SKAMANIA COUNTY PROFILE APRIL 1998

Labor Market and Economic Analysis Branch Employment Security Department

This report has been prepared in accordance with *RCW 50.38.050*.

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TABLE OF CONTENTS

INTRODUCTION1	Manufacturing
GEOGRAPHY2	Trade
ECONOMIC HISTORY3	Services
POPULATION	Government
Trends	The Small Sectors
Components of Population Change	Employment Projections
Populated Areas	OCCUPATIONAL PROFILE21
Population by Age Groups	PERSONAL INCOME24
Demographics	Total Personal Income
CIVILIAN LABOR FORCE 8	Per Capita Income
Trends	Components of Personal Income
Demographics	Earned Income
UNEMPLOYMENT 10	Transfer Payments
Trend	Dividends, Interest, and Rent
Demographics	JOB TRAINING AND ECONOMIC
Unemployment Insurance Claims	DEVELOPMENT29
INDUSTRIES, EMPLOYMENT,	Job Training
AND WAGES 12	Economic Development
Employment Trend	SUMMARY31
Location Quotients	APPENDIX - Skamania County
Average Annual Wage	Selected Economic DataA-1

INTRODUCTION

This report profiles the labor market and economic characteristics of Skamania County. It was prepared by the Labor Market and Economic Analysis (LMEA) Branch of the Washington State Employment Security Department and is one in a series that profiles labor market and economic conditions in each of Washington's 39 counties.

The profile is designed to assist state and local planners in developing local economic strategies. It is also an effective tool for answering labor market and economic questions frequently asked about the county. Readers with specific information needs should refer to the *Table of Contents* or to the *data appendix* to more quickly access those sections of particular interest to them.

Like the earlier Skamania County Profile of May 1994, the purpose of this report is to provide a comprehensive labor market and economic analysis of Skamania County. Characteristics profiled include the following:

- physical geography, economic history, and demographics
- labor force composition and trends
- industries, employment, and earnings
- skills and occupations
- economic development and job training

Much of the information in this report is regularly updated on the LMEA Internet homepage. The homepage contains current and historical labor market information which can be accessed by area or by type of information. The site address is:

http://www.wa.gov/esd/lmea

Any inquiries or comments about information in the profile should be directed to the Labor Market and Economic Analysis Branch.

GEOGRAPHY

Skamania County is bisected by the Cascade Mountain Range so it is difficult to say if it is east or west of the "mountains" as most Washington counties are routinely designated. It is also the southernmost county in the state. It is bounded by Lewis County to the north, Cowlitz and Clark counties to the west, Yakima and Klickitat counties to the east, the Columbia River and Oregon to the south. Skamania County constitutes a geographic area of 1,672 square miles. As such, it ranks 24th in size among Washington counties.

Because Skamania County is bisected from north to south by the Cascade Range, it is dominated by mountainous, rugged and heavily forested terrain. In fact, roughly 80 percent of the county falls within the boundaries of the Gifford Pinchot National Forest. Arguably the county's central feature is 8,365 foot Mount St. Helens, the most active volcano in the continental United States.

Located in the county's northwest sector, the volcano's 1980 eruption devastated the surrounding area and spewed ash throughout the northwest and beyond. Off the Pacific Crest Trail, which runs north and south through the county, are some of the region's highest elevations. These include Sunrise Peak (5,880 feet), Council Bluff (5,163 feet), Steamboat Mountain (5,425 feet) and Lookout Mountain (5,692 feet).

Skamania County has several major tributaries. The Washougal and Wind rivers in the county's lower half carry runoff south to the Columbia River while the Lewis River in mid-county flows through the Swift Creek dam and reservoir before continuing west to the Columbia River. The Columbia is considered one of the country's most scenic rivers as it passes along the county's southern border.

ECONOMIC HISTORY

Skamania County derives its name from the Indian term for swift waters—with reference to the Columbia River, which dominates the county's southern landscape. A bill establishing the county was drafted by the Washington Territorial Legislature and signed by Territorial Governor Isaac I. Stevens in March of 1854.

Nearly 80 percent of the county is extensively forested. As a result, Native American and white settlement and commerce has historically developed along the banks of the Columbia River. Consequently, much of the county's history is inextricably linked to the river.

Long before the advent of white exploration and settlement, what is now Skamania County was extensively populated by local tribes affiliated with the Chinook Nation. The tribes had developed and prospered for centuries along the banks of the Columbia River. Not surprisingly, their diet was based on salmon and supplemented with nuts, berries, and potato-like roots known as wapato. These Native American tribes traded with tribes throughout the northern hemisphere, who arrived to stock up on the abundant salmon each year.

The arrival of the Lewis and Clark expedition in Skamania marked the first appearance of whites in the region. Over the next 30 to 40 years, a booming fur trade would develop. By the 1820s, the Pacific Fur Company (American), North West Company (Canadian) and Hudson's Bay Company (British) were in fierce competition with one another as well as local Indians. The fur trade was phased out by 1830 due to a number of factors: depletion of the beaver and otter populations due to overtrapping and a shift in American fashion away from fur clothing.

In the place of trappers came Methodist, Presbyterian, and Catholic missionaries—all of whom set out to convert the native "heathen." Unfortunately, the most indelible marks left on the local tribes by early trappers and missionaries were smallpox and measles—diseases not previously introduced into the Indian populace. These diseases decimated the Native American people, sometimes wiping out entire villages.

The most rapid period of settlement in Skamania occurred during the mid-1800s. Many settlers intended to journey to the Willamette Valley in Oregon; however, they first had to traverse the Columbia Gorge. Already tired and hungry, many chose to try their luck on the banks of the mid-Columbia. This increased settlement prompted the State Territorial Legislature to establish the area as Skamania County. The town of Cascades (now known as North Bonneville) served as the county seat. The town of Stevenson—the county's other major town and contemporary county seat—was platted in the 1890s.

Like the local Indians, white settlers looked to the Columbia River as a source of sustenance. From this emerged Skamania's first industry—salmon fishing. When the settlers arrived, they immediately introduced new technologies such as gill nets and horse-pulled seine nets to harvest the salmon. Perhaps the most fascinating of these contraptions, however, was the fishwheel. Resembling something between a water wheel affixed to a mill or steamboat, the fishwheel scooped its catch out of the water and dumped it into a box. The fishwheel proved to be too effective for its own good; it was outlawed in 1934. Complementing the fishing industry, a number of salmon canning operations were established. The largest cannery in Skamania was located near the town of North Bonneville. The fishing industry tapered off considerably after the 1880s due to a combination of overfishing and poor industrial practices (i.e., logging, mining and agriculture) which damaged spawning grounds.

Logging and lumber were also, not surprisingly, major industries in Skamania. The early settlers needed raw logs to construct cabins as well as wood for cooking and heating fuel. Later, as new arrivals chose to erect proper houses instead of log cabins, the need for lumber gave rise to a fledgling sawmill industry. The prosperity of Skamania's logging and lumber industry was further stimulated by demand in eastern communities (e.g., The Dalles) on the Oregon side of the border. The timber was harvested from Skamania's heavy forests and sent down flumes to the Columbia. One of the biggest boosts to the logging and wood industry, however, was the coming of the steamboat. Steamboats burned a lot of fuel up to four cords of wood per hour. To satisfy this demand, an industry was established entirely on cutting and supplying cordwood to steamboat operators.

It was 1850 when the first steamboat operation appeared on the Columbia River. Others soon followed. Steamboats quickly proved to be a tremendous economic asset to the region. In addition to ferrying settlers and their possessions around the Gorge, they also served as

a vital commercial and communications link between regional settlements and the outside world. In order to provide an unobstructed commercial route over the Columbia River, several federal canal and lock projects were undertaken during the late 1800s and into the early 1900s. By the time the projects were completed, however, a new form of transportation had arrived.

Steamboats gradually gave way to trains in the 1880s as railroads began laying tracks through Skamania and the rest of the region. In 1880, the Oregon Railway and Navigation Company completed its transcontinental line from Minnesota to Portland via the Columbia Gorge. The line was further connected to the Northern and Union Pacific lines. By 1908, James J. Hill's Spokane, Portland and Seattle Railway (now Burlington Northern) completed work on its line along the northern or Washington State bank of the Columbia Gorge. The railroads provided the region with a commercial link to midwest and eastern markets as well as safe and efficient land passage around the Gorge's dangerous rapids. And not long after the rails had been laid, an ambitious road construction project got underway. Originally conceived as a military road after the Indian Wars of 1856-1858, the Lewis and Clark Highway (Highway 14) bridged the gap between Western and Eastern Washington by linking Vancouver, Pasco and points between.

No history of Skamania County would be complete without mention of the federal water projects undertaken between the 1930s and 1970s. Chief amongst these is the Bonneville Dam. Authorized by President Franklin D. Roosevelt in 1933 in the midst of the Great Depression and funded by Congress in 1935 through the River and Harbor Act, the dam was completed in late 1937 at a cost of \$31 million. The project had three purposes: to create jobs (it eventually provided 3,000), generate electric power, and make the Columbia River more navigable. Without downplaying the benefits derived from the dam,

there was substantial environmental and scenic damage in the wake of its construction.

To meet the region's growing energy needs, the Bonneville Power Administration directed the U.S. Corps of Engineers to construct a second powerhouse at the Bonneville Dam in 1975. The project would double the dam's electricity generating capacity. Again, there were environmental and scenic costs. In fact, the entire town of North Bonneville, as well as its highway and rail access, had to be relocated at a cost of \$35 million in 1976. This notwithstanding, the project created a tremendous temporary boom in construction employment as well as modest job creation in the local retail and service sectors. Construction on the second powerhouse was completed in 1982.

