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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.

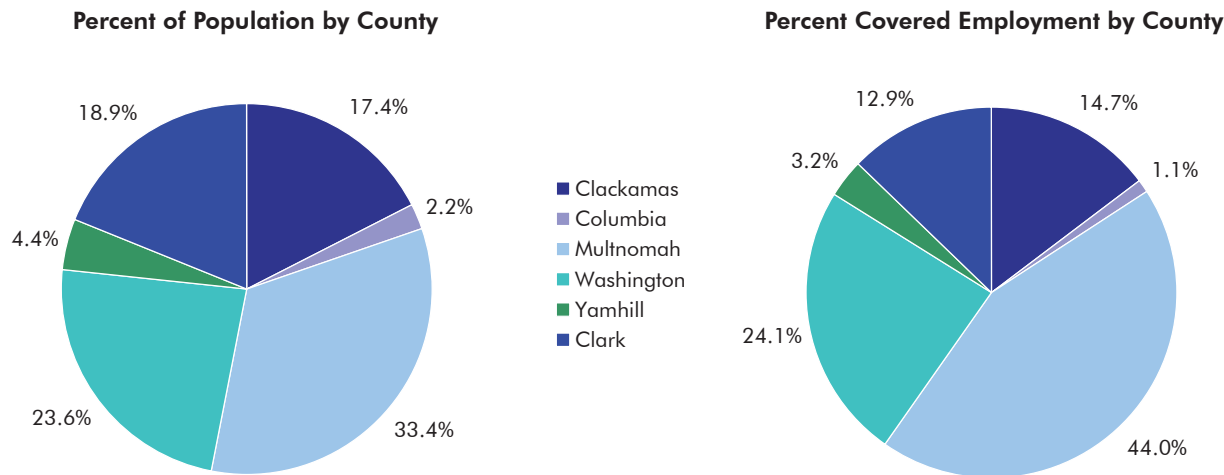


Figure 1: Percent of Population and Employment by County, 2005
 Source: PSU Population Research Center, www.pdx.edu/prc/; Washington State Office of Financial Management, www.ofm.wa.gov/pop/

