



METROPOLITAN BRIEFING BOOK

2007

Presented by the Institute of Portland Metropolitan Studies
Nohad A. Toulan School of Urban Studies and Planning
College of Urban & Public Affairs
Portland State University





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Investing in
Portland's Future



Welcome to the sixth edition of the Metropolitan Briefing Book!

The Institute of Portland Metropolitan Studies (IMS) was created to connect the resources of higher education to the needs of the six-county, bi-state Portland-Vancouver metropolitan area (Clackamas, Clark, Columbia, Multnomah, Washington, and Yamhill Counties). In this spirit, we offer our 2007 Metropolitan Briefing Book. Our theme is regional variety. Variety has been touted as “the very spice of life” (William Cowper) and as “the mother of enjoyment” (Vivan Grey). Our region enjoys a good deal of variety—in its landscapes, in its economy, and in its people, their cultures, and their attitudes. These differences are important to local vitality and beauty. But while we generally view this variety as positive, we also worry about equity. Although we promote regional thought and action, we must understand that each community experiences the problems facing us in a slightly different way and often with significantly different resources.

To provide a better understanding of what differentiates—and unites—our regional communities, we examine differences in public attitudes, demography, and economic prosperity. Craig Wollner and Sheila Martin review results of the 2007 Critical Issues Survey conducted by IMS and Portland State University’s Survey Research Laboratory and identify the economy, education, health care, population growth, public services, and taxes as concerns shared among both citizens and policymakers. Subsequent articles take up these themes. George C. Hough provides a comprehensive outlook on the effects of population growth. Sheila Martin shows that our workforce travels throughout the region to find the best match between worker skills and employer needs and examines the effects of employment patterns. John Tapogna ties trends in educational enrollment, performance, and funding to the demographic changes facing communities. Mike Houck and Jim Labbe discuss the shared sense of place fostered by our natural landscape and address regional efforts to integrate natural and built infrastructure. Jennifer Dill details important variations in how people get around the region and in their experience of travel. Steve Novick identifies the public finance challenges that each of our communities faces in prioritizing and paying for the services they provide their taxpayers. Finally, Ethan Seltzer and Sheila Martin frame the future by posing five questions for citizens and policymakers alike: How can we link education and the economy? How will we accommodate population growth? How can we ensure that emerging “city-suburbs” maintain a regional identity? How can we promote healthy ties between the Portland-Vancouver metropolitan area and Oregon and Washington states? How can we overcome a decades-old trend of public distrust of government?

We are deeply grateful to everyone who helped produce the Metropolitan Briefing Book. Our sponsors include the Portland Tribune whose commercial printing division printed the 2007 Metropolitan Briefing Book, the Portland Development Commission, Metro, the Port of Portland, and the Multnomah Public Library. We also thank the many people who reviewed early versions of the papers. PSU’s Survey Research Lab again did a great job on the Critical Issues Survey. Our thanks also to Tracy Dillon for editing and Meg Merrick for designing the document. Finally, all of our authors dedicated significant time and effort to the publications.

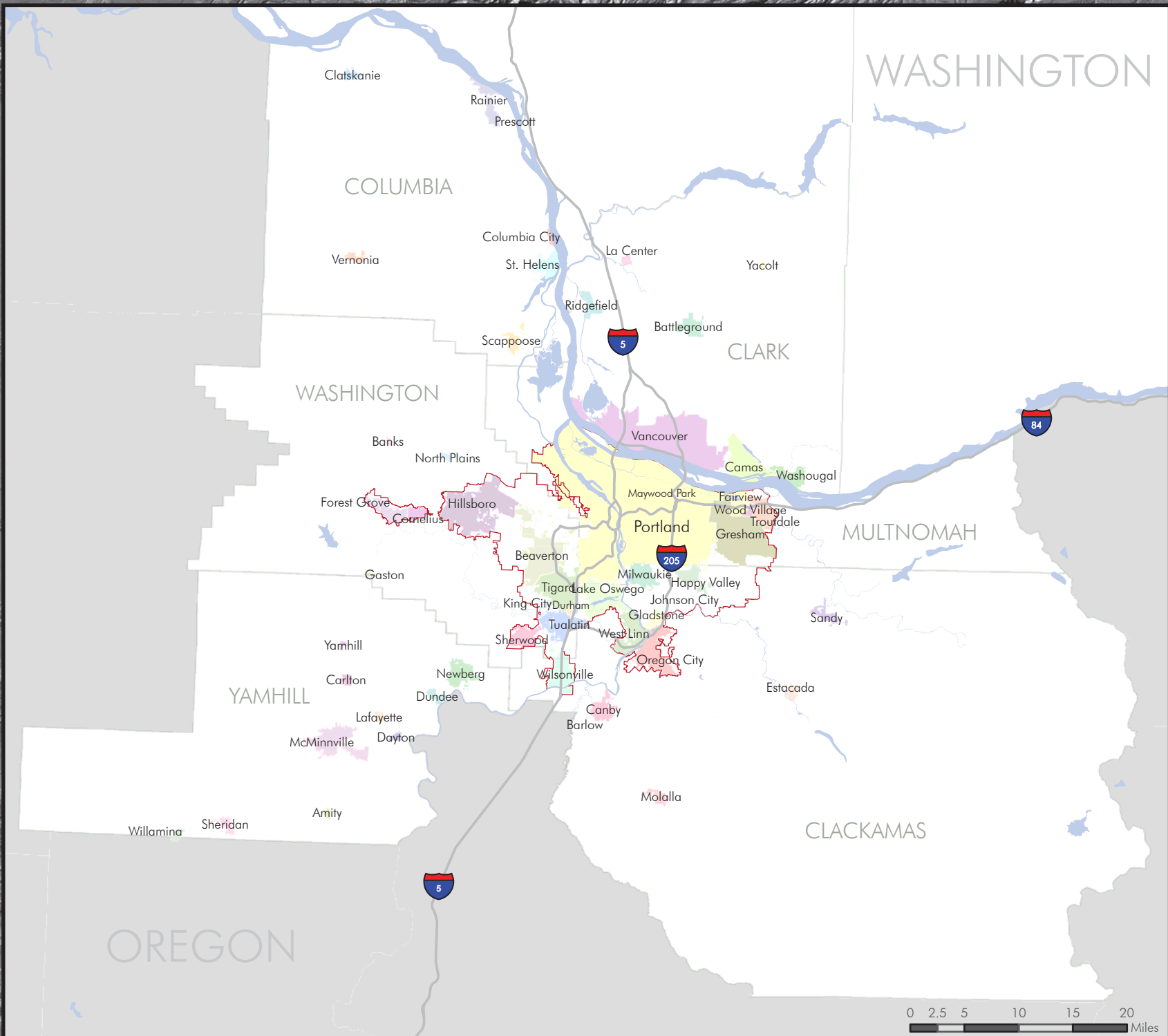
We have included the IMS mission statement and roster of IMS board members to give you a clear sense of who we are and how we serve the region. You can find out about all of our initiatives and events and download copies of this and related publications from our web site: www.pdx.edu/ims/. We also want to hear from you about how we can make future editions of the Briefing Book better.

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CRITICAL ISSUES 2007: OUR REGION SPEAKS ITS MIND

by Craig Wollner, Associate Dean of the College of Urban & Public Affairs, Portland State University
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Introduction

The great historian Richard Hofstadter remarked that the United States was the only country born in perfection and aspiring to progress. Locally, what issues facing the Portland-Vancouver metropolitan region (Clackamas, Clark, Washington, Columbia, Multnomah, Washington, and Yamhill counties) must we deal with immediately to preserve the vaunted quality of life in one of the most livable regions in the nation?

The Institute of Portland Metropolitan Studies (IMS) at Portland State University (PSU) in partnership with the PSU Survey Research Laboratory regularly conducts a biennial Critical Issues survey. Consisting of a telephone canvass of regional residents as well as a mail-back questionnaire from the region's elected and appointed officials, academics, journalists, and citizen-activists, the 2007 Critical Issues Survey attempted to identify what Hofstadter would understand as our traditional need to make better of best.

The problems identified by respondents to both surveys are compelling. They tell a story of leaders and ordinary residents battling with issues which, if neglected, could significantly impair our future. And the clearest news to come from the surveys is that both groups—the public and the opinion leaders—pinpoint the same topics as the ones requiring immediate attention:

- The general public and the opinion leaders agreed on the top three issues.
- The general public is most concerned about health care, followed by education and the economy a distant third. Opinion leaders ranked education by far the most important, followed by the economy and health care.

■ Health care has moved up in importance for the general public since 2004, when the economy was the most important issue to the general public. For the opinion leaders, education has moved from 2nd (2004) to most important today.

Citizens and Leaders on the Critical Issues

On a scale featuring “strongly disagree,” “disagree,” “agree,” and “strongly agree,” respondents reacted to statements on the regional economy, their family's financial well being, taxation, and population growth. Among the general public, the great majority believes that the regional economy is healthy (60.4% agree; 3.2% strongly agree). However, as Table 1 shows, a significant minority (29.9% disagree; 3.4% strongly disagree) are concerned about the economy. Opinion leaders reflect stronger overall satisfaction with the economy (67.8% agree; 5.1% strongly agree) and a similar level of dissatisfaction (25.5% disagree; 1.6% strongly disagree) compared to the public. The county-by-county breakdown reveals that Clackamas County rated the economy most highly (65.1% agree; 2.3% strongly agree) with Washington disagreeing most strenuously (34.3% disagree; 3.6% strongly disagree).

Do respondents believe that they and their families are doing better financially than two years ago? Among the general public, just over half (57.7%) agree that they are better off (46.3% agree; 11.4% strongly agree). Opinion leaders share a much stronger sense of financial well being (54.9% agree; 10.6% strongly agree). But a large group among the opinion leaders also feel that they are not as well off (30.3% disagree; 4.2% strongly disagree). Interestingly, Washington County, home of the state's presumably lucrative high tech industry, ranked second in dissatisfaction with personal financial condition (30.7% disagree; 12.4% strongly disagree) after Columbia County (35.5% disagree; 8.8% strongly disagree).

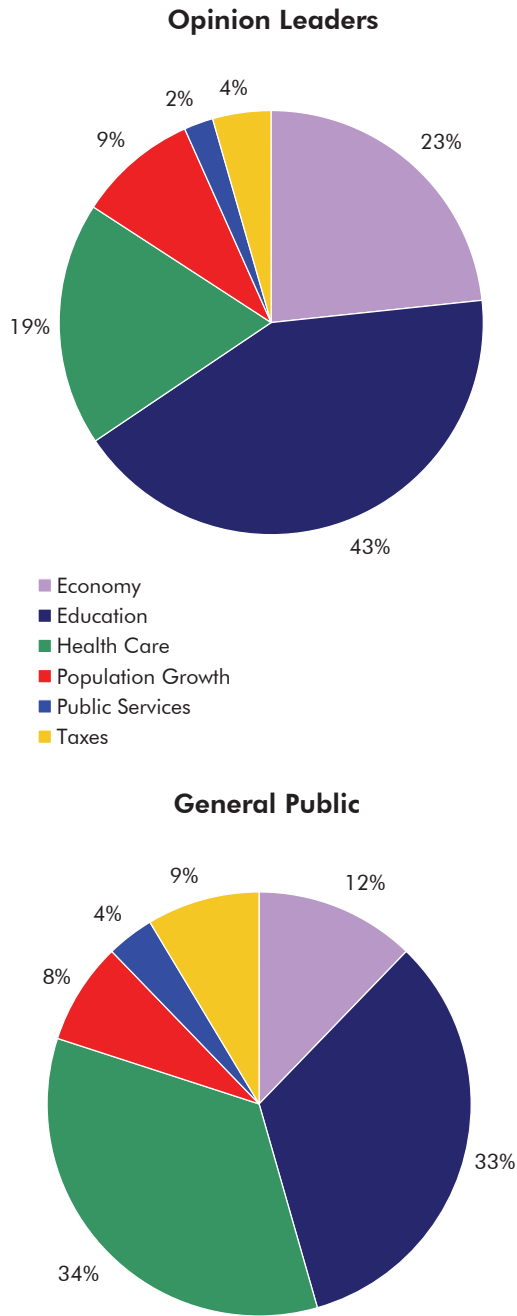


Figure 1: Top Ranked Issues Among the General Public and the Opinion Leaders

Table 1: Top Ranked Issues Among the General Public by County

Clackamas	Education (32.6%)
Clark	Health Care (40.5%)
Columbia	Health Care (38.2%)
Multnomah	Education (38.3%)
Washington	Education (38.7%)
Yamhill	Health Care (32.5%)
Overall sample	Health Care (33.9%)

Is taxation reasonable in light of the benefits it provides? A slim majority (53.0%) among the public thinks so (46.0% agree; 7.0% strongly agree). As might be expected, the opinion leaders, the members of the community with the greatest interest and often largest stake in government and the taxes that subsidize it, were more convinced that the tax system is fair (57.7% agree; 19.2% strongly agree, for a total of 76.9%). In light of the November 7 election results, the attitude of the public to taxes, as revealed here, may be telling. The defeat of state ballot measures 41 and 48, which would have returned significantly more money to taxpayers while (according to opponents) starving government of necessary funds, may be rooted in the attitude, rarely in evidence in Oregon elections since 1990, that taxes are generally fair but only adequately pay for or entirely under-fund public services and thus are not satisfactory. The passage of many funding measures regionally may be founded in the same view. This division was captured in a comment from a public respondent: "I think taxes are too low and that's why many services are inadequate or poor." Another commented, "I don't think it's the fault of the Parks & Recreation people that I'm not completely satisfied.

They don't get enough money." A slightly different perspective captured the ambivalence of citizens on this subject: "I'm dissatisfied with my water and sewer services because they are raising our rates. I don't think enough services are provided for people with mental health issues. With the schools, I think there is always room for improvement, but with a 97% rating you can't keep hounding people to improve."

Public respondents to the statement, "Population growth has become a serious issue in this region," expressed serious concerns (44.8% agree; 32.5% strongly agree). By county, the greatest anxiety was expressed in Clackamas where 83.7% identified this as a compelling problem (50.4% agree; 33.3% strongly agree) and the least in Columbia (39.0% agree; 32.4% strongly agree). Although a similar percentage (75.2) of opinion leaders was apprehensive about population growth, they provided no commentary to "unpack" their views on this issue. On the other hand, members of the public often intensely explicated their views on the severity and importance of the problem to them. Respondents who agreed or strongly agreed that population growth was a serious issue were specifically asked why they agreed. In addition, some comments focusing on immigration surfaced as responses to other questions. Many comments centering on immigration were surprisingly volatile in light of the fact that it played only a minor role in the unfolding election campaign despite some attempts to make it a major issue. "The Mexicans are taking over. I live near a county health clinic and they are everywhere. They are using up all the services," one respondent noted. Another said, "Immigrants and the

baby boom [are the problem]. They should restrict who comes into the country.” “I think that American citizens should be the ones who get the services and benefits before foreigners or immigrants,” another said. After Mexicans and other foreign immigrants, the culprits in the adverse effects of population growth were identified as Californians, traditionally the largest cohort of internal migrants to the state. As one respondent observed, “We’ve been inundated with Californians who are idiots when it comes to money. They pay ridiculous prices for homes and then everyone else’s assessed values go up and our taxes go up.” Other comments focused on connections between immigration and the increased competition for jobs, the increase in traffic congestion, the price of homes, the overcrowding of schools, and pressure on the urban growth boundary.

The second question on the survey probed further into views on the regional economy. It asked how important or unimportant respondents felt a list of policy goals were to improving the economy. The most important policy among a list including creating new jobs, improving worker wages, reducing costs for business, and reducing the cost of housing, public respondents felt, was creating new jobs at 72.5% (43.6% very important; 28.9% extremely important). The least important policy was thought to be reducing costs for businesses at 58.6% (44.2% moderately important; 14.4% not important). “I do think creating jobs is important for improving the economy,” a public respondent observed, “but it matters who is creating the jobs. It should be individual businesses and not government organizations.” Another who thought that creating jobs is necessary added, “It is also essential that it [be] possible to support a family on that wage,” linking the lack of family wage work that compels people to take second and third jobs to the perception that “families are falling apart.”

The third question asked respondents to rate the importance of four goals for improving the quality of K-12 education: improving teacher quality; raising

student achievement in the lower grades; improving public school financial accountability; improving the high school graduation rate; and reducing the gap between white and minority public school students. According to the general public, the most important goal is stabilizing funding for public schools. No other goal approached the 47.2% who thought this issue was extremely important. Another 34.9% thought this was a very important goal for a total of 82.1% who

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The total sample of the general public expressed near unanimity (90.4%) in believing that the overall goal of controlling health care costs was very important (33.1%) or extremely important (57.3%).

embraced it. Survey results reflected the chronic struggles of school systems in Multnomah and Columbia counties, where respondents ranked this goal as “extremely important” (54.3% and 51.1%, respectively). The least important goal to the public sample was improving public school financial accountability. In the total sample, only 38.8% found this goal extremely important and 32.1% found it very important. Among the opinion leaders, the leading goal was also by far stabilizing funding for public schools (69.4% extremely important). Among the other goals, only improving the high school graduation rate broke out of the thirties in percentage of extreme importance. However, when combining very important responses with extremely important, improving high school graduation rates (83.9%) approached the significance of the combined percentages of the funding stability goal (92.1%). This finding perhaps indicates opinion leaders’ improved awareness of Oregon’s dropout rate, which the

Oregon Progress Board reported in 2005 as 5.3% (in 2001). For the US in 2001, the rate was 5.0%. Oregon ranked 35th among 45 states reporting (Oregon Progress Board, 2006; Oregon Department of Education, 2006).

The fourth question was framed to elicit attitudes toward health care policy. Respondents were asked to rate policy goals for improving health care, from not important to extremely important. The goals were controlling the cost of health care; improving health services and health education programs, such as vaccinations and prenatal care; providing health care coverage for everyone; controlling the cost of prescription drugs; and accelerating medical and health

research. The total sample of the general public expressed near unanimity (90.4%) in believing that the overall goal of controlling health care costs was very important (33.1%) or extremely important (57.3%). A mere 9.4% regarded controlling health care costs as moderately important or not important. Among the questions relating to policy goals, this issue revealed the least disagreement about importance, reflecting the chronic simmering debate about health care in the state and the nation. Among the sub-goals, controlling the cost of prescription drugs ranked as the most important to respondents in the public (85.6%; 55.3% extremely important; 30.3% very important), perhaps reflecting the high average age for all respondents in the survey—54.32 years—a time in life when many individuals begin taking multiple medications for chronic conditions.

Many of the general public respondents expressed unease over inequities and gaps in the health care system, often in very personal terms: “Health care is a big issue because my father has lung cancer and has worked all his life with no health care.” Another commenter explained, “The medical coverage for people like me, who are by themselves, is nonexistent. I have medical issues; I’m going blind, I’m 58 years old, and I can get no medical help through work or the state.” Yet another said, “My husband takes seventeen prescriptions and sometimes we can’t eat because it gets so expensive.” Still another laid blame for the rapacity of the system not at the doorstep of the usual suspects—the insurance companies—but at that of providers: “I think doctors and pharmacies overcharge us and bleed insurance companies for as much as they can get. I have a problem with that.” In all, the comments suggested a pervasive anxiety about a system in which inequities are readily identifiable, but consensus on remedies is less so.

The confluence of public opinion and the perspective of the opinion leaders was most evident on health care. A solid 91% of the opinion leaders thought controlling health care costs was extremely important (60.4%) or very important (30.6%). A similar percentage of the general public (85.2% versus 85.6%) believed that the leading policy choice was controlling the cost of prescription drugs.

The opinion leaders echoed the public’s scorn for the quality of mental health services.

Question 5 concerned the level of satisfaction with public services provided by local government. The specific services spotlighted were police, fire, and other public safety services; parks and recreation; roads and traffic; and public transportation. The greatest satisfaction was recorded for two items. The public expressed confidence in police, fire, and other public safety services; 47.8% were somewhat satisfied and 36.7% were completely satisfied with these services, for a total of 84.5%.

Despite news reports of metropolitan area police organizations mishandling arrests, incidents of sexual harassment over the summer and into the fall, and gubernatorial campaign rhetoric regarding the serious understaffing of the State

Police, the number of respondents who were completely or somewhat dissatisfied with public safety services was relatively low (13.9%). Still, some commented on the conduct of the police: “The Portland police need additional training. It should start at the academy to avoid a lot of tragedies.” Another asserted, “Portland police need a lot of work; they need to be reconstructed.” In any case, the positive rating of 86.7% almost exactly matched parks and recreation’s total (48.9% somewhat satisfied; 37.8% completely satisfied).

The lowest rated item was services for people with mental illness, which, overall, was rated somewhat or completely unsatisfactory by 55.1% of those surveyed (24.7% somewhat dissatisfied; 30.4% completely dissatisfied). Views of one of the best liked services, the police, and the least, the approach to the mentally ill, came together in one respondent’s view of the interface between the two: “When [the police are called] to deal with mentally ill people, they just shoot them. They don’t know how to deal with them and they don’t have anywhere to take them that they can get help.”

For the opinion leaders, parks and recreation constituted the most satisfactory service (57.0% somewhat satisfied; 30.9% completely satisfied). Like the public, the opinion leaders thought highly of public safety services (54.7% somewhat satisfied; 29.1% completely satisfied), although there was a slight gap (87.9%

total versus 83.9% total). The opinion leaders echoed the public's scorn for the quality of mental health services (40.7% somewhat dissatisfied; 40.9% completely dissatisfied) but in harsher terms (81.4% versus 55.1%).

Question 6 returned to the topic of education: "How satisfied are you with the quality of public education students receive in kindergarten through 12th grade in your community today?" The split between those who were somewhat satisfied (47.5%) or completely satisfied (12.2%) with public education (totaling 59.7%) and those who were somewhat dissatisfied (28.6%) or completely dissatisfied (28.6%; totaling 57.2%) was not wide (22.9%) compared to other issues. The highest level of satisfaction occurred in Washington County, where 53.3% of respondents were somewhat satisfied, 10.9% were completely satisfied, and only 12.1% were either somewhat dissatisfied (5.1%) or completely dissatisfied (7.0%). Columbia County recorded the highest level of dissatisfaction at 47.6% of those surveyed (36.8% somewhat dissatisfied; 10.3% completely dissatisfied). Registering 30.8% somewhat dissatisfied and 11.1% completely dissatisfied (totaling 41.9%) Yamhill County was not far behind, perhaps indicating the difficulty that largely rural districts experience in finding adequate school funding.

The softened attitudes to and generally improved levels of satisfaction with taxes and public services, indeed, with government itself, as uncovered in these surveys, contrast clearly with attitudes of just a few years ago.

Public commentary on this issue was among the most copious, no doubt because schools have been a subject of intense debate in Oregon and Washington for more than a decade. Frustration with schools was evident and remarkable considering the otherwise strong level of satisfaction revealed in the survey. Many respondents had difficulty making a coherent statement about the quality of schools and the type and level of funding they deserved. Some made unwarranted leaps of logic or based their views on misinformation, but they were willing to articulate their thoughts emphatically, sometimes encapsulating contradictions in their remarks about the system, its teachers and their methods, the curriculum, funding, parents, and the children themselves. For example, one individual stated, "I think the schools get way too much of our tax dollars for what they produce. I think that the public schools need help and I choose to send my

children to private school." Another said, "Public schools are too closely tied to property tax and the money is not going to education." Another observed, "We waste a lot of money in our education system in grades K-12, but we still need more funding for them." Behind some comments on education was a sense that lack of professionalism of teachers is responsible for the problems of schools. "There's not the same quality of teachers that there used to be," one person said, adding, "Teachers today work just to be paid. Teachers need to make sure that they focus on each student and not just push them through school. If they do that, they should be fired." Another respondent pointed to parental neglect: "I don't think parents care anymore whether kids go to school. If parents don't value school, neither will their children." Another remarked, "I really think education needs to concentrate on basics like reading, writing, and math."

A moderate consensus of opinion leaders (60.8%) portrayed K-12 education as doing well (52.3% somewhat satisfied; 7.9% completely satisfied).

Summing Up

The prospect of change was in the air at the time these surveys were administered, but little empirical evidence existed to confirm that a transformation in public attitudes toward government and key institutions, and thus the policymaking environment, was imminent in Oregon and Southwestern Washington. In fact, absent the November 7, 2006 elections, the results of these surveys might well have seemed aberrative. But election results seem to confirm that a sea change was occurring in the national and regional outlook on government and public institutions. The softened attitudes to and generally improved levels of satisfaction with taxes and public services, indeed, with government itself, as uncovered in these surveys, contrast clearly with attitudes of just a few years ago. But the surveys also distinctly indicated that knotty problems remain in the very policies and institutions on which many now look more favorably. In this regard, education springs readily to mind. The inconsistencies in public respondents' comments indicate a deep level of

discomfort with the system and its formula for subsidy residing side by side with a sturdier optimism about learning outcomes. Also, the public's comments on population growth indicate a complex mix of doubt and optimism about growth that stem from the region's fiercely held values concerning quality of life. Traffic, sprawl, immigration—topics that appear over and over in public respondents' comments—are at the root of such concerns. In all, the surveys show that citizens and their leaders are more inclined than before to embrace an active and more costly government, but wary of too intense a romance.

APPENDIX 1

Background and Methodology

The surveys were conducted between October 12 and November 2, 2006. The mail-back survey was sent to 3616 elected and appointed officials, academics, journalists, and citizen activists in the Portland-Vancouver metropolitan region currently on the IMS mailing list. Of these, 435 were returned.

The telephone survey was conducted as a random sample of respondents over 18 years of age in the six-county region. It was stratified by county to ensure representation. The final sample size was 833. By gender, the respondents were 61.8% female and 38.2% male. Overall age was 54.32 years in a range from 18 to 106. A full description of the methodology, as well as demographic data for this project and detailed survey results, can be found at www.pdx.edu/ims.

References

Oregon Department of Education, Office of Analysis and Reporting. 2006. Dropout Rates. <http://www.ode.state.or.us/search/results/?id=135>.

Oregon Progress Board. 2006. *Achieving the Oregon Shines Vision: The 2005 Benchmark Performance Report*. Accessed at http://www.oregon.gov/DAS/OPB/obm_pubs.shtml#2005_Benchmark_Report.

POPULATION OUTLOOK FOR THE PORTLAND-VANCOUVER METROPOLITAN REGION

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While many people both inside and outside Oregon envision the state as a place of picturesque coastal bluffs, mountain ranges, the Columbia River Gorge, and old-growth forests, the population is primarily urban. It has been for many decades. In 2000, three-quarters of Oregon's 3.4 million residents lived in towns and cities. Almost one-half of Oregon's population lived in the metropolitan Portland area.

This paper offers an overview of population dynamics in the Portland-Vancouver metropolitan area, which includes five of Oregon's thirty-six counties—Clackamas, Columbia, Multnomah, Washington, and Yamhill—and Clark County in the state of Washington. It refers to the "metropolitan Portland-Vancouver area" as the total area including the Oregon and Washington counties and to the "metropolitan Portland area" when limiting discussion to the five Oregon counties. It describes current trends for population growth; the effect of births, deaths, and migration on population growth; how the age, sex, and ethnic composition are changing; and where residents live. Finally, the paper discusses the dynamics for future growth and their implications.

Population Growth

Population growth in metropolitan Portland-Vancouver historically has exceeded growth for the United States, but the differential in growth rates has declined over time. Between 1990 and 2000, the United States grew by about 13% and metropolitan Portland-Vancouver increased by almost 27%. The ratio of population growth for metropolitan Portland-Vancouver compared to the United States from 1990 to 2000 exceeded 2.0, meaning that the metropolitan area grew at more than twice the national average.

Recent Growth

Metropolitan Portland-Vancouver has steadily increased its population since 1990, growing from 1.5 million in 1990 to 1.9 million in 2000, an increase of 400,000 people or 27%. About 1.6 million or 82% of the total metropolitan Portland-Vancouver population resided in Oregon in 2000. By 2005, the estimated population for the metropolitan area was nearly 2.1 million, an increase of more than 153,000 since 2000, or 8%.

Net migration provided about 5% of the population growth in the Portland-Vancouver region from 2000 to 2005, compared to almost 75% of overall growth from 1990 to 2000.

The metropolitan Portland population grew from 1.3 million in 1990 to almost 1.6 million in 2000, an increase of 23%. Clark County, Washington experienced the most rapid population growth during the 1990 to 2000 period, considerably greater than Washington state's population increase of 13%. The higher rate of growth in Clark County affected the total Portland-Vancouver growth rate. The total metropolitan growth rate of 27% reflects the growth rate of 23% for the five Oregon counties and the 45% for Washington's Clark County.

During the same 1990-2000 period, Oregon's state population increased at a slightly lower rate of 20%. Because the metropolitan Portland population expanded more rapidly than the Oregon population, an increasing proportion of the Oregon population was in the metropolitan Portland area; 45% in 1990 and 46% in 2000.

Population growth can be viewed in either absolute or relative terms. Washington County was Oregon's fastest growing county in metropolitan Portland in both absolute and relative terms. Washington County added 134,000 new residents to

the metropolitan area from 1990 to 2000, an increase of 43%. Yamhill County was the second fastest growing county in relative terms, increasing 30% and adding 19,000 residents. Multnomah County added 77,000 residents during the same period, although its 13% growth was the smallest change in relative terms of metropolitan Portland counties.

Since 2000, population growth has slowed in all of metropolitan Portland-Vancouver. Washington County is still the fastest growing among Oregon counties, but its mid-decade growth rate is only 10% and the 44,443 additional persons represent only one-third of the 1990-2000 population growth numbers. The other metro counties continue to grow also, but do so in reduced absolute and relative terms (see Figure 1).

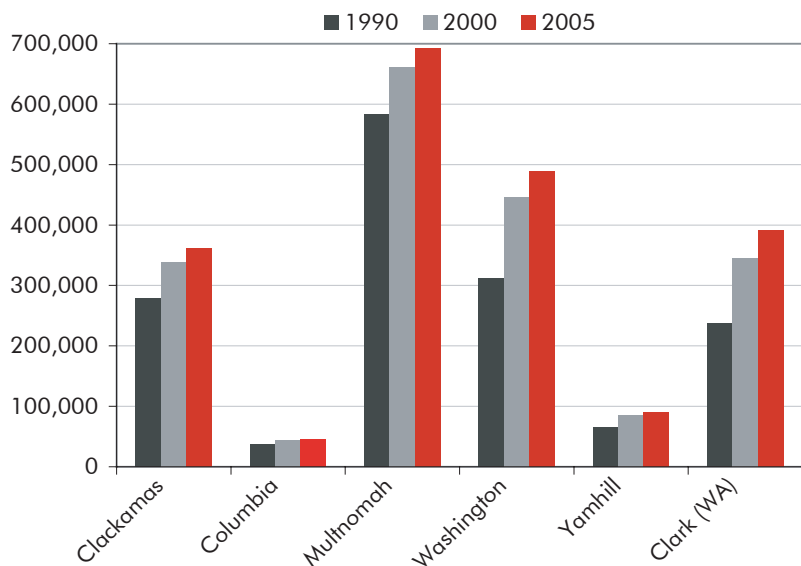


Figure 1: Population of Metropolitan Portland-Vancouver by County, 1990-2005

Source: US Census Bureau, Census of Population 1990 and 2000, Population Estimates, 2005, www.census.gov

Natural Increase

Population growth depends on changes in three factors: births, deaths, and migration. The difference between births and deaths is called natural increase. In most populations there are more births than deaths, and the population grows from natural increase. If in-migration is insufficient to counter-balance natural decrease, the population declines. In most cases, however, both natural increase and net in-migration contribute to a growing population.

Both mortality and fertility levels have remained fairly steady in the metropolitan Portland-Vancouver area for the past two decades. The crude death rate (the number of deaths per 1,000 residents) has remained at about 8 per 1,000 since 1980. In 2000, life expectancy at birth in Oregon was 74.6 years for men and 80.6 years for women, slightly higher than the U.S. national average for men and women.

