2012 LABOR MARKET AND ECONOMIC REPORT

U.S. economy
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Seasonal employment
Unemployment
Employment projections
Income and wages

Washington State Employment Security Department

Labor Market and Economic Analysis

January 2013

2012 Labor Market and Economic Report

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Further analysis and detailed statistics are available from the Employment Security Department upon request. For more information or copies of this report in alternate formats, please call 360-407-4500 or 800-215-1617.

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Labor market fast facts

Fast facts 1. Labor force and unemployment, not seasonally adjusted

Washington state, annual data 1980 through October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Year	Labor force	Employed	Unemployed	Unemployment rate
1980	1,972,373	1,815,717	156,656	7.9%
1985	2,102,321	1,926,816	175,505	8.3%
1990	2,537,037	2,406,444	130,594	5.1%
1995	2,812,611	2,636,011	176,600	6.3%
2000	3,050,021	2,898,677	151,344	5.0%
2005	3,255,527	3,075,972	179,555	5.5%
2006	3,319,252	3,155,384	163,868	4.9%
2007	3,386,775	3,232,652	154,123	4.6%
2008	3,472,127	3,283,923	188,204	5.4%
2009	3,522,803	3,193,293	329,510	9.4%
2010	3,516,463	3,167,398	349,065	9.9%
2011	3,484,814	3,165,348	319,466	9.2%
2012 through October	3,504,003	3,211,473	292,530	8.3%

Fast facts 2. Labor force and unemployment, not seasonally adjusted

Washington state metropolitan areas, January through October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

Metropolitan area	Labor force	Employed	Unemployed	Unemployment rate
Washington state	**3,504,003**	**3,211,473**	**292,530**	**8.3%**
Bellingham	108,700	100,560	8,120	7.5%
Bremerton	122,540	113,420	9,120	7.4%
Kennewick-Pasco-Richland	134,920	123,190	11,730	8.7%
Longview-Kelso	43,290	38,450	4,840	11.2%
Mount Vernon-Anacortes	57,250	51,940	5,310	9.3%
Olympia	130,240	120,150	10,080	7.7%
Seattle MD* (King and Snohomish)	1,501,336	1,390,402	110,935	7.4%
Spokane	229,930	209,560	20,370	8.9%
Tacoma MD* (Pierce)	391,840	356,750	35,090	9.0%
Wenatchee	63,780	58,910	4,880	7.7%
Yakima	127,100	114,680	12,420	9.8%

*Metropolitan Division

Fast facts 3. Projected industry average annual growth rates

Washington state, 2010 to 2020
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics

Industry	2011 Q2 to 2013 Q2	2010 to 2015	2015 to 2020
Total nonfarm	1.6%	1.6%	1.3%
Construction	1.1%	2.3%	1.4%
Manufacturing	2.2%	2.0%	0.5%
Wholesale trade	2.2%	1.8%	1.4%
Retail trade	1.5%	1.2%	0.5%
Transportation, warehousing and utilities	1.9%	2.1%	1.1%
Information	2.3%	2.2%	2.0%
Financial activities	0.9%	0.5%	0.2%
Professional and business services	2.6%	3.1%	2.7%
Education and health services	2.1%	2.1%	1.9%
Leisure and hospitality	1.9%	1.8%	1.0%
Government	0.1%	0.4%	1.0%

Fast facts 4. Wages and employment by industry

Washington state, 2011 Q4 (revised)
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

Industry	Average number of firms	Wages paid 4th quarter 2011	Average employment 2011	Average weekly wage 2011
Total	205,737	$36,480,506,133	2,844,391	$966
Government	2,098	$6,838,036,069	519,251	$1,003
Healthcare and social assistance	14,379	$3,912,891,505	327,373	$882
Retail trade	13,959	$2,462,397,007	307,676	$595
Manufacturing	6,768	$4,709,960,692	265,656	$1,309
Accommodation and food services	12,798	$1,010,704,863	222,164	$347
Professional, scientific and technical services	18,392	$3,426,375,277	162,889	$1,484
Other services (except public administration)	64,034	$819,111,627	132,114	$472
Construction	20,075	$1,769,614,542	126,993	$1,006
Administrative and support and waste management and remediation services	9,418	$1,508,238,038	136,020	$826
Wholesale trade	12,945	$2,055,769,517	119,854	$1,266
Information	2,470	$2,615,185,476	103,561	$2,307
Finance and insurance	5,401	$1,574,443,356	87,144	$1,407
Transportation and warehousing	3,949	$1,032,864,587	80,673	$954
Agriculture, forestry, fishing and hunting	7,082	$601,780,502	89,570	$483
Real estate, rental and leasing	6,058	$437,633,395	43,149	$766
Arts, entertainment and recreation	2,402	$302,418,096	45,000	$481
Educational services	2,497	$324,935,598	35,116	$684
Management of companies and enterprises	619	$946,299,470	33,221	$1,962
Utilities	233	$98,226,771	4,827	$1,578
Mining	164	$33,619,745	2,142	$1,132

Executive summary

U.S. economy and labor market

The pace of economic growth in the United States has remained in the 2 percent range through the first three quarters of 2012. The same constraints that existed in 2011 limiting a stronger recovery remain in place. They include:

- Muted consumer spending growth as individuals improve their balance sheets.
- Sustained depression in residential construction.
- Declines in government purchases of goods and services.
- Export growth inhibited by recession in Europe and slower economic growth in Asia.

Total nonfarm employment in the United States in October 2012 was up 1.5 percent from October 2011. Private-sector job growth was up 1.8 percent. Since employment bottomed in February 2010, private-sector employment was up 4.7 percent, still 3.3 percent below the peak of February 2008. Construction employment peaked in April 2006 as the collapse in the housing bubble occurred earlier than the start of the recession and in October 2012 was down 28 percent from the April peak.

Public-sector employment was down 0.1 percent from October 2011 to October 2012. It peaked in April 2009 and was down 2.9 percent from that level in October 2012.

Washington's economy and labor market

Using personal income as the comparison measure, economic growth in Washington state through the second quarter of 2012 has been greater than that of the rest of the nation. Personal income in inflation-adjusted dollars in the state was up 2.7 percent compared to 1.6 percent nationally. Consistent with faster income growth, total nonfarm employment in October 2012 was up 1.9 percent from October 2011 compared to 1.5 percent nationally.

From February 2008 to February 2010, total nonfarm employment in the state fell by about 205,000, equal to a 6.9 percent decline from the February 2008 peak. Since then total nonfarm employment has risen by 124,000, or 4.3 percent through October 2012, compared to 3.5 percent nationally. From the trough of the recession in February 2010, Washington state has regained roughly 60 percent of the number of jobs lost during the recession.

Seasonal, structural and cyclical industry employment

Industries in Washington state most sensitive to seasonal forces are agriculture and tourism. Employment in software publishing and healthcare-related industries have been heavily influenced by structural forces such as productivity improvement, policy changes and population trends. Food, administrative and education-services are most closely associated with short-term changes in economic growth.

Unemployment

The seasonally adjusted unemployment rate in Washington was 8.2 percent in October 2012, down from the October 2011 rate of 8.9 percent. The number of unemployment recipients was 124,000 in October 2012, down from 176,000 in October 2011. The peak level of unemployment insurance recipients was 305,000 reached in January 2010.

Consistent with the construction industry being the most severely affected industry during the recession, it accounted for a disproportionate share of the exhaustions of unemployment benefits from November 2011 to October 2012.

The downward trend in mass layoffs continued into the second quarter of 2012. Washington state employers reported 109 mass-layoff events from the third quarter of 2011 to the second quarter of 2012.

Employment projections

The report detailing occupational employment projections through 2020 was published in June 2012. Total nonfarm employment is expected to grow at an average annual rate of 1.3 percent through 2020. The occupational groups forecasted to experience the fastest growth rates are computer and mathematical, healthcare support and healthcare practitioners.

Income and wages

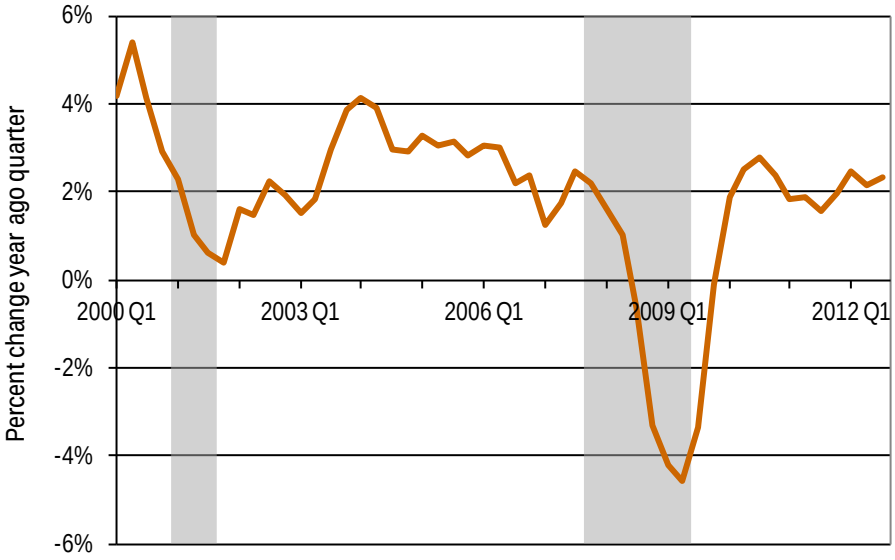
Recently released data show the median household income in inflation-adjusted dollars in Washington fell 5.8 percent from 2007 to 2011. The drop in household income has contributed to a decline in the homeownership rate, a rise in the poverty rate and a doubling of the share of households receiving food stamps. From 2007 to 2011, the number of occupied jobs where the wage was less than $40 per hour fell by 138,000. The number of occupied jobs paying $40 per hour or more increased by 39,000. Reflecting the increase in the number of unemployed people from 2007 to 2011, unemployment insurance payments surged from $800 million to $3.2 billion.

Chapter 1: U.S. economy and labor market

With the release of the third-quarter data for 2012 from the U.S. Bureau of Economic Analysis (BEA), real gross domestic product (GDP, the measure of output of goods and services in the economy over a period of time) was estimated to be up 2.2 percent relative to the third quarter of 2011. As shown in *Figure 1-1*, real GDP growth has trended around 2 percent for two years. This marks the slowest rate of recovery from a recession in the post-World War II period. Several forces are constraining the strength of the recovery. They include:

- Muted consumer spending growth as individuals improve their balance sheets.
- Sustained depression in residential construction.
- Declines in government purchases of goods and services.
- Export growth inhibited by recession in Europe and slower economic growth in Asia.

Figure 1-1. Real gross domestic product, percent change year ago quarter
United States, 2000 Q1 through 2012 Q3, recession periods shaded in gray
Source: U.S. Bureau of Economic Analysis, National Bureau of Economic Research

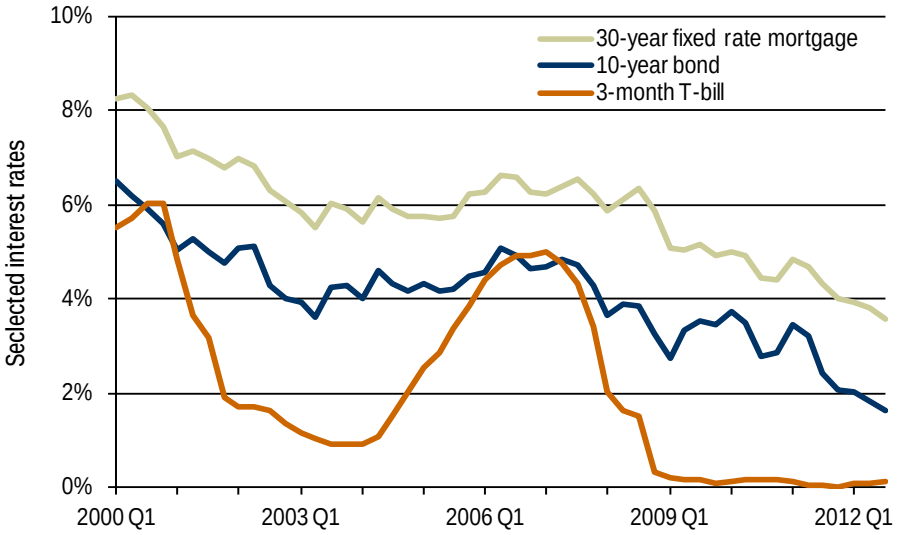


Economic growth rate running below trend potential of 2.5 percent per year.

Monetary policy unchanged

Throughout 2012, the Federal Reserve continued its unprecedented policy of adding government bonds and mortgage-backed securities to its balance sheet to stimulate the economy via low long-term interest rates (*Figure 1-2*). According to the National Association of Realtors[1] data, record low mortgage rates have helped fuel the improvement in existing home sales, which through the first three quarters of 2012 were up 8 percent compared to the same period for 2011. In his two semi-annual monetary policy reports to the House of Representatives and the Senate in July 2012, Chairman Bernanke said the Federal Reserve is likely to sustain its policy of extraordinarily low interest rates through at least the end of 2014.[2]

Figure 1-2. Selected interest rates
United States, 2000 Q1 through 2012 Q3
Source: Federal Reserve Board



Unprecedented policy steps taken by Federal Reserve to sustain low interest rates.

[1] The National Association of Realtors is a trade organization located in Washington, D.C. that provides information on a monthly basis relating to the existing home markets throughout the United States.

[2] Testimony by Federal Reserve Chairman Benjamin Bernanke, Semiannual Monetary Policy Report to Congress before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, Washington, D.C., July 17, 2012. Chairman Bernanke presented identical remarks before the Committee on Financial Services, U.S. House of Representatives, Washington, D.C., July 18, 2012.

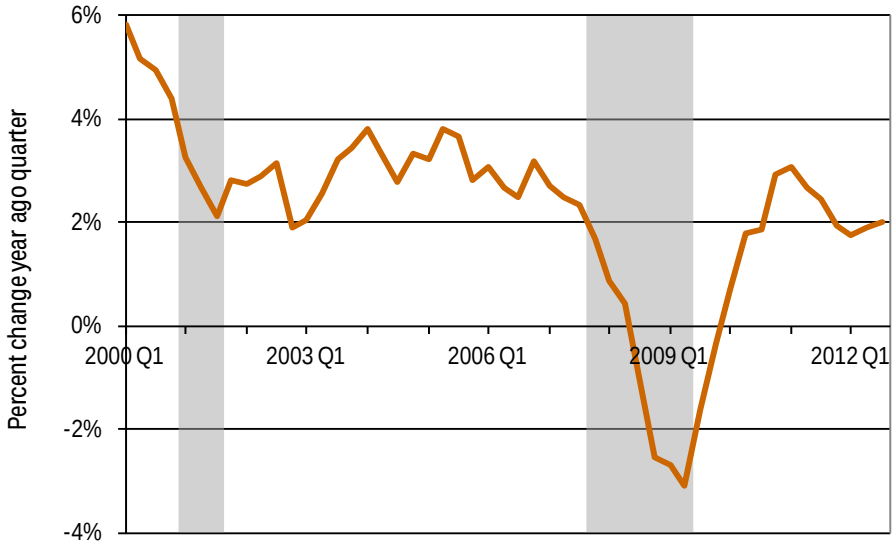
Consumer spending growth averaging 2 percent

Personal consumption expenditures in inflation-adjusted dollars in the third quarter of 2012 were up 2.1 percent compared to the third quarter of 2011 (*Figure 1-3*). People earning income through jobs benefitted from the 2-percentage point reduction in Social Security taxes that was in effect for 2011 and 2012.

While the cut in the payroll tax was in effect, the consumer savings rate has declined by an amount equal to 1 percent of disposable income. Were it not for the payroll tax, consumer spending growth would have been slower or the consumer saving rate would have been less.

Figure 1-3. Personal consumption expenditures inflation-adjusted in terms of 2005 dollars, percent change year ago quarter

United States, 2000 Q1 through 2012 Q3, recession periods shaded in gray
Source: U.S. Bureau of Economic Analysis, National Bureau of Economic Research



Decline in consumer spending during recession led to steep drop in state and local government revenues.

The Federal Reserve estimate of home mortgage debt shows a decline from $10.7 trillion at the fourth quarter of 2007 to $9.6 trillion in the second quarter of 2012. The decline is not due to homeowners paying down debt.[3] Rather mortgage debt outstanding has declined due to write-offs taken by financial institutions. On a national basis, it is estimated 15.3 million homeowners, or 31 percent, had a mortgage

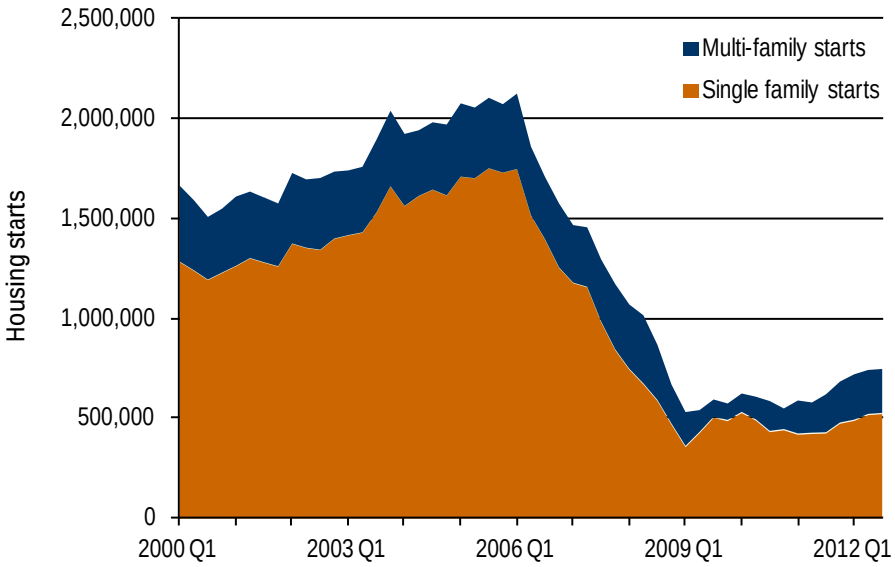
[3] The Federal Reserve estimates of household debt outstanding are in the quarterly Flow of Funds account report. The detailed data by type of liability and assets are in the Balance Sheet of Households and Nonprofit Organizations.

greater than the value of their home in the second quarter of 2012.[4] This is inhibiting the ability of these households to refinance their mortgage to free up income to support consumer spending.

Multi-family housing leading rebound in residential construction

From January to September 2012, housing starts were up 27 percent over the same period in 2011 (*Figure 1-4*). Growth in the number of households is picking up with gains in employment driving up the demand for new housing units. However, for a number of reasons, more people are choosing to rent, which is leading to a surge in apartment demand.[5] The tightening of rental markets throughout the country has led to a 35 percent increase in multi-family construction.

Figure 1-4. Housing starts by type of unit, seasonally adjusted annual rate
United States, 2000 Q1 through 2012 Q3
Source: U.S. Census Bureau



Residential building activity is up from record low.

[4] Zillow Negative Equity Report. http://www.zillow.com/blog/research/2012/11/14/negative-equity-falls-in-the-third-quarter-but-fiscal-cliff-could-derail-momentum/

[5] On a quarterly basis, the U.S. Census Bureau publishes the Residential Vacancies and Homeownership report showing homeownership rate in total, by region, by age of household head and by race and ethnicity. At the height of the housing bubble in 2006, the homeownership rate averaged 68.7 percent. In the third quarter of 2011, the homeownership rate was 66.3 percent and fell to 65.5 percent in the third quarter of 2012. The drop in the homeownership rate from 2006 to the third quarter of 2012 means there are 3.7 million fewer households owning their housing unit (single-family, multi-family or mobile home) than otherwise.