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

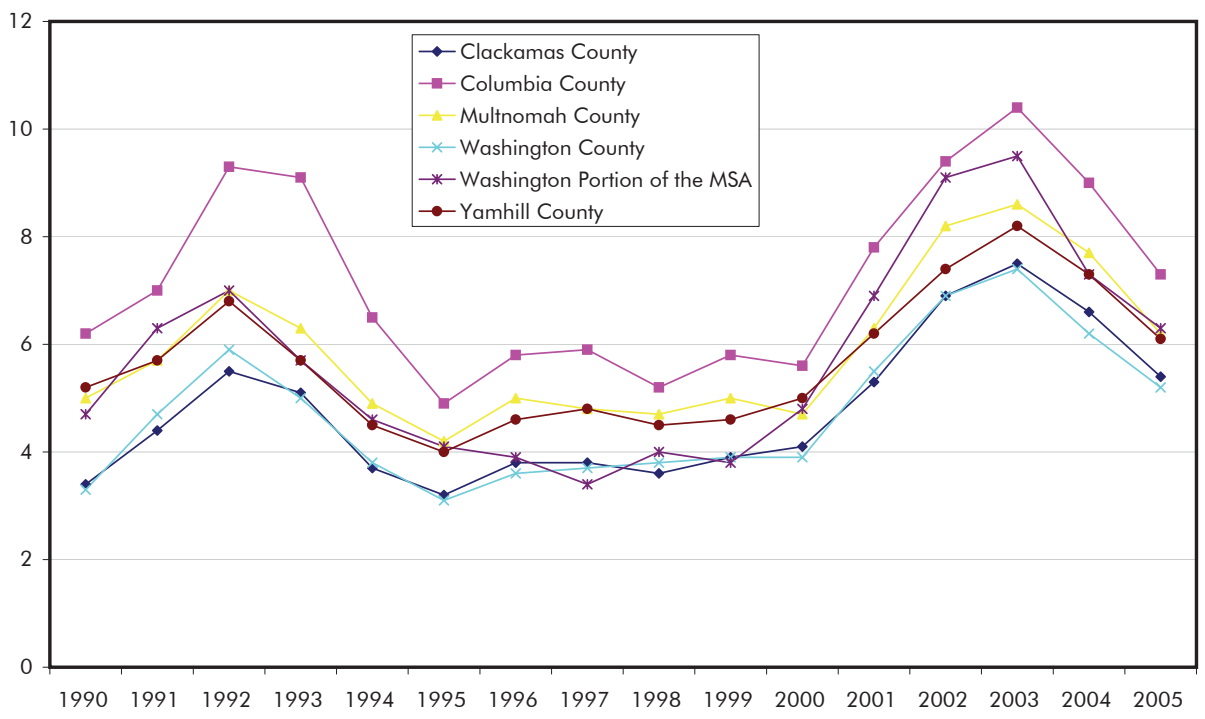


Figure 2: Annual Average Unemployment Rates by County
 Source: Oregon Employment Department, www.qualityinfo.org

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.

