

The background of the cover is a photograph of the Washington State Capitol building. The building is a large, classical-style structure with a prominent central dome and a portico supported by several columns. The scene is framed by the branches of cherry blossom trees in full bloom, with white and light pink flowers scattered across the image. The sky is a clear, pale blue.

Washington State Economic and Revenue Forecast

September 2014
Volume XXXVII, No. 3



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

September 2014
Volume XXXVII, No. 3

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Preface

ERFC forecasting structure and schedule

The Economic and Revenue Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year. The Washington State GF-S revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Council consists of six members, two appointed by the Governor and four appointed by the Legislature – one from each caucus of the Senate and House of Representatives. Current members of the Economic and Revenue Forecast Council are listed inside the front cover of this publication. The GF-S revenue forecast is updated four times per year: March (February in even-numbered years), June, September, and November. The staff of the Economic and Revenue Forecast Council is responsible for the preparation of the state's economic forecast and the forecast of the Department of Revenue's GF-S revenue sources as well as GF-S revenue from fines and forfeitures collected by the Administrative Office of the Courts. The staff is also responsible for review and coordination of the revenue forecasts of other agencies that collect relatively large amounts of GF-S revenue. These are the Department of Licensing, the Office of the Insurance Commissioner, the Lottery Commission, the State Treasurer, the Liquor Control Board and the Office of Financial Management. The Office of Financial Management is responsible for summarizing the forecasts of all other state agencies that collect relatively smaller amounts of GF-S revenue.

Forecast Procedure

For each quarterly update, the staff of the Economic and Revenue Forecast Council, under the direction of the Executive Director, reviews (and if warranted, modifies) a national economic forecast prepared by Global Insight, Inc. A state economic forecast is then prepared using an econometric model that links Washington's economy to the national economy. After review by forecast workgroups; the Governor's Council of Economic Advisors; and the Economic and Revenue Forecast Council in public; this state economic forecast (updated for newly released data) is used to prepare a baseline revenue forecast for GF-S and the related funds. The forecasts are based on current law and administrative practices and do not reflect pending legal challenges to GF-S receipts until they are resolved. Additionally, at least two alternative forecasts are prepared for all GF-S and related fund sources and presented to the Forecast Council for approval. Once the Council approves the forecast, it becomes the official forecast of GF-S and related fund revenues.

Data in this publication are accurate through September 30, 2014

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Executive Summary

- **The national economy continues to advance at a moderate pace. Uncertainty remains elevated and downside risks once again outweigh upside risks.**
- **U.S. real GDP rebounded sharply from its winter slump, increasing 4.2% (SAAR) in the second quarter from a 2.1% (SAAR) decline in the first quarter.**
- **Federal fiscal policy remains a drag on economic growth through contractionary spending and tax policies. Monetary policy remains accommodative, but rate increases are expected next year.**
- **Weak growth in Europe and slowing Asian growth remain significant threats to the U.S. economy.**
- **The Blue Chip Consensus GDP forecast, now calls for real GDP growth of 2.1% in 2014, down from 2.2% in the previous forecast. Real GDP growth is expected to increase to 3.0% in 2015, then slowly trend down to 2.5% in 2019.**
- **As expected in the June forecast, the Washington economy continues to expand at a moderate pace.**
- **Washington employment growth has been stronger than expected in June and historical estimates were revised higher.**
- **Overall housing construction is on track but single-family permits are weak. Seattle home prices have declined in two of the last three months.**
- **Since the recession, Washington consumer spending growth has been positive but weak.**
- **Revenue collections since June have come in \$115 million over the forecasted amount, but much of the variance was due to non-economic events.**
- **Changes to the economic forecast and taxable activity since the June forecast were small and mixed but the net result was slightly positive. They resulted in increases in expected revenue of less than one percent for each of the forecasted biennia.**
- **The forecast of General Fund-State (GF-S) revenue for the 2013-15 biennium was increased by \$163 million and the forecast for the 2015-17 biennium was increased by \$143 million. The forecast for the 2017-19 biennium was increased by \$164 million.**
- **The Boom Monitor Index (BMI) is a coincident index which measures the sustainability of Washington growth while also providing insight to upside and downside risks. This latest revision comprises several component changes and a reweighting of the index, improving current and historical accuracy.**

U.S. Economic Forecast

The moderate economic recovery has continued

The national economy continues to advance at a moderate pace. Growth in gross domestic product (GDP) rebounded in the second quarter at a rate of 4.2% after contracting 2.1% in the first quarter. Significant threats to the economic recovery remain, keeping uncertainty elevated. Violence in the Middle East, declining housing affordability, and reduced economic growth overseas all threaten to derail the recovery. Overall, economic activity has generally been in line with the June baseline forecast of moderate growth and slowly declining unemployment. Despite a slowdown in hiring in August, recent data suggest that the economy's underlying fundamentals remain firm.

Federal fiscal policy remains a drag on the recovery, while monetary policy is accommodative

Federal fiscal policy remains a drag on economic growth through contractionary spending. Real federal government expenditures were down 0.9% (SAAR) in the second quarter and have declined in each of the past seven quarters. In 2013, reductions in federal government spending are estimated to have reduced overall GDP growth by 0.5 percentage points. Monetary policy remains accommodative, although the Federal Reserve is now wrapping up its unconventional policies. Although the bond buying will come to an end, the Federal Reserve remains committed to keeping the fed funds rate low for a "considerable time." An increasing number of Fed officials are wondering if there is much else monetary policy can do to bolster the economy.

The European and Chinese economies are weak

The European economy remains stagnant and has yet to officially emerge from the recession that started at the end of 2011. The combination of the current European recession with the 2007-09 recession has resulted in a historic period of economic weakness. Real GDP in the Eurozone is still lower than in 2008. Economic activity in China has continued to weaken. In response to the weak growth, the Chinese government introduced a variety of small-scale stimulus measures. China has struggled to transition to a more consumer based economy and lower its reliance on exports. Concerns about a credit bubble, housing glut, and excess capacity in many industrial sectors had restrained the government from launching more aggressive stimulus programs. Weak economic growth in Europe and China will continue to threaten the U.S. recovery due to international trade ties.

Washington Economic Forecast

The Washington economy continues to show moderate growth

In recent months the Washington economy has performed slightly better than expected in the June forecast. The current level of employment is higher than anticipated in June both because growth has been stronger than expected and because historical estimates have been revised up. As anticipated, Washington personal income growth was weak in the second

quarter, largely due to aerospace bonuses paid in the first quarter which were not repeated in the second quarter. Single-family housing construction was once again weaker than expected in the second quarter of 2014 but overall construction was close to the forecast thanks to strong multi-family construction. Seattle area inflation is about the same as the national rate. Shelter costs are rising faster than elsewhere in the U.S. but other prices are rising more slowly.

The September Washington forecast reflects a very similar U.S. forecast

The September Washington State forecast is based on a new national forecast that is very similar to the forecast adopted in June. While real GDP is lower in the new forecast, the reason is a downward revision in historical estimates resulting from the annual revision of the national income and product accounts (NIPAs). GDP growth in the forecast averages 2.7% per year through 2019, the same rate as in the June forecast. Employment growth averages 1.4% per year, real personal income growth averages 3.3% per year and PCE inflation averages 1.5% per year, all the same as in June. Oil prices, however, are lower than assumed in June in the near-term but also decline less. These minimal revisions in the national forecast feed through to the state economic forecast.

Washington will continue to outperform the U.S. in growth

Our September 2014 forecast of Washington employment is higher than assumed in June due mainly to stronger than expected growth through August. Employment growth for the remainder of the forecast is also slightly higher than in the June forecast. Our current estimate of Washington personal income growth in the first half of 2014 is also higher than anticipated in the June forecast, resulting in a stronger forecast for 2014. Our new forecast for nominal personal income growth from 2015 through 2019 is also slightly higher than the rate predicted in June. The number of housing units authorized by building permits was close to the forecast in the second quarter of 2014. Once again the multi-family segment was stronger than expected but single family construction was weaker. As a result, we have slightly lowered our single-family housing permit forecast and raised our multi-family forecast. Our September economic forecast for total Washington housing units is very similar to the forecast adopted in June.

Revenue Forecast

Changes to the revenue forecast in September were once again slight but positive

Revenue collections since the June 2014 forecast came in \$115 million higher than the expected total. Most of the surplus came from Revenue Act taxes (retail sales and use, business and occupation, public utility and tobacco products taxes), which came in \$106 million above the forecast. While preliminary data indicate that second quarter economic activity was slightly higher than forecasted, much of the extra revenue was the result of lower-than-expected refunds and redemptions of tax credits rather than increased activity. As the reduced level of refunds

and tax credits is not expected to continue, and changes to the economic forecast were slight, total forecasted revenue for the biennium has been increased by only \$47 million above the current collection variance. Forecasted collections for the 2015-17 and 2017-19 biennia have been increased by similar amounts. As was the case in June, forecast increases amounted to less than one percent for each of the forecasted biennia.

*GF-S forecast
change by
biennium
(millions):*

13-15: +\$163

15-17: +\$143

17-19: +\$164

As of September 10th, revenue collections for the 2013-15 biennium were \$115.1 million ahead of the June forecast. For the remainder of the biennium, changes to the economic forecast have increased forecasted revenue by \$47.4 million. The sum of these changes for the 2013-15 biennium is a forecast increase of \$162.5 million, with total biennial revenue of \$33,331.9 million. The forecast for the 2015-17 biennium has been increased by \$143.0 million and the forecast for the 2017-19 biennium has been increased by \$164.2 million. GF-S revenue is now forecasted to total \$36,078.2 million in the 2015-17 biennium and \$39,187.6 million in the 2017-19 biennium.

Washington Boom Monitor Index

*The national
BMI
measured
sustainability
of growth*

The original Boom Monitor Index (BMI) was designed and constructed by Data Resources, Inc. At its inception the original BMI measured the sustainability of growth rates in the national economy. To construct the composite index, each of the eight series is first regressed against time in order to correct for any historical upward or downward trends. Then, the series are adjusted so they have an average value of 50 and a standard deviation of 20. These indexed values are then weighted according to their standard errors in regressions against the U.S. Department of Commerce's Index of Coincident Indicators. The BMI Composite has a historical average of 50 and a standard deviation of 20, just like the component series. Any reading more than one standard deviation away from the average (above 70) indicates growth rates that are only temporarily sustainable.

*The WA BMI
is similar to
the original
national
index*

The original Washington BMI is constructed in the same fashion as DRI's national BMI. After its inception in the June 1990, the Washington Boom Monitor Index underwent its first revision in March 1999. After the 1999 revision, Washington's Boom Monitor Index was not revised until September 2014, except for annual reweighting. The BMI underwent a large number of changes with the goal of smoothing out the volatile month-to-month readings of the old index, updating components to take into account the most recent housing bubble and subsequent collapse, and to reweight the index for a more accurate picture of the sustainability of Washington's economic growth. The Boom Monitor gives forecasters a glimpse into growth rate sustainability and provides useful information for making upside and downside risk probability adjustments.



Chapter 1: U.S. Economy – Current Conditions and Forecast

- **The national economy continues to advance at a moderate pace. Uncertainty remains elevated and downside risks once again outweigh upside risks.**
- **U.S. real GDP rebounded sharply from its winter slump, increasing 4.2% (SAAR) in the second quarter from a 2.1% (SAAR) decline in the first quarter.**
- **Although total nonfarm payroll employment growth was disappointing in August, it remains sufficient to absorb new entrants into the labor market and reduce unemployment.**
- **The modest housing market recovery has continued. Home prices are no longer increasing, although the pause in appreciation is expected to be temporary. Homebuilders are optimistic, but this has not yet led to a rebound in activity.**
- **Federal fiscal policy remains a drag on economic growth through contractionary spending and tax policies. Monetary policy remains accommodative, but rate increases are expected next year.**
- **Weak growth in Europe and slowing Asian growth remain significant threats to the U.S. economy.**
- **The Blue Chip Consensus GDP forecast, now calls for real GDP growth of 2.1% in 2014, down from 2.2% in the previous forecast. Real GDP growth is expected to increase to 3.0% in 2015, then slowly trend down to 2.5% in 2019.**
- **A more robust recovery in housing remains the most significant upside risk. A slowdown in Chinese or European growth is the major downside risk.**

Current Conditions

The moderate economic recovery has continued

The national economy continues to advance at a moderate pace. Growth in gross domestic product (GDP) rebounded in the second quarter at a rate of 4.2% after contracting 2.1% in the first quarter. Significant threats to the economic recovery remain, keeping uncertainty elevated. Violence in the Middle East, declining housing affordability, and reduced economic growth overseas all threaten to derail the recovery. Overall, economic activity has generally been in line with the June baseline forecast of moderate growth and slowly declining unemployment. Despite a slowdown in hiring in August, recent

data suggest that the economy's underlying fundamentals remain firm.