At present fertility levels, the average couple in the metropolitan Portland-Vancouver area has about two children by the end of their childbearing years. In order to exactly replace the population, couples need to have 2.1 children. Present metropolitan fertility levels are slightly less than the replacement level. In the long run, the metropolitan population would decrease at a very slow rate if there were no net in-migration.

Natural increase contributed about 18% of the metropolitan Portland-Vancouver area’s growth from 1990 to 2000. The area’s overall population growth of 403,000 was comprised of a natural increase of 130,000 and an estimated net in-migration of 273,000.

The metropolitan Portland-Vancouver area population is relatively young, with a sufficient number of people in the childbearing years to produce a sizeable number of births, offsetting fertility levels that are somewhat less than the long-term replacement level. Since 1990, there have been about 26,000 births and 13,000 deaths annually in the metropolitan area, adding about 13,000 people each year through natural increase.

Fertility and mortality levels do not vary greatly among the six Oregon and Washington counties. The annual number of births and deaths, however, is affected by modest differences in the age composition of the residents of the different counties. Overall, there are only slight differences in the rates of natural increase for the metropolitan counties.

Net Migration

Migration is the main factor affecting population growth in the metropolitan Portland-Vancouver area. Net migration into the metropolitan area has been positive since 1980, except for an estimated out-migration of about 10,000 people during the economic downturn in 1982-1983. Economic conditions and employment opportunities were especially strong from 1988 to 1998 as evidenced by net migration levels at 20,000 and above. There were particularly high levels of net in-migration to the metropolitan area from 1990 to 1992 with annual net migration exceeding 40,000. Net in-migration for 2003-2004 decreased to a decade low of about 9,000 persons. With the exception of that year, net in-migration has been in the 15,000 to 25,000 range.

Migration accounted for more than two-thirds of the area's population increase from 1990 to 2000 and provided more than half of the increase for each of the area's counties. Clark County, Washington experienced a net gain of about 79,000 from migration during 1990 to 2000, with migration accounting for almost three-fourths of its overall growth. Four other counties—Clackamas, Columbia, Washington and Yamhill—derived more than two-thirds of their growth in the 1990s from migration. In the past five years (see Figure 2), the metropolitan population has grown by more than 150,000, with about 55% of the population increase due to net in-migration. Net in-migration has slackened somewhat in recent years, with the result that its proportionate contribution to overall population growth has decreased. Net migration, however, remains the dominant factor in the population growth of the Portland-Vancouver metropolitan area.

Migration was important for all counties in the metropolitan region. Although Multnomah experienced the slowest overall growth rate, increasing 13% from

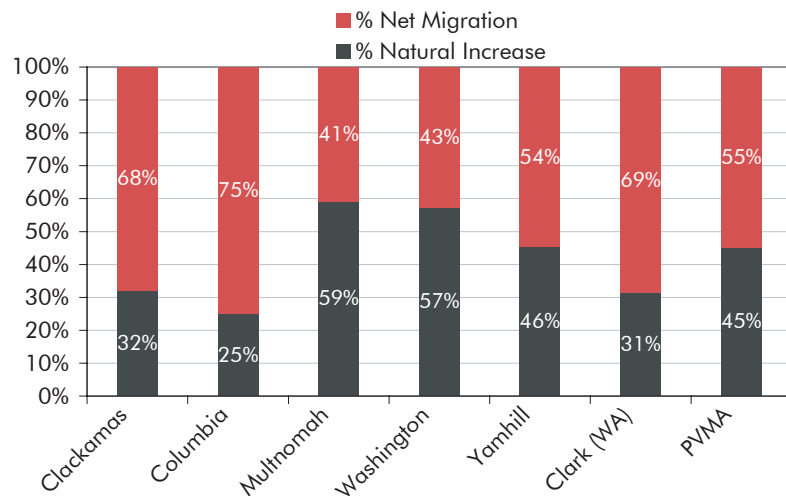


Figure 2: Metropolitan Portland-Vancouver Population Growth, 2000-2005

Source: Population Research Center, PSU; Oregon Department of Human Services, Center for Health Statistics; Office of Financial Management, Washington State

1990 to 2000, it received 42,000 net migrants, and migration accounted for more than one-half of its total population increase. Since 2000, the contribution of net migration has decreased for all counties. In Multnomah County, only 13,000 net migrants arrived during 2000 to 2005. Net migration accounts for about 40% of Multnomah and Washington county population growth. In Yamhill County, net migration provided more than 50% of population increase, similar to the metropolitan Portland-Vancouver average. And in Clackamas, Columbia, and Clark counties, net migration made up two-thirds or more of population growth.

Immigration

International migrants to the state of Oregon represented nearly 27% of the total population increase from 1990 to 2000. However, the immigrants to Oregon throughout the 1990s represented about 1% of the total immigrants to the United States. Since 2000, immigrants represent just over 1% of the United States total, and about 30% of the total population change for the Portland-Vancouver metro area.

In metropolitan Portland about two-thirds of the immigrants reported by the Immigration and Naturalization Service in 2000 came from only seven areas: Russia and other countries of the former USSR (18% of all immigrants), Mexico (17%), China (7%), Vietnam (8%), India (5%), Korea (3%), and the Philippines (3%). The most unique aspect about the metropolitan area's immigration is the relatively high proportion of immigrants from the former USSR—primarily from Russia. The proportion of Russians among Portland's immigrants is more than twice the national average. Since immigrants to the metropolitan area are generally younger than residents, they contribute to a somewhat younger age composition in addition to affecting the ethnic composition.

But immigration does more than change the age or ethnic mix of the population. The presence of migrants with different skills affects economic growth, adding new workers to the metropolitan labor force and, in some cases, providing needed skilled employees for local industries with job shortages.

Although foreign-born men are somewhat more likely to be in high-education, high-paying jobs, they are also far more common in low-education, low-paying jobs. Compared with native-born men, immigrants are found in some occupations requiring high levels of education, such as college teachers and engineers, as well as some occupations requiring little schooling, such as tailors, waiters, and unskilled service occupations. The picture for immigrant women is similar. Foreign-born women in the metropolitan area are disproportionately employed in a few high-education occupations, such as foreign-language teachers and physicians, but they also make up a large share of employment in many occupations that require little formal schooling: dressmakers, graders and sorters of agricultural products, waitresses, and private household service workers.

Factors Affecting Metropolitan Population Growth

Unemployment rates decreased from their peak of over 6-7% in 1992 and remained below 5% between 1993 and 2000 (see Figure 3). Improved employment opportunities attracted in-migrants as well as reducing out-migrants who might have departed in search of jobs if attractive employment had not existed here. In recent years, the unemployment rates in Oregon and in metropolitan

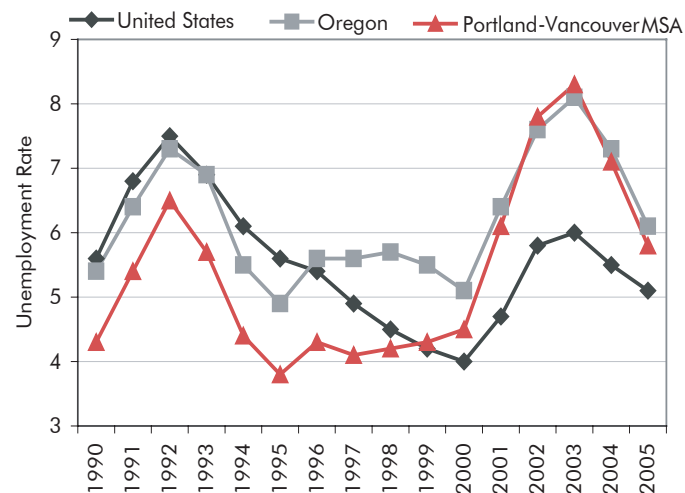


Figure 3: US, Oregon and Metropolitan Portland-Vancouver Unemployment Rates
Source: State of Oregon, Oregon Employment Department

Portland-Vancouver have increased, exceeding more than 8% in the state and in the metropolitan area by 2003, but falling to 6% by 2005.

There have been shifts in the major economic sectors for employment in the metropolitan area. The most noteworthy changes since 1980 have been increases in the service sector, substantial increases in high-tech, and decreases in lumber-related employment. Overall, more than two-thirds of all current employment in the metropolitan area is in services, trade, and government.

Factors Affecting Population Distribution

Population growth has been more rapid in the outlying areas of metropolitan Portland-Vancouver than in the central areas. From a demographic perspective, family and individual residential location is influenced by income, age and life cycle status, ethnicity, housing choices, location of employment, and transportation options and preferences. Given the employment decentralization observed in metropolitan Portland-Vancouver, population decentralization was certain to occur. The consequences of the other factors are more ambiguous.

Over the 1990 to 2000 period, per capita income increased more rapidly than median household income in metropolitan Portland-Vancouver. The difference between the two is attributable to the composition of households. The mix of households has changed since 1990 as the number of single-parent, childless couples and single-adult households increased. By and large this change amounted to a shift toward household types that traditionally had lower incomes. This shift retarded growth in household median income at the same time that earnings growth, while not as strong as in the 1950s and 1960s, remained robust. As a result, increases in income may have contributed more to decentralization of population than the median income figures would suggest.

Decentralization tendencies created by income change and employment dispersion have been partially offset by an influx of migrants and changing household size. For the area as a whole, over two-thirds of the population increase from 1990 to 2000 was attributable to net migration. Most of this migration is made up of people from elsewhere in the United States who presumably are attracted by our growing economy and job opportunities, the attractive environment/quality of life, or both. During the 1990s, about one-fourth of metropolitan Portland's migration is attributable to migration from abroad; post-2000 one-half of the migration comes from abroad.

Age Composition

Fertility and mortality levels and the volume and composition of migration affect the age composition of the metropolitan Portland-Vancouver population. If there were no migration, then the current population would become steadily older because fertility levels are relatively low. In the long run—again, assuming no migration—the median age of the metropolitan population would increase from its current level of about 35 years to about 41 years in 2050. Migration has the short-run effect of making the population slightly younger. In the long run, however, continued in-migration will increase the average age of the metropolitan population. This statement may seem counter-intuitive. But migrants eventually become older themselves. A steady stream of in-migrants, even if somewhat younger at the time of migration, will increase the number of people who become older and will, eventually, increase the number and proportion of elderly.

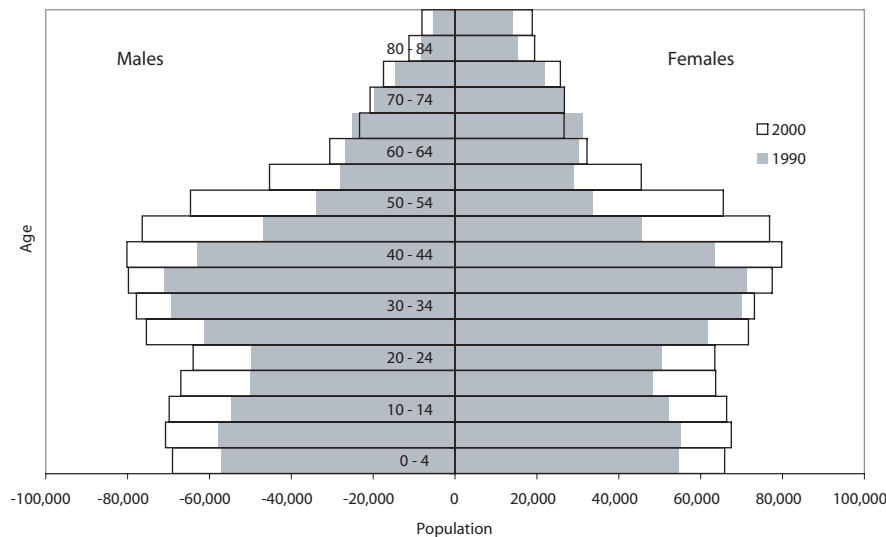


Figure 4: Changes in Population Age Structure in Metropolitan Portland-Vancouver, 1990-2000

Source: US Census Bureau

Figure 4 displays metropolitan Portland-Vancouver's population pyramid. Compared to Oregon and the United States, metropolitan Portland-Vancouver is slightly younger, reflecting the larger number of young adults who have arrived recently in the area. Post-Census 2000 reports list metropolitan Portland-Vancouver as one of the top destinations for young-college educated migrants.

Age composition is important for a variety of reasons. The number and proportion of people by age affects schools, the labor force, health care, and the demand for recreation, entertainment, and stores.

Children under the age of 5, although not yet attending school, determine the future needs of schools. The proportion of the population represented by this age group decreased from 7.6% to 7.0% despite an increase of 20,000 persons from 1990 to 2000.

Slightly less than one-fifth of metropolitan residents, or 18%, are between the ages of 5 to 17 years. In 2000, there were 354,000 metropolitan residents in these

school ages, an increase of 80,000 from 274,000 in 1990. This increase is reflected in the substantial growth of elementary, middle school, and high school students, particularly in school districts with rapid increases in younger couples.

Younger adults in the population, aged 18 to 24 years, are an important population group. They are the primary age group for the college population, for getting married, and for entering the labor force. The young adult population increased from 140,000 in 1990 to 178,000 in 2000, an increase of 38,000.

Despite an increase of 43,000 persons between the ages of 25 and 34, the age group's proportion decreased slightly, almost 2%, from 1990 to 2000. This group is very career mobile and is, therefore, affected by employment trends. However, once their young children become school age, they are less likely to migrate. The highest rates of net in-migration for the metropolitan area are for ages 20 to 34 years: more than one-half of younger in-migrants to Oregon settled in the metropolitan Portland area in the 1990s.

The working ages of 35 to 64 years are the main age group in the labor force. This age group also includes most parents in the metropolitan area. The population in the working ages grew from 530,000 to 754,000 during 1990 to 2000, and their representative proportion of the total population also grew nearly 4%.

The elderly population includes people who have a lower proportion in the labor force and are important users of health services. Although the number of elderly (ages 65 and over) increased by 15,000 from 1990 to 2000, growing from 183,000 to 198,000, their proportion of the total population decreased almost 2%; smaller depression-era cohorts joined the aged ranks during the latter half of the 1990s.

Racial/Ethnic Composition

The metropolitan Portland area population has a less diverse population than do other major population areas in the United States or on the West Coast. Metropolitan Portland's minority population constituted 20% of the metropolitan population in 2005. For metropolitan areas with population greater than one million, the U.S. average was 36%. Moreover, the metropolitan Portland

population is considerably less diverse than such other metropolitan areas as Seattle, San Francisco, San Jose, Los Angeles, or San Diego.

New Ethnic Categories

In 1998, the U.S. Office of Management and Budget directed the U.S. Census Bureau and other federal agencies to begin the transition to a revised federal classification scheme for racial and ethnic data. The new scheme affected 2000 census data and will gradually become common for other federal statistical data. There are two major changes in the new scheme. First and foremost, the census, surveys, and federal data collection forms allow respondents to report two or more race or ethnic groups if they wish. Second, native Hawaiians and other Pacific Islanders report themselves separately from Asian Americans.

Prior to the 2000 Census, we lacked accurate estimates for the number of Oregonians and metropolitan Oregonians who might report themselves as having multiple racial origins—that is, as identifying with two or more racial/ethnic groups. The majority of residents in Portland and Oregon reported themselves as white (80%) in the 2000 census. However, 3.3% of the population (53,480 in the metropolitan Portland area) identified themselves as having two or more races in the 2000 census.

The Portland-Vancouver metropolitan area's racial/ethnic composition, however, has experienced a recent dramatic increase in the minority population (see Figure 5). There have been gains in the minority population in every county in the metropolitan area since 1990. The overall minority population—including Asian Americans, Hawaiians and Pacific Islanders, Hispanics, African Americans, American Indians, and persons reporting two or more races—increased from 140,000 in 1990 to 307,000 in 2000, an increase of 119% (more than four times the rate of increase for the overall metropolitan increase of 23% during the same period).

The Portland-Vancouver minority population increased 119% from 1990 to 2000 and continued to rise by over 26% from 2000 to 2005 — over 3 times the overall population growth rate of 8%.

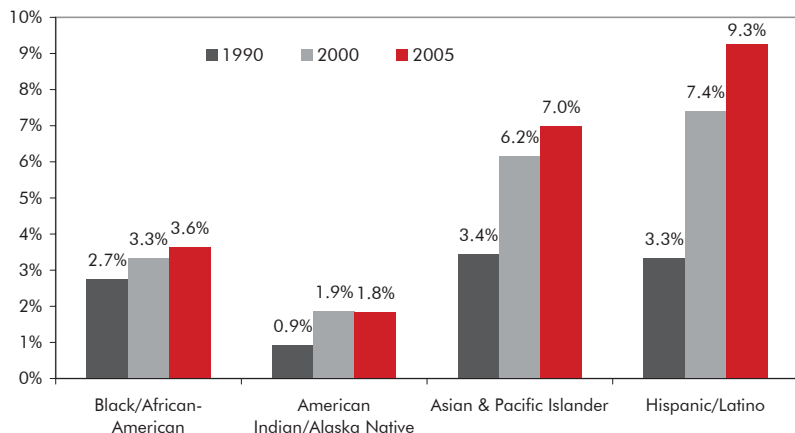


Figure 5: The Proportion of Minorities in Metropolitan Portland–Vancouver

Source: US Census Bureau, www.census.gov

Data for 2005 are based on U.S. Census Bureau estimates for the racial/ethnic composition of counties. The 2005 population estimates indicate that there has been continued growth for the Hispanic and Asian and Pacific Islander population.

The sources of the growth of the minority population vary. Almost all the African American and American Indian residents in metropolitan Portland are native-born. Many Asian American and Hispanic residents, however, are foreign-born, although native-born children often accompany them.

Fueled by internal and international migration, as well as fertility levels above the Oregon state average, Hispanics are the fastest growing minority population. The Hispanic/Latino population increased from 50,600 in 1990 to 142,400 in 2000, an increase of 181% during the period. Hispanics are currently the largest of the various minority groups in the Portland metropolitan area. U.S. Census Bureau estimates suggest that the Hispanic/Latino population numbers 195,000 in 2005, an increase of more than 52,000 since 2000.

Asian Americans, including Hawaiians and other Pacific Islanders, have the second fastest rate of growth of minority groups, increasing from 52,000 in 1990 to 119,000 in 2000, a growth of 127%. In 2005, an estimated 147,000 Asian

Americans and Pacific Islanders lived in the metropolitan area, an increase of 28,000 since 2000. Asian Americans have fertility levels similar to the Oregon state average. Metropolitan Portland receives a large number of immigrants from Vietnam, Hong Kong, Taiwan, Korea, Philippines, and Japan as well as Asian Americans who move here from other states. Asian Americans are the second largest minority population in the metropolitan area.

Pacific Islanders are a very small population group in Oregon in 2000, numbering only 8,000 – of whom 4,500 lived in metropolitan Portland. Although we lack data on net movements from Pacific Island areas, especially Hawaii, American Samoa and Guam, it is likely that migration of Pacific Islanders from Hawaii and other Pacific Island areas added to the metropolitan population in the 1990s. However, Pacific Islanders are likely to remain the smallest of Oregon’s and metropolitan Portland’s minority populations for the foreseeable future.

African Americans are the third largest minority population in the metropolitan area, numbering 44,000 in 2000, and increasing 16% from 1990. There is a net migration of African Americans into the metropolitan area, but at a considerably lower level than for Hispanics or Asian Americans. U.S. Census Bureau estimates for 2005 indicate that there has been overall change of almost 12,000 in the number of African Americans in the metropolitan area since 2000, or 18%.

The metropolitan Portland-Vancouver area included almost 36,000 American Indians and Alaskan Natives (AIAN) in 2000. This is a large increase from the 1990 population of 14,000. The large increase is due to the multi-racial identification of the AIAN population. In Census 2000, one-half of the AIAN population identified as solely AIAN and the other half identified as AIAN in combination with another racial group, mostly the white population. There is modest net migration of American Indians into the metropolitan area, from Oregon and nearby states, but the metropolitan American Indian population remains relatively small and does not appear to have changed significantly since 2000, increasing by 3,000.

Influence of Immigration

The size of the international migration influx to the United States in the 1990s rivaled the great waves of immigration experienced at the beginning of the century.

Taking illegal immigration into account, the best available estimate is that the total inflow amounted to about 1.1 million persons per year, or about 11 million during the 1990s decade. During 2000, California received about 26% of these newcomers, and another 40% went to the other five major immigrant-receiving states of New York, Texas, Florida, New Jersey, and Illinois.

While the flow of immigrants into Oregon may not be large, other evidence suggests that many immigrants, especially from Mexico, originally settled elsewhere before moving to Oregon.

Oregon's share of total U.S. immigration has been relatively modest. Oregon received about 1%, or 8,000 to 9,000 persons annually, of the total immigrant population arriving during 1990 to 2000. Over 80% of immigrants arriving annually in Oregon, or about 6,000 to 7,000, went to the metropolitan Portland area.

While the flow of immigrants into Oregon may not be large, other evidence suggests that many

immigrants, especially those from Mexico, originally settled elsewhere before moving to Oregon. As a result, the growth of the foreign-born population includes an unknown number of foreign-born persons who moved here from other states. At the current time, economic conditions in Mexico and nearby Central American countries continue to produce a steady stream of migrants intent on relocating in the United States. A plausible assumption is that some of the new immigrants to the United States from Latin America may eventually settle in Oregon, even if they initially live in some other state. The large and growing Mexican-origin population in California guarantees a source of future migrants who find Oregon attractive if job opportunities exist.

The social, political, and economic consequences of the inflow of migrants, both native and foreign-born, are substantial. The major social consequence is that an area that has been ethnically homogeneous is becoming less so. While active

political participation for some ethnic groups will take time, general minority participation in city, state, and congressional campaigns increased in the past decade. Economically, the influx of new residents has increased younger minority workers in the metropolitan labor force, adding low and semi-skilled workers as well as managerial and professional workers.

Implications for Future Growth

Population in the metropolitan Portland-Vancouver area grew from 1.5 million in 1990 to 1.9 million in 2000 and 2.1 million in 2005. Population is expected to grow to about 2.3 million by 2010. The metropolitan Portland-Vancouver population is expected to increase by 9.3% between 2000-2005 and will grow 9.0% between 2005-2010, an annual growth rate of 1.8% for the 2000-2010 period. Long-term forecasts project that the population will increase to 2.4 million in 2015, 2.6 million in 2020, and 2.8 million in 2025.

The age composition of the population will change as a result of low fertility, increasing life expectancy, and continued net in-migration (see Figure 6). Although all population age groups will increase between 2000 and 2025, the percentage distribution of the population by age will change.

- A slight increase is initially expected in the proportion of the population less than 18 years of age due to the high number of recent in-migrants of child-bearing age. As this in-migration pattern ceases, the proportion of children less than 18 years of age will decrease, reflecting a continuation of existing low fertility levels.
- The proportion of young adults, aged 18-to-24 years, will decrease slightly.
- The proportion of the population in the working ages of 25-to-64 years will increase modestly during the next 10 years, reflecting continued in-migration of younger persons, will peak in about 2010, and will then decrease between 2010 and 2025.

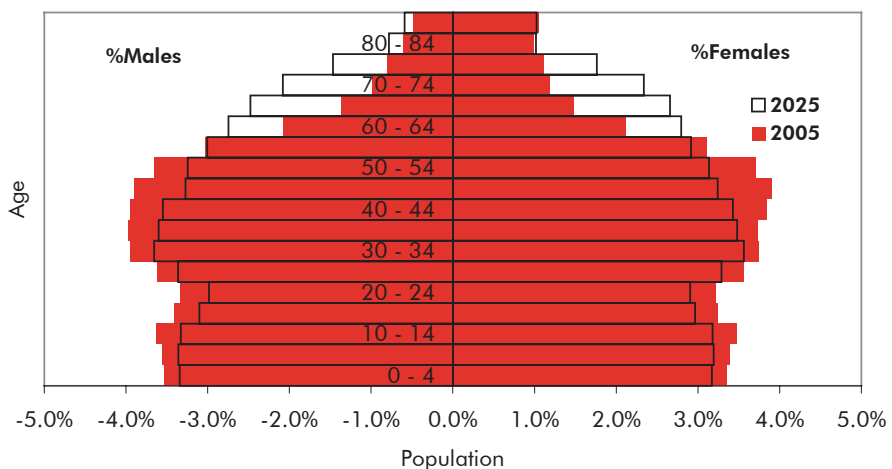


Figure 6: Projected Population Aging in Metropolitan Portland-Vancouver, 2005-2025
 Source: State of Oregon, Office of Economic Analysis; State of Washington, Office of Financial Management

■ Oregon’s population, similar to the U.S. population, will not experience rapid increase in the older population until the larger birth cohorts of the Baby Boomer era begin to retire. The first large group of Baby Boom births occurred in 1946 and will become 65 years of age in 2011. After 2010, therefore, Oregon’s older population will sharply and steadily increase in relative and absolute numbers for 20 years, from about 2010 to 2030.

■ The proportion of persons 65-years-of-age and older increased (unexpectedly) from 1995 to 2000, but decreased until about 2005. It will begin to increase as the Baby Boomers enter this age group.

The accuracy of these forecasts depends upon a series of assumptions concerning national, regional, and state trends, especially for the local metropolitan economy. Oregon’s Office of Economic Analysis prepares population forecasts for Oregon and its counties. Metro prepares population and related forecasts for the Portland-Vancouver metropolitan area.

The pace of population growth has slackened appreciably in the past several years, following strong economic and population growth throughout most of the 1990s. Although economic recession has resulted in decreased employment opportunities, prospects for future population increases are moderate.

Compared with trends of the previous decade, our forecasts for population growth in the next 10 years suggest that moderate growth will occur. In the past, metropolitan Portland-Vancouver has thrived in good times and, except for dramatic shifts in the regional economy in the 1980s, has survived fairly well in bad times. Despite currently higher unemployment rates, there is little evidence that metropolitan Portland-Vancouver has lost its favored status among West Coast metropolitan areas for future continued moderate population growth.

MICROCLIMATES IN THE PORTLAND-VANCOUVER REGIONAL ECONOMY

by Sheila Martin, Director of the Institute of Portland Metropolitan Studies, Portland State University¹

Introduction

Portland-Vancouver operates as a regional market for labor, housing, entertainment, and a broad range of goods and services. The 2006 Regional Business Plan was developed with the understanding that each part of our region is linked economically and that the economic performance of each community depends on the success of its neighbors.

Nevertheless, the region is not economically homogenous. Each community demonstrates specific industry concentrations. These concentrations are driven by factors that encourage similar or linked businesses to locate near one another. And population demographics vary, affecting each sub-region's economic performance as our workforce travels throughout the region to find the best match between their skills and employer needs. As a result, industrial concentrations within the region lead to geographic differences in average worker wages. Economic recovery has brought greater employment growth to some industries than to others. Similarly, while wages and per capita income have grown, some families and individuals are being left behind by the recovery.

Throughout this article, I define the Portland-Vancouver metropolitan region as the six-county region including Columbia, Clackamas, Multnomah, Washington, and Yamhill counties in Oregon and Clark County in Washington. Wherever possible, I present data for the region as defined by those six counties. Where noted, I define the region differently due to data constraints.

The Regional Labor Market

Without a doubt, workers in the metropolitan region travel throughout the region to find jobs. Table 1 shows the percentage of residents who worked in a county other than where they lived in 2003. For example, 36.4% of the residents of Clackamas County also work in that county, while 28.2% of the residents of Clackamas County work in Multnomah County. Similarly, 67.2% of Multnomah county residents work in Multnomah County, while 15.2% work in Washington County. The bolded figures on the diagonal represent the percentage of residents of each county who also work in that county. Note that these data cannot track commuters from Oregon to a specific place in Washington, or vice versa.

Table 1 shows that Clark County employs the highest proportion of its own residents. Columbia County exports the greatest percentage of its residents to other counties for work. Figure 1 examines the relationship between jobs and population in another way. It shows the percentage of population by county and the percentage of jobs by county. Clark County contains 19% of the region's

Table 1: Percentage of Residents Commuting to Other Counties, 2003

Resident County	Workplace County						
	Clackamas	Clark	Columbia	Multnomah	Washington	Yamhill	Other
Clackamas	36.4	n/a	n/a	38.2	16.9	n/a	8.5
Clark	n/a	75.8	n/a	n/a	n/a	n/a	24.2
Columbia	5	n/a	33.8	31.7	18.1	n/a	11.4
Multnomah	11.6	n/a	n/a	67.2	15.2	n/a	6
Washington	9	n/a	n/a	28	55.7	n/a	6.5
Yamhill	6.5	n/a	n/a	11.3	19.8	49.1	13.3

Source: Local Employment Dynamics database, lehd.dsd.census.gov/led/

¹ Many thanks to Amy Vander Vliet and Eric Moore of the Oregon Employment Department and Scott Bailey of the Washington Department of Employment Security for assistance with data and may helpful comments. Jesus Mendez with the Oregon Employment Department crafted the cluster maps. Joe Cortright and Ethan Seltzer provided useful comments on earlier drafts.

population, but only about 13% of the region’s jobs. Thus, despite retaining almost 76% of its residents within the county for work, it remains a net exporter of workers to the rest of the region. Washington County is evenly balanced between jobs and residents. Yet, 28% of its residents commute to Multnomah County to work, and over 15% of Multnomah county residents commute to Washington County to work. Multnomah County, however, remains a net importer of workers.

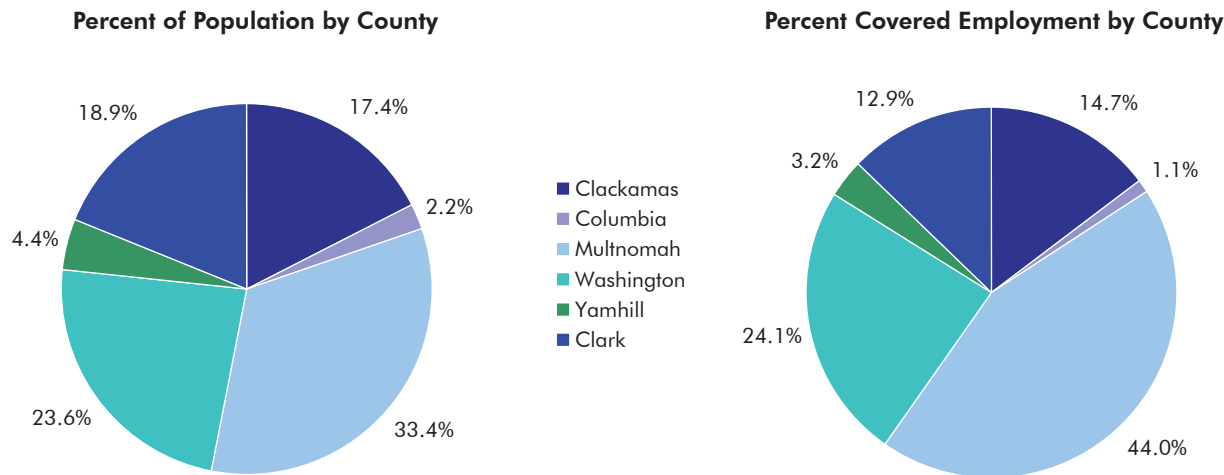


Figure 1: Percent of Population and Employment by County, 2005
 Source: PSU Population Research Center, www.pdx.edu/prc/; Washington State Office of Financial Management, www.ofm.wa.gov/pop/

Commuting patterns demonstrate that the region is held together by a mobile labor force that crosses county boundaries to find the best match between worker skills and employer needs. As a result, unemployment rates across the region move together. Figure 2 shows that each county’s unemployment rate rises and falls at roughly the same time. Furthermore, although some counties’ unemployment rates are consistently higher or lower than those of other counties, during times of economic expansion the gap between the highest and lowest rate narrows. This observation implies that the expansion is broadly shared among the population of the region’s counties. Table 2 shows the most recent unemployment rates for the region and for each county.