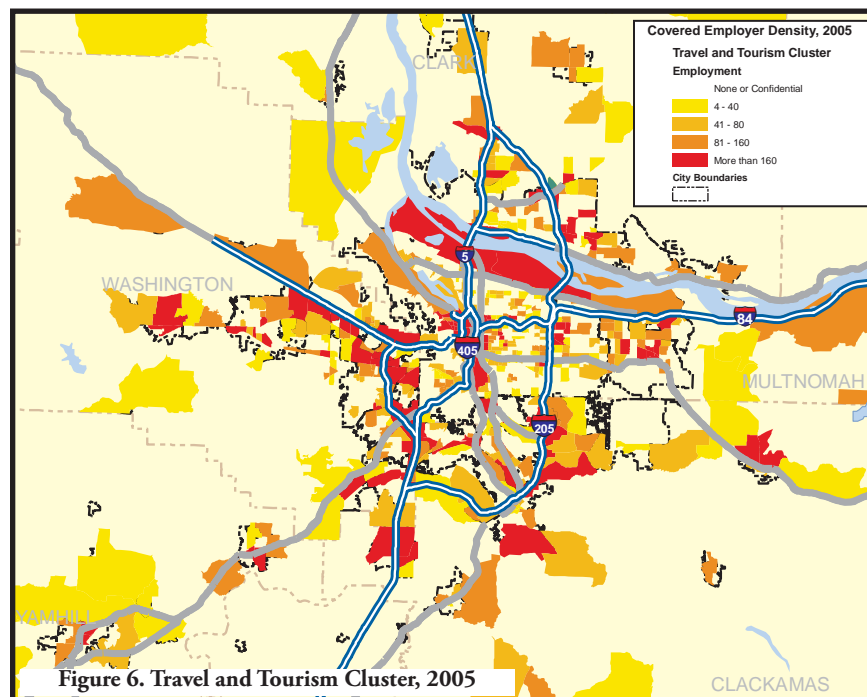
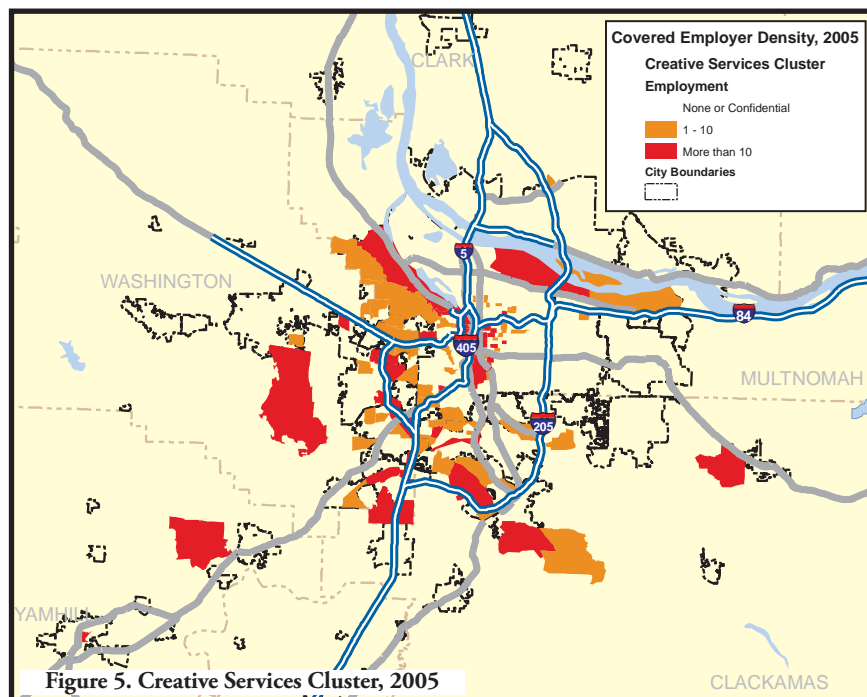
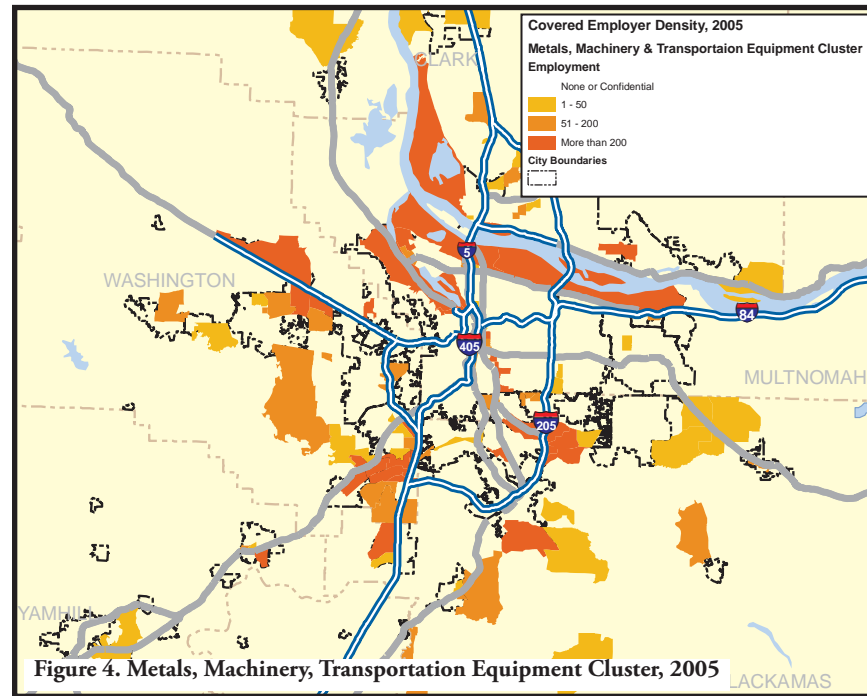
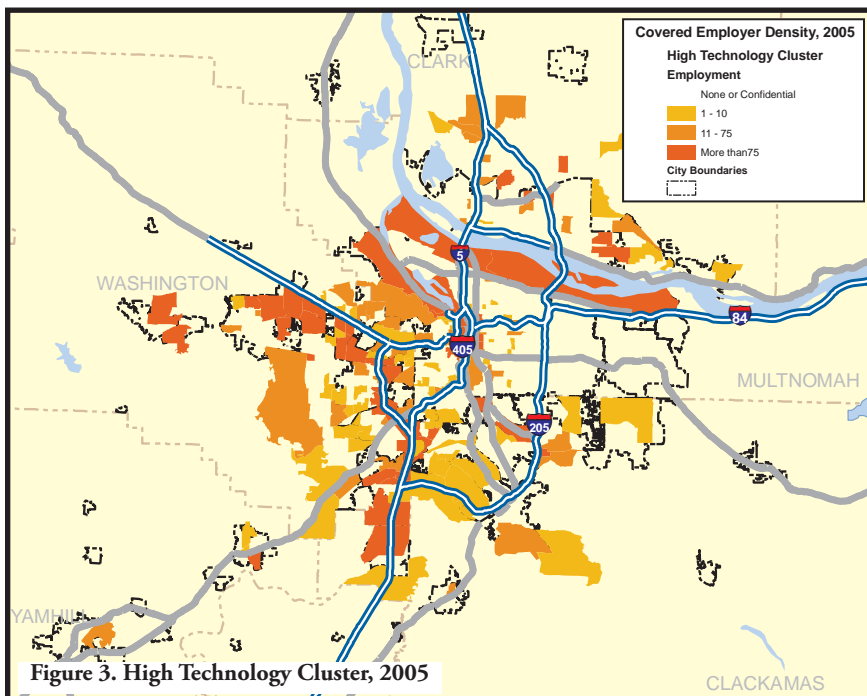
■ Apparel and Sporting Goods include designers, manufacturers, and distributors of shoes, clothing, and sports equipment. Although Nike and other companies in this sector cluster in Washington County, Multnomah County also is home to many of these companies.