U.S. real GDP rebounded in the second quarter

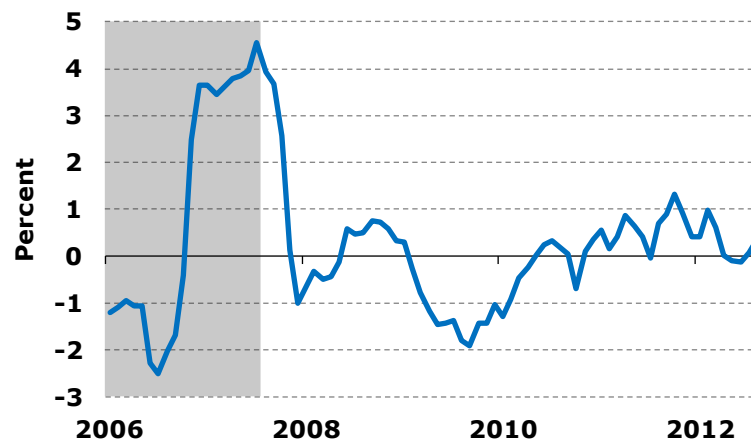
U.S. real GDP rebounded sharply from its winter slump, increasing 4.2% (SAAR) in the second quarter from a 2.1% (SAAR) decline in the first quarter. Consumer spending made the largest contribution to growth, increasing 2.5% (SAAR) and adding 1.7 percentage points to overall GDP. Inventory investment was also a major source of growth, contributing 1.4 percentage points in the second quarter. This will be a negative to growth going forward. Fixed investment was strong as well, with gains in both the nonresidential and residential sectors. Nonresidential fixed investment increased 8.4% (SAAR) in the second quarter while residential fixed investment grew 7.2% (SAAR). Together, total fixed investment added 1.3 percentage points to second quarter GDP growth. Exports growth was strong as well, although this was more than offset by an increase in imports. Government expenditures turned positive, adding 0.3 percentage points to growth, fueled by state and local government spending. Real final sales, which exclude inventories, grew 2.8% (SAAR) in the second quarter, up from a 1.0% (SAAR) decline in the first quarter.

Personal income is rising, but real wage growth remains weak

Rising personal income is essential for consumer spending to improve and overall economic growth to accelerate. Real personal income was up 0.3% in August, up from 0.2% the month before. Real disposable personal income (income after taxes and adjusted for inflation) growth was 0.3% as well. While real personal income has continued to increase, real wages have been flat (see Figure 1.1). Recent income gains have been led by increases in proprietors' income, rental income, and income from dividends. With weak real wage growth, spending growth has

Figure 1.1: Year-Over-Year Growth in U.S. Real Hourly Wages

Real wage growth has been almost nonexistent this recovery



Source: U.S. Bureau of Labor Statistics; data through August 2014

been inconsistent. Consumption growth rose 0.5% in August after no gain the month before. The personal saving rate declined from 5.6% to 5.4%. Spending on durable goods was up 1.8% after no increase the month before. New vehicle sales have been strong, surging to 17.5 million units (SAAR) in August, a post recession high. Nondurable goods spending was down 0.2%. Consumption of services increased 0.5% even with weak healthcare spending.

Employment growth was disappointing in August

Employment growth in August was disappointing, with the economy creating only 142,000 jobs. Prior to August, employment growth had been over 200,000 jobs each month for the past six months. Retail trade was particularly weak in August, contracting by 8,000 jobs after a 21,000 job gain in July. Manufacturing was weak as well in August, adding no jobs after increasing 28,000 the month before. On the positive side, construction added another 20,000 jobs, professional and business services was up 47,000 jobs, and healthcare grew by 43,000. Even with the overall weakness in jobs in August, the labor market remains solid. There is difficulty accurately capturing the seasonal variation in August jobs data and the numbers typically get revised up by large amounts. Even with the weak report, the three month moving average of job growth is 207,000, sufficient to reduce unemployment.

The labor market is improving

The recent level of job growth is absorbing not only unemployed workers, but some new entrants into the labor force as well. The unemployment rate dropped to 6.1% in August and remains on a downward trend. Although the labor force declined in August by 64,000, the recent trend has been positive. Also, previously discouraged workers are coming off the sidelines and re-entering the labor force now that they believe they have a chance at employment. Joblessness, while still elevated at 9.6 million people, has dropped by a third since the recovery began. The most comprehensive measure of underemployment, which includes those marginally attached to the labor force plus workers employed part time for economic reasons, has declined from 16.5% to 12.0% since the start of the recovery. Initial claims for unemployment insurance remain on a downward trend and are now back to pre-recession levels. For the week ending September 20th, the four week moving average of initial claims dropped by 1,250. The latest reading is down 5.9% from a year ago and down 54.7% since the peak in 2009.

Consumer confidence continues to trend upward

Consumer confidence has been increasing recently, but has yet to break out to levels typically seen at this point in a recovery. An improving economy and stronger labor market conditions have enabled consumers to feel more confident as the recovery has unfolded. Rising home prices and equity markets have also improved consumer's financial position. The most recent reading of consumer confidence from the Conference Board shows that confidence took a big step back in September, dropping 7.4

points. Both the present conditions and expectations components fell. Although this is an unusually large decrease, it represents more of correction from the large increases in July and August. Consumer confidence remains near a post recession high excluding the last two months. The University of Michigan reading of consumer sentiment showed a 2.1 point increase in September, reaching a 14 month high. Consumers indicated they were more optimistic about the economic outlook. This was slightly offset by a reduction in attitudes about current conditions. Both measures should continue to trend upward as the economic recovery continues.

Small business confidence is improving

Small business confidence has been increasing as well. The National Federation of Independent Business (NFIB) small business optimism index increased 0.4 points in August to 96.1. The improvement in optimism was broad based. Fewer small companies are facing declining revenues and a majority indicated they believe sales will improve in the near future. Also, more respondents indicated they are less threatened by an external shock to the U.S. economy from abroad. Hiring and compensation plans remain solid. No longer are poor sales or other economic factors the largest problems for small businesses. As the recovery solidified and demand increased, taxes and government regulation have reemerged as the most concerning problems cited by small businesses.

Oil prices are declining despite the turmoil in the Middle East

Oil prices have continued to drop after peaking in June. Even with the conflict in the Middle East intensifying, energy markets have been able to digest the turmoil. Disruptions related to the unrest have been viewed as temporary and are no longer causing large price swings. Brent oil prices have come down \$20 to \$95 per barrel in the past few months. West Texas crude is down to \$91 per barrel after hitting \$108 per barrel in the third week of June. Although Islamic militants have expanded their grip in North and Western Iraq, their actions have had very little impact on the country's production and exports since major oil operations are in the south. In addition to the turmoil in Iraq, Russia's intervention into Ukraine has the potential to rattle oil markets in the near term, as Russia is one of the world's biggest oil producers. U.S. oil production has continued to rise, making up the lost supply from Middle Eastern countries. Domestic production now averages over 8 million barrels per day, the highest in decades.

Inflation remains low

Headline inflation fell in August for the first time in over a year. The overall index dropped 0.2% led by a drop in the energy index which declined 2.6%. Gasoline prices fell sharply and natural gas and fuel oil indexes were also down. Electricity prices were up slightly. Overall, energy prices are now up just 0.3% from a year ago. Food prices moved up, increasing another 0.2% in August, and are now up 2.7% year over year. Shelter costs increased 0.2% and are now up 2.9% year over year. Overall,

the consumer price index (CPI) is now up 1.7% over the year. Core inflation, which excludes food and energy was flat in August and is also up 1.7% since last year.

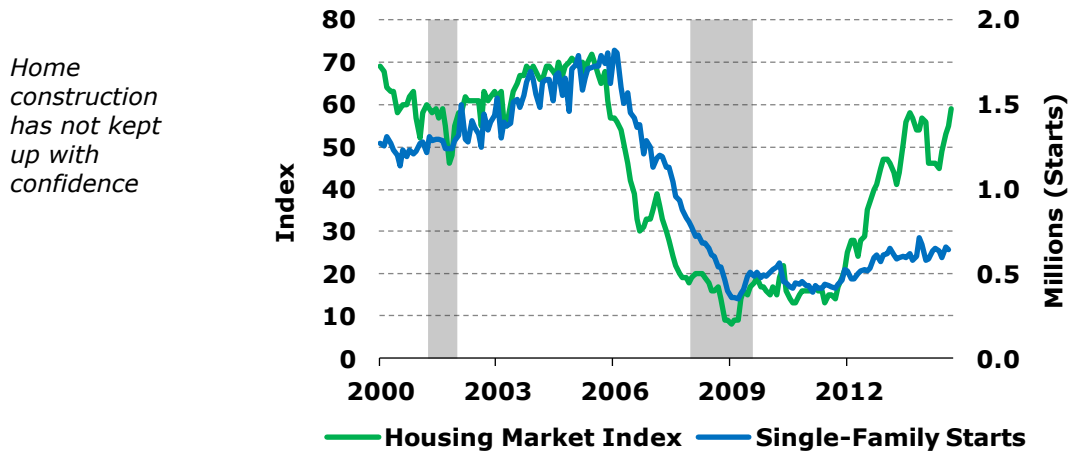
The modest housing recovery has continued

The housing market recovery has continued after struggling to gain traction early in the year. Recent data have generally been positive and indicate that activity is set to accelerate. Sales of new homes soared in August to 504,000 units (SAAR), an increase of 18.0% over July and 33.0% higher than a year ago. Despite the increase, the inventory of unsold homes edged up 4,000 to 206,000. This inventory corresponds to a 4.8 months' supply of new homes at the current sales pace. Mortgage rates reached their lowest level of the year in August, spurring potential buyers to take advantage of the reduced payments. Sales of existing homes, which is a much larger segment than new homes, fell slightly this past month. Completed sales in August fell 1.8% from July to 5.05 million units (SAAR). Sales are still 5.3% lower than a year ago. The decline was in both single family (-1.8%) and condo and co-op sales (-1.7%). The market for existing homes remains tight compared to last year, but has loosened somewhat in recent months. Total inventory increased to 2.31 million homes, up 4.5 percent from a year ago and representing a 4.8 month supply.

New construction has been modest despite homebuilders' optimism

Home construction remains modest and well below levels seen before the recession. Housing starts slowed in August to 956,000 units (SAAR) after coming in at 1.1 million units (SAAR) in July. Even with the slowdown from the prior month, housing starts are 8.0% higher than a year ago. Much of the drop was a reversal of last month's spike in multi-family housing, which declined 31.7% in August after a 44.9% jump in July. Single-family housing declined 2.4% in August. Housing permits showed a similar pattern as starts. Total permits declined 5.1% in August after a strong 8.6% increase in July. Similar to starts, multi-family housing reversed its previous month's gains and declined sharply while permits for single-family homes fell slightly. Both housing starts and permits are hovering around the 1.0 million unit (SAAR) range, a level which would be considered weak prior to the recession. While housing activity remains sluggish, homebuilder confidence continues to improve (see Figure 1.2). The NAHB housing market index, which measures confidence in homebuilders, indicates that homebuilders are incredibly optimistic. In August, the composite index was 59, the highest since November 2005 and well above the average of 48 since its inception in 1985. Although the surge in confidence has not yet translated into a surge in activity, it is pointing to some upside risk to the housing market. However, while pent-up demand is contributing to the optimism, first-time homebuyers are not entering into the market. According to the NAHB, this is partly due to the fact that incomes for those in the first-time buyers demographic have not kept up with the rise in prices as the recovery has taken hold.

Figure 1.2: Homebuilder Confidence and Single-Family Housing Starts



Home construction has not kept up with confidence

Source: NAHB/Wells Fargo, U.S. Census; data through September 2014

Home prices are no longer increasing

Home price appreciation is starting to decelerate and even turn negative. The seasonally adjusted Case-Shiller 20-city home price index decreased 0.2% in June, the second consecutive month of decline after increasing in each of the previous 27 months. Even with the decline, however, prices are still 8.1% higher than the previous year. Although prices have increased 21.2% since the trough of the recession, they remain 17.4% below their previous peak. The rise in home prices has been positive for the overall housing market. Rising prices have typically incentivized new construction and are enabling previously underwater homeowners to sell their homes and trade up for more expensive houses. Affordability issues are starting to emerge however, especially among first time home buyers as prices increase. Although homes remain affordable by historic standards, affordability is down sharply from the past two years.

The manufacturing sector continues to improve

The manufacturing sector continues to improve. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector expanded again in August. The ISM index improved to 59.0 from 57.1 the month before (index levels above 50 indicate expansion). Details from the report were generally positive. New orders increased 3.3 points to 66.7 and production rose 3.3 points as well to 64.5. The employment component fell 0.1 points but remains positive at 58.1. The latest G-17 report from the Federal Reserve, which measures manufacturing output, indicated a slight contraction in August. Output declined 0.4% (SA) in August although it remains 3.6% above last year. The production of durable goods declined 4.4% primarily due to a 7.7% drop in automotive products. Nondurable goods output increased, gaining 0.3%. New orders for core capital goods (nondefense capital goods excluding aircraft) increased by 0.6%, after declining 0.2% in July.

Shipments increased 0.1%, indicating positive near-term business activity.

Federal fiscal policy remains a drag on the recovery

Although uncertainty surrounding federal fiscal policy has receded, it still remains a drag on economic growth through contractionary spending. Real federal government expenditures were down 0.9% (SAAR) in the second quarter and have declined in each of the past seven quarters. In 2013, reductions in federal government spending are estimated to have reduced overall GDP growth by 0.5 percentage points. State and local government spending, however, has started to increase. Due to improving tax revenues, state and local governments are no longer slashing spending to balance budgets. State and local government spending increased 3.4% (SAAR) in the second quarter, and has had positive growth in five of the past six quarters.