However, the region does exhibit sub-regional economic microclimates. These economic microclimates are influenced by the region’s industry clusters and by its demographics.

The Portland-Vancouver Metropolitan region contained just over 2.1 million people in 2006 with a labor force of about 1.1 million workers. The region’s economy comprises over 68,000 business establishments that employ workers covered by unemployment insurance. In addition, the region is home to almost 135,000 nonemployer businesses. A nonemployer business has no paid employees, has annual business receipts of \$1000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. These businesses do not appear in the Covered Employment statistics because, with no paid employees, they are not subject to reporting under the Unemployment Insurance program. Yet, these businesses can play an important role in the regional economy.

Table 2: Unemployment Rates by County, October 2006

Clackamas	4.1
Clark	4.9
Columbia	5.1
Multnomah	4.6
Washington	3.9
Yamhill	4.4

Source: Oregon Employment Department www.qualityinfo.org

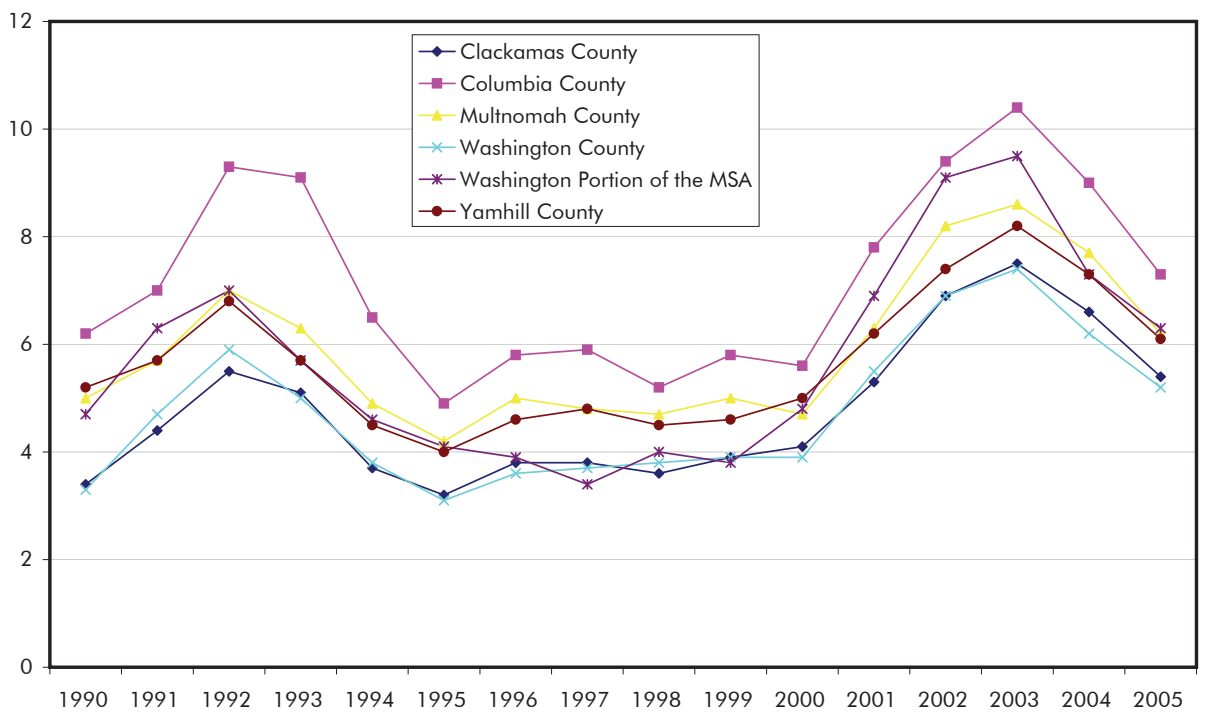


Figure 2: Annual Average Unemployment Rates by County
 Source: Oregon Employment Department, www.qualityinfo.org

The Portland-Vancouver Metropolitan Regional Economy

The Portland-Vancouver Metropolitan region contained just over 2.1 million people in 2006 with a labor force of about 1.1 million workers. The region’s economy comprises over 68,000 business establishments that employ workers covered by unemployment insurance. In addition, the region is home to almost 135,000 nonemployer businesses. A nonemployer business has no paid employees, has annual business receipts of \$1000 or more (\$1 or more in the construction industries), and is subject to federal income taxes. These businesses do not appear in the Covered Employment statistics because, with no paid employees, they are not subject to reporting under the Unemployment Insurance program. Yet, these businesses can play an important role in the regional economy.

Table 3: Portland-Vancouver Region: Population, Workforce, Employment, Unemployment & Establishments

Population, 2006	2,111,310
Civilian Labor force, October, 2006*	1,125,172
Total Nonfarm Employment, October, 2006*	1,075,724
Covered Business establishments, First Quarter 2006	68,178
Non-employer businesses, 2004*	135,330

Source: PSU Population Research Center, www.pdx.edu/prc/; Washington State Office of Financial Management, www.ofm.wa.gov/pop/; Oregon Employment Department, www.qualityinfo.org
 *These statistics include Skamania County in Washington.

Industry Cluster Specializations

The largest part of the Portland-Vancouver economy is engaged in industries that primarily serve the local population. These businesses, including retail trade, health care, government, and local professional and personal services, comprise two-thirds to three-quarters of the local economy.

The remainder of the economy is engaged in industries that compete globally for business. These traded sectors may serve the local population as well as people and businesses outside the region. Because they compete with companies outside the region, they bring new money into the area, or prevent money from being sent outside the region. These industries are organized as clusters that are related because they buy and sell to one another, hire from the same labor market, or sell to the same consumer market. Companies within a cluster concentrate in specific areas because locating near each other facilitates these relationships.

The Portland-Vancouver region’s major traded sector industry clusters were identified in the Regional Business Plan in January of 2006. They include seven traded-sector clusters and two partially traded clusters. Partially traded clusters include firms that strictly serve the local community as well as those that compete globally. Table 4 shows the employment, number of establishments, annual payroll, and average annual wage for these sectors for the six-county region.

Table 4: Cluster Employment and Wages, Portland-Vancouver Metropolitan Region, 2005

Cluster	Average Employment	Number of Establishments	Total Payroll (thousands)	Annual Average Wage
Apparel And Sporting Goods	8,003	164	\$767,637	\$95,919
Creative Services	9,227	1,241	\$415,790	\$45,062
Food Processing	11,628	384	\$438,982	\$37,752
Forest Products	15,243	609	\$800,656	\$52,526
High Technology	59,609	2,394	\$4,719,745	\$80,408
Metals, Machinery, And Transportation Equipment	40,110	1,241	\$1,936,829	\$48,288
Nursery Products	8,878	322	\$210,080	\$23,663
Professional And Business Services	101,266	7,772	\$4,386,306	\$43,315
Travel And Tourism	80,173	4,749	\$1,320,630	\$16,472

Source: Oregon Employment Department; Washington Department of Employment Security

Figures 3 through 6 map the distribution of employment in some of the region's traded sector clusters. Each map shows the employment range in a particular industry cluster for each census block group. The maps include only companies that hire workers covered by unemployment insurance. They do not include employment in block groups where confidentiality requirements will not allow us to disclose employment in that area. Some of the traded sector maps are not shown due to confidentiality issues.²

■ High technology, shown in Figure 3, includes firms that produce or design computers, electronics, instruments, and software, and firms that engage in scientific research. Employment is concentrated in Clark and Washington counties; however, Multnomah County also has significant employment in this cluster.

■ Metals, machinery, and transportation equipment, shown in Figure 4, include primary and fabricated metals, industrial machinery, tools, and a variety of metal products including transportation equipment. Employment and firms are concentrated in Clackamas County, and along the Columbia River in both Multnomah County and southwest Washington. Washington County also has employment in this industry on the outskirts of the urban area.

■ Forest Products include forestry and logging, the manufacturing of forest products, and the machinery used in forest industries. These firms are concentrated in Columbia County, along the Columbia River, and on the edges of Washington County. This map is not shown due to confidentiality concerns.

■ Food processing, including food and beverage manufacturing and distribution, clusters in Yamhill County, with distribution centers along the Columbia River and the edge of the urban area in Washington and Clackamas counties.

■ Creative Services, shown in Figure 5, include advertising, public relations, film and video services, entertainment and the arts. These firms are concentrated in Portland and in suburban Clackamas County.

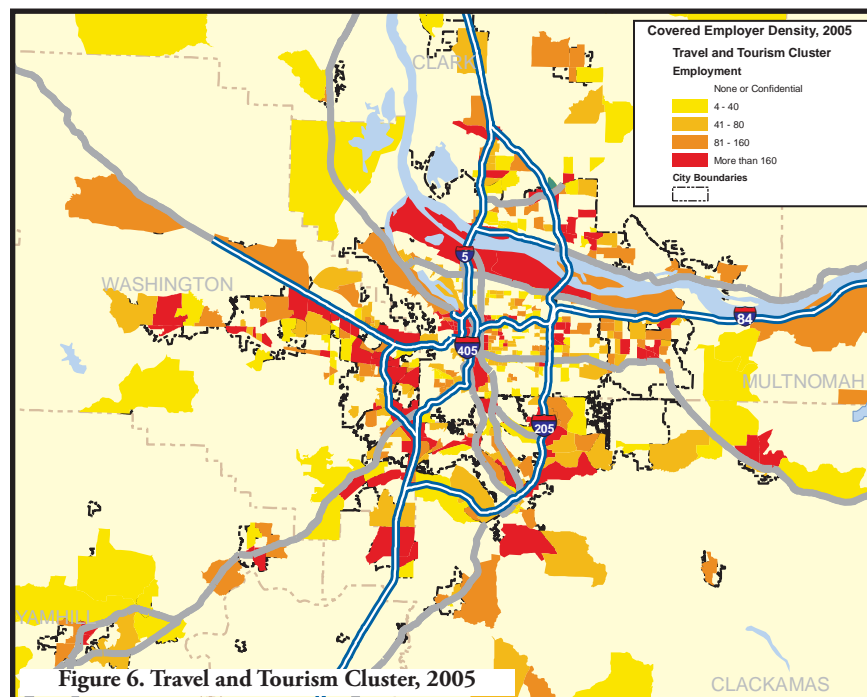
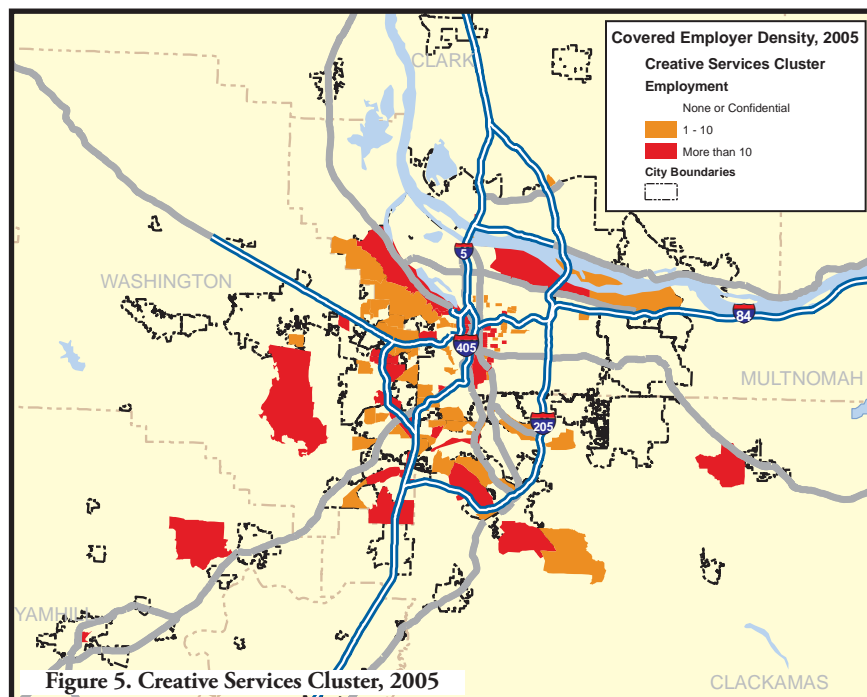
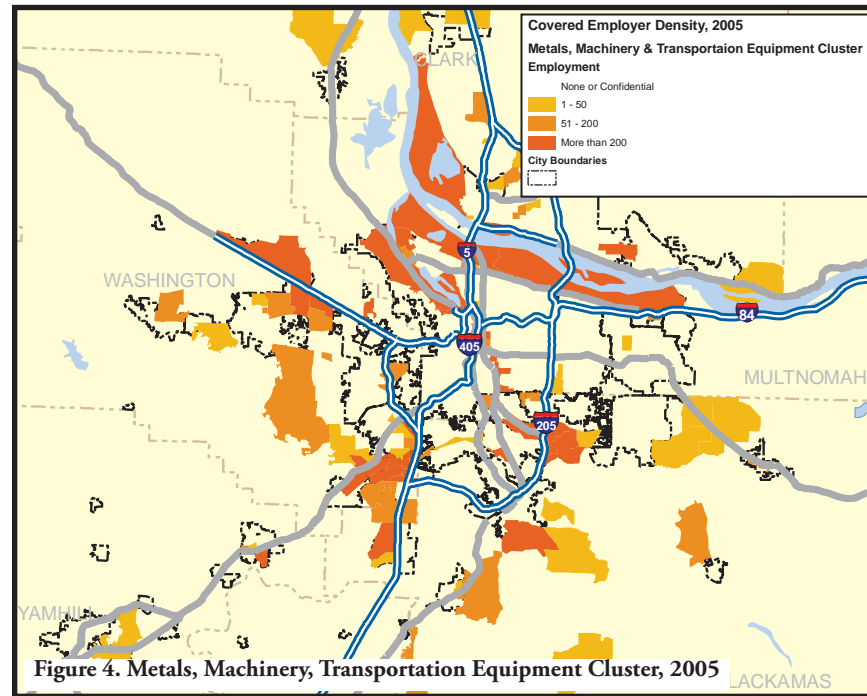
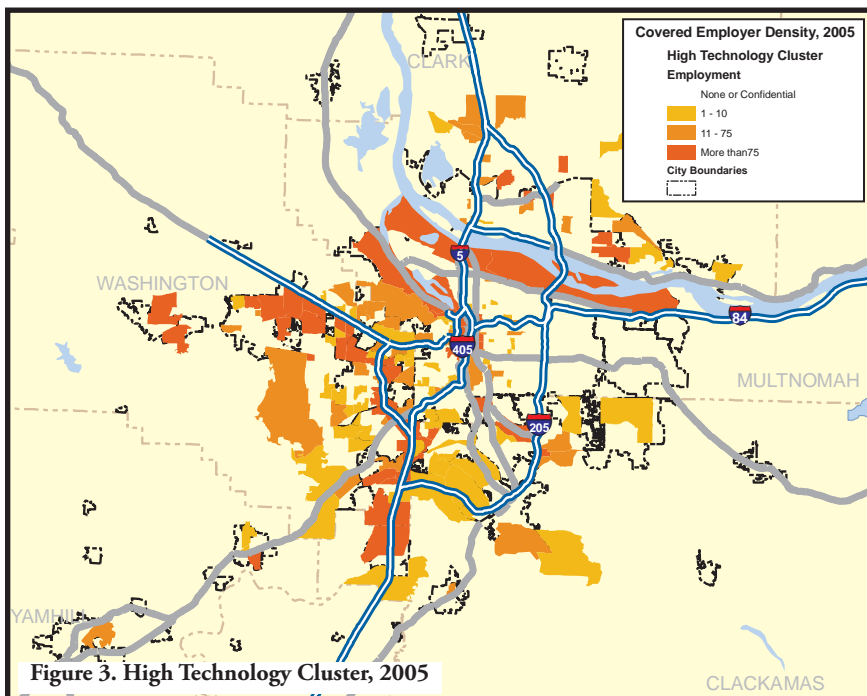
■ Apparel and Sporting Goods include designers, manufacturers, and distributors of shoes, clothing, and sports equipment. Although Nike and other companies in this sector cluster in Washington County, Multnomah County also is home to many of these companies.

■ Nursery products include growers and suppliers of nursery products and the services that support them and are concentrated at the outskirts of the urban areas in Washington and Clackamas counties.

The region's partially traded sectors are distributed throughout the region:

■ Professional and Business Services include architecture and engineering services, attorneys, corporate headquarters, accountants, and consultants.

■ Travel and Tourism, mapped in Figure 6, include hotels, restaurants, and attractions such as museums, golf courses, and professional athletics.



²The maps show the concentration of employment by census block group. The employment for some companies could not be displayed on the map due to the confidentiality rules of the Oregon Employment Department. The percentage of employees displayed by map are: High Technology, 88%; Metals, Machinery and Transportation Equipment, 77%; Creative services, 71%; Travel and Tourism, 91%. Source: Oregon Employment Department; Washington Department of Employment Security

Wage Differentials by County

Despite the fact that the region functions as a single market for labor, average wages across the region do vary in large part because the geographic patterns of industrial concentration vary as described above and because some industry clusters pay higher wages than others.

Table 5: Average Covered Wage by County, 2005

Clackamas	\$37,812
Clark	\$36,670
Columbia	\$31,977
Multnomah	\$41,241
Washington	\$46,769
Yamhill	\$31,394
Metro Region	\$41,069

Source: Oregon Employment Department, www.qualityinfo.org; Washington Department of Employment Security, www.workforceexplorer.org

Table 5 shows the average wage by county in 2005. Washington County, which has the highest concentration of technology companies, pays the highest average wages in the region. Multnomah County businesses rank second. The average for the region in 2005 was about \$41,000.

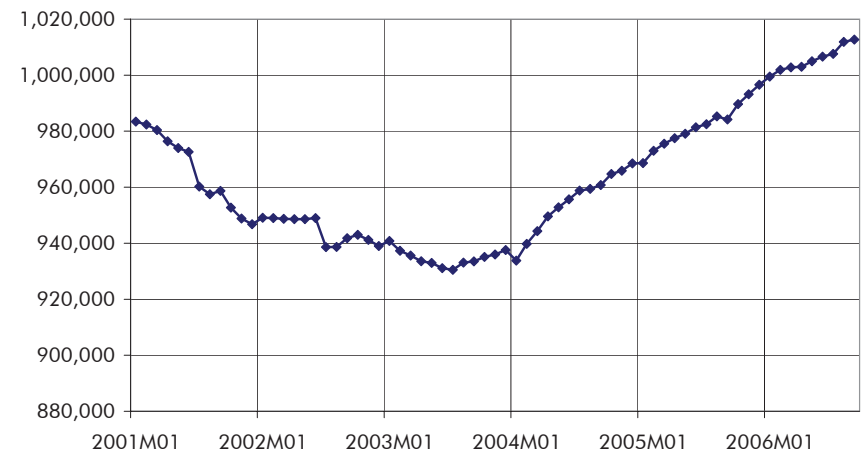


Figure 7: Total Nonfarm Employment in the Portland-Vancouver Metropolitan Region, Seasonally Adjusted*

Source: Oregon Employment Department
*Includes Skamania County.

The Regional Economic Recovery: Employment and Industry

The regional economy has experienced a strong recovery over the last three years. Figure 7 shows the seasonally adjusted time series of nonfarm employment for the region. As of October 2006, the region employed a seasonally adjusted total of 1,012,700 workers in the non farm sector—an 8.8% increase from the recession low of 930,500 in July of 2003.

The recovery occurred unevenly across industry sectors. Figure 8 shows the growth rate from the trough of the recession, July 2003, to September 2006, for major industry groupings. Construction had the highest growth rate (26%), while natural resources and mining lost 6%. Table 6 shows growth rates for manufacturing sub-sectors. Most of the growth in manufacturing was due to growth in the transportation equipment, computer and electronic products, and primary metals sectors. Even the wood products sector sustained a fairly healthy job growth since the recession.

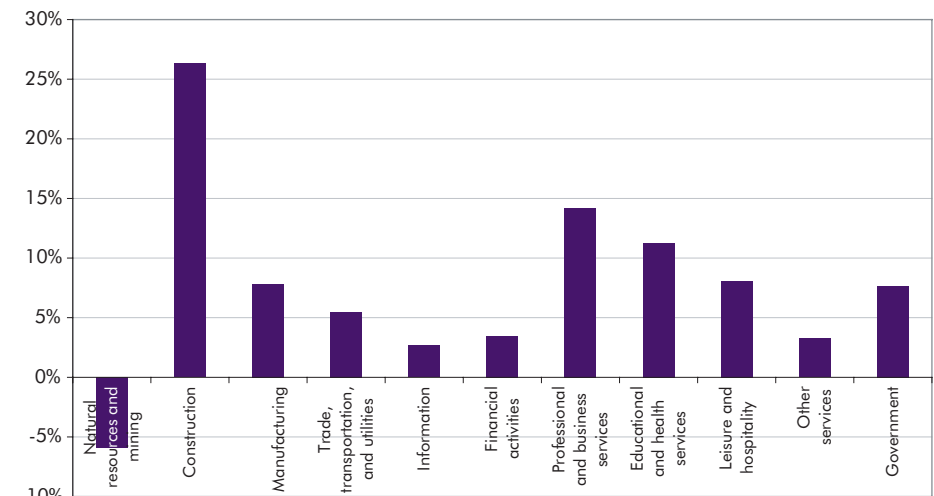


Figure 8: Employment Change by Sector, July 2003 to September 2006*

Source: Oregon Employment Department,
*Includes Skamania County.

The Regional Economic Recovery: Workers, Education, Income, and Poverty

Table 6: Growth in Employment in Manufacturing Sectors, July 2003 to September 2006*

Industry	Metropolitan Employment		
	Jul-03	Sep-06	Percent Change
Wood products	5,500	6,100	10.91%
Primary metals	5,500	6,600	20.00%
Fabricated metals	11,600	12,500	7.76%
Machinery	8,400	8,600	2.38%
Computer and electronic products	34,700	38,300	10.37%
Transportation equipment	7,500	9,600	28.00%

Source: Oregon Employment Department, www.qualityinfo.org
 * Includes Skamania County.

How does the economy look from the perspective of the 1.1 million workers employed in the region? Perhaps the first indicator of how well people are faring economically is whether they can find jobs. Figure 9 shows the unemployment rate for the metropolitan region over time. Unemployment rates peaked in 1992 (6.5%) and in 2003 (8.3%). The rate has fallen sharply since then. As of October 2006, the seasonally adjusted unemployment rate for the region was 4.7%. As indicated earlier, the unemployment rates for the counties tend to move together; rates have been declining across the region.

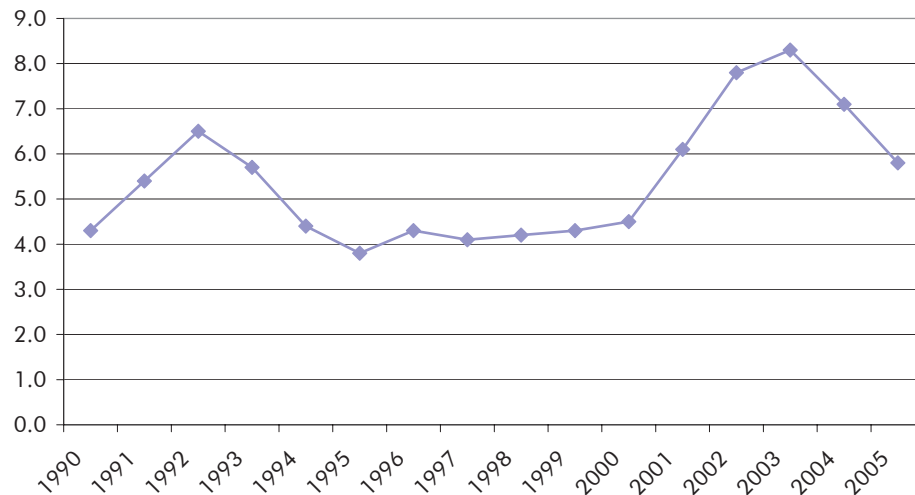
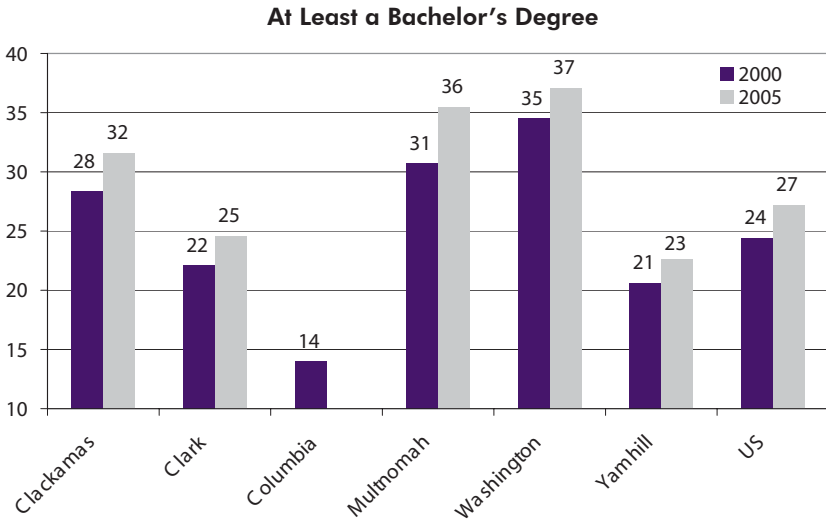
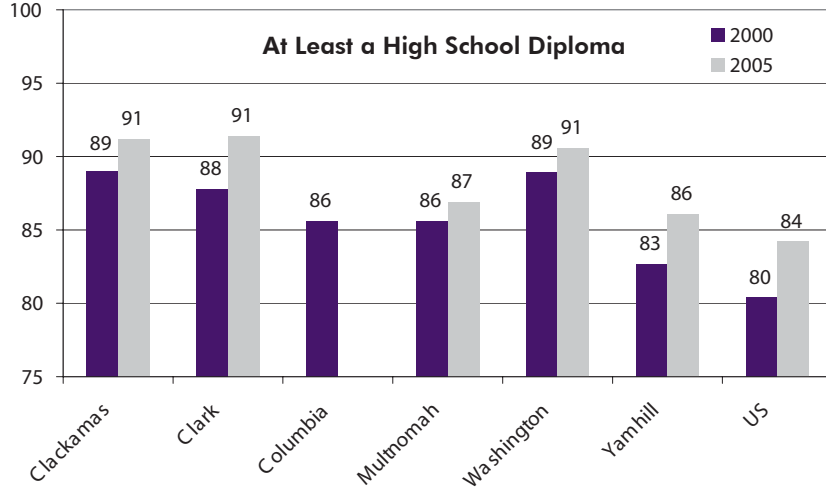


Figure 9: Annual Average Unemployment Rate, Portland-Vancouver Metropolitan Region*
 Source: Oregon Employment Department
 *Includes Skamania County.



Figures 10a and 10b: Percentage of the Adult Population Achieving at Least a High School Diploma and a Bachelor's Degree, by County, 2000 and 2005
 Source: 2000 Census and the 2005 American Community Survey, www.census.gov

At the same time, the region's population is becoming more educated. Education level has a strong influence on a person's earning power and income. Figures 10a and 10b show the percentage of the population with at least a high school diploma and a Bachelor's degree for 2000 and 2005. While some counties made significant gains in the percentage of the population with a bachelor's degree, there were only minor increases in the percentage of the population with a high school diploma.

Given the improved employment picture and the region's rising educational attainment, how are the region's workers faring with respect to wage? In 2001, the average annual wage for the six-county region was \$37,285. By 2005 it had risen to \$41,069. Although this rise appears to be a healthy increase, real wages adjusted for inflation have actually stayed flat during this time (Figure 11).

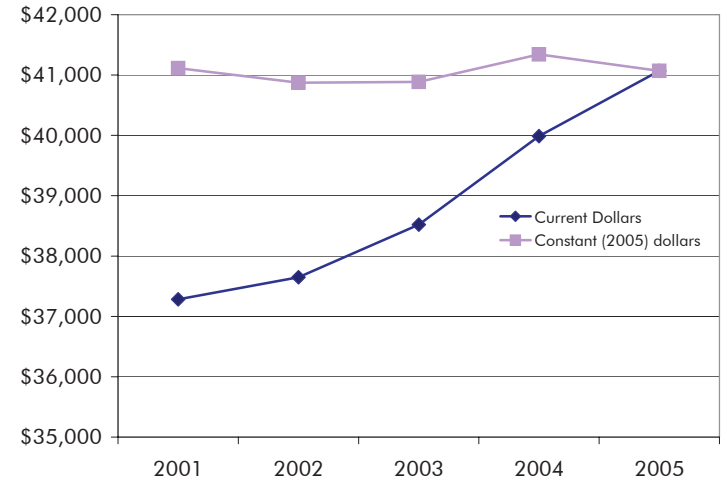


Figure 11: Average Annual Covered Wage, Portland-Vancouver Region
 Source: Oregon Employment Department, Covered Employment Database, www.qualityinfo.org; Washington Department of Employment Security, www.workfor-ccexplorer.org; and US Bureau of Labor Statistics, www.bls.gov. Average annual wage, adjusted by the author, using the CPI-U from BLS.

How is the population as a whole faring given unemployment, education, and wages? Figure 12 shows that per capita personal income in the region has grown sharply since 2003. But while the region's per capita income was higher than that of the United States in 2001, it fell below the U.S. average during the recession and has not yet caught up.

While per capita income for the region grew, so did poverty. According to the American Community Survey, 9.3% of the region's families and 12.8% of the region's individuals earned incomes below the poverty level in 2005. Although the region's poverty rates were slightly lower than the U.S. rates, they are higher than those reported in the 2000 census for the region.³ Table 7 shows poverty rates for each county and some of the region's cities for 2000 and 2005. Note that the 2000 statistics are from the decennial census, while the 2005 statistics are from the American Community Survey (ACS). The ACS does not report statistics for Columbia County. It also is based on a sample and subject to sampling variability.⁴

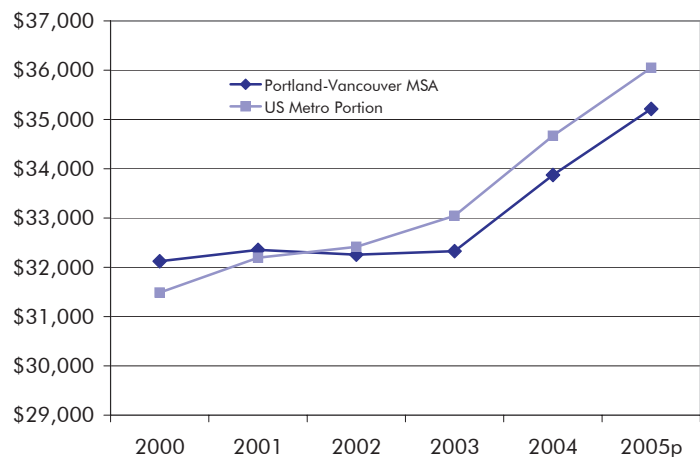


Figure 12: Per Capita Personal Income, Portland Metro Region and US Metro Average*

Source: Bureau of Economic Analysis, www.bea.gov

*2005 estimate is preliminary.

Table 7: Poverty Rates for 2000 and 2005 for Counties and Some Regional Cities

Counties	Families below poverty level (%)		Individuals below poverty level (%)	
	2000	2005	2000	2005
Clackamas	4.6	5.7	6.6	9.1
Clark	6.9	9.7	9.1	11.7
Columbia	6.7	n/a	9.1	n/a
Multnomah	8.2	11.9	12.7	17.4
Washington	4.9	7.9	7.4	10.3
Yamhill	6	n/a	9.2	14.4
Cities				
Portland	8.5	11.8	13.1	17.8
Gresham	8.4	14.5	12.5	18.5
Vancouver	9.4	15	12.2	16.9
Beaverton	5	n/a	7.8	8.7
Hillsboro	6	10.2	9.2	13.3
United States	9.2	10.2	12.4	13.3

Source: 2000 Census and the 2005 American Community Survey, www.census.gov

While per capita income for the region grew, so did poverty. According to the American Community Survey, 9.3% of the region's families and 12.8% of the region's individuals earned incomes below the poverty level in 2005.