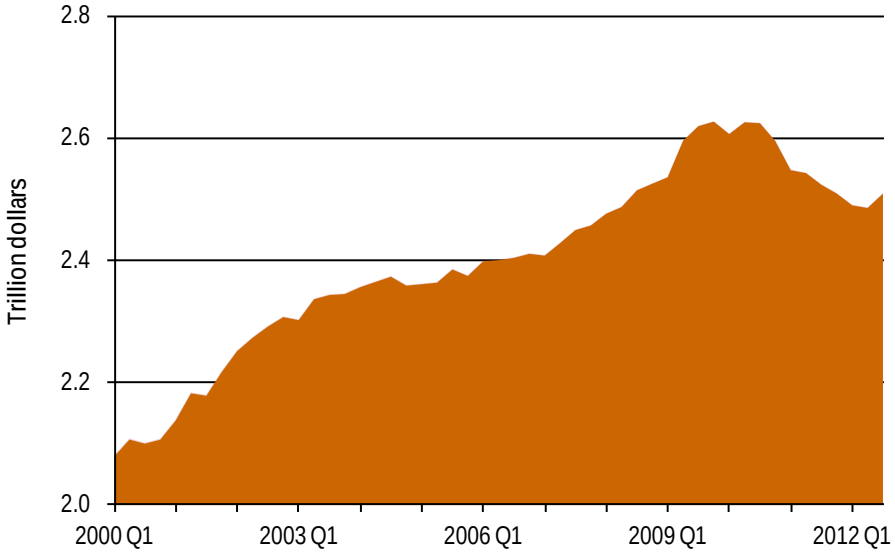
The National Association of Realtors reported the number of existing homes for sale in September 2012 was down 23 percent from the peak of 2010. This has led to a 10 percent increase in the median price of homes sold. The crucial uncertainty for the single-family home market remains the size of the hidden inventory of homes in foreclosure being held off the market by banks.

Government purchases down

In inflation-adjusted dollars, total government purchases of goods and services were down 2.4 percent in the third quarter of 2012 compared to the third quarter of 2011 (*Figure1-5*). Since the third quarter of 2010, the decline is 5.3 percent. Within the BEA detailed estimates of government purchases, federal government purchases in total were down 6.3 percent from the third quarter, with defense and nondefense expenditures down 7.3 percent and 0.9 percent, respectively. State and local government purchases peaked in the second half of 2009, lagging the collapse in consumer spending and are down 6.3 percent. The decline in government purchases is a reduction of 1.2 percent in real GDP.

Figure 1-5. Government purchases of goods and services inflation-adjusted in terms of 2005 dollars, seasonally adjusted annual rate

United States, 2000 Q1 through 2012 Q3
Source: U.S. Bureau of Economic Analysis



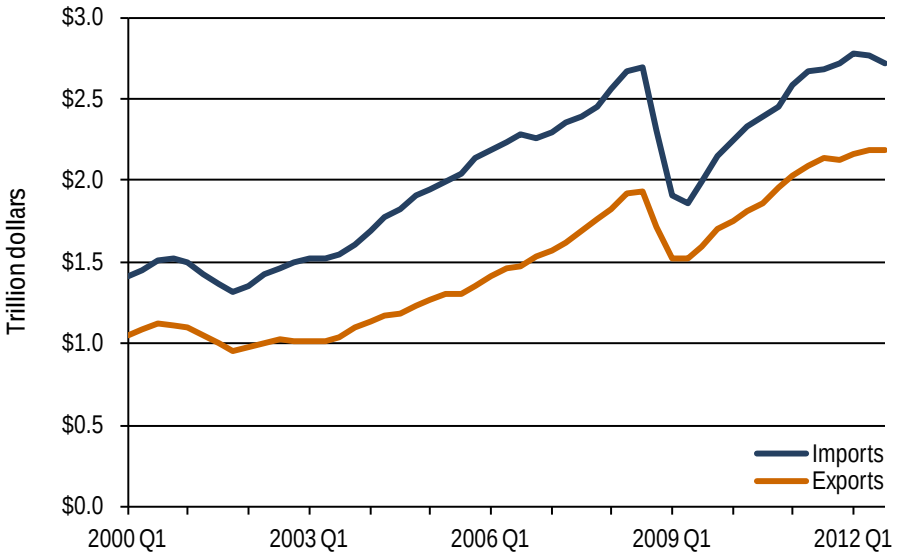
Government purchases running at levels of three years ago.

No improvement in trade deficit

Exports of goods and services in current dollar terms in the third quarter of 2012 ran at a seasonally adjusted annual rate of $2.18 trillion; goods and services imports ran at a seasonally adjusted annual rate of $2.72 trillion (*Figure 1-6*). The $536 billion difference in imports versus exports marks an increase of $14 billion in the trade deficit from the third quarter of 2011. Petroleum and product imports through the three quarters of 2012 ran at an annual rate of $444 billion, down slightly from the $463 billion rate for the first three quarters of 2011.[6]

Figure 1-6. Imports and exports of goods and services, seasonally adjusted annual rate

United States, 2000 Q1 through 2012 Q3
Source: U.S. Census Bureau



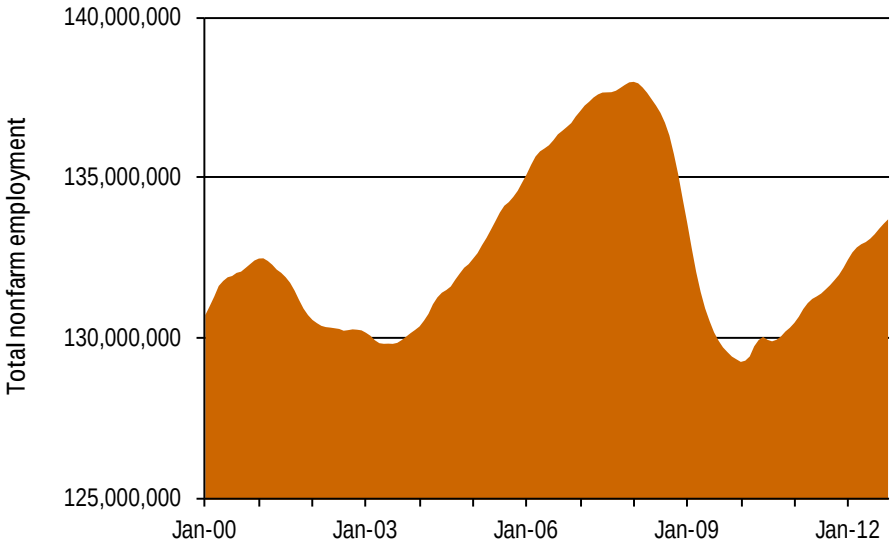
Trade balance has deteriorated since end of recession.

[6] Detailed data concerning commodity imports, such as petroleum and products, are presented in Exports and Imports of Goods and Services by Type of Product, Table 4.2.5 within the National Income and Product Accounts tables published by the Bureau of Economic Analysis.

National labor market

Two surveys are used by the federal Bureau of Labor Statistics (BLS) to measure labor market trends in the United States. The establishment survey provides an estimate of the number of occupied jobs in the private and public sectors. The survey of households, which numbers roughly 50,000 to 55,000 households out of 115 million households in the country, is an estimate of the number of people employed and unemployed searching for a job.[7] As shown in *Figure 1.7*, nonfarm employment in October 2012 was 133.7 million, up 1.4 percent from October 2011. Nonfarm employment peaked in the fourth quarter of 2007 at 137.8 million, so third-quarter employment in 2012 was 3.4 percent below the peak of almost five years ago.

Figure 1-7. Total nonfarm employment, seasonally adjusted
United States, January 2000 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

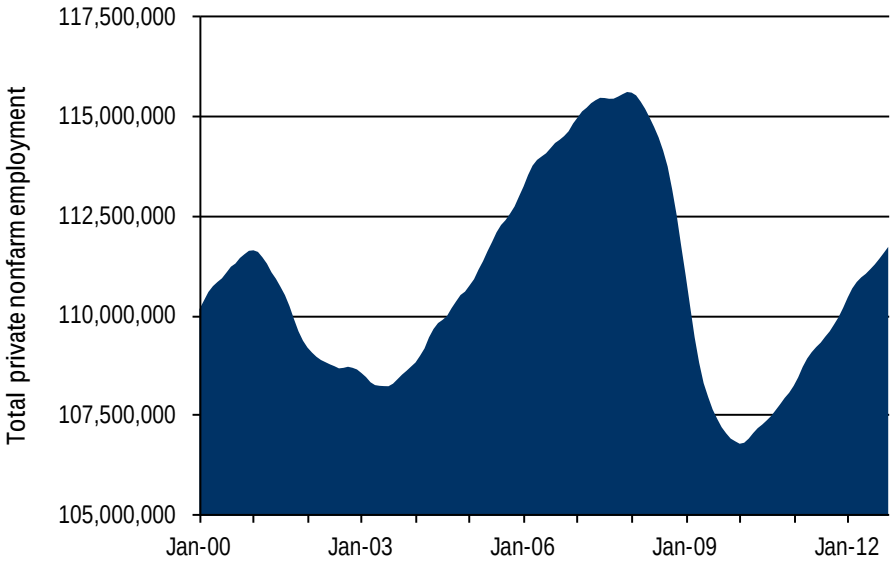


Total nonfarm employment just getting back to level of 2009 Q1.

[7] The estimate of the number of households in the United Sates comes from the quarterly Homeownership and Vacancy report published by the U.S. Census Bureau.

Employment in the private sector bottomed in the first quarter of 2010. Since then employment has increased 10 consecutive quarters (*Figure 1-8*). Relative to the trough, the private sector has gained back 52 percent of the 8.8 million occupied jobs lost during the recession.

Figure 1-8. Total private nonfarm employment, seasonally adjusted
United States, January 2000 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

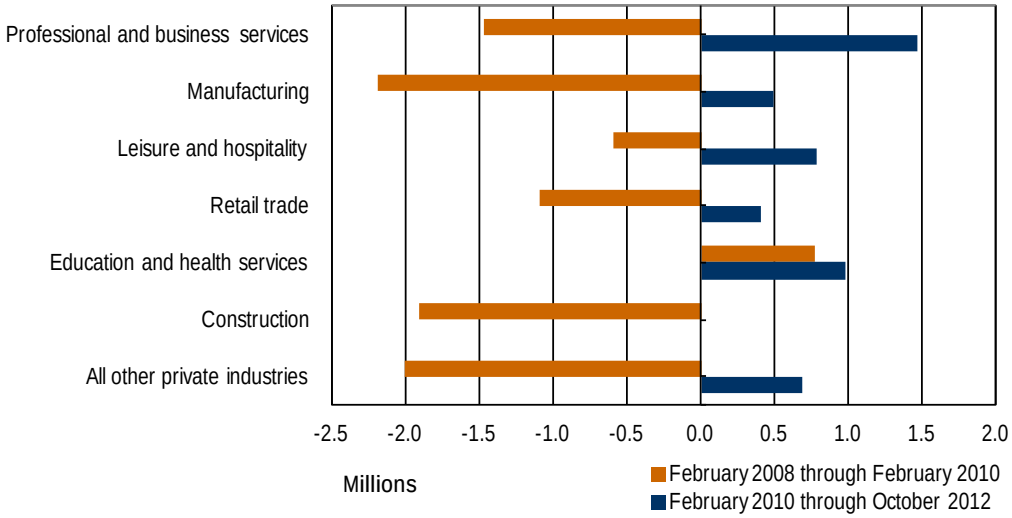


Private-sector employment just getting back to 2005 level.

Shown in *Figure 1-9* is a comparison of the decline in employment in selected industries during the recession and the increase in employment since February 2010. Three key points to be gained from *Figure 1.9* are the following:

- Professional and business-services employment gains have exceeded the losses during the recession.
- Private education and health-services employment did not fall during the recession.
- Construction employment has been flat since February 2010.

Figure 1-9. Change in private-sector employment by selected industries
United States, February 2008 through February 2010 and February 2010 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

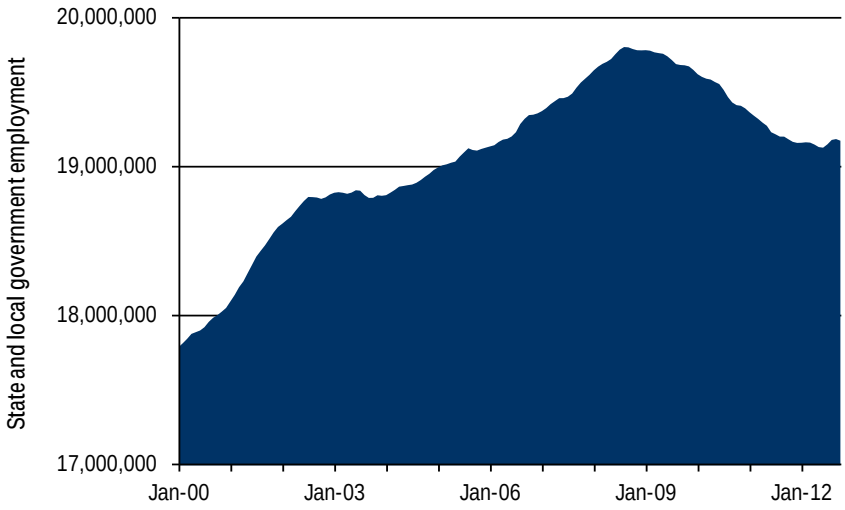


No growth in construction employment during recovery.

State and local governments were severely affected by the collapse in sales of taxable goods and services during the recession. As part of the initial stimulus package, the federal government increased its transfers to state and local governments by 17 percent in 2009 and 13 percent in 2010. The increase in 2011 is estimated to have been 3 percent.[8] This softened the hit to revenues, but not by enough to keep state and local government leaders from cutting jobs as part of the solution to balance their respective budgets, as mandated by law. The cuts have resulted in a 3.1 percent decline in state and local government employment (*Figure 1-10*). State and local governments account for 23 percent and 64 percent of public-sector jobs, respectively.

[8] Source: U.S. Office of Management and Budget, Budget of the United States Government, Historical Tables, annual. See http://www.whitehouse.gov/sites/default/files/omb/budget/fy2013/assets/hist.pdf

Figure 1-10. State and local government employment, seasonally adjusted
United States, January 2000 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Employment Statistics

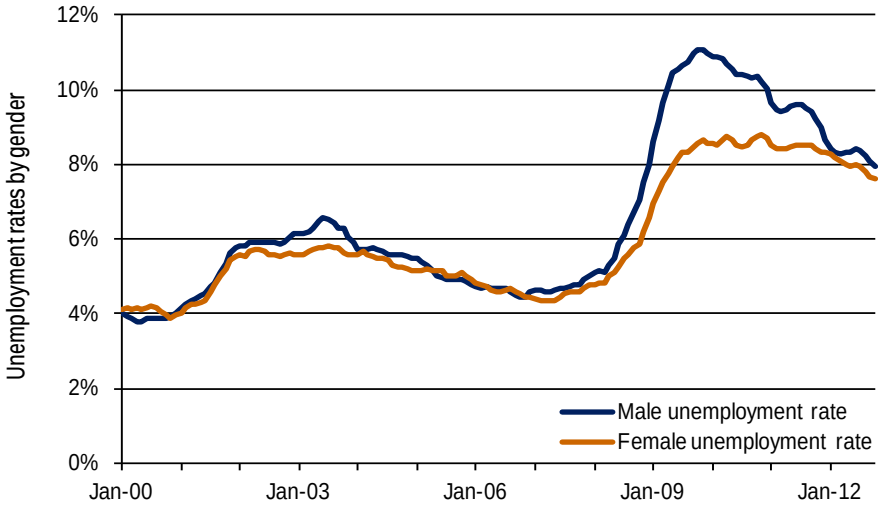


State and local government has fallen during recovery from recession.

Unemployment rate measure down

The household survey provides the data used to estimate the unemployment-rate measure for the United States. In October 2012, the unemployment rate 7.9 percent, down from 8.9 percent in October of 2011. Men were hit harder in this recession than in previous recessions due to the depression in construction and the loss of manufacturing jobs, some of which will be permanent (*Figure 1-11*).

Figure 1-11. Unemployment rates by gender, seasonally adjusted
United States, January 2000 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Population Survey

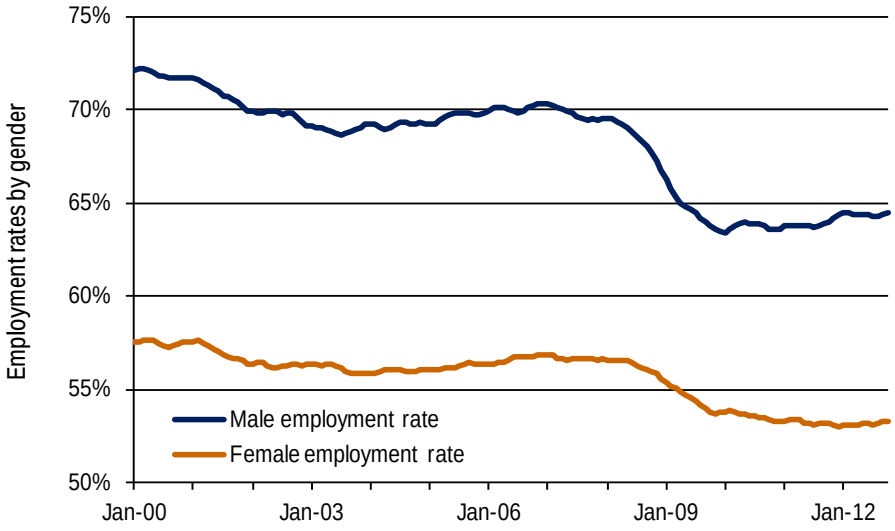


Decline in male unemployment rate partially due to men dropping out of labor force.

Downward trend for employment rate

The mix of job growth and a decline in the unemployment rate is positive. However, it is also important to look at the employment rate: the percentage of people employed relative to the population aged 16 years and older. The benefit of this measure is it eliminates the effect of the drop in the labor force participation rate as discouraged workers cease their job search or young adults delay entering the labor force due to negative job prospects. As shown in *Figure 1-12*, the employment rate has stabilized, but at a record low level. This measure reinforces the conclusion men were more severely affected by the recession than women, and they have been prone to drop out of the labor force.

Figure 1-12. Employment rates by gender, seasonally adjusted
United States, January 2000 through October 2012
Source: U.S. Bureau of Labor Statistics, Current Population Survey



Male employment rate at historic low.

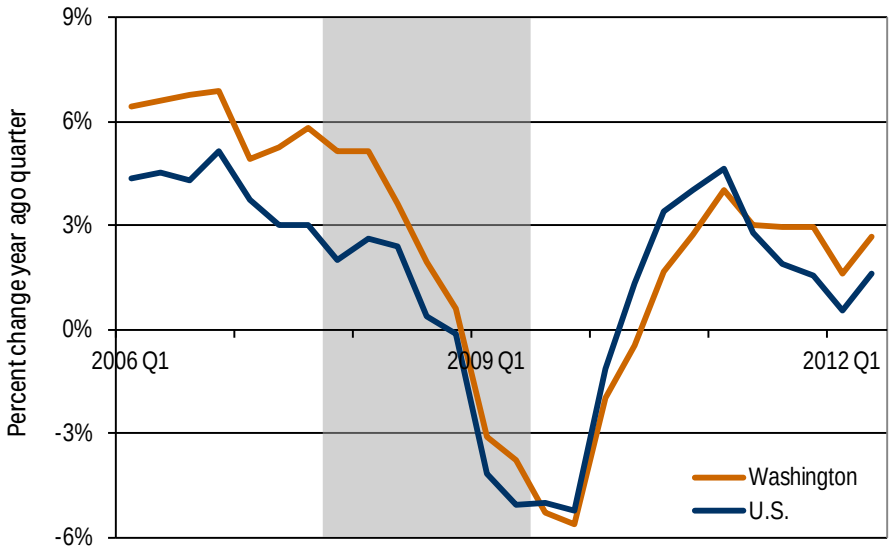
Chapter 2: Washington's economy and labor market

Employment and other economic indicators show growth in the Washington state economy has exceeded that of the rest of the nation during 2012. Relative to October 2011, nonfarm employment in the state in October 2012 was up 1.8 percent compared to 1.4 percent nationally. One of the key industries driving the faster growth in Washington is manufacturing, primarily aerospace.