In 1986, the Congress passed and President Reagan signed legislation designating the Columbia River Gorge as a National Scenic Area. The act imposes land use and development controls on the area and is intended to preserve the Gorge for future generations. Scenic interest in the Gorge dates as far back as the turn of the century, when Highway 14 was constructed. It opened the region and its scenery to the American public and since then, tourism has played an ever-increasing role in the county's economy. Additionally, roughly 80 percent of Skamania County's land mass is part of the Gifford Pinchot National Forest, with its mountains, mineral hot springs, ancient lava beds, and, of course, Mount St. Helens.

Today, Skamania County's economy is based largely on government employment—especially management of national forests and of fish and wildlife—with the balance distributed among logging and lumber, tourism and recreation, and light manufacturing. Services employment was boosted considerably a few years ago when the Skamania Lodge, a resort destination, was completed.

POPULATION

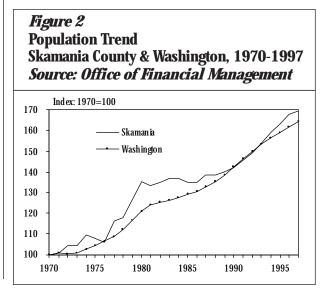
Trends

The Office of Financial Management put the 1997 population at 9,900 for Skamania County. The last actual head count was the 1990 Census when the population was 8,289.

Population changes are usually seen as important economic indicators; people tend to follow jobs. For the period 1970-97, the population in Skamania County grew 69 percent, going from 5,845 to 9,900. Of this growth, most occurred during the years 1976-80 and 1988-97. Most of the 1980s was a period of no-to-slow growth.

Figure 1 **Population Trend** Skamania County, 1970-1997 Source: Office of Financial Management 11,000 10,000 9,000 8,000 7,000 6,000 5,000 1970 1975 1980 1985 1990 1995

The differences in the rates were generally linked to national economic activity. Severe recessions in the early and mid-1970s and early 1980s put stoppers on population growth in Skamania County. The most recent national recession, 1990-91, does not seem to have had any effect, though. Since 1988, the population growth has not been spectacular, but it has been strong and steady. Overall for the 1970-97 period, the county's growth outpaced the state: 2.0 percent versus 1.9 percent annualized growth.



Components of Population Change

There are two components that can cause a population to change size. One is the natural change, births and deaths; the other is the migratory change, in- and out-migration. Of these two, the latter can provide insight into contemporary economic trends. The migratory element responds quickly to periods of industry contraction and expansion because such periods result in job creation or job loss. The natural change tends to fluctuate only in response to major societal upheavals—the Great Depression and the aftermath of WWII both resulted in significant changes in the birth rate.

Over the period 1970-97, Skamania County experienced a natural population increase of 1,458—the net increase resulting from births and deaths. Net migration added 2,597 residents, creating a total population increase of 4,055.

Figure 3 on the next page shows net migration from 1971 through 1997. As can be seen, the bulk of in-migration came during the 1970s and from the latter 1980s onward. Since 1988, every year has shown positive net migration while during most of the 1980s, the reverse was true.

Figure 3 **Population Change** Skamania County, 1971-1997 Source: Office of Financial Management 600 500 Migration 400 Natural Change 300 200 100 -100 -200 -300 1971 1976 1981 1986 1991 1996

Populated Areas

In 1997, 82 percent of Skamania County's 9,900 residents lived in unincorporated areas and 18 percent lived in incorporated areas. There are two municipalities in the county; the county seat at Stevenson (pop. 1,210)

and North Bonneville (pop. 539). Since the 1990 Census, North Bonneville's population has increased by 25 percent; Stevenson's by 5 percent.

Figure 4
Population of Cities, Towns, and County
April 1, 1990 to April 1, 1997
Source: Office of Financial Management

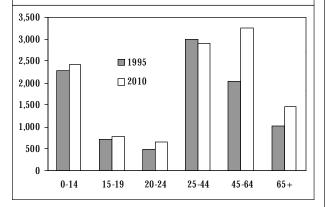
	1990	1991	1992	1993	1994	1995	1996	1997	% Change 1990-97
Skamania County	8,289	8,500	8,700	9,000	9,300	9,550	9,800	9,900	19.4%
Unincorporated	6,711	6,925	7,113	7,387	7,662	7,888	8,072	8,151	21.5%
Incorporated	1,578	1,575	1,587	1,613	1,638	1,662	1,728	1,749	10.8%
North Bonneville	431	425	437	458	478	497	533	539	25.1%
Stevenson	1,147	1,150	1,150	1,155	1,160	1,165	1,195	1,210	5.5%

Population by Age Groups

Disaggregated by age groups, the county's population shows many similarities to the state's. A predominant trend in the county and the state is an aging population. Data from the 1990 Census show that median ages (the age at which half the population is younger and half is older) have increased since the 1980 Census. Skamania County's increased from 29.8 to 33.6 years, and Washington State's from 29.8 to 33.1.

This continuing aging can be observed by looking at *Figure 5* on the next page, which shows the population categorized by age groups for 1995 and projections for 2010. Most notable is the actual decrease in size of the 25-44 age group (in the context of overall population growth, the decline is significant) and the very large increase in the 45-64 group. Over this period, the baby

Figure 5
Population Change
Skamania County & Washington, 1970-1997
Source: Office of Financial Management



boomers—that very large group born between 1946 and 1964—are moving toward retirement age, and causing

a large change in the demographics of the work force. The cohort aged 25-44 in Skamania County will decrease in numbers by 3 percent (going from 2,996 to 2,913) while the 45-64 group is projected to grow by 59 percent (2,044 to 3,253). There is also a sharp increase in those aged 65 and older, whose numbers are projected to rise from 1,019 to 1,455.

One of the larger ramifications of these changes is that a growing elderly population requires more services, particularly those related to health care. This will require changes to the occupational and industrial mix currently in effect. Also, the 25-44 age group, which is shrinking, contains those workers thought to be in their prime years of work productivity. What, if any, effect this will have on the labor force is a subject of contention. It may be a more productive one with a greater number of experienced workers, or it may be an older work force that is less flexible and more resistant to change.

Demographics

Although non-whites in Skamania County make up a smaller percentage of the total than statewide, the proportion of non-whites is increasing at a much faster pace than whites. From 1990 to 1996, the general population grew 18 percent. The number of whites grew 15 percent; the number of non-whites, 147 percent. Even so, non-whites are a relatively small percentage of the

county's total population. Whites numbered 9,171 in 1996, or 94 percent of the population (the figure is 88 percent for the state). Non-whites included Native Americans (5 percent) and Asians and Pacific Islanders (1 percent). Those of Hispanic origin, who can be of any race, comprised a little more than 4 percent of the total.

Figure 6
Population by Race and Hispanic Origin
Skamania County and Washington, 1990 and 1996
Source: Office of Financial Management

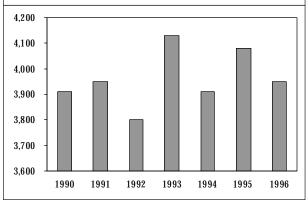
	1990			1996			
Skamania	Census	Share Size	Estimates	Share Size	% Change 90-96		
Total	8,289	100.0%	9,800	100.0%	18.2%		
White	7,987	96.4%	9,171	93.6%	14.8%		
Non-White	255	3.1%	629	6.4%	146.7%		
Black	5	0.1%	0	0.0%	-100.0%		
Indian/Aleut	198	2.4%	502	5.1%	153.5%		
Asian/Pacific Islander	52	0.6%	127	1.3%	144.2%		
Hispanic	172	2.1%	422	4.3%	145.3%		
Washington							
Total	4,866,692	100.0%	5,516,800	100.0%	13.4%		
White	4,411,407	90.6%	4,872,813	88.3%	10.5%		
Black	152,572	3.1%	191,296	3.5%	25.4%		
Indian/Aleut	87,259	1.8%	109,766	2.0%	25.8%		
Asian/Pacific Islander	215,454	4.4%	342,925	6.2%	59.2%		
Hispanic	214,570	4.4%	337,706	6.1%	57.4%		

CIVILIAN LABOR FORCE

The resident civilian labor force is defined as all persons 16 years of age and older within a specified geographic area who are either working or looking for work. This excludes those serving in the armed forces. In 1996, Skamania County's civilian labor force was estimated at 3,950.

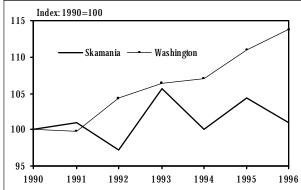
Figures 7 and 8 show the county's labor force from 1990 to 1996; the first chart shows the labor force numbers and the second one, indexed to 1990=100, shows the growth rates for the county and the state.

Figure 7
Civilian Labor Force
Skamania County, 1990-1996
Source: Employment Security Department



Labor force data for Skamania County during the 1980's are not valid. At the beginning of the decade, a large number of workers were commuting into the county to work on the Bonneville Dam project. Estimates of the labor force were adjusted to account for these commuters. However, when the project was completed in 1982, the adjustment factor was not altered. As a result, the labor force was underestimated, and the unemployment rate overestimated from 1980 to 1989. The adjustment factor was corrected after the 1990 Census. For this reason, the data are not shown in the charts but are available in the appendices at the back of this publication.





Trends

Skamania County's labor force grew 76 percent (rising from 2,250 to 3,950) between 1970 and 1996, somewhat slow compared to the statewide increase of 104 percent. In between those two points, several events caused dramatic changes, both up and down. National recessions, in 1974-75, the early 1980s, and 1990-91, all brought drops in the labor force numbers. A large boom was experienced in the late 1970s and early 1980s as workers poured into the county to work on the Bonneville Dam second powerhouse. Completion of work, unfortunately, coincided with the arrival of the

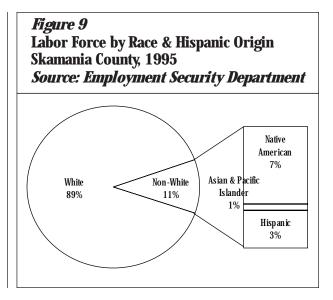
"double-dip" recessions of the early 1980s. Labor force size dropped sharply.