³The 2000 poverty statistics for the metropolitan region are not reported here because the Census Bureau's geographical definition of the region changed between 2000 and 2005. Thus, the regional poverty rates for 2000 and 2005 are not strictly comparable.

⁴The Census Bureau does not calculate a margin of error for the poverty rates.

Conclusions

The Portland-Vancouver metropolitan region operates as a regional market for labor, housing, entertainment, and a broad range of goods and services. Each of the region's communities is dependent on the others to provide workers, jobs, and the variety of housing, lifestyles, and goods and services that all major metropolitan areas need in order to thrive.

Nevertheless, the region is not economically homogenous. Washington, Multnomah, and Clark counties are the center of the high technology industry, while Clackamas is ground zero for the metals industry. Multnomah County and suburban Clackamas County form the core of the Creative Services sector, and

Yamhill concentrates on food processing. These geographic industrial concentrations drive the demand for workers of varying levels of skill and education and lead to geographic differences in average wages.

Given our economic interdependence, regional leaders must develop a joint response to economic stagnation and inequality.

Similarly, population demographics vary across the region. These differences in population characteristics affect each sub-region's economic performance as measured by unemployment rates, income, and poverty. One of the key demographic factors explaining the variation in economic performance is educational attainment of each sub-region's citizens.

From these patterns of regional industrial concentration and regional demographics arises a complex regional economy in which each community provides both jobs for workers in the other communities and workers for businesses located in each corner of the region. The industrial and demographic diversity fosters a wide variety of industries and provides opportunities to individuals with varied skills.

Despite vigorous job growth over the past several years, some statistics portray an economy that is failing to offer broad-based economic opportunity. Inflation negates the meager increases in average wages for many workers. Per capita income has risen simultaneously with the percentage of families in poverty. These contradictory trends suggest that some individuals and families in our region are not benefiting from the economic expansion.

The existence of economic microclimates does not give our community's leaders permission to ignore economic realities in the rest of the metropolitan region. Given our economic interdependence, regional leaders must develop a joint response to economic stagnation and inequality. Ultimately, each community's future depends in large part on the success of its neighbors in creating jobs, educating citizens, and offering prosperity that is broadly shared across the region's people and communities.

EDUCATIONAL ACHIEVEMENT: SHAPING THE REGION'S REPUTATION AND DRIVING ITS ECONOMY

by John Tapogna, Managing Director, ECONorthwest

Overview

Any region's reputation in education is a key to its economic vitality. Businesses look for signals of a quality workforce. Families want good schools for their children. The Portland-Vancouver region is making progress in education, but the news is not uniformly good.

On the positive side, Portland is rising in the ranks of so-called "well educated" cities—a reputation that benefits the region as a whole. Portland's attractiveness to young, recent college graduates is well documented and has played an important role in the trend. The influx of young professionals is a plus for the regional economy. However, instability of K-12 school funding continues to cloud the region's image. During the most recent recession, the national media frequently cited funding woes of Portland-area schools to illustrate the broader fiscal issues facing state and local governments. Despite the return of economic growth (and in some cases because of it), school-funding measures remained prominent on last November's ballots. Fast-growing districts needed capital for expansion while the region's largest district—Portland Public Schools—requested supplemental operating funds after two rounds of high-profile school closures. Unstable school finances remain a recognized problem, particularly in Oregon where volatile income taxes compose the majority of school revenue and the state plays no role in funding capital.

During the past 15 years, the standards-based movement has focused attention on the achievements of elementary and secondary students like no other time in history. Across the region, a higher percentage of students in early grades meet state-established reading and math benchmarks than do middle- or high-school students. State legislatures and individual districts have responded with a host of reforms to address underachievement in the higher grades. Students in Washington State will take high school exit exams in reading, math, and writing beginning with the class of 2008. In Oregon, the State Board of Education is

crafting more rigorous high-school diploma requirements, and school districts are experimenting with K-8 and small high school designs.

The federal No Child Left Behind Act ensures that student achievement and school quality will remain in sharp focus in the coming years. Performance on state and federal reports will shape the region's educational reputation and play a role in determining where in the region families and businesses locate.

Education and the Economy

No factor better predicts job growth and overall economic health than the quality of a region's labor force. A well-educated population drives economic growth in a number of ways. Firms looking to relocate or expand routinely put workforce skills at the top of their location criteria, well ahead of tax and regulatory concerns. Well-educated citizens are more likely to create their own jobs and, once successful, keep their businesses in their hometowns. On this critical indicator of economic health, the region fares reasonably well.

Annual rankings of well-educated cities can shape the region's reputation. The City of Portland ranks 11th nationally with about 38% of the adult population holding a bachelor's degree. That puts Portland in a second-tier of cities with Oakland, San Diego, and San Jose but behind Seattle and San Francisco.

Rates of educational attainment vary across the region. In 2005, every county exceeded the national average in the share of the adult population that holds at least a high school diploma. The same fact held in 1990 (Figure 1).

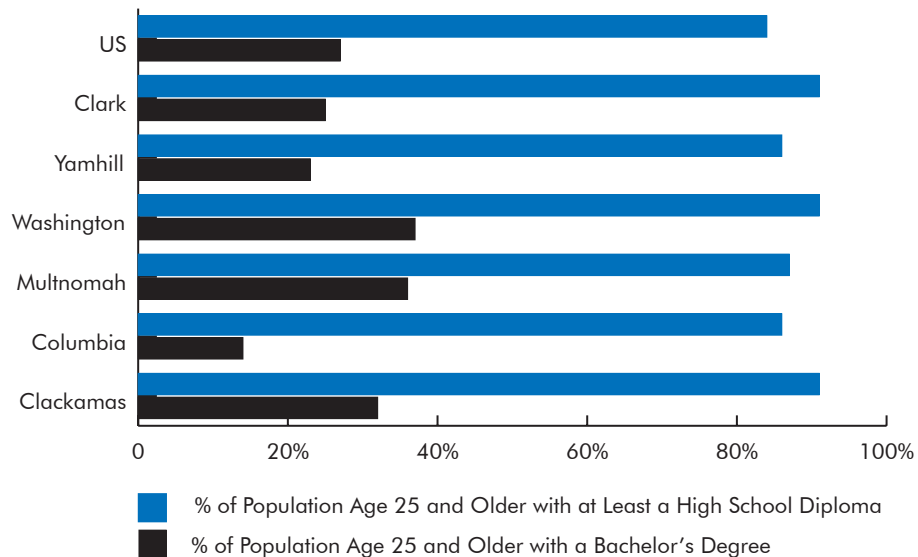


Figure 1: Educational Attainment of Adults 25 Years and Older

Source: 2005 American Community Survey. Data for Columbia County are from the 2000 Census, www.census.gov

In 2005, the share of the population holding a bachelor's degree exceeded the U.S. average in Clackamas, Multnomah, and Washington Counties. The most notable trend since 1990 is the sizable increase in the percent of Multnomah County residents who hold bachelors' degrees. The 12-percentage point increase in 15 years can be attributed, in part, to the net in-migration of young, recent college graduates. At an estimated 36% of adults with bachelors' degrees, Multnomah County's rate is virtually even with Washington County's, which was not the case in 1990.

The Multnomah and Washington county rates remain well behind San Francisco County, California (49%), Santa Clara County, California (44%), and King County, Washington (42%), which all boast very strong technology and professional service sectors.

Rates of educational attainment are lower in the region's outlying counties. The shares holding bachelor's degrees in Clark, Columbia, and Yamhill Counties are

below the national average; however, all three counties exceed the US average on rates of high school attainment.

Much has been written recently about the region's attractiveness to young, college-educated professionals. Precisely how they will impact the region is still unknown. Where will they work as their experience and skills mature? How many will start their own businesses, and in which sectors? Where will they choose to live as they form families and raise children? Answers to these questions will emerge throughout the next decade, and local lawmakers would be wise to watch this group and craft policies that support their entrepreneurial spirit.

The quality of a region's public schools also shapes its educational reputation. Businesses look to a strong K-12 system to generate a quality workforce, and business leaders desire strong schools for the children of their employees. So what do the enrollment, achievement, and finance trends of public K-12 schools tell us about the region's attractiveness?

K-12 Enrollment

Regional enrollment in public K-12 schools increased 30% during 1990-2005 from 253,894 to 329,196. Both underlying demographic trends and in-migration of families with children drove the overall increases. Throughout the 1990s, the children of the baby boom generation moved through the K-12 system. Enrollment gains were not uniform across the region. Generally, suburban areas saw gains while inner-Portland and outlying rural areas declined. School districts in Clark and Washington counties experienced the strongest growth. The eight school districts located in Clark County enrolled 45,320 in 1990 and 75,183 in 2005—a 66% increase (see Figure 2). Meanwhile, enrollment climbed 47%—from 54,572 to 80,222—in Washington County's seven districts.

Ten of the region's 46 districts lost enrollment during 1990-2005 (see Table 1). Enrollment in the Portland Public Schools stood at 53,042 in 1990, peaked at 56,856 in 1996 and then gradually declined to 47,089 in 2005. In 1990, the Portland Public Schools enrolled one out of every five public school students in the region. In 2005, PPS enrolled about one in seven. Analysts point to a fixed,

Table 1: Public School Enrollment by County and District, 1990 and 2005

County	School District	1990	2005	Percent Change 1990-2005
Clackamas	Canby	4,299	5,184	21%
	Colton	886	758	-14%
	Estacada	2,222	2,209	-1%
	Gladstone	2,056	2,231	9%
	Lake Oswego	6,218	6,953	12%
	Molalla River	2,888	2,869	-1%
	North Clackamas	12,403	16,921	36%
	Oregon City	6,984	8,100	16%
	Oregon Trail	4,484	4,239	-5%
	West Linn-Wilsonville	5,481	8,214	50%
All Clackamas County Districts		47,921	57,678	20%
Columbia	Clatskanie	1,737	865	-50%
	Rainier	1,482	1,212	-18%
	Scappoose	1,950	2,218	14%
	St. Helens	2,626	3,692	41%
	Vernonia	677	716	6%
All Columbia County Districts		8,472	8,703	3%
Multnomah	Cenntennial	4,973	6,401	29%
	Corbett	712	618	-13%
	David Douglas	6,370	9,994	57%
	Gresham Barlow	9,067	12,033	33%
	Parkrose	3,301	3,470	5%
	Portland	53,042	47,089	-11%
	Reynolds	6,975	10,906	56%
	Riverdale	249	586	135%
All Multnomah County Districts		84,689	91,097	8%

County	School District	1990	2005	Percent Change 1990-2005
Washington	Banks	1,021	1,236	21%
	Beaverton	24,874	36,640	47%
	Forest Grove	4,360	5,955	37%
	Gaston	671	509	-24%
	Hillsboro	14,004	19,694	41%
	Sherwood	1,387	3,837	177%
	Tigard-Tualatin	8,255	12,351	50%
	All Washington County Districts		54,572	80,222
Yamhill	Amity	779	839	8%
	Dayton	780	1,031	32%
	McMinnville	4,107	6,030	47%
	Newberg	4,186	5,206	24%
	Sheridan	839	1,042	24%
	Willamina	923	952	3%
Yamhill-Carlton	1,306	1,213	-7%	
All Yamhill County Districts		12,920	16,313	26%
Clark	Battleground	7,578	13264	75%
	Camas	2,288	5275	131%
	Evergreen	14,242	25576	80%
	Green Mountain	74	121	64%
	Hockinson	923	2062	123%
	La Center	798	1486	86%
	Ridgefield	1,359	1969	45%
	Vancouver	15,943	22415	41%
	Washougal	2,115	3015	43%
All Clark County Districts		45,320	75,183	66%

Sources: 1990-1998, NCES; 1999-2005 Oregon counties, ODE; 1999-2004 Clark County, Washington State School Superintendent; All Oregon Trail enrollments are from ODE. 1990 & 1991 Oregon Trail enrollments are estimates; 1994 Gresham-Barlow is an estimate; 1990-2005 Columbia and Yamhill Counties, ODE; Washington 2005 Data, <http://reportcard.ospi.k12.wa.us/Download/2006/DemographicInformationByDistrict.xls>

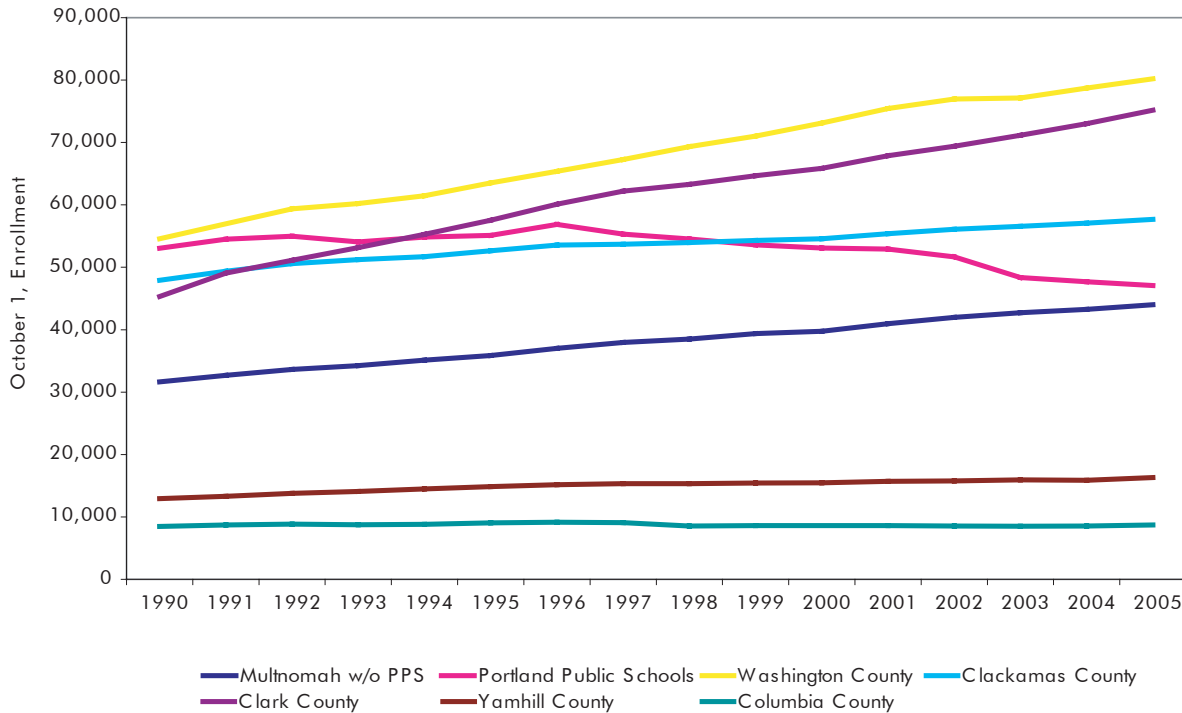


Figure 2: K-12 Public School Enrollment by County, Fall 1990 to Fall 2005

Source: 1990-1998, NCES; 1999-2005 Oregon counties, ODE; 1999-2004 Clark County, Washington State School Superintendent; All Oregon Trail enrollments are from ODE. 1990 & 1991 Oregon Trail enrollments are estimates; 1994 Gresham-Barlow is an estimate; 1990-2005 Columbia and Yamhill Counties, ODE; Washington 2005 Data, <http://reportcard.ospi.k12.wa.us/Download/2006/DemographicInformationByDistrict.xls>

old, and increasingly expensive housing stock as one reason that Portland has become relatively less attractive to families with children over time. While out-migration from PPS has been stable, in-migration of families with children has slowed due, in part, to housing prices. Private- and home-school enrollments and changing birth rates have played only minor roles in the district’s enrollment. Enrollment declines in PPS spurred two rounds of high-profile school closures that dominated district and community attention during much of the 2004-2005 and 2005-2006 school years.

Other declining enrollment districts are located in rural areas: the Colton, Molalla River, and Oregon Trail districts in Clackamas County; the Clatskanie and Rainer districts in Columbia County; the Corbett district in Multnomah County; the Gaston district in Washington County; and the Yamhill-Carlton

district in Yamhill County. The declines in rural districts mirror a statewide trend. Of Oregon’s 87 small rural districts, 67 have recorded a drop in enrollment since 1995, leading to proposals for the consolidation of smaller districts.

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Enrollment increases and declines pose different budget challenges. Fast growing districts need additional classroom space and rely on local voters to periodically approve bonds for capital construction. In Oregon, the capital needs of growing districts have risen on the public policy agenda and led to calls for a greater state-level role in providing K-12 capital or alternative finance methods (e.g., system development charges). In Washington, school capital bonds require a 60% supermajority for approval. Opponents of the 1944 law argue that it presents a significant challenge to provide adequate infrastructure in fast growing districts like those in Clark County. Supporters believe a supermajority is appropriate when asking taxpayers to take on debt. Unlike Oregon, however, Washington charges school impact fees to home developers. For example, the fast-growing Evergreen district in east Vancouver and Clark County plans to almost double its fee from \$3,540 per single-family home to \$6,819. Washington policymakers argue that existing

fees typically fund portable or modular classrooms, and that traditional bonding is required for full school construction.

In Oregon, declining enrollment presents fiscal challenges. The state's funding formula, which equalizes per student resources across the state, distributes dollars based on the average rather than marginal cost of serving a student. The formula's method does a poor job of recognizing fixed costs, which do not fall in step with enrollment. For example, spending on principals and building operations decline only if and when a district elects to close schools. Consequently, the average funding lost by a shrinking district is typically higher than the immediate savings associated with serving a smaller student base. In Oregon, a rough rule of thumb suggests district funding is reduced by about \$5,000 for each student lost, but short-term operating costs decline by only half that amount—about \$2,500 per student.

In upcoming years, districts across the region will compete for a relatively fixed population of school-aged children. Unlike the 1990s when the children of baby boomers grew K-12 enrollment, demographers see the school-age population growing at slower rates than the general population. Districts located in areas with relatively affordable housing that are close to new employment centers will grow while districts without those characteristics will stagnate or decline. Attracting Hispanic families with children, whose population percentages are expected to increase at higher rates than those of other ethnicities, will also be a key to enrollment growth.

K-12 Achievement

Since the early 1990s, essentially all states have developed educational standards. These standards have defined the knowledge and skills students are expected to master at various grade levels in core academic subject areas. Oregon and Washington have implemented assessment systems that track student-, school-, and district-level progress on achievement in elementary and secondary schools.

Oregon assesses student progress in grades 3, 5, 8, and 10. According to the Oregon Department of Education, the purpose of the Oregon Report Card is to

monitor trends among school districts and Oregon's progress toward achieving its goals and "to communicate information to parents about school progress and achievement while meeting the legislative expectation for school and district accountability." A comparison of reading and math scores for the 2000 and 2005 school years suggests four conclusions (see Table 2):

- Performance relative to standard is generally stronger in earlier grades. In both 2000 and 2005, regional districts generally showed a higher percentage of 3rd graders meeting state standards than 8th graders or 10th graders. This achievement "drop off" is not unique to the region, and state-level test results exhibit similar trends. Education policymakers use the trends support a call for more rigor in middle and high school curricula or other reforms, including a return to K-8 school configurations. Other observers believe the tests themselves may be to blame. Specifically, some argue that Oregon's third grade standard may be set too low, and the 8th grade standard too high and that recalibrating the tests would more appropriately evaluate a student's progression over time.

- Socio-economic status correlates with achievement levels. The regional achievement scores reflect conclusions that student achievement is correlated with higher levels of parental educational attainment and household income. Scores in districts with high attainment/income (e.g., Lake Oswego, Riverdale, West Linn-Wilsonville) are routinely higher than scores in districts with lower attainment/incomes (e.g., Clatskanie, St. Helens, Vernonia, Reynolds).

- Between 2000 and 2005, students show improvement in math. At each of the four testing grades, the majority of school districts in the region report gains during 2000-2005 in the share of students meeting the state's math standards. For 3rd grade math, in the median district 89% of student met standard—up from 79% in 2000's median district. At the 10th grade level, 45% of students met the math standard in 2005—up from 36% for the median district in 2000. The 10th grade underscores two points: teachers have better prepared students for the math test, but many students still fall short of the state standards.

Table 2a: Oregon Report Card Scores-Percentage of Students Meeting or Exceeding Achievement Standards

	1999/2000								2004/2005							
	3rd		5th		8th		10th		3rd		5th		8th		10th	
	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math
Canby	78	67	76	73	66	58	47	46	85	91	90	89	70	67	59	54
Colton	96	94	76	78	67	68	52	38	86	84	86	>95	79	79	52	43
Estacada	72	72	72	68	59	54	47	38	NA	85	NA	92	NA	61	NA	47
Gladstone	95	89	75	72	73	75	64	43	86	>95	83	82	69	70	57	43
Lake Oswego	96	93	93	89	80	84	73	67	>95	>95	95	>95	88	86	77	76
Molalla River	90	87	76	72	61	45	41	31	86	84	83	88	65	61	44	33
No. Clackamas	92	83	82	78	69	61	50	43	91	92	86	88	70	72	61	60
Oregon City	87	79	75	72	65	58	55	40	90	91	84	86	58	59	44	48
Oregon Trail	80	67	69	74	59	52	42	36	90	89	84	89	63	59	48	36
West Linn-Wilsonville	93	90	88	87	76	71	72	65	94	NA	93	NA	82	NA	78	NA
Clatskanie	91	90	76	63	59	44	43	22	67	80	84	86	73	71	39	31
Rainier	88	73	65	65	61	51	48	32	94	>95	75	82	42	43	49	59
Scappoose	86	87	80	71	63	42	53	32	86	90	80	84	44	55	34	37
St. Helens	77	76	70	66	51	45	42	26	76	85	73	75	49	48	35	31
Vernonia	77	82	72	60	57	34	47	23	73	78	77	85	53	62	46	42
Centennial	80	75	72	65	60	45	42	33	74	81	66	73	56	57	41	36
Corbett	93	100	85	84	83	69	42	35	>95	94	89	90	74	66	92	82
David Douglas	81	73	67	62	62	54	48	29	83	84	76	80	54	64	44	42
Gresham-Barlow	80	75	75	75	67	65	54	40	84	87	78	83	66	67	48	41
Parkrose	71	69	59	58	57	40	47	24	82	89	74	83	48	33	50	34
Portland	79	74	72	73	62	56	51	41	86	86	83	86	66	67	50	49
Reynolds	74	62	64	54	59	43	50	31	73	76	72	73	55	55	46	31
Riverdale	98	86	95	95	80	74	88	75	>95	>95	93	93	>95	>95	76	71

Source: Oregon Department of Education, Office of Analysis and Reporting, www.ode.state.or.us/data/schoolanddistrict/testresults/reporting/publicrpt.aspx

Table 2b: Oregon Report Card Scores-Percentage of Students Meeting or Exceeding Achievement Standards

	1999/2000								2004/2005							
	3rd		5th		8th		10th		3rd		5th		8th		10th	
	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math
Banks	81	61	73	66	67	57	68	43	79	90	86	89	61	54	57	50
Beaverton	86	82	81	81	72	67	58	51	90	91	87	91	73	77	63	56
Forest Grove	95	79	73	70	57	45	47	29	84	90	66	70	52	48	63	53
Gaston	80	81	69	68	65	61	50	50	90	88	94	91	66	61	57	43
Hillsboro	78	72	69	67	61	54	47	34	80	81	73	78	63	65	49	42
Sherwood	92	90	81	71	76	69	61	43	94	94	94	94	73	74	59	58
Tigard-Tualatin	90	78	82	77	77	71	57	58	90	90	87	90	73	74	64	66
Amity	92	91	63	67	61	45	49	33	89	>95	69	70	68	59	43	45
Dayton	81	69	70	59	51	37	48	33	76	90	71	83	57	60	49	50
McMinnville	80	71	80	77	57	58	47	43	87	90	82	90	60	61	61	46
Newberg	82	81	77	72	66	61	51	35	91	>95	92	94	66	75	66	70
Sheridan	86	81	72	61	35	22	36	25	73	71	69	71	42	35	61	46
Willamina	77	77	57	61	53	31	29	15	77	86	75	84	47	51	37	33
Yamhill-Carlton	85	93	73	76	69	69	44	43	82	88	84	88	76	77	54	40

Source: Oregon Department of Education, Office of Analysis and Reporting, www.ode.state.or.us/data/schoolanddistrict/testresults/reporting/publicrpt.aspx

■ Student performance on reading was mixed at best during 2000-2005. On the 3rd, 8th, and 10th grade-tests, districts were as likely to report achievement declines as they were gains. Fifth grade reading was the exception where only four districts saw a decline in the percentage of students meeting standard during 2000-2005.

Washington State has a decade-long history of developing and implementing its Essential Academic Learning Requirements (EALRs). The EALRs define benchmarks, or cumulative indicators, originally for grades 4, 7, and 10. Recently, the state has expanded testing for reading and math to all grades between 3-8 to comply with the federal No Child Left Behind Act. The EALRs, in turn, form the framework for the Washington Assessment of Student Learning (WASL), which will be required for high school graduation beginning in 2008. The WASL exit exam adds a significant consequence to the annual assessments and puts Washington's

standards under increased scrutiny. A review of district-level WASL scores since 2001 shows three trends (see Table 3):

- Achievement rates have generally improved over time. With limited exceptions, 2005 achievement rates for reading and math were higher in all school districts except for one in Clark County.

- Passing rates generally decline at higher grades. As in Oregon, achievement rates are lower for high schoolers than for elementary school children. With 10th grade achievement rates well below 100% in both reading and math, the underperforming students will face unprecedented challenges in attaining a high school diploma.

- Students generally perform better on reading than math. In Clark County and across Washington, students have generally performed better in reading than math. Subpar achievement levels in math have led some educators to call on the state Board of Education to increase math requirements and specify content.

Regional K-12 Finance

Few aspects of the K-12 system capture more stakeholder and media interest than finance. In Oregon and Washington, policymakers have debated the goals of funding equity, stability, and adequacy. Lawmakers and voters tend to support the notions of stability and resource equity (that is, providing a similar level of funding to students across a state). Arriving at consensus on an adequate funding level—

Table 3: Washington Assessment of Student Learning Scores-Percentage of Students Meeting or Exceeding Achievement Standards, Clark County Districts

	1999/2000						2004/2005						2000-2005, Percentage Point Change					
	4th		7th		10th		4th		7th		10th		4th		7th		10th	
	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math	Read	Math
Battleground	58	34	44	29	61	36	77	61	70	55	72	46	19	27	26	26	11	11
Camas	82	68	59	36	61	27	90	76	86	63	76	55	8	9	27	28	15	29
Green Mountain	60	40	NA	NA	NA	NA	90	80	67	38	NA	NA	30	40	NA	NA	NA	NA
La Center	73	47	39	26	64	26	86	62	64	48	80	60	13	16	25	22	16	34
Evergreen	71	44	41	27	63	28	80	63	68	51	75	48	9	20	28	25	12	21
Hockinson	78	47	66	42	NA	NA	87	77	82	60	92	72	9	31	16	19	NA	NA
Ridgefield	94	63	51	37	72	51	86	76	79	63	69	48	-8	13	27	26	-3	-4
Vancouver	69	44	38	26	57	31	75	54	65	44	73	46	6	10	27	19	17	16
Washougal	64	40	40	25	46	22	86	72	75	60	68	38	23	32	36	34	23	16

Source: State of Washington Office of the Superintendent of Public Instruction, www.k12.wa.us/assessment/WASL/overview.aspx

that is, the level of resources required to bring a certain percentage of students to an educational standard—has proven difficult. An array of factors drive achievement, including a family’s socioeconomic position, parental involvement, and teacher quality. Isolating the independent effect of spending is therefore technically challenging. Academic literature would suggest that an increase in spending can generate an improvement in achievement, but improvement is not guaranteed.

Looking across the region, about three in five districts (28 of 46) spent between \$6,500 and \$8,000 per student on ongoing operations and maintenance in 2004-2005 (see Table 4) For comparison, most districts spent below the U.S. average (\$8,618 per student).

A number of factors can lead to higher or lower spending averages. For example, the Portland Public Schools, which spent \$9,886 per student in 2004-2005, receive revenue from the federal and state governments to provide supplemental services to low-income and special needs students. Conversely, the Sherwood school district has identified fewer students with special needs and operates with lower revenue and spending per student. Riverdale’s above average spending is supported, in part, by donations from parents and other private parties.

Looking across the time period, median per student spending of Oregon’s 38 districts was generally 7 to 16% higher than Washington’s 8-district median. The instability of Oregon’s K-12 spending is notable in 2002-2003. The recession, and corresponding state fiscal crisis, resulted in a decline in spending per student in most Oregon districts. Addressing instability of K-12 revenue remains

Table 4a: Spending for Clackamas, Columbia, and Multnomah Counties

County	District Name	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	Average
							Annual Growth Rate 2001-2005
Clackamas	Canby	\$6,316	\$6,862	\$6,738	\$6,534	\$6,818	1.9%
	Colton	\$6,350	\$6,683	\$6,338	\$6,484	\$6,689	1.3%
	Estacada	\$6,736	\$6,516	\$6,784	\$7,401	\$8,138	4.8%
	Gladstone	\$6,483	\$6,751	\$6,316	\$6,839	\$7,420	3.4%
	Lake Oswego	\$7,151	\$7,384	\$7,064	\$6,979	\$7,275	0.4%
	Molalla River	\$7,200	\$7,119	\$6,288	\$7,234	\$6,747	-1.6%
	North Clackamas	\$7,265	\$6,862	\$6,417	\$6,751	\$6,800	-1.6%
	Oregon City	\$6,545	\$7,189	\$6,801	\$6,555	\$7,138	2.2%
	Oregon Trail	\$6,311	\$6,611	\$6,413	\$6,580	\$7,102	3.0%
	West Linn-Wilsonville	\$6,419	\$6,761	\$6,538	\$6,579	\$6,976	2.1%
Columbia	Clatskanie	\$7,066	\$7,071	\$6,957	\$7,059	\$7,603	1.8%
	Rainier	\$7,033	\$7,693	\$7,093	\$7,220	\$7,147	0.4%
	Scappoose	\$6,304	\$6,511	\$6,503	\$6,345	\$6,675	1.4%
	St. Helens	\$6,677	\$6,508	\$6,495	\$6,034	\$6,615	-0.2%
	Vernonia	\$6,911	\$7,658	\$7,690	\$7,140	\$7,075	0.6%
Multnomah	Cenntennial	\$6,330	\$6,655	\$6,227	\$7,701	\$7,808	5.4%
	Corbett	\$7,859	\$7,167	\$7,432	\$7,214	\$7,821	-0.1%
	David Douglas	\$6,612	\$6,998	\$6,768	\$6,990	\$7,250	2.3%
	Gresham Barlow	\$6,652	\$6,843	\$6,660	\$7,145	NA	NA
	Parkrose	\$6,738	\$6,533	\$6,401	\$7,650	\$8,017	4.4%
	Portland	\$8,166	\$8,291	\$7,921	\$8,753	\$9,306	3.3%
	Reynolds	\$6,788	\$7,084	\$6,440	\$7,986	\$8,628	6.2%
Riverdale	\$9,314	\$9,695	\$9,300	\$10,162	\$10,654	3.4%	

Source: ECONorthwest calculated using data from the Oregon Department of Education and Washington Office of Superintendent of Public Instruction

at the top of the public policy agenda in Oregon. Governor Kulongoski has pledged to dedicate a fixed share of the state general fund to education to add predictability to school district budgets. Meanwhile, the foundation-sponsored Chalkboard Project has proposed a K-12 spending guarantee, which would change with student enrollment, as well as a compensation index.

Governor Gregoire’s “Washington Learns” initiative is investigating the adequacy of the state’s K-12 system. Washington has long ranked in the bottom tier of states on spending per student and, like Oregon, has operated with large class sizes. Consultants to the “Washington Learns” process have called for reduced K-3 class sizes, full-day kindergarten, and one-on-one tutoring for early readers.