Using personal income[9] inflation-adjusted dollars as a measure for comparison, growth in the Washington state economy was 2.7 percent compared to 1.6 percent for the United States from the second quarter of 2011 to the second quarter of 2012 (*Figure 2-1*).[10]

Figure 2-1. Personal income, inflation-adjusted dollars, percent change year ago quarter

Washington state and United States, 2006 Q1 through 2012 Q2, recession shaded in gray
Source: Bureau of Economic Analysis, National Bureau of Economic Research



Personal income growth in Washington greater than United States since the first quarter of 2011.

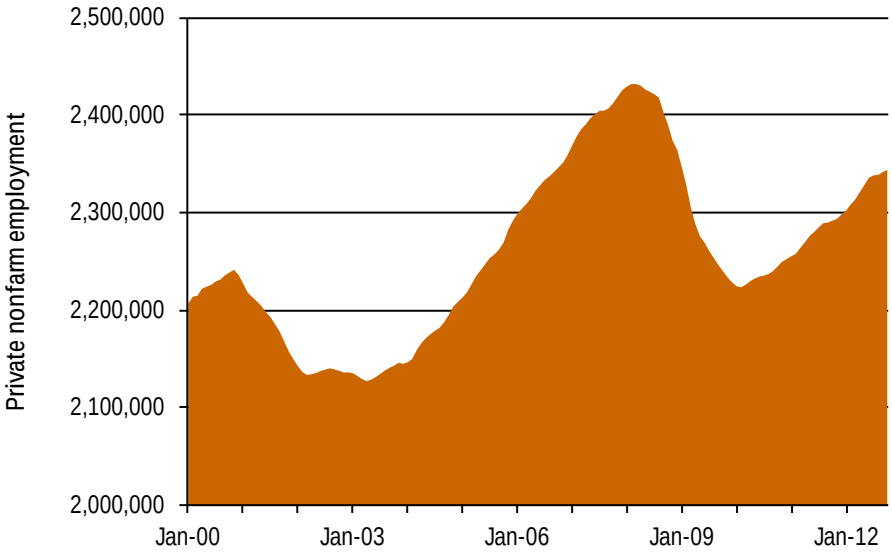
[9] Personal income is the sum of compensation of employees (primarily wages, salaries and supplements to employees, proprietors' income, rental income, investment income, government transfer receipts, less contributions for government social insurance. http://www.bea.gov/iTable/iTable.cfm?ReqID=9&step=1

[10] Personal income is used as the measure of comparison because there is no quarterly measure of gross state product.

Steady gains in private-sector employment

As shown in *Figure 2-2*, employment in the private sector has been on a steady upward path since the trough of the recession in the first quarter of 2010. Relative to October 2011, private-sector employment was up 2.6 percent in October 2012. This compares favorably to the rest of the nation, which experienced 1.8 percent growth in the private sector.

Figure 2-2. Private-sector nonfarm employment, seasonally adjusted
Washington state, January 2000 through October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Current Employment Statistics



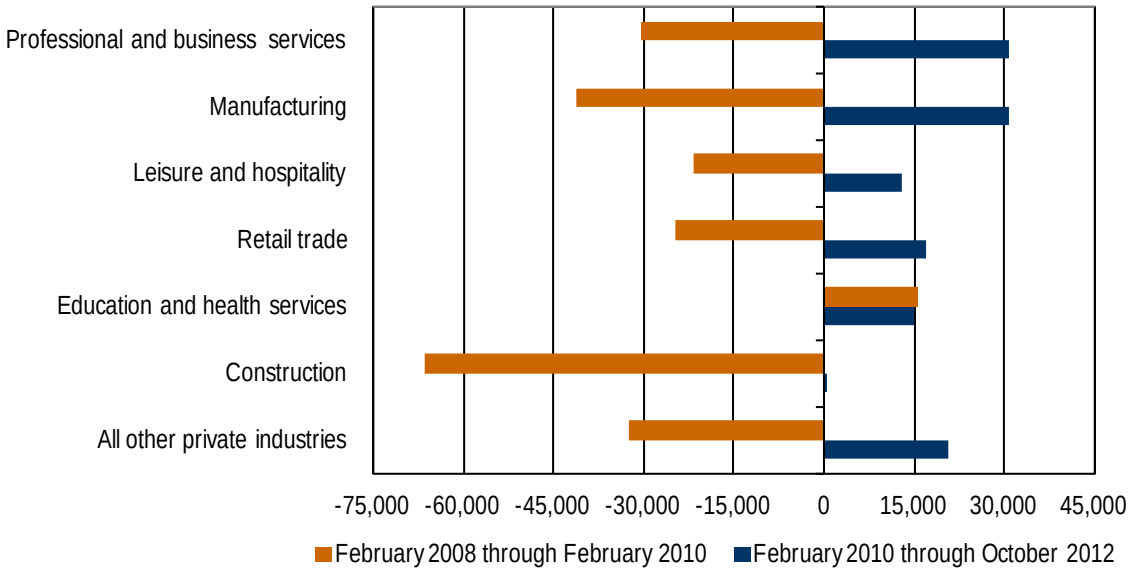
Private sector has regained 60 percent of jobs lost.

The data in *Figure 2-3* depict the extent of recovery in employment by industry since the trough of the recession. In total, private-sector employment has recovered by 60 percent through October 2012. There are two similarities to what has taken place nationally:

- Professional and business-services employment gains have exceeded the losses during the recession.
- Construction employment has been flat.

The key difference is led by aerospace, manufacturing employment in Washington has regained 73 percent of the number of jobs lost during the recession compared to 23 percent nationally.

Figure 2-3. Change in private-sector employment by selected industries
Washington state, February 2008 through February 2010 and February 2010 through October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Current Employment Statistics

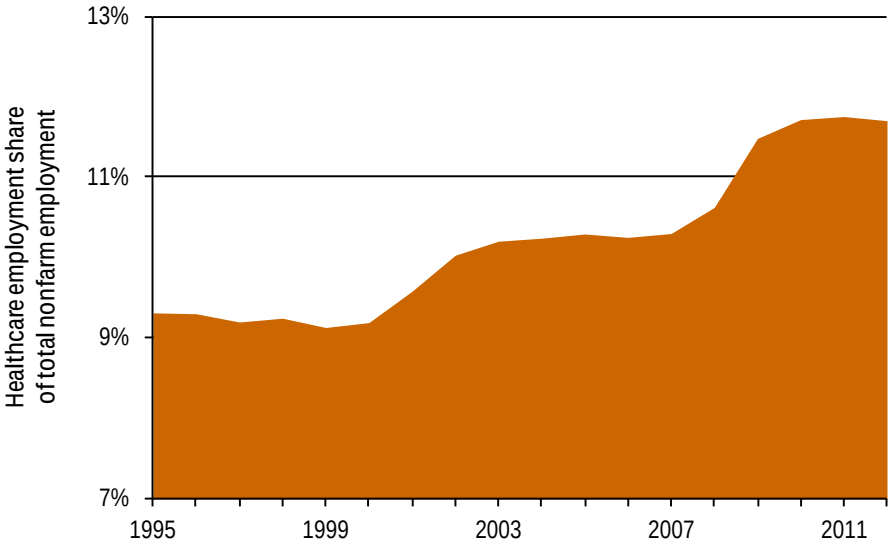


Professional and business-services employment exceeds pre-recession level.

Private healthcare is largest state industry

Employment in the private healthcare industry averaged 335,000 in 2012, accounting for 11.7 percent of total nonfarm employment (*Figure 2-4*). Since 2009, employment growth in the healthcare industry has tracked the changes in total nonfarm employment, so its share has been essentially constant. There have been times since 1995 when the share has stabilized and then resumed its upward trend, so the experience of the last three years is not unusual.

Figure 2-4. Healthcare employment share of total nonfarm employment
Washington state, 1995 through 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Current Employment Statistics

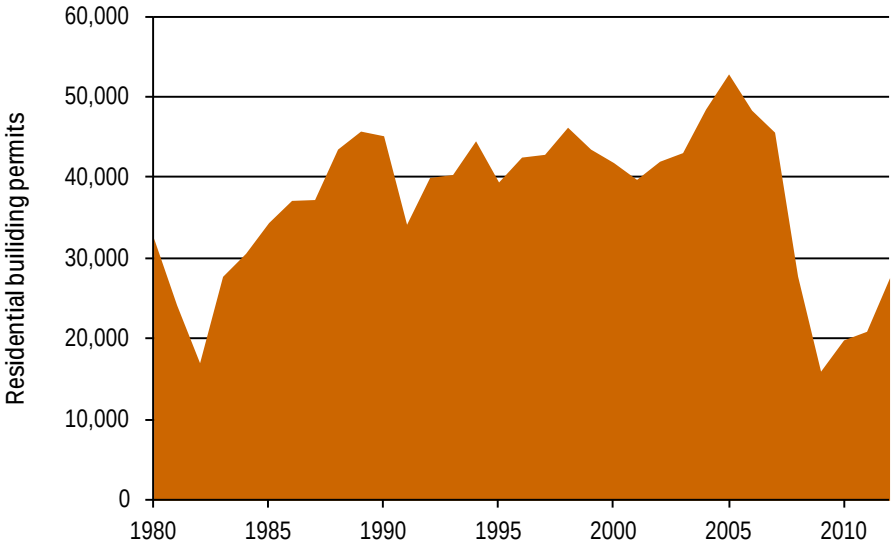


Healthcare employment share of total nonfarm employment stable since 2009.

Residential construction bouncing off bottom

The collapse in construction following the bursting of the "Housing Bubble" drove down residential construction to a level that has not been witnessed since the recession of 1980 to 1982 (*Figure 2-5*). Recovery is under way, primarily due to much higher rebound in multi-family units; apartments and condominiums, relative to single-family homes. The primary driver of the stronger rebound in apartment construction is the decline in the homeownership rate as uncertainty about future job stability is leading young adults to rent. This is most visible in the Seattle-Bellevue-Tacoma area, where multi-family permits were up 63 percent for the first 10 months of 2012 compared to the same period for 2011.

Figure 2-5. Residential building permits
Washington state, 1980 through 2012[11]
Source: Washington State Economic and Revenue Forecast Council, U.S. Census Bureau



Multi-family construction primarily driving recovery in residential construction.

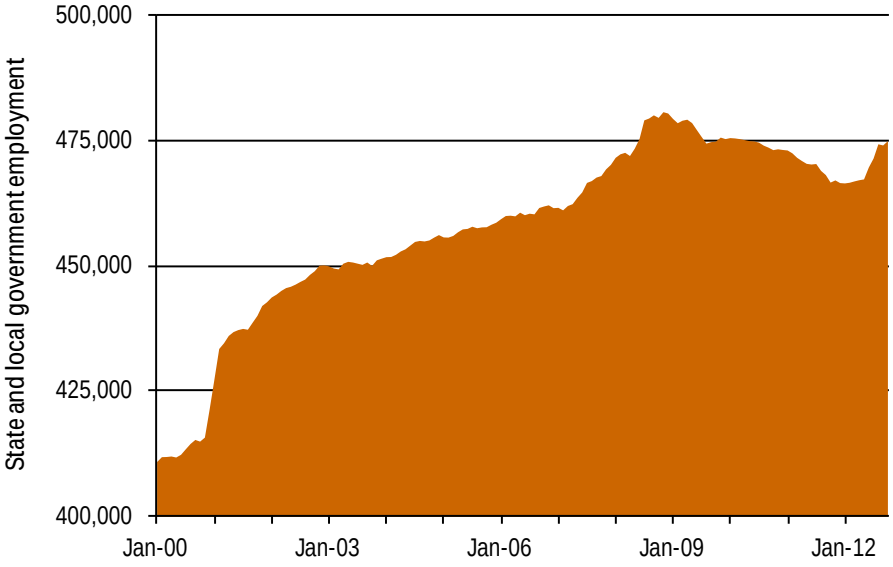
One positive indicator of revival in housing markets around the state is data compiled by the Washington Center for Real Estate Research, which show sales of existing homes in the first three quarters of 2012 were up 11 percent compared to the first three quarters of 2011.[12]

[11] 2012 is from the November 14, 2012, meeting of the Economic and Revenue Forecast Council.
[12] Washington Center for Real Estate Research is an industry-focused unit within the Runstad Center for Real Estate Studies. It is housed within the College of Built Environments at the University of Washington. Quarterly data concerning the housing markets across the state are accessible at the website using this url, http://wcrerdata.be.washington.edu/WSHM/2012Q3/Snapshot_2012Q3.pdf.

Downward trend in state and local government employment

The data in *Figure 2-6* show state and local government employment in October 2012 was 474,000, accounting for 87 percent of public-sector jobs in Washington state. Since the peak reached in the fourth quarter of 2008, total employment among state and local governments is down 1.6 percent. Local government employment has fallen 2.4 percent with the education sector experiencing a decline of 2.1 percent and non-education employment down 2.6 percent. State government employment in October 2012 was down just 0.1 percent from the fourth quarter of 2008. The number of people employed in state government outside of the education sector has declined 3.5 percent, whereas the number of workers in the state education system has risen 2.3 percent.

Figure 2-6. State and local government employment, seasonally adjusted
Washington state, January 2000 through October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Current Employment Statistics

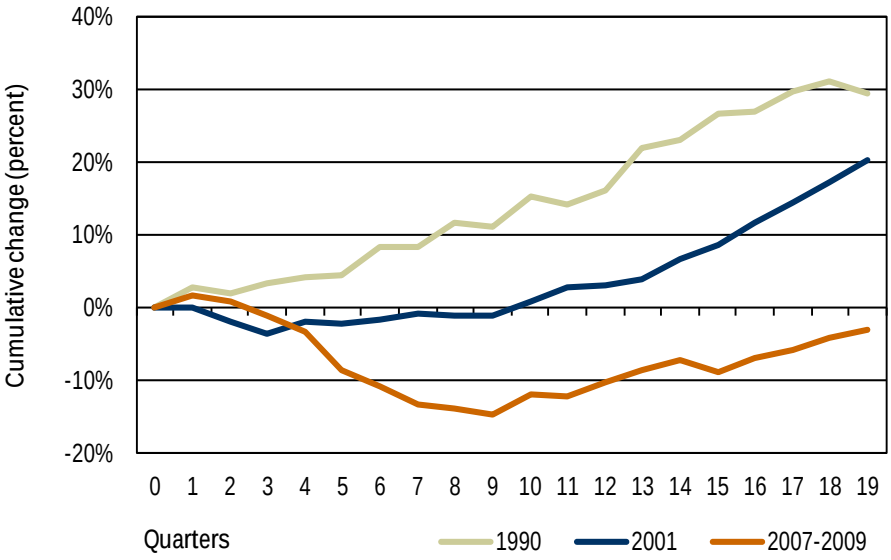


On downward trend since 2008 Q4.

The data in *Figure 2-7* show the level of revenue collections for the state government from sales taxes and other sources from their respective peaks relative to each quarter from the peak.

The unprecedented severity of the recession decimated revenue flows to the state government. The collapse in consumer spending on taxable goods and services during the recession, especially on sales of cars, appliances, dining outside the home and real estate transactions drove down revenues by 15 percent by early 2010. Retail sales and the number of home purchases have been up since then, but not enough to return revenue collections to the fourth-quarter 2009 level.

Figure 2-7. Washington state Revenue Act, collections after business cycle peaks[13]
Washington state, 1990, 2001 and 2007 to 2009 recessions
Source: Washington State Economic and Revenue Forecast Council



Revenue collections still 3 percent below pre-recession level.

[13] Revenue Act collections in order of importance are retail sales tax, business and occupation tax, use tax, public utility tax, and penalties and interest. In the 12-month period ending October 10, 2012, Revenue Act collections accounted for 78 percent of Department of Revenue tax receipts.

Exports critical to state economy

As shown in *Figure 2-8*, growth in nine of the ten largest commodity groupings exceeded 10 percent in 2011. Aerospace dominates the state's exports and the gains experienced in 2011 more than offset the decline in 2010. This is consistent with the global economy coming out of the recession in 2010. Four commodities listed are agriculture-based and one is from the forest products industry.

Figure 2-8. Top-10 Washington state export commodities in millions of 2011 dollars
Washington state, 2008 through 2011
Source: U.S. Census Bureau

	Millions of 2011 dollars					
Commodity	2008	2009	2010	2011	2011 Percent share of state exports	Percent change 2010 to 2011
Civilian aircraft, engines and parts	$21,426	$26,382	$23,199	$27,083	41.8%	17%
Soybeans, whether or not broken	$4,469	$3,718	$4,137	$3,691	5.7%	-11%
Wheat (other than durum wheat) and meslin	$2,211	$1,140	$1,275	$2,821	4.4%	121%
Corn (maize) other than seed corn	$3,118	$1,421	$1,946	$2,599	4.0%	34%
Oil (not crude) from petrol and bitum mineral	$1,932	$1,201	$1,175	$2,439	3.8%	108%
Coniferous wood in the rough, not treated	$507	$429	$680	$990	1.5%	46%
Silicon	$566	$402	$719	$849	1.3%	18%
Light oils and prep (not crude) from petroleum and bitum	$328	$238	$356	$821	1.3%	130%
Apples, fresh	$534	$569	$618	$770	1.2%	25%
Ferrous waste and scrap nesoi	$579	$371	$573	$759	1.2%	33%

Aerospace share of exports has averaged 44 percent for 2008 through 2011.

China is largest destination for Washington state exports

Exports from Washington state fell 5 percent during the global recession of 2009, in which world real gross domestic product (GDP) fell 2.3 percent (*Figure 2-9*).[14] The recovery in the global economy, albeit slow by historical standards, has pushed up demand for Washington-produced goods. In 2010, it rose 3 percent and surged by 21 percent in 2011.

[14] International Monetary Fund, World Economic Outlook (WEO) database, October 2012 Edition. Gross domestic product, constant prices, and market exchange rates.

Figure 2-9. Top-10 destination countries for Washington state exports in millions of 2011 dollars
Washington state, 2008 through 2011
Source: U.S. Census Bureau

	Millions of 2011 dollars					
Commodity	2008	2009	2010	2011	2011 Percent share of state exports	Percent change 2010 to 2011
China	$8,310	$9,113	$10,303	$11,233	17.3%	9%
Canada	$9,238	$6,792	$6,977	$8,547	13.2%	23%
Japan	$7,590	$5,573	$6,135	$6,468	10.0%	5%
South Korea	$3,261	$2,039	$2,719	$3,261	5.0%	20%
United Arab Emirates	$2,155	$2,893	$961	$2,753	4.3%	186%
Hong Kong	$982	$1,741	$1,041	$2,079	3.2%	100%
United Kingdom	$1,289	$1,436	$1,250	$2,017	3.1%	61%
Turkey	$762	$351	$1,386	$1,760	2.7%	27%
Australia	$1,003	$983	$940	$1,718	2.7%	83%
Taiwan	$1,842	$1,170	$1,917	$1,715	2.6%	-11%

China accounted for 17 percent of exports from 2008 through 2011.

In estimating world GDP on a country-by-country basis, economists at the International Monetary Fund (IMF) adjust for relative price differences across countries.[15] Based on their estimate, China's economy is the second-largest in the world and has grown at an annual average rate of 9 percent, which helps explain why China is Washington state's largest export market. The proximity to Asian Pacific Rim countries and Australia is a critical factor driving the growth in demand for Washington-produced goods in 2011.

[15] International Monetary Fund, World Economic Outlook (WEO) database, October 2012 Edition.

King and Snohomish counties experiencing strongest recovery

As shown in *Figure 2-10*, nonfarm employment in the King and Snohomish counties in October 2012 was up 100,700 relative to February 2010, the trough of the recession. This marks an 83 percent recovery in the level of employment since February 2010, three times the rate of recovery in the rest of the state. The key driver for the growth is the aerospace industry in which employment is up 15,900, dramatically offsetting the loss of 4,400 jobs during the recession.

A critical reason for the balance of the state lagging in job recovery is employment in the healthcare industry has risen by just 2,100. This is a sharp contrast to King and Snohomish counties where healthcare employment was up 11,900.

Figure 2-10. Total nonfarm employment change through recession and recovery
Washington state, King and Snohomish counties and balance of state, February 2008 to February 2010 and February 2010 to October 2012
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Current Employment Statistics

	Employment change February 2008 to February 2010	Employment change February 2010 to October 2012	Percentage recovery in jobs lost
King and Snohomish counties	-121,500	100,700	83%
Balance of state	-83,500	23,300	28%
Total for state	-205,000	124,000	60%

King and Snohomish counties benefitting from growth in a number of industries.