■ 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.

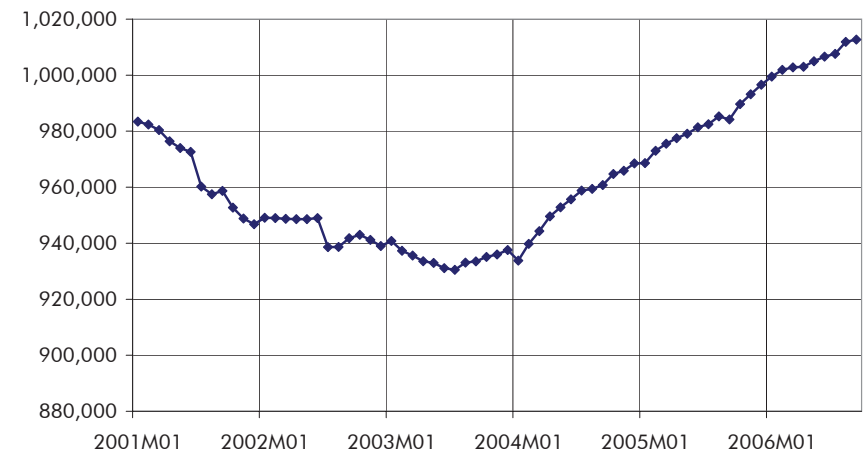


Figure 7: Total Nonfarm Employment in the Portland-Vancouver Metropolitan Region, Seasonally Adjusted*

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.

