

REVIEW

A Quarterly Review of Washington State Labor Market and Economic Trends



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August 1999

The *LMI Review* is published by the Labor Market and Economic Analysis Branch of the Washington State Employment Security Department.

The purpose of the *LMI Review* is to provide timely information and analysis of the state labor market conditions in support of public and private activities that expand employment opportunities and reduce unemployment.

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- *Labor Market Information Center (LMIC) at
1-800-215-1617*

WorkFirst Gives Clients a Step Up

Commissioner
Carver Gayton

COMMENTARY

I was proud to join Governor Gary Locke July 29 to celebrate the success of the second year of WorkFirst, our state's welfare reform program.

The portion of Washington State's population on welfare dropped to its lowest comparable percentage in nearly 30 years as the state's caseload fell below 60,000 in June, one-third fewer families than when the state initiated its WorkFirst program two years ago.

Governor Locke is most encouraged by the state's success in helping people find jobs and make a better life for themselves and their families.

"The caseload is dropping because people are going to work and earning enough to stay off welfare. That doesn't always happen in one step," the governor said. "Our state's efforts are becoming a national model in preventing those who leave welfare from becoming the working poor."

More than 39,000 WorkFirst participants went to work during the program year that ended June 30, surpassing the year's goal of 37,500. WorkFirst has paid for tuition, textbooks, and fees for 4,215 low-income students who are working at least half time.

Colleges are also developing pioneering programs to help WorkFirst participants and low-income workers get the training they need to move up the wage scale. In the past year, the colleges provided Workplace Basics training to 753 workers at 40 different businesses.

The Community Jobs program of the Department of Community, Trade, and Economic Development is another first of its kind in the nation. WorkFirst participants who have been unable to find work during their initial job search are placed in positions in nonprofit organizations, schools, and local, state, federal or tribal agencies. They earn minimum wage working at least

20 hours per week and are eligible for the Earned Income Tax Credit.

We held the celebration at the WorkFirst Post-Employment Labor Exchange (WPLEX), a program based in south Seattle, where a staff of 40 contact working participants, mostly by phone, and on evenings and Saturdays to find out what help they need to continue their progress. The program has received national recognition for its innovative approach to helping welfare recipients succeed in the work place.

Both North Carolina and Maryland have sent officials to Washington State to determine how to adapt the call-center concept in their own states. WPLEX was also one of 10 programs throughout the nation cited by the National Center for Public Productivity at Rutgers University for producing "measurable increases in quality and productivity" in state government.

In the first 11 months, the staff contacted 22,000 clients offering assistance in finding the training, childcare, and other services they need to keep their jobs or find better jobs.

Since the WPLEX call center opened last August, 7,700 employed WorkFirst participants were referred to better jobs and 6,355 were referred to two-year colleges for training to increase their earnings.

WPLEX and other new initiatives—including new training programs at state community colleges and the new Community Jobs Program for those who do not succeed in finding other work—represent the latest phase of the state's WorkFirst program.

In the feature article in this *LMI Review*, Robert Baker, senior economic analyst, reviews labor force developments that could affect WorkFirst participants' attachment to a particular job or industry. All involved in WorkFirst hope that in the long run these efforts will result in increased work force attachment, promotion, wage progression, and independence.

Although any worker's success in the labor market depends on skills, desire, education and many other factors, what gives WorkFirst participants a step up the career ladder is support and the continuing care of staff who go the extra mile.

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Commentary *continued*

Darlett Lybbert, a single parent said, “They really opened my eyes to all kinds of possibilities.” Staff helped her find a new job that boosted her income from \$540 to \$1,600 per month.

The examples are countless. Another single parent of three, Cynthia Greer, was working part time for a temporary service at \$7 per hour. Unable to reach her by phone, staff wrote a letter informing her of the help and opportunities available. WPLEX provided labor market information, new leads to better jobs, and referred her to Everett Community College to improve her job skills. Greer followed through and now has a full-time job at \$15 per hour and attends school full time in computer-related classes.

The job specialists—who conduct the job search workshops, help clients overcome their

fears, build confidence, and send them off to their first job—play an important role in the individual’s success. WPLEX workers who call working participants and advocate for better jobs and training opportunities have a hand on their future. And the program designers who risked careers and reputations on WorkFirst and WPLEX, left a radical way of fulfilling the promise that participants who take a job will not be forgotten.

With support like this, WorkFirst participants should have a better chance than most to survive the winds of change and escape poverty through work.

To learn more about WorkFirst accomplishment visit the Internet at www.wa.gov/WORKFIRST. ■

Exuberant, But Not Unbalanced

First Quarter 1999

**QUARTERLY
ANALYSIS**

Washington's economy picked up speed in the first quarter of 1999. Nonfarm wage and salary employment growth surged ahead at a 3.0 percent seasonally adjusted annual rate in the first three months of the year after scaling back to 1.7 percent in the fourth quarter of 1998. Some of the dynamics related to a sharp uptick in the pace of construction—employment advanced at a 10.3 percent annualized rate from an already heady 6.8 percent pace in the fourth quarter. All the gain centered in general building and special trades attesting to the ongoing strength in housing and commercial activity across the state. In addition, the pace of the manufacturing shortfall eased off and good growth continued in services and trade.

Predictions for a decisive slowing of the economy basically fell flat. Both the state and the nation have consistently exceeded growth expectations over the past six to eight months with the length of the current economic expansion now approaching an all-time record. Job growth in Washington has eased from 4.1 percent in 1997 to 3.3 percent on average in 1998 and, in the most recent forecast from the Revenue Forecast Council, 2.3 percent heading into 1999. However, this is still a very respectable pace ranking higher than the national average and in line with the state's long-run historical average. Moreover, with manufacturing slumping as Boeing—the state's largest industrial employer—systematically trims its work force, it is truly remarkable that the rest of the economy is doing so well.

A Different Economy

Past Boeing downturns, for the most part, have coincided with national recessions. The principal exception was the 1990-91 recession in which Boeing continued expanding thereby

shoring up the state's economy and successfully circumventing a downturn. This time around the national economy remains remarkably strong, the global financial crisis is turning about, and Boeing's commercial production base is revolving around record highs. Local jobless levels are trending down from 33-year lows. There is little in the outlook that would suggest anything other than a slowing of the overall growth rates as Boeing continues trimming its work force through 2000 in an effort to cut costs.

LABOR FORCE AND UNEMPLOYMENT

Washington's unemployment rate dropped by two-tenths of a percentage point in the first quarter of 1999 from 4.9 to 4.7 percent of the work force. This measured fractionally higher than the 4.6 percent registered in the first quarter of 1998. Stronger than average job growth continues throughout much of the economy despite the pullback in aircraft and parts. Weather patterns also eased by the end of the quarter after record-breaking fall and winter rains. Meanwhile, the comparable national average dropped to 4.3 percent in the first quarter compared to 4.4 percent in the fourth quarter of 1998.

Falling Unemployment

It also appears that the state's jobless trend has again shifted gears. Over-the-year comparisons statewide showed an improving pattern for nearly two years starting in the fourth quarter of 1996 and extending through the first half of 1998. But, then the rates began creeping above the prior-year levels as employment growth in the state slowed from the highs in 1997. And by the fourth quarter of 1998, the difference had crept up to four-tenths of a percentage point—still below 5.0 percent, but higher than the 31-year record of 4.5 percent reported in the fourth quarter of 1997. Comparisons continue to shift back to periods of historically tight labor markets—1951-53, 1966-67, and 1990.

Continued page 4

INDUSTRY DEVELOPMENTS

Long Distance or Sprint?

Total nonfarm wage and salary employment heightened by 19,300 workers in the first quarter of 1999 for an annual growth rate of 3.0 percent. This is significantly above the growth rate for the previous quarter and above the growth rate of two quarters prior to that. So does this qualify as an economic turnaround? Well, more like a respite. Because the economic fundamentals of the state, particularly the Puget Sound region, are on a relatively stable base, job growth should continue apace for the next several quarters. Any future slowdown will likely be tied to the aerospace situation.

Double Digit Growth

Construction rose by 3,600 in the winter quarter—a 10.3 percent annual growth rate—with strong gains in special trade contractors (+3,200) and general building contractors (+900). Strong gains in personal income, along with a bit of fear regarding rising home mortgage rates, spurred continued activity in the home building and remodeling arena. Heavy construction dipped by 400, likely because of the unusually wet weather during the first three months of the year.

Money Money Money MONEY MONEY

Wholesale and retail trade advanced by 5,000 in the first quarter as population and personal income growth spurred ever-greater numbers of consumers to spend ever-greater amounts of money. Of course the wealth effect of the stock market played an important role as well; based on traditional measures, consumers spent more than they earned in the first quarter. That was possible because of the huge pool of stock equity investors have accumulated over the past several years (months). Heavy increases took place in general merchandise (+800), and eating and drinking places (+2,200). Eating and drinking places

expanded payrolls at a 5.1 percent annual clip in the first quarter as more folks chose to eat out in celebration of their newfound prosperity.

Physicians Assistant, Heal Thyself

Services jumped by 4,400 in the first quarter. On the surface this appeared to be a substantial number, but in percentage terms it was well below average. While business services and educational services advanced at twice the average rate—over 6.0 percent—health care seemed to have hit the wall. After rebounding from the great health care scare of 1993, when employment weakened for three consecutive quarters, the industry appeared to be on more solid footing. But during the first quarter, employment dipped as the endemic conflicts between the health care and insurance sectors appear to have re-emerged.