Chapter 3: Seasonal, structural and cyclical industry employment

Three factors significantly affect employment and unemployment on a regular basis: *seasonality, structural change* and *cyclicality*. A fourth important factor is a one-time event that can significantly affect employment and unemployment at a specific point of time.

Seasonal employment changes are fluctuations that tend to happen at the same time each year. Structural (commonly referred to as "trend") employment change happens over long periods and can be caused by advances in technology, public policy and demographics. Cyclical employment change is driven by the business cycle in general, or specific events such as the bursting of the housing bubble. Irregular changes are one-time events.

The descriptive analysis in this chapter is based on filtering of time series. The results are based only on internal behavior of the series, not external factors. While exploring such connections – the "why" – are a plausible task, it is out of scope of this chapter.

Identifying seasonal, structural and cyclical employment change

To identify the three major factors that drive employment trends, statistical processes[16] are used to determine the influence of seasonal, structural and cyclical forces. The data used to identify all of these factors are based on employment covered by unemployment insurance from 1990 through 2011, at the three-digit North America Industry Classification System (NAICS) level (with the addition of some four-digit level detail industries).

Private nonfarm employment is combined with local and state government employment for the education and health industries. Federal employment is combined with private employment for the postal services and boat-building industries. The rest of the government employment is aggregated by federal, state and local levels.

[16] Census X-12 seasonal adjustment was used to break the time series into three components: irregular, seasonal and trend-cycle; and then used the Hodrick-Prescott filter to separate trend and cycle components from the trend-cycle series. Trend represents structural changes. The relative contributions of cyclical and trend factors to monthly employment changes are calculated as the average for all months of absolute differences for specific factors divided by the total of absolute differences for both factors. The percentages of relative contributions are used in report as identification of structural and cyclical changes.

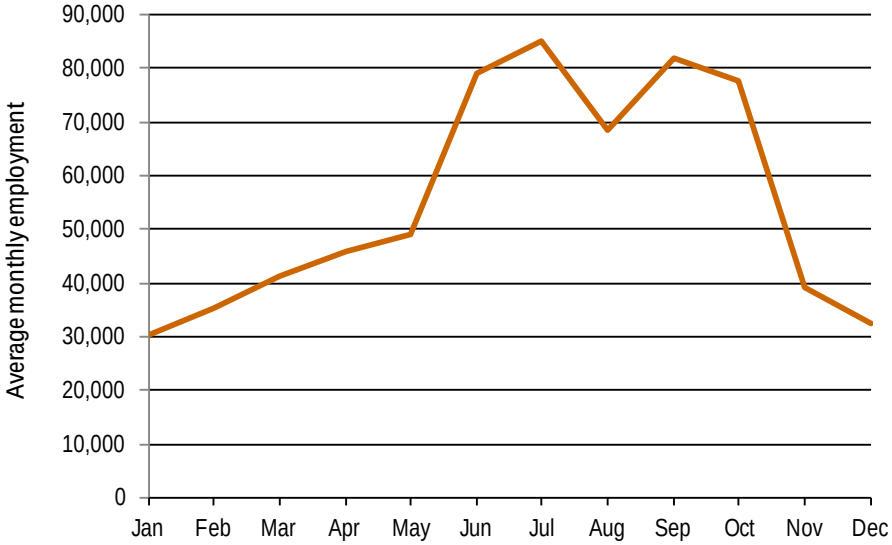
Seasonal employment change

Seasonal employment refers to periodic fluctuations in employment that tend to occur at the same time each year. Causes for seasonal change include regular weather patterns, administrative measures such as the start and end of the school year, and social, cultural and religious traditions such as holidays. According to the U.S. Census Bureau definitions, effects associated with the dates of variable holidays like Easter are not seasonal in this sense because they can occur in different calendar months from year to year.

Industries exhibiting consistent employment patterns every year are considered to be seasonal. Crop production, scenic and sightseeing transportation, support activities for agriculture and forestry are the most seasonal industries in Washington state.

Crop-production employment peaks in summer and early fall as shown in *Figure 3-1* for monthly averages since 1990. Heavy construction, performing arts and accommodation, retail trade and educational-service industries also have consistent seasonal patterns.

Figure 3-1. Average monthly employment in crop production
Washington state, 1990 through 2011
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages



Crop-production employment has two peaks in summer and early fall.

Based on analysis of 97 industries in Washington state, there are 15 industries with a high level of seasonality, 25 industries with a moderate level of seasonality, 27 industries with a low level of seasonality and 30 other industries categorized as not seasonal.

The levels of seasonality for each industry are based on a seasonal factor measure.[17] If this measure is less than 1 percent the industry is said to be not seasonal; industries with an indicator value between 1 and 2 percent have a low level of seasonality; industries with indicator values from 2 to 4 percent have a moderate level of seasonality. Finally, industries with indicator values of more than 4 percent have a high level of seasonality.

Not surprisingly, the crop-production industry exhibits the most seasonality (*Figure 3-2*) followed by scenic and sightseeing transportation and support activities for agriculture and forestry. The food manufacturing, beverage production and tobacco-products manufacturing industries are seasonal due to their dependence on agriculture-related industries.

Figure 3-2. Industries with a high level of seasonality

Washington state, from 1990 through 2011
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

NAICS	Title	Seasonal factor
111	Crop production	34.4%
487	Scenic and sightseeing transportation	15.3%
115	Support activities for agriculture and forestry	14.2%
237	Heavy and civil engineering construction	9.1%
711	Performing arts, spectator sports and related industries	8.6%
213	Support activities for mining	8.3%
114	Fishing, hunting and trapping	8.2%
721	Accommodation	5.8%
611	Educational services	4.9%
311	Food manufacturing	4.8%
448	Clothing and clothing accessories stores	4.7%
713	Amusement, gambling and recreation industries	4.5%
512	Motion picture and sound recording industries	4.5%
312	Beverage and tobacco product manufacturing	4.4%
492	Couriers and messengers	4.1%

Crop production, scenic and sightseeing transportation, and support activities for agriculture and forestry are the industries with the highest degree of seasonality in Washington state.

[17] The indicators are defined as an average absolute difference between estimated factors and one, as one stands for no seasonality.

Shown in *Figure 3-3* are industries showing no seasonality in employment.

Figure 3-3. Nonseasonal industries

Washington state, 1990 through 2011
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

NAICS	Title	Seasonal factor
622	Hospitals	0.3%
522	Credit intermediation and related activities	0.3%
524	Insurance carriers and related activities	0.3%
621	Ambulatory healthcare services	0.3%
334	Computer and electronic product manufacturing	0.4%
623	Nursing and residential care facilities	0.4%
541	Professional, scientific and technical services	0.4%
551	Management of companies and enterprises	0.4%
523	Securities, commodity contracts and other financial investments and related activities	0.5%
331	Primary metal manufacturing	0.5%
511**	Other publishers	0.5%
423	Merchant wholesalers, durable goods	0.6%
3366	Ship and boat building	0.6%
3364	Aerospace product and parts manufacturing	0.6%
518	Data processing, hosting and related services	0.6%
335	Electrical equipment, appliance and component manufacturing	0.7%
333	Machinery manufacturing	0.7%
325	Chemical manufacturing	0.7%
521	Monetary authorities-central bank	0.7%
5171	Wired telecommunications carriers	0.8%
5112	Software publishers	0.8%
323	Printing and related support activities	0.8%
562	Waste management and remediation services	0.8%
515	Broadcasting (except internet)	0.8%
486	Pipeline transportation	0.9%
624	Social assistance	0.9%
481	Air transportation	0.9%
5172	Wireless telecommunications carriers (except satellite)	0.9%
336*	Other transportation equipment manufacturing	0.9%
811	Repair and maintenance	1.0%

*Excludes software publishers.
**Excludes Aerospace.

These Washington industries do not exhibit seasonality.

Structural employment change

Shifts in long-term employment growth trends are driven by fundamental structural change and productivity trends across industries, rather than the cyclical fluctuations in employment. Structural change in employment can be initiated by productivity improvement, policy changes or permanent changes in resources, technology or society.

Demographic forces, such as the changing age structure of the population, immigration, social trends influencing the tendency of people to be in the labor force, affect the supply of labor. These same forces affect the demand for new housing units, healthcare services and provision of public and private education.

Figure 3-4 lists the industries most affected by structural factors (structural component above 50 percent).

Analysis shows the industry most affected by the structural component is software publishers (68 percent), while scenic and sightseeing transportation is least affected (16 percent). On average (among percentages) for all industries, structural changes caused about 42 percent of employment growth trends.

Figure 3-4. Industries most influenced by structural factors
Washington state, 1990 through 2011
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

NAICS	Title	Structural factor
5112	Software publishers	68.3%
621	Ambulatory healthcare services	63.0%
425	Wholesale electronic markets and agents and brokers	60.2%
622	Hospitals	59.7%
453	Miscellaneous store retailers	57.0%
903	Local government (other)	56.2%
532	Rental and leasing services	56.0%
238	Specialty trade contractors	55.9%
624	Social assistance	55.9%
611	Educational services	55.8%
423	Merchant wholesalers, durable goods	54.1%
323	Printing and related support activities	53.1%
814	Private households*	52.1%
541	Professional, scientific and technical services	51.6%
623	Nursing and residential care facilities	51.2%

*Industries in the private households subsector include private households that engage in employing workers on or about the premises in activities primarily concerned with the operation of the household. These private households may employ individuals, such as cooks, maids, butlers, and outside workers, such as gardeners, caretakers, and other maintenance workers.

These Washington industries most influenced by structural factors such as technology changes, policy changes and changing demographics.

Cyclical employment change

Industries react in different ways to business-cycle fluctuations. Some industries are very vulnerable to economic swings, while others are relatively unaffected by them. These fluctuations normally occur around a long-term growth trend and typically involve shifts over time between periods of relatively rapid employment growth and decline. However, the cyclical fluctuations in some industries might be attributed to specific cycles in consumer demand, rather than general business cycles. For example, aerospace manufacturing employment continued to fall through 2004, even though the recession ended in 2002.

The same method used for identifying structural changes within an industry is applied to identify cyclical industries. *Figure 3-5* shows the industries with the largest cyclical variation (more than 70 percent). The scenic and sightseeing transportation industry has employment that is most attributable to cyclical factors (84.3 percent). Presumably, sightseeing is a discretionary activity and, hence, is more likely to increase in growth periods and decline in recessionary periods. The industry with the next-highest level of cyclicality is crop production. Agricultural industries (such as animal production, fishing, hunting and trapping) and support activities for agriculture and forestry are highly cyclical as well.

Figure 3-5. Industries most influenced by cyclical factors

Washington state, from 1990 through 2011
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

NAICS	Title	Cyclical factor
487	Scenic and sightseeing transportation	84.3%
111	Crop production	82.7%
213	Support activities for mining	81.7%
112	Animal production	77.3%
316	Leather and allied product manufacturing	76.6%
324	Petroleum and coal products manufacturing	75.2%
483	Water transportation	74.8%
486	Pipeline transportation	74.4%
711	Performing arts, spectator sports and related industries	73.7%
446	Health and personal care stores	72.4%
115	Support activities for agriculture and forestry	72.2%
221	Utilities	71.7%
114	Fishing, hunting and trapping	71.0%
512	Motion picture and sound recording industries	70.3%

These Washington industries are most sensitive to cyclical movements and exhibit shifts of relatively rapid employment growth and decline.

Figure 3-6 shows industries most influenced by overall economic growth and provides the correlation between industry employment growth and total employment growth.

Monthly employment in the food-services and drinking-places industry shows the strongest relationship to the state's growth pattern, with a correlation of about 99 percent. Employment in the administrative and support services, educational services, and amusement and support services industries also highly correlates with overall economic growth.

Figure 3-6. Industries most influenced by overall economic growth
Washington state, 1990 through 2011
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages

NAICS	Title	Cyclical factor	Correlation with total employment
721	Accommodation	66.5%	95.0%
712	Museums, historical sites and similar institutions	64.8%	95.4%
485	Transit and ground passenger transportation	61.7%	96.5%
335	Electrical equipment, appliance and component manufacturing	61.1%	96.3%
531	Real estate	54.0%	95.1%
813	Religious, grantmaking, civic, professional and similar organizations	54.0%	95.2%
713	Amusement, gambling and recreation industries	52.3%	97.0%
561	Administrative and support services	51.4%	97.5%
722	Food services and drinking places	50.8%	98.7%
541	Professional, scientific and technical services	48.4%	96.3%
611	Educational services	44.2%	97.2%
903	Local government (other)	43.8%	95.3%
5112	Software publishers	31.7%	96.6%

These Washington industries are most influenced by overall economic growth and show a correlation between industry employment growth and overall economic growth.

Chapter 4: Unemployment

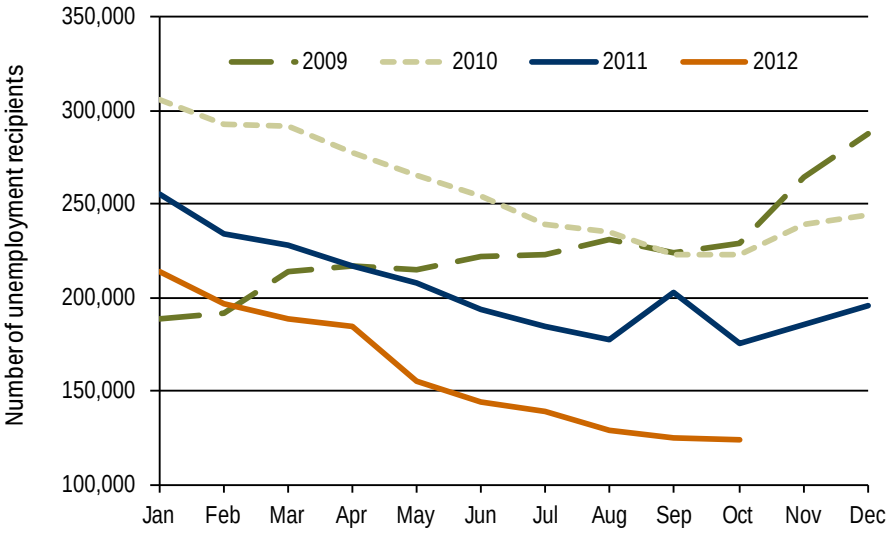
The recovery in the state's economy is generating employment gains, yet it is important to review unemployment measures. Given the severity of the recession and the length of time it is taking those unemployed to find a job, the number of people exhausting their unemployment benefits continues to grow.

Unemployment benefits

In October 2012, 124,000 people received unemployment benefits. *Figure 4-1* shows the number of beneficiaries in October 2012 decreased by 59 percent from the peak of 305,000 recorded in January 2010. The drop in beneficiaries reflects several factors including:

- Some claimants found jobs.
- Some claimants exhausted all of their unemployment benefits.
- Fewer people applied for benefits.

Figure 4-1. Unemployment recipients by month, all entitlement programs
Washington state, January 2009 through October 2012
Source: Employment Security Department/LMEA, Unemployment Insurance Data Warehouse



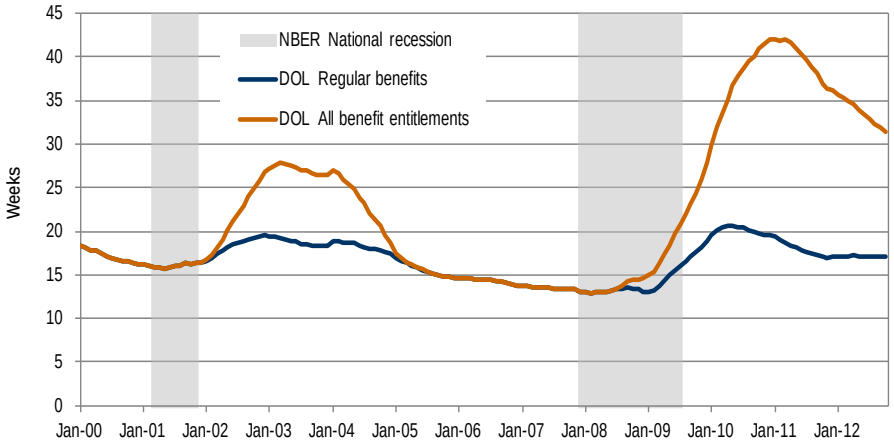
Recipients on downward trend.

Duration of unemployment benefits

Typically, individuals covered by unemployment insurance can receive up to 26 weeks of regular unemployment benefits in a 52-week benefit year. Driven by the severity of job losses during the Great Recession, additional weeks of federally funded unemployment benefits were made available to those who had used all of their regular unemployment benefits, up to an additional 53 weeks of emergency unemployment benefits and 20 weeks of extended benefits. This meant a person could claim up to 99 weeks of unemployment benefits.[18]

Duration of benefits is the number of weeks benefits are paid to a claimant. Average duration for regular benefits and all benefits received in 2010 peaked at 20 weeks and 42 weeks, respectively. (*Figure 4-2*) In 2011, average duration of regular benefits declined to 18 weeks and the average duration of all benefits dropped to 40 weeks. The first six months of 2012 show average duration of regular benefits at 17 weeks and average duration for all benefits of 35 weeks.

Figure 4-2. Duration of regular unemployment benefits compared to all benefits
Washington state, January 2000 through October 2012
Source: U.S. Department of Labor, Education & Training Administration, Monthly Program and Financial Data; National Bureau of Economic Research



Duration of regular unemployment benefits has stabilized.

[18] During 2012, the length of extended benefits was reduced in stages. Extended benefits ended in April 2012, while emergency unemployment benefits were scheduled to last through the end of 2012.

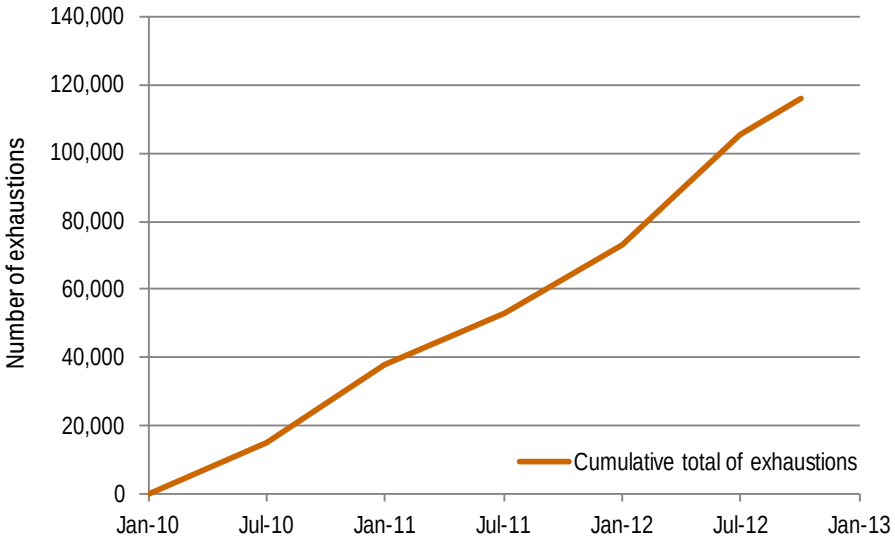
More people have exhausted all benefits

Unemployed people exhaust their benefits when they have received all their regular, emergency and extended unemployment benefits. *Figure 4-3* shows the cumulative total of exhaustions. Beinning in January 2010 and running through October 2012, 115,947 people had used all of their available unemployment benefits.

Figure 4-3. Number of people exhausting all unemployment benefits since emergency and extended unemployment programs were activated

Washington state, January 2010 through October 2012

Source: Employment Security Department/LMEA, Unemployment Insurance Data Warehouse



Steady increase in number of people experiencing exhaustions of unemployment benefits.

Benefits exhaustions by industry, occupation and area

Higher levels of benefits exhaustion are generally associated with long-term unemployment. The following figures provide detailed data by industry, occupation and area for those who potentially face continued joblessness after receiving all their regular, emergency and extended unemployment benefits.