Monetary policy will likely remain accommodative in the short term

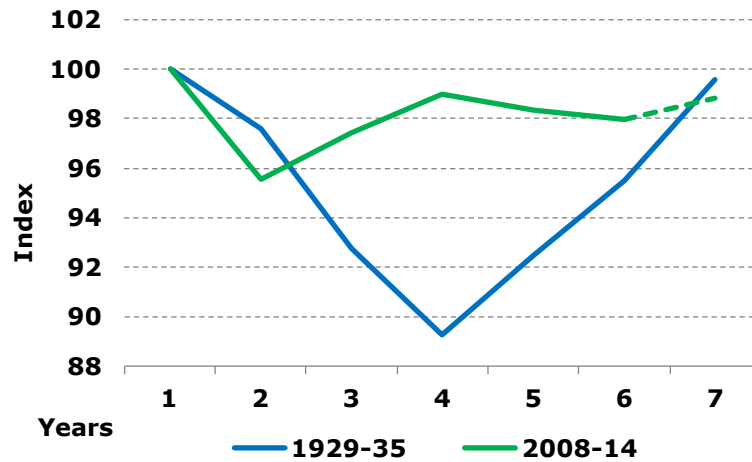
Monetary policy remains accommodative, although the Federal Reserve is now wrapping up its unconventional policies. In September, the Fed reduced its quantitative easing (QE) program by another \$10 billion. They remain on track to announce the final reduction of QE next month. Although the bond buying will come to an end, the Federal Reserve remains committed to keeping the fed funds rate low for a "considerable time." Most Fed members would like to raise interest rates in 2015. However, there remains some disagreement about whether inflation will remain below the 2% target and how much strength is in the labor market. An increasing number of Fed officials are wondering if there is much else monetary policy can do to bolster the economy.

Weakness in European economies remains a significant threat to the recovery

The European economy remains stagnant and has yet to officially emerge from the recession that started at the end of 2011. The combination of the current European recession with the 2007-09 recession has resulted in a historic period of economic weakness. Real GDP in the Eurozone is still lower than in 2008. The prolonged slump is now comparable to the point Europe was at six years after the Great Depression (see Figure 1.3). Although the Eurozone economy is no longer contracting, growth remains anemic. Real GDP in the Eurozone increased at a 0.1% annualized rate in the second quarter of 2014, down from a 0.9% rate the previous quarter. The weakness in European economies remains a threat to the U.S. economic recovery. Risks of a financial crisis remain and weak growth abroad limits U.S. export potential. Some member countries continue to experience negative growth, including France and Italy. Job gains in the Euro area have been weak and unemployment elevated. Consumer confidence in the Eurozone dropped in September for the fourth consecutive month. Poor economic conditions across the European Union will continue to put financial pressure on member countries and keep the threat of a European financial crisis alive.

Figure 1.3: Eurozone GDP

The Eurozone has experienced years of stagnation



Source: Eurostat, Angus Maddison, Blue Chip; data through 2014

Slower growth in China remains a risk to the recovery

Economic activity in China has continued to weaken, threatening the U.S. recovery through international trade ties. Chinese GDP growth inched up to 7.5% (Y-O-Y) in the second quarter from 7.4% in the first quarter. For China, growth below 8% is considered poor. The last time Chinese growth was above 8% was the first quarter of 2012. In response to the weak growth, the Chinese government introduced a variety of small-scale stimulus measures. China has struggled to transition to a more consumer based economy and lower its reliance on exports. Concerns about a credit bubble, housing glut, and excess capacity in many industrial sectors had restrained the government from launching more aggressive stimulus programs. Improvement in the U.S. and Eurozone economies should help China's exports rebound moderately, although it will be insufficient to offset the weakness in investment demand.

Forecast

Our forecast is based on the latest Blue Chip Consensus forecast

The September 2014 economic forecast was based on a modified version of Global Insight's September 2014 Control forecast for the U.S. economy. Consistent with our standard practice, the U.S. real GDP forecast was adjusted to match the Blue Chip Consensus GDP forecasts for 2014 and 2015. We also incorporated the latest long term Blue Chip GDP forecast for 2016 through 2019. Our oil price forecast was adjusted to incorporate futures prices for both Brent crude oil and for West Texas Intermediate crude.

Real GDP growth is down slightly from the previous forecast

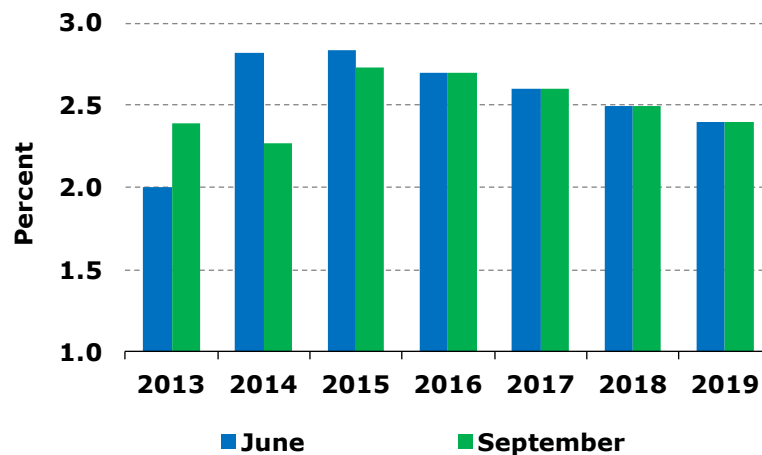
The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, now calls for real GDP growth of 2.1% in 2014, down from 2.2% from the previous forecast. Real GDP contracted in the first quarter, largely due to severe winter

conditions impacting economic activity, and then rebounded sharply in the second quarter. For the remainder of 2014, GDP growth is expected to moderate in the second half of this year, growing 2.8% (SAAR) and 3.0% (SAAR) in the third and fourth quarters. The June forecast expected growth of 3.2% (SAAR) in the second half of the year. Real GDP growth is expected to increase to 3.0% in 2015, down slightly from the 3.1% growth expected in June. The forecast then calls for GDP growth to slowly trend down from 2.9% in 2016 to 2.5% in 2019, unchanged from the June forecast.

Consumer spending will not be a strong driver of GDP growth

The forecast for consumer spending growth is also down slightly from the June forecast. While consumers are starting to feel more optimistic, stagnant wage growth has impeded spending. Despite the absence of increased real wages, the jobs recovery has continued at a modest pace. Home values and equity markets continue to increase as well, adding to net wealth. Much like the recovery so far, personal income growth will remain modest and consumer spending will not be a strong driver of growth in the recovery as is usually the case. We expect real consumer spending growth of 2.3% in 2014 before increasing to 2.7% in 2015 and 2016. We then expect consumption growth to moderate throughout the remainder of the forecast, reaching 2.4% in 2019 (see Figure 1.4). The forecast calls for consumer spending to contribute 1.9 percentage points to GDP growth this year and then contribute 1.8 percentage points to overall GDP growth annually for the remainder of the forecast.

Figure 1.4: U.S. Real Consumption Growth



The forecast calls for lower real consumption growth this year and next

Source: U.S. Bureau of Economic Analysis, ERFC September 2014 forecast; historical data through 2013

Personal income growth will pick up

Real disposable personal income growth is expected to rebound to 2.5% this year after declining 0.2% in 2013. This is much higher than the 1.8% growth we expected in June due to stronger growth in the first half of the year than originally

estimated. We then expect growth in real disposable personal income to pick up to 2.7% in 2015 and reach 4.0% in 2017. Growth is then expected to moderate, growing 3.3% in 2018 and 3.1% in 2019. Nominal disposable income is expected to grow 4.0% this year, led by strong wage growth, particularly in the private sector. Wages and salaries are expected to grow 4.9% this year, the strongest growth since 2007, and maintain this level of growth throughout the forecast. Income will also be boosted throughout the forecast by strong growth in dividend and interest income as interest rates rise and equity markets continue to increase.

The outlook for employment has been lowered slightly

Payroll employment growth is expected to be slightly lower this year than anticipated in the June forecast. Going forward, the forecast has been reduced slightly in terms of the total number of jobs. Growth in payrolls is expected to be 1.8% this year, down from the 1.9% growth forecasted in June. Even with the downward revision, employment growth is still expected to be higher than the 1.7% growth in 2013 and the highest annual growth since 2006. We expect employment growth of 1.8% in 2015, trending down to 0.7% in 2019. The forecast calls for the U.S. economy to add about 212,000 jobs per month through the end of this year as private sector gains continue and public sector hiring slowly increases. We expect employment growth to average 201,000 jobs per month for 2015 and 2016. The forecast calls for job growth to slow through the end of the forecast, averaging just 80,000 jobs per month in 2019 as labor force growth slows due to retiring baby boomers. As a result of the steady job growth, we expect the unemployment rate to drop over a full percentage point in 2014 to 6.3%, then to gradually fall to 5.3% in 2018 and 2019.

Private sector hiring will continue to outpace public sector hiring

Employment growth in nonfarm payrolls has been led by private sector hiring throughout the recovery as the public sector has been weighed down by budget concerns. While state and local governments have largely worked through their budgetary issues and have started hiring again, the federal government continues to shed jobs. We expect the drag from weak government job growth to continue through 2016 and into the first part of 2017. Private sector employment is estimated to have reached 116.6 million in the second quarter of this year, making up all of the jobs lost during the recession. We don't expect the job losses in the public sector to be made up until the first half of 2019. Federal government employment will continue to decline throughout the forecast, but this will be offset by modest gains in state and local government employment. The forecast calls for total government employment to increase 0.2% this year after declining in each of the previous four years. Growth in government payrolls will slowly increase throughout the forecast, reaching 1.1% in 2017 and 2018 before moderating to 1.0% in 2019. We expect private sector job growth of 2.1% this year and in 2015, matching the increase from 2013. The forecast calls

for private sector job growth to gradually moderate throughout the remainder of the forecast to just 0.6% in 2019.

Business investment is improving

Business investment continues to improve. Vacancy rates for office buildings are still high but remain on a slow downward trend. Some of the existing empty office space is becoming obsolete, creating demand for new office space to meet businesses' changing demand needs. Companies have a high level of cash on hand, profits are strong, and borrowing rates remain low. We expect nonresidential construction to rebound with 6.9% growth this year, up from a 0.5% decline in 2013. The forecast calls for growth to weaken to 1.3% in 2015 before picking back up with growth of 6.5% in 2016, and reaching 9.7% in 2017. The forecast then calls for growth to moderate through 2019. Equipment investment is expected to have strong growth throughout the forecast as businesses improve productivity as they expand. Although we do not expect to see double-digit growth experienced early in the recovery, we do expect capital equipment to remain an important driver of GDP growth going forward. Investment in equipment and software is expected to grow 6.0% this year and then peak at 8.1% in 2015. The forecast then calls for growth to gradually moderate to 3.9% in 2019. We expect overall real nonresidential fixed investment to grow 5.4% this year, 5.8% in 2015, 6.1% in 2016, and reach 6.5% in 2017. Growth will moderate from there at 5.3% in 2018 and 3.5% in 2019.

The modest housing recovery will continue

The housing recovery remains modest. We expect growth in housing starts to continue in the second half of the year now that the temporary effects of severe winter weather have been worked through. The forecast calls for growth of 10.0% for 2014, down from the 18.6% growth in 2013. Mortgage rates for a conventional 30-year fixed rate mortgage will continue to rise from 4.2% this year to 6.1% in 2018 and 2019. Much of the surplus of distressed properties caused by the recession has been worked through. Continued improvement in the housing market remains dependent on job growth and access to financing. The forecast expects robust growth in housing starts to continue in the near term. Growth in single-family starts is expected to be 4.9% this year, weighed down from the weak first quarter. Growth will further increase to 31.1% in 2015 and 28.7% in 2016, reaching 1.0 million units early in the year. Growth will remain strong in 2017 at 6.6% before flattening in 2018 and 2019. The multi-family housing segment is expected to moderate from the robust growth the past three years. The forecast calls for 11.7% growth this year before slowing to 0.4% in 2016. Going forward, we expect the multi-family segment to remain in the 400,000 to 420,000 unit range annually. The housing market will continue to improve, particularly while interest rates remain low by historical standards and inventories are lean. Population remains on an upward trend and employment continues to increase at a modest pace. The number of housing units remain at historically low levels and

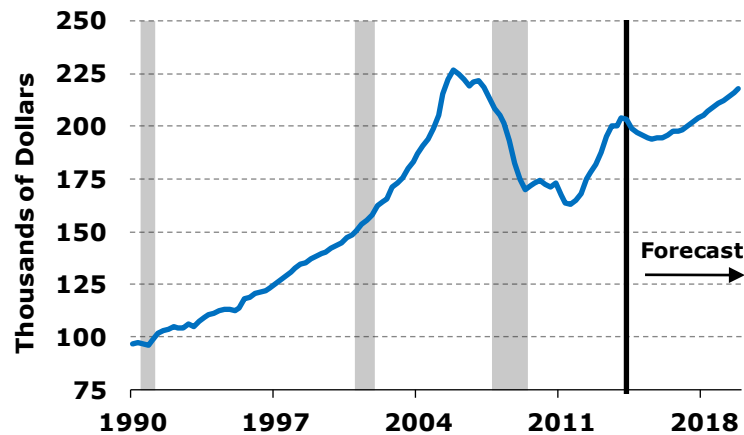
there is considerable pent up demand created by the recent lack of household formation. The forecast calls for total housing starts to reach 1.58 million in 2017 and remain at that level through 2019.