The 1990s have essentially exhibited a seesaw pattern (Figure 8) with the size of the labor force growing one year only to drop back the next. Statewide, labor force growth after the 1990-91 recession has been moving upwardly quite steadily. Skamania County's labor force in the 1990s has grown by only 1 percent, rising from 3,910 to 3,950.

Demographics

Like the general population, the labor force in Skamania County is not characterized by a breadth of racial or ethnic diversity (Figure 9). It is primarily white. Estimates for 1995 show 3,560 whites in a labor force of 3,980. There were no blacks, 270 Native Americans, 20 Asian/Pacific Islanders, and 130 of Hispanic origin. (In these estimates, those of Hispanic origin are not counted in the racial groupings; the category of whites, for example, would be more correctly labeled, non-Hispanic whites.)

Also according to the estimates, men accounted for 59 percent of the labor force and women for 41 percent. This represents a major change from 15 years earlier when women constituted only 33 percent of the work force and men 67 percent (1980 Census). Increased female participation in the labor force is a demographic fact occurring in the county, the state, and the nation.

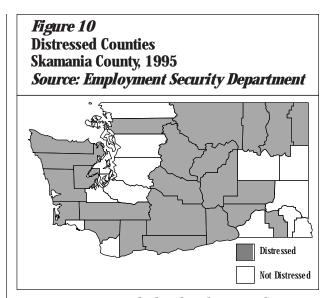


UNEMPLOYMENT

As mentioned earlier, the civilian labor force consists of those who are working and those who are not working but are looking for work. The unemployment rate is the percentage of the total labor force who are not working but who are actively looking for work. The unemployed do not include retirees, persons in institutions, or those who have come to be known as "discouraged workers," i.e., persons who would like to work but who are not actively searching for a job. None of these groups of people are included in the unemployment figures because they are not looking for work.

At the national level, the unemployment rate is determined by a regularly recurring survey of households. At the local level, the state's portion of this household survey is integrated and merged with other information (e.g., unemployment insurance claims and surveys of business establishments) to produce unemployment rates for the state and the counties.

Figure 10 shows the counties in Washington that are considered to be distressed, that is, they have unemploy-



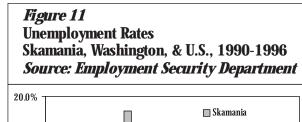
ment rates 20 percent higher than the statewide average for three consecutive years. Skamania County ranks among the distressed counties, making it eligible for some preference in bidding for government contracts.

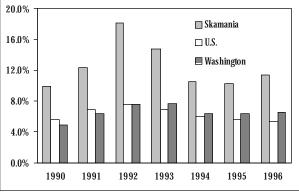
Trend

In 1996 the unemployment rate in Skamania County was 11.4 percent. That equates to 450 people looking for work. Statewide, the rate was 6.5 percent and nationwide, the rate was 5.4 percent.

The annual average unemployment rate in Skamania County, since at least 1970, has been consistently higher than the statewide average. Even when the timber industry was flourishing, unemployment was relatively high by statewide standards because the seasonality of the industry contributed to high rates of joblessness during certain months of the year. The timber industry is still large in the county, but employment at hotels and lodging places is greater, and it is even more seasonal than timber. Aside from government, which is relatively stable, the main industries in the county are seasonal and tend to drive up unemployment on average.

The 1990-91 recession drove up unemployment, with the rate increasing from 10.0 percent in 1990 to 12.4 percent in 1991, and then leaping to 18.2 percent in 1992 (see Figure 11). With the ensuing recovery, though, the rate declined and it has stayed in the 10 to 11 per-





cent range since. The current rates, though, are high by Washington's standards and unemployment is a significant problem in the county. The last time Skamania's jobless rate was not double-digit was in 1979.

Demographics

There are significant differences in unemployment rates by race and ethnic background even though few minorities are found in the county's work force. The 1995 estimates show that unemployment for whites was 9.0

percent; for Native Americans, 29.6 percent (80 of 270 unemployed); and for Hispanics, 15.4 percent (20 of 130 unemployed). Numbers for others were so small as to be meaningless. The rate for men was 11.1 percent and for women, 9.8 percent.

Unemployment Insurance Claims

Figure 12 lists, by occupation rather than industry, the number of people who filed unemployment insurance claims between July 1, 1996 and June 30, 1997, in Skamania County and Washington State.

Sorting the professions, rather loosely, into blue-collar and white-collar groupings, and comparing the county to the state, a strong difference between their employment bases is readily discerned. White-collar subsumes professional and related, clerical, sales, and services professions; blue-collar subsumes the rest. The miscellaneous category is excluded.

Skamania County had 29 percent of its claims originate from white-collar professions whereas the state as a whole had 46 percent. This leaves 71 percent of the county's claims stemming from blue-collar jobs as opposed to the statewide 54 percent. Structural work, primarily construction work, was the big driver accounting for the regional differences. Almost one-fourth of the entire county's claims came from this category. Farm workers made up 12 percent of all Skamania County's claimants but only 8 percent statewide. Skamania County had significantly fewer claims coming from professional occupations than there were throughout the state.

Figure 12
Unemployment Insurance Claimants
Skamania County and Washington State, July 1, 1996 - June 30, 1997
Source: Employment Security Department

	S	kamania	Washington State		
	Claimants	Percentage	Claimants	Percentage	
Structural work	178	23%	58,241	18%	
Service	106	14%	28,263	9%	
Packaging and material handling	94	12%	38,118	12%	
Agriculture, forestry and fishing	89	12%	25,950	8%	
Machine trades	77	10%	16,753	5%	
Motor freight and transportation	60	8 %	54,030	17%	
Clerical	52	7%	5,503	2%	
Professional/technical/managerial	48	6%	35,927	11%	
Processing	48	6%	16,134	5%	
Benchwork	28	4%	17,598	5%	
Sales	10	1%	9,434	3%	
Miscellaneous, NEC	3	0%	16,798	5%	
Total	759	100%	322,749	100%	
White-Collar*	216	29%	145,673	46%	
Blue-Collar*	540	71%	171,573	54%	

INDUSTRIES, EMPLOYMENT, AND WAGES

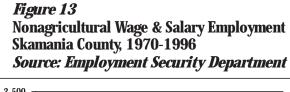
Data in this section are derived from two different Bureau of Labor Statistics programs which are conducted in Washington by the Employment Security Department. The first, called CES (Current Employment Statistics), generates monthly nonagricultural employment figures; the second, the Quarterly Employment and Wages program (ES-202), includes data on both agricultural and nonagricultural employment covered under the state unemployment insurance program. All wage data and agricultural employment data in this section stem from the Employment and Wages program; other employment information comes from the CES program.

Employment Trend

Figures 13 and 14 show nonagricultural wage and salary workers in Skamania County from 1970 to 1996. The data differ from the labor force data presented earlier: the number of nonfarm jobs is only a portion of the total labor force numbers. Nonagricultural employment numbers are derived from surveys of establishments located in Skamania County—the labor force data is based on individual residence in the county, regardless of where the employing establishment is located. And a large portion of Skamania County residents work outside the county. Figure 15 on the next page shows how commuting patterns in Skamania County have changed since

1960: in 1990 almost half of employed county residents worked outside the county, mainly in Vancouver.

Nonagricultural employment grew substantially through the 1970s, culminating in a large 1980 construction peak. After that boom, employment fell off to its previous level and, with minor fluctuations, remained at that level through the 1980s. The downturn in 1992 was centered in manufacturing, i.e., the closure of the Stevenson Co-Ply Plywood Mill. The recovery following that was driven by a huge gain in the services sector stemming from the opening of the Skamania Lodge.



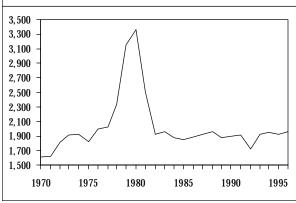


Figure 14
Nonagricultural Wage & Salary Employment
Skamania County & Washington, 1970-1996
Source: Employment Security Department

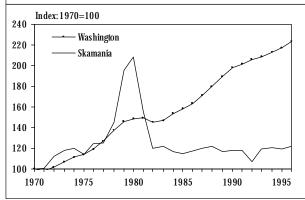


Figure 15 **Commuting Patterns** Skamania County, 1960-1990 Source: Employment Security Department 1,600 1,400 ■ In-Commuters 1,200 □ Out-Commuters 1,000 800 600 400 200 1960 1970 1980 1990

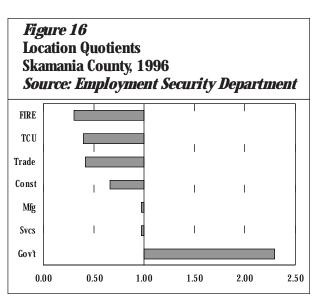
Location Quotients

One way to determine how an area's economy is shaped is to compare it to another area. The following section shows how Skamania County employment patterns both differ from and coincide with Washington State's. When comparing an industry's share of all employment at the county level to the same industry's share at the statewide level, it becomes apparent that some county employment is distributed differently than statewide employment. The location quotient compares the share of total employment in a particular industry division in the county with the share it represents in Washington State.

The quotient is determined by dividing the statewide industry employment share into the county industry share. A quotient of 1.0 denotes an industry in which the county is typical to the state as a whole; a value above 1.0 shows an industry with a higher concentration of employment; and a value below 1.0 marks a county industry with a lesser concentration of employment than in the same industry statewide.