Exhaustions by industry

Figure 4-4 presents exhaustions by industry. From November 2011 to October 2012, the construction industry accounted for 16.4 percent of all those who had exhausted their benefits. Construction's share of total covered employment is 4.5 percent and exhaustion to employment ratio is 3.7. Calculating the exhaustion rate to employment, percent of exhaustees divided by percent of employment, can identify industries where unemployed workers were dealing with long-term unemployment and industries that were still struggling to recover from the recent recession.

Figure 4-4. Unemployment benefits exhaustions by industry, all types of benefits
Washington state, November 2011 through October 2012
Source: Employment Security Department/LMEA, Quarterly Census of Employment and Wages

Industry sector	Annual exhaustions	Percent of exhaustions	*Industry share of covered employment	Exhaustions to employment ratio
Construction	8,346	16.4%	4.5%	3.7
Manufacturing	5,733	11.3%	9.3%	1.2
Trade	5,117	10.1%	10.8%	0.9
Healthcare and social assistance	4,573	9.0%	11.5%	0.8
Administrative and support and waste management and remediation services	4,292	8.5%	4.8%	1.8
Government (excluding education services)	3,167	6.2%	18.3%	0.3
Professional, scientific and technical services	2,716	5.4%	5.7%	0.9
Accommodation and food services	2,529	5.0%	7.8%	0.6
Wholesale trade	2,515	5.0%	4.2%	1.2
Other services (except public administration)	2,302	4.5%	4.6%	1.0
Finance and insurance	2,196	4.3%	3.1%	1.4
Transportation and warehousing	1,496	2.9%	2.8%	1.0
Information	1,356	2.7%	3.6%	0.7
Real estate, rental and leasing	1,310	2.6%	1.5%	1.7
Educational services	1,026	2.0%	1.2%	1.6
Arts, entertainment and recreation	932	1.8%	1.6%	1.1
Agriculture, forestry, fishing and hunting	783	1.5%	3.2%	0.5
Management of companies and enterprises	134	0.3%	1.2%	0.3
Utilities	152	0.3%	0.2%	1.7
Mining	83	0.2%	0.1%	2.1

*QCEW 2011 preliminary annual average.

Construction accounted for disproportionate share of benefit exhaustions.

Exhaustions by occupation

Unemployment exhaustions by occupation are detailed in *Figure 4.5*. Administrative support, construction, production and management occupations continue to account for over 42 percent of all exhaustions.

Exhaustions-to-employment ratios are not available because total employment is reported only by industry, not by occupation.

Figure 4-5. Unemployment benefits exhaustions by major occupational groups, all types of benefits

Washington state, November 2011 through October 2012
Source: Employment Security Department/LMEA, Unemployment Insurance Data Warehouse

Occupational groups	Annual exhaustions, all types of benefits	Percent of exhaustions
Office and administrative support	8,396	16.2%
Construction and extraction	7,474	14.4%
Management	5,783	11.1%
Production	4,471	8.6%
Sales and related	4,342	8.4%
Transportation and material moving	3,124	6.0%
Installation, maintenance and repair	2,358	4.5%
Food preparation and serving related	2,102	4.1%
Business and financial operations	1,942	3.7%
Personal care and service	1,863	3.6%
Building and grounds cleaning and maintenance	1,155	2.2%
Healthcare support	1,110	2.1%
Computer and mathematical	1,055	2.0%
Architecture and engineering	1,017	2.0%
Healthcare practitioners and technical	978	1.9%
Arts, design, entertainment, sports and media	764	1.5%
Protective service	755	1.5%
Farming, fishing and forestry	783	1.5%
Military specific	600	1.2%
Community and social services	570	1.1%
Education, training and library	578	1.1%
Life, physical and social science	372	0.7%
Legal	299	0.6%

Three occupations account for 42 percent of benefit exhaustions.

Exhaustions by workforce development area

Figure 4-6 shows exhaustions by workforce development area (WDA) for November 2011 through October 2012. Seattle-King WDA, Pierce County WDA and Snohomish County WDA collectively accounted for more than 50 percent of all exhaustions. Seattle-King County also had almost twice as many exhaustions as either the Pierce or Snohomish WDAs. The lowest levels of exhaustions occurred in the Benton-Franklin WDA and Eastern Washington WDA.

Figure 4-6. Unemployment exhaustions by workforce development area, all types of benefits

Washington state, November 2011 through October 2012
Source: Employment Security Department/LMEA, Unemployment Insurance Data Warehouse

Workforce development area	Annual exhaustions, all types of benefits	Percent of exhaustions
Seattle-King County	13,609	26.2%
Pierce County	7,050	13.6%
Snohomish County	5,800	11.2%
Out of state	4,481	8.6%
Pacific Mountain	3,940	7.6%
Spokane County	3,425	6.6%
Southwest Washington	3,061	5.9%
Northwest Washington	2,556	4.9%
Olympic Consortium	2,235	4.3%
South Central Washington	2,081	4.0%
North Central Washington	1,456	2.8%
Benton-Franklin	1,356	2.6%
Eastern Washington	841	1.6%
Total	51,891	100.0%

Larger urban areas account for most of benefit exhaustions.

Unemployment rate

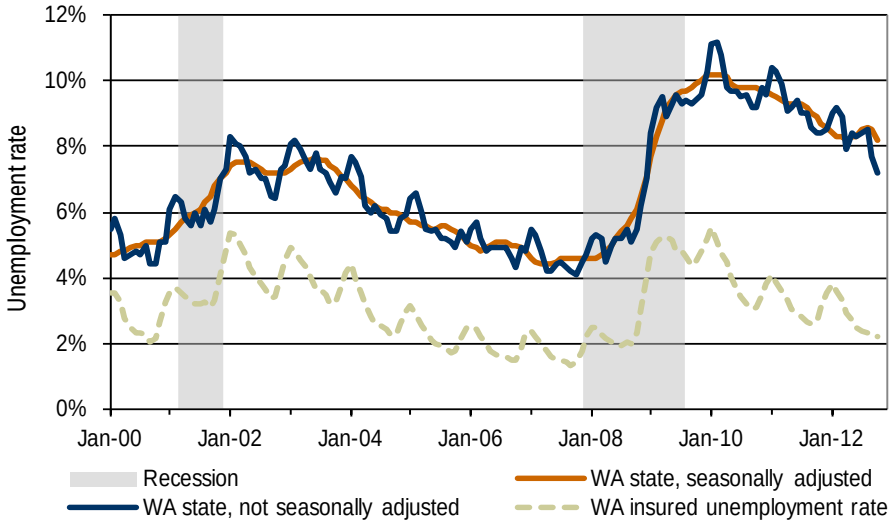
The insured unemployment rate, calculated only from unemployment-insurance program data, is the ratio of the insured unemployed (those drawing unemployment benefits) divided by the number of employees (working and not working) covered by unemployment insurance.

The total unemployment rate is the ratio of the estimated number of unemployed individuals actively looking for work relative to the labor force. Total unemployment includes workers covered by unemployment insurance and those not covered by unemployment insurance. The labor force includes those working and looking for work.

Figure 4-7 compares the insured and total unemployment rates for Washington. From 2000 to 2008, the total unemployment rate measures moved in tandem with the insured rate. In late 2008, both measures of unemployment began a dramatic rise and peaked in late 2010. Since 2009, the gap between the insured and total unemployment rates has also widened. This means there were increasing numbers of unemployed workers not insured or receiving benefits relative to the number of unemployed workers that were insured.

Figure 4-7. Unemployment rate, seasonally and not seasonally adjusted and the insured unemployment rate

Washington state, January 2000 through October 2012, recessions shaded in gray
Source: Employment Security Department/LMEA; National Bureau of Economic Research



Insured unemployment falling as recovery continues.

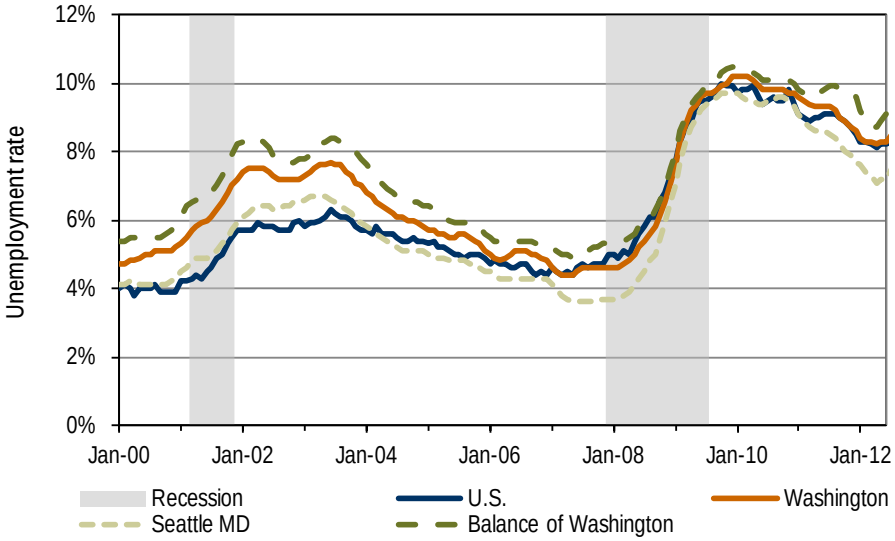
The regular or total unemployment rate

The total unemployment rate is widely used in economic analysis as one measure of the strength of the economy at a point in time. The data for measuring the unemployment rate come from the Local Area Unemployment Statistics (LAUS) program. LAUS is a national-state cooperative program that estimates total employment and unemployment. National LAUS data come from the Current Population Survey (CPS), the household survey that is the official measure of the size of the national labor force. For Washington state, the unemployment rate is a model-based estimate. Statistical models combine current and historical data from the CPS, the Current Employment Statistics (CES) program and state unemployment-insurance systems to calculate the commonly reported unemployment rate. Results from the state model are adjusted to the national totals. The Employment Security Department reports this rate each month as part of the *Monthly Employment Report*.

As shown in *Figure 4-8*, the state unemployment rate peaked in the first quarter of 2010. Since then, the unemployment rate has been trending downward and averaged 8.5 percent in the third quarter of 2012.

Through the recession, the unemployment rates in the United States, Washington state, Seattle and the rest of Washington converged. As discussed in *Chapter 2*, employment growth in Seattle has exceeded that of the rest of the state and the nation; hence the greater decline in the unemployment rate.

Figure 4-8. Historical unemployment rates, seasonally adjusted
United States and Washington state, January 2001 through October 2012, recessions shaded in gray
Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics; National Bureau of Economic Research



Lower unemployment rate in Seattle metropolitan district (MD) reflects faster employment growth in recovery.

Alternative unemployment rate measures

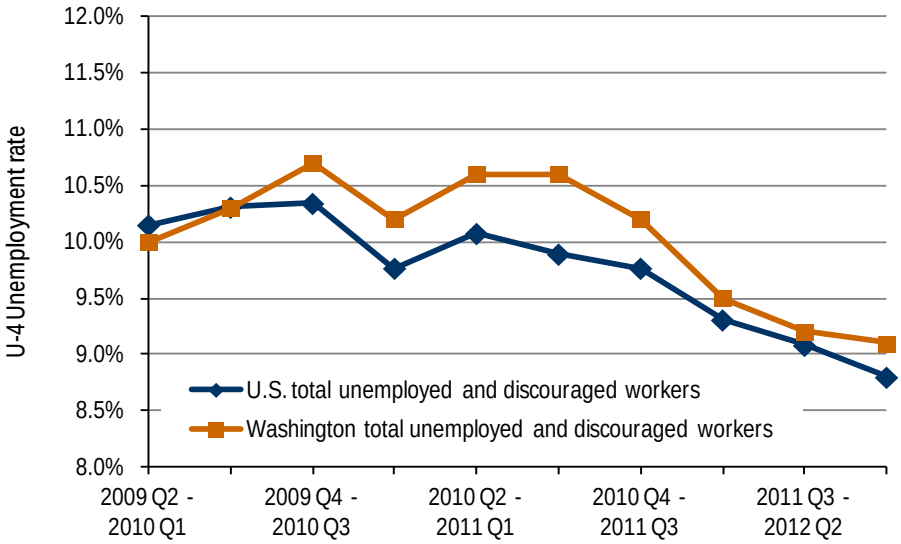
The Bureau of Labor Statistics (BLS) reports six alternative measures for labor underutilization, or unemployment. The commonly used definition of the unemployment rate is the number of people able to work and seeking work divided by the civilian labor force; it is equivalent to the U-3 rate. The general criticism of this unemployment rate measure is it is too narrow.

Three of the six alternative measurements are defined as:

- U-3 – Total unemployed as a percent of the civilian labor force.
- U-4 – Total unemployed plus discouraged workers, as a percent of the civilian labor force plus discouraged workers.
- U-6 – Total unemployment plus all marginally attached workers and employees working part time involuntarily, all as a percent of the civilian labor force plus all marginally attached workers.[19]

The U-4 measure rose faster and remained higher in Washington than for the country as a whole (*Figure 4-9*). The moving average for the third quarter of 2009 to the second quarter of 2010 had the state and the nation both at 10.3 percent. But from the third quarter of 2010 to the second quarter of 2011, the Washington state rate increased to 10.6 percent while the nation's rate decreased to 9.9 percent. The average for the U-4 measure in Washington state was 9.2 percent from the third quarter of 2011 to the second quarter of 2012 compared to the U-3 measure of 8.7 percent. This differential of 0.5 percentage point suggests the number of discouraged workers is 17,500. More than likely, the number of discouraged workers is understated because those who have been out of work for more than 12 months are not included in the labor force.

Figure 4-9. U-4 unemployment rate (includes discouraged workers)
United States and Washington state, four-quarter moving averages from 2009 Q2 through 2012 Q3
Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics

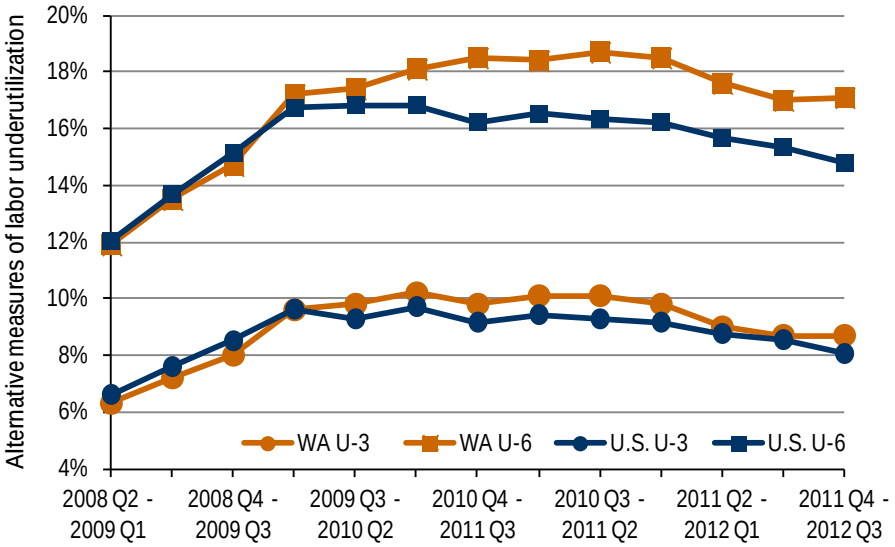


Washington unemployment rate accounting for discouraged workers remains higher than national average.

[19] The U.S. Bureau of Labor Statistics defines a marginally attached worker as someone currently not in the labor force, but who wants full-time work and has actively looked for a job in the past 12 months.

U-6 is the widest measure of unemployment. Its increase implies the number of discouraged workers, marginally attached workers and those working part-time involuntarily have risen even more than has the number of unemployed (*Figure 4-10*). This holds true more strongly for the state of Washington than for the nation. Washington's U-6 has remained higher than the national rate since the moving average of the second quarter of 2009 to the first quarter of 2010.

Figure 4-10. Trends in U-3 and U-6 alternate measures of unemployment
United States and Washington state, four-quarter moving averages from 2009 Q2 through 2012 Q3
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics



Most comprehensive unemployment rate measure remains higher in Washington than nationally.

Mass-layoff statistics

The Mass-Layoff Statistics (MLS) program is a national-state cooperative program that collects data on establishments having at least 50 initial unemployment claims within a five-week period. When initial claims total 50 or more, state MLS representatives contact those establishments to determine whether the separations are at least 31 days in duration. The questions asked of the employer are:

- What the reason was for the layoff?
- Do you expect to recall workers?
- Is the layoff associated with the movement of work domestically or globally?

MLS program data are used to help identify economically distressed areas and industries in the state. The data are also used to help allocate re-employment services and resources to those distressed workers and areas.

To protect employer confidentiality as guaranteed by BLS, mass layoffs are reported on a statewide basis, not by workforce development area (WDA).

Mass-layoff trends

Movement of work associated with mass layoffs decrease

From the third quarter of 2011 to the second quarter of 2012, there were three mass layoffs associated with the movement of work within the same company or to a different company, whether domestically or outside the United States. From the third of quarter of 2010 to the second quarter of 2011, there were seven reported mass layoffs.

Employers recall more laid-off workers

In the most recent four-quarter period (2011 third quarter to 2012 second quarter), employers recalled workers in 71 percent of mass layoffs. In the previous four quarters, the recall rate was 57 percent; and during the recession, employers recalled 30 percent of their laid-off workers in the third quarter of 2008 to third quarter of 2009.

Worksite closures remained the same

For both periods, third quarter of 2011 to third quarter of 2012 and the previous four quarters, employers reported 11 worksite closures associated with mass layoffs.

Mass-layoff events and separations fall only slightly in 2012

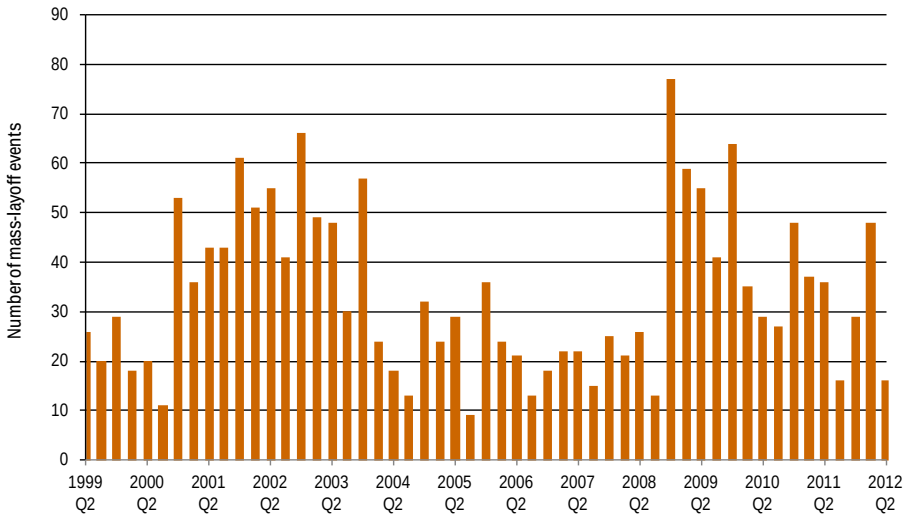
From third quarter of 2011 to third quarter of 2012,[20] Washington state employers reported 109 mass-layoff events. These events resulted in the separation of 15,879 workers losing their jobs for at least 31 days.

[20] At the writing of this report, MLS data was available through the second quarter of 2012. As a result, we compare four-quarter years from the third quarter of one year to the second quarter of the following year.

Mass layoffs have declined in the last year compared to the previous four quarters, but the number is still higher than pre-recession levels (*Figure 4-11*). The number of separations associated with these events has increased in the last four quarters and has remained above 15,000 for the last three years.

MLS events decreased by 39, or 26 percent, and separations decreased 5 percent in the recent four-quarter period (third quarter of 2011 to second quarter of 2012) compared to the prior four-quarter period.