The pause in home price appreciation will be temporary

Home prices, which had been increasing at double-digit rates, are beginning to decline. We do expect the pause in appreciation to be temporary, and home prices to increase as the housing recovery unfolds (see Figure 1.5). The inventory of distressed properties, which hold down home values, is slowly being worked through. First-time home buyers remain on the sidelines due to still tight credit standards and emerging affordability issues. Investor demand, which had been propping up overall housing demand in recent years, is falling as fewer housing markets are undervalued. The forecast calls for the median price of an existing single-family home to peak at \$200,700 in 2014. We then expect the price to drop to \$196,400 in 2015 before once again slowly appreciating. The forecast calls for the median price to reach \$215,300 in 2019, just below the \$222,000 peak in 2006.

Figure 1.5: U.S. Median Single Family Existing Home Price, seasonally adjusted

Home prices will appreciate after a brief slowdown



Source: National Association of Realtors, ERFC September 2014 forecast; historical data through 2014Q2

Weak foreign demand has weighed down export growth

Export growth will continue to be weighed down by weak foreign demand for U.S. goods and services in the near term. Europe has just emerged from a prolonged recession and economic activity remains low. With severe structural imbalances in member countries and strict austerity measures still in effect, we expect the slow growth to continue. The latest Blue Chip forecast calls for 0.9% growth this year for the Eurozone followed by 1.5% growth in 2015. The weak economic growth has led to painfully high unemployment with rates for the Eurozone as a whole above 10% for the past three years. This has had an

adverse effect on consumer spending and reduced the exports of U.S. firms to Europe. The weakness in Europe has contributed to a slowdown in growth in other important U.S. trading partners as well. China, which is our largest export market outside of North America, in particular has slowed. Chinese growth remains well below their recent history and has prompted the government to introduce new stimulus measures. The latest Blue Chip forecast calls for growth of 7.4% in 2014 and 7.2% in 2015 for China. This is far below the Chinese growth seen from 2005 through 2011 of 11% and not enough to generate strong U.S. export growth.

Growth in some U.S. export markets is set to increase

GDP growth in other major U.S. export markets is forecasted to increase, offsetting some of the loss of demand from Europe and China. The forecast calls for growth in U.S. trading partners to increase to 2.5% this year after growing 2.3% in 2013. GDP growth for these countries is expected to increase further, reaching 3.4% in 2017 before gradually slowing to 3.2% in 2019. This growth will fuel demand for U.S. exports. We expect real U.S. export growth of 2.5% this year, down from 3.0% in 2013, before rebounding to 5.1% in 2015. The forecast calls for export growth of 4.2% in 2016, improving to 6.1% by 2018 and 6.0% in 2019 as global economic conditions firm. Export growth is offset by increased imports starting this year, however. Net exports are expected to reduce overall GDP growth by 0.2 percentage points in 2014. Going forward, net exports are expected to reduce GDP growth by 0.2 percentage points on average through 2019 as the U.S. economy recovers and import growth picks up.

Policymakers remained focused on deficit reduction

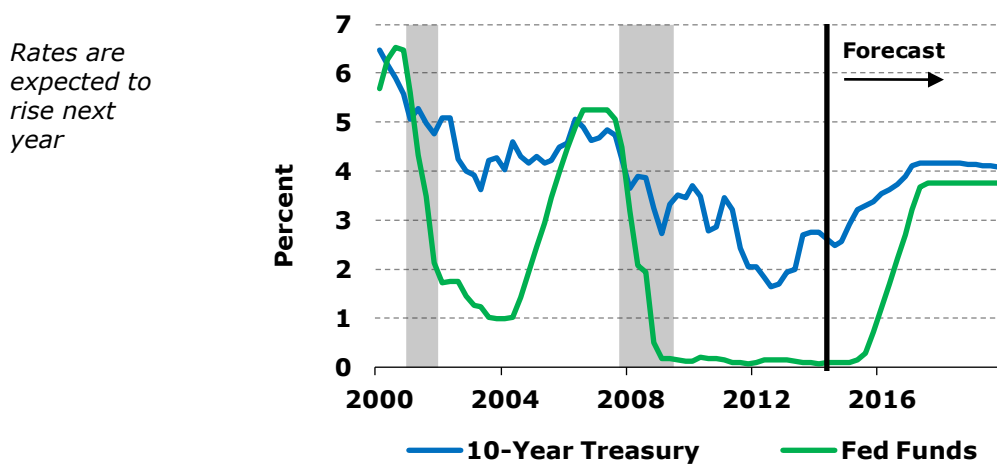
While uncertainty surrounding fiscal policy remains low, policymakers remain focused on deficit reduction. The forecast calls for an \$89.7 billion reduction in the federal deficit between 2013 and 2015. After dropping sharply in 2013 by \$51.0 billion, we expect real defense spending to decline another \$21.4 billion in 2014 and then fall gradually through the remainder of the forecast by an average of \$4.1 billion per year. Real nondefense purchases will decline as well throughout the forecast. We expect a \$6.6 billion decline this year followed by a \$2.4 billion reduction on average through 2019. With the prospect of expanded military action in the war against Islamic militants in Syria and Iraq, defense spending may be increased in the near term. Even with the potential increase, however, nondefense spending cuts might be required to offset them. The forecast calls for 2014 to be the trough in total real government purchases. We expect low growth for the remainder of the forecast, gradually increasing to 0.7% in 2017 through 2018 and 0.6% in 2019.

The Fed is starting to end its loose monetary policy

The Federal Reserve is now beginning to end its loose monetary policy it has used to support the economy. With the economic recovery continuing to firm, the first steps have now been taken

to end the Federal Reserve’s unconventional policies aimed at boosting the recovery. In October, the Fed will end its bond buying program that has kept interest rates low. There will then be roughly \$4.2 trillion in various assets on its balance sheet that will take years to unwind. The forecast calls for Fed policymakers to begin to raise interest rates in the third quarter of 2015. While the forecast still assumes inflation will be low and the labor market relatively weak, it is still anticipated that the Fed will be comfortable raising rates. Going forward, we expect rates to rise gradually before leveling off in 2017 (see Figure 1.6).

Figure 1.6: Yield on 10-Year Treasury Notes and Fed Funds Rate



Source: Federal Reserve, ERFC September 2014 forecast; historical data through 2014Q2

Oil prices are expected to decline on increased production

The forecast for oil prices is lower in the near term than in June, although prices decline at a slower rate as the forecast unfolds. Turmoil in oil-producing countries has continued, although markets seem to be less affected than in the past. Libya's oil production has climbed to 900,000 barrels a day as the country was able to restart conflict-damaged refineries. Production is now close to the pre-revolution capacity of 1.6 million barrels per day. Escalating violence in Iraq and sanctions against Russia have not severely impacted prices. Weak economic growth in China and Europe has slowed growth in demand. The International Energy Agency lowered their global demand forecast to growth of 900,000 barrels a day this year to 1.2 million barrels per day next year. At the same time, U.S. Energy Department estimates that growth in U.S. production alone will be enough to meet the increase in demand. We expect declining prices throughout the forecast, falling from about \$97 per barrel this year to \$89 per barrel in 2019. In addition to declining oil prices, the modest recovery will keep inflation subdued. We expect low headline inflation throughout the forecast ranging from 1.8% to 1.3%.

Table 1.1 provides a fiscal year summary of the U.S. economic indicators. For calendar year tables, see the appendix.

Risks to the Forecast

Downside risks outweigh upside risks

Our view of the risks to the forecast has changed since the June forecast. The probability of the optimistic scenario has been lowered while the probability of the baseline scenario has been raised. The largest change since the last forecast has been a lowered chance of robust recoveries in the labor market and housing market. The level of uncertainty in the baseline remains high. However, downside risks outweigh upside risks.

Downside Risks (25% Probability)

Fiscal tightening

Policymakers misinterpret weak growth and depressed confidence, decide on austerity, and cut discretionary spending, further reducing growth. Private sector confidence plummets, lowering stock prices and economic activity.

Sovereign debt contagion

Sovereign debt worries reemerge in the southern periphery of the European Union and the EU Commission re-imposes fiscal-tightening programs. Europe returns to recession and continued austerity measures increase the financial strains in Eurozone countries.

Slow Chinese growth

Global growth is restrained by a hard landing (growth <5%) in China. This leads to weaker growth in emerging economies in particular.

Crisis in Ukraine escalates

Tensions in Ukraine escalate, destabilizing the region. Oil shipments and financial linkages to Europe are stressed.

Middle East collapses

The conflict in Iraq and Syria escalates. Major oil infrastructure is compromised, reducing supply globally. The U.S. expands its military presence.

Declining stock market

Declining stock market weakens confidence, resulting in a drop in spending. Businesses are no longer willing to expand.

No housing recovery

The housing-sector recovery never materializes. Declining affordability and tight supply remove the option for homeownership for many potential buyers.

Upside Risks (20% Probability)

Housing recovery ignites

The housing sector improves faster than anticipated. Home prices continue to increase and buyers move off the fence. Affordability is not a major issue as income gains offset any increase in interest rates. Homebuilders respond and housing starts increase, leading to more hiring.

Confidence improves, boosting spending

Pent-up demand, fueled by a rebound in confidence, boosts consumer spending after years of economizing. Stock market gains reduce the desire for excess savings, further boosting spending.

Virtuous labor market cycle

The recent trend of solid payroll gains continues, and the labor market recovery gathers steam. This triggers a virtuous cycle of jobs, income, spending, and yet more jobs.

Eurozone rebounds from stagnation

The European Central Bank expands its monetary base, successfully leading the Eurozone away from deflation. They also develop a credible pro-growth plan to tackle sovereign debt issues.

Emerging markets rebound

Emerging market GDP growth accelerates. Global growth picks up and U.S. exports are boosted. Businesses expand production in response.

Table 1.1
U.S. Economic Forecast Summary
 Forecast 2015 to 2019

Fiscal Years

	2012	2013	2014	2015	2016	2017	2018	2019
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,205.8	15,502.5	15,880.5	16,285.7	16,752.4	17,247.0	17,705.5	18,156.3
% Ch	2.0	2.0	2.4	2.6	2.9	3.0	2.7	2.5
Real Consumption	10,351.7	10,566.3	10,819.8	11,088.4	11,389.8	11,693.6	11,995.8	12,285.2
% Ch	1.8	2.1	2.4	2.5	2.7	2.7	2.6	2.4
Real Nonresidential Fixed Investment	1,891.2	1,953.1	2,045.4	2,154.6	2,282.7	2,430.8	2,577.0	2,691.4
% Ch	9.5	3.3	4.7	5.3	5.9	6.5	6.0	4.4
Real Residential Fixed Investment	407.6	464.7	493.5	533.8	619.7	689.4	692.9	701.4
% Ch	8.9	14.0	6.2	8.2	16.1	11.3	0.5	1.2
Real Personal Income	12,844.4	13,172.0	13,359.4	13,748.3	14,236.4	14,811.8	15,344.5	15,827.3
% Ch	2.8	2.6	1.4	2.9	3.6	4.0	3.6	3.1
Real Per Capita Income (\$/Person)	40,981	41,732	42,027	42,929	44,111	45,542	46,820	47,925
% Ch	2.1	1.8	0.7	2.1	2.8	3.2	2.8	2.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.067	1.081	1.096	1.110	1.127	1.145	1.164
% Ch	2.4	1.4	1.3	1.4	1.3	1.5	1.6	1.6
U.S. Consumer Price Index (1982-84=1.0)	2.276	2.314	2.350	2.389	2.420	2.461	2.507	2.551
% Ch	2.9	1.7	1.6	1.7	1.3	1.7	1.9	1.8
Employment Cost Index (Dec. 2005=1.0)	1.150	1.171	1.193	1.218	1.248	1.283	1.318	1.357
% Ch	1.7	1.8	1.9	2.1	2.5	2.8	2.8	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	15,855.9	16,430.8	17,076.5	17,803.8	18,655.0	19,591.5	20,507.5	21,414.5
% Ch	4.0	3.6	3.9	4.3	4.8	5.0	4.7	4.4
Personal Income	13,516.9	14,058.1	14,436.8	15,066.8	15,800.3	16,693.7	17,575.7	18,419.1
% Ch	5.3	4.0	2.7	4.4	4.9	5.7	5.3	4.8
Employment (Millions)								
U.S. Civilian Labor Force	154.3	155.3	155.5	157.0	159.4	161.5	163.1	164.4
Total U.S. Employment	141.2	143.3	144.9	147.6	150.3	152.7	154.4	155.7
Unemployment Rate (%)	8.52	7.77	6.78	5.98	5.68	5.47	5.36	5.31
Nonfarm Payroll Employment	133.00	135.17	137.54	140.08	142.52	144.76	146.29	147.40
% Ch	1.6	1.6	1.7	1.9	1.7	1.6	1.1	0.8
Manufacturing	11.83	11.98	12.05	12.26	12.44	12.48	12.44	12.42
% Ch	1.8	1.2	0.6	1.7	1.5	0.3	-0.3	-0.2
Durable Manufacturing	7.38	7.51	7.59	7.79	8.00	8.08	8.07	8.07
% Ch	3.1	1.7	1.0	2.7	2.7	1.0	-0.1	0.0
Nondurable Manufacturing	4.45	4.47	4.46	4.47	4.43	4.40	4.37	4.35
% Ch	-0.2	0.3	0.0	0.0	-0.7	-0.8	-0.5	-0.4
Construction	5.60	5.73	5.92	6.18	6.67	7.31	7.77	8.01
% Ch	2.0	2.4	3.2	4.4	7.9	9.7	6.3	3.1
Service-Providing	114.74	116.61	118.68	120.71	122.47	124.00	125.08	125.96
% Ch	1.5	1.6	1.8	1.7	1.5	1.3	0.9	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	95.0	92.3	101.2	93.0	89.8	88.2	87.5	87.1
Personal Saving/Disposable Income (%)	6.4	6.3	5.0	5.0	5.5	6.7	7.6	8.2
Auto Sales (Millions)	6.6	7.4	7.6	7.9	8.1	8.3	8.4	8.4
% Ch	11.5	12.1	2.1	4.0	2.7	2.2	1.7	0.0
Housing Starts (Millions)	0.684	0.875	0.957	1.144	1.397	1.580	1.565	1.570
% Ch	20.1	27.8	9.4	19.5	22.1	13.1	-0.9	0.3
Federal Budget Surplus (Billions)	-1,149.6	-863.2	-609.5	-589.6	-540.2	-560.1	-602.4	-626.2
Net Exports (Billions)	-593.5	-532.5	-515.7	-482.0	-458.7	-466.2	-457.1	-415.7
3-Month Treasury Bill Rate (%)	0.05	0.08	0.04	0.08	1.05	2.87	3.51	3.51
10-Year Treasury Note Yield (%)	2.08	1.82	2.71	2.80	3.46	3.98	4.17	4.14
Bond Index of 20 G.O. Munis. (%)	3.97	3.75	4.54	4.57	5.07	5.44	5.60	5.58
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	4.46	5.22	5.96	6.17	6.12