A quotient above 1.0 suggests that the good or service produced by an industry is exported from the area; a quotient below 1.0 is a sign that, hypothetically, goods or services must be imported into an area to provide the same consumption patterns found at the state level. The greater the value above or below 1.0, the stronger the suggestion of exporting or importing becomes.

Figure 16 shows the 1996 location quotients of the major nonfarm industry sectors in the county. This portrait shows strong differences between Skamania County



and the state. Only one industry (government) has an employment density greater than the statewide level, i.e., a quotient above 1.0, while most of the others are significantly less than the statewide level. Those industry sectors with the lower quotients are all sufficiently low to assume that a high level of importation occurs. Or, more realistically, residents must leave the county to purchase the good or service produced by the sector in question. Major markets exist in nearby Vancouver and Portland.

The quotient for government is particularly high. Quotients for the three levels of government were: federal, 4.48; state, 0.55; and local, 2.59 (based on covered employment). The abnormally high federal government

quotient stems from operations of the U.S. Forest Service, which manages the national forest land in the county. Their "product," forest conservation/management, is an export in the sense that taxpayers from other areas "buy" what is being offered. Forest management also ties into the timber industry, which logs on the federal land. The manufacturing sector, whose 0.97 quotient indicates parity with the state, is largely composed of industries related to timber.

Average Annual Wage

\$20,000

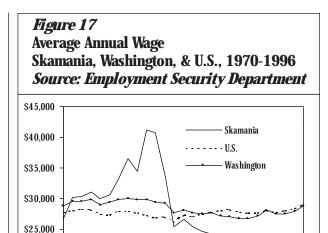
1970

1975

The annual average wage is derived by dividing the total wages paid in an area by the annual average employment in that area. Employment not covered by the unemployment insurance program is excluded; however, approximately 90 percent of all employment in the state is covered under the program. (Note—all amounts here have been inflation adjusted to 1996 dollars.)

The average real wage *(see Figure 17)* started declining in Skamania County in 1980. Overall since 1970, it fell by 22 percent, going from \$26,728 to \$20,896 in 1996. The overall trend, though, overlooks the peak reached during the big construction boom of the late 1970s. The influx of engineers and construction workers and their associated high wages drove up the county's wage to a high of \$41,212 in 1979, about \$10,000 more than the state's average wage at that time. The increase from 1970 to 1979 was a phenomenal 54 percent.

With work on the Bonneville second powerhouse completed, though, the wage fell just as fast, dropping 38 percent to \$25,429 in only three years. After 1982, the wage continued to decline, and at a faster rate than the statewide decline. The overall decline, though, seems to have bottomed out, and the trend in the county seems to be moving in tandem with the statewide trend, although at a lower level. There was an uptick in 1996 to \$20,896—the highest since 1992. Even so, the county's average wage lags the statewide wage by about \$8,000.



Neighboring Clark County averaged \$26,993 and Klickitat County was at \$25,378.

1985

1990

1995

1980

Figure 18 on the next page shows the average wage in 1996 for the major industry sectors and some specific industries in Skamania County and in Washington. Virtually all of the county's wages are lower than their statewide counterparts but that shouldn't be thought of as unusual: the state's wage levels are driven by the relatively high paying aerospace and high tech industries of the Puget Sound area.

Figure 18
Average Annual Covered Wages, 1996
Skamania County and Washington State
Source: Employment Security Department

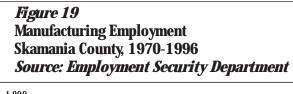
	Skamania	State		Skamania	State
Total	\$20,896	\$28,884	Miscellaneous Retail	\$10,877	\$16,150
Ag/Forestry/Fishing	\$8,238	\$14,510	Other Industries	\$16,190	
Construction	\$19,074	\$30,970	FIRE	\$17,689	\$34,429
General Building Contractors	\$12,222	\$29,435	Depository Institutions	\$19,107	\$31,531
Heavy Construction, Ex. Bldg	\$25,473	\$38,591	Other Industries	\$15,917	
Special Trade Contractors	\$15,914	\$29,266	Services	\$15,315	\$28,074
Manufacturing	\$25,222	\$39,091	Social Services	\$10,545	\$14,915
Lumber & Wood Products	\$28,321	\$32,796	Membership Organizations	\$9,180	\$19,181
Other Industries	\$18,495		Private Households	\$9,463	\$8,835
TCU	\$25,079	\$35,880	Other Industries	\$16,399	
Retail Trade	\$9,844	\$16,081	Government	\$25,967	\$31,958
Food Stores	\$10,923	\$18,118	Federal	\$31,267	\$39,649
Eating & Drinking Places	\$7,581	\$9,991	State	\$27,609	\$32,277
			Local	\$23,284	\$29,696

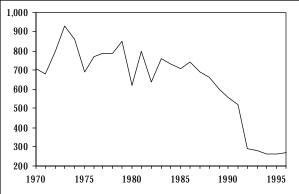
Manufacturing

Compared to Washington State, the county has the same concentration of its nonfarm employment in manufacturing—about 14 percent. Within the county, the bulk of manufacturing rests in the lumber and wood products industry. In 1996, 68 percent of manufactur-

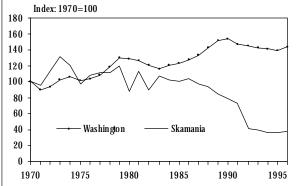
ing jobs were in this industry, most of them in logging or at sawmills.

Starting in 1970 at 710, employment in Skamania's manufacturing sector increased nearly 20 percent during the decade of the 1970s (see Figures 19 and 20).









Through 1979, 140 jobs had been added—the major impediment to continuous growth being the 1974-1975 recession. However, during this same time, manufacturing's share of all nonagricultural employment fell from 44 percent to 27 percent.

At the turn of the decade, the county's manufacturing sector experienced employment contractions as recessions hit in the first half of 1980 and from mid-1982 to late 1983. After 1986, though, employment levels continuously declined through 1994 with the steepest decline reserved for 1991-92. Timber harvest restrictions have had a significant impact on employment in the county. Conservation and environmental measures have caused a drop in harvest activity and loss of logging jobs. The closure of Stevenson Co-Ply, while accelerated by

logging restrictions, was due mainly to the replacement of plywood by less expensive materials such as chipboard and oriented strandboard. From 1988 to 1993, the county lost 449 timber-related jobs—about 70 percent of industry employment.

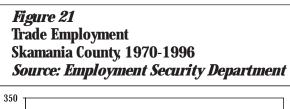
In 1995, for the first time since 1986, manufacturing employment did not drop (it totaled 260 in 1994 and 1995), and in 1996 there was a slight uptick to 270. While this doesn't necessarily signal a turnabout, the decade-long decline may have bottomed out.

Wages in the manufacturing sector averaged \$25,222, and in the lumber and wood products industry, \$28,321. While not as high as the statewide manufacturing wage of \$39,091, these wages were both considerably higher than the countywide overall average.

Trade

The trade sector encompasses both the wholesale and retail industries, although wholesale trade in Skamania County accounts for less than 5 percent of all trade employment. Because Skamania County is rather sparely populated and major trade centers are located nearby in Vancouver and Portland, a flourishing trade sector has not materialized. All the industries combined amounted to 200 jobs in 1996, or 10 percent of all jobs. By way of comparison, the statewide share for trade is 25 percent. In Skamania County, trade is focused on convenience or perishable items: the largest employers in the trade sector are grocery stores and restaurants. Together they account for about 85 percent of total trade employment.

Employment in trade has suffered from rapid and extreme expansions and contractions over the last two decades. But, from 1970 through 1996, when all is said and done, a total of only 40 new jobs materialized. Starting at 160 workers in 1970, the number grew over 30 percent by 1974, reaching a level of 210. After falling and stalling a bit during and after the recessions of the mid-1970s, growth resumed at a very sharp rate. From 1977 to 1980, the sector saw employment jump by 50 percent, hitting its record peak of 300 workers. This rise in trade employment came in conjunction with the work being done on the Bonneville Dam.



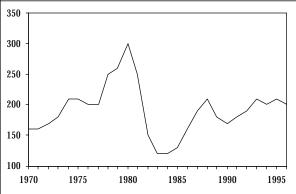
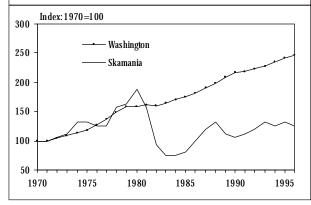


Figure 22
Trade Employment
Skamania County & Washington, 1970-1996
Source: Employment Security Department



However, the completion of this work, coupled with the national double-dip recessions of the early 1980s, caused employment to plummet more sharply and more rapidly than it had increased. From 1980 to 1983, employment fell from 300 to 120, a 60 percent decrease. The sector, however, did emerge from the recessions with strong growth, increasing from its record low point of 120 to 210 in 1988 before falling off again. Since the end of the 1990-91 recession, employment has stabilized, staying within a narrow range of 190 to 210 over the last five years.

Sector wages, though, are relatively low. The average for all of retail trade in 1996 was \$9,844; statewide, the average was \$16,081. Within the trade sector, food stores paid an average of \$10,923 while eating and drinking places paid \$7,581. Much of the work in these industries, particularly eating and drinking places, is part time, which brings the average down. And tip income is not included.

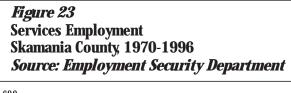
Services

The services sector includes industries as diverse as hotels and motels, auto repair, medical and legal, movie theaters, engineering, and accounting, among others. Services employment, long a laggard, now almost parallels the statewide pattern. In the state, services makes up 27 percent of all employment; in Skamania County, 26 percent. However, this only happened in the last 4 years—in 1992, the share was only 8 percent.

The construction of the Skamania Lodge, a Columbia Gorge destination resort which opened in 1993, was the direct cause of services growth. This resort has become the largest private-sector employer in the county and its payroll has roughly tripled the size of the services sector.