In both states, the governors are recommending a seamless PreK-to-University System that facilitates student transitions from one system to the next and consolidates resource allocation decisions.

The region’s economic prosperity is linked to the skills of its workforce. The future points to both opportunities and challenges. The coming decade will show whether Portland’s attractiveness to young professionals persists and how, or if, those professionals turn their education credentials into an economic engine. Where this wave of 1990s-era, college-educated immigrants locate, as they age and form families, will shape the regional landscape. The quality of K-12 schools will play an important role in their location decisions.

Federal and state education standards will keep K-12 student achievement in the top tier of the public consciousness and policy agenda. On both sides of the border, policymakers have offered an array of proposals to boost high-school achievement

Table 4b: Spending for Washington, Yamhill, and Clark Counties

County	District Name	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	Average Annual Growth Rate 2001-2005
Washington	Banks	\$6,030	\$6,623	\$6,410	\$6,592	\$6,729	2.8%
	Beaverton	\$6,250	\$6,294	\$6,281	\$6,269	\$6,932	2.6%
	Forest Grove	\$6,940	\$7,079	\$6,935	\$6,978	\$7,494	1.9%
	Gaston	\$6,626	\$7,171	\$6,847	\$7,137	\$8,485	6.4%
	Hillsboro	\$6,771	\$7,359	\$6,601	\$6,656	\$7,189	1.5%
	Sherwood	\$6,286	\$6,368	\$5,844	\$5,815	\$6,175	-0.4%
	Tigard-Tualatin	\$7,366	\$7,720	\$7,780	\$7,087	\$7,249	-0.4%
Yamhill	Amity	\$6,968	\$7,281	\$7,248	\$7,451	\$8,076	3.8%
	Dayton	\$6,810	\$7,076	\$6,616	\$7,039	\$7,565	2.7%
	McMinnville	\$6,029	\$6,354	\$6,230	\$6,787	\$7,007	3.8%
	Newberg	\$6,194	\$6,342	\$6,421	\$6,493	\$7,082	3.4%
	Sheridan	\$6,842	\$7,313	\$6,694	\$6,869	\$7,724	3.1%
	Willamina	\$6,989	\$7,615	\$7,460	\$7,032	\$7,229	0.8%
	Yamhill-Carlton	\$6,674	\$6,812	\$7,538	\$6,680	\$7,388	2.6%
Clark	Vancouver	\$6,602	\$6,821	\$7,092	\$7,367	\$7,659	3.8%
	Hockinson	\$6,851	\$6,355	\$6,670	\$6,729	\$6,718	-0.5%
	La Center	\$5,572	\$5,891	\$6,199	\$6,124	\$6,470	3.8%
	Green Mountain	\$6,695	\$6,569	\$6,830	\$7,035	\$8,043	4.7%
	Washougal	\$6,660	\$6,944	\$6,707	\$6,612	\$6,984	1.2%
	Evergreen	\$6,384	\$6,514	\$6,691	\$6,991	\$7,318	3.5%
	Camas	\$6,269	\$6,522	\$6,521	\$6,644	\$6,738	1.8%
	Battleground	\$5,943	\$6,069	\$6,240	\$6,246	\$6,644	2.8%
Ridgefield	\$5,923	\$6,020	\$6,050	\$6,260	\$6,385	1.9%	

Source: ECONorthwest calculated using data from the Oregon Department of Education and Washington Office of Superintendent of Public Instruction

and shrink dropout rates. At their core, the key strategies—exit exams and revamped diploma requirements—bet that students, and their parents, will respond to higher expectations. In ten years, we will know whether the high expectations and accountability of the standards movement translate into better education for the region’s children.

ECOLOGICAL LANDSCAPES: CONNECTING NEIGHBORHOOD TO CITY AND CITY TO REGION

by Mike Houck, Executive Director, Urban Greenspaces Institute
Jim Labbe, Urban Conservationist, Audubon Society of Portland

“Connectivity is needed both within a particular network and across many networks of human, built, and natural systems in a region. Some structures and patterns would be more appropriately understood at a regional and metropolitan scale; others, at the city or neighborhood scale; and still others at the site scale.”

Gerling and Kellett, *Skinny Streets & Green Neighborhoods*, Design For Environment and Community, 2006

While many factors are unique to communities on both sides of the Columbia River, our local and regional landscapes unite us and provide a shared sense of place. Bald eagles from the headwaters of the Tualatin basin are just as likely to forage in the Vancouver Lake lowlands as on Sauvie Island. Proximity to the Columbia Gorge, coast, high desert, and the Cascades adds to the region’s mystique and quality of life. But it’s the more proximate landscapes, those within our immediate radius of reach, that we treasure most. What matters most to the region’s residents are their streetscapes, neighborhood parks, and regionally significant landscapes, from Clark County’s Lewis River to the agricultural fields, wetlands, and floodplains along the Tualatin and Pudding rivers, and from the Tillamook Forest to the Columbia, Sandy and Clackamas gorges.

This paper summarizes past and current efforts to delineate the landscapes that define our region’s sense of place, contribute to the region’s biodiversity and ecological health, provide recreational opportunities, and ensure access to nature nearby—the landscapes Portland State University’s Joe Poracsky refers to as the region’s “emerald compass” (Poracsky, 2000, 13-16). We also describe some of the region’s efforts to integrate its green infrastructure with the built environment across multiple landscape scales to attain a more sustainable metropolitan region.



Oaks Bottom Wildlife Refuge and Ross Island with Portland downtown skyline.



Salmon Creek Greenway, Clark County, Washington. Photos: Mike Houck

Early Park and Landscape Planning

Comprehensive efforts to describe and protect our special landscapes within the city of Portland date back to 1903 when landscape architect John Charles Olmsted observed that Portland was “most fortunate, in comparison with the majority of American cities, in possessing such varied and wonderfully strong and interesting landscape features” (Olmsted, 1903, 34). Olmsted’s proposed “system of public squares, neighborhood parks, playgrounds, scenic reservations, rural or suburban parks, and boulevards and parkways” was built around features that are today’s landscape icons: Forest Park, Mt. Tabor, Macleay Park, and the Terwilliger Parkway (Olmsted, 1903, 36-68).

Park and landscape planning at the regional scale began, when in 1971, the Columbia Region Association of Governments (CRAG) laid out a bi-state Urban-Wide Park and Open Space System (Figure 1) based on the premise that “open spaces are needed not only at the coast, or in the Columbia River Gorge, or in the mountains, distant from the daily urban hubbub, but also for immediate enjoyment and use within the urban complex.” CRAG’s regional open space system incorporated “environmental features which have stamped the region with its unique form and character, rivers and streams, Flood plains, and the high points” like Multnomah Channel, Sauvie Island, Lake River, Salmon and Burnt Bridge creeks, Boring Lava Domes, Government Island and the Sandy River Delta (CRAG, 1971, 3-4).

Regional Landscape Planning

Metropolitan Greenspaces Initiative

By the late 1980s, alarm at the loss of local greenspaces (Figure 2) led to the proliferation of grassroots citizen organizations throughout the region. This coalition of park, trail and greenspace advocates—inspired by the Olmsted plan, CRAG’s Urban Outdoors scheme, and recommendations of the Columbia-Willamette Futures Forum’s regional park study—ignited a grassroots effort to create a Portland-Vancouver parks and greenspaces system (Howe, 1999).

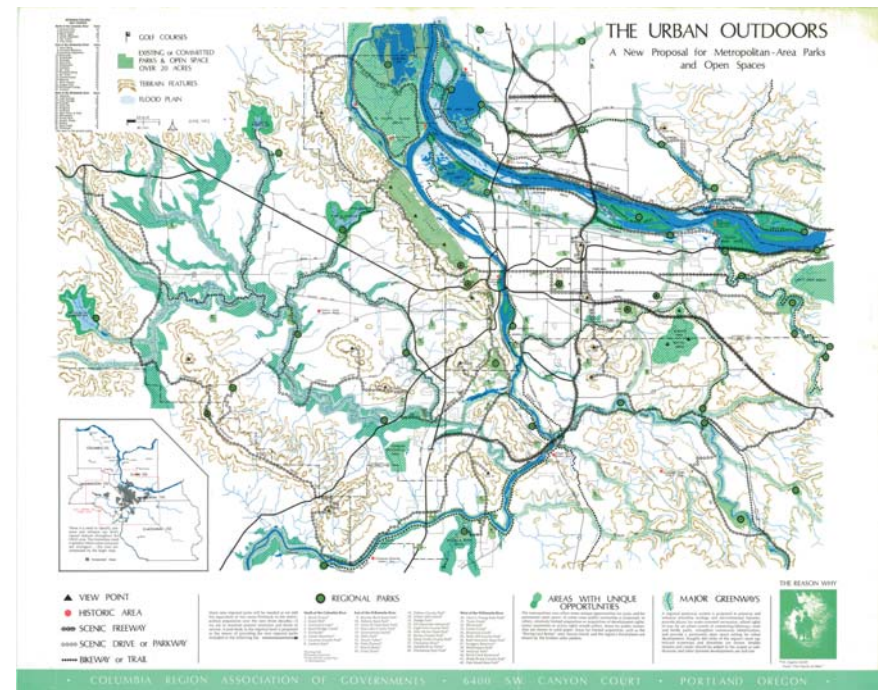


Figure 1: Columbia Region Association of Governments (CRAG) Bi-State Urban-Wide Park and Open Space System
Source: Metro



Figure 2: Loss of forest canopy in the upper Cedar Mill Creek Watershed between 1990 and 2002. Rapid growth in the 1990s resulted in the loss of roughly 16,000 acres of natural areas, an area roughly the size of the City of Gresham.
Source: Jim Labbe

Working with a regional parks forum, Metro initiated a bi-state inventory of natural areas and in 1989 contracted with Bergman Photographic Services to fly the region to capture color infrared photographs of Clark County and the three counties on the Oregon side of the Columbia (Metro, 1989). PSU geographer Joe Poracsky digitized these photographs, creating for the first time a map depicting all of the region's remaining natural areas. Three years later, using this map to prioritize acquisition opportunities, a Greenspaces Master Plan calling for a "cooperative regional system of natural areas, open space, trails and greenways for wildlife and people in the four-county metropolitan area" was adopted (Metro, 1992). While Olmsted's rationale for an interconnected system of boulevards and parkways was based primarily on aesthetics and public access (Olmsted, 1903) the Greenspaces Master Plan integrated principles of landscape ecology with the complementary goal of providing equitable accessibility to parks and natural areas via a regional system of trails, paths, and greenways (Metro, 1992; Parks 2020 Vision, 2001).

In 1995 a \$135.6 million bond measure was approved by over 60% of the region's voters (Oregon) with which Metro purchased 8,140 acres including 74 miles of river and stream riparian areas and added to the expanding regional trail network (Figure 3) (Metro, 2006b). The region's voters approved another \$227.4 million bond in November, 2006 which will allow for the acquisition of another 5,000 acres of natural areas and trail corridors by Metro as well as park, trail and natural area projects by local park providers with their \$44 million share of the regional bond. A \$15 million "nature in neighborhood" competitive grant program that will also allow nonprofit organizations, neighborhoods, and local park providers to "re-green" nature and park deficient neighborhoods (Houck, 2006).

Integrating Greenspaces and Regional Growth Management

In addition to park and greenspaces planning, land use regulations have been adopted to protect water quality and fish and wildlife habitat and to reduce natural hazards as part of the Region 2040 planning process (Metro, 1998) (Metro, 2005a). In August, 2005 the Metro Council established a regional Nature In Neighborhoods fish and wildlife habitat protection and restoration program that covering 80,542 acres of the region's riparian or streamside corridors and fish and wildlife habitat inside and just beyond the Urban Growth Boundary (UGB) (Figure 3).

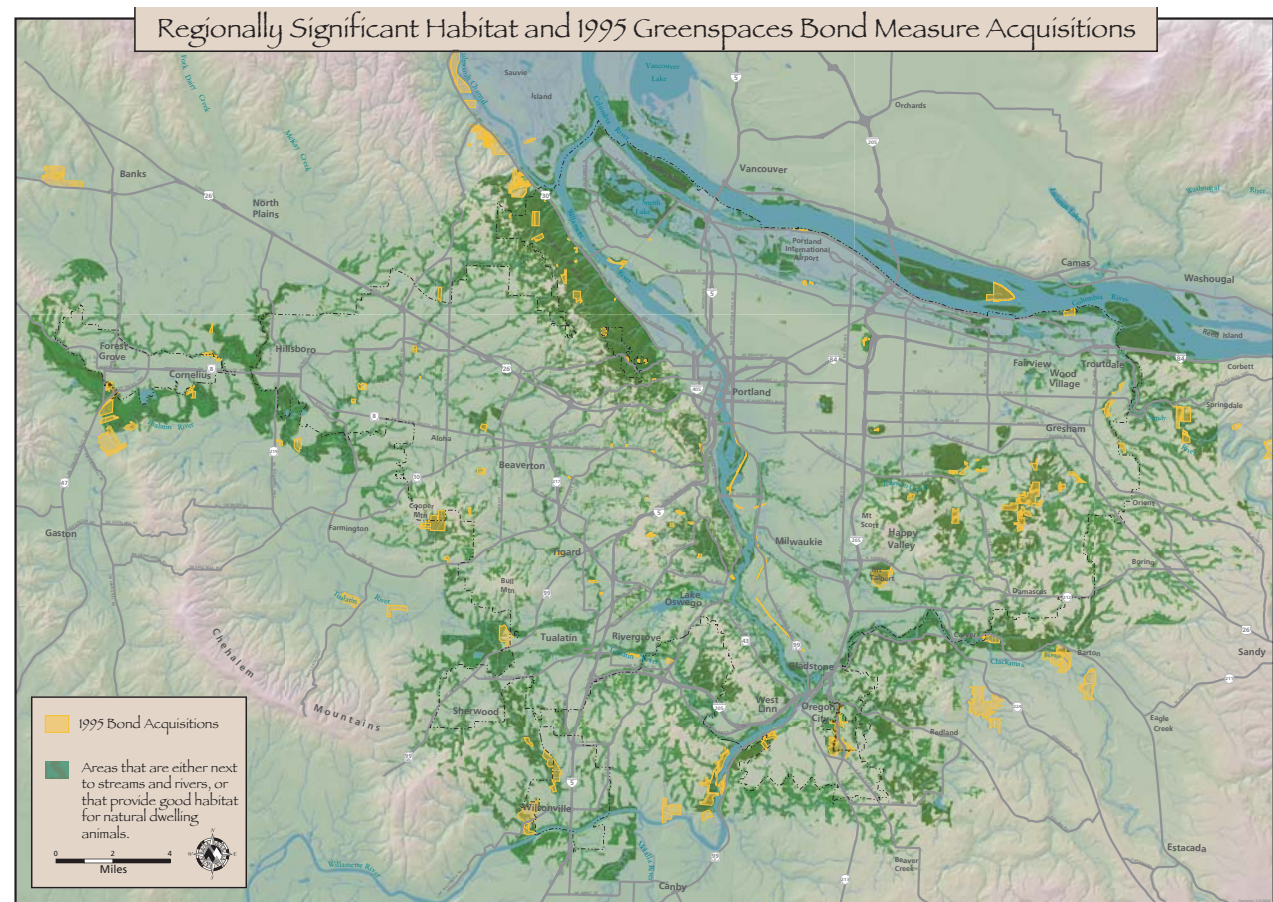


Figure 3: Metro Fish and Wildlife Habitat map depicting 80,000 acres of regionally significant fish and wildlife habitat inside and extending one mile outside the Portland region's Urban Growth Boundary. Source: Metro

Regulatory protections were applied to only 39,299 acres (49%) of the most significant streamside corridors, leaving over 40,000 acres of regionally significant fish and wildlife habitat inside the Portland region's UGB to be protected through voluntary, non-regulatory programs. Metro's Nature in Neighborhoods includes performance measures such as "preserving and improving streamside, wetland, and floodplain habitat and connectivity, increasing riparian forest canopy by 10%; limiting floodplain development to 10%; and preserving 90% of forested wildlife habitat within 300 feet of streams by the year 2015" (Metro, 2005a, 44-46).

Natural Area Planning in Clark County, Washington

"People who pay more attention to abstract figures than to realities are accustomed to look upon a river as a dividing line, so it appears on maps. But rivers are dividing lines from only one point of view: military attack. From every other standpoint the river basin as a whole is a unit."

(Mumford, 1938)

Across the Columbia River similar efforts to acquire, protect, and restore natural resources and to create an interconnected parks, trails and natural areas system have been undertaken by Clark County and the City of Vancouver. In 2003, Clark County adopted its Conservation Areas Acquisition Plan, identifying critical habitat and greenway acquisition priorities within its 627 square mile planning area. The Conservation Futures Program, funded by a 6.25% per \$1,000 assessed value property tax adopted in 1985, has made possible acquisition of 3,800 acres of shoreline, greenway, and fish and wildlife habitat (Clark County, 2003).

The county's new Conservation Areas Real Estate Excise Tax (CREET) will allow the purchase of additional critical habitat and greenways. Clark County's acquisition of farmland is justified in part because agricultural lands "abutting habitat and greenway areas provide complementary benefits and public value" (Clark County, 2003, 19). Acquisition priorities include the East fork and upper Lewis River, Salmon Creek, Vancouver Lake Lowlands, Washougal River, Lacamas Lake and Creek, and Burnt Bridge Creek. Vancouver-Clark Parks and Recreation District also owns 7,400 acres of park land, including 1,106 acres of natural areas and 1,826 acres of trails and greenways (Vancouver-Clark Parks, 2006).

Policy Implications

It remains to be seen how performance measures will be evaluated and how efficacious stewardship, education, and acquisition programs will prove to be over time. One concern is whether upland habitats will be protected. New urban expansions provide the opportunity for enhanced protection of natural areas. Oregon's Big Look process offers an opportunity to incorporate more holistic ecosystem protection and restoration than the existing land use program achieves (Wiley, 2001). Finally, given our shared landscape and ecosystems, natural resource planning between Clark County and the Oregon side of the Columbia should be better integrated. Both Metro's New Look and regional parks, trails and greenspaces planning should be utilized to achieve that objective.

A New Look at the Regional Landscape

"I have found that people who feel very strongly about their own landscape are more often than not the same people who are pushing for better comprehensive planning. But it is the landscape that commands their emotions. Planning that becomes too abstract or scornful of this aspect will miss a vital motivating factor. The landscape element of any long-range regional plan, more than any other element can enlist a personal involvement. People are stirred by what they can see."

(Whyte, 1968)

Metro's New Look is exploring new relationships between the built and natural environments and between rural and urban landscapes (Metro, 2006a). The New Look anticipates policies necessary to accommodate a million new residents within the next 25 years, while maintaining compact urban form, retaining quality of life, ensuring equitable access to parks and nature, and addressing issues of sustainability. A burgeoning population, development pressures on remnant greenspaces, and uncertainty surrounding Measure 37 impacts on the extra-UGB landscape make protection of the region's signature landscapes, inside and outside our cities and on both sides of the Columbia River, more urgent now than ever.



Figure 4: Working draft Greenspaces Policy Advisory Committee map of Ecologically Significant Landscapes Inside and Outside the Urban Growth Boundary in the Portland-Vancouver Metropolitan Region.

Integrating Urban and Rural Landscapes

For the past 30 years Oregon's land use program has focused on maintaining urban growth boundaries to create compact urban form and to protect rural working landscapes outside the UGB. Meanwhile, too little has been done to protect natural resources inside the UGB (Wiley, 2001). Metro's adoption of a 1996 regional Greenspaces Resolution raised the protection of natural resources to the same political and policy levels as farmland protection and maintaining a tight UGB.

In June, 2006 a regional mapping charette hosted by Metro's Greenspaces Policy Advisory Committee (GPAC), resulted in an ecologically based map delineating landscapes that landscape ecologists and park planners identified as regional landscape features that would (Metro, 2005b):

- Preserve significant natural areas for wildlife habitat and public use.
- Enhance the region's air and water quality.
- Connect the region's communities with trails and greenways.
- Provide sense of place and community throughout the bi-state metropolitan region.
- Support an ecologically sustainable metropolitan area.

Information from this charette was integrated with other natural resource data to create a composite map, covering 3,620 square miles (2.3 millions acres) of Columbia, Clark, Multnomah, Clackamas, Washington and Yamhill counties (Figure 4). Oblique aerial perspectives were also created to provide a more generalized landscape perspective, juxtaposing potential future farmland and natural area preserves (Figure 5).

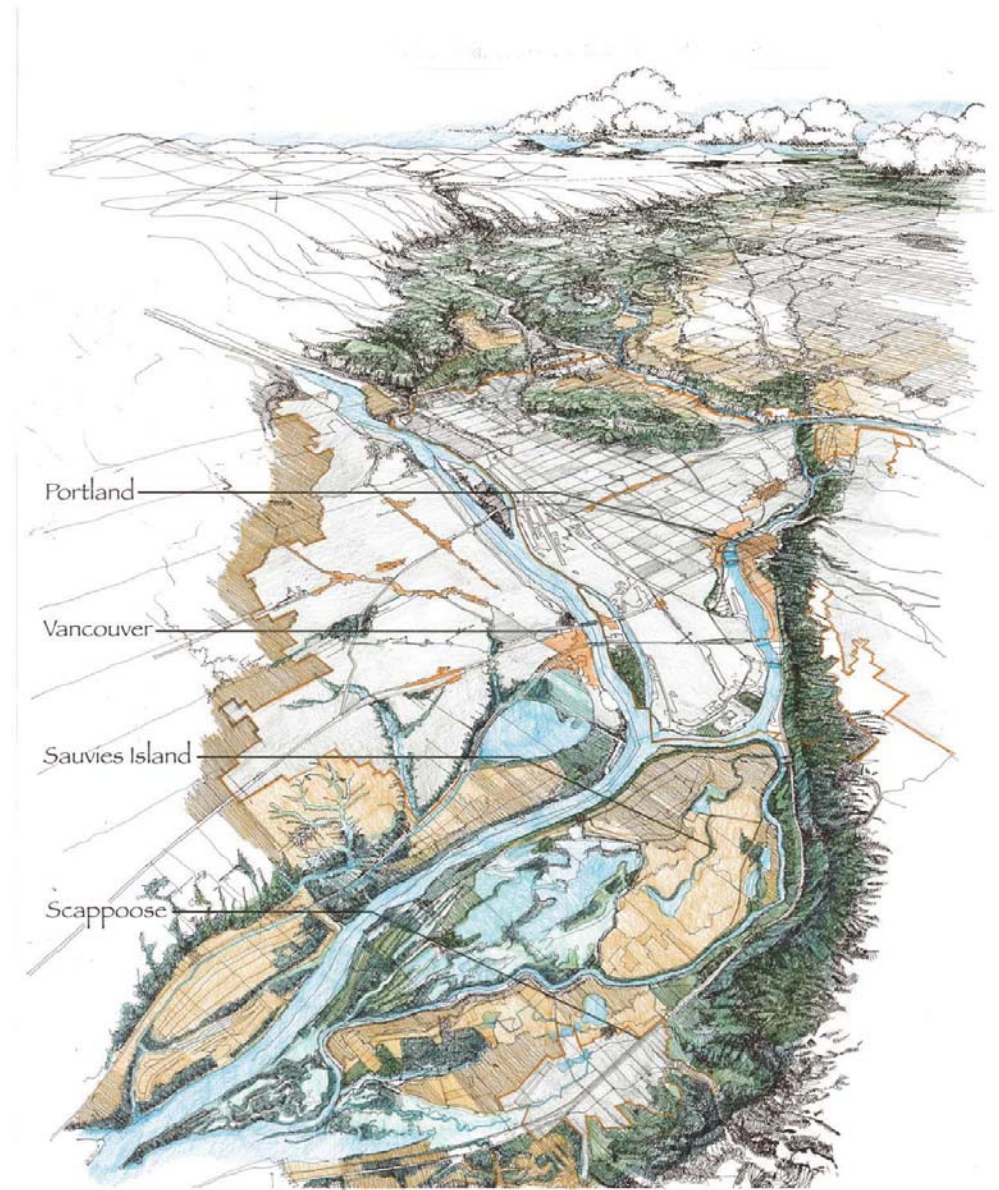


Figure 5: James Pettinari, Professor of Architecture at the U of O School of Architecture produced this oblique aerial view over Sauvie Island looking south over Vancouver and Portland.

Policy Implications

Information from the GPAC and New Look mapping processes provide critical data for identifying the natural areas component of the regional system of parks, trails, and natural areas and for future UGB expansion decisions. These maps will also aid in future ecosystem-based planning across the urban and rural landscapes on both sides of the Columbia River.

Planning Across Scales

Innovative Watershed Planning

“The belief that the city is an entity apart from nature and even antithetical to it has dominated the way in which the city is perceived and continues to affect how it is built. This attitude has aggravated and even created many of the city’s environmental problems. The city must be recognized as part of nature and designed accordingly.”

Anne Whiston Spirn, *The Granite Garden*, 1984

Creating an ecologically sustainable metropolitan region means ecological processes must be considered from a “nested” perspective, telescoping up and down the scale, integrating the built and natural environment, from large regional landscapes to watersheds and sub-watersheds, down to the individual neighborhoods and streetscapes. One key to implementing this landscape based planning is innovative watershed planning. Portland’s newly adopted Watershed 2005 Plan, which seeks to “incorporate stormwater into urban development as a resource that adds water quality benefits and improves livability, rather than considering it a waste that is costly to manage and dispose of” (City of Portland Environmental Services, 2006, 15) is a good example of planning across landscape scales.

Portland’s Watershed 2005 Plan “is built on the principle that urban areas do not have to cause damage to watershed health” and that “a healthy urban watershed has hydrologic, habitat, and water quality conditions suitable to protect human health, maintain viable ecological functions and processes, and support self-sustaining populations of native fish and wildlife species” (City of Portland Environmental Services, 2006, 38).



Photo: Mike Houck



Photo: Mike Houck



Photos: BES

Clockwise from top: Ecoroof on PSU residential building; Astor Elementary School before and after rain garden installation; stormwater infiltration, street retrofit on SW 12th and Montgomery at PSU.

Policy Implications

The Watershed 2005 Plan also mandates that watershed health be integrated into all city bureaus and policies and that potential impacts on stormwater be considered at the front end of project planning. In the Tualatin Basin, Clean Water Services' Healthy Streams Plan (Clean Water Services, 2005) promotes progressive watershed and stormwater management programs as well. A regional watershed and stormwater management advisory panel should be convened by Metro to identify the best elements of local watershed policies to craft a regionally consistent approach to watershed health and stormwater management.

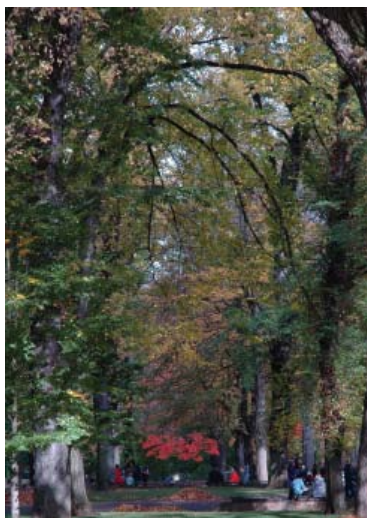
Urban Forest Canopy

"The urban forest should be managed as a healthy ecosystem. Understood as green infrastructure, the urban forest is a interwoven system of landscapes performing multiple human and natural functions."

Gerling and Kellett, Skinny Streets & Green Neighborhoods,
Design for Environment and Community

The urban forest canopy, one of the most integrative and multi-functional elements of the region's green infrastructure, decreases urban heat island effect, reduces air pollution and energy consumption, absorbs greenhouse gases, enhances biodiversity, attenuates stormwater runoff, and provides numerous public health, aesthetic, and enhanced property values (Portland Parks and Recreation, 2003) (Netusil and Chattopadhyay, 2005).

Vancouver, Washington has inventoried its 46 square miles of urban forest canopy (City of Vancouver and Vancouver-Clark



Urban forest canopy over Portland's Park Blocks
Photo: Mike Houck

Parks, 2005) and a PSU study for Portland Park and Recreation's urban forestry program tracked urban forest canopy changes in a 126 square mile area covering nearly 100 Portland neighborhoods. The latter study found increases of 5% to 20% in forest canopy in many older nature-poor neighborhoods in North and Northeast Portland over a 30-year-period from 1972 to 2002 (Poracsky and Lackner, 2004). These increases were attributed in part to citizen-based tree planting programs. Metro has also inventoried the region's urban forest canopy as part of its Nature In Neighborhoods monitoring program.

Policy Implications

The urban forest canopy's influence over multiple environmental, social and ecological parameters led the Portland-Multnomah County Sustainable Development Commission to consider using urban forest canopy trends as one of several "ecological indicators of sustainability" (City of Portland Office of Sustainability, 2006). A cooperative effort expanding the monitoring of urban forest canopy across the region should be undertaken and targets established for canopy retention and expansion.

Regional Equity: Access to Parks and Natural Areas

Access to public parks and to nature, whether public or private, underpins our regional growth strategy for compact, walkable, and livable communities. Provision of public open space is widely recognized as the quid pro quo for public acceptance of denser, more transit-oriented urban neighborhoods.

While natural landscapes unify the region, there are also disparities regarding access to these landscapes and public parkland. These disparities are a result of a number of factors including past policy decisions regarding where and how public investment has occurred, development patterns, access to affordable housing, and demographic changes. Today, most jurisdictions have neighborhoods that are deficient in access to parks or nature relative to the rest of the region. Most neighborhoods fall short of park access goals established by Metro, local park providers and non-governmental organizations (CLF, 2006). Given lack of public

financing and inadequate System Development Charges (SDC), park providers face chronic funding shortages that, without significant policy changes, are likely to exacerbate these deficiencies as the region grows (Metro, 2001).

How do cities and neighborhoods across the Portland-Vancouver region compare regarding access to parks and natural areas? Answering this question was one goal of the Regional Equity Atlas (CLF, 2006; Audubon Society of Portland, 2006), which measured access to public parks and proximity to private and public natural habitat.¹

Access to Public Parks and Greenspaces

Park access and level of service within a geographic area can be measured using

- Walkable distance to nearest public park.
- Acres of public parks per capita.
- Diversity of park types.
- Social, economic, or cultural barriers to accessing public parks.

four criteria:

In assessing access, the Atlas measured the more objective factors of per capita parks and walkable distance to the nearest park, and calculated them by jurisdiction and neighborhood. The Atlas combines these measures into an integrated assessment of park access across the Portland-Vancouver region.

While now widely considered an insufficient measure of park access, acres of parkland per 1,000 residents has historically been the easiest way to measure and compare park service levels among communities. The more commonly used measure today is the percent of the population within walking distance from a public park. Increasingly, this criterion is becoming the preferred measure of park access (Harnik, 2003, 43). Roughly half of the region's urban population lives within ¼ mile walking distance from public parkland. Percentages range from 3% (Maywood Park) to 92% (Sherwood). Twenty-eight percent of jurisdictions have less than 50% of their populations living within ¼ mile from any public park. Access by this measure varies more widely between neighborhoods than jurisdictions. About half in the region have more than 50% of their populations living within a ¼ mile

from any public parkland.

Figure 6 presents a more comprehensive measure of access to public parks and greenspace. It combines per-capita and walking distance measures into an integrated park access score for every location (1/4 acre) in the region along the walkable street and trail network. This measure of access accounts for the walking distances to reach the nearest public parkland, the quantity of that parkland, and the number of people who share it.

Areas particularly park deficient include Northeast Portland, West Gresham, Milwaukie, and Oak Grove. The developing city of Damascus has poor access despite its low population due to low acreage and the length of walking distances. Despite the larger districts with poor access, there is considerable local variability in access across the region. Pockets of poor access can be found in most corners of the region.

