

A Quarterly Review of Washington State Labor Market Information

Third Quarter 1998

February 1999 Issue

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Washington State Employment Security Department
Carver Gayton, *Commissioner*

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****

Changes are on the Way

Commissioner
Carver Gayton

COMMENTARY

Signals of change flash throughout this issue of the *LMI Review*. From the Quarterly Analysis with a turning point on every page, to the playful opening on the Emerging Occupations story, we are reminded change is inevitable. We are introduced to new titles and categories for the jobs we do and a new survey shows how many jobs there are.

The issue is not that we are changing, but rather how much we are changing.

Employment Security is in the midst of the most significant change in the more than 60 year history of the department. We are taking claims by phone at the first Unemployment Claims TeleCenter and gearing up to implement One-Stop service delivery where employers and job seekers will get together at WorkSource locations.

While our core services remain the same, we are putting in place new and improved methods that are responsive to the dictates of economic change.

Although Washington's economy remained remarkably robust through the third quarter of 1998, several major players shifted gears. No longer are aircraft and parts leading the upward cycle.

There was a sharp pickup in nonmanufacturing. Business services rose at an astounding 12.5 percent annual clip in the third quarter. Construction broke all records and scrambled for workers.

The Office of the Forecast Council is assuming a 12,000 cut in employment in aircraft and parts this year and even more in 2000. But the industry employment base, under any scenario, will stand well above the 79,800 experienced in December 1995.

National economists expect the economy to continue its record expansion this year with no real threat of recession. Locally, Washington's labor markets entered the fall quarter with typical seasonal patterns driving both the goods-producing and the services-producing sectors of the economy. Any discussion of the economy relies on the quality of population figures to produce accurate estimates of labor force activity.

A new source of socioeconomic data are available from the Office of Financial Management. A total of 7,279 households completed the survey in the spring of 1998, a tenfold increase over the Current Population Survey. Within the households in the State Population Survey were 19,923 persons.

This social and economic information about our state should be a valuable resource for legislators, policy-makers, researchers, economists and employment specialists assisting job seekers.

Our One-Stop partners will be counting on Employment Security for this kind of information when WorkSource Centers and affiliates become operational this year.

New jobs resulting from downsizing and technological change have reduced the number of people working in some job categories and created a demand for workers with a slightly different set of skills for another category.

Who even heard of a webmaster half a dozen years ago? Today there are webmasters, web site coordinators, web site technicians, web writers, web editors—all in high demand.

The 90 staff operating our first TeleCenter are doing slightly different jobs using Interactive Voice Response System, automatic call distributors and sophisticated phone and computer systems and other new technology. They went through intensive training before the TeleCenter ever took a call from a claimant. When they did take that call, they were ready.

There is no doubt we are living through rapidly changing times. The economy, technology, our populations, the work we do are all changing. Those who keep up with the changes will succeed. Those who don't, won't. ■

Passing the Baton

Third Quarter 1998

QUARTERLY
ANALYSIS

Washington's economy remained remarkably robust through the third quarter of 1998 despite a marked slowdown in manufacturing. The state continued showing exceptionally strong job growth for the third consecutive year and near-record low unemployment. Broad-based expansion was taking place predominately in the services economy with the major drivers being health care, engineering and management services, computer data processing and software, and temporary help services. In addition, the construction industry of the state was booming thanks largely to secondary impacts generated from the huge manufacturing buildup in the central Puget Sound area in 1996-97.

Several major players, however, have shifted gears. No longer is aircraft and parts powering the upcycle. Production is moving forward at all-time highs in 1999, but the quarterly job count will likely have peaked at 113,500 in the third quarter, with the monthly peak being in June of the preceding quarter. Preliminary counts for the fourth quarter show a drop of 3,100 in what marks the beginning of a cyclical drawdown through 1999 and 2000. At the same time, slumping economies in southeast Asia and shifts in the computer parts industry generally have shaved employment in computer equipment manufacturing by 1,300 from the high of 8,500 in the first quarter of 1998. On top of that, exports of wheat, apples, and forest products were off as much as a third as the Asian crisis dragged on.

What moved to the forefront was a sharp pickup in nonmanufacturing. Business services, in particular, were leading the charge—employment rose at an astounding 12.5 percent annual clip in the third quarter. Construction broke all records and scrambled for workers. Even retail trade picked up speed with employment jumping from 2.2 percent growth in 1996-97 to a season-

ally adjusted rate of 4.7 percent annualized growth in the summer months. Statewide housing starts were up a quarter in the first half and real personal income growth continued to mount.

It is important to note that adjustments in manufacturing are coming off a very high base. Employment in Washington's basic goods-producing sector jumped 11 percent on average in 1996-97 to an all-time high of 369,400 with aircraft and parts adding 30,000 workers. The state Office of the Forecast Council is assuming a 12,000 net employment reduction in aircraft and parts over the next 12 months and further reductions in 2000. But the industry employment base, under any scenario, will still stand well above the low of 79,800 experienced in December 1995. By the same token, other manufacturing is expected to continue to ease modestly from its first quarter high but with more than compensating offset in services and trade keeping employment growing through 1999.

LABOR FORCE AND UNEMPLOYMENT

Washington's seasonally adjusted unemployment rate increased five-tenths of a percentage point in the third quarter from 4.4 percent in the second quarter. The pattern was atypical for the period owing predominantly to a combination of agricultural employment disruptions which threw the seasonal adjustment factors for a loop. The third quarter jobless rate has been below that of the second quarter in eight out of the past nine years. Unseasonably warm weather in the late summer and early fall simply delayed the state's apple harvest anywhere from a week to ten days—pushing the employment impact in September beyond the official payroll reporting period that includes the 12th of the month. As a result, employment was lower than expected and the jobless rate was higher than expected. The comparable national average registered at 4.5 percent—up one-tenth of a percentage point for the quarter.

In all likelihood, the state's seasonally adjusted quarterly unemployment rate troughed at 47-year lows in the early part of this year, hitting a low of 4.2 percent in the first quarter. The as-

sumption of slower employment growth in the months ahead logically translates into some easing in regional labor markets. And, collaterally, some help in addressing what has become a widespread labor shortage in the central Puget Sound area. Washington's quarterly jobless rate has tracked below 5 percent for 7 consecutive quarters—the longest stretch of low unemployment since the “Boeing Boom” of the mid-1960s.

The summer quarter showed unemployment rates for the state running roughly two-tenths of a percentage point higher than the year before. The suspicion, however, was that third quarter unemployment was not reflective of any labor market deterioration, but rather a one-time-only seasonal anomaly. Measurements this year are being made against a very low base and, despite some modest uptick from a year ago, the overall level of unemployment statewide in 1998 ranked as one of the lowest on record.

INDUSTRY DEVELOPMENTS

Total nonfarm wage and salary employment increased by 25,300 workers between the second and third quarters of 1998—a 4.0 percent annual clip. That was the fastest pace of job growth since the second quarter of 1997. Over-the-year job growth was 81,000, or 3.2 percent—more reflective of the slower pace of the preceding quarters.

The Tide Turns

Manufacturing payrolls were essentially flat in the summer months with gains in forest products (+200), and transportation equipment (+1,100), electronic and other electrical equipment (+200) and printing and publishing (+200) offset by losses in industrial machinery (-500), instruments (-200), food processing (-900), textiles (-300) and paper and allied products (-300).

While aircraft and parts equipment appeared to post employment gains in the third quarter, this was merely an arithmetic phenomenon. Employment actually peaked in June and tailed off modestly in July, August, and September. Even though

the quarterly average was higher in the third quarter, none of the summer months matched June's job count.

Boeing jetliner deliveries through the third quarter totaled 368 leaving 182 to be completed in the fourth quarter in order to reach the expected goal of 550. In addition, 36 completed jets, including 9 jumbo 747s and 4 other wide-bodies, were being held in storage because of cancelled orders coming out of the Asian crisis. New buyers, however, moved up the queue with final financing arrangements being completed in the fourth quarter.

Clearly, the job momentum that propelled total manufacturing payrolls in the state to all-time highs earlier in the year has weakened. A strong 18,400-worker year-to-year increase posted in the first quarter narrowed to 6,400 by the third quarter, and then dipped negative at year-end. Boeing has issued three 90-day advanced layoff notices: 528 on December 4; 1,025 on January 1; and 1,420 on January 29. On balance, this means a sharp pickup from the pattern of the past several months. In addition, Boeing jacked up its expected companywide job cutbacks over the two-and-a-half years starting in July from 28,000 to 48,000 thereby extending the drag through 2000.

Construction and Tourism Move to Seasonal Highs

Construction employment swelled by 800 workers on a seasonally adjusted basis in the third quarter to reach 140,700. Payrolls of general building contractors rose at an 8.8 percent clip, representing the bulk of the gains for the period. Changes in roads and public works, and special trades' employment were essentially flat over this interval. Construction activity was on a fast pace throughout the entire year. Housing starts began the year at a 50,000 annual rate in the first quarter and continued at a strong 46,000 rate in the second quarter as well. Mild winter weather allowed many activities to continue that would normally taper off and, as a result, employment remained at elevated levels through the first three quarters compared to a more typical year.

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Quarterly Analysis *continued*

At the same time, the major industry sectors associated with tourism and recreation in the state hit their stride. Retail trade advanced by 5,500 workers in the third quarter with eating and drinking places up 2,600. Services jobs jumped 8,500 with hotels and lodging places adding 700.

General merchandising rose 600. Health care advanced by 500 and business services ballooned by 4,600 in the quarter. Engineering and management services grew by 1,300 workers in the third quarter. The latter has been one of the stellar performers of the state's economy in recent months climbing 5,700 jobs over the year for a growth rate of 10 percent.

Over-the-Year Growth Continues Strong

Manufacturing payrolls were up 6,400 workers over the year in the third quarter with major gains in aircraft and parts (+5,200), electronics (+1,400), and fabricated metals (+600). Losses have centered in industrial machinery (-1,100), forest products (-900), and food and kindred products (-2,000). Construction added 5,100 workers and wholesale and retail trade jumped by 20,300. Services employment soared by 31,500 workers led by significant gains in business services (+11,400), health care (+6,500), and engineering and management services (+5,700). Total nonfarm wage and salary employment adjusted in collaboration with the Office of the Forecast Council was up 81,000 or 3.2 percent in the third quarter.