Employment in this sector, though, had been growing over the years. At the beginning of the 1970s, there were only 60 people working in services. The number almost doubled, growing to 110 by 1972 before recessionary retrenchment occurred. A sharp spike (to 140 in 1978) and decline coincided with the boom era and its aftermath. By 1984, only 70 were at work in the sector. Since then, though, employment has been increasing —1988 was the only year of decline. Employment came in at 140 in both 1991 and 1992 and then leaped to 410.

The services sector average wage was much lower than the statewide same-sector wage and the county's overall wage in 1996. Skamania services paid \$15,315 on average; this was only 55 percent of the statewide services wage and 73 percent of the overall county wage.



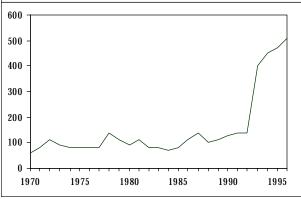
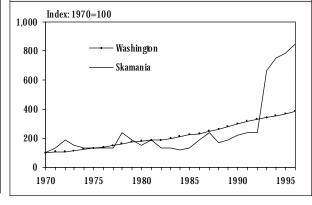


Figure 24
Services Employment
Skamania County & Washington, 1970-1996
Source: Employment Security Department



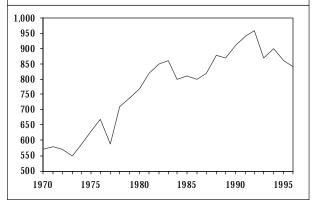
Government

Government is the largest industry sector in Skamania County. At all its levels (federal, state, and local), it accounts for 47 percent of the county's nonagricultural employment—an extremely high percentage. Throughout the state, government employment constitutes only 19 percent of nonagricultural employment. And even Thurston County, the home of state government, has only 40 percent of its workers on the government payroll. It is difficult to over-emphasize the importance of government to the county's economy.

While government employment is relatively stable when compared to the volatility of many sectors, it is affected by recessionary periods and also by political concerns. *Figures 25 and 26,* which depict government growth since 1970, show a number of drops in employment over the period. Nevertheless, the number of employees in this sector grew from 570 to 960 between 1970 and 1992, an increase of 390, or 70 percent. However, 120 jobs were lost, from 1992 to 1996. Much of this stemmed from U.S. Forest Service cutbacks.

Within government, the greatest portion of employment, about 64 percent, falls to local government (local government includes K-12 public education). State government comes in with 6 percent of the total and federal government has a 30 percent share. Statewide, the shares are: local, 58 percent; state, 25 percent; and federal, 16 percent.

Figure 25
Government Employment
Skamania County, 1970-1996
Source: Employment Security Department

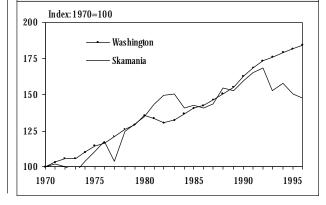


Federal government employment is the big difference between Skamania County and the rest of the state. The location quotient is 4.48. By far the largest portion of federal employment is with the U.S. Forest Service, which administers the 80 percent of Skamania County covered by the Gifford Pinchot National Forest and the 15 percent covered by the Columbia Gorge National Scenic Area.

State government representation is minimal in the county. Skamania residents seeking services provided by the state must, for the most part, travel to adjoining Clark or Klickitat counties. Local government is the largest public employer in the county, as is the case for most counties. Of the 500 local government workers, 45 percent (227) were involved with education. The remainder were employed in the myriad other functions of local governments.

The large governmental presence in Skamania County undergirds the average wage of the county. Were it not for public employees, the average wage would be \$17,177, close to \$4,000 less than it is. Federal workers were the highest paid in 1996; their average wage was \$31,267. State employees averaged \$27,609, and local government workers averaged \$23,284. In all, the government average wage was \$25,967. Although these wage averages are all lower than the statewide averages for the same levels of government, they add a very healthy payroll to a relatively small economy like Skamania's.

Figure 26
Government Employment
Skamania County & Washington, 1970-1996
Source: Employment Security Department



The Small Sectors

Three of the industry sectors in Skamania County (construction, TCU, and FIRE) have relatively small numbers of employment which are not suitable for charting. The numbers have been rolled together here *(Figures 27 and 28)* to give an idea of the overall trend of the three. However, there is a short discussion of each sector below.

The overall employment numbers have been relatively flat except for the large spike which peaked in 1980. As will be seen, this was a construction boom related to work on the Bonneville Dam. Overall for the period, the three sectors added a total of only 30 jobs, going from 110 in 1970 to 140 in 1996. This amounts to 27 percent growth which, compared to the state's 105 percent growth, is quite low. Looking at it another way, the three sectors amount to 7 percent of the county nonfarm employment; statewide, they amount to 16 percent.

Construction and Mining employment in Skamania County has been relatively flat since 1982, particularly when comparing these years with their immediate predecessors. The most recent figures (1996) show construction and mining in Skamania with 70 workers.

The sector experienced a dramatic employment swing during the last two decades. Remaining relatively stable from 1970 through 1974, the number of jobs ranged from 40 to 80. However, 1975 saw the beginnings of construction on a new powerhouse to expand energy capacity at the Bonneville Dam. As the project geared up, construction employment increased at annual rates of 25 to 50 percent through 1978. Between 1978 and 1979, employment exploded from 310 to 1,040 as the

Small Sector Employment Skamania County, 1970-1996 Source: Employment Security Department 1,800 1,600 1,400 1,200 1,000 800 600 400 200 1970 1975 1980 1985 1990 1995

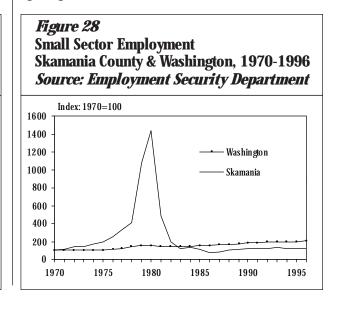
Figure 27

project got fully underway. It reached its peak of 1,450 in 1980. But, as the project was completed, construction employment returned to normal levels. By 1986 and 1987, it was down to 40—the level recorded back in 1970. Only slight gains have been realized since then.

The average covered wage in 1996 for construction was \$19,074 in Skamania County—somewhat less than the county's overall average and considerably less than the statewide construction wage of \$30,970, which is driven by the higher pay rates of the metropolitan Puget Sound area. There were only a relatively small number of workers in the mining industries, and the wages have been suppressed for confidentiality reasons.

Transportation, Communications, and Utilities (TCU) is a small sector in the county that contains only 2 percent of nonfarm jobs (TCU has a 5 percent share statewide). Employment in the TCU sector has been as much as 100 (1978-79) and as little as 20 (1983). There were 40 in 1996. Most jobs in the sector are involved with trucking and warehousing. Unlike other areas, there is little public utilities employment in Skamania County. At \$25,079, the TCU sector has one of the higher average wages in the county.

Finance, Insurance, and Real Estate (FIRE) is the smallest industry sector in the county. Its employment has ranged from a low of 10 in 1985 to its 1979 peak of 50 during the county's boom period. Its annual level of employment hovered around 20 since 1986, and then moved up to 30 in 1995 and 1996. Most of the jobs are in banking or real estate. The average wage in the sector was \$17,689 in 1996. Statewide, the same sector's average wage was \$34,429.



Employment Projections

Employment Security Department analysts are projecting relatively slow job growth in Skamania County during the next few years. Between 1996 and 2001, overall nonfarm jobs are expected to increase by 6.7 percent; an annualized average rate of 1.3 percent totaling 130 new jobs (*Figure 29*). The state as a whole is expected to increase 2.5 percent per year.

The largest number of new jobs should occur in the services sector (70), followed by trade with 30 new jobs. Other sectors will remain essentially the same, or show slight increases. (The TCU sector is projected to have a one-third increase in jobs, but that only amounts to 10.) More importantly, no decreases are envisioned. The projections reflect the belief that the long, downward spiral in employment has bottomed out.

Figure 29
Industry Projections
Skamania County and Washington, 1996 and 2001
Source: Employment Security Department

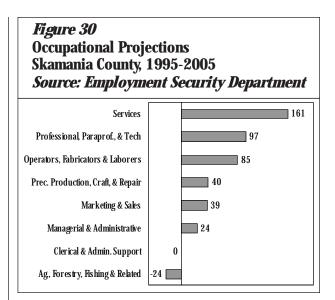
	Skamania County					Washington	
_	1996	2001	% Change	# Change	Ann Avg	% Change	Ann Avg
Total Nonfarm Employment	1,950	2,080	6.7%	130	1.3%	13.2%	2.5%
Manufacturing	270	280	3.7%	10	0.7%	7.3%	1.4%
Construction & Mining	60	70	16.7%	10	3.1%	8.2%	1.6%
Transportation & Utilities	30	40	33.3%	10	5.9%	8.2%	1.6%
Wholesale & Retail Trade	220	250	13.6%	30	2.6%	12.9%	2.5%
Finance, Ins. & Real Estate	30	30	0.0%	0	0.0%	9.1%	1.8%
Services	480	550	14.6%	70	2.8%	21.9%	4.0%
Government	860	860	0.0%	0	0.0%	9.5%	1.8%

OCCUPATIONAL PROFILE

Looking at the work force in terms of occupational divisions rather than industrial divisions gives a different perspective on how county employment differs from state employment. *Figure 30* shows the projected numeric change for each of the major occupational groupings over the period 1995-2005.

The largest increase will be in service occupations, which is also the largest grouping and contains about 25 percent of all jobs in the county. Professional and technical jobs, with the second largest increase, will add about 100. On the low end of the scale, agricultural professions will actually decrease and clerical jobs will remain about the same. In general, there will be considerably more new "white-collar" than "blue-collar" jobs, a trend occurring both statewide and nationwide.