Proximity to Natural Habitat

We define "access to nature" as the chance to encounter the region's native fish and wildlife and to explore natural areas that sustain them. Definitions of "nature" in this context may vary over time and space with changes in cultural preferences or in the landscape itself. For example, it does not account for the return of urban forest canopy in many older urban neighborhoods. Nevertheless, we believe this definition has a strong basis in the region's history and shared culture as well as in contemporary assessments of individual and community preferences.

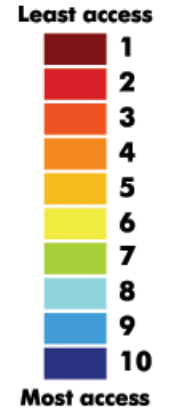
Nature-poor communities are concentrated in older urban centers, although similar nature deficient pockets can be found throughout the region. Using these data and the 2000 census, it was possible to calculate the acres of habitat per capita by neighborhood, jurisdiction, and for the region. Roughly 64% of the Portland metropolitan population inside the UGB lives within a linear quarter mile "as the crow flies" of a natural area. Fifteen of 28 jurisdictions have at least 90% of their populations living within ¼ mile of a natural area. The jurisdictions with the lowest ¼ mile access to a natural area are Cornelius (64%), Gresham (60%) and Portland (34%).

¹To receive or review a copy of the CLF *Regional Equity Atlas*, please see www.slfuture.org.

Public Park Access*

Portland-Vancouver Four-county area

Access score (full range):



* An additive scoring of population per park-acre by closest-park service areas (range 5-0, <250 | >4,000) and network distance to closest public park (range 5-0, <1/8 | >1 mi). Public parks from Clark Co. GIS 2004 & Metro Data Resource Center 2003 Park Inventory, excluding stadiums, fairgrounds, parkways, schools, and trails. Parks not perfectly comparable between Clark and Metro; eg., Metro includes a wider variety of "open space," usually private. Open space includes golf courses, cemeteries, & common space, in addition to such features as urban open space or greenways. Parks include community centers, tennis courts, rifle range, et al. Analysis completed on public parks only. Network excludes streets most clearly auto-only, such as freeways; includes trails from park themes. Population data: based on U.S. Census Bureau SF1 2000, block-level rasterized. Other: ESRI 2002, Oregon Geospatial.

Analytic Cartography: K. Radin 2004-05
PORTLAND STATE UNIVERSITY
Population Research Center

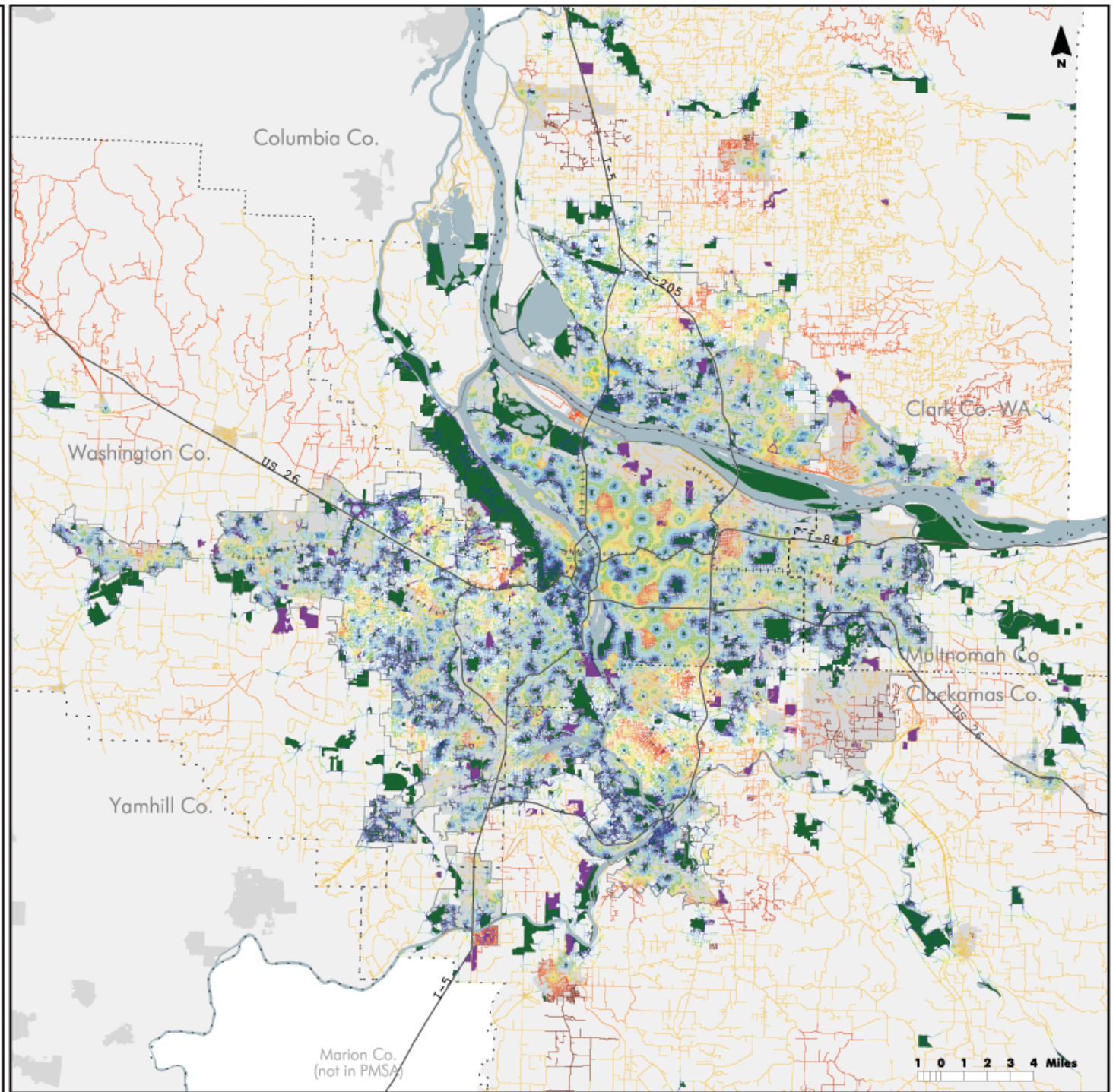


Figure 6: Public Park Access, Portland-Vancouver Metropolitan Region
Source: Coalition for a Livable Future

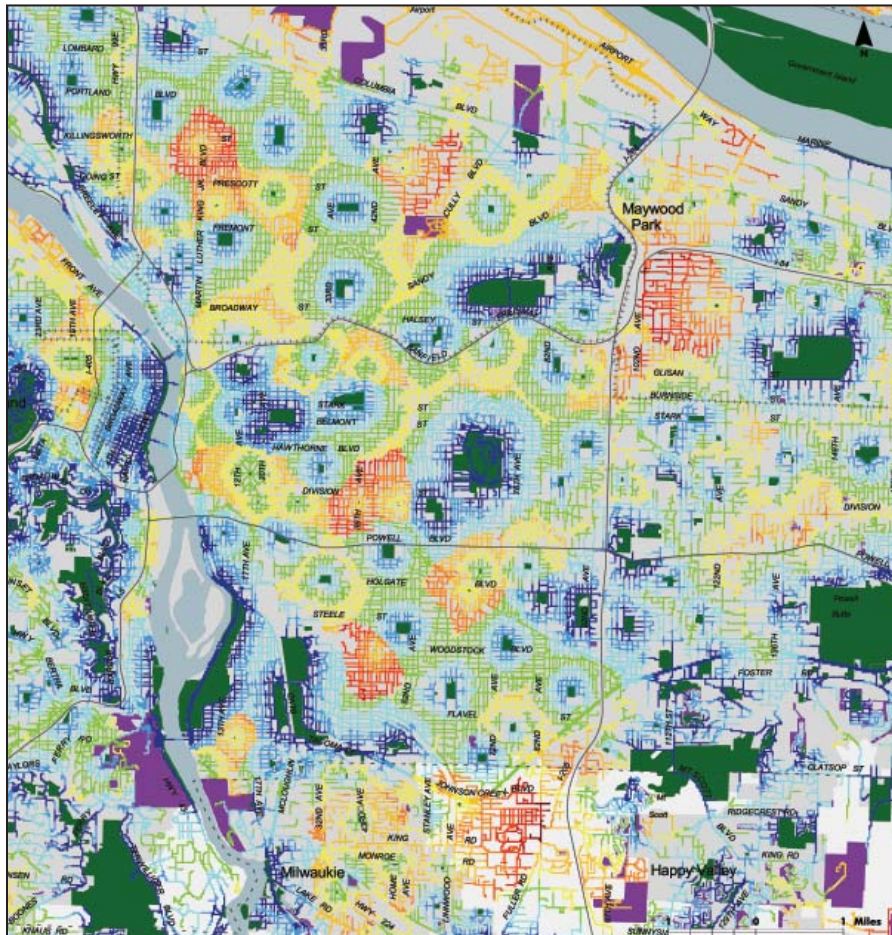


Figure 7: Public Park Access, Southeast Portland Close In.
 Source: Coalition for a Livable Future, courtesy of Jim Labbe

Policy Implications

Expanding the quantity and accessibility of public parks and natural areas at the neighborhood scale will be increasingly important to reducing disparities among neighborhoods and across the region. Policymakers should consider two strategies for more equitable access. First, address wealth and income barriers by fostering diverse housing and transportation choices. This approach will help reduce disparities in access based on race, wealth, and income that exist in the region. Second, establish local and regional level of service goals and develop funding mechanisms to ensure basic levels of access across the region. Metro's

Greenspaces Policy Advisory Committee, working with regional and local park and natural area providers, is taking a lead in these issues (Metro, 2005a).

Opportunities to increase public park and natural areas are greatest in newly urbanizing communities like Damascus. These areas are park deficient but also have abundant high quality habitat relative to the rest of the region. The value of and opportunity to re-nature existing urban areas is also needed. As older urban centers redevelop, new opportunities will emerge to enhance access to nature while restoring ecological functions.

Finally, most natural areas are not publicly owned yet still provide contact with nature in our neighborhoods. Therefore, educating private landowners regarding ecological stewardship of private property and fostering habitat-friendly development practices will be vital to sustaining access to nature in our region.

Conclusions

The region's residents care deeply about their landscape, not just the inspiring view of Cascades in the distance, but the "emerald compass" that frames the view in every direction, from the streetscape to the neighborhood; from the neighborhood to the city; and from the city to the region.

In order to create a livable, socially and environmentally just, and ecologically sustainable metropolitan region, the gray and green infrastructures must be integrated to ensure access to parks, trails, and greenspaces in every community and neighborhood. Policies that aim solely at protecting large landscapes within and outside our cities will not be sufficient to achieve ecological sustainability across the region. Greenspaces, parks, and trails must be recognized, valued, and funded as integral elements of the region's green infrastructure at every scale, large and small, across the urban landscape. Doing so will help us design cities where the built and the natural are interlaced, and where access to parks and nature is a part of our everyday lives.

A more detailed discussion with additional photos and maps can be found online at www.urbangreenspaces.org.

References

- Audubon Society of Portland. 2006. *Access to Nature and Regional Equity: A summary of results from the Coalition of a Livable Future's Regional Equity Atlas, Parks and Recreation Chapter*. March.
- City of Portland, Environmental Services. 2006. *Actions for Watershed Health: 2005 Portland Watershed Management Plan*, March 8.
- City of Portland, Office of Sustainability. 2006. *Recommended Signs of Sustainability, Draft, Sustainable Development Commission*, September.
- City of Vancouver, and Vancouver-Clark Parks and Recreation. 2005. *Canopy Report, GIS Analysis Using 2002 LIDAR Data*, March 28.
- Clark County, WA. 2003. *Conservation Areas Draft Acquisition Plan*.
- Clean Water Services. 2005. *Healthy Streams Plan*. June.
- Coalition for a Livable Future (CLF) and the PSU Center for Population Research. 2007. *Regional Equity Atlas Project*. www.clfuture.org.
- Columbia Region Association of Governments (CRAG). 1971. *A Proposed Urban-Wide Park & Open Space System*.
- Gerling, Cynthia and Ronald Kellett. *Skinny Streets & Green Neighborhoods: Design For Environment and Community*. Island Press.
- Harnik, Peter. 2003. "The Excellent Park System." *Trust for Public Land*.
- Houck, Mike. 2006. "Our Last Landscape." *OregonLand, Oregon Chapter, American Society of Landscape Architects*, Fall.
- Howe, Deborah A. 1999. *The Environment as Infrastructure: Metropolitan Portland's Greenspaces Program*. Portland State University.
- Metro, 1989. *Memorandum: Mel Huie to Rich Carson, Pat Lee and Mike Houck*.
- Metro, 1992. *Metropolitan Greenspaces Master Plan*. July.
- Metro, 1998. *Title 3 Model Ordinance*, May 28.
- Metro, 2001. *Metro Policy Advisory Committee (MPAC) Parks Subcommittee. Final Report*. Jim Zehren Chair. April 25. pg. 48.
- Metro, 2005a. *EXHIBIT 2, Ordinance No. 05.1077B, Urban Growth Management Functional Plan, Title 13, "Nature in Neighborhoods."*
- Metro, 2005b. *Greenspaces Policy Advisory Committee vision statement*, March, <http://www.metro-region.org/article.cfm?ArticleID=13942>
- Metro, 2006a. *New look at regional choices*, <http://www.metro-region.org/article.cfm?articleid=16386>.
- Metro, 2006b. *Open Spaces, Treasured Places, 8,000 Acres and Counting*, August.
- Mumford, Lewis. 1939. *Regional Planning In The Pacific Northwest: A Memorandum, Portland, Oregon: Northwest Regional Council*.
- Netusil, Noelwah and S. Chattopadhyay, 2005. *Economic Benefits of Large Patches of Tree Canopy: A Second-Stage Hedonic Price Analysis*. Conference Proceedings, W-1133 2005 Annual Conference, Salt Lake City, UT, February 13-15.
- Olmsted, John Charles and Frederick Law Jr., 1903. *Outlining a System of Parkways, Boulevards and Parks for the City of Portland*, Report of the Park Board, Portland.
- Poracsky, Joe. 2000. "Portland's Emerald Necklace." In *Wild in the City: A Guide to Portland's Natural Areas* ed. Mike Houck and M J Cody, OHS Press, 2000.
- Poracsky, Joseph and Michael Lackner. 2004. *Urban Forest Canopy Cover in Portland, Oregon, 1972-2002*, Portland State University, Center for Spatial Analysis and Research, April.
- Portland Parks and Recreation, 2001. *Parks 2020 Vision*.
- Portland Parks and Recreation, 2003. *Portland Urban Forestry Management Plan*.
- Spirin, Anne Whiston. 1984. *The Granite Garden: Urban Nature and Human Design*. New York: Basic Books.
- Vancouver-Clark Parks, 2006. *Draft Recreation and Open Space Plan*, August.
- Whyte, William H. 1968. *The Last Landscape*. Garden City, NY: Doubleday.
- Wiley, Pam. 2002. *No Place for Nature: The Limits of Oregon's Land Use Program, In Protecting Fish and Wildlife Habitat in the Willamette Valley*. Defenders of Wildlife.

GETTING FROM HERE TO THERE IN THE REGION

by Jennifer Dill, Associate Professor, Nohad A. Toulan School of Urban Studies & Planning, Portland State University

When we think about the transportation system, we often think about commuting to and from work. Why isn't there direct transit service from my home to work? How congested will it be when I leave work today? But commuting is only one type of daily regional travel (see Table 1). Unfortunately, data are insufficient to tell us exactly how to categorize all of the travel happening here (or in any U.S. region). We can get some idea from the types of vehicles and infrastructure used. For example, goods movement, both locally and through-travel, accounts for most of the travel on railroads and in ships at the ports. Goods include merchandise being moved to or from locations within the region as well as through-travel on vehicles just passing through—for example, on trucks traveling the I-5 corridor between California and Washington. Large, heavy-duty trucks, which are primarily for goods movement, account for about 5% of the vehicle miles traveled (VMT) on Portland area roads (Economic Development Research Group, 2005). The remaining vehicles on our roadways are for “personal” travel by area residents, visitors and pass-through passengers, and “commercial” travel by businesses and governments. We don't regularly collect data on most forms of commercial travel, but personal travel likely represents the majority of light-duty vehicles on roadways. This paper focuses on personal travel by area residents.

Table 1: Types of travel

Category	Examples	
Personal Travel	Commuting	Going between work and home
	Other personal travel by residents	Grocery shopping
		Taking kids to soccer practice
		Doctors appointment
		Picking up the dry cleaning
		Visiting a work client
	Visitors	Walking from a hotel to the Convention Center
		Arriving by train from Seattle
	Passenger through-travel	Driving from California to Washington on I-5
Flying from Eugene to Frankfurt, Germany with a layover at PDX		
Commercial Travel & Goods Movement	Utility services	Garbage pick-up
		Telephone, gas, electric, etc. service
	Public vehicles	Police and fire vehicles
		City and county vehicles
		Mail delivery
	Urban goods and services	Couriers and messengers
		Store deliveries and repair services
		Construction equipment
		Goods arriving at the Port delivered by truck to local stores
	Goods movement through-travel	Cargo arriving by ship from China and leaving by train to Idaho or truck to southern Oregon
		Trucks traveling on I-5 from California to Washington

Source: Adapted from Pisarski, 2006

Where Are We Going?

Commuting to and from work actually represents a small portion of all personal travel but is important because it influences many other travel decisions. Nationwide in 2001, commuting to and from work only accounted for about 15% of all personal trips by all travel modes, while over 40% were for shopping and other family/personal business (Pisarski, 2006). This result resembles what was found in the last travel survey conducted in this region over ten years ago (the 1994-95 Household Activity Survey).

Over the past 30 years nationwide, commuting to and from work has represented a declining share of all personal travel. It's not because we're working less, but because we're traveling a lot more for other reasons, such as shopping, personal business, and other errands. Despite its shrinking share of overall travel, commuting has an important influence on overall personal travel. People often make other trips on the way to or from work, such as dropping kids off at school or stopping at the gym. The mode they choose for commuting, how long it takes, and where they work will influence many other travel decisions. Work locations and commuting can also influence people's choice of where to live.

Commuting patterns are as diverse as the types of travel. While downtown Portland is a popular commute destination, people are commuting in all directions. In both 1990 and 2000, about two-thirds of all residents of the six-county region lived and worked within the same county, while 30% crossed county lines to get to work but stayed within the region (Table 2).

Nationwide, most urban areas have seen an increase in suburb-to-suburb commuting, and Portland is no exception. In 2000, over 210,000 new regional residents added to the work commute, compared to 1990. Of these, 27% lived and worked in Washington County and 11% commuted to Washington County from one of the other five counties (far right column in Table 2). The shift presents challenges to transportation planners. As traffic flows become more dispersed, traditional forms of fixed-route transit service become less cost-effective.

Table 2: Commute Flows for Residents of the Region's Six Counties

Home County	Workplace County	% of all commutes		% of growth in commutes, 1990 to 2000
		1990	2000	
Multnomah	Multnomah	31%	28%	15%
Washington	Multnomah	7%	6%	2%
Clackamas	Multnomah	7%	6%	2%
Clark	Multnomah	4%	4%	5%
Yamhill & Columbia	Multnomah	1%	1%	1%
Washington	Washington	13%	16%	27%
Multnomah	Washington	3%	3%	5%
Clackamas	Washington	2%	2%	3%
Clark, Yamhill & Columbia	Washington	1%	2%	3%
Clackamas	Clackamas	9%	9%	8%
Remaining 5 counties	Clackamas	4%	5%	6%
Clark	Clark	9%	11%	17%
Remaining 5 counties	Clark	1%	1%	
Columbia	Columbia	1%	1%	0%
Remaining 5 counties	Columbia	<1%	<1%	0%
Yamhill	Yamhill	3%	3%	2%
Remaining 5 counties	Yamhill	<1%	<1%	1%
All 6 counties	Outside the 6 county region	3%	3%	3%
		100%	100%	100%
<i>Lives and works in same county</i>		67%	67%	69%
<i>Lives in one county and works in a different county</i>		30%	30%	28%
<i>Lives in region and works outside region</i>		3%	3%	3%

Source: 1990 and 2000 Census data provided by Metro

How Are We Getting There?

Most personal travel occurs in private vehicles —cars, SUVs, vans, pick-up trucks, and motorcycles. The 1994-95 Portland Household Activity Survey found that 84% of all personal trips were made in personal vehicles, while 8% were made walking, 3% on transit, 4% on school buses, and 1% on bicycles. If and how this pattern may have changed in the past 10 years is not clear. We do have more recent data on commuting. The Census Bureau collects data on commute modes in its Decennial Census and in the new annual American Community Survey (ACS). For commute trips, people are more likely to use transit and less likely to walk, compared to all trips.

Compared to residents in most other large metropolitan areas, Portland-Vancouver commuters are more likely use alternative modes to get to work, rather than driving alone. In 2005, the ACS found that 73% of the workers 16 years and older in the metropolitan statistical area (MSA, including Multnomah, Clackamas, Washington, and Clark counties) drove alone to work. This rate is lower than that in most other MSAs of similar size. Figure 1 shows the share of workers who usually drove alone to work for the Portland-Vancouver MSA, along with the next 20 larger and smaller MSAs by population within the 50 states. The regions are arranged from largest (left) to smallest (right). Portland-Vancouver

has the fourth lowest drive-alone rate of these 41 regions, behind San Francisco-Oakland, Washington DC, and Boston. Residents are more likely to use transit for commuting than other types of trips. Much of the difference is due to a higher rate of transit commuting (6%) than in all but six of the other regions. In addition, 11% carpooled (ranked 14th), 3% walked (ranked 5th), and 1% bicycled (ranked 2nd). About 5% of workers in the region worked at home most of the time.

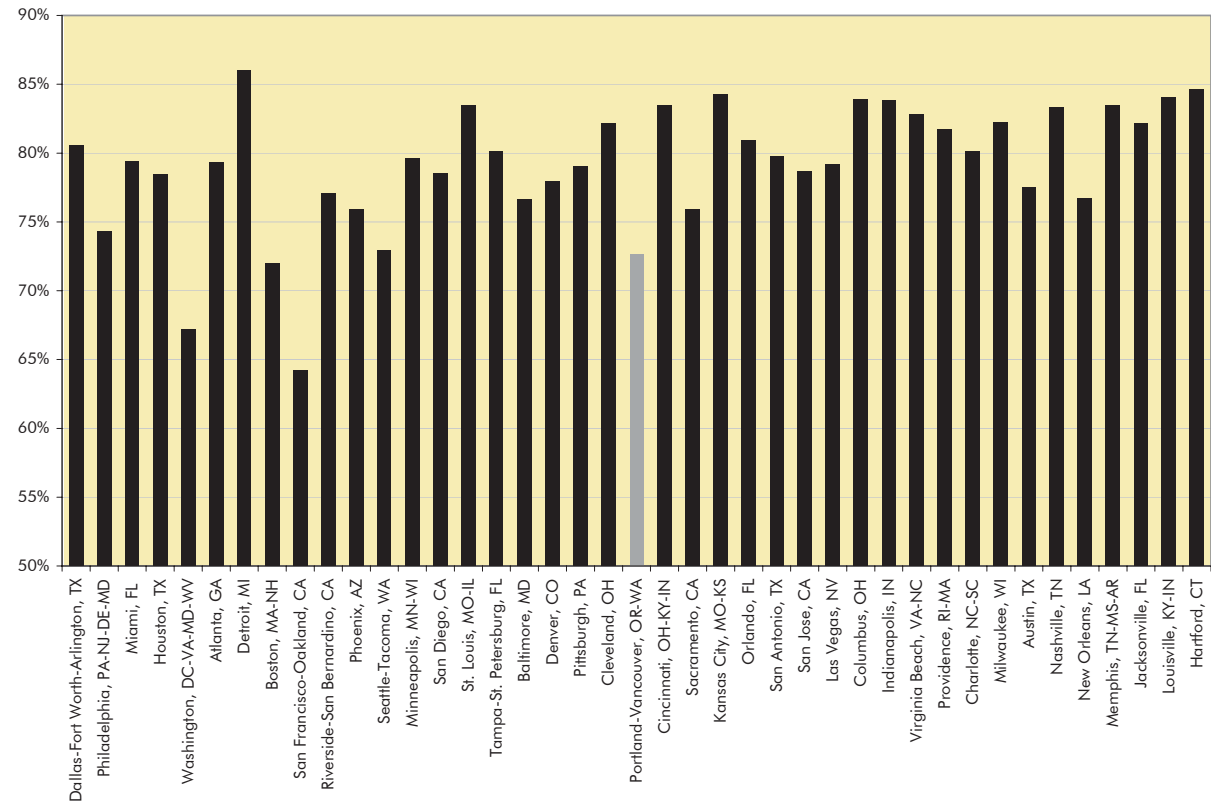


Figure 1: Percent of Workers Driving Alone to Work in 41 Metropolitan Areas

Source: American Community Survey, www.census.gov

The higher rates of transit commuting in the region are reflected in overall higher transit ridership per person in the region. Ridership data reported by transit agencies to the federal government show that Portland-Vancouver area residents make an average of about 50 trips a year on transit. Only four of the other 40 regions had higher rates in 2004 (Figure 2). The number of transit trips a person makes depends somewhat on the amount of transit service available. Therefore, another commonly used measure of transit performance is the number of transit trips taken per “revenue” mile of service (when vehicles are collecting passengers). In 2004, transit riders made 3.3 trips per revenue mile on TriMet and C-Tran, ranking 9th among the 41 MSAs. Between 1997 and 2004, only six of the 41 regions saw an increase in trips per revenue mile, including Portland-Vancouver (a 12% increase). Trips per revenue mile also grew by more than 10% in Dallas-Ft. Worth, Boston, and San Antonio. Miami, Tampa-St. Petersburg, and Orlando saw increases of less than 5%.

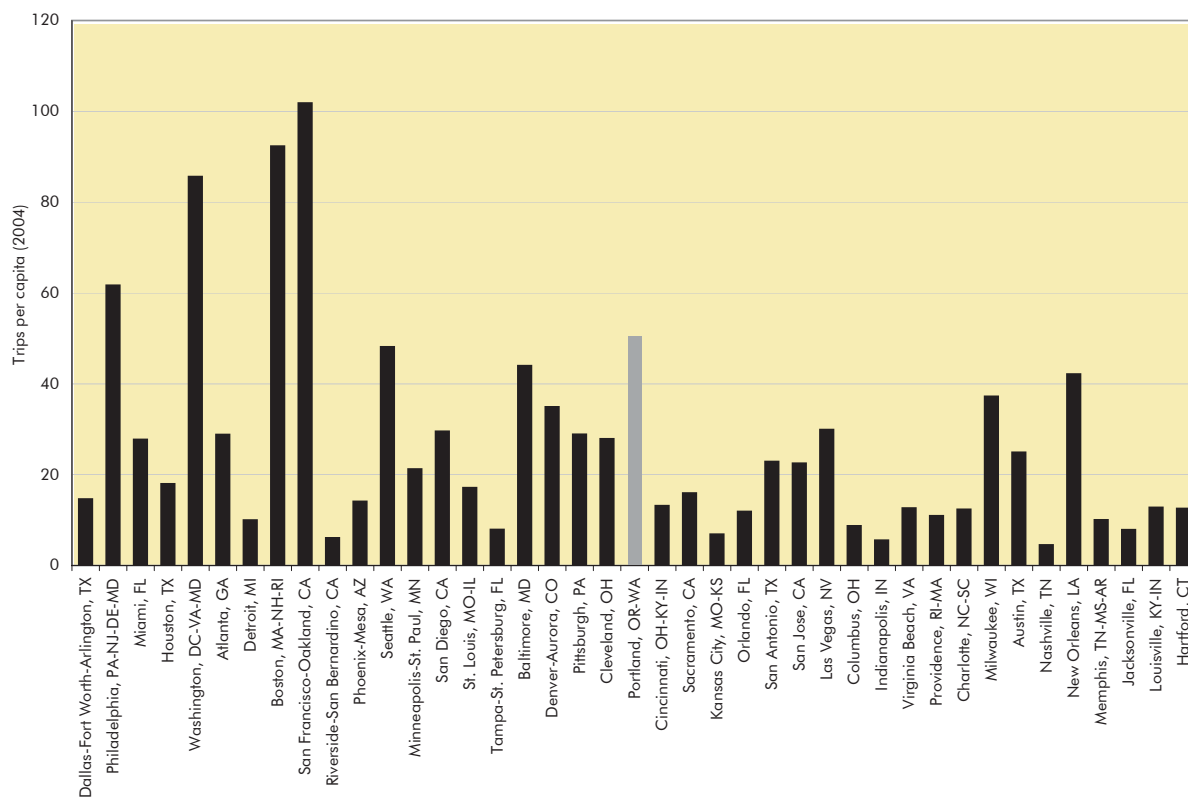


Figure 2: Transit Trips per Capita, 2004

Source: Author’s calculations using Federal Transit Administration’s National Transit Database, <http://www.ntdprogram.com>. Excludes demand response and vanpool service. MSA population data are from 2005 ACS.

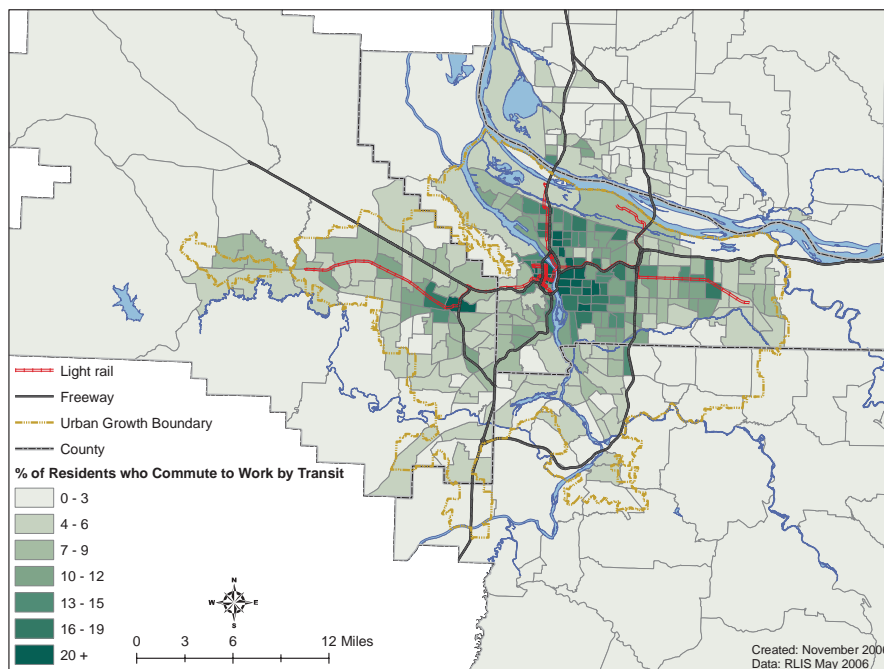


Figure 3: Percent of Workers Commuting by Transit, by Census Tract, 2000

Source: 2000 Census, Summary File 3

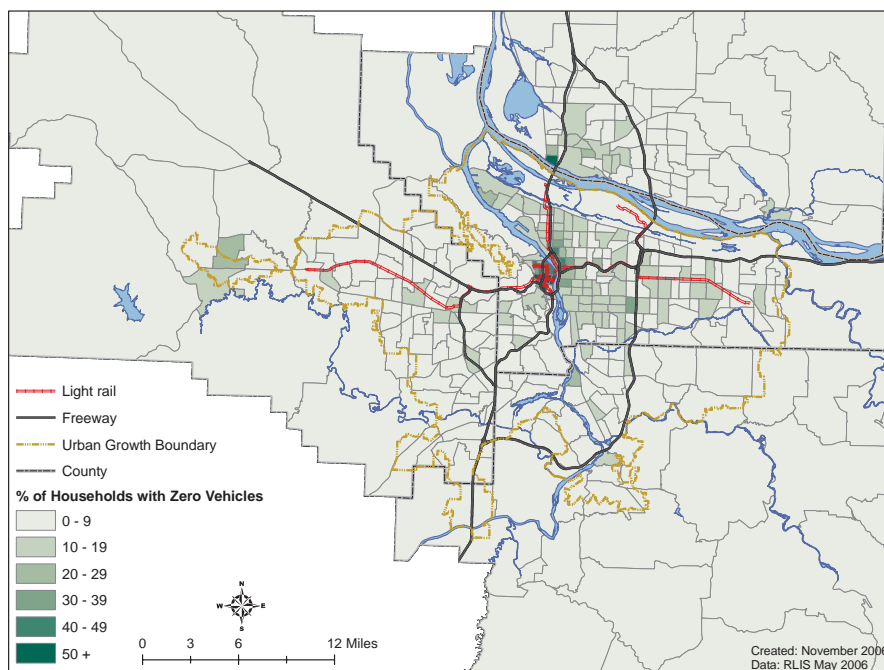


Figure 4: Percent Households with No Vehicle, 2000

Source: 2000 Census, Summary File 3

Transit use for commuting varies significantly throughout the region, with the highest rates closest to downtown Portland and Beaverton (Figure 3).