Figure 4-11. Confirmed mass-layoff events
Washington state, 1999 Q2 through 2012 Q2
Source: Employment Security Department/LMEA, Mass-Layoff Statistics Program



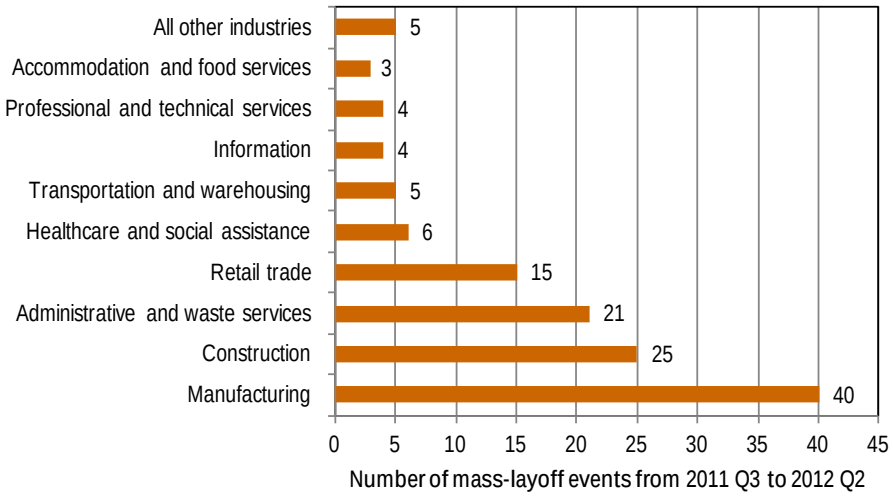
Confirmed mass-layoff events have declined in the four quarters from 2011 Q3 to 2012 Q2.

Mass layoffs occurred mostly in four industry sectors

From third-quarter 2011 and second-quarter 2012, the four industry sectors reporting the largest number of mass layoffs were manufacturing, construction, administrative and waste services, and retail trade (*Figure 4-12*). These are the same sectors that reported the most layoffs in the four previous quarters.

Figure 4-12. Confirmed mass-layoff events by industry

Washington state, 2011 Q3 to 2012 Q2
Source: Employment Security Department/LMEA, Mass-Layoff Statistics Program



Manufacturing and construction have accounted for roughly 50 percent of mass-layoff events.

Chapter 5: Employment projections

Information in this chapter is from the Employment Security Department's (ESD) *2012 Employment Projections*.[21]

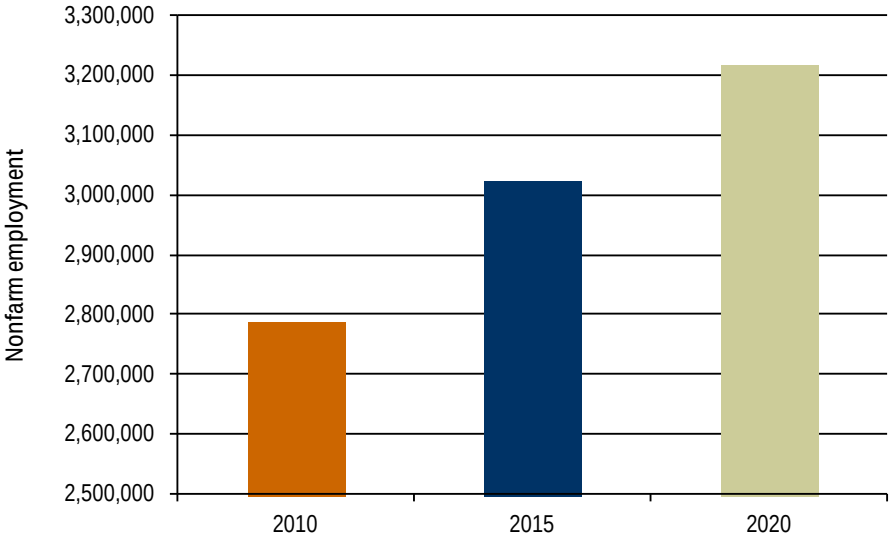
Policy-makers, job seekers and economic analysts each use occupational and industry employment projections for different purposes, as discussed further in this chapter.

Industry forecasts are provided for two-, five- and 10-year time horizons. The occupational staffing pattern for each industry is used to convert the industry projections into occupational projections. The base year for the projections is 2010.

Industry employment projections

Total nonfarm industry employment in Washington state is projected to reach 3 million by 2015 and 3.2 million by 2020 (*Figure 5-1*).

Figure 5-1. Nonfarm industry employment
Washington state, 2010, 2015 and 2020
Source: Employment Security Department/LMEA, Employment projections



Nonfarm employment in Washington projected at 3,200,000 in 2020.

Washington state is projected to have an estimated 236,000 net new nonfarm jobs from 2010 to 2015, an average annual growth rate of 1.6 percent. This growth rate is larger than the average annual growth rate of 1.4 percent projected for the state for 2009 to 2014 in Employment Security Department's (ESD) previous employment projections.

[21] See: https://fortress.wa.gov/esd/employmentdata/reports-publications/industry-reports/employment-projections.

Figure 5-2 presents 2010 employment base-year estimates and 10-year projected share of employment by industry for Washington state and the nation.[22] Since five-year projections are not produced on the national level, Washington's five-year projections are not included.[23]

Changes in employment structure for the state and the nation are similar. Significant increases in the percentage of total employment that each sector represents (employment shares) for both the state and the nation are expected in the professional and business services and health services sector. The largest decreases by share of employment are in the government sector for both the state and the nation and in manufacturing at the national level. National projections anticipate much more significant decreases in the employment share for manufacturing and increases for health services and construction.

Figure 5-2. Base and projected industry employment
Washington state and United States, 2010 and 2020
Source: Employment Security Department/LMEA; U.S. Bureau of Labor Statistics, Employment projections

	Washington state			United States	
Industry	Estimated employment 2010	Estimated share of employment in 2010	Estimated share of employment in 2020	Estimated share of employment in 2010	Estimated share of employment in 2020
Mining	2,200	0.1%	0.1%	0.5%	0.5%
Construction	140,100	5.0%	5.2%	4.2%	4.9%
Manufacturing	257,600	9.3%	9.1%	8.8%	7.6%
Wholesale trade	120,600	4.3%	4.4%	4.2%	4.1%
Retail trade	308,000	11.1%	10.5%	11.1%	10.8%
Utilities	4,900	0.2%	0.2%	0.4%	0.3%
Transportation and warehousing	83,600	3.0%	3.1%	3.2%	3.4%
Information	102,700	3.7%	3.9%	2.1%	1.9%
Financial activities	139,200	5.0%	4.5%	5.8%	5.6%
Professional and business services	326,400	11.7%	13.5%	12.8%	13.6%
Education services	48,700	1.7%	1.8%	2.4%	2.6%
Health services and social assistance	326,500	11.7%	12.5%	12.6%	14.7%
Leisure and hospitality	266,300	9.6%	9.5%	10.0%	9.6%
Other services	104,900	3.8%	3.4%	4.6%	4.6%
Federal government	75,600	2.7%	2.4%	2.3%	1.7%
State and local government	475,600	17.1%	16.1%	15.0%	14.1%

The mix of industry employment expected to be unchanged from 2010 to 2020. The largest growth sectors for the state and the nation projected to be the professional and business services and health services sectors.

[22] To compare structural changes in long-term employment projections for the primary nonfarm industry sectors, logging employment is removed from the nonfarm employment data, since logging is not part of national total nonfarm employment projections.
[23] For detailed five-year projections for Washington, see: https://fortress.wa.gov/esd/employmentdata/reports-publications/industry-reports/employment-projections.

The effect of the great recession on growth rates

The Great Recession had a substantial negative effect on employment growth rates for the 2000 to 2010 period and put most areas of the state well below long-term historical trends. *Figure 5-3* shows historical and projected growth rates for the state and Washington's 12 workforce development areas (WDA).

Projected growth rates for the 2010 to 2015 and for the 2015 to 2020 periods, for all areas except Benton-Franklin WDA, are considerably higher than the rates achieved from 2000 to 2010. The largest difference between the historical growth rates and the projected growth rates is expected to be in the Seattle-King County WDA. From 2000 to 2010, nonfarm employment for the area declined 0.5 percent per year. The average annual employment growth rate in the next 10 years (2010 to 2020) is projected to be 1.5 percent. According to our forecast, King County employment will reach the pre-recession level of year 2008 in 2014 to 2015.

Benton-Franklin WDA is the only area where projected growth is less than that experienced in the previous 10 years. The effects of the recession affected several industries (real estate, construction and financial activities), but were more than offset by increased employment at Hanford due to stimulus funding for two-year environmental cleanup projects. While this area is projected to have the fastest growth rate among the WDAs from 2010 to 2020, it is expected to be 1.2 percentage points below that of the 2000 to 2010 period.

Figure 5-3. Historical and projected nonfarm employment growth
Washington state and Workforce Development Areas, 2000 to 2010, 2010 to 2015 and 2015 to 2020
Source: Employment Security Department/LMEA, Employment projections

Workforce development area	Historical growth rate 2000 to 2010	Projected growth rate 2010 to 2015	Projected growth rate 2010 to 2020
Statewide	0.27%	1.64%	1.26%
Olympic Consortium	1.02%	1.14%	1.23%
Pacific Mountain	0.66%	1.22%	1.09%
Northwest	0.90%	1.57%	1.16%
Snohomish County	1.28%	1.99%	1.27%
Seattle-King County	-0.47%	1.74%	1.29%
Pierce County	0.78%	1.43%	1.25%
Southwest Washington	0.45%	1.85%	1.32%
North Central	0.47%	1.53%	1.01%
South Central	0.32%	1.40%	1.06%
Eastern Washington	0.36%	1.28%	1.10%
Benton-Franklin	2.84%	1.69%	1.59%
Spokane	0.44%	1.55%	1.29%

While Benton-Franklin WDA is the only area where projected growth is less than that experienced from 2000 to 2010, it is still higher than projected growth rates for the rest of the state.

Occupational projection results

The 10-year average annual growth rate for total employment from 2010 to 2020 is projected to be 1.37 percent, slightly below the predicted rate of 1.43 percent for the 2009 to 2019 period. The national average annual growth rate for 2010 to 2020 is expected to be 1.35 percent, essentially the same as for the state.

State and national occupational employment structures in 2010 are expected to be closer than in 2020. The index of dissimilarity[24] is expected to decrease from 7.1 percent in 2010 to 6.8 percent in 2020.

Projections for major occupational groups

Figure 5-4 shows occupational employment estimates and long-term projections at the state and national level.

[24] Index of dissimilarity between two normalized vectors X and Y is defined as ½ * Σ |X-Y|. The theoretically possible value of the index is between 0 and 1 (0 for fully equal structures and 1 for completely opposite structures).

Figure 5-4. Estimated and projected occupational employment structure

Washington state and United States, 2010 and 2020

Source: Employment Security Department/LMEA, Employment projections; U.S. Bureau of Labor Statistics, Employment Projections

		Estimated and projected employment shares					Shares of total average annual openings	
		Washington state			United States			
SOC	Occupational groups	Estimated employment 2010	Estimated employment shares 2010	Projected employment shares 2020	Estimated employment shares 2010	Projected employment shares 2020	Washington state	United States
11-0000	Management	162,744	5.09%	5.09%	6.13%	5.74%	4.79%	4.69%
13-0000	Business and financial operations	161,419	5.05%	5.12%	4.75%	4.87%	4.85%	4.66%
15-0000	Computer and mathematical	124,698	3.90%	4.33%	2.48%	2.64%	4.50%	2.62%
17-0000	Architecture and engineering	79,316	2.48%	2.56%	1.70%	1.64%	2.64%	1.46%
19-0000	Life, physical and social science	40,064	1.25%	1.29%	0.86%	0.87%	1.47%	1.00%
21-0000	Community and social services	54,824	1.71%	1.73%	1.68%	1.83%	1.64%	2.00%
23-0000	Legal	27,387	0.86%	0.85%	0.85%	0.82%	0.67%	0.63%
25-0000	Education, training, and library	188,503	5.90%	5.76%	6.43%	6.48%	5.07%	6.20%
27-0000	Arts, design, entertainment, sports and media	64,463	2.02%	2.04%	1.89%	1.87%	2.21%	1.95%
29-0000	Healthcare practitioners and technical	156,605	4.90%	5.16%	5.45%	6.00%	5.23%	6.55%
31-0000	Healthcare support	83,783	2.62%	2.77%	2.93%	3.44%	2.47%	3.73%
33-0000	Protective service	56,847	1.78%	1.71%	2.31%	2.24%	1.65%	2.18%
35-0000	Food preparation and serving related	241,571	7.56%	7.54%	7.79%	7.49%	10.09%	9.31%
37-0000	Building and grounds cleaning and maintenance	128,899	4.03%	4.17%	3.84%	3.77%	3.80%	3.02%
39-0000	Personal care and service	143,841	4.50%	4.58%	3.49%	3.87%	4.86%	4.71%
41-0000	Sales and related	326,280	10.21%	9.81%	10.43%	10.26%	10.64%	11.78%
43-0000	Office and administrative support	431,077	13.48%	13.38%	15.80%	15.25%	12.40%	13.60%
45-0000	Farming, fishing and forestry	91,787	2.87%	2.58%	0.68%	0.58%	2.36%	0.53%
47-0000	Construction and extraction	160,441	5.02%	4.95%	4.42%	4.73%	4.61%	5.04%
49-0000	Installation, maintenance and repair	121,313	3.79%	3.65%	3.79%	3.81%	3.24%	3.70%
51-0000	Production	158,936	4.97%	5.01%	6.01%	5.47%	4.69%	4.07%
53-0000	Transportation and material moving	192,084	6.01%	5.95%	6.29%	6.32%	6.11%	6.57%

Occupational projections running from 2010 to 2020 show the top three sectors for job openings will be office and administrative support occupations, sales-related occupations, and food preparation and serving-related occupations for both the state and the nation.

Compared with the nation, in the base year of 2010, Washington had significantly lower employment shares for office and administrative support, management, and production occupations, but significantly higher shares for farming, computer-related, and personal care and service occupations. With the exception of production occupations and computer-related occupations, these major differences will remain

through 2020. The share of production occupations is expected to become significantly lower by 2020, and the difference in share for computer-related occupations is expected to increase by 2020.

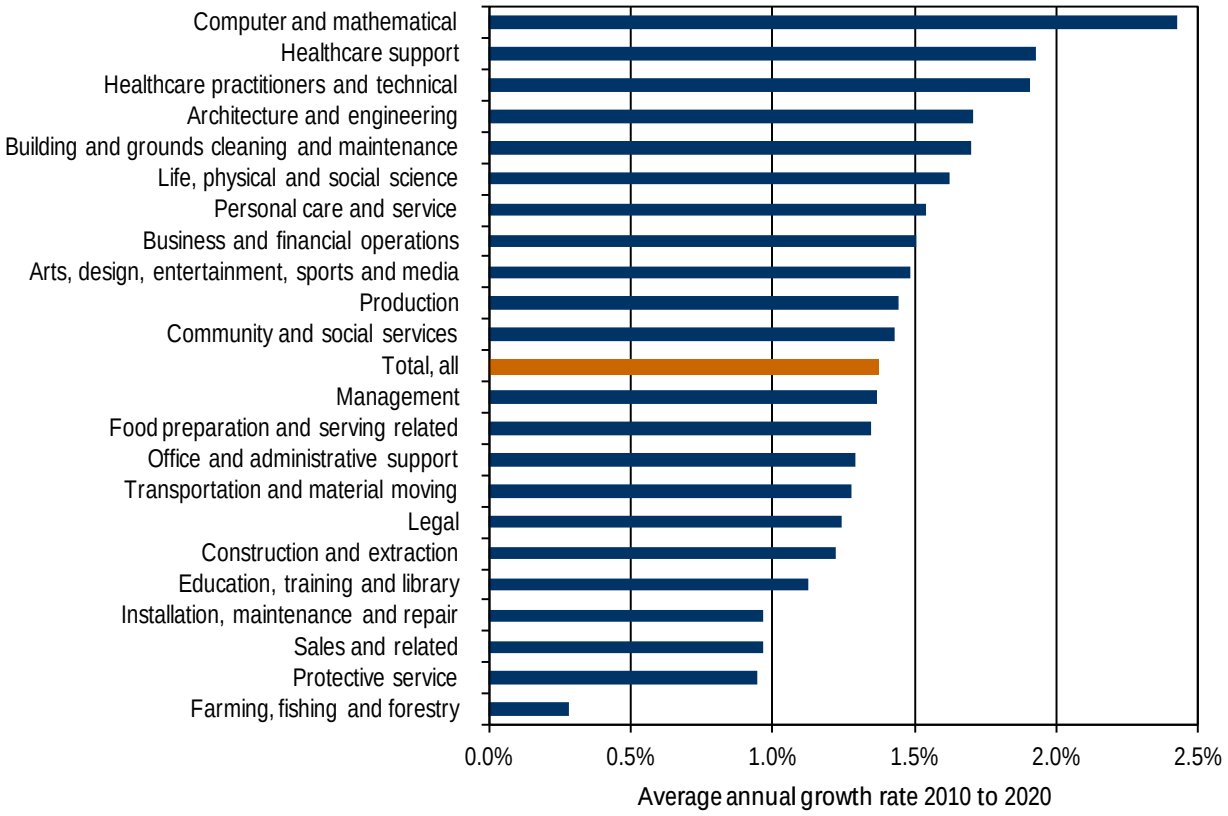
For the state, the largest increases in employment shares are expected to be in computer-related occupations, healthcare practitioners and technical occupations, and healthcare-support occupations. Two of these three occupational groups (health-related occupations) are also on top of the list for the national projections. Computer-related occupations rank fifth in projected increase for the nation, while they are first in Washington state.

Occupational projections show the top three occupations for job openings will be office and administrative support occupations, sales-related occupations, and food preparation and serving-related occupations for both the state and the nation in the same order. Combined, these three major groups are projected to represent 33 percent of total openings for the state and 35 percent for the nation.

The projected average annual growth rates for the major occupational groups in Washington state are presented in *Figure 5-5*.

At the state level, the fastest-growing occupational groups are projected to be computer and mathematical occupations, building and grounds cleaning and maintenance occupations, healthcare support occupations, and healthcare practitioners and technical occupations. The slowest growth is expected in farming occupations, protective service occupations, and sales and related occupations.

Figure 5-5. Average annual projected growth rates for major occupational groups
Washington state, 2010 to 2020
Source: Employment Security Department/LMEA, Employment projections



Computer and mathematical occupations were projected to experience the highest rate of employment growth in the 2011 report.