Figure 31 on the next page is based on Occupational Employment Surveys conducted by the Employment Security Department in 1996. The surveys are an aggregate of rural southwest Washington, including Skamania County. Metropolitan counties, such as Clark, are excluded. (A great number of Skamania County residents work in Clark County so their wages are not reflected in



this survey.) The occupations and wages shown here, although not specific to Skamania County alone, give a fairly good idea of what the various jobs are in the area, and at what levels of pay.

Figure 31
Occupational Wages
Rural Southwest Washington, 1996
Source: Employment Security Department

TITLE	WAGE	TITLE	WAGI
Accountant & Auditor	\$15.31	Electrician	\$18.95
Administrative Service Manager	\$20.67	Emergency Medical Technician	\$15.41
Amusement & Recreation Attendant	\$6.23	Engineering, Math, Natrl Science Mgr	\$27.34
Assemble, Fabricate, ex Mach, Elec, Prec	\$8.90	Excavating & Loading Machine Operator	\$16.79
Automotive Body, Related Repairer	\$14.66	Extrude, Form, Press Mach Op/Tender	\$10.02
Automotive Mechanic	\$12.12	Faller & Bucker	\$19.05
Baker, Bread & Pastry	\$8.75	File Clerk	\$8.86
Bank Teller	\$8.16	Financial Manager	\$18.31
Bartender	\$7.26	Fire Fighter	\$14.60
Bill, Post & Calculate Machine Oper	\$9.69	First Line Supervisor, Agr, Forest, Fish	\$23.83
Billing, Cost & Rate Clerk	\$10.74	First Line Supervisor, Clerical	\$12.04
Bookkeeping, Accounting & Auditing Clerk	\$10.43	First Line Supervisor, Constr & Extract	\$17.62
Bus & Truck Mechanic & Diesel Specialist	\$14.26	First Line Supervisor, Mechanic & Repair	\$18.69
Bus Driver, School	\$11.96	First Line Supervisor, Production	\$19.00
Cabinetmaker & Bench Carpenter	\$12.57	First Line Supervisor, Sales & Related	\$11.42
Carpenter	\$16.40	First Line Supervisor, Transportation	\$18.52
Cashier	\$7.49	Food Preparation Worker	\$6.2
Cementing & Gluing Machine Op/Tender	\$9.35	Food Service & Lodging Manager	\$12.1
Chemical Equipment Controller/Operator	\$17.80	Forest & Conservation Worker	\$11.1
Chemical Plant & System Operator	\$14.18	Forester, Conservation Scientist	\$19.8
Chemical Technician, except Health	\$13.38	Furnace Operator/Tender	\$13.3
Child Care Worker	\$6.55	General Manager & Top Executive	\$23.3
Choke Setter	\$13.21	General Office Clerk	\$8.7
Civil Engineer, including Traffic	\$23.38	Grader, Bulldozer & Scraper Operator	\$12.7
Civil Engineering Technician	\$17.06	Guard & Watch Guard	\$8.8
Clergy	\$16.53	Hairdresser & Cosmetologist	\$7.8
Coat, Paint, Spray Machine Op/Tender	\$11.97	Hand Packer & Packager	\$7.1
Combined Food Preparation & Service	\$5.77	Heat, A/C, Refrigeration Mech & Install	\$16.0
Computer System Analyst, EDP	\$25.41	Helper, Carpenter & Related Worker	\$9.8
Construction Manager	\$20.76	Helper, Mechanic & Repairer	\$9.0
Conveyor Operator & Tender	\$9.28	Home Health Aide	\$7.8
Cook, Fast Food	\$6.03	Host & Hostess, Restaurant, Lounge	\$6.2
Cook, Institution or Cafeteria	\$9.11	Housekeeping Supervisor, Institutional	\$8.2
Cook, Restaurant	\$6.86	Human Service Worker	\$11.1
Cook, Short Order	\$7.14	Industrial Machinery Mechanic	\$12.7
Cost Estimator	\$17.29	Industrial Production Manager	\$23.1
Counter & Rental Clerk	\$6.96	Industrial Truck & Tractor Operator	\$13.1
Counter Attendant, Lunchroom, Cafeteria	\$5.64	Instructor & Coach, Sport	\$9.0
Crane & Tower Operator	\$16.43	Instructor, Nonvocational Education	\$15.3
Crush, Grind, Mix Machine Op/Tender	\$12.14	Insurance Policy Processing Clerk	\$13.1
Dental Assistant	\$12.40	Insurance Sales Worker	\$18.8
Dental Hygienist	\$26.86	Janitor & Cleaner, except Maid	\$8.1
Designer, except Interior Design	\$15.76	Laund, Dry-clean Mach Op/Tend, exc Pres	\$7.5
Dining Room, Cafeteria & Bartender Help	\$6.57	Lawyer	\$29.1
Drafter	\$14.99	Legal Secretary	\$13.4
Driver/Sales Worker	\$14.55 \$12.17	Licensed Practical Nurse	\$13.4
Education Administrator	\$26.80	Logging Tractor Operator	\$13.50 \$14.61
Electrical & Electronic Engineer	\$20.60	Log-Handling Equipment Operator	\$14.0. \$15.12

Figure 31 (Continued)
Occupational Wages
Rural Southwest Washington, 1996
Source: Employment Security Department

TITLE	WAGE	TITLE	WAGE
Longshore Equipment Operator	\$23.07	Residential Counselor	\$8.49
Machine Feeder & Offbearer	\$9.59	Roofer	\$14.01
Machinery Maintenance Worker	\$15.71	Sales Agent, Advertising	\$20.85
Machinist	\$14.90	Sales Agent, Real Estate	\$21.18
Maid & Housekeeping Cleaner	\$5.91	Sales Rep, exc Retail, Sci, Related	\$14.07
Maintenance Repairer, General Utility	\$12.20	Sales Rep, Science & Related, exc Retail	\$19.48
Marketing, Advertising, Public Rel Mgr	\$26.64	Salesperson, Parts	\$9.70
Mechanical Engineer	\$25.53	Salesperson, Retail	\$7.26
Medical Assistant	\$10.55	Sawing Machine Operator/Tender	\$10.86
Medical Secretary	\$9.48	Secretary, except Legal & Medical	\$10.33
Medicine & Health Service Manager	\$25.28	Separate, Filter & Rel Machine Op/Tender	\$15.13
Millwright	\$17.43	Service Station Attendant	\$6.78
Mobile Heavy Eq Mechanic, exc Engine	\$15.64	Sheriff & Deputy Sheriff	\$20.11
Nursing Aide, Orderly & Attendant	\$7.73	Social Work, exc Medical & Psychiatric	\$14.96
Operating Engineer	\$18.41	Social Work, Medical & Psychiatric	\$16.12
Order Clerk, Materials, Service	\$10.73	Stenographer	\$15.96
Packaging & Filling Machine Op/Tend	\$9.77	Stevedore, except Equipment Operator	\$28.49
Painter & Paperhanger, Constr & Maint	\$13.72	Stock Clerk, Sales Floor	\$7.43
Paper Goods Machine Setter/Set-Up Op	\$11.57	Stock Clerk, Stockroom or Warehouse	\$9.65
Payroll & Timekeeping Clerk	\$12.70	Teacher Aide & Educational Asst, Clerk	\$8.55
Personal Home Care Aide	\$7.25	Teacher Aide, Paraprofessional	\$9.49
Personnel, Train & Labor Relation Mgr	\$15.65	Teacher, Elementary	\$22.19
Personnel, Train & Labor Relation Spec	\$18.23	Teacher, Kindergarten	\$18.21
Physician & Surgeon	\$46.46	Teacher, Preschool	\$7.91
Plumber, Pipefitter, Steamfitter	\$18.80	Teacher, Secondary School	\$22.17
Police Patrol Officer	\$18.90	Teacher, Special Education	\$22.55
Postal Mail Carrier	\$13.54	Teacher, Vocational Education	\$17.53
Precision Instrument Repairer	\$20.79	Tire Repairer & Changer	\$9.54
Procurement Clerk	\$10.33	Traffic, Shipping & Receiving Clerk	\$10.88
Production Inspector, Grade, Sort, Test	\$16.95	Truck Driver, Heavy or Tractor-Trailer	\$13.73
Production, Planning, Expediting Clerk	\$13.31	Truck Driver, Light, incl Delivery & Rel	\$10.11
Property & Real Estate Manager	\$14.95	Typist, including Word Processing	\$7.96
Psychologist	\$24.69	Vehicle Washer & Equipment Cleaner	\$7.11
Public Admin, Chief Exec & Legislator	\$12.42	Vocational & Educational, Counselor	\$18.94
Purchase Agent, exc Whlsl, Retail, Farm	\$15.49	Waiter & Waitress	\$6.24
Purchasing Manager	\$19.57	Welder & Cutter	\$13.26
Receptionist, Information Clerk	\$8.09	Welfare Eligibility Worker, Interviewer	\$15.34
Registered Nurse	\$19.09	Wholesale, Retail Buyer, except Farm	\$8.42
_		Writer & Editor	\$13.50

PERSONAL INCOME

This section deals with income rather than wages only, which were discussed earlier and which are only one aspect of income. Data in this section are provided by the U.S. Department of Commerce, Bureau of Economic Analysis.

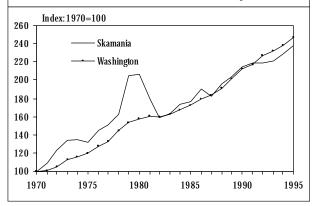
Total Personal Income

Personal income is generally seen as an important indicator of a region's economic vitality Conceptually, personal income captures all types of income. Wages, salaries, government transfer payments (including government retirement), farm income, self-employed income, proprietors' income, interest, dividends, and rent are all included in this measure. Because business and corporate incomes are not included, it is considered personal income.