Services Economy Continues to Build

Meanwhile, construction and services continue buttressing the economy. Over-the-year job growth in the services-producing industries registered in the 3.7 percent range in October—up from 3.1 percent a year ago. Construction came in at 4.5 percent; wholesale and retail trade at 3.9 percent; and services at 5.3 percent. The most spectacular runup over the past 12 months has been centered in business services—specifi-

cally temporary help agencies (up 13 percent) and computer data processing and software (up 20 percent). These two sectors, more than any other, have consistently led the economy throughout the lengthy business upcycle and both are expected to continue strong into the New Year.

INDUSTRY NOTES

The Axe Begins to Fall

A majority of the 2,300 contract workers at Boeing were phased out during the third quarter of 1998. This represented part of the company's phase-out of temporary engineering workers in the commercial aircraft division. Contract workers were among the first of the 12,000 positions Boeing has announced would be cut in the commercial division. Companywide, Boeing has about 9,800 contract employees—3,000 of which work for the commercial division engineering unit. Other cost-cutting measures included a hiring freeze in the commercial division, travel restrictions, and spending cutbacks on "non-essential" items.

Boeing announced 20,000 additional jobs over the next two years bringing the total expected downsizing of the company to 48,000 by the end of 2000. Far fewer planes are scheduled to be built after 1999 largely because of the ongoing Asian crisis. The company turned out 550 planes in 1998 and is expecting to produce a record 620 in 1999. But deliveries in 2000 are predicted to drop to 490 with the jumbo 747 jetliner going from 48 to 12. The silver lining is that this pullback comes at a time when the local economy is very strong with very low unemployment.

Asian Crisis Hits Puyallup

Matsushita Semiconductor closed its Puyallup electronics chip plant on September 8 citing a lethargic Japanese economy and downturns in the computer chip market. Spokesmen for the company blamed low-priced personal computers and the lack of new innovative consumer electronic products. Approximately 350 workers were affected by the shutdown. The company agreed to

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Figure 1

Nonagricultural Wage and Salary Workers

Washington State, Seasonally Adjusted, In Thousands, Benchmarked: March 1997

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

	3rd Qtr 1998	2nd Qtr 1998	3rd Qtr 1997	Numeric Change	
				2nd Qtr 1998 to 3rd Qtr 1998	3rd Qtr 1997 to 3rd Qtr 1998
TOTAL NONAGRICULTURAL EMPLOYMENT	2,608.3	2,582.9	2,527.2	25.3	81.0
MANUFACTURING	380.4	380.6	374.0	-0.2	6.4
Durable Goods	273.6	272.7	265.3	0.9	8.3
Lumber & Wood Products	34.6	34.3	35.5	0.2	-0.9
Logging	7.3	7.1	7.7	0.2	-0.4
Sawmills & Plywood	23.6	23.5	24.1	0.1	-0.6
Furniture & Fixtures	4.6	4.6	4.1	0.0	0.5
Stone, Clay & Glass	9.6	9.6	9.6	0.0	-0.1
Primary Metals	12.3	12.2	11.7	0.0	0.6
Aluminum	7.7	7.7	7.8	0.0	0.0
Fabricated Metals	14.8	14.9	14.2	-0.1	0.6
Industrial Machinery & Equipment	25.9	26.4	27.0	-0.5	-1.1
Computer & Office Equipment	7.2	8.1	8.4	-0.8	-1.1
Electronic & Other Electrical Equipment	18.6	18.4	17.1	0.2	1.4
Transportation Equipment	129.5	128.4	123.0	1.1	6.5
Aircraft & Parts	113.5	113.0	108.3	0.5	5.2
Instruments & Related	14.7	14.9	14.4	-0.2	0.3
Miscellaneous Manufacturing	9.1	8.9	8.6	0.1	0.5
Nondurable Goods	106.8	107.9	108.7	-1.1	-1.9
Food & Kindred Products	39.3	40.2	41.3	-0.9	-2.0
Preserved Fruits & Vegetables	13.6	13.6	13.9	0.0	-0.3
Textiles, Apparel & Leather	9.6	9.9	10.0	-0.3	-0.4
Paper & Allied Products	15.9	16.2	16.2	-0.3	-0.4
Printing & Publishing	24.6	24.4	24.4	0.2	0.2
Chemicals & Allied Products	6.0	5.9	5.6	0.1	0.4
Petroleum, Coal, Plastics	11.5	11.4	11.2	0.1	0.3
MINING & QUARRYING	3.4	3.3	3.5	0.1	-0.2
CONSTRUCTION	140.7	139.8	135.6	0.8	5.1
General Building Contractors	39.9	39.1	38.2	0.8	1.7
Heavy Construction, ex. Buildings	19.0	19.0	18.6	0.0	0.3
Special Trade Contractors	81.8	81.7	78.8	0.0	3.0
TRANSPORTATION, COMMUNICATION, & UTILITIES	138.1	135.8	131.6	2.3	6.5
Transportation	92.8	90.4	87.5	2.4	5.3
Trucking & Warehousing	32.2	32.0	31.0	0.1	1.2
Water Transportation	10.0	9.5	9.2	0.5	0.8
Transportation by Air	24.8	24.0	22.8	0.8	2.0
Communications	29.5	29.6	28.5	-0.1	1.0
Electric, Gas, & Sanitary Services	15.8	15.9	15.6	0.0	0.2
WHOLESALE & RETAIL TRADE	628.3	621.6	608.1	6.8	20.3
Wholesale Trade	154.4	153.1	151.0	1.3	3.4
Retail Trade	474.0	468.5	457.1	5.5	16.9
General Merchandise	47.8	47.0	45.5	0.8	2.3
Food Stores	70.2	69.7	71.6	0.6	-1.4
Eating & Drinking	177.3	174.6	167.3	2.6	9.9
FINANCE, INSURANCE, & REAL ESTATE	135.0	133.4	128.8	1.6	6.3
Finance	58.9	58.0	55.5	0.9	3.4
Insurance & Real Estate	76.1	75.4	73.2	0.7	2.9
SERVICES	713.2	704.7	681.8	8.5	31.5
Hotels & Lodging	29.1	28.4	28.4	0.7	0.8
Personal Services	22.3	22.5	22.3	-0.2	0.0
Business Services	157.2	152.6	145.8	4.6	11.4
Health Services	184.9	184.4	178.4	0.5	6.5
Educational Services	34.5	34.5	33.2	0.0	1.2
Social Services	59.8	59.4	57.7	0.4	2.0
Engineering & Management Services	63.1	61.8	57.4	1.3	5.7
GOVERNMENT	469.1	463.6	463.9	5.5	5.2
Federal	67.2	66.9	68.1	0.3	-0.9
State	134.1	134.0	133.7	0.1	0.4
State Education	71.0	71.6	72.2	-0.5	-1.2
Local	267.8	262.7	262.2	5.0	5.6
Local Education	145.1	139.5	140.5	5.6	4.7
Workers in Labor-Management Disputes	0.0	0.0	1.2	0.0	-1.2

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

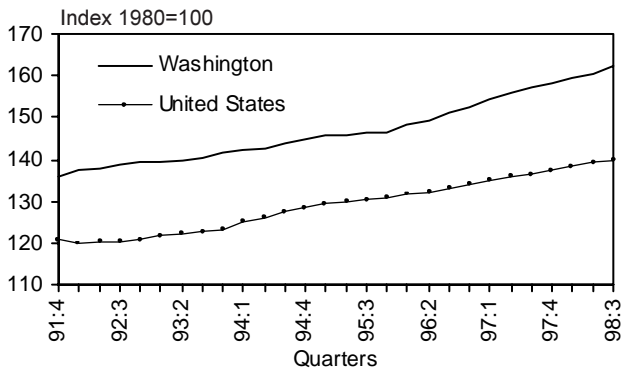


Figure 5
New Housing Units Authorized
Washington State, Seasonally Adjusted
Source: U.S. Department of Commerce

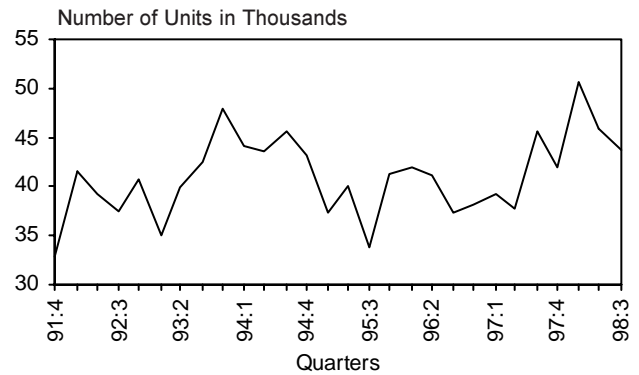


Figure 3
Manufacturing & Nonmanufacturing Employment Change
Washington State, Seasonally Adjusted
Source: Employment Security Department

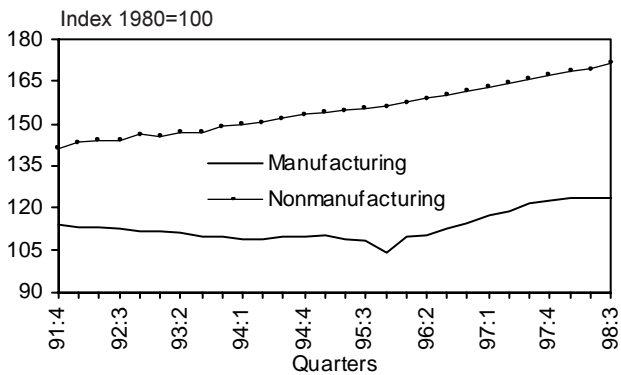


Figure 6
Consumer Price Index
All Urban Customers
Source: Bureau of Labor Statistics