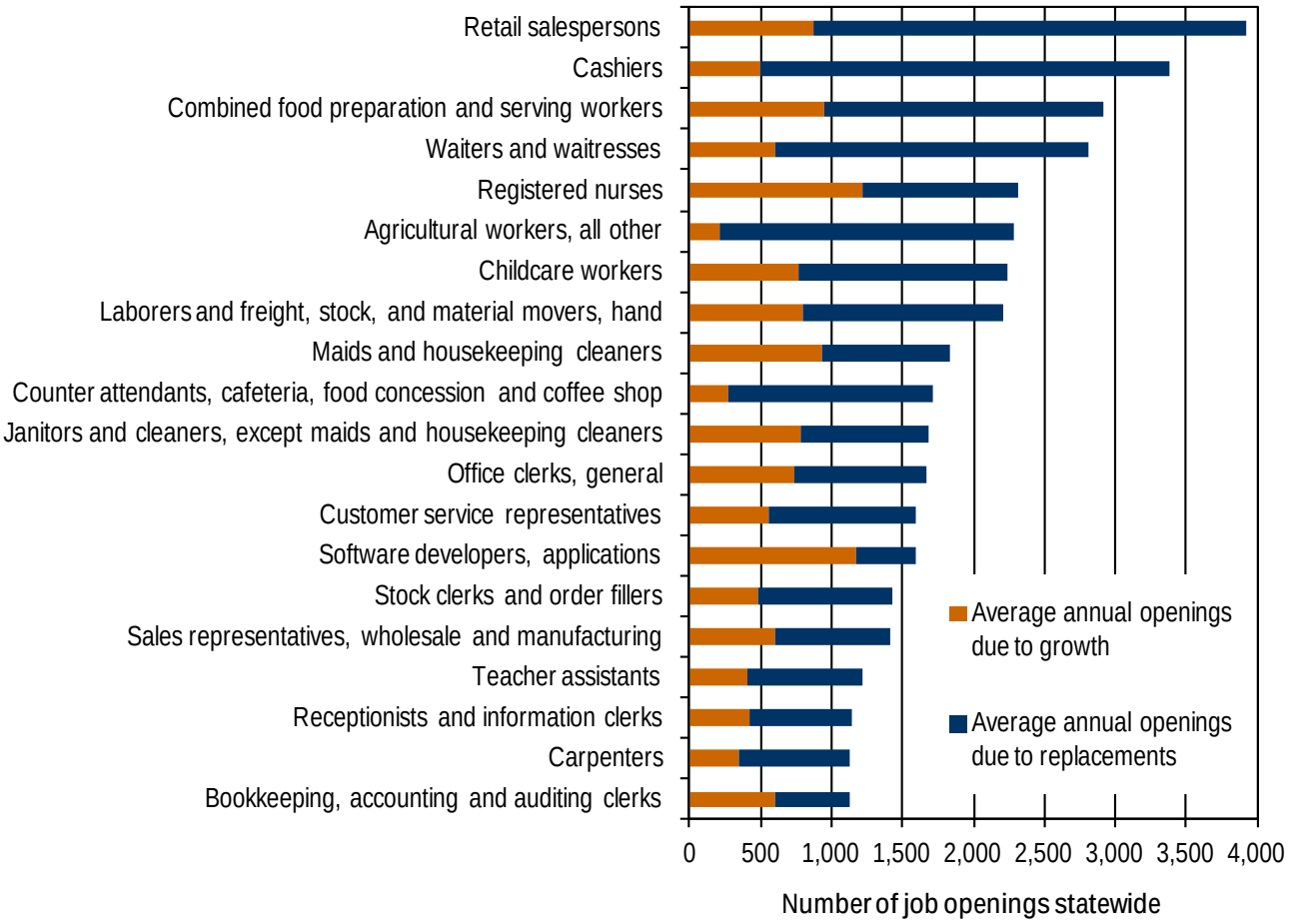
Projections for specific occupations

The top 20 specific occupations by total openings are presented in *Figure 5-6*. At the detailed occupational code level (six-digit SOC), retail salespersons and cashiers are projected to have the largest number of openings. Openings can be due to replacement or due to growth (a newly created position). Replacement includes openings created by retirements and separations. It does not include normal turnover as workers go from one employer to another or from one region to another without changing their occupations.

Only four of the top 20 occupations will have more vacancies due to growth than replacement vacancies. Among them, the largest absolute and relative differences are for computer application software developers, where the number of openings due to growth is 2.8 times larger than the number of openings from replacement. For the other 16 occupations, the number of openings due to replacement is greater (in many cases significantly greater) than the number of openings due to growth.

For total employment, 64 percent of openings are due to replacement and 36 percent due to growth.

Figure 5-6. Top 20 specific occupations by total openings
Washington state, annual averages for 2010 to 2020
Source: Employment Security Department/LMEA, Employment projections



For only four of the top 20 occupations, the number of openings due to growth exceeds that due to replacement. The largest difference is for computer application software developers, where number of openings due to growth is 2.8 times larger than number of openings due to replacement.

Employment and earnings by education level

The 2010 standardized occupation classification (SOC) codes assign one of eight new educational categories to all occupations. However, applying the new education categories to state occupational projections creates a mixed picture, with significant differences in employment estimations between categories.[25]

[25] For instance, occupations requiring a master's degree would have about 10 times less estimated employment than occupations requiring a bachelor's degree. Reliability of such results would not be high as education attachment is based on expected education rather than actual.

To make educational categories more representative and somewhat comparable with those used in previous projections, eight education categories are aggregated to four. When measuring by these educational categories, higher education levels are associated with higher wages. This held true in all areas of the state.[26]

Figure 5-7 shows statewide average employment and estimated wages by education level. Only occupations with available wage data are included in the calculations.

By 2020, 22.5 percent of jobs are expected to require a bachelor's degree or higher, slightly greater than 21.8 percent in 2010.

Figure 5-7. Employment, growth and wages by educational level
Washington state, 2010 to 2020
Source: Employment Security Department/LMEA, Employment projections

Education level	Estimated employment 2010	Average annual growth rate 2010 to 2020	Average annual total openings 2010 to 2020	Average annual wages (esimated for March 2011)
Bachelor's degree or higher	698,146	1.67%	28,574	$81,837
Associate degree and postsecondary non-degree award	306,129	1.55%	11,450	$62,852
Some college (no degree) and high school diploma or equivalent	1,311,876	1.26%	48,946	$45,559
Less than high school	880,578	1.21%	38,547	$28,694

The fastest employment growth in the 2010 to 2020 period is projected for occupations requiring a bachelor's degree or higher.

Wages increase with education

At the state level, the gains in earnings from one educational category to the next are spread evenly. The largest gain is the transition from an associate degree to a bachelor's degree, with an estimated average gain of $18,984 annually. The gain in average wages from some college to associate degree is $17,294: and from less than high school to high school and some college, the gain is $16,865. The estimated average gains between each for all workforce development areas are $14,279, $16,192 and $14,351, respectively.

[26] Wages are not part of the occupational projections. Source data for wages come from the Occupational Employment Statistics (OES) survey and are subject to restrictions and limitations of the OES survey. Agricultural employment is excluded from OES except for agricultural services. Self-employment and private households are not included in the OES survey. All wage estimations are adjusted as of March 2012.

Occupations by area

Tables for the top 10 occupations for the state and each workforce development area are available in the online appendix at **https://fortress.wa.gov/esd/employmentdata/reports-publications/occupational-reports/employment-projections**.

Personal and home-care aides are the most common occupation, appearing on eight of the lists, followed by market-research analysts and marketing specialists, software application developers, and welders, cutters, solderers and brazers (seven occurrences for each occupation).

Software application developers have the largest number of openings among the top 10 occupations in both short- and long-term projections. However, a ranking of total openings among all occupations (except those suppressed due to standards associated with the U.S. Bureau of Labor Statistics' Occupational Employment Statistics (OES) program), the largest number of expected openings are retail salespersons, cashiers and combined food-preparation and serving workers, including fast food. Occupations requiring a high school diploma, equivalent or some college are most common (53 occurrences), followed by occupations requiring a bachelor's degree or higher (41 occurrences), less than high school (27 occurrences), and associate degree or postsecondary non-degree award (9 occurrences).

Among the top 10 occupational lists, the Seattle-King County WDA has the highest percentage of occupations requiring a bachelor's degree or higher (eight of the top 10). Statewide, five out of 10 occupations require a bachelor's degree or higher.

Use of employment projection

These employment projections provide a general outlook for industries and occupations in Washington state. While they may not provide a complete picture of Washington's future labor market, they do provide a reasonably plausible view about Washington industry and occupational employment in the future.

Occupational projections show how many job openings are expected due to occupational employment growth and decline, and replacement needs. Total openings from occupational projections do not represent the total demand, but can be used as an indicator of the demand.

Chapter 6: Income and wages

For a majority of households in Washington state, incomes in 2011 were substantially less than in 2007, prior to the start of the recession. The decline was driven by fewer people working, reduced hours worked and, on average, lower wages. Please note that all data in this chapter have been adjusted for inflation and are expressed in 2011 inflation-adjusted dollars.[27]

Household and family income

Not surprisingly, the "Great Recession" that officially ended in 2009 took its toll on household and family income (*Figure 6-1*). Unfortunately, the first two years of the recovery brought no relief. According to the U.S. Census Bureau's American Community Survey (ACS), median household income fell sharply in 2010 and was essentially unchanged in 2011. The median household income was 5.8 percent lower in 2011 than in 2007.

Almost two-thirds of households are families (two or more related individuals living in the same housing unit). Median family income followed the same trend, as did non-family household income.[28]

Figure 6-1. Median household income in 2011 dollars
Washington state, 2007 through 2011
Source: U.S. Census Bureau, American Community Survey

	2007	2008	2009	2010	2011	Change 2007 to 2011
All households	$60,345	$60,317	$59,265	$57,201	$56,835	-5.8%
Family households	$72,148	$73,411	$71,908	$69,522	$68,628	-4.9%
Non-family households	$38,801	$38,661	$37,522	$36,174	$35,871	-7.6%

Incomes declined for both family and non-family households.

Household income has five sources: Earnings from wages, earnings from self-employment, investment income, transfer payments such as Social Security, and private retirement payments. From 2007 to 2011, according to the ACS:

- The share of households with earned income and the average earnings from holding a job dropped.
- The number of people who reported working full-time jobs (35+ hours/week) fell by 5 percent, while the number of those working part-time increased by 10 percent.

[27] Census data adjusted for inflation using CPI-U-RS from the U.S. Bureau of Labor Statistics. State wage data adjusted using the implicit price deflator for personal consumption expenditures from the U.S. Bureau of Economic Analysis. The two deflators are very similar.

[28] Non-family households accounted for 35 percent of all households and 80 percent of those were single-person households.

- The median earnings for full-time, year-round workers did not change, but the median earnings for all workers declined – a result of the shift towards more part-time workers. This shift also caused the percentage of people securing employer-paid health insurance coverage to fall more than the decline in the percentage of people employed.
- Self-employed workers declined as a share of total employment.
- The percentage of households with a Social Security beneficiary increased by 2 percentage points, in line with the growth in households with residents aged 65 and older.
- More households had members receiving Supplemental Security Income (largely for people with disabilities), but the average annual payout per household was constant.
- There is mixed evidence concerning cash welfare payments. The American Community Survey suggests the number of households receiving welfare jumped from 3.1 percent of households in 2007 to 4.6 percent in 2010 before dropping to 4.3 percent in 2011. There was no significant change in average benefits. There was little change in the proportion of people receiving private pension payments, though the annual average payout per household rose by 5 percent.

Since 2007, the number of households in lower-income brackets has increased, while the number of those in upper-income brackets has fallen. For example, 5.8 percent of households had incomes below $10,000 in 2007; that rose to 6.4 percent in 2011 (*Figure 6-2*). The poverty rate[29] increased more than 2 percentage points and child poverty rose 3 percentage points. When 2010 and 2011 are compared, there is no significant difference in income distribution, outside of a small increase in the share of households with incomes over $200,000 per year (*Figure 6-3*).

Again comparing 2011 with 2007, fewer households had earnings from a job, and more received support from Social Security, Supplemental Security Income (SSI), and welfare payments. The share of households receiving food stamps nearly doubled, from 7.7 percent to 14.5 percent. Those without any health insurance coverage increased from 12.5 percent in 2008 to 14.2 percent in 2011. This 1.7 percentage-point increase translates into a rise of 100,000 more people in Washington state without health insurance coverage.

[29] The U.S. government establishes a poverty threshold every year that is based on family size. In 2011, the threshold for a family of two adults and four children was $22,811. Thresholds for other family sizes are available at www.census.gov/hhes/www/poverty/data/threshld/index.html

Figure 6-2. Selected income statistics
Washington state, 2007 through 2011
Source: U.S. Census Bureau, American Community Survey

Selected income statistics	2007	2011
Households with income below $10,000	5.8%	6.4%
Households with income from $10,000 to $24,999	12.5%	14.2%
Households with income from $25,000 to $49,999	22.8%	23.5%
Poverty rate	11.4%	13.9%
Poverty rate, children under 5	17.8%	20.4%
Households with earnings from a job*	81.3%	79.0%
Receiving Social Security*	24.7%	26.9%
Receiving Supplemental Security income*	3.7%	4.5%
Receiving welfare cash payments*	3.1%	4.3%
Receiving food stamps*	7.7%	14.5%
Residents without health insurance#	12.5%	14.2%
Renters paying more than 30 percent of their income for housing	46.5%	44.2%
Homeownership rate	66.1%	62.8%
Homeowners paying more than 30 percent of their income for housing	33.5%	32.2%

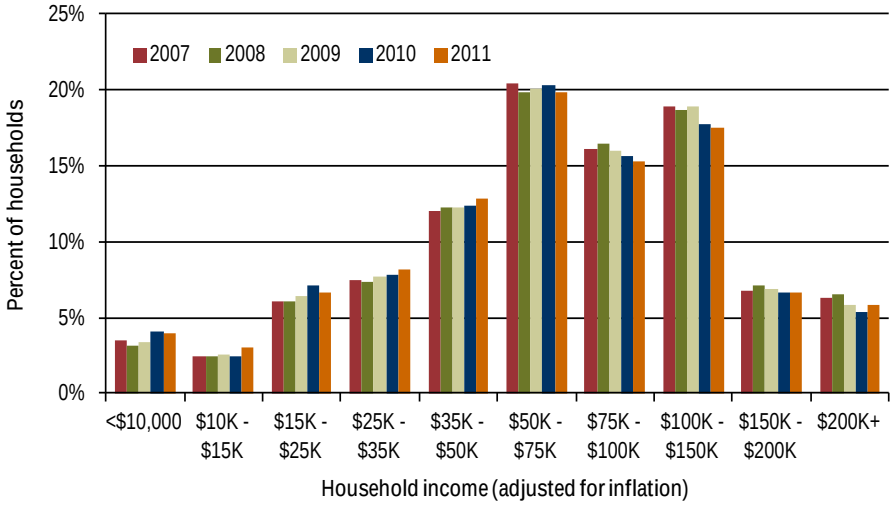
*Households may fall into more than one of these categories.
#Datum is for 2008, earlier data not available.

There were more people in poverty, more depending on the safety net, and fewer homeowners from 2007 to 2011.

In total, the homeownership rate dropped by more than 3 percentage points. As people's status shifted from owners to renters, the percentage of households in economic distress due to high housing costs fell from 2007 to 2011. The economists at Zillow.com estimate that in the third quarter of 2012, 34 percent of the homeowners in Seattle were underwater on their mortgage[30] (i.e., had mortgage debt greater than the market value of the home). According to the BEA (see section on personal and per capita income), investment income fell 20 percent in 2009 and changed little over the next two years. Interest income makes up about half of investment income. During this time short-term interest rates were near zero and long-term interest rates have been at record lows.

[30] Zillow Negative Equity Report. http://www.zillow.com/blog/research/2012/11/14/negative-equity-falls-in-the-third-quarter-but-fiscal-cliff-could-derail-momentum/

Figure 6-3. Percent of households by income range, 2011 dollars
Washington state, 2007 through 2011
Source: U.S. Census Bureau, American Community Survey



There were more lower-income households and fewer upper-income households from 2007 to 2011.

Wages

The previous section focused on households and families and the income they receive, regardless of source. In this section, we turn our attention to jobs and the wages they pay.

Specifically, the trends for jobs covered by the state unemployment insurance system are the focus of this section. Bonuses and overtime pay are included as part of wages. Benefits, tips, and other non-wage payments are not. Federal government jobs and jobs with private household employers[31] are excluded except for the average annual wage.

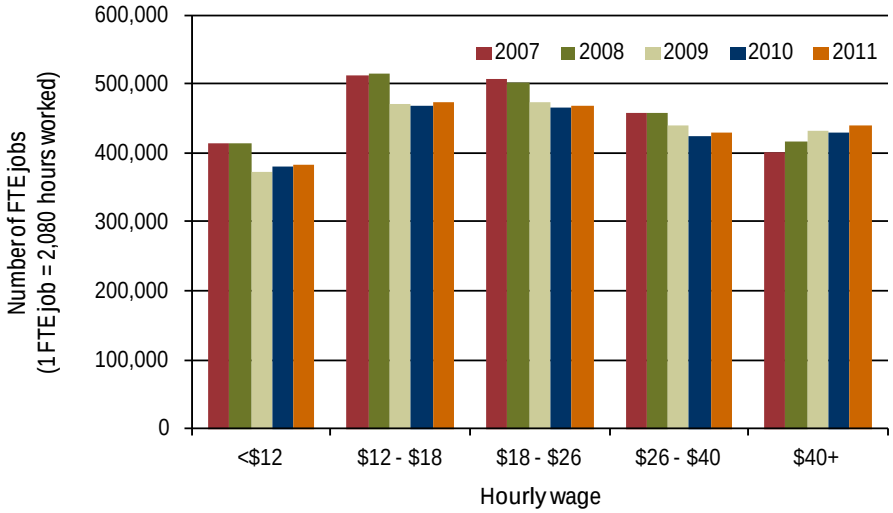
[31] NAICS code 814. NAICS is the North American Industrial Classification System.

The average annual wage for jobs in Washington rose each year from 2008 to 2011, when it reached $50,264. As shown in *Figure 6-4*, the increase is due to a loss of lower-wage jobs and a gain in higher-wage jobs.

The labor market has shifted to more part-time and seasonal jobs. The number of jobs covered by unemployment insurance increased by 1.4 percent in 2011. When these jobs are adjusted to a full-time equivalency basis (year-round, 40 hours a week), the growth rate was 1.2 percent, confirming part-time jobs grew at least twice as fast as full-time jobs. Similarly, from 2007 to 2011 unadjusted employment fell by 3.7 percent, but on a full-time-equivalent (FTE) basis, the loss was 4.3 percent.

In 2011, jobs were added across the wage spectrum. Also shown in *Figure 6-4*, there were more jobs in each of the five wage ranges displayed.

Figure 6-4. Number of FTE jobs by hourly wage range, 2011 dollars
Washington state, 2007 through 2011
Source: Employment Security Department/LMEA



There were large net losses in jobs paying below $40 per hour and a net gain in jobs paying more than $40 per hour.

Compared with 2007, before the recession began, there were still substantially fewer lower-wage (under $18 per hour) and medium-wage ($18 to $26 per hour) jobs in 2011 (*Figure 6-5*). Job losses began with a trickle in early 2008 before becoming quite deep in the last quarter of that year. In 2009 alone, 41,000 jobs paying less than $12 per hour disappeared. Only about 10,000 of these have come back.

- In 2011, there were 32,000 fewer jobs paying below $12 per hour than in 2007. The decline was concentrated in retail trade (especially general merchandise stores), with smaller but substantial losses in temp agencies, construction, manufacturing, and hospitality.
- More than 39,000 jobs paying between $12 and $18 per hour went by the wayside in the recession, with little net gain in the recovery. Two-thirds of these were in construction and manufacturing. Men were hit harder as they account for a larger share of the people working in construction and manufacturing.
- A similar number of jobs paying between $18 and $26 per hour came to an end. Almost half were in construction, and about one-sixth in manufacturing.
- Over 27,000 jobs paying between $26 and $40 per hour were eliminated. Over two-thirds of these were construction jobs.

Finally, the number of jobs paying $40 or more increased by almost 40,000. Four industries accounted for more than half of the gain: aerospace, local government (non-education), software, and computer systems design.

Figure 6-5. Change in number of FTE jobs by hourly wage range with top 4 industries, 2011 dollars

Washington state, 2007 through 2011
Source: Employment Security Department/LMEA

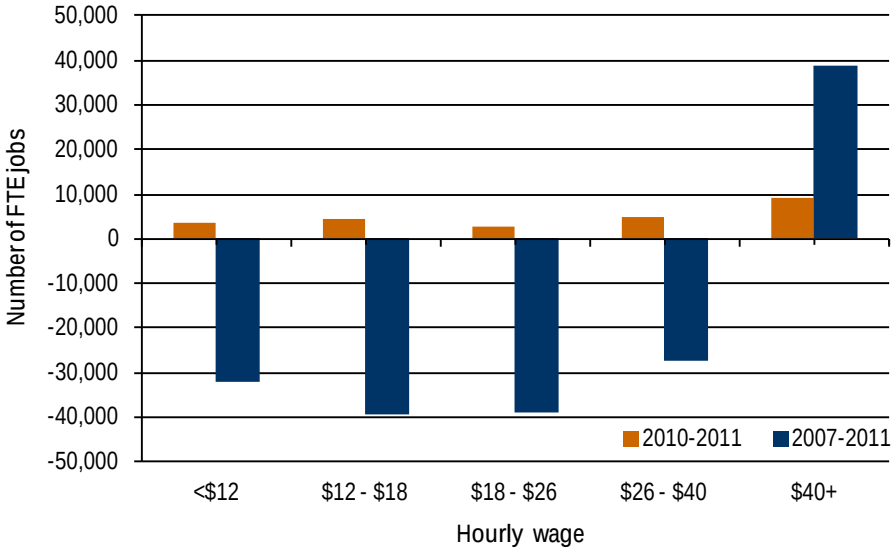
Net change in jobs, 2007 to 2011	
Jobs paying less than $12 per hour	
All industries	-32,083
Retail trade (NAICS 42)*	-13,168
Employment staffing (NAICS 5613)	-4,031
Manufacturing (NAICS 31-33)	-3,885
Construction (NAICS 23)	-3,666
Jobs paying $12 to $18 per hour	
All industries	-39,474
Construction	-15,380
Manufacturing	-11,609
Retail trade	-6,736
Wholesale trade (NAICS 42)	-2,760
Jobs paying $18 to $26 per hour	
All industries	-38,970
Construction	-17,744
Manufacturing	-6,639
Local government (non-education)	-3,972
Retail trade	-2,807
Jobs paying $26 to $40 per hour	
All industries	-27,370
Construction	-19,320
Retail trade	-3,018
Information services (NAICS 51)	-2,956
State government	-2,901
Jobs paying $40 per hour or more	
All industries	38,984
Aerospace (NAICS 3364)	6,543
Local governments (non-education)	6,069
Software (NAICS 5112)	5,217
Computer systems design (NAICS 5415)	4,431

*North American Industry Classification System

Construction dominated middle-wage job losses from 2007 to 2011.