In Skamania County, personal income grew by 147 percent between 1970 and 1995, rising from \$69 million to \$164 million in real 1995 dollars *(see Figure 32)*. At the same time, personal income for Washington as a whole grew by a comparable 147 percent. Growth in the county has been, for the most part, steady. Slight declines occurred in conjunction with several national recessions but growth quickly resumed with economic recovery.

The big anomaly in the growth pattern, of course, occurred from 1978 through 1982. The big bulge and subsequent decline in personal income was caused by the start-up and completion of the huge construction project occurring on the Bonneville Dam. From 1978

Figure 32
Personal Income
Skamania County & Washington, 1970-1995
Source: Bureau of Economic Analysis



to 1980, personal income increased 27 percent, then in the next two years fell 30 percent. Considering that the average annual growth over the two decades was 3.5 percent, those four years were a period of remarkable change.

Per Capita Income

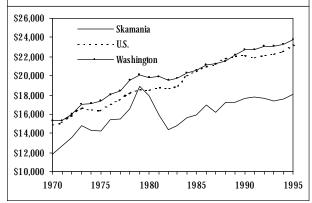
Dividing the total personal income of an area by the population yields personal per capita income. Per capita income is a useful measurement; it gives a common denominator between income (growth or decline) and population (growth or decline) so that comparisons can be made between different areas or time periods with unlike populations and incomes.

Figure 33 on the next page shows per capita income for Skamania County, Washington State, and the U.S. in constant 1995 dollars. Between 1970 and 1995, this in-

come increased from \$11,810 to \$18,036, or 53 percent in Skamania County. For the state and the nation, it increased by about 55 percent.

There has historically been a gap between per capita income in the county and the state. In 1970, the difference, in favor of the state, amounted to about \$3,500. For most of the 1970s, the difference fell into the \$2,000 to \$3,000 range. That changed in 1979 when the income of the county boomed—to the point that per capita income only lagged the state's by about \$1,200. But that

Figure 33
Per Capita Income
Skamania, Washington, & U.S., 1970-1995
Source: Bureau of Economic Analysis



was only one year: the recessions of the early 1980s caused a decline in both county and state income, but it was far more severe in the county because the recessions coincided with completion of construction work on the Bonneville Dam. The county's per capita income, although increasing since then, did so at a slower rate than the state. Consequently, the difference has widened appreciably, to almost \$5,700 in 1995.

Comparing a county such as Skamania to the state, whose economy as a whole is driven by the high tech and aeronautic industries of the Puget Sound area, is somewhat misleading. However, even when compared to its neighboring counties, Skamania's income of \$18,036 for 1995 was still low. It ranked twenty-sixth in the state, and of its neighbors, only Klickitat County's was lower at \$17,164. Yakima County's was \$18,427, Cowlitz County's was \$20,013, and Clark County came in with \$23,013.

Components of Personal Income

As mentioned earlier, personal income encompasses many different types of income. All the various types, however, can be subsumed under the three broad categories of earnings, transfer payments, and investment income. Earnings include wages, salaries, and proprietors' income; transfer payments include income maintenance, unemployment insurance, and government retirement payments; investment income consists of interest, dividends, and rent. (Note: private pension earnings are included in investment income, and are allotted to counties in accordance with the county share of dividends and

interest. There is no way of tracking where private pension checks go, hence no way of truly tracking private retirement payouts.) *Figure 34* shows how these components of personal income have changed over time and *Figure 35* shows the share size of each component in 1995. Although earnings have declined, they are the major source of personal income.

However, as a percentage of personal income, net earned income decreased from 75 percent in 1970 to 66 percent in 1995. The other two sources of income had reciprocal increases: transfer payments grew from

Figure 34
Changes in Personal Income Components
Skamania County, 1970-1995
Source: Bureau of Economic Analysis

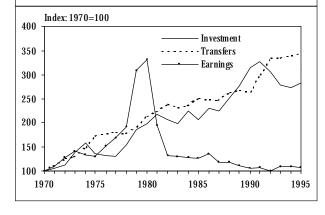
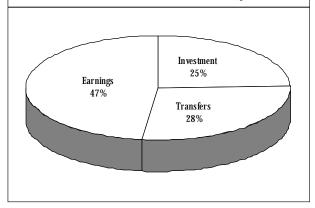


Figure 35
Components of Personal Income
Skamania County, 1995
Source: Bureau of Economic Analysis



13 to 18 percent of the total and investment income went from 14 to 16 percent. Looking at it a little differently, the dollar amount of earned income increased 111 percent over the period while transfer payments grew 244 percent and investment income grew 183 percent.

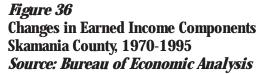
Of note is the difference between the annual average wage data presented earlier and the earnings data shown here. The average wage showed a sharp decline (over \$5,000 since 1983) while the per capita income and earnings component of personal income showed fairly steady growth. The earnings data shown here are adjusted for residence while the average wage data are based on place of business and do not capture the wages of Skamania residents who work outside the county. As the charts show, it makes a considerable difference.

Earned Income

The largest portion of personal income is earned income. Although its percentage of the total has diminished over the last two decades, it, nevertheless, retains the lion's share of all income. This component of personal income is an important reflection of an area's economy because it shows how much income people derive directly from their jobs. *Figures 36 and 37* show growth of the components of earned income since 1970 and their share sizes in 1995.

Earnings include wages and salaries, proprietors' income, and what is called "other labor income." (Other labor income subsumes an assortment of incomes but primarily consists of employer payments into employee pension and health care plans.) Earnings data are normally presented as establishment-based rather than residence-based income figures, like in the two charts. However, there is such a large amount of commuting by Skamania residents that a sizeable portion of income would be missed with only that series. Consequently, *Figure 38* on the next page shows, in dollar amounts, both residence-based and establishment-based data series. The point of demarcation between the two series was 1982: establishment-based earnings continued to drop while residence-based earnings began to grow.

Establishment-based wages and salaries actually decreased in Skamania County, going from \$42.1 million (1970) to \$41.7 million (1995), a drop of 1 percent. However, total establishment-based earnings grew by 7 percent over the same time. Strong growth was realized in other labor income (129 percent) and weak growth in proprietors' income (5 percent). Other labor income grew from \$1.6 million in 1970 to \$5.1 million in 1995. (This is a partial explanation for the decrease in the annual average wage discussed earlier; employees' compensation is being buttressed by a greater level of benefits rather than by direct pay.) Proprietors' income, after increasing and decreasing its share of earned income at various times throughout



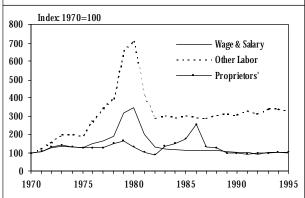
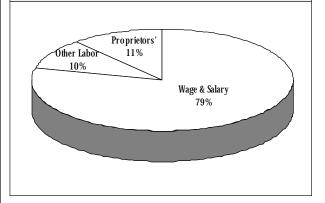


Figure 37
Components of Earned Income
Skamania County, 1995
Source: Bureau of Economic Analysis



the two decades, wound up in 1995 with just about the same share it had in 1970: 12 percent in 1970 versus 11 percent in 1995. In dollars, this income increased from \$5.7 million to \$6.0 million.

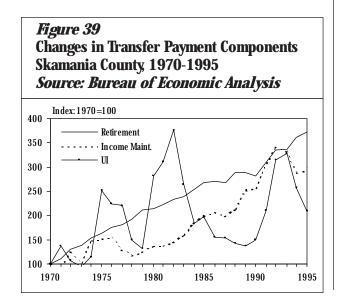
Figure 38 **Earned Income by Residence & Establishment** Skamania County, 1970-1995 Source: Bureau of Economic Analysis Millions \$180 \$160 \$140 \$120 \$100 \$80 \$60 \$40 Residence-based earnings \$20 Establishment-based earnings \$0 1975 1985 1990 1995 1970 1980

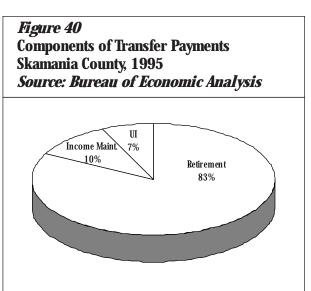
Transfer Payments

The next source of personal income, second in size after earnings, is transfer payments. A transfer payment is generally seen as a payment by the government to someone from whom no service is rendered.

Overall, transfer payments increased 244 percent from 1970 to 1995 in Skamania County, expanding from more than \$8 million to over \$30 million. And, as mentioned earlier, its share of all personal income has also greatly expanded, from 13 to 18 percent. Except for several brief periods of flatness or slight decline, growth has been constant throughout the two decades.

Transfer payments are split into three categories: retirement and related; income maintenance; and unemployment insurance. *Figures 39 and 40* show the changes in these components since 1970 and the share size of each in 1995. By far the largest component of transfer payments is retirement related. This includes social security payments, federal civilian and military retirement pay, and state and local government retirement pay. Medicare payments are also included. Retirement and related payments increased by 273 percent from 1970-95, giving this component an 83 percent share of all transfer payments in 1995. These type of transfer payments, in fact, amounted to 15 percent of all personal income in Skamania County.





Income maintenance includes Aid to Families with Dependent Children (AFDC), general assistance, food stamps, and other transfers generally thought of as welfare. This category comprised 10 percent of all transfer payments in 1995, slightly less than its 12 percent share of 1970. The dollar value of income maintenance, however, grew by 192 percent between 1970 and 1995. As a percentage of all personal income, income maintenance has generally remained at less than 2 percent. For the first time, it went above that during 1991-93 but has since fallen again (to 1.9 percent).