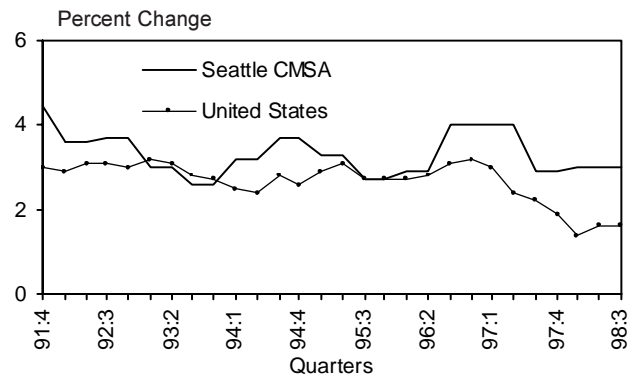
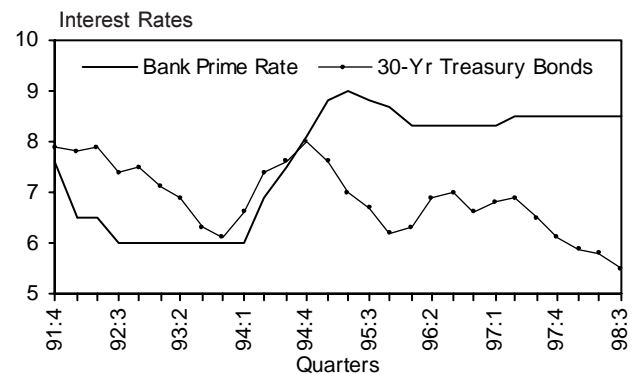


Figure 4
Unemployment Rates
Washington State & Nation, Seasonally Adjusted
Source: Employment Security Dept., U.S. Dept. of Labor



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



pay for 60 days of non-work in lieu of the 60-day notice required by federal law. And as a result, the current employment statistics published monthly by the Employment Security Department will carry the workers as employed through December 5 even though operations have officially ceased.

Others OK

The remaining computer chip manufacturers in Washington's repertoire appeared to be holding up better than average. None of the remaining four presently on the scene are heavily dependent on the especially weak market for DRAM memory chips—which was Matsushita's downfall—according to a recent article in the *Puget Sound Business Journal*. And things are looking up. A new report by the national Semiconductor Industry Association calls for 9 percent growth next year followed by double-digit gains in the following two years. Signs of uptick are beginning to appear although the industry generally is still weak.

State Exports Feel the Pinch

Washington exports of lumber, wheat, and apples are off sharply this year as a result of the Asian currency devaluation. Pacific Northwest wheat shipments were down 12 percent cumulative through July with export prices off better than a third. Roughly 90 percent of the region's wheat is typically exported to Asia. The fallout in that market is causing one of the biggest stockpiles of wheat regionally in history—340 million bushels. Apple exports are similarly impacted—down 33 percent from a year ago through August. Shipments to Thailand, Malaysia, China, and Indonesia are off anywhere from 50 to 85 percent. Growers recently levied a 15 cent-a-box advertising levy on themselves in an effort to boost U.S. consumption as an offset.

NATIONAL INDICATORS

Manufacturing Slowdown Continues

According to the National Association of Purchasing Management, manufacturing activity nationally slowed in September for the fourth consecutive month. The monthly index of business activity held steady at 49.4 with a reading below 50 considered an indicator of contraction. The Asian financial crisis, which began over a year ago, is viewed as the culprit: approximately a quarter of all U.S. goods production is exported. Pricing trends reinforced the reading with the "prices paid" component of the index falling to 34.4 in September—the lowest since 1949. On the plus side, the U.S. is experiencing a flood of foreign capital from Asia which is helping drive down domestic interest rates to the lowest levels in 27 years.

Three Strikes and You're Safe?!

In an effort to keep the economy rolling and skirt any likely financial disruptions, the Federal Reserve moved decisively in mid-November to cut short-term interest rates for the third time in seven weeks. The quarter-point reduction in the federal funds rate followed two similar quarter-point cuts bringing rates to the lowest in four years. This rapid succession of cuts represent a remarkable reversal on the part of the Fed which up until July seemed more likely to raise rates in an effort to stave off inflation. But prospects of slower economic growth and worries of a possible credit crunch have now moved to center stage.

Overall Economy Remains Solid

Despite a slowing manufacturing presence, the overall U.S. economy continues to build at a healthy clip. Job growth slowed in the third quarter to a 2.0 percent annual pace following the 2.3 percent rate in the second quarter and 2.8 percent growth in the first. Unemployment has held at a very low 4.3-to-4.6 percent range for the first three quarters of 1998. Consumer spending nationally soared. Construction—both housing

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Quarterly Analysis *continued*

and nonresidential building—boomed thanks to a combination of a rapidly growing economy and historically low interest rates. Consumer confidence took a dip in September—responding in all likelihood to tumultuous financial markets abroad and unsettling political developments in the U.S. But the fundamentals of the economy remained strong.

Third Quarter GDP Estimates Boosted Upward

Growth of third quarter real Gross Domestic Product—the inflation-adjusted output of all goods and services produced in the U.S. economy—was revised upward from 3.3 percent to 3.9 percent. The pace reflected a sharp pickup from the second quarter's 1.8 percent reading and forestalled any talk of imminent recession. Strong consumer spending but some easing in capital goods outlays was reflected in the numbers. Moreover, the pattern continued into the fourth quarter. Orders for new durable goods fell in October after adjusting for inflation while, at the same time, the Conference Board's index of consumer confidence rallied sharply in November after four months of steady decline.

It's Difficult to be Dismal

Whatever goes up must come down. Well, that is the theory anyway. Most of the time economists use the past as a gauge of the future. Unfortunately, the past has proven to be a poor standard for measuring or predicting what will occur in *this* particular business cycle. One gets the feeling that most economists are now operating on the "sooner or later I'll be right" principal—not unlike predicting a sunny day in Seattle. The underlying theme of most forecasts is that the economy has expanded at an unsustainable rate and must slow at some point; predicting that point has left many in the profession flummoxed.

That having been said, economists expect the U.S. economy to continue its record expansion in 1999 with no real threat of recession. According

to *Standard & Poor's DRI Review*, Real GDP is forecast to rise 2.7 percent in 1999 compared to 3.9 percent in 1997 and 3.8 percent in 1998. The inflation assumptions are for a very modest pickup to 2.2 percent in 1999 from 1.6 percent in 1998. Further cuts on the part of the Federal Reserve are expected with the fed funds rate dropping anywhere from a half to a full percentage point by mid-1999. Moreover, a squeeze in corporate profits is looked to curb the growth of stock prices going into the year.

Locally, Washington's labor markets entered the fall quarter with fairly typical seasonal patterns driving both the goods-producing and service-producing sectors of the economy. Construction in the central Puget Sound area was booming. Capital goods production in the state charged ahead on the strength of double-digit growth in national producer-durable expenditures. Strong domestic demand offset much of the shortfall in Asian exports in many key industries. Unemployment was historically low. And despite mounting economic and political concerns and recent volatility in the stock market, consumers generally remain upbeat generating strong markets for housing and other big-ticket items.

■ *Dennis Fusco*
Chief Economist

The New State Population Survey: *A Labor Market Profile*

FEATURE ARTICLE

A new source of socioeconomic data has recently become available in Washington State, the Washington State Population Survey (SPS). If that sounds familiar, that is the intent. This survey was designed around the nationwide Current Population Survey (CPS), administered by the U.S. Department of Commerce, Bureau of the Census for the Department of Labor, Bureau of Labor Statistics.

Enhancement

A common criticism of all *current* socioeconomic data is that it is never quite specific enough, either in data specificity, or in the geographic areas covered. And when the information is of appropriate detail, it tends not to be current; Census information, for instance, takes several years to compile and distribute.

The CPS is the most thorough regular survey conducted at the national level. That both the Bureau of the Census and the Bureau of Labor Statistics use this instrument is a solid testament to its integrity. But, as with much that is administered at the national level, the product does have its shortcomings at the state and local level. While the CPS surveys 50,000 households monthly nationwide, that does not translate to a large number at the state level—roughly 700 for Washington State. As a result, the degree of detail is quite general, and the range of error can be rather substantial. Much of the data are only reliable at the annual level.

Because of these shortcomings, it was felt that a periodic state-sponsored survey would provide information to fill in the gaps, as it were.

The SPS was designed by the State Office of Financial Management with consultation from a legislative staff advisory group and an extended SPS Network that consisted of more than 80 individuals from research organizations, state agencies, local governments, and higher education institutions. The survey was administered by the Washington State University Social and Economic Sciences Research Center (SESRC).

Frequency

For any survey to be useful, it needs to have continuity. This survey is expected to be held every other year, and results will be available for each 90-day legislative session.

Results

A total of 7,279 households completed the telephone interview in the spring of 1998. This was a ten-fold increase in the size of the CPS. Within those households were 19,923 persons. The results of this survey need to be balanced against the information that is already available. Because it is a survey, and not a universal tally like the census, it does have a range of error, and should be considered in that context. Even though this survey occurred from March through May of 1998, the great majority of responses were in the first month. As a result, these data should still be considered monthly rather than quarterly.

The Employment Security Department was particularly interested in acquiring new SPS demographic data as it pertains to the labor force. Even when annualized, the CPS-based data have an uncomfortable range of error for racial categories. As a result, race and ethnic labor force counts as published by the Employment Security Department have been alternative estimates based on population counts from the Office of Financial Management and census data—a census share methodology. Any improvement in this realm would be seen as a major plus.

The Qualifier

First and foremost, it must be emphasized that these data cannot replicate the detail of the CPS data at the national level. In order to do

Continued page 10

Feature Article *continued*

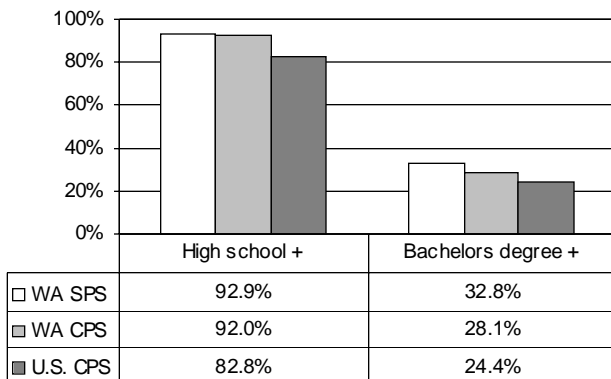
that, tens of thousands of households would have to be surveyed statewide. Accuracy and degree of detail in the CPS come from the absolute number of households surveyed (50,000) and their relationship with the universe of total households in the United States. So while the methods are similar, the SPS results are of a more general level of detail.