Goods Jobs Going

Manufacturing payrolls, on the other hand, fell by 2,200—the net result of a 4,000-worker reduction in aircraft and parts countered in part by a 1,800-worker increase over the month in other primary goods production. On a quarterly basis, the drawdown in aircraft and parts from the peak in the third quarter of 1998 totaled 7,500, with the pace picking up speed since the first of the year. Industrial machinery advanced by 300; electronics inched up 300. Lumber and wood products payrolls were down 300 jobs over the quarter; and food processing jobs fell by 200. The job count in aluminum showed a gain of 300 over the quarter as replacement workers were brought aboard at the strike-impacted Kaiser facilities. The strike has idled 2,300 workers at two sites in the state.

Over-the-Year Nets Out at 2.5 Percent

Total nonfarm wage and salary employment was up 65,500 or 2.5 percent over the year. Comparing other over-the-year figures, manufacturing employment in the state was down 9,500 in the first quarter led by losses in computer and office equipment (-2,000), textiles (-1,400), and aircraft and parts (-6,100). The computer mak-

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Figure 1

Nonagricultural Wage and Salary Workers

Washington State, Seasonally Adjusted, In Thousands, Benchmarked: March 1998

Source: Employment Security, Revenue Forecast Council, & Office of Financial Management

	1st Qtr 1999	4th Qtr 1998	1st Qtr 1998	Numeric Change	
				4th Qtr 1998 to 1st Qtr 1999	1st Qtr 1998 to 1st Qtr 1999
TOTAL NONAGRICULTURAL EMPLOYMENT	2,637.2	2,617.9	2,571.7	19.3	65.5
MANUFACTURING	371.5	373.7	381.0	-2.2	-9.5
Durable Goods	264.7	267.0	272.0	-2.3	-7.3
Lumber & Wood Products	33.4	33.7	34.4	-0.3	-1.0
Logging	6.4	6.8	7.1	-0.4	-0.7
Sawmills & Plywood	23.3	23.1	23.6	0.2	-0.3
Furniture & Fixtures	4.9	4.7	4.6	0.3	0.3
Stone, Clay, & Glass	9.7	9.8	9.5	-0.1	0.2
Primary Metals	11.7	11.1	12.3	0.6	-0.6
Aluminum	7.2	6.9	7.9	0.3	-0.7
Fabricated Metals	14.5	14.4	14.9	0.2	-0.4
Industrial Machinery & Equipment	25.7	25.4	27.3	0.3	-1.6
Computer & Office Equipment	6.5	6.8	8.5	-0.2	-2.0
Electronic & Other Electrical Equipment	18.6	18.3	18.2	0.3	0.4
Transportation Equipment	122.0	125.9	127.0	-3.9	-5.0
Aircraft & Parts	106.0	109.9	112.1	-4.0	-6.1
Instruments & Related	14.8	14.7	15.1	0.1	-0.3
Miscellaneous Manufacturing	9.3	9.1	8.8	0.3	0.6
Nondurable Goods	106.8	106.8	109.0	0.0	-2.2
Food & Kindred Products	40.5	40.7	40.6	-0.2	-0.1
Preserved Fruits & Vegetables	13.5	13.3	13.8	0.2	-0.3
Textiles, Apparel, & Leather	8.7	8.9	10.1	-0.2	-1.4
Paper & Allied Products	16.0	16.2	16.4	-0.2	-0.5
Printing & Publishing	23.8	23.7	24.3	0.1	-0.5
Chemicals & Allied Products	6.1	5.9	6.0	0.1	0.1
Petroleum, Coal, Plastics	11.8	11.4	11.5	0.3	0.3
MINING & QUARRYING	3.3	3.3	3.3	0.0	0.0
CONSTRUCTION	150.6	147.0	141.1	3.6	9.5
General Building Contractors	42.9	42.0	40.0	0.9	2.9
Heavy Construction, ex. Buildings	19.0	19.4	18.6	-0.4	0.3
Special Trade Contractors	88.8	85.6	82.4	3.2	6.3
TRANSPORTATION, COMMUNICATION & UTILITIES	139.9	138.9	134.6	1.0	5.3
Transportation	93.2	92.3	90.1	0.9	3.1
Trucking & Warehousing	31.6	32.1	31.8	-0.5	-0.2
Water Transportation	9.6	9.2	9.4	0.4	0.2
Transportation by Air	27.7	26.9	24.2	0.8	3.5
Communications	31.1	30.9	29.3	0.2	1.8
Electric, Gas & Sanitary Services	15.6	15.7	15.3	-0.2	0.3
WHOLESALE & RETAIL TRADE	635.5	630.5	617.9	5.0	17.6
Wholesale Trade	155.0	154.4	152.3	0.5	2.7
Retail Trade	480.6	476.0	465.6	4.5	14.9
General Merchandise	49.5	48.7	46.5	0.8	3.0
Food Stores	71.0	70.4	69.7	0.5	1.3
Eating & Drinking	178.3	176.1	173.0	2.2	5.4
FINANCE, INSURANCE, & REAL ESTATE	139.9	138.5	131.7	1.4	8.2
Finance	61.8	60.8	57.2	1.0	4.6
Insurance & real estate	78.1	77.7	74.5	0.4	3.6
SERVICES	723.4	719.1	698.9	4.4	24.6
Hotels & Lodging	28.4	27.8	28.6	0.6	-0.2
Personal Services	23.4	23.4	22.5	0.1	0.9
Business Services	159.6	157.1	151.5	2.5	8.1
Health Services	185.0	185.2	183.5	-0.2	1.5
Educational Services	34.6	34.1	33.8	0.5	0.9
Social Services	62.1	61.7	58.4	0.4	3.7
Engineering & Management Services	65.6	65.2	61.6	0.4	4.0
GOVERNMENT	473.0	466.8	463.1	6.1	9.8
Federal	67.4	67.4	67.5	0.1	0.0
State	137.0	135.3	133.1	1.7	3.9
State Education	72.7	71.4	71.3	1.2	1.4
Local	268.6	264.2	262.6	4.4	6.0
Local Education	141.1	139.7	139.2	1.4	1.9
Workers in Labor-Management Disputes	2.2	2.2	0.0	0.0	2.2

Excludes proprietors, self-employed, members of the armed forces, and private household employees. Includes all full- and part-time wage and salary workers receiving pay during the period that includes the 12th of the month.

Labor Market And Economic Indicators

Figure 2
Total Nonagricultural Employment Change
Washington State & Nation, Seasonally Adjusted
Source: Employment Security Department

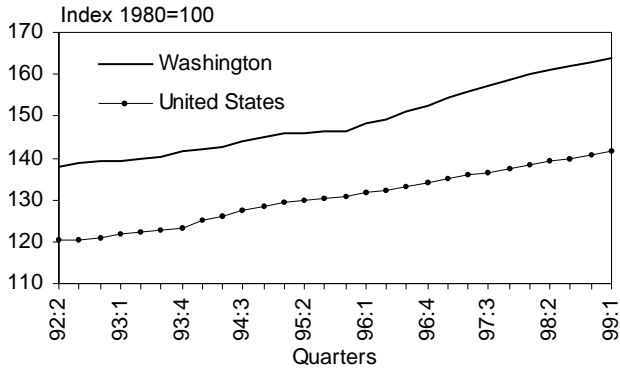


Figure 5
New Housing Units Authorized
Washington State, Seasonally Adjusted
Source: U.S. Department of Commerce

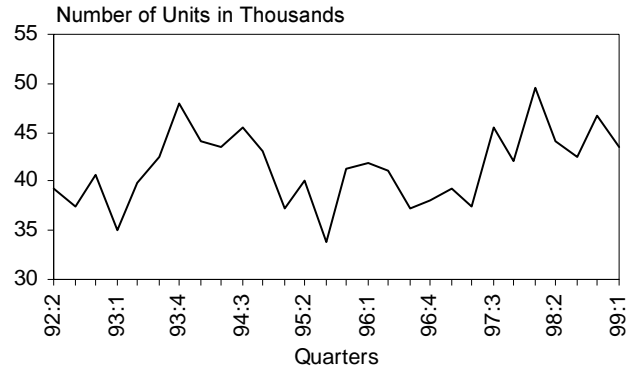


Figure 3
Manufacturing & Nonmanufacturing Employment Change
Washington State, Seasonally Adjusted
Source: Employment Security Department

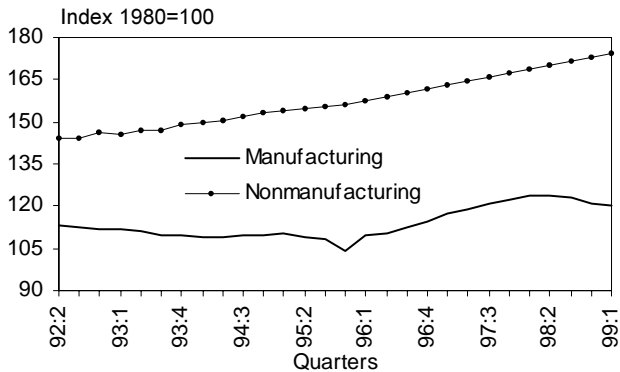


Figure 6
Consumer Price Index
All Urban Customers
Source: Bureau of Labor Statistics