Table 1.2

Forecast Analysis

Comparison of Forecasts for 2013-15

Forecast Date	2012				2013				2014				2015	
	<u>Feb.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Mar.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Feb.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Mar.</u>	<u>June</u>
U.S.														
Percent Growth, 2013:2-2015:2														
Real GDP	5.9	6.1	6.1	6.0	5.8	5.8	5.7	5.5	6.2	5.5	5.5			
Implicit Price Deflator	4.3	4.4	3.8	3.4	3.4	3.1	3.1	2.9	2.6	3.2	2.8			
Average Rate, 2013:3 to 2015:2														
3 Month T-Bill Rate	0.27	0.50	0.17	0.16	0.12	0.08	0.09	0.07	0.06	0.07	0.06			
Mortgage Rate	5.17	4.97	4.45	4.16	3.99	4.15	4.63	4.56	4.61	4.48	4.40			

Table 1.3

Fiscal Years

Forecast Comparison

Forecast 2015 to 2019

	2013	2014	2015	2016	2017	2018	2019
U.S.							
Real GDP							
September Baseline	15502.5	15880.5	16285.7	16752.4	17247.0	17705.5	18156.3
% Ch	2.0	2.4	2.6	2.9	3.0	2.7	2.5
June Baseline	15584.3	15933.8	16364.0	16832.1	17327.8	17790.0	18244.3
% Ch	2.0	2.2	2.7	2.9	2.9	2.7	2.6
Implicit Price Deflator							
September Baseline	1.067	1.081	1.096	1.110	1.127	1.145	1.164
% Ch	1.4	1.3	1.4	1.3	1.5	1.6	1.6
June Baseline	1.066	1.079	1.097	1.112	1.127	1.144	1.161
% Ch	1.4	1.2	1.7	1.4	1.4	1.5	1.5
Unemployment Rate							
September Baseline	7.77	6.78	5.98	5.68	5.47	5.36	5.31
June Baseline	7.77	6.79	6.08	5.83	5.67	5.60	5.57
Mortgage Rate							
September Baseline	3.53	4.33	4.46	5.22	5.96	6.17	6.12
June Baseline	3.53	4.33	4.63	5.37	6.18	6.63	6.62
3 Month T-Bill Rate							
September Baseline	0.08	0.04	0.08	1.05	2.87	3.51	3.51
June Baseline	0.08	0.05	0.09	1.17	3.09	3.74	3.73

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Chapter 2: Washington Economy – Current Conditions and Forecast

- **As expected in the June forecast, the Washington economy continues to expand at a moderate pace.**
- **Washington employment growth has been stronger than expected in June and historical estimates were revised higher.**
- **Overall housing construction is on track but single-family permits are weak. Seattle home prices have declined in two of the last three months.**
- **Since the recession, Washington consumer spending growth has been positive but weak.**
- **The annual revision raised the estimated level of Washington personal income in 2013 by \$4.403 billion (1.3%).**
- **Seattle shelter costs are rising much faster than the national average but overall inflation remains modest.**
- **We expect the Washington economy to continue to outperform the U.S. economy.**

Current Conditions

The Washington economy continues to show moderate growth

In recent months the Washington economy has performed slightly better than expected in the June forecast. The current level of employment is higher than anticipated in June both because growth has been stronger than expected and because historical estimates have been revised up. As anticipated, Washington personal income growth was weak in the second quarter, largely due to aerospace bonuses paid in the first quarter which were not repeated in the second quarter. Single-family housing construction was once again weaker than expected in the second quarter of 2014 but overall construction was close to the forecast thanks to strong multi-family construction. Seattle area inflation is about the same as the national rate. Shelter costs are rising faster than elsewhere in the U.S. but other prices are rising more slowly.

Job growth has been...

In the three months since the June forecast was adopted, the Washington economy added 21,600 jobs, 3,200 more than the

...stronger than expected

18,400 expected in the June forecast. As usual, most of the new jobs were in private-services providing industries which added 15,200 jobs in June, July, and August. The manufacturing sector added 2,100 jobs in the three-month period thanks in part to an unexpected increase of 1,200 jobs in the aerospace industry. (We believe the increase in aerospace was due to temporary summer interns and will be reversed in the fall.) The construction sector added 2,500 jobs in June, July, and August while federal, state, and local government combined added 1,800 jobs. The state's unemployment rate was 5.6% in August, the same rate as in July but down from 7.0% in August 2013.

Historical employment data were revised up

We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions raised the estimated level of total employment in May 2014 by 8,000 jobs. As a result of the upward revisions to history through May and slightly stronger-than-expected growth in the next three months, the total effect is 11,200 (0.4%) more jobs in August 2014 than expected in the June forecast.

Initial claims continue to trend lower

In another sign of labor market healing, initial claims for unemployment insurance continue to trend lower and are now at pre-recession levels. The four-week moving average of Washington initial claims for unemployment insurance edged up to 8,069 in the week ending September 20th from 8,024 in the previous week but is still lower than at the onset of the recession.

Hourly earnings growth is improving

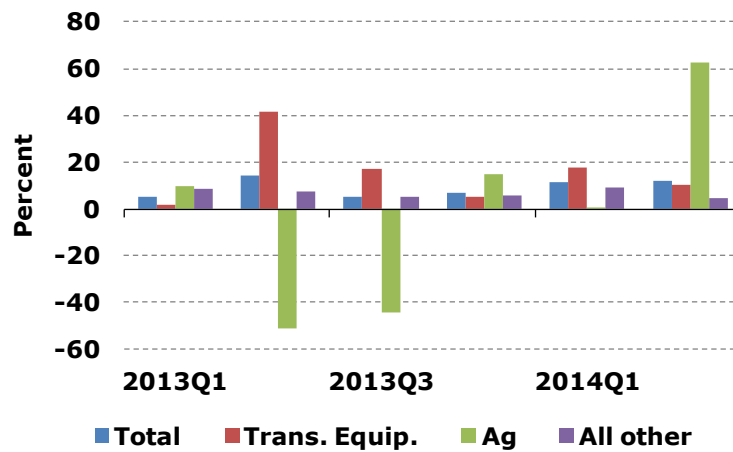
Growth in average hourly earnings has picked up, but average weekly hours continue to trend down. Private sector average hourly earnings in the twelve months ending in August 2014 were up 2.0% over the previous twelve month period. A year ago the comparable rate of increase was only 0.6%. However, average weekly hours declined 0.2% in the most recent twelve month period compared to the previous year. This is better than the 0.4% decline in the previous year, but still negative. As a result of the improvement in average hourly earnings, average weekly earnings growth improved to 1.8% compared to 0.6% a year ago.

Export growth is strong

Washington exports increased 11.9% in the second quarter of 2014 compared to the second quarter of 2013. Exports of transportation equipment (mostly Boeing planes) increased 10.4% over the year and exports of agricultural products jumped 62.5% over the year. Exports of all other Washington commodities rose 4.6% over the year (see Figure 2.1).

Agricultural exports rebounded in the second quarter

Figure 2.1: Washington Export Growth



Source: WISER Trade; data through 2014 Q2

Overall housing is on track but single-family permits are weak

Single-family housing construction was once again weaker than expected in the second quarter of 2014 but overall construction was close to the June forecast thanks to stronger-than-expected multi-family construction. Total housing units authorized by building permits averaged 37,200 (SAAR) in April, May, and June. The June forecast had assumed 37,400 units. Single-family units averaged 16,600, 800 less than expected but multi-family units averaged 20,600, 600 more than expected. As expected, the third quarter started out weaker than the second quarter as July and August multi-family permits came down from an unsustainably high second-quarter level. Multi-family permits in July and August still exceeded the June forecast, more than making up for a shortfall in single-family permits. Total permits averaged 32,300 units (SAAR) in July and August compared to the June forecast of 32,600 units for the third quarter as a whole.

Seattle-area home prices may be peaking

Seattle home prices may be peaking. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices declined 0.1% in July. Seattle home prices have now fallen in two of the last three months after 29 consecutive monthly increases since the trough in November 2011. Seattle home prices are still up 7.1% over the previous July and 26.1% higher than the November 2011 trough.

Layoffs are coming in the software industry

In July Microsoft announced that it would lay off 18,000 employees worldwide. The majority of these are related to the Nokia acquisition and will not be in the Puget Sound area. Nevertheless, the local impact will be significant. In July, 1,351 Washington employees were notified of layoffs. Another 747 were notified in September for a total of 2,098. This is comparable to the 2,101 Microsoft employees laid off in 2009. There remain approximately 2,900 Microsoft job cuts remaining,

some of which will undoubtedly be local. The layoffs should be complete by the end of the Microsoft fiscal year which is June 30, 2015.

Aerospace employment is declining

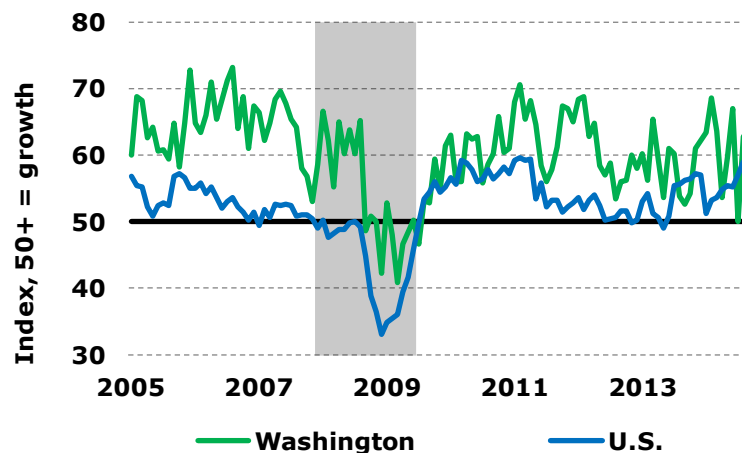
Aerospace employment, which had been responsible for much of the strength in manufacturing early in the recovery, is now in decline. As of May 2014, aerospace lost 3,400 jobs since the peak in November 2012. Aerospace employment actually increased by 1,200 in June, July, and August but we believe the increase was due to temporary summer interns and will be reversed in the fall. We continue to believe that this downturn will be relatively mild due to the hefty backlog of orders. The current reductions are due to improvements in productivity and restructuring. The steep cuts in the past have been associated with production cuts which we do not expect over the next few years.

Manufacturing continues to expand

The Institute of Supply Management - Western Washington Index (ISM-WW) rebounded to 62.9 in August from 50.1 in July (see Figure 2.2). Index values above 50 indicate positive growth while values below 50 indicate contractions. The July figure was the weakest since July 2009, at the depth of the recession. All components (production, orders, employment, inventory, and deliveries) improved in August.

The ISM-WW index bounced back in August

Figure 2.2: Institute of Supply Management Indices



Source: ISM, ISM-WW; data through August, 2014

Car sales reached a new post-recession high in August

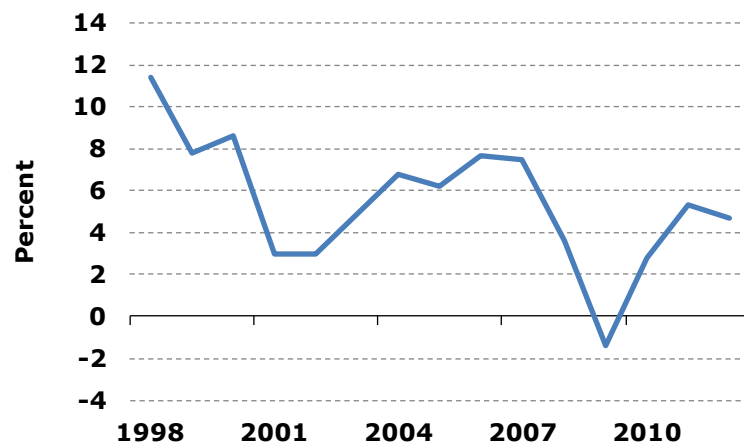
Washington car sales reached yet another post-recession high in August 2014. New vehicle registrations totaled of 291,400 (SAAR) in August, 0.2% more than in July and 5.2% more than in August 2013. New vehicle registrations for August were the strongest since November 2007, before the onset of the recession.