The following are select characteristics that best illustrate the economic profile of Washington State. Several of these variables will be compared with those from the national Current Population Survey (CPS). These are but a handful of the myriad variables captured in the SPS. Many other variables capture social and demographic characteristics that will be helpful for researchers and policy makers.

Educational Attainment

In general educational attainment is a good indicator of a region's economic potential. That being said, Washington State has a great deal of potential. According to the SPS, almost 93 percent of Washington's 25 and older population graduated from high school (see Figure 8). Compare that to the national average of less than 83 percent. In addition, almost one-third of the state's 25 and older population graduated from a four-year college. The national average for college graduation was less than one in four.

Figure 8
Educational Attainment of Persons 25 Years Old and Over U.S. and Washington State, March 1998
Source: SPS and CPS



In these measures of educational attainment, the SPS figures were higher than the State CPS counts. The small size of the CPS sample in Washington has historically resulted in a relatively high standard error—only six states in the nation are higher. Non-response bias in the SPS is also pretty significant on certain sensitive questions. That may also be what is in evidence here.

Labor Force by Race

In the past, labor force detail on race had to be imputed by Labor Market and Economic Analysis (LMEA) via population estimates from the Office of Financial Management (OFM). With the SPS, labor force activity by race is readily available. The good news is that the earlier estimates were very similar to the SPS results.

In the last *Affirmative Action Information* report published by LMEA, the race and ethnic counts were estimated for 1996 (see Figure 9). In those figures the distribution of labor force by race and ethnic origin were so close to the March 1998 SPS figures that the differences could simply be the result of the time differential (see Figure 10). The principal difference is the growing share of Asian and Pacific Islander, and Hispanic workers. But this is not unusual considering that Asians and Hispanics have captured an increasing overall population share in this two year span.

Figure 9
Washington State Labor Force Characteristics Distribution by Race and Hispanic Origin: 1996
Source: Employment Security Department, LMEA

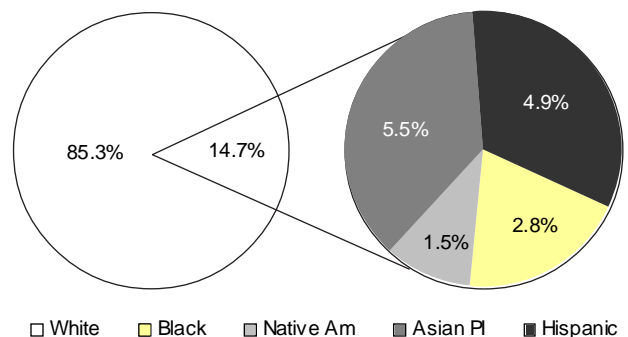
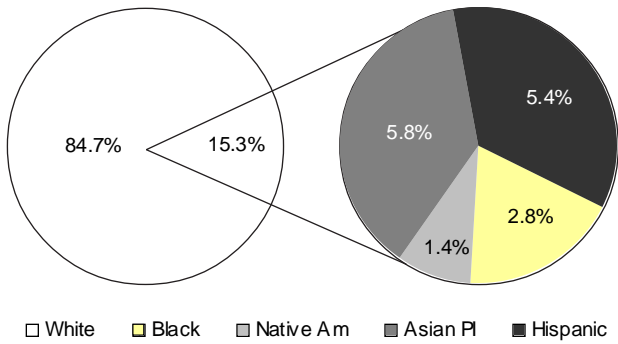


Figure 10
 Washington State Labor Force Characteristics
Distribution by Race and Hispanic Origin
 Source: March 1998 State Population Survey

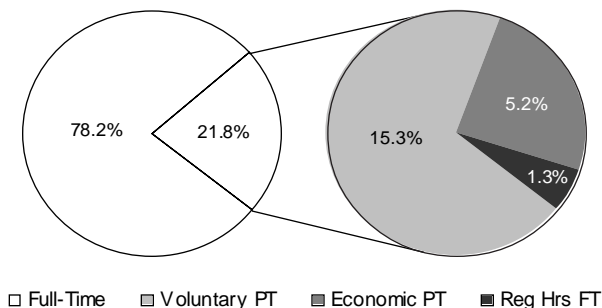


Full-Time Part-Time

It has long been known that high proportions of Washington workers have been employed on part-time schedules. SPS data provide further confirmation. According to the SPS some 594,000 Washington workers—almost 22 percent of all workers—worked less than 35 hours per week (see Figure 11). This compares favorably to the CPS figures for 1996 where 21.2 percent of all workers worked less than 35 hours per week in Washington.

SPS figures also differentiate between voluntary and involuntary part-time status. The great majority of part-time workers are voluntary—some 70 percent so indicated. About one in four part-time workers would rather work full time. Then there are those who regularly work full-time hours, but for a variety of reasons, worked part-time hours during the survey period; they represented about 6 percent of all part-time workers.

Figure 11
 Washington State Labor Force Characteristics
Employed Workers by Full-Time/Part-Time Status
 Source: March 1998 State Population Survey



Regional Differences?

In a rather unusual turn, part-time status shows a rather rural aspect in Washington State. Even in what are considered the agricultural metropolitan areas—the Tri-Cities and Yakima—part-time workers constitute the smallest share of the labor force compared to any other region in the state (see Figure 12). The region with the highest share of part-time workers was the Olympic Peninsula and Southwest.

Tired of Working

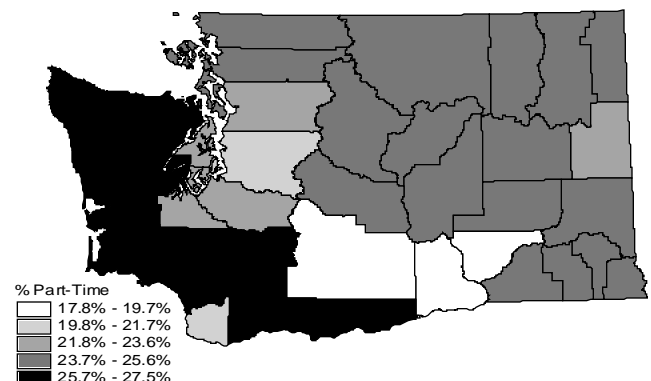
There were a number of reasons why workers preferred part-time employment. Almost 30 percent of those who preferred a part-time schedule did so because they were in school or a training program i.e., they were using part-time employment as a means to acquire additional skills (see Figure 13 on the next page). Another 22 percent felt that part-time work enabled them to care for their own children. Quite a large percentage of part-time workers—almost 13 percent—were already retired and didn't want to breach their social security limit. Over 11 percent said quite simply that they needed no full-time work and they liked the part-time schedule.

Temporary

The use of temporary workers is a hot-button issue in today's labor markets. The SPS queried respondents as to whether their job was temporary. As a result, it is estimated that

Continued page 12

Figure 12
 Share of Part-Time Workers
 By Regions
 Source: March 1998 State Population Survey



Feature Article *continued*

Figure 13

Washington State Labor Force Characteristics
Main Reason for Not Wanting to Work Full Time
 Source: *March 1998 State Population Survey*

	Number	Percent
In School/Training	122,651	29.7%
Care Own Children	90,034	21.8%
Retired/SS Limit	53,353	12.9%
Need No FT/Like PT	46,078	11.2%
Other Family or Pers Obl	38,435	9.3%
Other	29,655	7.2%
Health/Medical Cond	15,821	3.8%
Tired of Working	7,855	1.9%
Have \$ not to FT	3,803	0.9%
Consider Job FT	3,679	0.9%
Regulations	1,555	0.4%

460,000 workers in Washington considered their job temporary—almost 17 percent of all workers. But this count goes far beyond the formal use of temporary workers; less than one in eight of those who considered their position temporary were actually hired as a temporary worker, through a temporary agency, or on contract (*see Figure 14*). As a matter of fact, over one-quarter of those who classified their jobs as temporary did so because they did not

Figure 14

Washington State Labor Force Characteristics
Reasons Workers Consider Their Job Temporary
 Source: *March 1998 State Population Survey*

	Number	Percent
Not a Career Job	118,037	25.7%
Other	80,821	17.6%
No Plan to Keep Job	59,435	12.9%
Student Work & Pay for School	49,789	10.8%
Hired as Temp	35,298	7.7%
Seasonal Job	26,389	5.7%
Job Insecure	20,169	4.4%
Plan to go Back to School	20,316	4.4%
Contract Job	9,856	2.1%
Advanced Age	8,541	1.9%
Moving/Relocating	8,576	1.9%
Hired by Temp Agency	7,917	1.7%
Job Not Interesting	4,442	1.0%
Pay Too Low	3,962	0.9%
Seeking Better Job	4,146	0.9%
Planning Own Business	2,306	0.5%

regard their current job as a “career” job. Almost 13 percent simply said they didn’t plan to keep their current job. Another 11 percent were students working their way through school.

Metaphysically Speaking, Everything is Temporary

John Maynard Keynes once said, “In the long run, we’re all dead.” This attitude is evident for a small share of workers who regarded their jobs as temporary. A little less than 2 percent of those considering their job temporary did so because of their own advanced age.

Self Employed

Thanks to the SPS, we are able to better understand the characteristics of the self-employed. One particular generalization can be gleaned from these data: it is easier to be self-employed in construction and services than in manufacturing and transportation (*see Figure 15*). They appear to be rather ubiquitous in regards to industry association but with higher concentrations in the service producing sectors. Within the level of industry detail in this survey, some representation of self-employment was missing from only one industry, that being metal manufacturing.

It’s a Services Thing

There were some obvious industry modalities when examining the self-employed data. The single greatest concentration of the self-employed was in the construction and mining division. A bit less than 8 percent of private workers were engaged in construction and mining but nearly 16 percent of the self-employed were so engaged. Other industries that had disproportionate concentrations of self-employed workers were agriculture forestry and fishing, real estate, personal services, other business services, amusement and recreation services, legal services, educational services, social services, engineering services, and other services.