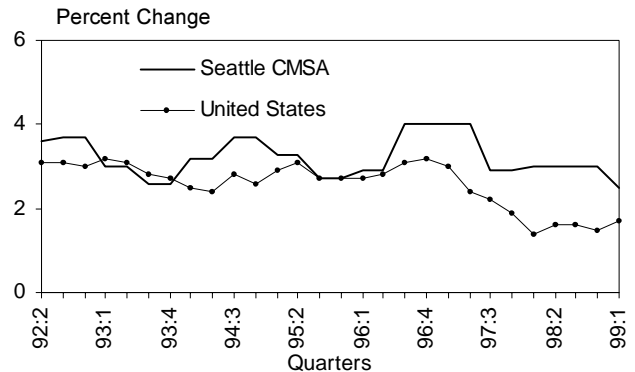


Figure 4
Unemployment Rates
Washington State & Nation, Seasonally Adjusted
Source: Employment Security Dept., U.S. Dept. of Labor

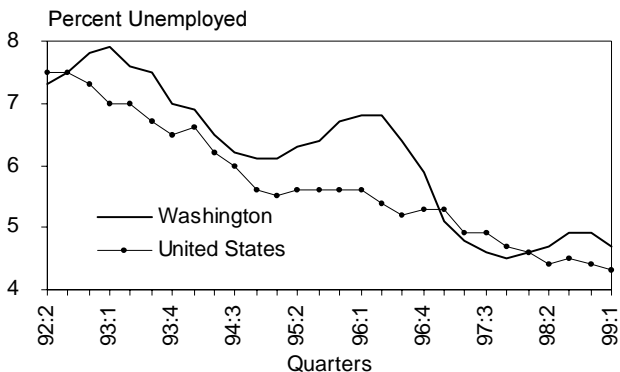
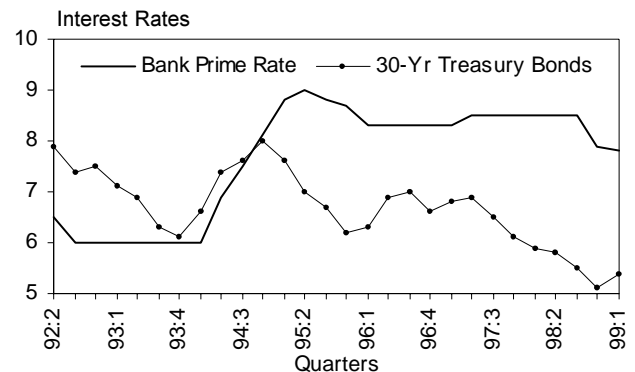


Figure 7
Selected Interest Rates
Percent Annual Rate
Source: Federal Reserve Board



Quarterly Analysis *continued*

ers had been slashing prices and payrolls—while consumers snatched up computers like they were scattered currency that fell from an armored truck; those that built them were being shown the door.

Single Family Soaring

Construction rose by 9,500 over the year, which amounted to a 6.8 percent gain—the quickest over-the-year job growth of the major divisions. A solid labor market and strong gains in personal income have spurred the construction sector. As of the first quarter, single-family building permits were being issued at a 29,900 annual pace, the fastest since 1994. Most amazing about these data is the fact that 1999 is estimated to have one of the lowest net migration flows to Washington in over a decade. In 1990, the population gain from net migration was 98,500; in 1999 it was 37,400. New residents to the Evergreen State usually provide the most significant component of demand for new housing. Existing population seems to be the driving element currently. Empty nesters, and those moving up—or even purchasing a second home—are likely a growing component of this market.

Bountiful Trade

From the first quarter of 1998 to the first quarter of 1999, employment in wholesale and retail trade establishments increased by 17,600. Jobs in department stores increased 6.5 percent over the year as the populace disposed of their disposable income. And after shopping, or (horror of horrors) working late, when it was too late to fix dinner, a trip to the favorite eating and drinking place was in order. Employment in restaurants and bars rose 3.1 percent during this period.

Some Above, Some Below

Services expanded by 24,600 over the year, which translated into 3.5 percent growth; a full percentage point above the total employment

averages. Sectors with well above average growth included business services, social services, and engineering and management services—each with over-the-year growth exceeding 5.0 percent. Personal services advanced at a moderately above average pace thanks to renewed demand for laundry services, photographic services, beauty and barber shops, and others.

INDUSTRY NOTES

State Per Capita Income Jumps

Washington's per capita income grew by 5.7 percent last year—the third highest of any state in the nation. Only North Dakota (+7.8 percent) and Colorado (+6.1 percent) were higher. The U.S. average was 4.4 percent. In addition, the state broke into the top 10 states in terms of dollar ranking at \$27,961—fully 6 percent higher than the national average of \$26,412. Better than a fourth of the state's percentage increase was attributed to the computer software industry—principally Microsoft—with strong growth also centered in construction, financial services, and trade. Washington's nearly 5.7 million residents in 1998 had a combined personal income of \$159 billion, up 7.1 percent from 1997.

Foreign Export Markets Open

Both China and Japan have finally agreed to a more open market policy regarding Washington agricultural products. Japan was first to reverse its long-standing restriction on Washington State apples. Five varieties of apples are to be allowed into the country—Braeburn, Fuji, Gala, Granny Smith, and Jonagold—and two varieties of cherries—Lapin and Sweet Heart. Previously, only red and golden delicious had the necessary health authorizations. China followed by agreeing to drop its 27-year-old ban on importing Pacific Northwest wheat. The move was part of China's so-far unsuccessful bid to win admission to the World Trade Organization. Potential sales to Northwest farmers could reach \$200 million a year.

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High Tech Stabilizes

After suffering significant downsizing in 1998, high tech computer manufacturing employment in the state is now holding its own. Intel is keeping 200 of its previous 650 assembly technicians at Du Pont rather than closing completely the two-year-old facility as previously announced. There are 1,400 to 1,500 workers currently at the site—mostly engineers who design the Intel's server and workstation computers. Meanwhile, WaferTech announced that it plans to hire 200 additional workers and boost production by 50 percent at its new Camas plant this year. Employment will build from 550 to 750 and output would jump from 10,000 to 15,000 silicon wafers a month. Hewlett Packard's work force in Vancouver has now stabilized at 2,000 after shedding nearly 1,200 permanent and 400 temporary assembly workers last year.

NATIONAL INDICATORS

GDP Shoots Up

Real gross domestic product—the inflation-adjusted value of all goods and services produced in the U.S. economy—surged forward at a 4.3 percent seasonally adjusted annual rate in the first quarter. The strength following a stunning 6 percent rise in the previous quarter caught analysts and market-watchers by surprise. Consumers showed no letup in their buying pace with consumer spending shooting up at a 6.7 percent annual rate—the largest in 11 years. Spending by business was also robust, jumping at an 8.5 percent rate in the first three months. At the same time, the nation is experiencing the lowest inflation in a generation with the chain-weighted implicit price deflator for personal consumption expenditures up only 1.2 percent.

Wage Growth Slows

In seeming defiance of the relationship between supply and demand, wage growth in the nation actually slowed in the first quarter despite

a tightening labor market. The government's employment cost index rose a modest 0.4 percent in the first three months of 1999 following a 0.7 percent uptick in the fourth quarter. The pace was the slowest of any period since the Bureau of Labor Statistics began compiling data on this subject 17 years ago. Compared to a year ago, the index was up just 3.0 percent—the lowest annual increase since mid-1997.

This apparent disconnect between modest wage hikes and tight labor markets is not so unusual considering the advent of the new global market place. This market place trades in not only goods and services, but also capital and labor. Thus the balance twixt labor supply and employer demand is no longer limited by geography. In most aspects of manufacturing, and in many parts of services, competition is worldwide. The economic weakness in our Pacific Rim trading partners suppresses overseas demand for imported goods and services—this nation's exports—all the while being the potential source of a ready supply of inexpensive labor.

Another explanation for the moderate wage hikes is that low inflation is banishing some of the fears of escalating prices that erode take-home pay. And, collaterally, employers are unable to pass on cost increases to customers in this very low-inflation environment and are pressing hard to keep wage costs under control.

Manufacturing Turns Around

Signs of recovery in U.S. manufacturing are mounting, giving hope that the cycle has turned. The National Association of Purchasing Management's index of industrial activity rose from 52.4 to 54.3 in March—the third consecutive monthly increase and the highest reading recorded in over a year. Problems in Asia hit the U.S. manufacturing sector hard starting in late-1997 and drove the index down from a high of 58 to a low of 45 at year-end 1998. But the trend has reversed gears since the first of the year—indicating that the worst is over. The composite index moved up better than 9 points in the first quarter with virtually all components showing improvement. The important export-order index was positive.

■ *Dennis Fusco*
Chief Economist

Industry Attachment of WorkFirst Participants: *Seasonal, Cyclical, and Structural Sensitivity*

LABOR FORCE DEVELOPMENTS

In the first 24 months of “ending welfare as we know it,” some 60,000 former welfare recipients in Washington State have been placed in jobs. It is hoped that these newly attached workers will be able to parlay their initial venture into a progressive work force experience that results in increased work force attachment, promotion, wage progression, and independence.

There are many factors that will help determine the success or failure of individuals’ labor market experience. Actual work-place knowledge, marketable skills, desire, education, health, age of dependents, and many others will have an impact on each individual employment situation. In turn, as the state explores this new territory, questions still need to be answered as to the long-term consequences of WorkFirst policies.