Nominal Washington consumer spending declined in 2009

In August the U.S. Bureau of Economic Analysis released, for the first time, estimates of personal consumption expenditures (PCE) by state for 1997 through 2012. These estimates are not adjusted for inflation. Washington personal consumption expenditures rose 4.7% in 2012 compared to 4.1% for the nation. Washington's 2012 consumption growth rate ranked ninth strongest among the states and District of Columbia. Washington consumer spending fell 1.4% in 2009, at the bottom of the most recent recession, in stark contrast to the 2001 recession when consumer spending growth never fell below 3.0% (see Figure 2.3). While consumer spending growth returned to positive territory in 2010, 2011, and 2012, growth remains weaker than during the previous recovery.

Since the recession, Washington consumer spending growth has been positive but weak

Figure 2.3: Washington Consumer Spending Growth



Source: U.S. Department of Commerce, Bureau of Economic Analysis; data through 2012

Second quarter personal income growth was skewed by Boeing bonuses in the first quarter

In late September, the Bureau of Economic Analysis released estimates of state personal income through the second quarter of 2014. Washington personal income grew at a 5.8% rate (SAAR) in the second quarter which ranked 38th among the states (including the District of Columbia) and was slightly lower than the 6.3% annual rate for the U.S. as a whole. Washington's growth in the second quarter was skewed by the very large bonus payments paid by Boeing in the first quarter. Excluding durable manufacturing wages, Washington's second quarter growth was 6.8% which ranked 15th among the states and District of Columbia and exceeded the 6.2% rate for the U.S. as a whole.

Historical personal income was boosted by a revision in dividend income

The September BEA release also reflected the annual revision of state personal income. Annual revisions are made "to incorporate source data that are more complete and more detailed than previously available." The annual revision raised the estimate of Washington personal income in 2013 by \$4.403 billion (1.3%)

compared to the previously available estimate. The revision was more than accounted for by a \$5.108 billion (7.9%) increase in the estimate for dividends, interest, and rent. According to the revised estimates, Washington personal income increased 2.5% in 2013 which ranked 10th fastest among the fifty states and District of Columbia. The comparable national growth rate was 2.0%.

Seattle-area shelter costs are rising rapidly

Seattle shelter costs continue to rise much more rapidly than U.S. city average shelter costs but other prices are rising much more slowly, with the result that headline inflation in Seattle is close to the national average. The Seattle CPI rose 1.8% from August 2013 to August 2014 compared to 1.7% for the U.S. city average. Similarly, core prices (all items excluding food and energy) increased 1.7% in Seattle, the same rate as the U.S. city average. However, shelter costs rose 4.4% over the year in Seattle compared to 2.9% for the U.S. city average. All items excluding shelter rose only 0.6% in Seattle compared to the national average increase of 1.2%.

Washington State Forecast

The September Washington forecast reflects a very similar U.S. forecast

The September Washington State forecast is based on a new national forecast that is very similar to the forecast adopted in June. While real GDP is lower in the new forecast, the reason is a downward revision in historical estimates resulting from the annual revision of the national income and product accounts (NIPAs). GDP growth in the forecast averages 2.7% per year through 2019, the same rate as in the June forecast. Employment growth averages 1.4% per year, real personal income growth averages 3.3% per year and PCE inflation averages 1.5% per year, all the same as in June. Oil prices, however, are lower than assumed in June in the near-term but also decline less. These minimal revisions in the national forecast feed through to the state economic forecast.

Washington will continue to outperform the U.S. in growth

Our September 2014 forecast of Washington employment is higher than assumed in June due mainly to stronger than expected growth through August. Employment growth for the remainder of the forecast is also slightly higher than in the June forecast. Our current estimate of Washington personal income growth in the first half of 2014 is also higher than anticipated in the June forecast, resulting in a stronger forecast for 2014. Our new forecast for nominal personal income growth from 2015 through 2019 is also slightly higher than the rate predicted in June. The number of housing units authorized by building permits was close to the forecast in the second quarter of 2014. Once again the multi-family segment was stronger than expected but single family construction was weaker. As a result, we have slightly lowered our single-family housing permit forecast and raised our multi-family forecast. Our September economic

forecast for total Washington housing units is very similar to the forecast adopted in June.

Washington Payroll Employment

Employment growth is stronger in 2014 than assumed in June

Our September 2014 forecast of Washington employment is higher than assumed in June due mainly to stronger than expected growth through August. Washington employment is expected to grow 2.6% this year compared to the 2.3% growth assumed in the June forecast. The September forecast for average annual employment growth from 2015 through 2019 is 1.6% per year compared to 1.5% per year in the June forecast.

Aerospace employment is slowly declining

Despite rising production, aerospace employment continues to decline. Aerospace employment usually peaks before production as developers and testers are laid off and productivity improves. Aerospace employment has performed about as expected during the last three months and we have not changed our expectation of a downward trend over the next few years. However, we believe that this downturn will be relatively mild due to the large backlog of orders. The current reductions are due to improvements in productivity whereas the steep cuts in the past have been associated with production cuts, which we do not expect over the next few years. On an annual average basis, we expect aerospace employment to decline 2.5% in 2014, 2.6% in 2015, 2.5% per year in 2016 and 2017, 2.2% in 2018, and 2.0% in 2019.

Software employment will be weak in the near term as the sector absorbs Microsoft layoffs

Software employment has been growing steadily since the 2009 Microsoft layoffs. As of the third quarter of 2014, employment exceeded the previous peak by 3,300 jobs. The recently announced Microsoft layoffs will begin in September 2014 and will affect annual employment growth rates in 2014 and 2015. After that we expect moderate positive growth to resume, however the level of software employment will be lower than assumed in June throughout the remainder of the forecast. Software employment rose 3.0% in 2013 which was the highest growth rate since 2008. We expect a growth rate of 2.7% in 2014 followed by a 0.5% decline in 2015. Positive growth is expected to return in 2016 with growth averaging 1.2% per year in each through 2019.

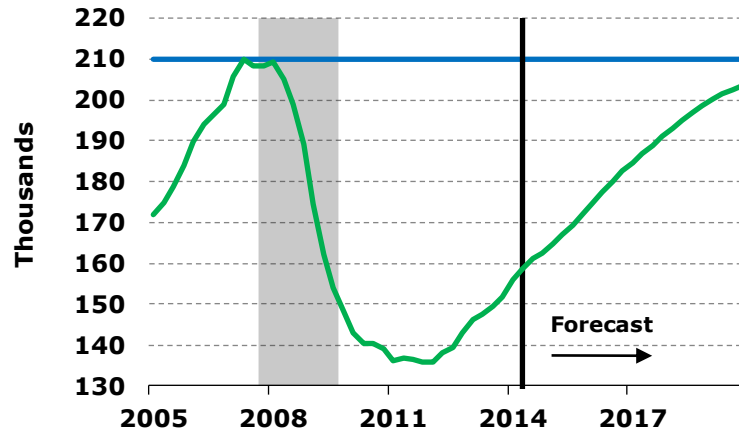
Construction employment is growing faster than we believed in June

Construction employment growth continues to surprise on the upside. We have increased our forecast of construction employment growth this year to 7.2% compared to 6.3% in the June forecast. This will make 2014 the best year for construction employment growth since 2006. Most of the growth this year will be in residential construction with nonresidential construction employment growth picking up in 2015-2019. Overall construction employment will grow 5.5% in 2015, 6.2% in 2016, 5.0% in 2017, 4.4% in 2018, and 3.1% in 2019. Even with these impressive growth rates, construction employment will still be

6,500 below its previous peak at the end of 2019 (see Figure 2.4).

Washington construction employment will remain below its previous peak

Figure 2.4: Washington Construction Employment



Source: WA Department of Employment Security, ERFC September forecast; historical data through 2014 Q2

Financial activities employment will decline in 2016-19

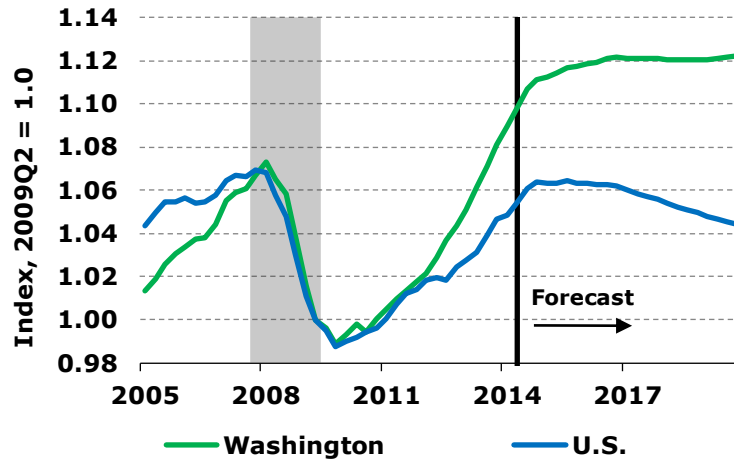
Financial activities employment fell 19,400 jobs (12.2%) from a peak in the first quarter of 2006 to the trough in the second quarter of 2010. Employment in credit intermediation and related activities accounts for most of the decline, followed by real estate and rental and leasing. On a calendar year basis, financial activities employment grew 0.2% in 2011, 2.4% in 2012, and 4.1% in 2013. Going forward, we expect a declining trend in financial activities employment due to productivity growth and outsourcing. Employment will grow only 1.8% in 2014 and remain flat in 2015 before declining 0.9% in 2016, 2.6% in 2017, 2.1% in 2018, and 0.7% in 2019.

Retail trade employment has rebounded

Retail trade is another highly cyclical sector that declined early and sharply but has now turned around. Growth in Washington has been much stronger than the national average during the recovery thanks to our outsized and rapidly growing electronic shopping sector (see Figure 2.5). Retail trade employment grew 1.5% in 2011, 2.1% in 2012, and 3.3% in 2013 following declines of 0.2%, 5.5%, and 0.4% in 2008, 2009, and 2010. We expect another year of 3.3% growth this year based on employment data through August. The forecast assumes weaker growth in the next five years as the recovery matures. We expect growth rates of 1.3%, 0.4%, 0.1%, 0.0%, and 0.1% in 2015 through 2019.

Figure 2.5: Retail Trade Indices

Washington retail trade employment growth has been much stronger than the national average during the recovery



Source: WA State Employment Security Department, BLS, ERFC September 2014 forecast; historical data through 2014 Q2

We expect strong growth in professional and business services employment

As is typical during recoveries, professional and business services will be one of Washington’s fastest growing sectors. During a recovery, growth in this sector is boosted by gains in employment services, mainly temporary help services. As businesses gauge whether the increase in demand will continue, they typically hire temporary staff before they hire permanent employees. Employment growth in professional and business services rebounded to 4.0% in 2011 from just 0.6% in 2010 and a 6.9% decline in 2009. Growth slowed to 3.1% in 2012 and 2.9% in 2013 due to a slowdown in employment services and big cuts in waste management (Hanford) and accounting services. We expect growth to remain very strong in this sector throughout the forecast with growth rates of 2.9%, 5.0%, 4.3%, 3.0%, 2.2%, and 2.3% in 2014 through 2019.

State and local government employment is growing again

State and local government employment was a drag on the overall jobs recovery long after most other sectors turned around but has finally passed its trough. State and local government employment peaked in the fourth quarter of 2008 and declined through the first quarter of 2012. Since then, employment levels have risen steadily but slowly. On an annual average basis, state and local government employment rose 0.8% in calendar 2013 following three years of decline. While we expect growth to improve, employment in the state and local government sector will not regain its previous peak until the first quarter of 2015. We expect moderate employment growth in 2014 through 2019 with growth rates of 1.3%, 1.2%, 1.4%, 1.6%, 1.6%, and 1.3%.

Washington Personal Income

The current level of personal income is higher than expected in June

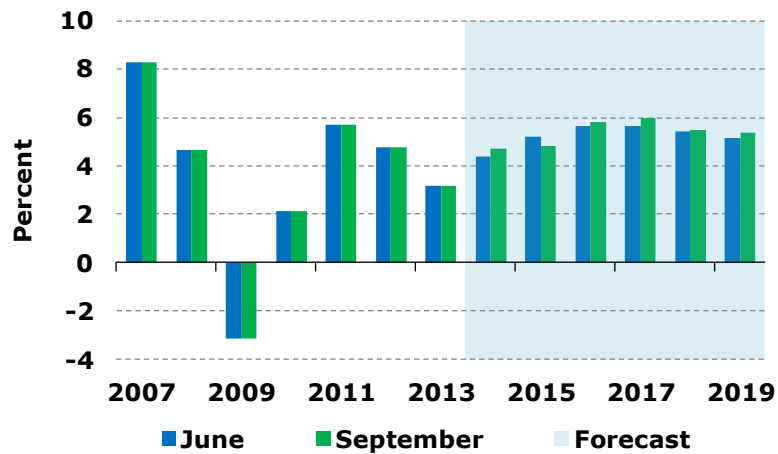
In late June, the Bureau of Economic Analysis released estimates for state personal income through the first quarter of 2014. We have incorporated the new BEA estimates as well as additional Washington QCEW and other wage data through the first quarter. Our current estimate of Washington personal income in the first quarter of 2014 is \$338.2 billion which is \$0.5 billion (0.2%) higher than assumed in June. Also, monthly U.S. personal income growth, a key driver of the Washington personal income estimates, has been stronger than expected so far in 2014, mostly in the transfer payments component. As a result, our estimate for personal income in the second quarter is \$1.1 billion (0.3%) more than expected in June.