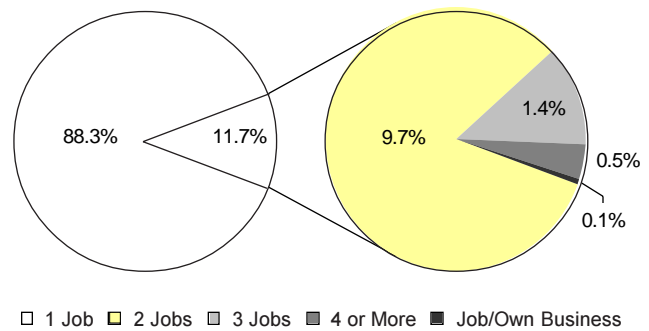
Figure 15
 Distribution of Self-Employed by Industry
 and Major Sector
 Source: March 1998 State Population Survey

	Self Employed	Private
Ag, Forestry, Fishing	3.50%	1.88%
Lumber & Wood	2.16%	2.80%
Metals	0.00%	1.29%
Ind Machinery	0.05%	1.36%
Electronic	0.06%	0.71%
Aircraft & Parts	0.33%	7.46%
Other Transp	2.15%	1.42%
Food Products	0.46%	1.80%
Paper Products	1.23%	1.90%
Printing & Publishing	0.11%	0.84%
Other Mfg	0.64%	2.05%
Construction & Mining	15.62%	7.69%
Transportation	2.04%	4.78%
Communication	0.42%	2.21%
Utilities	0.18%	0.68%
Wholesale Trade	3.88%	4.18%
Gen Merchandising	0.28%	0.68%
Food Stores	0.32%	3.08%
Apparel	1.25%	0.76%
Eating & Drinking	3.09%	7.85%
Other Retail	4.81%	5.55%
Finance	2.30%	3.84%
Insurance	1.03%	1.95%
Real Estate	6.01%	1.86%
Hotels & Lodging	1.13%	1.26%
Personal Services	4.94%	1.30%
Comp Data Software	1.20%	4.53%
Other Business Svcs	5.03%	1.78%
Amusement & Rec	2.35%	1.53%
Health Care	6.95%	9.89%
Legal Services	3.33%	1.00%
Educational Services	3.47%	1.43%
Social Services	7.83%	1.42%
Engineering Services	4.27%	3.32%
Other Services	7.59%	3.93%

Beyond Moonlighting

The great majority of workers hold just one job. But a significant number and share of the working population hold two or more jobs. By SPS counts, almost 12 percent of all workers held two or more jobs (see Figure 16). Most multiple job-holders work at two jobs, but 1.4 percent of all workers hold three jobs, 0.5 percent hold four jobs or more, and 0.1 percent have a job and own a business.

Figure 16
 Multiple Job-Holding
 Washington State
 Source: March 1998 State Population Survey



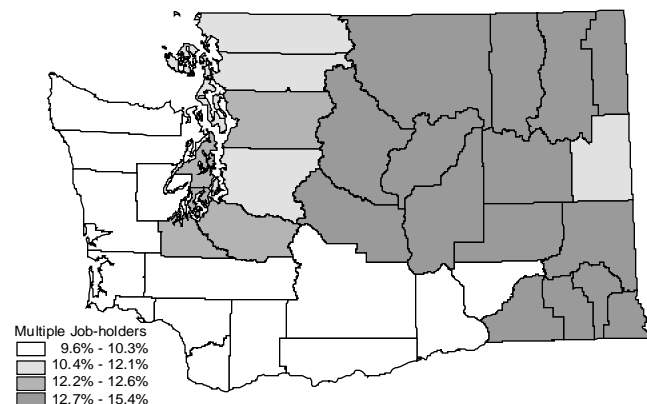
Significant regional differences are evident in the SPS results (see Figure 17). The areas with the lowest rate of multiple job holding are the smaller metropolitan areas—Tri-Cities, Yakima, and Vancouver (though Vancouver is contiguous to the much larger Portland area). The region with the highest rate of multiple job holding covers the non-metropolitan labor markets of Eastern Washington, with a rate of over 15 percent. The dominance of agriculture, food processing, and distribution activities in the Eastern Washington region drives this multiple job-holding characteristic.

Benefits

While there tends to be a good variety of wage information, there has been little reliable information on benefits at the state or regional

Continued page 14

Figure 17
 Multiple Job-Holding by Region
 Washington State
 Source: March 1998 State Population Survey



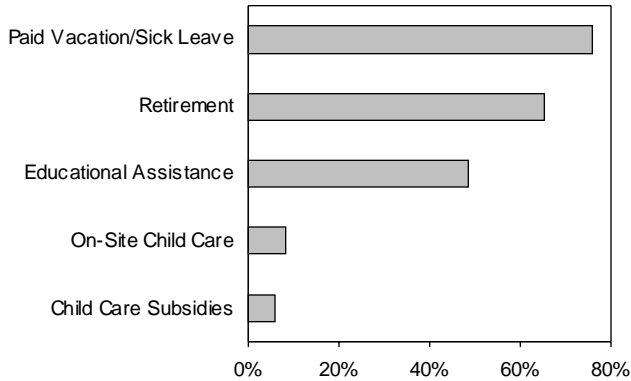
Feature Article *continued*

Figure 18

Share of Workers Receiving Benefits

Washington State

Source: March 1998 State Population Survey



level. The SPS captured this very information. The responses were principally “yes or no,” so there is no way to compare the quality of those benefits. For instance, while over three out of four workers receive paid vacation and/or sick leave (see Figure 18) it is not known how much vacation or sick leave is accrued per year. Not quite two-thirds of Washington workers receive retirement benefits. On the low end of the benefit menu is child care: only about one in twelve workers receives on-site child care, and a little over one in twenty receive child-care subsidies.

Benefits by Industry

Compensation is a good indicator of job desirability, and a significant component of that are benefits. There are some *standout* industries in terms of benefits, both on the high and low ends of the range. On the high end of the benefits range is aircraft and parts, which ranked first in educational assistance, on-site child care, child-care subsidies, paid vacation and sick leave, and ranked second in retirement (see Figure 19). On the low end is apparel, ranking last in educational assistance and on-site child care, in the middle of the pack for child-care subsidies, second to last for paid vacation and sick leave, and in the bottom third for retirement.

Some industries rank low in the provision of benefits for reasons other than outright *niggardliness*. Industries like construction and real estate use a high proportion of self-employed workers or independent contractors. As such, many of these workers establish their own retirement plans and forego paid vacations etc.

Benefits by Occupation

There are a number of surprises when benefits by occupation are examined. Contrary to the now popular cynical version of the golden rule—those with the gold make the rules—benefits received by those in managerial and administrative positions is only about average (see Figure 20 on page 16). On the top of the benefits list are those in plant and systems occupations, engineers, and inspectors; all are likely aircraft industry related.

On the bottom of the benefits by occupation list are personal services, agricultural, construction, and timber occupations. It is probably no surprise that on-site child-care benefits are not available to timber workers. What is unusual, however, is that timber workers have the lowest level of educational assistance benefits; they were the only occupational category whose education benefit ratio was in the single digits.

Home Computer Use

With the cost of computers on a continuous downward path, more and more computers have been purchased for home use. Up until now, only national data have been available. Based on these national data, it was estimated that less than one in four households had computers in 1993. The SPS estimated that well over half of all households in Washington State had computers in the spring of 1998 (see Figure 21 on page 17). Even in the most rural regions of the state, home computer use is at remarkably high levels. Well over 40 percent of households in the Olympic Peninsula and coastal counties had home computers. The region with the highest rate of home computer use was King County with 63 percent.

Continued page 17

Figure 19
 Share of Workers Receiving Benefits by Industry
 Washington State
 Source: March 1998 State Population Survey

	Educational Assistance	On Site Child Care	Child-Care Subsidies	Pd Vacation Sick Leave	Retirement
Utilities	68.9%	8.3%	9.6%	90.8%	95.2%
Aircraft & Parts	90.4%	65.1%	31.2%	99.6%	95.1%
Metals	44.5%	3.1%	6.6%	91.7%	95.0%
Finance	71.9%	0.1%	12.3%	85.8%	88.7%
Insurance	81.5%	1.5%	16.3%	95.2%	87.8%
Electronic	79.4%	13.6%	23.8%	94.9%	85.9%
Educational Services	50.2%	7.9%	5.0%	78.2%	80.1%
General Merchandise	55.9%	0.0%	13.1%	75.0%	79.3%
Food Products	35.7%	0.0%	0.0%	83.9%	76.4%
Computer Data Software	65.6%	2.3%	13.5%	88.4%	76.0%
Paper Products	57.4%	4.1%	0.0%	77.5%	74.4%
Communication	80.0%	1.3%	7.5%	87.1%	74.2%
Food Stores	29.6%	1.0%	0.8%	85.2%	71.7%
Transportation	43.5%	5.0%	5.5%	86.4%	71.2%
Health Care	62.8%	14.3%	6.2%	83.1%	71.1%
Printing & Publishing	31.7%	4.1%	1.8%	92.2%	69.4%
Industrial Machinery	63.6%	1.1%	15.0%	85.0%	67.8%
Wholesale	36.1%	5.7%	8.6%	82.1%	65.6%
Engineering Services	56.3%	6.2%	5.1%	76.5%	63.4%
Total	46.3%	8.3%	5.7%	73.6%	62.6%
Other Manufacturing	45.7%	1.4%	0.0%	87.2%	62.3%
Other Retail	30.5%	0.7%	0.4%	76.4%	55.9%
Construction & Mining	30.2%	1.6%	0.9%	48.7%	52.0%
Legal Services	33.3%	0.0%	1.6%	74.6%	50.0%
Lumber & Wood	31.8%	2.7%	0.8%	71.8%	49.1%
Other Business Services	23.1%	2.9%	0.2%	56.4%	47.1%
Amusement & Recreation	45.3%	8.9%	2.3%	71.1%	45.7%
Apparel	2.3%	0.0%	3.1%	42.0%	42.0%
Other Services	34.7%	3.6%	1.8%	65.9%	41.5%
Social Services	47.5%	20.9%	2.3%	53.6%	40.7%
Agriculture, Forestry, Fishing	23.0%	2.6%	3.4%	53.5%	39.1%
Other Transportation Equipment	36.2%	13.9%	8.3%	66.5%	38.6%
Eating Places	13.7%	2.7%	4.7%	54.1%	31.8%
Real Estate	23.7%	0.7%	2.1%	45.5%	30.4%
Personal Services	18.7%	0.0%	0.0%	41.5%	30.2%
Hotel & Lodging	14.8%	0.0%	1.2%	76.5%	29.9%