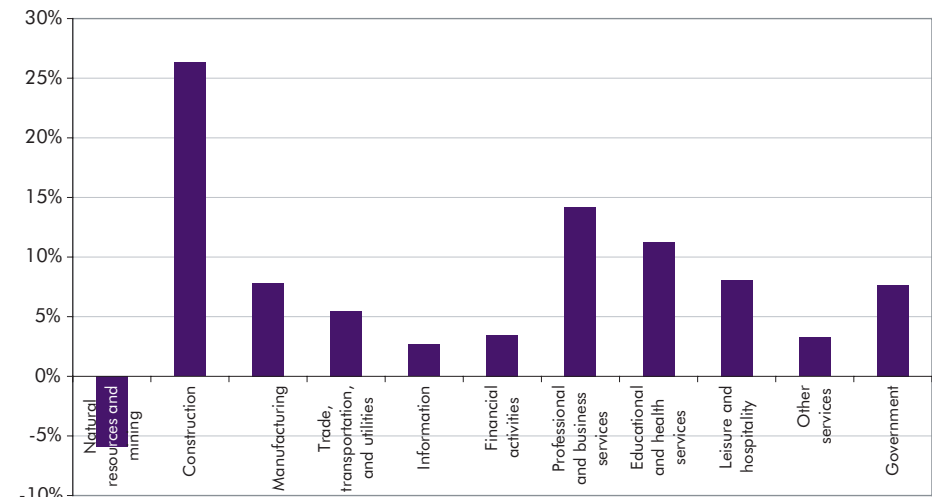


Figure 8: Employment Change by Sector, July 2003 to September 2006*

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.

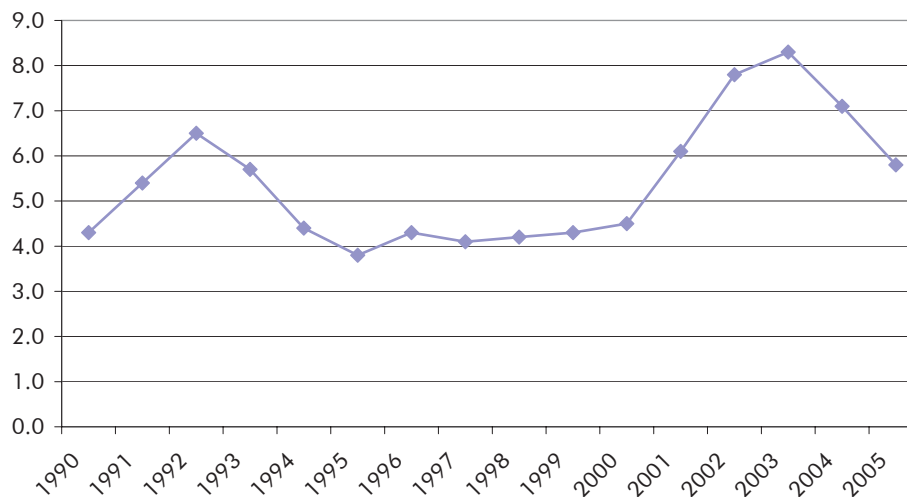
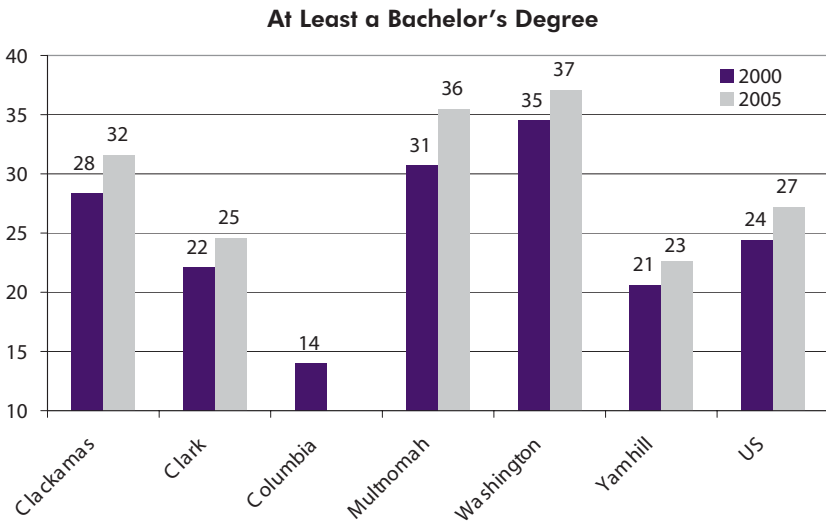
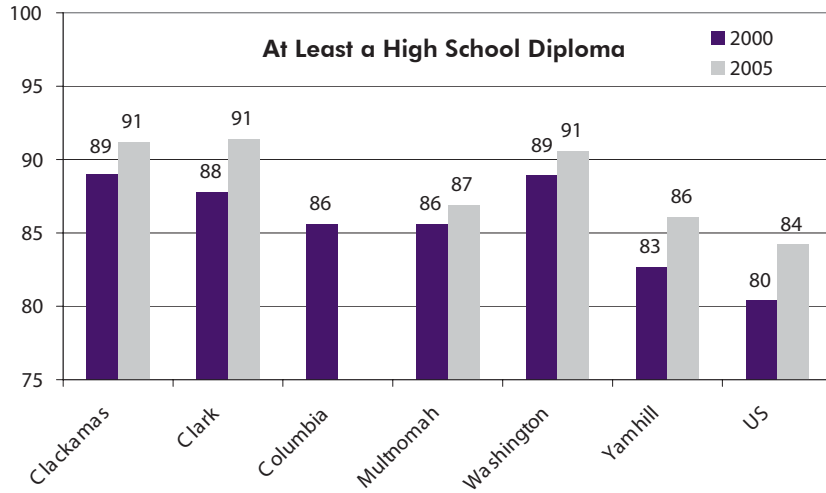