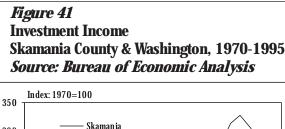
The third component, unemployment insurance, increased by 108 percent since 1970, giving it about 7 percent of all transfer payments. Over the period, there have been large changes in this type of income; increasing, of course, during periods of high unemployment and then contracting as the economy improved. Its dollar value in 1970 was \$1.0 million, which expanded to \$2.1 million in 1995. It reached a high point of about \$3.9 million in 1982 in conjunction with the recession of that year.

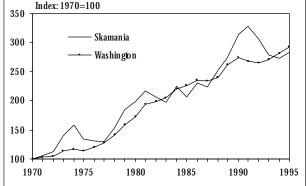
Dividends, Interest, and Rent

These types of income (collectively called investment income) are the prime examples of making money with money. Money which has been used to purchase stocks, bonds, or which resides in bank accounts, or has been loaned, or which was used to purchase rental properties, can return a profit. No service or work is performed, yet income is derived from the invested money. Private pension plans are included in this category.

Investment income grew almost 183 percent from 1970 to 1995, increasing from \$9.5 million to \$27.0 million. As *Figure 41* shows, this income increased substantially from 1977 to 1981 and from 1987 through 1990. Recessionary periods generally hurt investment income; note the decreases occurring during the national recession years of 1975, the double dip recession of 1980-82 and the 1990-91 recession. It has just recently started to recover from the last recession.

As a portion of personal income, investment income's 16 percent in 1995 almost equaled transfer payments. Share size was up from its 14 percent in 1970.





JOB TRAINING AND ECONOMIC DEVELOPMENT

Job Training

Not only is a well-trained labor force crucial to economic growth, the quality of individual lives is strongly influenced by the benefits that accrue from a "good" job. In addition to the traditional education process, a number of initiatives have been undertaken to prepare people for entry into the labor market and to retrain workers whose skills have been made redundant by technological and structural changes in the work place.

The Job Training Partnership Act (JTPA) of 1982 established programs to prepare youth and adults facing serious barriers to employment for entry or re-entry into the labor force. Of note is the emphasis placed on economically disadvantaged individuals and dislocated workers. It is upon this legislation that Private Industry Council service providers base their job service programs.

Private Industry Council. The Southwest Washington Private Industry Council (PIC) administers JTPA job training programs in Skamania County. The PIC, a nonprofit organization, receives its primary funding through the federally funded Job Training Partnership Act. PIC programs provide job training, employment counseling, and placement assistance to Southwest Washington residents, including Skamania County A host of different programs are offered that respond to particular needs in the community. The actual execution of JTPA programs in Skamania is contracted out to the Employment Security Department's Job Service Center.

Job Service Center. Operated by the Employment Security Department, the Columbia Gorge Job Service Center (JSC) provides job services to residents of Skamania and Klickitat counties. The main office of the JSC is located in White Salmon and there are satellite offices in Stevenson in Skamania County and Goldendale in Klickitat County. The JSC is a full-service office; that is, it provides the full range of services offered by any JSC in the state.

WorkFirst: Washington's Welfare to Work Program. WorkFirst is a work-based program that makes immediate employment the primary strategy for helping needy families. The purpose is to move families on welfare into employment as quickly as possible through up-front job search, work experience activities, and short-term education and training. WorkFirst is delivered through a partnership between the Employment Security Department, Department of Social and Health Services, State Board of Community and Technical College, and the Department of Community Trade and Economic Development.

The Worker Profiling/Re-employment Services Program targets recent unemployment insurance applicants for job placement services to speed their return to work. This shortens the duration of unemployment for the individual and saves costs to the unemployment insurance trust fund. Further, workers are profiled to identify those who will have the most trouble finding re-employment and additional services are provided to them.

Unemployment Insurance provides temporary financial assistance to eligible unemployed individuals who are able, available, and actively seeking work, or who are in approved training programs.

The Economic Dislocation and Worker Adjustment Assistance Act (EDWAAA) is a PIC program designed to assist clients laid-off because of either plant closures or plant restructuring and technology improvements. Through this program, clients—in addition to receiving regular unemployment insurance benefits—work with counselors to assess their jobs skills and interests and draw up an individual training strategy. The strategy might include retraining at the community college with tuition and fees paid by the state. The program also provides clients with job search workshops to enhance skills such as resume writing, application processing, and interviewing.

The *Trade Adjustment Act (TAA)* is another JSC administered program. This one is designed to assist those who have been displaced because of the impact of for-

eign imports on their industries. While the amount of benefits and compensation periods vary, the program offers services only after the U.S. Department of Labor certifies that the individual has indeed been dislocated as a result of such impacts on his or her industry.

The JSC runs the *Migrant Seasonal Farm Workers Program*, which provides assistance to agricultural workers. Two Veterans Programs are also operated out of the JSC. Staffed and developed by veterans, one is the *Local Veterans Employment Representative (LVER)* program; the other is the *Disabled Veterans Outreach Program*

(DVOP). The gist of the programs is to provide counseling, career search skills, and job placement assistance.

Education. Although there are no post high school educational institutions in Skamania County, its residents live within range of Central Washington University in Ellensburg, the colleges and universities of the Puget Sound area, and four-year institutions in Portland, Oregon. Similarly, there are vocational and community college sites in Clark and Yakima counties as well as in Portland, Oregon.

Economic Development

Economic Development Council (EDC). The Stevenson-based Skamania County Economic Development Council (SCEDC) is a private nonprofit organization responsible for the majority of economic development and business assistance efforts within the county. The primary objectives of the SCEDC are to assist existing local businesses in retention and expansion efforts as well as to help prospective businesses locate in the county. The SCEDC operates two revolving loan funds (micro-lending programs) to help meet these objectives. The funds are designed to assist businesses on the Washington side of the Columbia River Gorge National Scenic Area. Other offerings are information on the local business environment, taxes, infrastructures, etc.

As an adjunct to its operations, the SCEDC operates a Business Assistance Center. The center provides one-on-one counseling, a variety of audio visual training materials, an extensive library of reference material, and a dedicated computer, available to all, with appropriate business-related software.

Chamber of Commerce. Chambers of Commerce are generally comprised of business owners and other interested individuals who work together to further the business interests of their communities. Stevenson is the home of the Skamania County Chamber of Commerce, which also works to promote economic development in the area.

Infrastructure. The infrastructure of an area is integral to its economic development; the following is a synopsis of the county's transportation resources.

Major roads and highways in Skamania County are concentrated in the south along the Columbia River. State Route 14 runs east and west through the county on the Washington side of the Columbia River. Fairly accessible, also, is Interstate Route 84, which runs parallel to State Route 14 on the Oregon side of the Columbia River.

The Portland International Airport, a full-service airport that accommodates all major air carriers, is in relatively close proximity to Skamania County. Also, there is the Key Airstrip in Skamania County, with a 2,300-foot turf runway that handles only small private planes.

SUMMARY

Geography and politics have greatly influenced the Skamania County economy. Ninety percent of the county is forestland, and 80 percent of the county is part of the Gifford Pinchot National Forest. For decades, the county economy rested on timber, directly through logging and milling and indirectly through Forest Service employment. Timber-related employment began to decline in the 1980s, dropping from 820 in 1979 to 620 in 1988. At that time, harvest restrictions were placed on federal lands, limiting local timber supply and raising log prices. Timber harvest from federal lands dropped from an average of 250 million board feet to less than 5 million in 1996. Scarce timber and competition from chipboard substitutes led to the closure of Stevenson Co-Ply, the largest mill remaining in the county, in early 1992. The job loss was accompanied by loss of savings because the mill was a co-op. By 1993, only 180 timber jobs remained in Skamania, and federal employment has fallen from a peak of 420 to only 240 in 1996.

While most of Skamania is in forested, mountainous terrain, the bottom strip of the county borders the Columbia Gorge. The Gorge has influenced the county economy in two major ways. In the 1978-82 period, construction of a second powerhouse at Bonneville Dam boosted county construction employment, chiefly through construction workers commuting into the county. This had the unfortunate side effect of skewing county labor force estimates in the 1983-89 period; through use of a faulty commuting ratio, the labor force size was underestimated and the unemployment rate overestimated.

Second, in 1986, about 15 percent of the county was made part of the Columbia Gorge National Scenic Area. Creation of the NSA, while placing some restrictions on development in the Gorge area, has helped augment the county's growing tourism industry. Federal subsidies

helped build the Skamania Lodge, a conference center/destination resort, now the largest private sector employer in the county. An interpretive museum is now in operation, and other retail and service spin-offs have come on line. In addition, a number of manufacturing jobs related to windsurfing have been created.

The transition from timber to tourism has had a number of effects. Population growth began picking up in 1990, as did labor force growth. Because of fewer job opportunities, almost half of the Skamania labor force commutes to work outside the county. Unemployment rose sharply in 1992 with the mill closure, reaching 18 percent before declining to the current 10-11 percent.

Only a few years ago, one-third of the jobs in the county were in manufacturing; by 1996, the number had fallen below 15 percent. With the advent of the Skamania Lodge, trade and service employment rose from 19 percent to a 36 percent share, while the public sector accounted for 43 percent.

The annual average wage for jobs in Skamania has fallen steadily over the past two decades (with the exception of the powerhouse construction years). In 1996 the average was \$20,896 per job. In comparison, inflation-adjusted wages in the early 1970s were \$30,000 per job. Per capita income has not declined, mainly because of increases in investment income and government transfer payments. But, at \$18,036 (1995), it remains 24 percent below the state average.

Coming years should bring further expansion of tourist-related business as well as modest growth in population and employment. Commuting to jobs outside the county by a significant share of the labor force should be the norm.