Talking the Talk

The gist of WorkFirst can be summarized in one of its slogans—*get a job, get a better job, get a career*. This recognizes that welfare dependency could become a marginalized state that, in its most extreme, could be progressively detrimental in terms of ultimate work force attachment and independence. Thus, to break that dependency requires a *progression* of work force experiences rather than the simplistic “get a job” solution.

With the placement of 60,000 former welfare recipients into employment in Washington State, it would be very easy to proclaim WorkFirst a resounding success. But it’s a little early in the process to be able to measure occupational and/or wage progression. These elements are as important, or maybe even more important, than the first step in the process—getting the job.

It must be remembered that the economy has been operating at a very high level for the past two years—an ideal environment in which to institute a new socioeconomic policy like WorkFirst. Jobs have been abundant, and many employers have had difficulty finding workers at all skill levels. But what happens when the economy turns? Will the totality of the new welfare policy come unraveled by the classic “last hired, first fired” labor market dynamic? As a result, the degree to which WorkFirst’s success is measured is not by how well the policy works during the best of times, but by how well it works during the worst of times.

What We Know

So one of the most important elements in this new social welfare experiment is the proportion to which the participants are susceptible to changes in the business cycle. The Employment Security Department regularly examines the seasonal, cyclical, and structural character of industries in Washington State. As a result, the cyclical sensitivity of WorkFirst participants can be evaluated.

Seasonal, Cyclical, and Structurally-Mature Industries

Seasonality, cyclicity, and structural maturity are important characteristics to include in any discussion of employment because they tend to foster higher than average rates of unemployment in those industries where they are present. This is historically the case in Washington, where the industry mix relies heavily on agricultural, natural resource, and goods-producing industries. As a result, a significant share of workers is viewed as being at risk of longer and more frequent episodes of unemployment.

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Labor Force Developments *continued*

Defining Seasonal, Cyclical, and Structural Industries

Seasonality reflects regular monthly swings in economic activity. These swings produce atypically high employment or unemployment depending on the season. Workers in affected industries are hired at the start of and released at the end of, for example, the crop harvest or logging season, the school year, the summer tourist or winter ski season, etc. Complementary and support industries also tend to be affected.

Cyclical reflects shifts in the business cycle. Business cycles tend to generate disproportionately high employment or unemployment depending on where an economy is in the cycle, namely whether it is in expansion or contraction. Turning points in the cycle are brought about by factors that influence supply and demand. For example, recessionary pressures are often brought to bear by softening demand that squeezes revenue and forces cost-cutting which, in turn, increases the likelihood of payroll reductions.

Structural maturity reflects long-range upward shifts in productivity. Shifts of this nature typically result in unemployment as affected firms introduce

new equipment, processes, and technology to heighten their competitive positions and overall productivity, and replace jobs as those gains are realized. Structural pressures are also brought to bear by shifts in consumer buying patterns.

In 1986, the state legislature's Joint Select Committee on Unemployment Insurance and Compensation developed criteria for identifying seasonal, cyclical, and structural industries. The criteria were applied to three-digit Standard Industrial Classification code private covered employment data from the Employment Security Department. An industry was classified as seasonal if its highest to lowest monthly employment varied 18.9 percent or more from its annual average estimate using 1993 as the reference year. Cyclical was acknowledged if an industry's highest to lowest annual average employment varied 24 percent or more from the midpoint trend line from 1982-90. This formula was run in addition to the official threshold of 37.8 percent from the midpoint trend line from 1976-84. Structural industries were identified as Type 1 if employment decreased 10 percent or more from the pre-recession peak in 1990 or Type 2 if the loss was less than 10 percent from the 1990 peak.

These definitions of seasonal, cyclical, and structural industries could be called *artificial* constructs. It can be argued that all industries have some seasonal or cyclical employment pattern. That is true. But these parameters allow a basis for comparison that would otherwise become much too protracted.

Seasonal

Using a base year of 1997, some 138 out of the 381 different industries (measured at the 3-digit Standard Industrial Code level) in Washington were considered to be seasonal. These industries employed some 495,100 workers on an

Figure 8
Seasonal, Cyclical, and Structural Analysis for WorkFirst Placements
Washington State
Source: *Employment Security Department, LMEA*

	Total Employment		1988-1997 Job Growth	WorkFirst Percent	Distribution		
	1997	WorkFirst			Total Employment	WorkFirst	Job Growth
Total	2,539,474	59,728	597,935	2.4%	100.0%	100.0%	100.0%
Seasonal	495,073	18,175	159,524	3.7%	19.5%	30.4%	26.7%
Cyclical	479,935	10,455	123,155	2.2%	18.9%	17.5%	20.6%
Structural	121,980	1,837	-32,353	1.5%	4.8%	3.1%	-5.4%
Seasonal/Cyclical	806,503	22,845	223,108	2.8%	31.8%	38.2%	37.3%
Seasonal/Cyclical/Structural	878,200	23,750	200,997	2.7%	34.6%	39.8%	33.6%

annualized basis, representing 19.5 percent of all covered jobs (see *Figure 8*). In comparison, the share of WorkFirst candidates in seasonal industries was half again higher at 30.4 percent during the six-month period ending in March 1999.

On initial examination it appears that WorkFirst candidates are over-represented in seasonal jobs. It is noteworthy, however, that in the past nine years, some 26.7 percent of all net new jobs were in seasonal industries. Considering that the very character of seasonal industries is one of high numbers of job openings, a high proportion of WorkFirst placement in these sectors is not surprising.

A short list of these industries is included in *Figure 9*. This list includes the familiar seasonal industries like department stores, hotels and motels, and elementary and secondary schools. It also includes some sectors that are still familiar but not in the seasonal context—personnel supply services and private households being the best examples.

Cyclical

Also within these most recent calculations, it was determined that some 168 of the 3-digit sectors in Washington State were cyclically sensitive. These sectors employed 480,000 workers, or 18.9 percent of all covered employment. In comparison, a lesser share of WorkFirst entrants—17.5 percent—were in cyclical industries.

The good news is the lesser share of WorkFirst entrants in cyclically sensitive industries may portend a diminished risk of layoff come any future economic downturn. The bad news is, almost 21 percent of the net new jobs created in the past nine years have been in cyclically sensitive industries, so there is an element of unrealized opportunity in this current WorkFirst employment mix. The in-between news is, in light of the unusual character of this particular business cycle, it has become evermore difficult to assess the inherent riskiness of any particular industry employment.

Continued page 12

Figure 9
WorkFirst Employment in Seasonal Jobs
4th Quarter 1998 and 1st Quarter 1999
Source: Employment Security Department, LMEA

SIC	Industry	Employment		Percent
		Total	WorkFirst	
736	Personnel Supply Services	45,455	3,253	7.2%
531	Department Stores	41,689	2,448	5.9%
881	Private Households	25,361	1,958	7.7%
701	Hotels and Motels	26,649	1,442	5.4%
821	Elementary and Secondary Schools	13,323	1,161	8.7%
799	Misc. Amusement, Recreation Services	27,356	750	2.7%
017	Fruits and Tree Nuts	37,189	733	2.0%
594	Miscellaneous Shopping Goods Stores	24,002	639	2.7%
203	Preserved Fruits and Vegetables	13,701	555	4.1%
152	Residential Building Construction	21,558	465	2.2%
565	Family Clothing Stores	11,475	317	2.8%
072	Crop Services	5,765	236	4.1%
176	Roofing, Siding, and Sheet Metal Work	6,747	221	3.3%
078	Landscape and Horticultural Services	9,079	191	2.1%
793	Bowling Centers	2,766	187	6.8%
172	Painting and Paper Hanging	5,619	185	3.3%
451	Air Transportation, Scheduled	20,990	181	0.9%
013	Field Crops, Except Cash Grains	6,514	160	2.5%
162	Heavy Construction, Except Highway	13,401	158	1.2%
562	Women's Clothing Stores	3,946	151	3.8%

Labor Force Developments *continued*

What are these industries? The short list has a lot in common with the seasonal list (*see Figure 10*). On the top of the list is personnel supply services. This sector includes temporary help supply firms. Temp firms have aligned themselves in the cyclical market by focusing their services on those sectors with wide swings in employment. As a result, those industries to which temporary help services have been provided retain a smaller but stable core of employees and accommodate their seasonal or cyclical employment needs with temps. In theory, the employment patterns of the users of temporary help services should exhibit lesser seasonal or cyclical variation, while personnel supply would absorb the cyclical payroll patterns of its customers.

Structural

It may seem unusual to discuss the placement of WorkFirst entrants in structurally ma-

ture industries as these industries have lost jobs, but opportunities are available. In 1997, 4.8 percent of all covered jobs were in structurally mature industries. Many industrial sectors that were caught up in the *merger and acquisition* activity of the late 1980s and early 1990s are now considered structurally mature. These were sectors like commercial banks and savings institutions. Other industries are on this list because of changing business practices; the movement of retailing away from traditional stores to the “big box” discounters is reflected in the inclusion of women’s clothing stores, variety stores, and miscellaneous general merchandise stores (*see Figure 11*). All in all, these industries lost over 32,000 jobs in the nine-year period ending in 1997.