The data in (*Figure 6-6*) show that jobs on a full-time equivalent basis paying $40 per hour or more accounted for roughly 50 percent of all job growth.

Figure 6-6. Change in number of FTE jobs by hourly wage range, 2011 dollars
Washington state, 2007 to 2011 and 2010 to 2011
Source: Employment Security Department/LMEA



Job growth at highest of pay scale.

The Great Recession and the slow recovery increased wage disparity in Washington state (*Figure 6-7*). The gap between the average wage for the lowest-paid 10 percent of jobs, and the average wage for the highest-paid 10 percent of jobs widened. The upper 10 percent paying jobs do not include many corporate officers (generally the highest-paid employees). Wages do not include stock options or income from capital gains.

Figure 6-7. Measuring the wage gap, in 2011 dollars

Washington state, 1990 and 2011
Source: Employment Security Department/LMEA

	All counties		All except King County	
Average wages	1990	2011	1990	2011
Lowest-paid 10 percent of jobs	$7.54	$9.17	$7.26	$8.96
Median job	$17.78	$21.59	$16.27	$19.20
Highest-paid 10 percent of jobs	$57.29	$93.81	$49.08	$69.68
Selected ratios				
Highest 10/lowest 10 ratio	7.6	10.2	6.8	7.8
Highest 10/median ratio	3.2	4.3	3	3.6
Median/lowest 10 ratio	2.4	2.4	2.2	2.1

The gap between high-wage jobs and low-wage jobs widened again in 2011.

Personal and per capita income

Personal income is the sum of earned income (from owning a business or holding a job), investment income and transfer payments chiefly from government programs such as Social Security, Medicare and Medicaid, welfare, and unemployment insurance (*Figure 6-8*). Per capita personal income is the total personal income of an area divided by the population of the area. Since per capita income is an average, it is influenced by factors such as relative concentration of high-income households, family size and the number of retirees in an area.

Figure 6-8. Personal income and transfer payments, in 2011 dollars, billions

Washington state, 2007 to 2011
Source: Employment Security Department/LMEA; National Bureau of Economic Analysis

Type of income	2007	2008	2009	2010	2011
Total personal income	$294.10	$302.30	$288.90	$290.30	$299.70
Earned income	$196.40	$196.50	$191.40	$191.70	$199.50
Investment income	$60.20	$65.80	$50.50	$48.40	$51.00
All transfer payments	$37.50	$40.00	$47.10	$50.20	$49.20
Social Security	$15.20	$15.60	$17.10	$17.50	$17.70
Medicare and Medicaid	$14.50	$15.00	$16.00	$16.90	$17.40
Welfare, food stamps, SSI	$3.40	$4.30	$5.10	$5.90	$5.90
Unemployment insurance	$0.80	$1.30	$3.90	$4.40	$3.20

Unemployment insurance payments rose 450% from 2007 to 2010.

Per capita income rose in 2011, but remained well below the 2008 peak (*Figure 6-9*). Per capita income, after adjustment for inflation, fell 6 percent in 2009, slid 0.5 percent in 2010, and recovered somewhat in 2011 with a 1.9 percent increase.

Earned income recovered in 2011. After a big drop in 2009 and little improvement in 2010, income from wages and business ownership jumped in 2011 by 4.1 percent in absolute terms and 2.7 percent on a per capita basis. Earned income accounted for 67 percent of total personal income, up from 65 percent in 2008 but well below the 79 percent rate of 1969.

Investment income rebounded as well, but had a much bigger hole to fill after collapsing with the stock market in 2008.

Transfer payments fell in 2011 after providing a countercyclical balance in 2009 and 2010. Transfer payments are steadily increasing with the aging of the Baby Boomers, those born from 1946 to 1964. The two main components are Social Security and Medicare. During the recession, three other smaller payment streams surged: unemployment-insurance payments (which quintupled), welfare and food stamps. Unemployment insurance and welfare payments declined in 2011, while food stamp outlays continued to rise.

Figure 6-9. Personal income and transfer payments per capita, in 2011 dollars
Washington state, 2007 to 2011
Source: Employment Security Department/LMEA; National Bureau of Economic Analysis

Type of income	2007	2008	2009	2010	2011
Total personal income	$45,508	$46,068	$43,326	$43,047	$43,878
Earned income	$30,400	$29,942	$28,700	$28,432	$29,209
Investment income	$9,309	$10,029	$7,568	$7,176	$7,472
All transfer payments	$5,798	$6,097	$7,059	$7,438	$7,197
Social Security	$2,351	$2,380	$2,564	$2,594	$2,594
Medicare and Medicaid	$2,243	$2,289	$2,406	$2,508	$2,550
Welfare, food stamps, SSI	$534	$657	$772	$880	$857
Unemployment insurance	$129	$198	$591	$656	$472

Per capita unemployment insurance payments fell 28 percent in 2011 from 2010, but were still 265 percent greater than in 2008.

Chapter 7: Economic comparisons with other states

Figure 7-1. States with minimum wage higher than federal minimum wage, dollars per hour, based on 2012 ranking

United States and Washington state, 2002, 2007 and 2012
Source: U.S. Department of Labor

Rank	State	2002	2007	2012
1	Washington	$6.90	$7.93	$9.04
2	Oregon	$6.50	$7.80	$8.80
3	Vermont	$6.25[1]	7.53[1]	$8.46
4	Nevada	N/A	$6.15	$8.25
4	Illinois	N/A	$6.50[2]	$8.25
4	District of Columbia	$6.15	$7.00	$8.25
4	Connecticut	$6.70	$7.65	$8.25
8	Massachusetts	$6.75	$7.50	$8.00
8	California	$6.75	$7.50	$8.00
10	Alaska	$5.65	$7.15	$7.75
11	Ohio	N/A	$6.85	$7.70
12	Florida	N/A	$6.67	$7.67
13	Montana	N/A	$4.00-$6.15[3]	$7.65
13	Arizona	N/A	$6.75	$7.65
15	Colorado	N/A	$6.85	$7.64
16	New Mexico	N/A	N/A	$7.50
16	Maine	$5.75	$6.75	$7.50
18	Rhode Island	$6.15	$7.40	$7.40

N/A = Wages not above federal minimum
[1]Rates applicable to employers of two or more
[2]Rates applicable to employers of four or more
[3]Montana sets a lower rate for businesses with gross annual sales of $110,000 or less ($4.00 - January 1, 1992 to January 1, 2005)

Minimum Wage

Unemployment Rates

Figure 7-2. Highest and lowest unemployment rates, based on 2011 ranking
United States and Washington state, 2001, 2006, 2011 and through October 2012
Source: U.S. Bureau of Labor Statistics

Rank	State	2001	2006	2011	Average January to October 2012
1	North Dakota	2.8%	3.2%	3.5%	3.0%
2	Nebraska	3.1%	3.1%	4.4%	4.0%
3	South Dakota	3.1%	3.1%	4.7%	4.4%
5	Vermont	3.3%	3.7%	5.6%	5.0%
6	Iowa	3.3%	3.7%	5.9%	5.2%
4	New Hampshire	3.4%	3.5%	5.4%	5.3%
8	Oklahoma	3.7%	4.1%	6.2%	5.3%
7	Wyoming	3.9%	3.2%	6.0%	5.4%
9	Virginia	3.2%	3.1%	6.3%	5.7%
10	Minnesota	3.9%	4.1%	6.4%	5.7%
35	Tennessee	4.7%	5.2%	9.2%	8.1%
35	Washington	6.2%	5.0%	9.2%	8.4%
38	Arizona	4.7%	4.1%	9.5%	8.4%
38	Kentucky	5.2%	5.9%	9.5%	8.4%
38	Oregon	6.4%	5.4%	9.5%	8.6%
	United States	*4.7%*	*4.6%*	*9.0%*	*8.9%*
41	Illinois	5.4%	4.7%	9.8%	8.9%
44	Michigan	5.2%	6.9%	10.3%	8.9%
41	Georgia	3.9%	4.7%	9.8%	9.0%
43	District of Columbia	6.2%	5.7%	10.2%	9.2%
44	South Carolina	5.2%	6.4%	10.3%	9.2%
37	New Jersey	4.3%	4.7%	9.3%	9.4%

Figure 7-3. 10 Highest and lowest average annual job-growth rates, nonfarm employment

United States and Washington state, 2000 through 2011
Source: U.S. Bureau of Labor Statistics

Rank	State	Average annual growth rate
	United States	*0.0%*
1	North Dakota	1.7%
2	Wyoming	1.6%
3	Alaska	1.3%
4	Utah	1.1%
5	District of Columbia	1.0%
5	Texas	1.0%
7	Nevada	0.8%
7	Montana	0.8%
9	Idaho	0.7%
9	New Mexico	0.7%
14	Oklahoma	0.4%
14	Virginia	0.4%
14	Washington	0.4%
39	California	-0.3%
39	Alabama	-0.3%
39	Wisconsin	-0.3%
39	New Jersey	-0.3%
39	Rhode Island	-0.3%
39	Missouri	-0.3%
39	Massachusetts	-0.33%
46	Connecticut	-0.38%
47	Mississippi	-0.51%
47	Indiana	-0.53%

Nonfarm Employment

Annual Exports

Figure 7-4. 10 Highest and lowest annual exports in billions of dollars, 2001, 2006 and 2011, based on 2011 ranking

United States and Washington state, 2001 through 2011

Source: U.S. Bureau of Labor Statistics

Rank	State	2001	2006	2011
1	Texas	$95.0	$150.9	$188.4
2	California	$106.8	$127.8	$159.4
3	New York	$42.2	$59.1	$84.4
4	Illinois	$30.4	$42.1	$64.8
5	Florida	$27.2	$38.6	$64.8
6	Washington	$34.9	$42.4	$64.6
7	Michigan	$32.4	$40.5	$51.0
8	Ohio	$27.1	$38.2	$46.4
9	Louisiana	$16.6	$23.5	$42.3
10	Pennsylvania	$17.4	$26.4	$41.0
42	Vermont	$2.8	$3.9	$4.3
43	Maine	$1.8	$2.6	$3.4
44	North Dakota	$0.8	$1.5	$3.4
45	Rhode Island	$1.3	$1.5	$2.3
46	New Mexico	$1.4	$2.9	$2.1
47	Montana	$0.5	$0.9	$1.6
48	South Dakota	$0.6	$1.2	$1.5
49	Wyoming	$0.5	$0.8	$1.2
50	District of Columbia	$1.0	$1.0	$1.1
51	Hawaii	$0.4	$0.7	$0.9

Figure 7-5. 10 Highest and lowest per capita personal income, in 2011 dollars, based on 2011 ranking

United States and Washington state, 2001 through 2011
Source: National Bureau of Economic Analysis

Rank	State	2001	2011	Average annual growth rate
	United States	*$31,157*	*$41,560*	*2.9%*
1	District of Columbia	$45,421	$73,783	5.0%
2	Connecticut	$43,561	$57,902	2.9%
3	Massachusetts	$39,547	$53,471	3.1%
4	New Jersey	$39,635	$52,430	2.8%
5	New York	$35,476	$51,126	3.7%
6	Maryland	$36,203	$50,656	3.4%
7	Wyoming	$31,216	$47,898	4.4%
8	North Dakota	$26,574	$47,236	5.9%
9	Virginia	$33,246	$46,107	3.3%
10	New Hampshire	$34,805	$45,881	2.8%
15	Washington	$32,966	$43,878	2.9%
42	Arizona	$27,091	$35,062	2.6%
43	Alabama	$25,072	$34,880	3.4%
44	New Mexico	$24,751	$34,133	3.3%
45	Kentucky	$25,363	$33,989	3.0%
46	Arkansas	$23,864	$33,740	3.5%
47	Utah	$25,618	$33,509	2.7%
48	West Virginia	$23,573	$33,403	3.5%
49	South Carolina	$25,637	$33,388	2.7%
50	Idaho	$25,665	$32,881	2.5%
51	Mississippi	$22,815	$32,000	3.4%

Personal Income

Building Permits

Figure 7-6. 10 Highest and lowest states in number of authorized privately-owned residential building permits, based on 2006 ranking
United States and Washington state, 2006 through 2011
Source: U.S. Bureau of Labor Statistics

Rank	State	2006 Building permits	2011 Building permits	Percent change 2006 through 2011
	United States	*1,838,903*	*624,061*	*-66.1%*
1	Texas	216,642	97,450	-55.0%
2	Florida	203,238	42,360	-79.2%
3	California	160,502	45,471	-71.7%
4	Georgia	104,200	18,493	-82.3%
5	North Carolina	99,979	32,804	-67.2%
6	Arizona	65,363	13,007	-80.1%
7	Illinois	58,802	11,809	-79.9%
8	New York	54,382	22,575	-58.5%
9	South Carolina	50,776	15,542	-69.4%
10	Washington	50,033	20,864	-58.3%
42	New Hampshire	5,677	2,346	-58.7%
43	West Virginia	5,645	2,220	-60.7%
44	South Dakota	5,304	2,813	-47.0%
45	Montana	4,542	1,914	-57.9%
46	Wyoming	3,537	2,114	-40.2%
47	North Dakota	3,529	6,201	75.7%
48	Alaska	2,739	877	-68.0%
49	Vermont	2,626	1,299	-50.5%
50	Rhode Island	2,370	700	-70.5%
51	District of Columbia	2,105	4,612	119.1%

Figure 7-7. Median single-family house prices in thousand dollars, based on 2006 ranking

Selected U.S. metropolitan areas, 2006 and 2011[1]
Source: National Association of Realtors

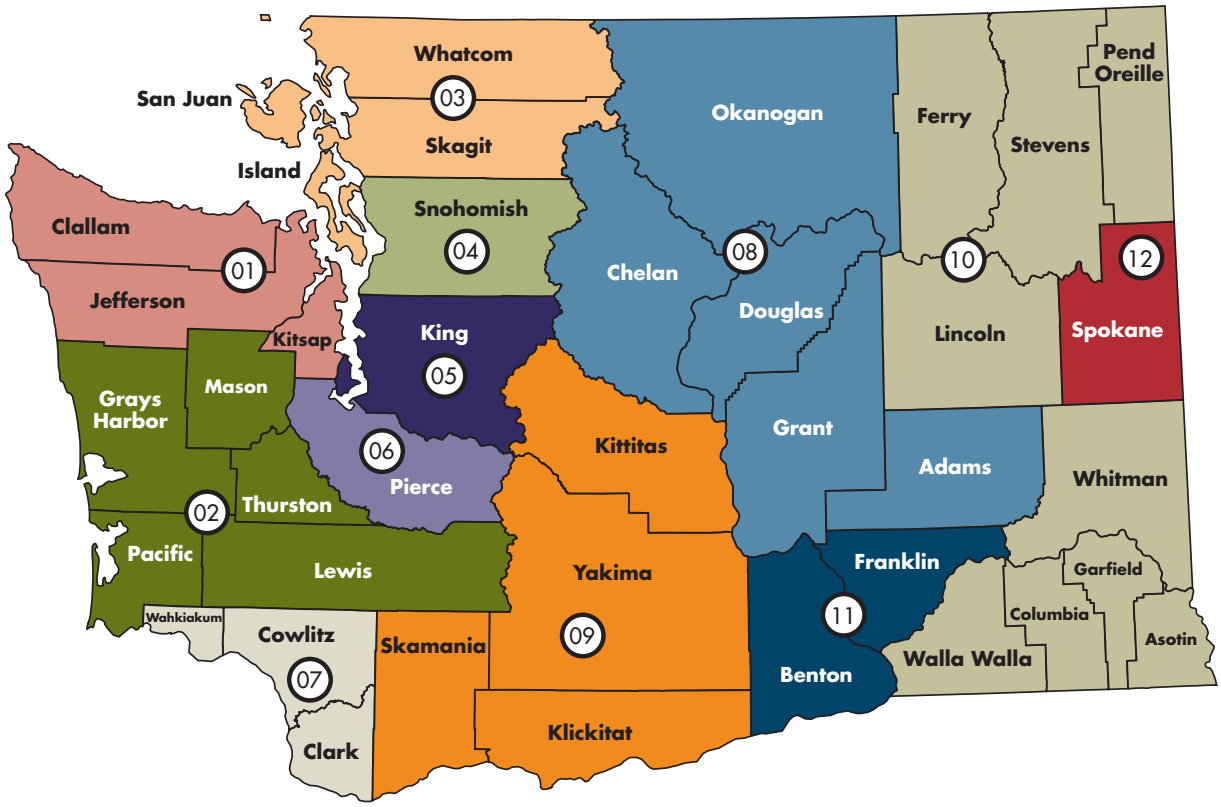
Home Prices

Rank	Metropolitan area	2006	2011	Percent change 2006 to 2011
	United States	*222*	*166*	*-25.1%*
1	San Jose-Sunnyvale-Santa Clara, CA	775	570	-26.5%
2	San Francisco-Oakland-Fremont, CA	753	483	-35.8%
3	Anaheim-Santa Ana-Irvine, CA	709	513	-27.7%
4	Honolulu, HI	630	597	-5.2%
5	San Diego-Carlsbad-San Marcos, CA	602	370	-38.5%
6	Los Angeles-Long Beach-Santa Ana, CA	585	308	-47.4%
7	New York-Wayne-White Plains, NY-NJ	539	443	-17.9%
8	NY: Nassau-Suffolk, NY	475	376	-20.8%
20	Seattle-Tacoma-Bellevue, WA	361	285	-21.1%
28	Portland-Vancouver-Beaverton, OR-WA	281	220	-21.8%
54	Salem, OR	213	146	-31.3%
66	Spokane, WA	184	162	-11.8%
78	Kennewick-Richland-Pasco, WA	156	N/A[2]	N/A[2]
108	Yakima, WA	137	150	10.2%
147	Cumberland, MD-WV	96	89	-7.2%
148	South Bend-Mishawaka, IN	93	84	-9.8%
149	Elmira, NY	87	103	19.1%
150	Decatur, IL	85	88	2.5%
151	Youngstown-Warren-Boardman, OH-PA	82	N/A[2]	N/A[2]

[1]Preliminary
[2]N/A = not available

Appendix 1 – Washington's workforce development areas

Washington state is divided into 12 workforce development areas (WDA). WDAs are regions within Washington state with economic and geographic similarities, generally comprised of a county or group of counties.



- WDA 1 — Olympic Consortium
- WDA 2 — Pacific Mountain
- WDA 3 — Northwest Washington
- WDA 4 — Snohomish County
- WDA 5 — Seattle-King County
- WDA 6 — Pierce County
- WDA 7 — Southwest Washington
- WDA 8 — North Central Washington/Columbia Basin
- WDA 9 — South Central
- WDA 10 — Eastern Washington
- WDA 11 — Benton-Franklin
- WDA 12 — Spokane County