Figure 9: Annual Average Unemployment Rate, Portland-Vancouver Metropolitan Region*
 Source: Oregon Employment Department
 *Includes Skamania County.



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).

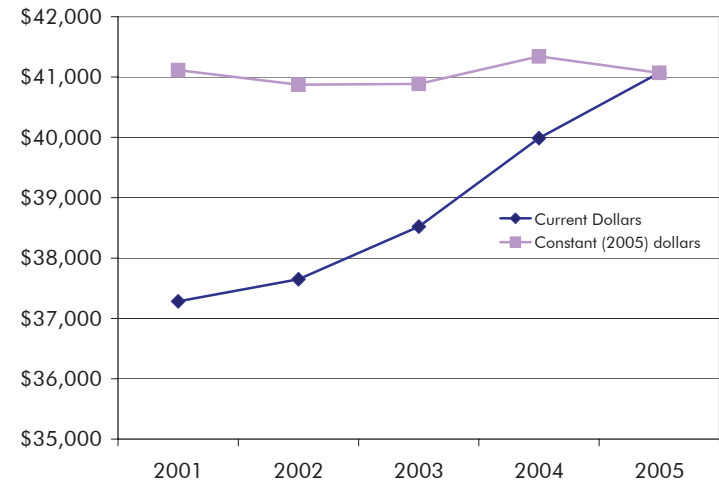


Figure 11: Average Annual Covered Wage, Portland-Vancouver Region
 Source: Oregon Employment Department, Covered Employment Database, www.qualityinfo.org; Washington Department of Employment Security, www.workfor-coexplorer.org; and US Bureau of Labor Statistics, www.bls.gov. Average annual wage, adjusted 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

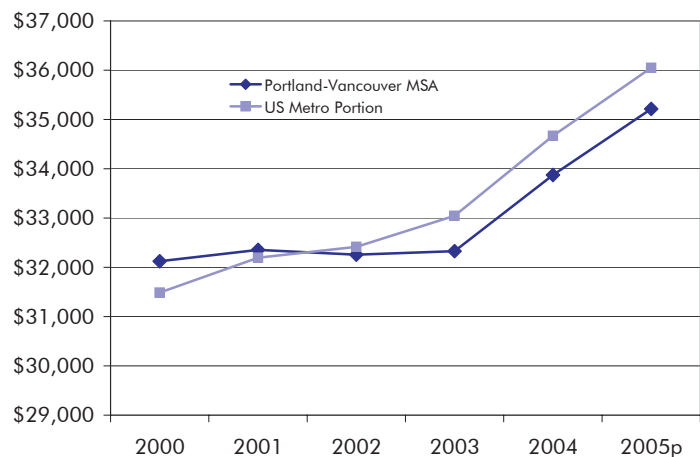


Figure 12: Per Capita Personal Income, Portland Metro Region and US Metro Average*

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.