During the six-month period ending in March 1998, 3.1 percent of WorkFirst entrants were found in structurally mature industries. While it might seem counter-productive to place heretofore marginally attached workers (at best) into what have been classified as declining

Figure 10

WorkFirst Employment in Cyclical Jobs
4th Quarter 1998 and 1st Quarter 1999
Source: Employment Security Department, LMEA

SIC	Industry	Employment		Percent
		Total	WorkFirst	
736	Personnel Supply Services	45,455	3,253	7.2%
832	Individual and Family Services	18,565	1,029	5.5%
017	Fruits and Tree Nuts	37,189	733	2.0%
372	Aircraft and Parts	104,774	712	0.7%
152	Residential Building Construction	21,558	465	2.2%
809	Health and Allied Services, NEC	8,629	178	2.1%
839	Social Services, NEC	4,338	177	4.1%
371	Motor Vehicles and Equipment	5,381	167	3.1%
173	Electrical Work	15,517	166	1.1%
804	Offices of Other Health Practitioners	9,736	160	1.6%
162	Heavy Construction, Except Highway	13,401	158	1.2%
873	Research and Testing Services	13,685	148	1.1%
373	Ship and Boat Building and Repairing	6,881	143	2.1%
422	Public Warehousing and Storage	4,424	138	3.1%
616	Mortgage Bankers and Brokers	6,025	127	2.1%
415	School Buses	1,368	109	8.0%
205	Bakery Products	3,814	105	2.8%
539	Misc. General Merchandise Stores	2,236	101	4.5%
569	Misc. Apparel & Accessory Stores	4,402	97	2.2%
365	Household Audio and Video Equipment	1,504	96	6.4%

industries, there are still long-term opportunities in many of these sectors. Even industry sectors with no current or projected employment growth still have job openings because of the need for replacement workers. Plus, restructuring has run its course in many of these industries, and they may exhibit stable or positive job growth even though their employment may still be below their historic peak.

Two In One

A cursory examination of these tables will reveal that many industries have both seasonal and cyclical employment patterns. As a result of this overlap, the data are not additive; the total is less than the sum of the parts... asynergistic as it were. But by eliminating the double counting it can be determined that in 1997 over 806,500 jobs in Washington State were in seasonal and/or cyclical industries. That turns out to be 31.8 percent of all jobs.

When the industry attachment of WorkFirst candidates is examined, 38.2 percent were found

in seasonal and/or cyclical industries. Again, this is similar to the initial over-representation of these workers in seasonal industries alone. And, again, in the examination of job growth data, some 37.3 percent of the net new jobs created in the last nine years were in these seasonal and/or cyclical industries. The list of these industries is, as a result, quite familiar (*see Figure 12 on the next page*).

All In One

As a complement to the above analysis, it behooves us to discuss the compilation of data covering all industries with either seasonal, cyclical, or structural employment patterns. However, analysis of this nature can be problematic because of the merging of positive and negative employment trends. For instance, while growth in seasonal and/or cyclical industries totaled 223,100 jobs between 1988 and 1997, growth in seasonal and/or cyclical and/or structural industries was only 201,000 jobs. Structurally mature industries, by definition, have lost

Continued page 14

Figure 11
WorkFirst Employment in Structurally Mature Jobs
4th Quarter 1998 and 1st Quarter 1999
Source: Employment Security Department, LMEA

SIC	Industry	Employment		Percent
		Total	WorkFirst	
602	Commercial Banks	22,274	241	1.1%
603	Savings Institutions	6,858	158	2.3%
562	Women's Clothing Stores	3,946	151	3.8%
373	Ship and Boat Building and Repairing	6,881	143	2.1%
533	Variety Stores	1,374	123	9.0%
539	Misc. General Merchandise Stores	2,236	101	4.5%
241	Logging	7,618	84	1.1%
206	Sugar and Confectionery Products	611	80	13.1%
769	Miscellaneous Repair Shops	5,187	74	1.4%
525	Hardware Stores	3,114	60	1.9%
016	Vegetables and Melons	3,354	49	1.5%
251	Household Furniture	1,413	49	3.5%
655	Subdividers and Developers	2,675	49	1.8%
335	Nonferrous Rolling and Drawing	2,525	45	1.8%
091	Commercial Fishing	3,027	34	1.1%
572	Household Appliance Stores	1,304	33	2.5%
011	Cash Grains	2,920	30	1.0%
592	Liquor Stores	226	27	11.9%
631	Life Insurance	3,292	24	0.7%
025	Poultry and Eggs	809	23	2.8%

Labor Force Developments *continued*

Figure 12

WorkFirst Employment in Seasonal and/or Cyclical Jobs
4th Quarter 1998 and 1st Quarter 1999

Source: Employment Security Department, LMEA

SIC	Industry	Employment		Percent
		Total	WorkFirst	
736	Personnel Supply Services	45,455	3,253	7.2%
531	Department Stores	41,689	2,448	5.9%
881	Private Households	25,361	1,958	7.7%
701	Hotels and Motels	26,649	1,442	5.4%
821	Elementary and Secondary Schools	13,323	1,161	8.7%
832	Individual and Family Services	18,565	1,029	5.5%
799	Misc. Amusement, Recreation Services	27,356	750	2.7%
017	Fruits and Tree Nuts	37,189	733	2.0%
372	Aircraft and Parts	104,774	712	0.7%
594	Miscellaneous Shopping Goods Stores	24,002	639	2.7%
203	Preserved Fruits and Vegetables	13,701	555	4.1%
152	Residential Building Construction	21,558	465	2.2%
565	Family Clothing Stores	11,475	317	2.8%
072	Crop Services	5,765	236	4.1%
176	Roofing, Siding, and Sheet Metal Work	6,747	221	3.3%
078	Landscape and Horticultural Services	9,079	191	2.1%
793	Bowling Centers	2,766	187	6.8%
172	Painting and Paper Hanging	5,619	185	3.3%
451	Air Transportation, Scheduled	20,990	181	0.9%
809	Health and Allied Services, NEC	8,629	178	2.1%

jobs. And though it is important to know where those jobs have been lost, their inclusion in this analysis can muddy the job growth discussion.

The Beginning of the End of the Beginning

It is generally accepted among economists that, regardless of the *unprecedented* character of the current economy, business cycles are not dead. They are obviously longer, and relative to the last downturn in 1991, the inevitable recessions may be shorter and shallower. The advent of *just-in-time* business procedures has lessened the expensive, and potentially damaging, swings in inventory build-up that mark the end of a business cycle. Nonetheless, discussions of future recessions invariably use the term *when*, not *if*.

Within this economic framework a bold social experiment in self-sufficiency is occurring. That there are concerns regarding this experi-

ment is understandable. The inherent uncertainty in being a new-entrant or a re-entrant to the labor force and the natural resistance to being a 30 or 35 year old beginner makes the very idea of WorkFirst frightening to many a candidate.

But the experiment is underway, and the industry placement of former welfare recipients, for the most part, is a pretty close match of the industrial growth in the economy of the last nine years. The principal difference is the WorkFirst placement mix is a bit more weighted to seasonal industries, and a bit less weighted to cyclical industries. While that may lend itself to short-term disruptions in employment, it may also lead to long-term stability.

The great unknowns in this experiment are the prospects for occupational, industrial, and wage progression. For those entering the work force during their high school or college years, there is a great deal of exploration—job hopping—as younger workers decide what they want

to do. It is possible that the freedom to explore is conducive to these aforementioned progressions. The immediacy of need for most WorkFirst candidates, however, makes it much more difficult for them to engage in such unfettered labor market discovery. How this rootedness might play out in terms of the WorkFirst candidate's long-term labor market experience is far beyond our abilities to foretell. However, in a pioneering effort, the state of Washington has established policies that encourage WorkFirst candidates to engage in this kind of labor market exploration and discovery. It is hoped that this will help facilitate the wage and occupational progression necessary for the success of WorkFirst.

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Average Covered Wage Change and Distribution in Washington: *A Comparison of 1988, 1993 and 1998*

WAGE DEVELOPMENTS

Background

The astounding 7.8 percent increase in Washington's average covered wage in 1998 garnered a tremendous amount of attention. After all, it was one of the largest annual gains in the state's history—if not *the* largest. Not surprisingly, the posting also raised a number of questions as to the drivers behind such a significant increase.

In response to the many questions raised, the Employment Security Department has prepared this analysis of the average covered wage change and distribution trends over the past decade using 1988 and 1993 as comparisons against 1998.

The use of a standard arithmetic average to calculate average covered wages leaves the average vulnerable to skewing if extremes are present. As a result, Employment Security opted to prepare a distribution of average covered wage changes with the aim of generating a truer picture of the concentration of average covered wage changes.

Past Is Not Precedent

When analyzing average covered wage trends, it is commonly accepted that rates of change will vary from period to period based on where the economy happens to be in the business cycle. This was the case with respect to the three periods selected for this analysis.

Continued page 16

Wage Developments *continued*

The Earlier Peak

Take 1988, for example. That year, Washington's economy was nearing the peak of a national economic expansion. The state was experiencing then record-breaking orders for commercial aircraft, a rebound in its forest products industry, and the lowest unemployment rates up to that point in the decade at roughly 6 percent (just five years earlier, jobless rates had been in the double digits). The major negative in the economy was the closure of the N-reactor at Hanford. Against this backdrop, a 3.7 percent increase in the average covered wage was rather impressive.

Between 1987 and 1988 a goodly number of workers received wage gains in the 4 percent to 5.9 percent range, but that was offset by the somewhat higher number who saw some increase up to 3.9 percent (*see Figure 13*). There were a few outliers, namely non-depository institutions and home furnishing stores, but their shares of total state employment were so small as to make the impact of their gains unnoticeable. As a result, the average covered wage distribution pretty much clustered around the state average.