What About Accessibility?

The transportation system affects access to jobs and essential services. In most regions, including Portland, having a vehicle can make a difference between holding a steady job or not. Throughout the region, 8% of all households do not have a vehicle. These households are concentrated in and near downtown Portland and Vancouver, though carless households are found in the suburbs as well (Figure 4). Vehicle ownership is related to income and race/ethnicity. One in five households headed by a black householder does not have a vehicle, and 12% of Hispanic households do not have a vehicle, compared to 8% of white households.

Access and mobility also vary by age. One of the more significant demographic changes that will influence our transportation system in the next 30 years is the aging of the baby boomer generation. In 2000, 10.5% of the region's population was 65 or older. This share is projected to be 17% in 2030. The number of people 65 and older is expected to more than double, from 166,000 to 394,000 (Neal et al., 2006). These older adults are spread throughout the region, with some high concentrations in areas far from urban centers (Figure 5). This distribution reflects a trend towards "aging in place." Nearly two-thirds of households headed by people 65 and older in the region have lived in the same home for more than 10 years; over 40% have lived in the same home for more than 20 years. Therefore, the homes that baby boomers are living in today probably will be the ones that they live in after they retire. When choosing a new home, homeowners in their 40s may not be thinking about their mobility needs when they are 70.

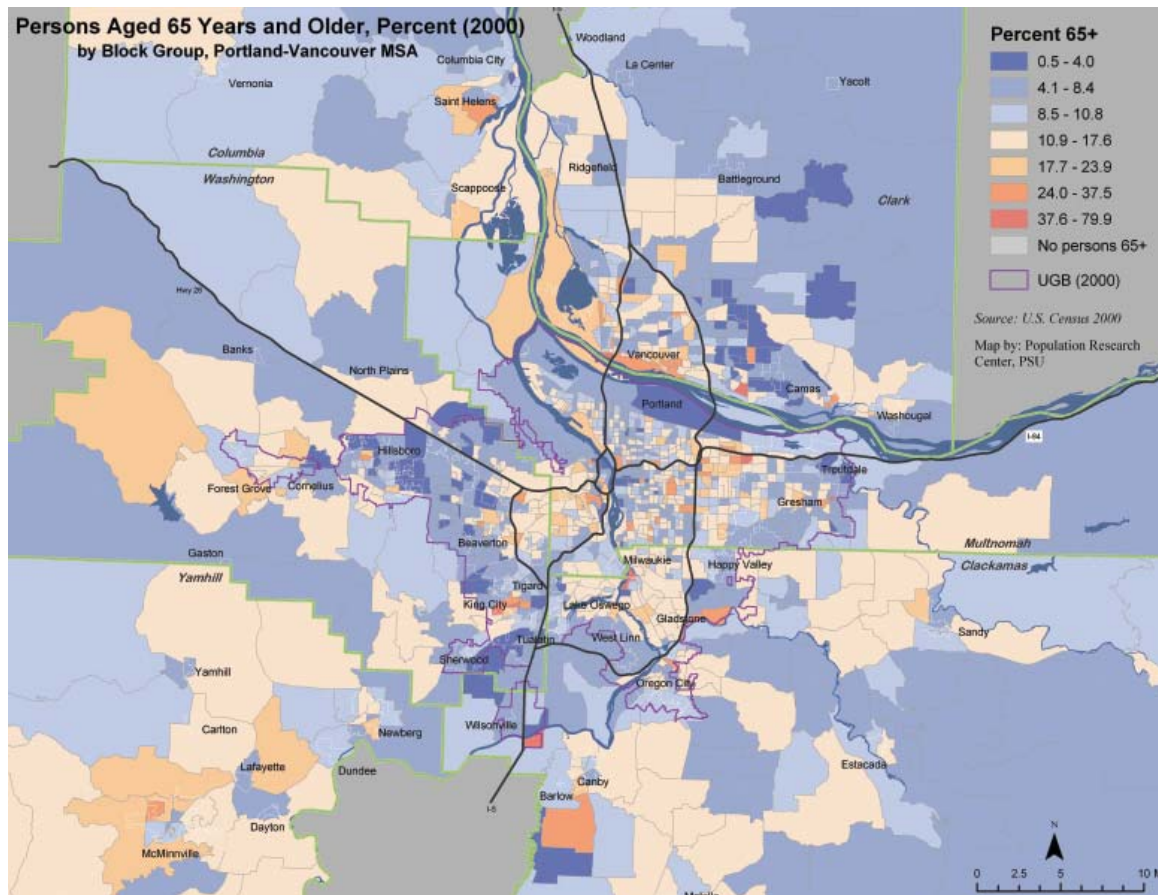


Figure 5: Proportion of Persons Aged 65 Years and Older in the Portland-Vancouver MSA, by Block Group, 2000

Source: Neal et al., 2006

How Much Are We Traveling?

Despite the higher rates of using alternative modes for commuting, most of the region's travel occurs in private vehicles. Residents of the region drove about 19.5 miles per day in 2003, according to data from the Texas Transportation Institute's (TTI) Urban Mobility program. This figure was below the median for the 41 MSAs (23.6 vehicle miles per capita).

All of this vehicle travel does contribute to congestion. The average peak hour traveler experiences nearly 40 hours of delay per year due to congestion (Figure 6). Over half (54%) of this delay is caused by incidents, such as vehicle crashes, rather than recurring congestion caused by too many vehicles.

However, congestion can be measured in ways that influence the conclusions made. The annual TTI report on mobility includes several different measures of congestion and performance. The news media often highlight TTI's "travel time index," which is a ratio of a vehicle's travel time during the peak period to travel time under free-flow conditions. In 2003, the index for the Portland-Vancouver region was 1.37, indicating that peak-period commuters traveled 37% longer in the congested period. Using this measure, the region scored above the median (1.33) and ranked in the top 15 of the 41 regions. The difference in ranking compared to the total annual hours of delay stems from the different measures. The region's residents tend to have shorter distance commutes than do residents of the other regions. Therefore, even when they are delayed by a greater percent (37%), the total time they are delayed is shorter. For example, the travel time index for the Seattle-Tacoma region in 2003 was 1.38, just a little higher than in our region, but that region's commuters spent an extra 46 hours per year in peak period congestion, compared to 39 hours in Portland-Vancouver. Why? Even under free flow conditions, Seattle's commuters spend almost four minutes longer because they are traveling further distances.

Congestion has increased significantly over the past 20 years (Figure 7). In 1982, travelers spent an extra 7 hours a year in peak hour congestion, compared to 39.3 hours in 2003, a 461% increase. Why was there such a large increase in congestion delay when vehicle travel only increased about 150% over the same period? When the volume of traffic approaches the capacity of the roadway, even a small increase in

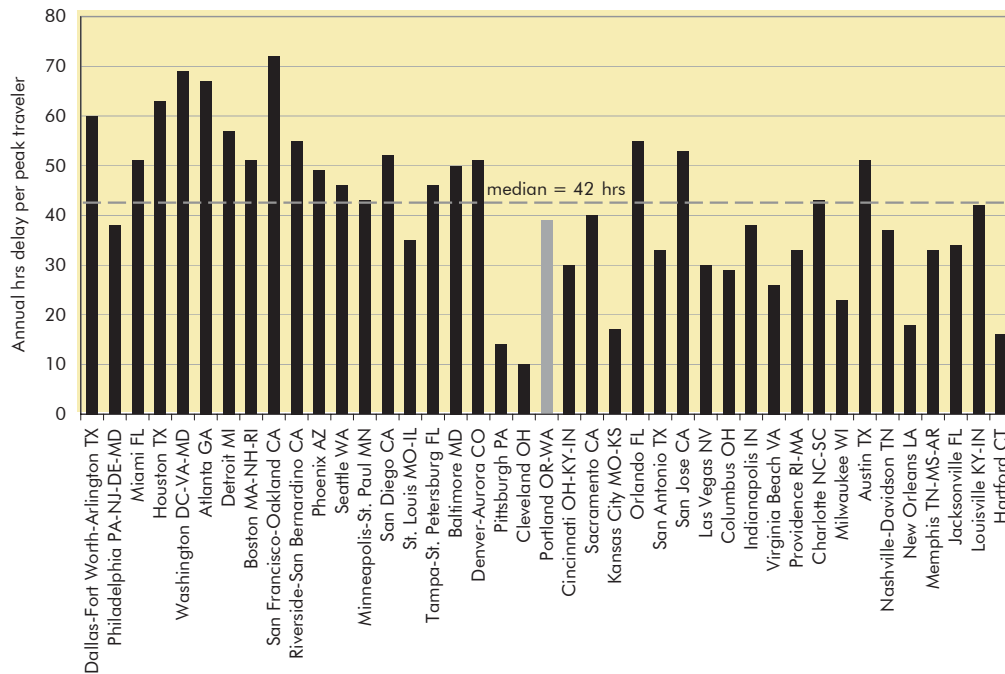


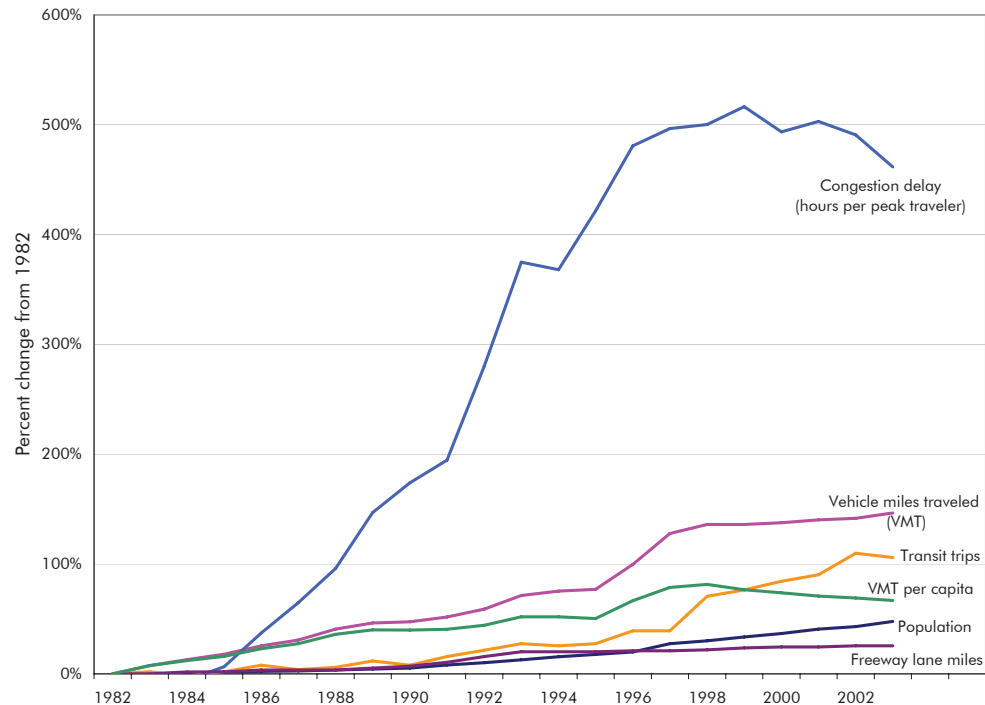
Figure 6: Annual Hours of Delay per Peak Period Traveler, 2003

Source: Texas Transportation Institute
2005 Urban Mobility Report
<http://mobility.tamu.edu/ums/>

the number of vehicles causes a proportionally larger increase in the amount of delay. Imagine a roadway in the middle of the night with just a few cars. You could double the number of cars – a 100% increase in volume –without causing any delay; everyone could still go the speed limit. But, at 4:00 p.m. on a weekday leaving downtown Portland, when there are far more vehicles on the road, adding just a few more can slow down traffic significantly. As vehicle travel increased in the region over 20 years, each day the roadways experienced more tipping points when adding cars caused delay. The “peak hour” is now a few hours. It should be noted, however, that hours of delay declined from 1999 to 2003. During this same time, VMT per capita declined, and the total number of transit trips increased faster than population. Reducing VMT per capita is one objective of Oregon’s Transportation Planning Rule (TPR).

Figure 7: Trends in Travel, Portland-Vancouver, 1982-2003

Source: Data from Texas Transportation Institute, 2005 Mobility Report
<http://mobility.tamu.edu/ums/>



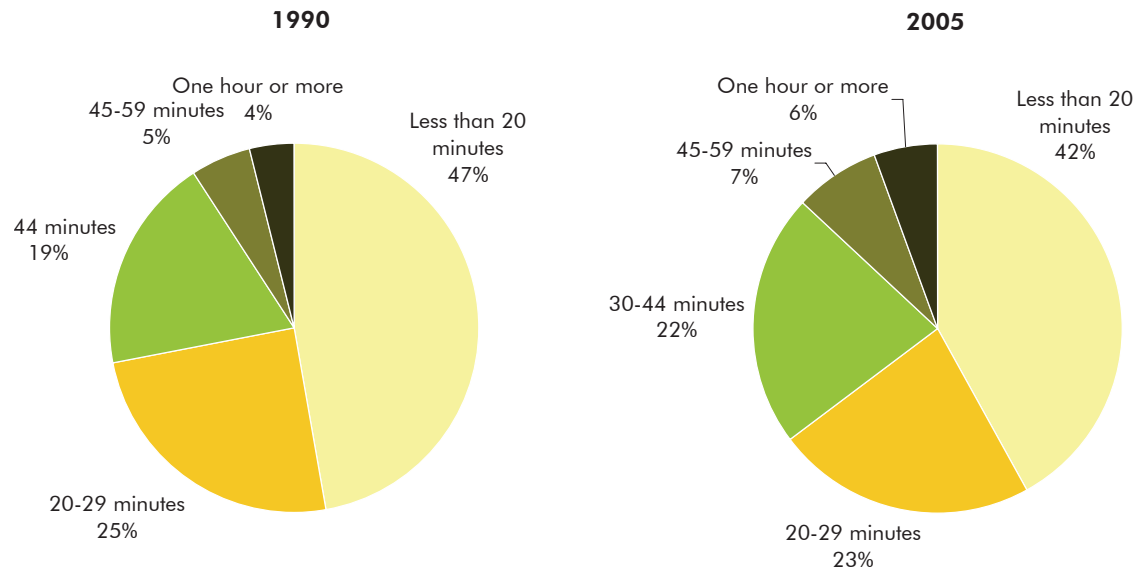


Figure 8: Commute times of Portland-Vancouver Workers, 1990 and 2005
 Source: 1990 US Census SF3 and 2005 American Community Survey. Includes workers in the Portland-Vancouver MSA 16 years and older who did not work at home.



Courtesy of the Portland Development Commission

Increasing congestion and changing commute patterns are contributing to longer commutes. However, most commuters (65%) spend less than 30 minutes getting to work. In 1990, 47% of the region’s commuters got to work in less than 20 minutes, compared to 42% in 2005 (Figure 8).

Thoughts about the Future

Many discussions regarding transportation in the future focus on the congestion. However, several factors and conditions indicate that “solving” the congestion problem, or even reducing congestion significantly, is highly unlikely. One reason is what Anthony Downs calls “triple convergence,” which involves temporal, modal, and spatial shifts (2004). For example, if travel times on a congested freeway were reduced during the morning peak by adding a lane to the freeway, people would respond in three ways. Some people driving on parallel roadways would switch to the freeway. Some people using transit or other modes would switch to driving on the freeway because it’s faster. And some people who were traveling after the peak to avoid congestion would move their trip earlier. These shifts, along with population growth, can quickly erase the improvements made.

Does this mean we should give up on addressing congestion? Certainly not. Over half of congestion is caused by crashes and other non-recurring problems, such as construction projects and weather conditions (Figure 9). Non-recurring congestion is often worse because it’s unpredictable. Commuters and trucking firms can plan around the peak period congestion that happens every weekday. But unexpected delays

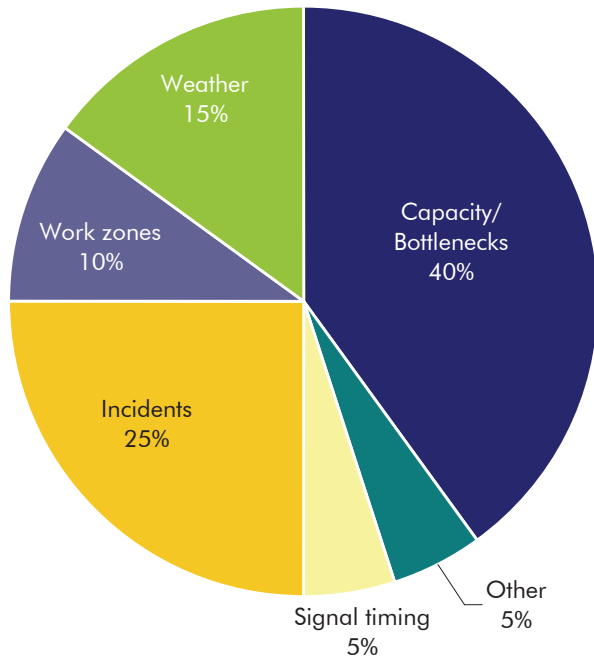


Figure 9: Causes of congestion

Source: Metro, Metropolitan Mobility the Smart Way, http://www.metro-region.org/library_docs/trans/report_final_small.pdf

can cost trucking firms revenue and cause frustration for most drivers. Programs like ODOT's COMET patrols, which aim to clear crashes and stalled motorists quickly, can significantly reduce congestion caused by incidents. Better traffic signal timing and ramp meters can also smooth traffic flow. Using these and other types of intelligent transportation systems (ITS) to manage our transportation system better can help reduce congestion, usually at a lower cost than expanding capacity.

Figure 7 also suggests that reducing the amount of driving per person may help manage congestion. Therefore, improving the attractiveness of travel options including transit, ridesharing, walking, bicycling, and telecommuting is important. Programs and policies that do so can also improve the safety, livability, and attractiveness of regional neighborhoods, such as narrower streets, sidewalks, traffic calming devices, a lively

mix of land uses, street trees, bicycle facilities, and putting parking lots behind buildings. Recent programs using individualized marketing aimed at residents and employer-based programs have also been successful in the short term. Longer-term solutions include changing land use patterns to make origins and destinations closer so that people could walk or bike and increasing densities to make transit more effective. Debate exists concerning how much land use patterns influence travel and congestion. However, despite the questionable effects on congestion, changing land use plans and zoning to promote mixed-use zoning and higher densities of housing gives people more choices. The market and the planning system should provide a variety of neighborhoods and housing types that allow people to choose among several travel modes other than driving. Providing choices is an important public policy objective, whether or not it changes travel patterns.

The Portland region has already started working on implementing most of these ideas to help improve our transportation system. However, the current level of effort will not be enough to deal with the population and job growth expected over the next 20 years. Without additional funding, our problems will worsen.

State and federal gas taxes make up the majority of funding for roads. However, like most U.S. states, Oregon's gas tax revenues have not kept up with inflation and the growth in travel. In Oregon, the amount of gasoline taxes collected per mile driven fell 50% from 1970 to 2003, from 2.31 cents to 1.16 cents per mile (Whitty and Imholt, 2005). Fuel taxes are an attractive funding option for the near term because they resemble a user fee—how much people pay in fuel taxes is somewhat proportional to how much they use the system. However, as vehicles become more fuel efficient and use other types of fuels, traditional per gallon gasoline taxes will no longer be a good user fee. Moreover, legislative bodies and the voters have been unwilling to increase gas taxes to keep up with increasing demand and costs.

In addition to increasing fuel taxes, two options should be considered. First is the pricing of new infrastructure. Many other states and regions are using tolling to pay for new infrastructure, including high-occupancy toll lanes along existing roadways, along with tolls on new freeways and bridges. Tolls, particularly ones that vary based upon the amount of congestion, are one solution that doesn't result in Downs' triple convergence. The second solution is longer term and is being tested in Oregon right now—a vehicle mileage fee. With such a fee, drivers would pay for every mile they drive, rather than for every gallon of gasoline they buy. Such a system could also incorporate congestion charging, with higher rates for driving on the most congested roads during peak periods. This option faces some technical and many political challenges. Both of these funding options send signals to drivers to make appropriate decisions about whether, when, and where to drive and could have significant effects on future levels of congestion. They should be part of a comprehensive set of strategies, along with operations management, encouraging travel options, and changing land use.

REFERENCES

Downs, Anthony. 2004. *Still Stuck in Traffic*. Washington, DC: Brookings Institution.

Economic Development Research Group. 2005. *The Cost of Congestion to the Economy of the Portland Region*. December 5.

Neal, Margaret B., Nancy Chapman, Jennifer Dill, Irina Sharkova, Alan DeLaTorre, Kathleen Sullivan, Tomoko Kanai, and Sheila Martin. 2006. *Age-Related Shifts in Housing and Transportation Demand*. Prepared for Metro, Portland, OR. Portland State University, College of Urban and Public Affairs, August 14.

Pisarski, Alan E. 2006. *Commuting in America II*. Washington, DC: Transportation Research Board.

TriMet. 2006. *Tri-County Elderly and Disabled Transportation Plan*, September. <http://www.trimet.org/pdfs/publications/edplan.pdf>.

Whitty, James M., and Betsy Imholt. 2005. *Oregon's mileage fee concept and road user fee pilot program report to the 73rd Oregon Legislative Assembly*. Salem, OR: Oregon Department of Transportation.

PUBLIC FINANCE: DIFFERENCES, SIMILARITIES, AND NO QUICK FIXES

by Steve Novick, Pyramid Communications

Candidates for office, in every place and at every level of government, often talk as if they think they will be able to revolutionize both government services and the local (or state, or national) economy by, in some way, changing the structure of public finance. They'll improve funding for basic services by prioritizing government spending. They'll boost the economy by cutting taxes. They'll replace an outdated, irrational structure by reforming taxes. They'll make corporations and the rich pay their fair share. Et cetera.

A review of the structure of public finance in the Portland metropolitan region suggests that any and all such pronouncements should be taken with a number of grains of salt. The following pages address how Oregon, Washington, the six metropolitan counties, and a sampling of cities and school districts raise and spend money. But for those with limited time, I offer the following summary:

Prioritization has limited promise.

Wherever they are, governments spend most of their money on the same things:

- Cities spend a lot of money on police and fire. They also usually provide sewer and water service. And they have streets and street lights to maintain.
- Counties spend a lot of money on jails and social services (mental health, etc.).
- States spend money on education, health care and other "human services," and public safety. They also spend dedicated revenues on the services they are dedicated to – e.g., gas tax money on roads. As a percentage

of General Fund spending, Washington spends significantly less than Oregon on public safety, and significantly more on health / human services.

- School districts spend most of their money on personnel – teachers, bus drivers, cafeteria workers, custodians, principals, librarians, speech pathologists — and relatively little on 'administration.'

There is no Promised Land of Public Finance in the Portland-Vancouver metropolitan area.

These facts do not preclude some differences in spending patterns, and some room for different choices. However, when you hear any politician saying (as they often do) that we should "focus on the basics—education, health care and public safety," or that "schools should put the money where it belongs—in the classroom, not into administration," you might well ask, "What the heck are you talking about? Isn't that what we already do?"

Be suspicious of claims that changing the tax structure will revolutionize the economy, and recognize that self-interest rather than careful study often motivates such claims.

It would be difficult to find two states with more different tax structures, as far as State government itself is concerned, than Oregon and Washington. State and local taxes are higher in Washington than in Oregon, and, in particular, businesses pay a much higher share of total tax revenues. But in both states, strong elements of the business community make the same claim: that the tax structure is unfriendly to business. And Washington's economic performance, compared to Oregon's, casts severe doubt on the argument that either total taxation or business taxation is a major drag on economic growth.

Recognize that “making businesses pay their fair share” and “making the wealthy pay their fair share” are not the same thing.

Businesses pay a much larger share of total taxes in Washington State than in Oregon. But according to the liberal Institute for Taxation and Economic Policy, which applies “incidence modeling” to determine who ultimately really pays taxes, not just who writes the first check, the rich pay a much larger share of total taxes in Oregon than in Washington (McIntire et al., 2003). The fact that Oregon has a progressive income tax, and Washington has a regressive sales tax, is not offset by the larger business share in Washington. Incidence models indicate that businesses do, in fact, pass on much of the cost of taxes—especially taxes on all business revenues (as opposed to profits), like Washington’s—to their customers, many of whom, obviously, are low- or middle-income.

Health care costs are a big deal and a source of terror for all levels of government.

Governments tend to be involved in labor-intensive businesses. As long as workers would like to have health insurance, and health insurance costs continue to rise, government money managers—like many private business owners—will sleep uneasily.

Everyone always thinks the grass is greener on the other side of the fence. But there is no Promised Land of Public Finance in the Portland metropolitan area. Those who feel the City of Portland is committing economic suicide by driving businesses across the river through the business tax might be surprised to learn that the City of Vancouver has been considering restoring a local business and occupation tax. Those who think that the City of Portland has unique budget problems may be surprised to learn that Hillsboro is beginning to question whether it can remain a full-service city in the future.

A Tale of Two States

Oregon and Washington raise money in dramatically different ways. They spend it on pretty much the same stuff, but Washington spends much less on prisons and public safety.

Washington famously has no income tax. Oregon famously has no general sales tax. Figures 1 and 2 show the percentage of general fund revenue generated by each revenue source for Oregon and Washington in their 2005-2007 budgets, respectively.

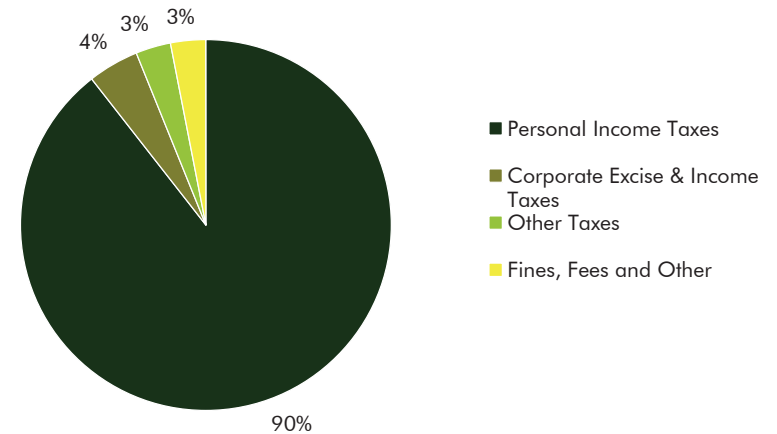


Figure 1: Oregon General Fund Revenue Sources, 2005-07

Source: State of Oregon, Legislative Fiscal Office. 2006. 2006 Oregon Public Finance: Basic Facts. www.leg.state.or.us/comm/lro/rr1_06_oregon_publicfinance_basicfacts.pdf

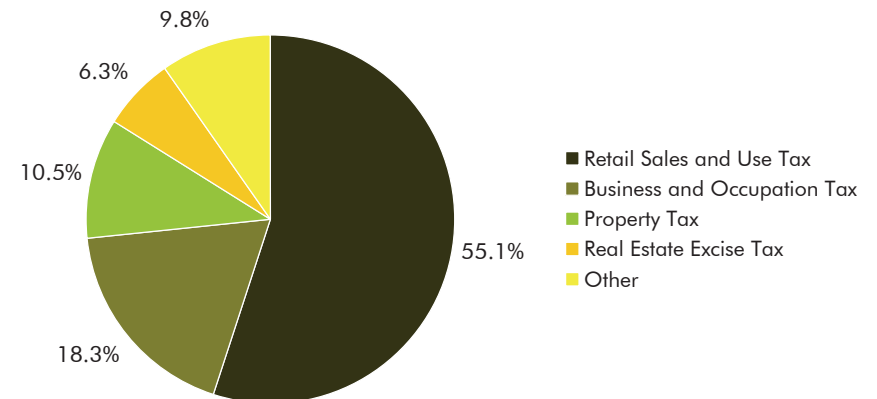


Figure 2: Washington State General Fund Revenue Sources, 2005-07

Source: State of Washington, Economic and Revenue Forecast Council. 2006. Washington Economic and Revenue Forecast, September 2006

While Oregon relies on the personal income tax for over 89% of its general fund revenue, Washington has a significantly more diverse revenue base. The retail sales tax, by contrast, is expected to generate 'only' 55.1% of Washington's 2005-2007 revenue. Washington's "business and occupation tax" will generate 18.3 percent of its General Fund revenue in 2005-2007. As the Washington Department of Revenue explains, "The state B&O tax is a gross receipts tax. It is measured on the value of products, gross proceeds of sale, or gross income of the business. Washington, unlike many other states, does not have an income tax. Washington's B&O tax is calculated on GROSS income from activities. This means there are no deductions from the B&O tax for labor, materials, taxes, or other costs of doing business." Furthermore, Washington's sales tax is levied not only on purchases by final consumers, but also on business-to-business purchases, further increasing the initial incidence of taxes on business.

Oregon's corporate income tax is applied only to corporate profits, as opposed to gross revenues. The tax generates only 4.4% of Oregon's General Fund revenue.

Another major difference between Oregon and Washington is that Washington has a hefty real estate excise tax (the state tax rate is 1.28%; there are also local levies) which is expected to generate 6.3% of Washington's revenue in 2005-2007. And Washington has a state property tax, generating 6.3% of its general fund revenue.

Oregon, with its state-sponsored video gaming machines, relies much more heavily on its Lottery than Washington. The Lottery will add \$830 million to state coffers in 2005-07; some of that money is dedicated, but most is simply mixed in with Oregon's \$11.639 million General allocation for schools and other services. Washington's Lottery, by contrast, generates about only \$200 million per biennium.

Finally, the two revenue systems result in a different long-run response to growth. As explained by economist Paul Warner at the Oregon Legislative Revenue Office,

Oregon's income taxes will grow over time faster than the overall economy, though at an unstable rate. Washington's sales tax dominated system is less responsive to income growth and therefore will not grow as fast as the economy in the long run.

As a percentage of personal income, Washington's total state and local taxes rank 30th in the United States, according to the Tax Policy Center (2006), compared to Oregon's 43rd. Oregon ranks higher in the category of "own source revenue" when fees, such as college tuition, are included in the mix. College tuition is a significant factor because Oregon has proportionately more students in state universities than does Washington while providing less state support for students.

But should Oregon leftists call for the immediate adoption of Washington's business-taxing revenue system? Not so fast, comrades. According to the left-leaning (and well-respected) Institute for Taxation and Economic Policy, Washington's tax system hits the poor and middle class much harder than the rich, while Oregon's system is relatively flat. Oregon's income tax is progressive (McIntyre et al 2003). The fact that the top rate of 9% kicks in at a low-sounding level of taxable income does not make the system flat, because a significant part of most people's income is untaxed, due to exemptions and deductions. Meanwhile, a retail sales tax is inherently regressive, and for a simple reason: Poor and middle-class people spend all their money on something. Rich

people don't spend all of theirs. Therefore, it is virtually impossible to design a sales tax that taxes the rich at the same rate as the poor. And, as noted above, economists assume gross receipts business taxes such as Washington's are largely passed on to consumers. Figures 3 and 4 take that "pass-through" effect into account (as well as other pass-through effects, such as landlords passing on property taxes to tenants).