Higher actuals in the first half raised our forecast for 2014 income growth

Our September forecast for nominal personal income growth this year of 4.7% is stronger than the June forecast of 4.4% due to the higher actuals in the first half of 2014. Our new forecast for nominal personal income growth from 2015 through 2019 averages 5.5% per year, slightly higher than the 5.4% rate predicted in June (see Figure 2.6). The higher nominal income growth forecast in 2015-19 reflects the slightly higher inflation in the new forecast. Real income growth in 2015-19 is forecasted to average 3.9% per year, the same rate expected in the June forecast.

Figure 2.6: Washington Personal Income Growth

Personal income growth is higher than assumed in the June forecast



Source: U.S. Department of Commerce, Bureau of the Economic Analysis, ERFC September 2014 Forecast; historical data through 2013

Washington Building Permits

The total housing permit forecast is...

The number of housing units authorized by building permits was close to the forecast in the second quarter of 2014. Once again the multi-family segment was stronger than expected but single

... very similar to the June forecast

family construction was weaker. As a result, we have slightly lowered our single-family housing permit forecast and raised our multi-family forecast. Our September economic forecast for total Washington housing units is very similar to the forecast adopted in June. We expect total housing units to rise 3.3% to 34,100 units in 2014, 6.0% to 36,100 units in 2015, 13.8% to 41,100 units in 2016, and 3.5% to 42,500 units in 2017. Housing permits are expected to level off in the last two years, rising only 1.3% to 43,000 in 2018 and 2.8% to 43,800 in 2019.

Seattle Consumer Price Index

Inflation will remain moderate throughout the forecast

Core inflation (excluding food and energy) in Seattle slowed to 1.5% in 2013 from 2.6% in 2012. As the economic recovery continues, Seattle core inflation will increase but remain in a moderate range. We expect the core Seattle CPI to rise 2.3% and 2.2% in 2014 and 2015, slowing to 1.9% in 2016, 2.0% in 2017, 1.9% in 2018, and 1.8% in 2019. We expect declining oil prices during the remainder of the forecast which should further restrain headline inflation. We expect all-items Seattle area inflation rates of 2.3% in 2014, 2.2% in 2015, 1.7% in 2016, 1.9% in 2017, 1.9% in 2018, and 1.8% in 2019.

Table 2.1 provides a fiscal year summary of the state economic indicators. For calendar year tables, see the appendix.

Alternative Scenarios

Alternate forecasts are prepared in accordance with state law

In accordance with state law, the Washington State Economic and Revenue Forecast Council adopted a forecast based on optimistic assumptions and a forecast based on pessimistic assumptions.

Optimistic

In the optimistic scenario, the European Central Bank (ECB) expands its monetary base, successfully steering the Eurozone away from deflation. Eurozone growth strengthens more than in the baseline as fiscal conditions improve, credit conditions ease, and pent-up demand is released. The euro appreciates in response to the ECB's policy changes, as well as to changes in interest rates and economic performance. GDP growth in the major economies reaches 2.7% in the third quarter. Emerging-market GDP growth accelerates as these markets implement structural reforms to increase labor productivity, and their exchange rates appreciate against the U.S. dollar. As global growth picks up, the dollar depreciates 3.6% against most major currencies in the third quarter of 2014. The S&P 500 jumps in the third quarter and stays above the baseline level throughout the forecast period. The exchange-rate depreciation begins to impact international trade about a year after it begins. Fixed

In the optimistic scenario, the Eurozone recovers faster than expected

nonresidential investment expands 6.3% in 2014, 8.4% in 2015, and 7.9% in 2016. The increased production capacity allows export growth to take off. Greatly increased production capacity brings significant wage and payroll gains. As employment and wage growth both pick up, they lift the pace of consumption growth.

The optimistic scenario also assumes a much stronger Washington economy

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast assumes that aerospace employment resumes an upward trend in the first quarter of 2014 through the second quarter of 2017 rather than continuing to fall as in the baseline. Software employment growth is also much stronger than in the baseline forecast. Seattle inflation is higher than in the baseline forecast due to the stronger regional economy as is average wage growth. The strong local economy also drives population growth higher. The recovery in construction employment is much stronger than in the baseline forecast with employment in the sector exceeding the previous peak in the third quarter of 2017. By the end of 2019, Washington nonfarm payroll employment is higher by 163,500 jobs than in the baseline forecast and Washington personal income is \$44.4 billion higher.

Pessimistic

The housing sector relapses in the pessimistic scenario

In the pessimistic scenario, the housing-sector rebound never materializes. Additionally, foreign growth weakens and consumer confidence sinks. Tight credit, a scarcity of developed lots, and rising construction costs restrain the housing market recovery and remove the homeownership option for more renters. Housing starts weaken, averaging 0.96 million in 2015. Consumption makes meager contributions to growth, driven down by less aggregate household-related expenditures. Federal government spending contracts sharply in the fourth quarter, and continues dropping in subsequent quarters. Without a credible stimulus plan on the horizon, private-sector confidence deteriorates, stock prices drop, and the U.S. economy wobbles. The declining stock market weakens confidence, resulting in consumer spending increasing only 1.4% in 2015. With businesses unwilling to expand further in such a weak environment, nonresidential fixed investment growth slows. Light-vehicle sales turn down again, falling to 15.8-million units (annualized) in the fourth quarter and below 15.0 million units in mid-2015. In this scenario, U.S. export growth declines because foreign growth is lower. The double squeeze from weak domestic sales and slow exports weakens businesses, initiating a slowdown in payroll growth. Meanwhile, some otherwise qualified job applicants are prevented from relocating to employment opportunities by a dismal real estate market. In turn, this leads to depressed wages, low profits, and declining employment, with the unemployment rate rising back above 6.5% in 2015.

This scenario also assumes a weaker local economy

In addition to reflecting the impact of the weaker U.S. forecast on the state economy, aerospace employment declines much more rapidly in 2013 through 2019 than assumed in the baseline forecast. Software employment also begins to decline in the third quarter of 2014. Population growth is also weaker than in the baseline forecast as migration into Washington drops. Construction employment is essentially flat in the pessimistic alternative rather than rising as in the baseline. The Seattle CPI is lower than in the baseline forecast, as are Washington wage rates, further depressing personal income. By the end of 2019, Washington nonfarm payroll employment is 212,700 lower than in the baseline forecast and Washington personal income is \$37.6 billion lower.

Table 2.2 compares the optimistic and pessimistic forecasts with the baseline forecast.

Governor's Council of Economic Advisors (GCEA)

In the GCEA scenario, the U.S. and state forecasts were adjusted to match the average view of the Council members.

The Governor's Council members expect weaker output growth but higher inflation

At the national level, the GCEA outlook for real GDP growth is slightly below the baseline forecast in every year except 2014. However, real consumer spending growth in the Governor's Council scenario was very close to the baseline forecast throughout the forecast. Despite the slower real GDP growth, the Governor's Council members expected consistently higher inflation than predicted in the baseline forecast. As a result of the higher inflation assumption, nominal consumption is higher in the Governor's Council scenario than in the baseline forecast. Compared to the baseline, the GCEA expects slightly higher oil prices in 2014 and 2015 but lower oil prices in 2016 through 2019. The Council members' mortgage rate forecast is very close to the baseline forecast.

The GCEA members expect weaker Washington real income growth but stronger nominal growth due to higher inflation

The GCEA scenario for Washington is also similar to the baseline forecast. Their real personal income growth forecast averages 3.4% per year in 2014 through 2019 compared to the baseline forecast of 3.8% but, because they expect higher inflation, their nominal personal income growth forecast is higher (5.4% versus 5.2%). The council members' forecast for total employment growth is slightly stronger on average than the baseline forecast. Overall, their forecast expects a 1.8% average rate through 2019 compared to 1.7% per year in the baseline forecast. The GCEA forecast for manufacturing employment is about the same as the baseline forecast. The Council members' construction employment forecast is lower than the baseline forecast but their housing permit forecast is higher. At the end of 2019, the GCEA forecast for Washington nonfarm payroll employment is 5,900 higher than in the baseline forecast but Washington personal income is \$3.6 billion lower. See Table 2.3 for more information.

Table 2.1
Washington Economic Forecast Summary
 Forecast 2015 to 2019

Fiscal Years

	2012	2013	2014	2015	2016	2017	2018	2019
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	294.668	302.196	310.409	320.274	333.071	347.789	361.776	375.294
% Ch	2.7	2.6	2.7	3.2	4.0	4.4	4.0	3.7
Real Wage and Salary Disb.	151.296	156.114	161.436	166.715	173.154	179.439	185.660	192.598
% Ch	2.6	3.2	3.4	3.3	3.9	3.6	3.5	3.7
Real Nonwage Income	143.371	146.082	148.973	153.559	159.918	168.350	176.117	182.695
% Ch	2.7	1.9	2.0	3.1	4.1	5.3	4.6	3.7
Real Per Capita Income (\$/Person)	42,906	43,526	44,222	45,101	46,316	47,781	49,122	50,351
% Ch	1.5	1.4	1.6	2.0	2.7	3.2	2.8	2.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.067	1.081	1.096	1.110	1.127	1.145	1.164
% Ch	2.4	1.4	1.3	1.4	1.3	1.5	1.6	1.6
Seattle Cons. Price Index (1982-84=1.0)	2.360	2.404	2.437	2.496	2.535	2.583	2.633	2.683
% Ch	3.1	1.8	1.4	2.4	1.6	1.9	2.0	1.9
Average Nonfarm Annual Wage	52,771	54,067	55,319	56,670	58,522	60,611	62,965	65,573
% Ch	3.7	2.5	2.3	2.4	3.3	3.6	3.9	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.04	24.19	24.75	25.29	25.83	26.44	27.09	27.78
% Ch	1.2	0.6	2.3	2.2	2.1	2.4	2.4	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	310.085	322.520	335.434	350.990	369.660	391.980	414.385	436.753
% Ch	5.2	4.0	4.0	4.6	5.3	6.0	5.7	5.4
Disposable Personal Income	276.917	285.992	296.021	308.740	323.977	343.634	363.678	383.424
% Ch	4.5	3.3	3.5	4.3	4.9	6.1	5.8	5.4
Per Capita Income (\$/Person)	45,150	46,453	47,786	49,426	51,404	53,852	56,265	58,596
% Ch	4.0	2.9	2.9	3.4	4.0	4.8	4.5	4.1
Employment (Thousands)								
Washington Civilian Labor Force	3,482.2	3,470.8	3,461.2	3,499.8	3,566.4	3,626.2	3,679.5	3,730.6
Total Washington Employment	3,180.0	3,211.5	3,235.4	3,307.1	3,377.3	3,437.4	3,489.2	3,538.4
Unemployment Rate (%)	8.68	7.47	6.52	5.51	5.30	5.21	5.17	5.15
Nonfarm Payroll Employment	2,894.2	2,955.6	3,029.5	3,100.4	3,160.8	3,214.0	3,255.2	3,296.4
% Ch	1.4	2.1	2.5	2.3	1.9	1.7	1.3	1.3
Manufacturing	274.8	285.0	287.2	289.6	293.2	294.8	295.6	297.4
% Ch	4.9	3.7	0.8	0.9	1.2	0.6	0.3	0.6
Durable Manufacturing	199.2	208.6	209.6	211.6	214.6	215.9	216.0	217.2
% Ch	6.2	4.7	0.5	1.0	1.4	0.6	0.0	0.6
Aerospace	90.8	96.4	94.9	92.9	90.3	88.0	85.9	84.1
% Ch	10.0	6.2	-1.5	-2.2	-2.8	-2.5	-2.4	-2.1
Nondurable Manufacturing	75.6	76.3	77.6	78.0	78.5	78.9	79.6	80.2
% Ch	1.5	1.0	1.6	0.5	0.7	0.5	0.8	0.8
Construction	136.6	144.0	154.0	163.9	173.4	183.5	192.0	199.4
% Ch	-1.1	5.4	6.9	6.4	5.8	5.8	4.6	3.8
Service-Providing	2,476.9	2,520.6	2,582.1	2,640.3	2,687.7	2,728.9	2,760.8	2,792.7
% Ch	1.2	1.8	2.4	2.3	1.8	1.5	1.2	1.2
Software Publishers	52.1	52.9	55.0	55.2	55.5	56.2	56.9	57.6
% Ch	1.7	1.6	3.9	0.4	0.4	1.3	1.2	1.3
Nonfarm Payroll Employment, EOP*	2,915.2	2,979.9	3,058.2	3,124.6	3,182.2	3,230.0	3,271.0	3,311.7
% Ch*	1.6	2.2	2.6	2.2	1.8	1.5	1.3	1.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	23.763	31.259	33.664	34.466	38.570	42.311	42.668	43.531
% Ch	14.1	31.5	7.7	2.4	11.9	9.7	0.8	2.0
Single-Family	14.120	18.533	17.265	18.985	23.548	27.365	27.350	27.575
% Ch	4.8	31.3	-6.8	10.0	24.0	16.2	-0.1	0.8
Multi-Family	9.643	12.725	16.399	15.481	15.022	14.947	15.318	15.955
% Ch	31.1	32.0	28.9	-5.6	-3.0	-0.5	2.5	4.2
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	4.46	5.22	5.96	6.17	6.12