Sluggish

In 1993, Washington's economy was exceptionally flat despite the fact that economic recovery had taken hold nationally following the recession in 1991. Washington was not participating in

this recovery largely because its aircraft and parts sector was laying off significant numbers of workers and consequently exerting a significant drag on the rest of the state economy. Against this backdrop, the modest 0.7 percent increase in the state's average covered wage seems appropriate.

Despite the meager gain in the overall average, the distribution of wage changes reveals that more than 900,000 workers saw wage increases in the 2.0 percent to 3.9 percent range while two-thirds as many received increases up to 1.9 percent (*see Figure 14*). Since there were no outliers to speak of, why was the average covered wage change only 0.7 percent? The answer lies in the estimated 400,000 workers who were in industries that saw average covered wage declines. Many of these workers were in the high-wage, but beleaguered, aircraft and parts sector while another big sector was business services, including the high-wage software sector.

The New Standard

Cut to 1998 and Washington once again boasted a strong economy, not unlike that ten years earlier in 1988. Commercial aircraft order backlogs were at a record high, the forest products industry was more or less holding its own, at least in terms of profitability, and the state's jobless rate was the lowest in 50 years. Yet the average covered wage gain for this period was an astounding 7.8 percent. At a glance, the circumstances of 1998 do not appear dramatically different from 1988.

Figure 13

Percent Change in Average Covered Wages
Washington State, 1987-1988
Source: *Employment Security Department, LMEA*

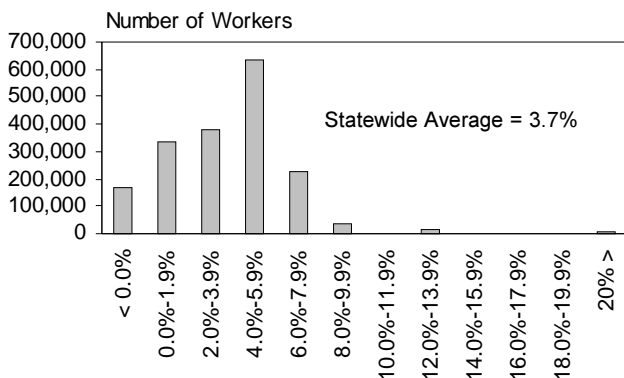
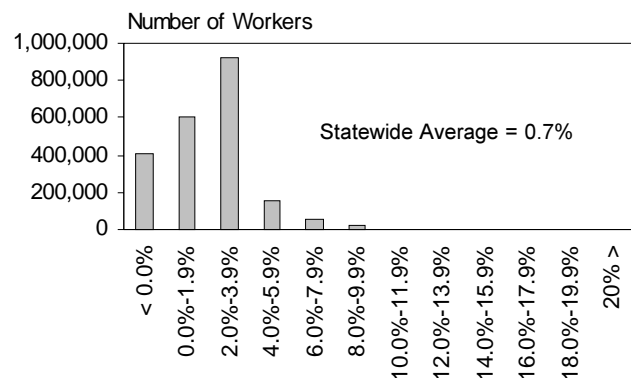


Figure 14

Percent Change in Average Covered Wages
Washington State, 1992-1993
Source: *Employment Security Department, LMEA*



The average covered wage change distribution for 1998 immediately reveals that something is quite different. For starters, only a small number of workers were concentrated around the 7.8 percent average (see Figure 15). In fact, the greatest number of workers were stratified essentially as they were in 1988—in the 4 percent to 5.9 percent range followed by the 2 percent to 3.9 percent range. Moreover, there were numerous outliers in the upper ranges. Ironically, aircraft and parts was not one. In fact, it experienced a slight wage decline between 1997 and 1998. Business services, propelled by prepackaged software, emerged as the principal catalyst with its 34 percent average covered wage increase (software alone rose 43 percent). Herein lies the major difference between today and ten years ago. Here was a sector that did not rate a mention in labor market commentaries in 1988 and scarcely a mention in 1993; today, however, it is regarded as the driving force behind Washington's economy and a key to the state's future prosperity.

Other High Tech

Also driving up the average were two other high tech dominated sectors—industrial machinery and computer equipment and instruments and related products—and notable sectors like eating and drinking establishments and finance, investment, and real estate with average covered wage gains in the 10 percent to 20 percent ranges. The exceptionally strong state economy, tight labor

markets, soaring stock market, and low interest rates are surely responsible for much of the gains in these areas.

1998 Stands Out

When the average covered wage distributions for 1988, 1993, and 1998 are overlaid the differences become evident (see Figure 16). Clearly, the average covered wage change distribution for 1998 stands apart from previous years with its significant outliers on the high end of the wage change spectrum—outliers that clearly pull the average covered wage up. However, the salient point with respect to the average covered wage distribution in 1998 is that despite the 7.8 percent average, the majority of wage changes coalesced around the 4 percent to 5.9 percent range and the 2 percent to 3.9 percent range, in that order.

The Software Effect

Given the tremendous impact that *Prepackaged Software (SIC 7372)* had on raising the state's average covered wage in 1998, it is one sector—though perhaps not the only one—whose impact requires more extensive analysis. Clearly, software's impact on society as a business and personal tool has been pervasive. The same can be said of the software industry's impact on Washington's labor market.

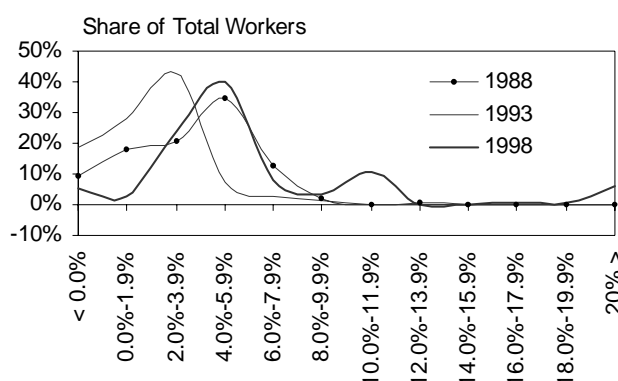
In terms of employment, prepackaged software constituted 0.2 percent, 0.5 percent, and 0.9 percent of total covered employment in 1988,

Continued page 18

Figure 15
Percent Change in Average Covered Wages
Washington State, 1997-1998
Source: Employment Security Department, LMEA



Figure 16
Distribution of Average Covered Wage Changes
Washington State, by Select Years
Source: Employment Security Department, LMEA



Wage Developments *continued*

1993, and 1998, respectively. During this period, employment gains within the sector had only modest impact on the state's total covered employment. Removing prepackaged software from the total caused no difference in the overall employment change in 1988 and negligible shifts of one-tenth of one percentage point in both 1993 and 1998 (*see Figure 17*). While the latter attest to the strong employment growth in the sector, the sector's employment growth paled next to the sheer enormity of the growth in its total covered wage base, at least in recent times.

The average covered wage for prepackaged software was up 18 percent in 1988, down 27 percent in 1993, and up 43 percent in 1998. However notable the magnitude of these changes, more significant is the degree to which the effect of the sector's total covered wage base (a principal component of the average covered wage) on the statewide average covered wage has grown over time. For example, in 1988, the prepackaged software industry's \$194 million in total covered wages was so modest that the state's average covered wage would have actually risen two-tenths of a percentage point if those wages were excluded (*see Figure 18*). By 1993, however, the tide was starting to shift. In a year where the prepackaged software industry's wages declined, the sector's more than \$1.0 billion in total wages depressed the state's average covered wage to a greater extent than it would have been the case

had the sector's wages been excluded. Five short years later in 1998, the effect of the prepackaged software industry's \$6.8 billion in wages was so dramatic that excluding it would cause the state's average covered wage gain to fall nearly three percentage points to 5.0 percent. While 5.0 percent is still impressive, it is considerably more in line with historical averages.

While the significance of prepackaged software on the state's economy is widely acknowledged, what is it that accounts for the sector's recent ability to visibly affect the state's average covered wage? The answer, it would seem, is the Microsoft Corporation. Though Microsoft is not the only player in the prepackaged software sector—there were more than 400 establishments in this sector in 1998—it is certainly the most dominant, which includes having the most generous compensation package (which includes exercised stock options) for permanent, full-time employees. As such, it stands to reason that Microsoft compensation trends should be used as a focal point for understanding wage phenomenon attributed to the prepackaged software industry.

That having been stated, while Microsoft has always had among the highest wages in the industry, the company's wages (including exercised stock options) really started to accelerate starting at the end of 1995 (*see Figure 19*). While the company's stock price appreciated steadily, it didn't really begin skyrocketing until 1997 (*see Figure 20*).