Feature Article *continued*

Figure 20

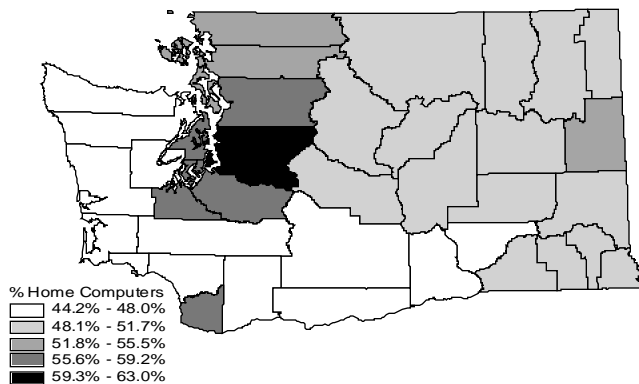
Share of Workers Receiving Benefits by Occupation

Washington State

Source: March 1998 State Population Survey

	Educational Assistance	On Site Child Care	Child-Care Subsidies	Pd Vacation Sick Leave	Retirement
Managerial & Administrative	52.6%	6.0%	6.4%	77.0%	63.8%
Management Support	59.1%	13.8%	10.1%	86.3%	74.8%
Engineer	79.2%	21.0%	13.6%	93.8%	86.6%
Natural Scientists	66.0%	3.2%	3.2%	93.3%	78.1%
Computer Occupations	73.6%	10.8%	10.0%	92.4%	80.0%
Social Scientists	59.8%	15.8%	2.1%	69.9%	64.5%
Law Occupations	55.6%	2.2%	5.3%	81.9%	72.0%
Teachers/Librarians	51.1%	10.5%	3.8%	75.5%	74.0%
Health Practitioners	63.9%	13.2%	6.1%	86.4%	73.8%
Writers, etc.	36.6%	4.7%	0.0%	61.3%	46.3%
Other Professional	72.0%	5.7%	7.0%	78.3%	78.9%
Sales	33.7%	2.0%	5.0%	69.8%	56.7%
Clerical	51.8%	6.9%	6.3%	80.4%	66.8%
Services Supervisor	43.3%	9.4%	4.1%	83.3%	71.6%
Protective Services	76.4%	6.0%	4.8%	85.6%	84.8%
Food Preparation & Service	13.4%	1.3%	1.3%	60.7%	39.8%
Health Service	55.8%	6.2%	11.1%	71.4%	50.3%
Cleaning	33.2%	8.8%	5.7%	52.3%	39.3%
Personal Service	11.0%	6.5%	0.5%	40.1%	25.2%
Other Service	32.7%	1.0%	0.7%	62.9%	39.8%
Agriculture, Forestry, Fishing Supervisor	24.0%	15.1%	0.4%	55.7%	40.7%
Timber Worker	5.9%	0.0%	0.0%	55.8%	48.2%
Other Agriculture, Forestry, Fishing Services	17.6%	2.8%	3.8%	35.6%	29.1%
Production Craft Maintenance Supervisor	60.0%	6.3%	1.8%	84.7%	74.9%
Inspector	58.1%	13.8%	28.7%	97.1%	77.2%
Mechanic	47.5%	9.4%	3.3%	81.7%	64.1%
Construction	20.3%	3.7%	1.2%	38.4%	44.0%
Precision Production	48.2%	0.0%	0.0%	84.8%	45.8%
Machine Setters	49.1%	17.8%	8.6%	92.6%	87.9%
Hand Working	57.5%	26.3%	14.5%	86.4%	77.5%
Plant & System	80.4%	38.5%	0.4%	100.0%	88.9%
Transportation	27.5%	4.5%	2.9%	77.0%	73.9%
Helper, Laborer	38.4%	7.5%	5.5%	71.1%	59.6%
Total	48.7%	8.2%	5.6%	75.9%	65.0%

Figure 21
 Share of Households with a Personal Computer
 Washington State
 Source: March 1998 State Population Survey



A Veritable Cornucopia

These are just a few of the variables the SPS surveyed. While these variables concentrated on the labor market and economic data, even that category has many more than this discussion could broach simply because of space constraints. The demographic and social characteristic data were equally extensive. This source of social and economic information about Washington State should be a valuable resource for legislators, policy-makers, researchers, economists, and everyone else in need of such data. Detail formerly presumed can now be stated with greater certainty, thus leading to a better understanding of the state's socioeconomic dynamism.

■ *Robert Wm. Baker*
 Senior Economic Analyst

The Other Tri-Cities

AREA DEVELOPMENTS

Prominent in Agriculture and Food Processing

While much media attention, both near and far, focuses on the role that Hanford plays in the Tri-Cities economy, few outsiders and perhaps far too many Tri-Citians fail to appreciate the profound and far reaching contribution that farming makes to the community. While agriculture and related industries are about half the size of the Hanford payroll, roughly \$560 million, they now employ more people directly on the farm and in associated industries of food processing, food packing, and providing services to local farmers.

Covered employment and wage data for this report were for 1997, which is the latest complete information.

Highlights of farming and related industries in 1997 in the Tri-Cities:

- Well over a quarter of a billion dollars in covered payroll income
- 14,913 covered jobs on an annualized basis
- Peak employment of 23,600 in June
- Low employment of 9,532 in January
- 1,039 employers
- 60 percent of the covered jobs were at the farm level
- 23 percent of the jobs were with manufacturing food-processing plants
- 17 percent of the jobs were with firms selling commodities from farms or selling goods and services to farms.

Number Three in Jobs

Not all agriculture and related jobs are covered under the unemployment insurance system. Including those not covered, the Tri-Cities

Continued page 18

Area Developments *continued*

in 1997 represented roughly 15 percent of all statewide farm jobs. With 11,200 farm jobs in 1997, the Tri-Cities had the third largest number of farm jobs in the state, nearly tying with Chelan and Douglas counties (Wenatchee area) for second place with their total of 11,920. Both regions were considerably behind Yakima with a total of 21,900 jobs in 1997.

Millions in Wages

In 1997 farming in the Tri-Cities generated \$118,058,744 in covered wages to farm workers (see Figure 22). For those owning the farm, about \$80 million was earned in Benton County and roughly \$100 million in Franklin during 1996. Output from the local farms helped to fuel

the large local food processing industry which generated a payroll of \$102,940,777 and an annual average pay of \$30,197 in 1997

Amber Waves of Grain

In some individual areas of agriculture, the Tri-Cities' share of statewide output is ranked at or near the top compared to other counties. In wheat production, the community produced almost 13 million bushels in 1997—about 7.5 percent of the state total. As a result, the Tri-Cities ranked sixth in the state following Whitman, Lincoln, Adams, Walla Walla, and Grant counties. But in *corn grown as a grain*, a distinct crop, the Tri-Cities produced almost 8.5 million bushels in 1997, close to 47 percent of the state's total output, and far surpassing any other county.

Figure 22

Agriculture Related Industries; Units, Employment, and Wages
Washington State and Benton and Franklin Counties, 1997
Source: LMEA

	Tri-Cities (Benton & Franklin Counties)					Washington State				
	SIC	Units	Empl	Total Wages	Avg Wages	Units	Empl	Total Wages	Avg Wages	
Cash Grains	011	129	317	\$5,365,034	\$16,924	1,674	2,308	\$35,281,613	\$15,287	
Field Crops, exc. Cash Grains	013	154	1,727	\$29,011,581	\$16,799	740	6,204	\$100,599,776	\$16,215	
Vegetables & Melons	016	78	773	\$9,565,996	\$12,375	403	3,268	\$38,073,589	\$11,650	
Fruits & Tree Nuts	017	324	4,583	\$47,411,903	\$10,345	3,937	36,509	\$390,007,217	\$10,682	
Horticultural Specialties	018	16	102	\$1,401,640	\$13,742	388	5,075	\$81,070,948	\$15,975	
General Farms, Primarily Crop	019	48	1,335	\$22,711,947	\$17,013	260	3,416	\$55,016,404	\$16,106	
Livestock, Except Dairy & Poultry	021	18	46	\$1,038,534	\$22,577	344	988	\$18,196,232	\$18,417	
Dairy Farms	024	11	71	\$1,259,780	\$17,743	634	3,488	\$66,417,099	\$19,042	
Animal Specialties	027	6	17	\$246,319	\$14,489	162	426	\$6,795,770	\$15,953	
Crop Services	072	31	452	\$5,903,688	\$13,061	250	5,665	\$96,334,184	\$17,005	
Veterinary Services	074	18	127	\$1,823,092	\$14,355	553	4,372	\$74,685,545	\$17,083	
Animal Services, exc. Veterinary	075	9	27	\$254,061	\$9,410	427	1,281	\$15,843,612	\$12,368	
Farm Labor & Management Svcs	076	4	66	\$484,648	\$7,343	18	2,014	\$20,015,670	\$9,938	
Preserved Fruits & Vegetables	203	15	3,021	\$93,072,722	\$30,809	135	13,635	\$371,894,181	\$27,275	
Grain Mill Products	204	4	63	\$1,773,015	\$28,143	62	1,760	\$64,582,371	\$36,695	
Beverages	208	19	275	\$7,491,970	\$27,244	111	3,176	\$103,437,526	\$32,568	
Misc. Food & Kindred Products	209	4	50	\$603,070	\$12,061	324	12,231	\$411,703,942	\$33,661	
Farm & Garden Machinery	5083	20	320	\$10,510,026	\$32,844	229	2,383	\$70,226,112	\$29,470	
Groceries & Related Products	514	28	451	\$8,650,478	\$19,181	1,526	29,725	\$901,559,516	\$30,330	
Farm-Product Raw Materials	515	6	77	\$1,829,771	\$23,763	107	1,444	\$36,709,626	\$25,422	
Farm Supplies	5191	41	431	\$14,676,191	\$34,051	468	4,804	\$139,055,615	\$28,946	
Repair Services, Nec	7699	22	107	\$2,757,745	\$25,773	857	4,056	\$106,558,125	\$26,272	
Business Consulting, Nec	8748	20	101	\$4,722,936	\$46,762	594	3,281	\$114,807,206	\$34,992	
Total		1,025	14,539	\$272,566,147	\$18,747	14,203	151,509	\$3,318,871,879	\$21,905	

No Small Potatoes

In potato production, the Tri-Cities ranked number one capturing almost 43 percent of the state's output. Grant County, the next nearest county, yielded 68 percent of the Benton-Franklin total. Taken alone Benton County and Franklin County would be number three and number two, respectively. Other major counties known for spud growing include Adams, Walla Walla, and Skagit.