And how do Oregon and Washington spend their money? In both states, dedicated funds are spent on what they are dedicated to—gas taxes to roads, university tuition to universities, and so forth. As Figure 5 shows, Oregon spends its discretionary "general fund" money largely on three major categories—human

As a percentage of personal income, Washington's total state and local taxes rank 30th in the U.S. compared to Oregon's 43rd.

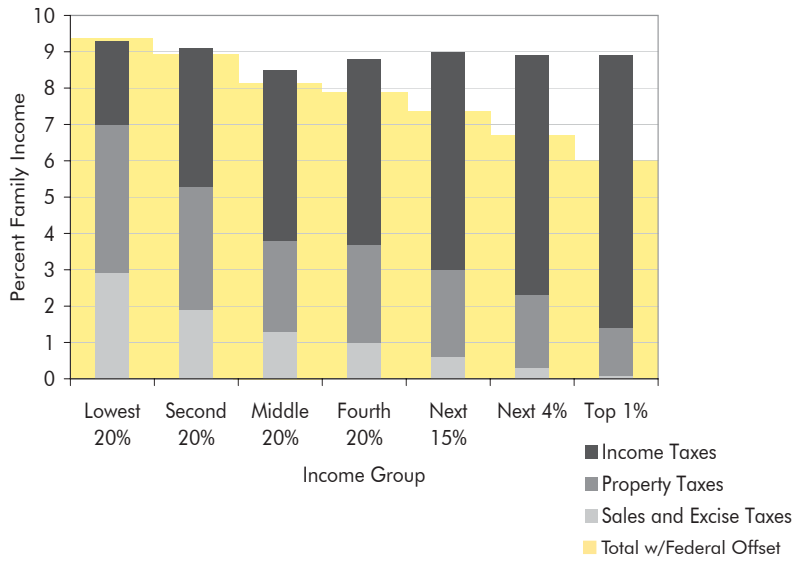


Figure 3: Oregon Shares of Family Income Paid in State and Local Taxes, 2002
 a. Non-elderly taxpayers only
 Source: McIntire, 2003

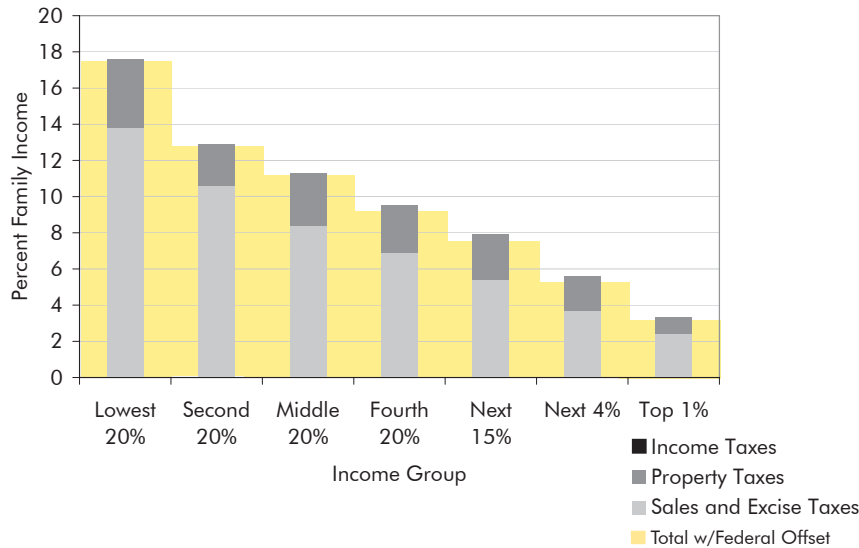


Figure 4: Washington Shares of Family Income Paid in State and Local Taxes, 2002
 Source: McIntire, 2003

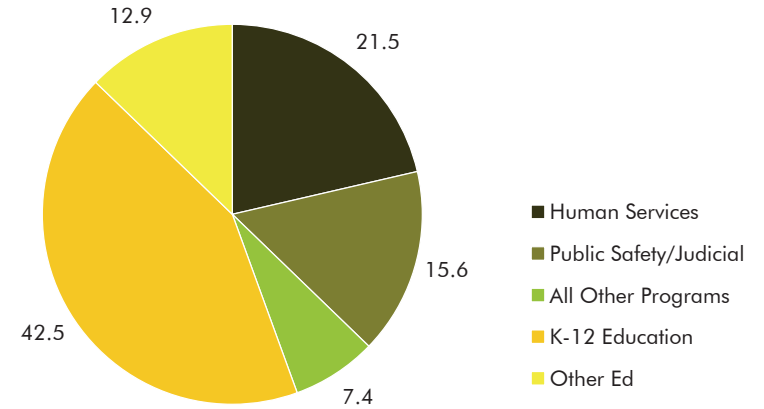


Figure 5: Oregon Legislatively Approved General Fund & Lottery Funds Spending
 Source: State of Oregon, Legislative Fiscal Office. 2005. Analysis of the 2005-07 Legislatively Adopted Budget. www.leg.state.or.us

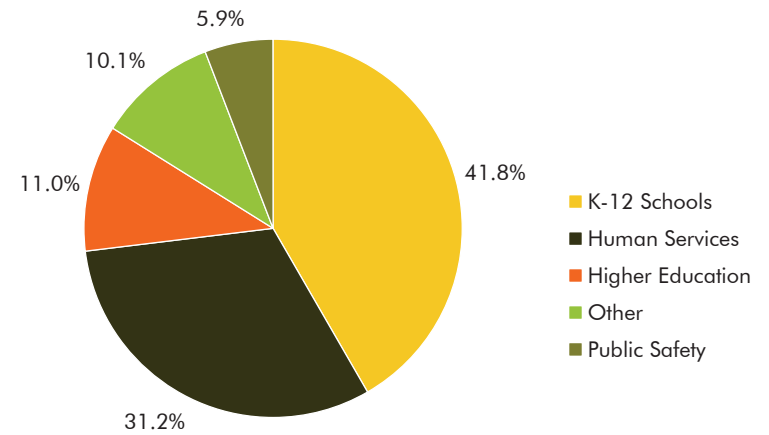


Figure 6: Washington General Fund Spending, 2006-07
 Washington State Office of Financial Management and Author's Calculations.
 * Public safety includes corrections, judicial, state patrol, and Attorney General.
 Source: Senate Ways and Means Committee. 2006. A Citizen's Guide to the Washington State Budget, www.leg.wa.gov/

services (largely health care), education, and public safety (prisons, State Police). But in Oregon, public safety takes up 15.6% of the general fund/Lottery budget, while in Washington only 5.9% goes to these programs. One explanatory factor is that Washington locks fewer people up; while Washington has 173% of Oregon's total population, it has only 134% of Oregon's prison population, meaning that proportionally, Washington's prison population is 22.6% smaller than Oregon's.

The Property Tax: Capped on Both of the Columbia's Shores

Schools, cities and counties—the three forms of government addressed below—all receive a significant portion of their money from the property tax. On both sides of the Columbia, property taxes are subject to severe restrictions.

In Oregon, Measure 5, passed in 1990, limited property tax rates to no more than \$5 per \$1,000 of real market value for schools, and \$10 per \$1,000 for other local governments. Then, in 1996-1997, Measure 47 (modified by the Legislature and re-passed as Measure 50) limited increases in taxes on any given property to 3% per year. Unlike California's Proposition 13, Measure 50 does NOT provide that the property is reassessed at its real market value when it is sold. (Interestingly, based on anecdotal evidence, many Oregonians seem to be under the false impression that it is reassessed.) Measure 50 exempts local option voter-approved taxes for no more than five years, but such measures have to stay within the Measure 5 limits.

Washington passed its own property tax limitation initiative, I-747, in 2001. The initiative is even more restrictive than Measure 50, limiting growth in levies at the district level rather than taxes on individual properties, and applying a lower limit. As the Washington Department of Revenue explains on their website, <http://dor.wa.gov/>.

"I-747 limited the increase in taxing district levy amounts to 1% each year, plus additional amounts for new construction. It did not limit the amount of tax paid on individual properties or the rate at which assessed values may increase. Additionally, voter-approved levies (such as school district maintenance and operation levies) are not subject to the 1% limitation."

The Schools: State-Dependent . . . With One Exception

With one significant exception, schools in the region get the largest share of their operating money from the State government—whichever State government you're talking about. The exception is Portland, where, in the 2004-2005 school year, local property taxes narrowly beat out state support as the largest funding source.

Oregon's statewide school funding "equalization" formula in effect says: "We're going to try to ensure that everyone – more or less – gets the same amount of money per student. Here's how we'll do that. We'll figure out how much total property and income tax money schools will have statewide. We'll divide that by the number of students to get a per-student target. Then we'll look at how much each district can raise through property taxes under Measures 5 and 50, and subtract that from the total amount you're going to get. We'll then give each district enough income tax and Lottery money to reach that per-student target."

This strategy means that a district like Portland, with lots of valuable property but a smaller student population per capita than surrounding districts, ends up paying a larger share of its own students' costs from local sources, the biggest of which is property taxes. The figures in Table 1 for 2004-2005 (the last year for which the Oregon Department of Education has final audited figures) leave out a number of local sources of funding, such as athletic and cafeteria fees, but highlight this important fact.

Table 1: Local versus state support for selected school districts, 2004-05

District	Property tax (\$Millions)	State support
Gresham-Barlow	\$17.90	\$53.30
North Clackamas	\$32.80	\$64
Hillsboro	\$40.70	\$70
McMinnville	\$7.50	\$27.60
Scappoose	\$4.90	\$7.50
Portland	\$170*	\$163

Source: Oregon Department of Education
*including \$17 million in 'local option' taxes

In 2004-2005, Gresham and Portland also received significant funding from the now-defunct Multnomah County income tax.

Washington State has its own version of a statewide, semi-equalized school funding formula: Most of the money comes from the state, on a more or less per-student basis, but districts are allowed to levy property taxes, up to a certain percentage of its state and federal funding. The Vancouver school district receives 69% of its operating funds from the State of Washington, and recently passed a four-year local property tax levy.

In August, the Vancouver School District adopted its 2006-2007 budget. Oregonians affected by the “grass is greener on the other side of the river” bug might want to read the press release accompanying the budget adoption (Vancouver Public Schools, 2006):

“Like other school districts in Washington state and elsewhere, Vancouver School District has been faced with increasing costs and diminishing resources (in terms of real dollars) for the past several years. Cost increases include fuel for school bus transportation, utilities, and health care benefits for employees . . . Over the past four years, the district has made budget reductions and realigned resources totaling nearly \$11 million . . . Additional reductions, totaling nearly \$4.4 million, are included in the 2006-07 budget. The bulk of the reductions have come from the central office and operations . . . Changes in the 2006-07 budget that will affect students include reductions in the swim program, a decrease in intramural programs for middle schools (by 33%).”

What does the future of school funding look like in the region? Clearly, the health of school budgets will mirror the health of state budgets. Another major factor in the health of school budgets will be rising health care costs. Education is a labor-intensive business, and employees like to have health insurance; but costs keep rising. North Clackamas has been relatively successful at controlling health insurance costs over the past few years. But asked for his fiscal wish list for the next five years, Superintendent Ron Naso quickly responded: “Some kind of universal health care.” Without that, Naso said, his district is “at the mercy of where hospital and pharmaceutical costs are going to go.”

How do Oregon schools spend their money? For Oregon schools, the Chalkboard Project’s “Open Books Project” is a reliable source of data. Figure 7 provides their data for Hillsboro, McMinnville, Scappoose, Portland and North Clackamas.

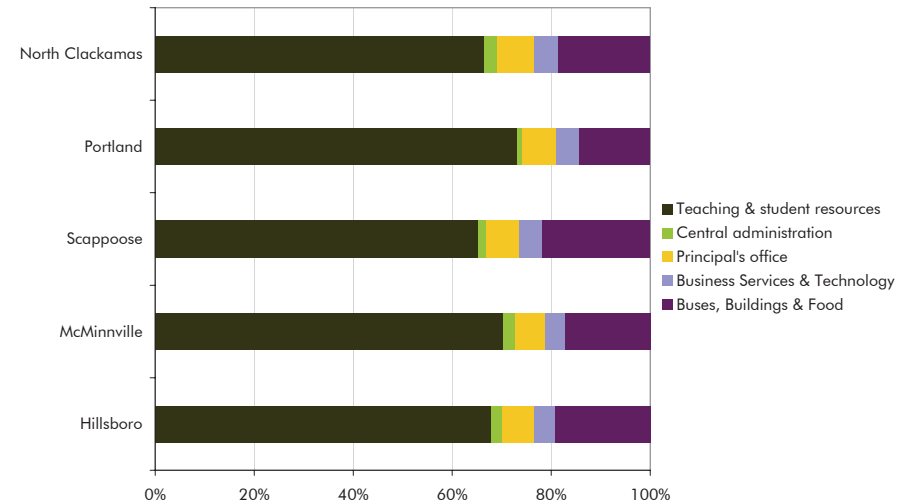


Figure 7: School District Spending by Category, 2004-05
Source: www.openbooksproject.org

Hot Time, Money in the Cities

Cities rely much more on “fee for service” than do other governments. Water and sewer services, paid for by businesses and homeowners, are major portions of most cities’ budgets. The funding sources for the major general government services, such as police and fire, vary somewhat. But every city in the region relies significantly on property taxes to pay for those services. Taxes on utilities (such as natural gas, electrical service, and cable service) are also a significant factor. Table 2 summarizes general fund revenue and spending categories for a few cities in various parts of the region.

Table 2: City General Fund Revenue Sources and Spending Categories

	Hillsboro	Lake Oswego	McMinnville	Portland	Vancouver
Revenues	2006-07	2005-07	2006-07	2006-07	2005-06
Property Taxes	65.60%	18.30%	39.60%	37.40%	33.10%
Other Taxes	0.00%	0.00%	0.00%	15.10%	44.60%
Fees and Service Charges	21.10%	66.10%	38.60%	20.20%	13.50%
Intergovernmental Revenue	3.00%	13.90%	9.10%	9.40%	4.50%
Other Revenues and Transfers	10.30%	1.80%	12.80%	17.90%	4.30%
Total general fund, less beginning balances	100.00%	100.00%	100.00%	100.00%	100.00%

Expenses					
Public Safety	51.60%		50.50%	49.20%	50.80%
Parks Recreation and Culture	14.80%		0.00%	11.00%	8.70%
Libraries	8.50%		12.80%	0.00%	0.00%
Planning and Development	0.00%		4.80%	10.10%	5.10%
Transportation, Utilities and Public Works	6.20%		12.20%	1.60%	14.90%
General Government, Reserves, and Other	19.00%	100%	19.70%	28.00%	20.50%
			0.00%	0.00%	0.00%
Total	100.00%	100.00%	100.00%	100.00%	100.00%
General fund, pct. total budget	22.13%	10.48%	21.40%	16.01%	75.87%

Note: Beginning fund balances are not included in revenue calculations; “other” includes reserves and contingencies. Sources: City of Hillsboro, 2006. 2006-07 Budget. http://www.ci.hillsboro.or.us/Finance/Budget_Info.aspx; City of Lake Oswego. 2006. Lake Oswego Finance. 2005-07 Budget. <http://www.ci.oswego.or.us/finance/Budget05-07/Message.htm>; City of McMinnville. 2006. Finance Department. 2006-2007 Adopted Budget <http://www.ci.mcminnville.or.us/city/departments/finance-department-2006-2007-budget/>; City of Portland. 2006. Adopted Budget Fiscal Year 2006-07, Volume One. Bureau of Budgets, Programs and Services. <http://www.portlandonline.com/shared/cfm/image.cfm?id=125246>; City of Vancouver. 2006. 2006-2006 Biennial Budget. www.ci.vancouver.wa.us/budget/

The City of Vancouver, like the Oregon cities, spends the biggest portions of its money on police, fire, streets, utilities (water and sewer) and parks / recreation. Unlike the Oregon cities, Vancouver has a local retail sales tax, which provided 18.7% of its 2005-2006 General Fund revenue.

Portland business leaders (and not just conservative anti-taxers) often cite the Portland business license fee as a drag on the economy and a reason to move somewhere else—possibly across the river, to Vancouver. So Oregonians might be surprised to learn that Vancouver is currently considering restoring its own, local B&O tax after having phased out such a tax between 1993 and 2002. The City explains this move by citing revenue losses due to initiatives—the property tax limitation, I-747, and I-695, which eliminated the motor vehicle excise tax.

In an August opinion piece in the Vancouver Business Journal, City Manager Pat McDonnell wrote:

“Limitations on local taxing authority have left the City Council with few viable options to fund the services our community says are most important – police and fire – and to make critical investments in our transportation infrastructure ... A business and occupation tax is currently the only tool we can use to begin to address the basic transportation and public safety needs of our community.”

The proposed tax would start at \$1.10 per \$1,000 of gross receipts and rise to \$1.50 by 2010.

Oregon cities also have concerns about the future, as a recent conversation with Hillsboro Mayor Tom Hughes suggests:

“One thing that people might not realize is that in the context of our revenue system—no sales tax, capped property taxes, income taxes collected and distributed statewide instead of locally—having a strong local economy has a only a limited ability to improve the funding picture for public services,” said Hillsboro Mayor Tom Hughes. “It’s great to have Intel there, and having good jobs drives up home values, but the City doesn’t get the full benefit of rising housing values, because of 47/50. It’s nice when CostCo opens, but it’s not as if the City will capture revenue from a local sales tax. Having become the high tech corridor for the region, we have had to increase our level of services in areas like intellectual property crime.”

And according to Rich Rodgers, a staffer for Portland City Commissioner Erik Sten who follows budget issues,

“This year, we have enough money to pay for current services—even enough to pay for some one-time extras. But if you look out over five years, rising health care costs for employees start making it impossible to maintain current services—just as they do for every other government, and just as they cause problems for every labor-intensive business. And even now, we don’t have the resources we would need to maintain the on-duty strength we want in police and fire. In the long run, of course, we have to be really worried if we ever have severe inflation, because in that case, the Measure 50 3% limit on property tax increases—which has no inflation adjustment—will kill us.”

County Revenue and Spending

The counties in the region do not report their information in the same way, and they do not provide exactly the same services, making comparisons somewhat difficult. For instance, Clark County, unlike Multnomah County, has its own sewage treatment plant and administers solid waste collection, disposal and recycling. Thus, the “public works” component of Clark’s budget is proportionally larger than the equivalent portion of Multnomah budget would be if Multnomah had a “public works” budget category, which it does not. Similarly, Multnomah County maintains a large library system, yet libraries are often a city responsibility.

With that caveat, we have collected an assortment of on-line information on the general fund budgets of the six metro area counties (Table 3).

Table 3: County Revenues and Expenditures

	Clackamas	Clark	Columbia	Multnomah	Washington	Yamhill
	2004-05	2005-06	2006-07	2006-07	2006-07	2006-07
Total Revenues¹						
Property Taxes	16.4%	21.8%	43.7%	24.6%	19.5%	22.3%
Other Taxes	0.0%	10.7%	1.5%	10.2%	2.2%	0.0%
Fees and Service Charges	16.5%	21.4%	0.0%	31.1%	18.0%	33.5%
Intergovernmental Revenue	24.7%	21.8%	19.3%	29.3%	28.2%	37.5%
Other Revenues and Transfers	42.4%	24.2%	35.5%	4.9%	32.0%	6.7%
Beginning Balance		0.0%	13.9%	18.8%	46.4%	33.5%
Total less beginning balance	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Expenses						
Public Safety	10.76%	18.7%	26.2%	21.0%	14.5%	68.0%
Parks and Recreation		0.0%	6.3%	0.0%	2.7%	0.0%
Libraries		0.0%	0.0%	5.0%	0.0%	0.0%
Planning and Development		3.9%	5.4%	0.0%	0.0%	0.0%
Transportation, Utilities and Public Works	45.42%	26.2%	45.5%	8.0%	14.2%	1.0%
General Government and Other	23.98%	10.3%	12.5%	31.0%	8.1%	15.0%
Human and Community Services	12.47%	16.9%	3.1%	35.0%	10.5%	7.0%
Capital, Debt, and Non-operating	7.37%	23.9%	0.9%		50.0%	

1. Revenue percentages back out beginning fund balances.

Source: Clackamas County, Department of Finance. 2004. Summary of Clackamas County Budgets 2004-2005. <http://www.co.clackamas.or.us/finance/finance/revenue.htm>; Clark County. 2005. 2005-2006 Budget in Brief. <http://www.clark.wa.gov/budget/>; Multnomah County. 2006. Budget Manager’s Message, Summary of Resources 2006-07. Fiscal Year 2007 Adopted Budget; Washington County. 2006. 2006-2007 Adpoted Budget Summary Schedules and Trends; Yamhill County. 2006. 2006-2007 Yamhill County Budget. <http://www.co.yamhill.or.us/commissioners/yamhill06.pdf>

As addenda to the table, consider the following information and tidbits:

■ Counties spend heavily on public safety – jails, Sheriffs, District Attorneys, and supervision of released offenders (parole and probation). (If Dick Wolf of Law and Order were a public finance geek, the show would begin: “In the criminal justice system, the people are represented by two separate yet equally important groups — the city employees, known as police, who investigate crime, and the county employees, known as district attorneys, who prosecute the offenders. These are their stories.”) A significant portion of property tax money normally goes to public safety.

■ Counties rely heavily on state and federal funds for social services, like mental health services. Multnomah County’s \$1.15 billion all funds budget includes \$246 million in Federal / State program money. Thus, counties are at the mercy of state and federal budgeteers.

■ All counties spend money on transportation, using gas tax and other generally dedicated funds. Multnomah County’s \$1.15 billion “all funds” budget for 2006-2007 includes a \$53 million road fund and a \$41 million Willamette River bridge fund. Washington County spends more money on transportation, land use and housing (which they combine into one category) than on human services.

■ Counties get stuck with random bits and pieces of government that nobody else wants, like Elections, Assessment and Taxation, and animal control. These are included in the “General Government” category.

■ Washington County, alone among Oregon counties, is allowed to collect a real estate transfer tax – a 1/10 of 1% tax that yields several million dollars per year.

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■ Multnomah County projects that with the expiration of the local income tax, it will have a \$24 million General Fund deficit in 2006-2007.

■ In November, Washington County breathed easier after passing two local option levies to maintain library and public safety services.

■ Clark County’s web site contains the following message: “Do more with less—or if that’s not possible, spend strategically! Because population growth and the demand for county services continue to outstrip revenue sources, Clark County has prioritized its delivery of services. The focus is on services that most directly affect citizens and the community’s well-being. This is reflected in the county’s budget, with the largest segments allocated to public works and public safety projects and services.”

The Future of Local Public Finance

Oregonians, at least, hear more about threats to the State and to schools than about cities and counties. But a sword of Damocles hangs above city and county heads. The Oregon 3% limit and the (rather different) Washington 1% limit on property tax “increases” posed difficulties even in an age of low inflation. But when the double-digit inflation rates of the late ‘70s and early ‘80s return (as, inevitably, at some future time, they will) property-tax dependent governments will be ruined.

Cities and counties will have to turn to special “local option” elections for most of their revenue for every service, including some that are far from warm and fuzzy. How excited will the voters be about a dedicated local option tax for code enforcement, or tax assessment? Absent a change to the property tax limitations, Oregon and Washington are probably going to have to learn the answer to that question.

References

Hughes, Tom. 2006. Personal communication with the author, November 17, 2006.

McDonnell, Pat. 2006. City Running Out of Solutions? *Vancouver Business Journal*, August 4 , 2006, accessed at <http://www.vbjusa.com/>.

McIntire, Robert S, Robert Denk, Norton Francis, Matthew Gardner, Wil Gomaa Fiona Hsu and Richard Sims. 2003. *Who Pays? A Distributional Analysis of the Tax System in All 50 States*. 2nd Edition. Institute for Taxation and Economic Policy. Accessed at <http://www.itepnet.org/wp2000/text.pdf>

Oregon Department of Education, 2006. Budget data accessed at <http://www.ode.state.or.us/data/reports/toc.aspx#Finance/Funding>

Rodgers, Rich. 2006. Personal communication with author, October 23, 2006. Vancouver Public Schools. News Release, August 14, 2006. Accessed at www.vansd.org

Warner, Paul. 2006. Personal communication with the author, Nov. 20, 2006

Washington Department of Revenue. 2006.
<http://dor.wa.gov/content/taxes/busoccupation/#WhatIs>

FIVE QUESTIONS FOR THE FUTURE

by Ethan Seltzer, Director of the Nohad A. Toulan School of Urban Studies and Planning, Portland State University
Sheila Martin, Director of the Institute of Portland Metropolitan Studies, Portland State University

We suspect that every generation views its times and challenges as tougher and more challenging than any preceding time. Sometimes the issue is money, others it's that elusive sense of leadership, or even "the vision thing." Nonetheless, it's less about what times used to be like that matters, and more about what we'll do with the hand we've been dealt. Fundamentally, it's about the future.

As we reviewed the materials now in your hands, we identified a number of issues, five to be precise, that will distinguish or diminish the prospects for this region in the future. Certainly, other readers would likely focus on different issues. This is our cut, and we encourage you to seek your own story for the future out of the presentations in this edition of the Metropolitan Briefing Book. The challenge for our time, as for any time, is to present our take on the present and the future in plain view. The more stories, the better. The more stories, the more robust the conversation, and the better chance that we can move forward with purpose and conviction as a metropolitan community.

In that spirit, we present the following five key questions for the future of our region:

1. How will we link education, the economy, and our place?

In every edition of the Metropolitan Briefing Book, the changing nature of the economy has been a common thread. As a smaller share of people actually earn a living from our abundant landscape, it may appear that the linkage between economy and place has weakened. Similarly, as the best paying jobs require both knowledge and the ability to come up with new ideas, access to the regional economy requires education and training like never before. Has the bond between place and economy been replaced by the link between education and economy?

A closer look reveals that the characteristics of this place still offer a strong foundation for the region's economy. The bioregion is still a fundamental reason

for being here. The notion of our region as not just an economic unit, but as a cultural region, continues to draw people from around the world—people with creativity and innovation that have become a critical resource for the future in all sectors (services, agriculture, high tech, etc.).

For years this region has depended on living off of the educational investments made by other places. In the future, this will be harder to do as we compete with other places for the best talent. Further, for residents who lack education and skills, economic prospects will become increasingly dim. Consequently, we need to begin to put education and the economy together in a new equation based on human capital and community quality of life. How will we do it? What does a 21st century connection between education, the economy, and this place look like? Can we strategically engage these issues in ways that we haven't in the past?

2. How will we accommodate the next million?

Our region is growing. Not, perhaps, as quickly as other places, but growing, nonetheless. In the next 30 years, our metropolitan area of about 2.1 million is expected to exceed 3 million residents. No matter how soon they arrive, what should still be true about living in this region when our population jumps beyond what we can currently imagine? Will the addition of 1 million people happen via the addition of the equivalent of two "Cities of Portland," or will we come up with a different equation?

This is no academic question. Certainly the path of least resistance is to simply wait and see what happens. However, deliberate thought and many deliberate actions created today's metroscape. Do we want to trust our luck and default to passive observation as our future unfolds? If we actually have some preferences about how it all turns out, now is the time to say something.

3. How can we make the most of the realignment of our “city-suburbs” thinking about this region?

It used to be that our conception of a metropolitan area was based on a central city surrounded by suburbs. For most of the last 50 years, the notion was that if the city was doing well, it was at the expense of the suburbs, or that if the suburbs flourished, it was only at the expense of the city. However, people no longer live “jurisdictional” lives. We all live, work, shop, recreate, and socialize in regions of our own devising—regions that differ from those of our neighbors. In this region, we have planned for growth in both Portland and surrounding communities, and we’ve seen it happen. Fundamentally, we’ve moved beyond the typical, oppositional city/suburb model used to describe most US metropolitan areas to one characterized more accurately as “polycentric.”

This polycentric lifestyle has a number of advantages. Since 1996, vehicle miles traveled per capita have generally been declining, indicating that a broader range of functions and activities are being found closer to everyone’s home. We’re more likely to interpret the relationships between our communities as collaborative than competitive. How can we leverage this new sense of function and interrelationship into a competitive advantage for this metropolitan area? We already have some of the shortest commutes in the nation among metropolitan areas our size. And the differences between city and suburban incomes are smaller than those found in many other metropolitan areas. Rather than viewing these as emblematic of trends playing out elsewhere, how can we utilize these new dynamics, arrived at largely by design, to make us more effective functionally and competitively in the future?

4. How will we articulate, nurture, and leverage the ties between the metropolitan region and the states?

Institutionally, politically, historically, and culturally, we are part of the states of Oregon and Washington. What does that mean in today’s world?

We continuously hear and observe that metropolitan regions are the relevant units of global competition. Although we often tell the story of our metropolitan region as if it were an independent unit, the unreality of that story is made readily apparent every time we hold an election or a meeting of the state legislature. Our challenge

as a region is to figure out the story of the states, and the contribution that we make to that larger context. Further, we need to understand both what we’re a part of and what we’d like to be a part of—we won’t be allowed to go it alone. The current environment of confusion, tension, and outright hostility associated with the so-called “urban/rural divide” has become an unacceptable distraction, particularly as we attempt to address the other questions on this list. Strategically, we are part of two states and the bi-national Cascadian bioregion. For too long we’ve either ignored or simply tolerated these affiliations. It’s high time we put them to work and use them to shape our preferred future.

5. Can we transcend the last several decades of declining trust in “the public” and government in particular?

Community quality of life is a collective achievement. In a similar sense, economic competitiveness emerges from what we do here together. Our metropolitan region faces huge challenges, some of which are outlined above. Citizens are increasingly concerned about health care and education, and by most accounts they expect public entities to act to secure greater predictability for households and communities. We haven’t lost our belief that government has an important role to play, but we seem unsure of what our public institutions can and should achieve.

Perhaps the most crucial challenge for elected officials and all units of government is to understand the trust placed in them, and to live up to it. Recent election results reveal a real reservoir of hope and optimism in our collective inhabitation of this place. Glimmers of a stronger public sense of purpose remain. Can our institutions deliver? Are we as citizens, inhabitants, leaders and followers able to make more of the whole than we have in the recent past?

As has been said, “there are a million stories in this city, and this is just one of them.” Getting the story right isn’t nearly as important as making the attempt to have one in the first place. We offer these issues as a summary of the story we find in the 2007 issue of the Metropolitan Briefing Book. We look forward to making more of the sum of the parts here in the future, not just with this publication but with this vital place we’ve chosen to call home.

IMS MISSION STATEMENT

The Institute of Portland Metropolitan Studies is a service and research center located in the College of Urban and Public Affairs at Portland State University. The mission of the Institute is to serve the communities of the Portland-Vancouver metropolitan area and to further the urban mission of Portland State University by:

Identifying the most pressing issues facing this metropolitan area and its communities, and developing the data and other information needed to fully communicate their scope and significance;

Building capacity in the region to address critical metropolitan issues by:

- *brokering partnerships among faculty, students, and area communities to foster new understanding of and/or new strategies for addressing those issues; and*
- *acting as a catalyst to bring elected officials, civic and business leaders together in a neutral and independent forum to discuss critical metropolitan issues and options for addressing them; and*

Developing new resources to support research and service activities needed to meet those objectives.

By acting effectively on this mission statement, the Institute will enable the:

University to help advance the economic, environmental, and social goals held by the communities of the region; and

Communities of this region to act collectively to seek and secure a sustainable future for this metropolitan area.

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