Figure 17
Changes in Covered Employment
Washington State, Select Years

Source: Employment Security Department, LMEA

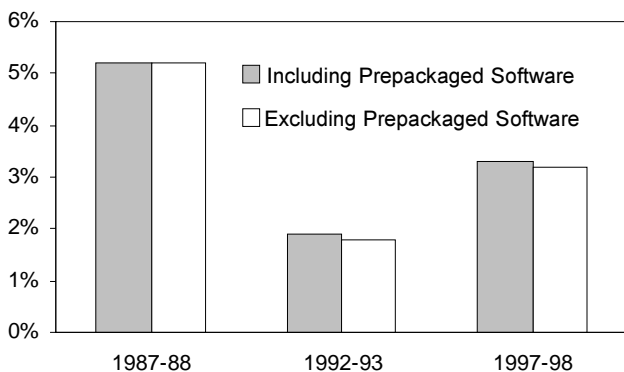


Figure 18
Changes in Average Covered Wages
Washington State, Select Years

Source: Employment Security Department, LMEA

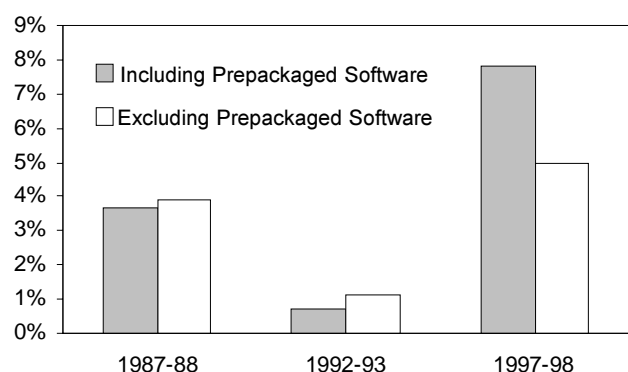
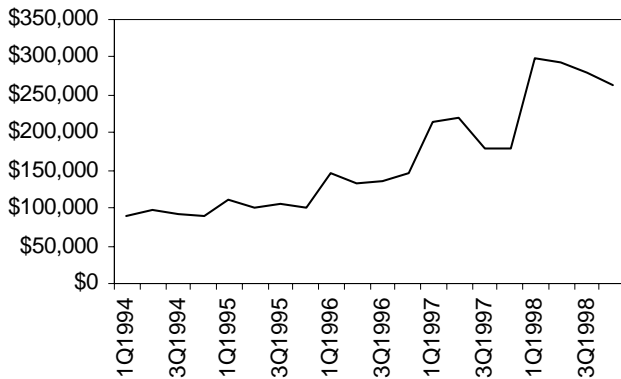


Figure 19
 Prepackaged Software Wages
 Annualized Quarterly, 1st Qtr 1994-4th Qtr 1998
 Source: Employment Security Department

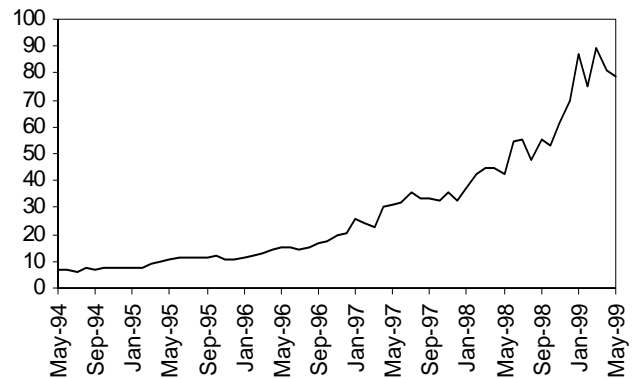


Translated, this means that Microsoft's impact on the prepackaged software sector, which in turn impacted the statewide average covered wage, is a relatively recent phenomenon as opposed to a historic constant, (which most probably believe to be the case). This would be consistent with the observed change in the impact of the prepackaged software sector on the state's average covered wage from modest in 1993 to dramatic in 1998.

Summary

- The 7.8 percent average covered wage change in 1998 was not reflective of the covered wage distribution using industry averages, which showed the majority of workers' gains to be in the 4.0 percent to 6.0 percent range.
- A comparison of the distribution of average covered wage changes in 1998 and 1988 showed similar distributions save the disproportionate number of outliers at the higher end of the wage change spectrum in 1998. These outliers clearly raised the average covered wage in 1998.
- The outliers identified in the 1998 average covered wage change distribution were tied

Figure 20
 Microsoft Stock Price (adjusted for splits)
 May 1994-May 1999
 Source: Microsoft Corporation



specifically to high tech sectors like prepackaged software, industrial machinery and computer equipment, and instruments and related products, but also were present in eating and drinking establishments, finance, investment, and real estate. An exceptionally strong state economy and tight labor markets, coupled with a soaring stock market and low interest rates, were all key drivers.

- Prepackaged software emerged as the principal outlier, so much so that excluding its wages in 1998 would cause the increase in the state's average covered wage to fall from the officially reported 7.8 percent to 5.0 percent.
- The disproportionate impact of prepackaged software on the state's average covered wage coincides with the significant rise in stock prices at Microsoft, which is a relatively recent phenomenon. Stock options are included as part of this wage base. Neither the company nor the prepackaged software sector had as significant an effect on the state's average covered wage five or ten years earlier.

■ Gary Kamimura
 Economic Analyst

Another Look at Mass Layoffs: *Dislocated Workers in Mass Layoff Data*

UNEMPLOYMENT DEVELOPMENTS

An earlier article in the *LMI Review* highlighted some characteristics of Mass Layoff Statistics (MLS) such as industries and occupations impacted during the four quarters of the study period (third quarter of 1995 through second quarter of 1996). In this article attention is focused on that portion of the mass layoff population specifically identified as dislocated workers.

Diverse Dislocation Definitions

In general, dislocated workers are identified in several ways. One definition identifies dislocated workers as unemployed workers who are unlikely to return to their former employer. In another definition, unemployed workers who return to the same employer, but receive lesser salary and/or

compensation are considered dislocated. Another definition identifies Unemployment Insurance (UI) recipients who are likely to exhaust their UI benefits as dislocated workers.

In yet another definition of dislocated workers, specific reasons for being laid off are the identifying factors. In this delineation, all those experiencing a mass layoff due to *reorganization*, *financial difficulties*, *bankruptcy*, and *contract completion* are classified as dislocated workers.

These layoff reasons are given special recognition because they usually constitute long-term layoffs. *Figures 21 and 22* identify the number of initial claims (ICs) for unemployment insurance distinguishing the layoff reasons and the number of events in each category.

Dislocated or Not

As noted in *Figure 21*, the layoff reasons are grouped into two divisions, the *dislocated worker* reasons and *other* mass layoff reasons. Less than half of the mass layoffs were due to dislocated worker reasons. Of those with dislocated workers reasons, *reorganization* had the highest frequency of occurrence and the highest percentage of all mass layoffs. Under the other mass layoff reasons, *seasonal*, was the most common reason given.

Figure 21

Total Mass Layoff Initial Claims by Reason
Washington State, 3rd Quarter 1995-2nd Quarter 1996
Source: Employment Security Department, LMEA

Layoff Reasons	Total IC's	Percent	# of Events
<i>Dislocated Worker Reasons</i>			
Reorganization	3,339	35%	17
Financial Difficulties	739	8%	5
Bankruptcy	143	1%	1
Contract Completed	1,020	11%	9
<i>Other MLS Reasons</i>			
Natural Disaster	102	1%	1
Seasonal	2,477	26%	21
Slack Work	1,028	11%	10
Vacation	492	5%	3
Plant Repair	110	1%	1
Weather Related	169	2%	1
<i>Total</i>	9,619	100%	69

Figure 22

Distribution of Mass Layoff Initial Claims by Reason
Washington State, 3rd Quarter 1995-2nd Quarter 1996
Source: Employment Security Department, LMEA

Layoff Reasons	3rd Qtr 1995	4th Qtr 1995	1st Qtr 1996	2nd Qtr 1996
<i>Dislocated Worker Reasons</i>				
Reorganization	41%	32%	34%	35%
Financial Difficulties	33%	0%	9%	0%
Bankruptcy	10%	0%	0%	0%
Contract Completed	0%	22%	13%	0%
<i>Other MLS Reasons</i>				
Natural Disaster	0%	0%	0%	4%
Seasonal	16%	25%	28%	30%
Slack Work	0%	6%	16%	18%
Vacation	0%	6%	0%	13%
Plant Repair	0%	4%	0%	0%
Weather Related	0%	6%	0%	0%
<i>Total</i>	100%	100%	100%	100%

Reorganization THE Reason

Figure 22 further distinguishes the importance of *reorganization*. This reason was given more often than any other no matter which quarter examined. A distant second was *seasonal* which appeared to have its own seasonal pattern with the third quarter of 1995 showing a dip. The other end of the scale belonged to those reasons appearing rarely such as *natural disaster*, *plant repair* and *weather related*.

Reorganization usually arises within jobs, industries, or occupations that are experiencing significant change. These changes could be related to dramatic causes such as financial difficulty, or bankruptcy. They can also be strictly a matter of rearranging the content of work and schedule. While reorganization usually means rearrangement of the workers duties, at specific times it means complete elimination of the position. Such eliminations are more often the result of mechanization, reduction in the demand for the companies' products, or even more serious than any other cause, depletion of the raw material. In Washington, cases of raw material depletion most often refer to jobs in logging and fisheries.

Possible Retraining

Whether the causes are mechanization, reduction in demand, or depletion of raw material, these usually require special attention and preparation on part of state agencies that provide support to unemployed populations. In these cases, workers may require re-training and/or extended job search assistance. Under the most favorable conditions, the retraining of an unemployed worker will be short and specific to a specialized field. These training situations have the potential to update workers in their needed skills and provide them with employment in similar fields as before their layoff.

On the other hand, when a dislocated worker is leaving a position that is in diminishing demand, the training will be more extensive and diverse. This training will prepare the worker for a totally new occupation and/or career that promises better employment opportunities in the future. Usually with these dislocations, there is a

high possibility that the individual will also exhaust their UI benefits. As noted above, this is one of the characteristics that separates dislocated workers from other unemployed workers.