Tops Again

The Tri-Cities also ranks at the top in vegetable growing. In 1997, the two counties grew 53 percent of the state's processed carrots, almost 57 percent of fresh market carrots, over 52 percent of the asparagus, 49 percent of storage onions, and nearly 37 percent of the processed sweet corn. The industry in the bi-county region employed 773 workers in 1997 with a peak of 2,288 at the apex of the asparagus harvest and a low of only 201 during January. In terms of employment, Yakima County ranked number two and Skagit County was third. By itself, Franklin County would still rank number two.

Fruit Jobs Numerous

An estimated 4,583 workers were associated with fruit production in 1997; this was 12.6 percent of the state total. The big county was Yakima with 12,191 workers or nearly one-third of the total. The Tri-Cities was also behind Chelan and Douglas' 7,616 but bested Okanogan County's 4,140. Grant County and Douglas County had 3,225 and 2,174 each. The Tri-Cities industry had a payroll of \$47,411,903 paid out by 324 producers. Peak employment came in June with 9,566 workers.

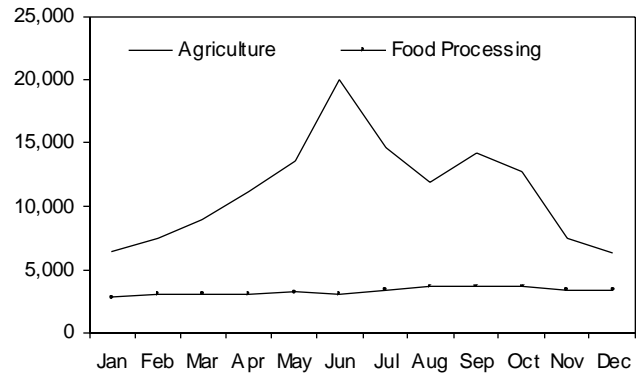
Strong Relations

But farming and related activities also contribute significantly to the manufacturing side of the Tri-Cities economy (see Figure 23): about 42 firms operate small to very large food processing plants in the region. Roughly 3,400 jobs are created with the smaller firms turning grapes into

Figure 23

Monthly Agriculture and Food Processing Employment
Tri-Cities MSA, 1997

Source: LMEA



wine and the larger firms processing vegetables, especially potatoes.

Major Food Processing Employers

JR Simplot Co.	Welch Foods
Milne Fruit Products Inc.	Washington Frontier
Preston, Seneca Foods Corp.	Zen Noh Hay
Stimson Lane LTD.	Lamb Weston Inc.
Hogue Cellars	Twin City Foods Inc.

Source: Tri-Cities Economic Development Council

Local Lamb Weston operates three plants in the bi-county region as well as its corporate headquarters in Benton County. Twin City Foods may be opening an additional facility in Pasco next year; several other food processors have located there in recent years. Employment in the industry has grown by roughly 500 over the past ten years. The industry in 1997 paid a total of \$102,941,000 in wages for an average of \$30,197 per year.

First in Freezing

In the Tri-Cities, the canned and frozen preserved fruits and vegetables industry was the largest in the state with 2,508 jobs. Grant County followed with 1,615. On the west and wet side of the state, Lewis County had 314 jobs in this sector followed by Skagit County with 268. Employment in the industry has grown by roughly 500 over the past ten years. And employment totals will be enhanced in the future by further investment of

Continued page 20

Area Developments *continued*

new facilities in Franklin County. In 1997, the industry paid out \$75,950,205 in wages among 8 plants with average pay of \$30,283 per year.

Fruit of the Vine

A total of 680 workers were employed in wine production in the state in 1997. In the Tri-Cities 243 workers are involved in wine production or roughly one-third of the state total. Other significant Eastern Washington State counties are Yakima and Spokane. While the local vintners don't employ a large number of people directly, perhaps their greatest contribution to the local economy is from all the wine fanciers who visit the area to sample the different varieties of wine. Local hotels where they may stay employ 800 and restaurants employ around 4,400.

To Market, To Market

Food packing does not get a great deal of attention but someone must buy from the local farms and move fresh produce to market. Twenty-eight firms did this in the Tri-Cities during 1997, with an average level of employment of 451 and a total payroll of \$8,650,478. Average pay was \$19,181 and peak employment was 595 during the potato harvest.

Up-Stream Impacts

A total of 47 firms provided other wholesale goods to local farms in 1997. They engaged in the wholesale distribution of animal feeds, fertilizers, agricultural chemicals, pesticides, seeds, and other farm supplies. Their employment stood at 508 during the year with a total payroll of \$16,505,962 and average pay of \$32,492.

Services, Advice, and Supplies

Rounding out the assessment, 124 local firms provided agricultural services, consulting, machinery-wholesale, and equipment repair with a payroll of \$26,456,196 and an average pay of \$22,047 paid out among 1,200 workers. The bulk of the activity was on the Franklin side of the

economy, particularly in the area of farm equipment sales. Benton County did quite well in agricultural consulting with 20 firms and average pay of \$46,762.

Not included in the assessment are the jobs that exist in transportation and warehousing (particularly cold storage) or in the rather large meat packing plant across the Snake River in neighboring Walla Walla County whose workers uniformly come from the Tri-Cities.

In Total

Farm and farm related jobs in the Tri-Cities in 1997 came to over 18 percent of all covered employment. This compared to 6.0 percent across the state altogether. These select food processing jobs locally captured 4.3 percent of total employment compared to 1.2 percent state-wide. The U.S. processed food and beverage industry is the nation's largest manufacturing sector, accounting for more than one-sixth of the nation's industrial activity. In 1997 the industry was estimated to have produced shipments valued at \$481 billion.

The U.S. processed food and beverage industry is also a major participant in the global economy. The United States accounts for about one-fourth of the industrialized world's total production of processed foods. Seven of the largest ten and 22 of the 50 largest food-processing firms in the world are headquartered in the United States. Throughout the nation, employment in the industry may have peaked unless more overseas markets are penetrated. In the future the food processing industry may go the way of agriculture. This means plenty of output but with capital and technology doing the bulk of the work. Fifty years ago, the farm population totaled a little more than 24 million or 16.6 percent of the total population. Two generations later roughly 4.5 million or 1.9 percent of the United States are able to feed this nation as well as export the output of roughly two out of every five acres.

■ *Dean Schau*
Tri-Cities Regional Economist

Emerging Occupations from the U.S. Occupational Outlook

OCCUPATIONAL DEVELOPMENTS

Scene: Kindergarten Classroom

Teacher: "OK children, today we're going to talk about what we want to be when we grow up. Tyler, what would you like to be when you grow up?"

Tyler: "I want to be a *Credentialler*."

Teacher: "Uh... OK... how about you Melissa?"

Melissa: "I want to be a *Utilization Review Coordinator*."

An unlikely scene, no doubt. Doctor, nurse, firefighter, ballerina, and police officer will probably always dominate early childhood career exploration. But for those currently in high school and college, there is an intrinsic desire to get a jump on the competition and choose that next hot occupation. In addition, policy-makers continually need a heads-up on the latest occupational findings to ensure that mechanisms be in place should new educational requirements arise.

Emerging occupations have long been an elusive part of the occupational outlook. These occupations can be characterized as new occupations created by changes in technology, society, markets, or regulations. Emerging occupations may also be existing occupations that have been substantially modified by the same changes, are increasing in employment, and this expansion can be into industries that, heretofore, had not demanded these occupations or skills.

The Occupational Employment Statistics (OES) program has compiled this report of the emerging occupations that have been reported

most frequently by respondents on the 1996 OES survey. Some of these occupations were among those reported in the "Emerging Occupations" article in the *Occupational Employment Statistics, 1994* publication (U.S. Department of Labor, Bureau of Labor Statistics, March 1996, bulletin 2468). Employers are still reporting them.

The occupations are listed in order of the number of industrial divisions in which they have been reported (see *Figure 24*).

Figure 25 shows the number of industry divisions containing establishments that reported each of the emerging occupations. The services division had the most establishments reporting emerging occupations. Within the services division the industry groups responsible for reporting the most emerging occupations were social services, health services, business services, and educational services.

Continued page 22

Figure 24

Number of Industry Divisions Reporting New or Emerging Jobs by Occupation, 1996
Source: *Bureau of Labor Statistics*

Administrative Assistants	8
Convention managers	5
Web masters	4
Environmental engineers	4
Computer managers	4
Bankruptcy specialists	2
Desktop publishing specialists	2
Utilization review coordinators	2
Quality assurance directors	2
Consumer credit counselors	1
Resettlement coordinators	1
Bus aides	1
Volunteer coordinators	1
Credentiallers	1
Development directors	1

Figure 25

Number of Emerging Occupations by Industry Division
Source: *Bureau of Labor Statistics*

Mining	1
Construction	2
Manufacturing	6
Transportation, communications, gas, and electric	3
Wholesale trade	5
Retail trade	2
Finance, insurance, and real estate	6
Services	14

Occupational Developments *continued*

Expanding that Skill Set

While downsizing and technological innovations such as personal computers, voice mail, and the like have reduced the employment of secretaries, **administrative assistants** are being reported by establishments in many industries. While some secretarial positions have been upgraded to "Administrative Assistants," there are many duties (such as typing, filing, taking phone calls, scheduling appointments, or making travel arrangements) that might be performed by either a secretary or an administrative assistant. Administrative assistants typically have more responsibilities than general secretaries, and perhaps could be described as Executive Secretaries, providing high level support to executive staff. Administrative assistants may have office management functions, working with payroll, budget, or personnel records. Administrative assistants may also work independently on projects involving research, preparation of outlines or presentation materials. They might be able to receive the training necessary to move into higher level positions. Administrative assistants may supervise or assign tasks to secretaries or clerks. Administrative assistants are employed in many industries.

Junkets Are Big Business

Another office occupation is **convention managers**, meeting planners, conference planners, and convention coordinators. Convention planning personnel serve as liaison between their own organization and various outside vendors providing goods and services necessary for a convention. Convention managers coordinate activities of convention center/hotel/banquet personnel in order to make arrangements for group meetings and conventions. Convention managers were most prominent in the membership organizations industry. They were also reported in the following industries: business services; educational services; printing and publishing; social services; health services; transportation services; wholesale trade; deposi-

tory institutions; insurance carriers; and hotels, rooming houses, camps, and other lodging places industries.

A Tangled Web Demands Skills

Web masters, web site technicians, and web site coordinators write the computer code necessary to publish or update text and images on Internet web sites. They design and maintain Internet web sites. As more and more organizations project a presence on the Internet, more of these World Wide Web workers are being reported. Establishments in the printing and publishing; wholesale trade; retail trade; business services; and membership organizations industries reported employment of Internet publishing personnel.

Environment Spurs Demand

Environmental engineers, environmental compliance managers, regulatory compliance managers, and environmental scientists and technicians work together to ensure compliance with environmental regulations and company policy. Environmental compliance managers direct the work of scientists, technicians, hazardous materials removal workers, and field technicians. The work may involve the disposal of hazardous materials, monitoring emissions of pollutants, or safety of employees on the job. Environmental engineers and scientists may also work on environmental impact statements or environmental assessments. Some may work as contractors advising clients to ensure compliance with environmental law and regulations. These environmental professionals were mostly reported in industries which must adhere to environmental regulations, such as the paper and allied products; fabricated metal products; industrial machinery and equipment; electric, gas, and sanitary services; construction; wholesale trade; business services; health services; engineering and management services industries.

Spreading Like Wildfire

Technological change continues to create emerging occupations, especially computer-related occupations. **Computer managers**, computer network administrators, information systems managers, and information network managers are a few of the titles given to employees with responsibilities for managing an organization's computer network. These computer managers are responsible for overseeing the installation, configuration, and maintenance of both software and hardware in a local area network (LAN), wide area network (WAN), or Internet/Intranet system. Computer managers monitor network use to ensure adequate computer services are available to all users. Their duties may include keeping the computer network secure. Employment of computer managers was reported by establishments in many industries, including the printing and publishing; wholesale trade; depository institutions; business services; health services; legal services; and social services industries.

Losing Money is Big Business

Bankruptcy specialists and bankruptcy assistants were reported in the depository institutions, non-depository institutions, holding and other investment offices, and business services industries. They ensure that their employers receive the maximum revenue when a client or debtor declares bankruptcy, or they represent the bankrupt party. They may assist lawyers or collections personnel.

Publishing has Never Been Easier

Continued advances in computer hardware, software, printers, and related equipment now allow firms to do more of their document production in-house and on-demand. Doing the work this way is faster than sending it out. **Desktop publishing specialists** and desktop publishing operators use advanced computer graphics and word processing computer systems to produce various documents, such as reports, proposals, benefit books, advertisements, brochures, flyers,

etc. Firms in the finance, insurance, and real estate; and wholesale trade industries, among others, reported desktop publishing occupations.

Keeping Costs Down

Utilization review coordinators are nurses who review medical and hospital records to ensure that appropriate and cost effective treatment was provided, and to ensure that resources are efficiently utilized. They screen admissions for medical necessity and appropriateness of services. They also calculate statistics and write reports. Utilization review coordinators were reported in the health services; insurance; business services; social services; and management services industries.

Quality is Job One

Quality assurance (QA) directors, QA engineers, technicians and coordinators work to ensure the quality of products or services. Quality assurance personnel administer quality assurance, total quality management, or statistical control programs, and formulate plans for quality improvement. They inspect or test raw materials, input components, or finished products. They work on product specifications and analysis and evaluation of new products. Some conduct client satisfaction surveys or handle customer complaints. QA professionals also work to achieve compliance with technical specifications set by the International Organization for Standardization (ISO) or other organizations. Many QA professionals work to ensure compliance with health, safety, or environmental regulations. Employment of QA professionals were reported by establishments in the public building and related furniture; motor vehicles, parts, and supplies; professional and commercial equipment; and services to buildings industries, among others.

More Credit = More Counselors

Consumer credit counselors provide advice on personal finance, such as budgeting, money management, mortgages, financial planning, especially to persons with money manage-

Continued page 24

Occupational Developments *continued*

ment or credit problems. They may help negotiate with creditors to arrange a debt repayment plan in order to avoid personal bankruptcy. They may conduct public education workshops and seminars on personal finance subjects. They are employed in the nonprofit social services industry.

Yearning to Breathe Free

Resettlement coordinators and cross-cultural counselors help refugees and immigrants in their adjustment to life in the U.S. They provide services or aid in finding services related to employment, immigrant legal status and citizenship, learning English, health or education. They may provide assistance in family reunification and immigrant sponsorship. Resettlement coordinators are employed in the social services industry.

Mass Transit Assist

Bus aides assist drivers and passengers on buses (but they do not drive the bus). Bus aides may monitor students and maintain order on school buses. Bus aides assist passengers boarding the bus. Some bus aides assist in the transportation of medical patients or disabled persons. Bus aides are employed in the educational services; social services; health services; child care services; local and interurban passenger transportation services; auto repair services, and parking; amusement and recreation services; and hotels and lodging places industries.

Volunteers Aplenty

Nonprofit organizations are the primary employers of **volunteer coordinators**. Volunteer coordinators and volunteer directors work to recruit, train, schedule, and organize volunteers in the educational services; local government; health services; residential care; membership organizations; and social services industries.

Verify Verify Verify

Credentialers and credential specialists obtain and verify employment, education, or licensing credentials for physicians, professors, or other professionals who are being considered for employment. Establishments in the health services; business services; educational services; and engineering, accounting, research, and management and related services industries reported employing credential specialists.

Fundraising

Development directors, fund raising specialists, and grant writers work at generating revenue from donors for nonprofit organizations. They maintain contact with a variety of donors (individuals, corporations, foundations, or government agencies) and organize donor recognition programs. They may concentrate on writing grant proposals and related documents. They might coordinate annual campaigns and special fundraising events, or develop direct mail appeals. These fundraising professionals are employed in the trusts, social services, and membership organizations industries.

The Occupational Employment Statistics (OES) survey asks employers to report the number of people they employ in various occupational categories. In large establishments (more than 50 employees) those employees that do not fit into an existing occupation are reported in “all other” categories. At the end of the survey form employers are asked to provide a job title and description for the “all other” occupations that they believe to be “numerically important or emerging due to technological change.” Small establishments (fewer than 50 employees) are asked to report employment that does not fit into a specific category. OES staff reviews these job titles and descriptions and determines which are emerging occupations.

Post Script

The postwar economy has been a period of remarkable change. Within this fast-paced environment, computers opened a whole new wave of occupations and changed many traditional job requirements. This same dynamic continues today as can be seen in several of these emerging occupations. Emerging occupations will always constitute a very small slice of the occupational pie but represent the leading edge of occupational trends.

■ *Robert Wm. Baker*
Senior Economic Analyst

*With extracts from BLS Issues in Labor Statistics:
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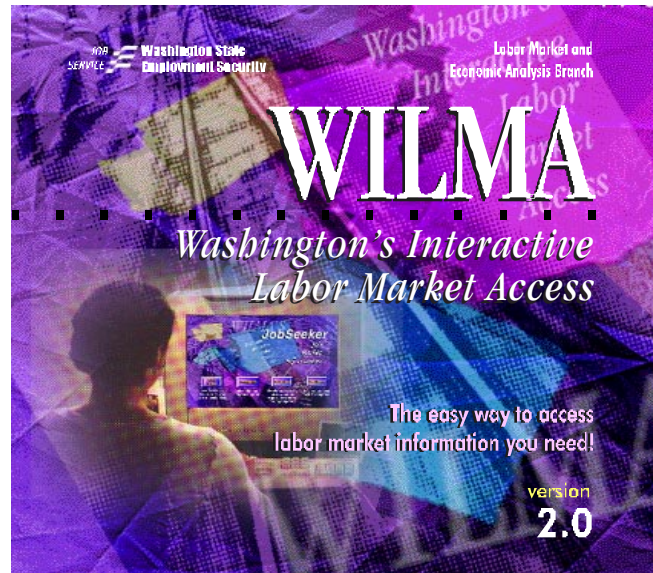
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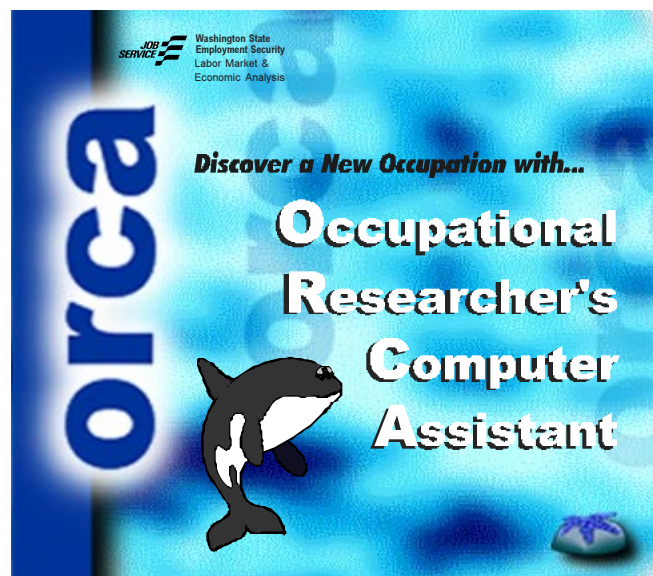
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