Different Patterns in Different Quarters

During the study period, the variation and magnitude of the layoff reasons changed with the quarters. Figures 23 and 24 present two different time periods and the layoff reasons. While first quarter of 1996 resembled the third quarter of 1995, the second quarter of 1996 was more comparable to the fourth quarter of 1995 in magnitude and variation.

As shown in Figure 23, variations in layoff reasons were limited. While the dislocated worker layoff reasons included *reorganization*, *financial difficulties* and *bankruptcy*, the other mass layoff reason was only limited to *seasonal*. The increased variation that is noticed in the fourth quarter of 1995 and second quarter of 1996 indicate ebb and flow that distinguishes the yearly layoffs.

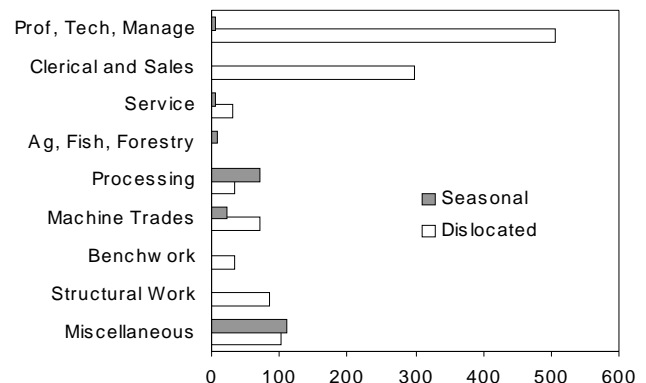
The majority of the mass layoffs in the third quarter of 1995 were due to dislocated worker reasons. While these numbers stayed high, the increase in variation of layoff reasons in the following quarter is noticeable. The fourth quarter of 1995 was significant among all the quarters. This period produced the largest number of mass layoffs with six out of ten possible layoff reasons being used.

Continued page 22

Figure 23

Mass Layoff by Occupation and Reason
Washington State, 3rd Quarter 1995

Source: Employment Security Department, LMEA



Unemployment Developments *continued*

Figure 24

Mass Layoff Initial Claims by Occupation and Reason
 Washington State, 4th Quarter 1995
 Source: Employment Security Department, LMEA

Occupational Grouping	Layoff Reasons					
	Dislocated*	Seasonal	Repair	Slack Work	Vacation	Weather
Professional, Technical, and Managerial	263	19	0	6	3	3
Clerical and Sales	95	8	3	0	4	1
Service	32	17	1	1	3	10
Agricultural, Fishery, Forestry, and Related	8	99	1	0	0	2
Processing	20	277	0	7	65	2
Machine Trades	219	22	45	7	29	10
Benchwork	43	1	4	0	3	0
Structural Work	599	19	7	53	8	64
Miscellaneous	76	146	45	45	14	27
Total	1,355	608	106	119	129	119

* Dislocated reason contains reorganization and contract completed.

Who Was Impacted by Mass Layoffs?

Further analyses identified some of the characteristics of the mass layoff populations. What is presented in the five characteristic charts, *Figures 25 through 29*, identifies some basic information about these populations. The charts are reflective of the total working population. This is especially true in relation to age, race, and handicapped category (see *Figures 25, 26, and 27*).

The gender chart distinguishes the fourth quarter of 1995 (see *Figure 28*). As it appears, there were more than twice as many male workers experiencing mass layoff compared to fe-

males. More careful examination of the data showed that this was due to the type of work impacted by mass layoffs. Specifically, this was due to types of industries normally dominated by men, such as construction and mining.

The education chart is interesting in two respects. One is the dominance of the zero to high-school (0-HS) group in every quarter (see *Figure 29*). This may be more reflective of the industries experiencing mass layoffs, which can manage with a work force educated at the high school level. On the opposite end of the scale is the most educated population. Here too, the

Figure 25

Mass Layoff Initial Claims by Age
 Washington State, 3rd Quarter 1995-2nd Quarter 1996
 Source: Employment Security Department, LMEA

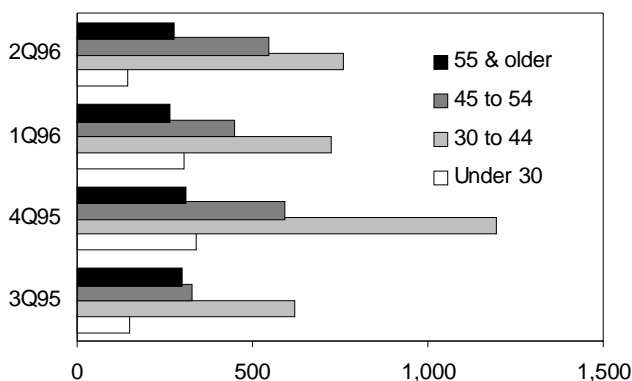


Figure 26

Mass Layoff Initial Claims by Race and Ethnicity
 Washington State, 3rd Quarter 1995-2nd Quarter 1996
 Source: Employment Security Department, LMEA

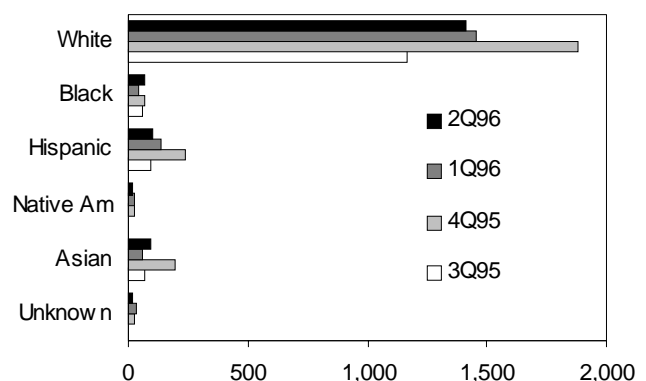


Figure 27
 Mass Layoff Initial Claims by Disability Status
 Washington State, 3rd Quarter 1995-2nd Quarter 1996
 Source: Employment Security Department, LMEA

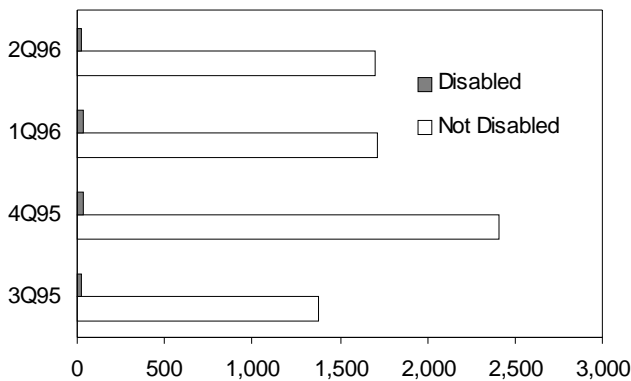
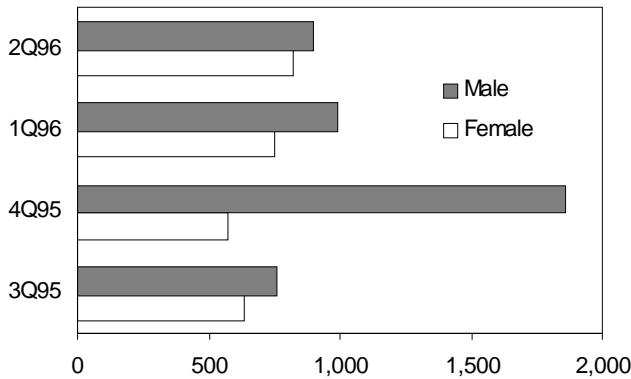
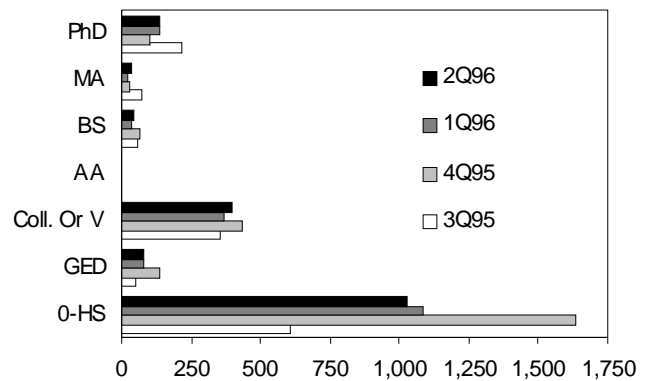


Figure 28
 Mass Layoff Initial Claims by Sex
 Washington State, 3rd Quarter 1995-2nd Quarter 1996
 Source: Employment Security Department, LMEA



disproportionately large number of Ph.D. workers in every quarter is interesting. While the cause of the first point may be the result of the involved industry's normal and regular needs, the later point could be more reflective of the state's overall work force characteristics. According to

Figure 29
 Mass Layoff Initial Claims by Educational Attainment
 Washington State, 3rd Quarter 1995-2nd Quarter 1996
 Source: Employment Security Department, LMEA



the 1998 Census Bureau, Washington State is among the top ten states with highest educational attainment. The census indicates 28.1 percent of all 25 years or older Washingtonians have graduated from college or attained higher degrees.

Future Studies

Further studies of this population are being planned and are in the process of being completed. An investigation into the impact of the services various programs provide to the mass layoff and the dislocated worker populations is currently in the planning stages. A study addressing the income levels of these workers is nearing completion; this investigation evaluates the income levels of these workers before and after experiencing a mass layoff. That finding will more directly identify the impact of mass layoffs on the individuals and on a bigger scale show the health of the state's economy.

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 Research Investigator

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