*End of Period, for use in the Budget Stabilization Account calculation

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2014	2015	2016	2017	2018	2019
U.S.						
Real GDP, Percent Change						
Optimistic	2.4	3.3	3.9	4.1	3.2	2.8
Baseline	2.4	2.6	2.9	3.0	2.7	2.5
Pessimistic	2.4	1.4	1.4	2.4	2.1	1.9
Implicit Price Deflator, Percent Change						
Optimistic	1.3	1.9	1.2	1.0	1.4	1.6
Baseline	1.3	1.4	1.3	1.5	1.6	1.6
Pessimistic	1.3	1.1	1.4	2.3	2.5	2.7
Mortgage Rate, Percent						
Optimistic	4.33	5.74	6.74	6.70	6.16	5.96
Baseline	4.33	4.46	5.22	5.96	6.17	6.12
Pessimistic	4.33	4.16	4.80	5.48	6.28	7.15
3 Month T-Bill Rate, Percent						
Optimistic	0.04	0.75	3.14	3.62	3.51	3.50
Baseline	0.04	0.08	1.05	2.87	3.51	3.51
Pessimistic	0.04	0.05	0.23	0.34	1.10	2.93
Washington						
Real Personal Income, Percent Change						
Optimistic	2.7	5.2	6.5	6.9	5.6	4.6
Baseline	2.7	3.2	4.0	4.4	4.0	3.7
Pessimistic	2.7	0.8	1.0	1.6	2.0	2.3
Personal Income, Percent Change						
Optimistic	4.0	7.2	7.8	8.0	7.1	6.3
Baseline	4.0	4.6	5.3	6.0	5.7	5.4
Pessimistic	4.0	1.9	2.4	4.0	4.6	5.0
Employment, Percent Change						
Optimistic	2.5	3.1	2.8	2.7	2.2	2.0
Baseline	2.5	2.3	1.9	1.7	1.3	1.3
Pessimistic	2.5	1.5	0.4	0.4	0.2	0.1
Housing Permits, Thousands of Authorized Units						
Optimistic	33.7	35.6	42.9	48.1	48.7	48.9
Baseline	33.7	34.5	38.6	42.3	42.7	43.5
Pessimistic	33.7	30.5	30.7	32.6	33.3	33.5

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2014	2015	2016	2017	2018	2019
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	2.1	3.0	2.9	2.8	2.6	2.5
GCEA Average	2.2	2.9	2.8	2.6	2.4	2.4
Real Consumption						
<i>Growth</i>						
ERFC	2.3	2.7	2.7	2.6	2.5	2.4
GCEA Average	2.3	2.8	2.6	2.6	2.4	2.3
Implicit Price Deflator, PCE						
<i>Growth</i>						
ERFC	1.5	1.2	1.4	1.6	1.6	1.6
GCEA Average	1.6	1.7	1.8	1.8	1.8	1.8
Mortgage Rate						
<i>Percent</i>						
ERFC	4.2	4.9	5.6	6.2	6.1	6.1
GCEA Average	4.3	4.9	5.5	6.0	6.0	5.9
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	105.1	101.9	100.7	99.1	98.0	97.3
GCEA Average	105.5	102.0	99.6	98.4	97.6	97.1
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	3.2	3.6	4.3	4.3	3.8	3.7
GCEA Average	3.3	3.4	3.6	3.4	3.3	3.2
Wage and Salary Employment						
<i>Growth</i>						
ERFC	2.6	2.0	1.9	1.4	1.3	1.2
GCEA Average	2.4	2.2	1.8	1.5	1.4	1.3
Manufacturing Employment						
<i>Growth</i>						
ERFC	0.6	1.1	0.9	0.4	0.4	0.4
GCEA Average	0.8	1.2	0.8	0.3	0.2	0.2
Construction Employment						
<i>Growth</i>						
ERFC	7.2	5.5	6.2	5.0	4.4	3.1
GCEA Average	6.2	4.6	4.9	4.5	3.6	2.9
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	34.1	36.1	41.1	42.5	43.0	44.2
GCEA Average	33.9	37.6	42.9	42.9	43.4	44.3
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	2.8	2.7	3.4	3.8	4.0	4.2
GCEA Average	2.8	2.8	3.2	3.2	3.3	3.4

Table 2.4
Forecast Analysis
 Comparison of Forecasts for 2013-15

Forecast Date	2012				2013				2014				2015	
	<u>Feb.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Mar.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Feb.</u>	<u>June</u>	<u>Sept.</u>	<u>Nov.</u>	<u>Mar.</u>	<u>June</u>
Washington														
Percent Growth, 2013:2-2015:2														
Employment	3.6	3.7	4.3	4.2	3.8	3.7	3.6	3.6	4.3	4.4	4.9			
Personal Income	11.5	11.4	11.5	11.0	11.0	10.6	10.7	10.5	10.1	9.9	9.8			
Real Personal Income	6.9	6.7	7.4	7.3	7.3	7.3	7.4	7.4	7.2	6.4	6.8			
Total (Thousands of units), 2013:3 to 2015:2														
Housing Units Authorized	64.2	61.8	63.6	64.4	70.1	72.6	69.1	66.0	67.0	67.8	68.1			

Table 2.5
Forecast Comparison
 Forecast 2014 to 2017

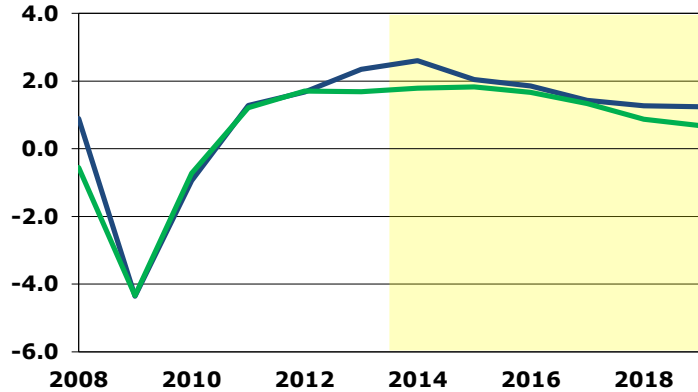
Fiscal Years

	2013	2014	2015	2016	2017	2018	2019
Washington							
Real Personal Income							
September Baseline	302.196	310.409	320.274	333.071	347.789	361.776	375.294
% Ch	2.6	2.7	3.2	4.0	4.4	4.0	3.7
June Baseline	302.398	310.483	319.258	332.682	346.746	360.584	374.086
% Ch	2.6	2.7	2.8	4.2	4.2	4.0	3.7
Personal Income							
September Baseline	322.520	335.434	350.990	369.660	391.980	414.385	436.753
% Ch	4.0	4.0	4.6	5.3	6.0	5.7	5.4
June Baseline	322.509	335.110	350.305	369.966	390.932	412.690	434.439
% Ch	4.0	3.9	4.5	5.6	5.7	5.6	5.3
Employment							
September Baseline	2955.6	3029.5	3100.4	3160.8	3214.0	3255.2	3296.4
% Ch	2.1	2.5	2.3	1.9	1.7	1.3	1.3
June Baseline	2955.5	3025.5	3087.8	3147.0	3200.1	3242.5	3282.2
% Ch	2.1	2.4	2.1	1.9	1.7	1.3	1.2
Housing Permits							
September Baseline	31.259	33.664	34.466	38.570	42.311	42.668	43.531
% Ch	31.5	7.7	2.4	11.9	9.7	0.8	2.0
June Baseline	31.259	33.711	34.056	38.736	42.307	42.796	43.249
% Ch	31.5	7.8	1.0	13.7	9.2	1.2	1.1

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts
(Percent change)

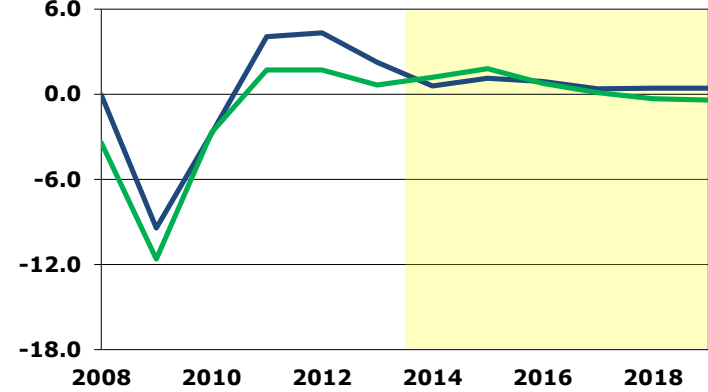
Forecast

Total nonfarm payroll employment



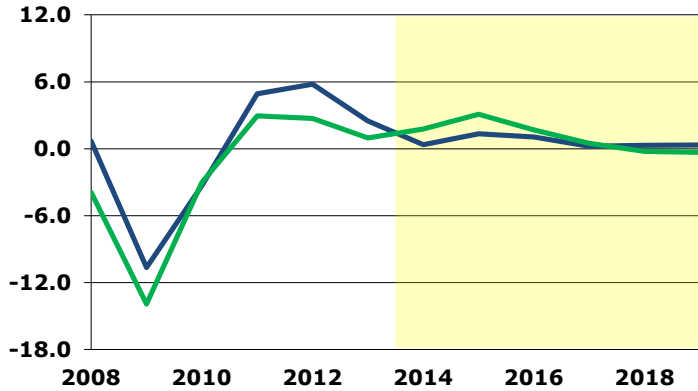
Source: WA State Employment Security Dept. 2013, ERFC 2019

Manufacturing employment



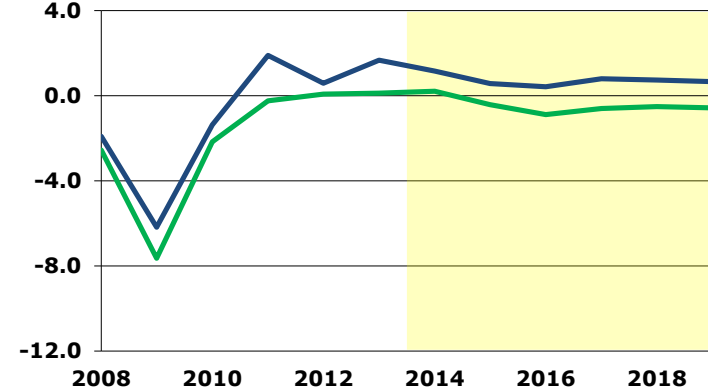
Source: WA State Employment Security Dept. 2013, ERFC 2019

Durable manufacturing employment



Source: WA State Employment Security Dept. 2013, ERFC 2019

Nondurable manufacturing employment



Source: WA State Employment Security Dept. 2013, ERFC 2019

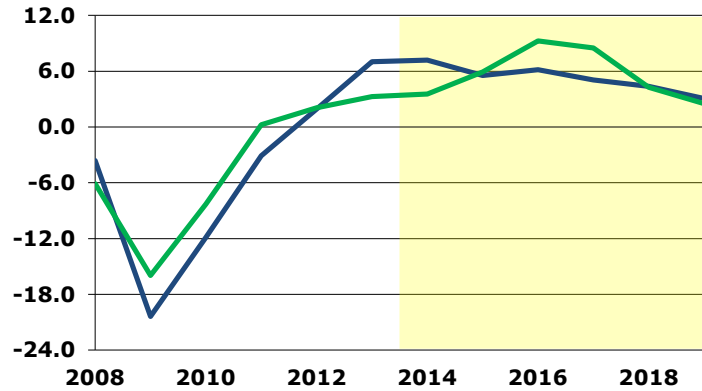
Washington

U.S.

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts (continued)
 (Percent change)

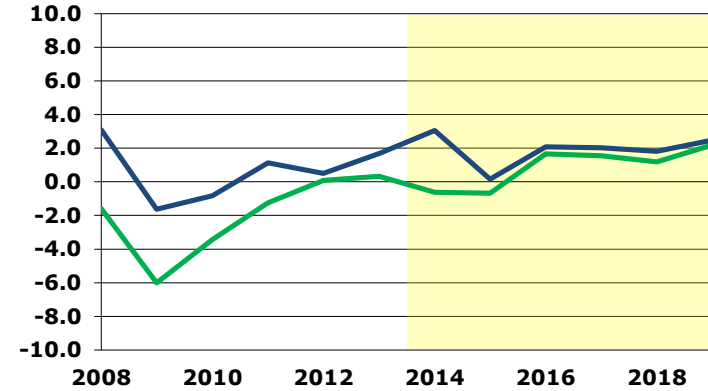
Forecast

Construction employment



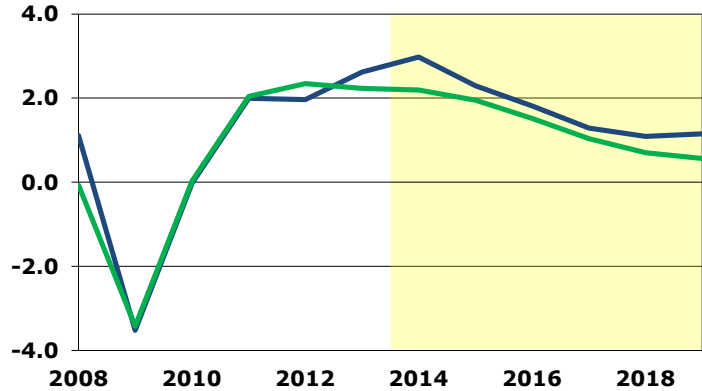
Source: WA State Employment Security Dept. 2013, ERFC 2019

Information employment



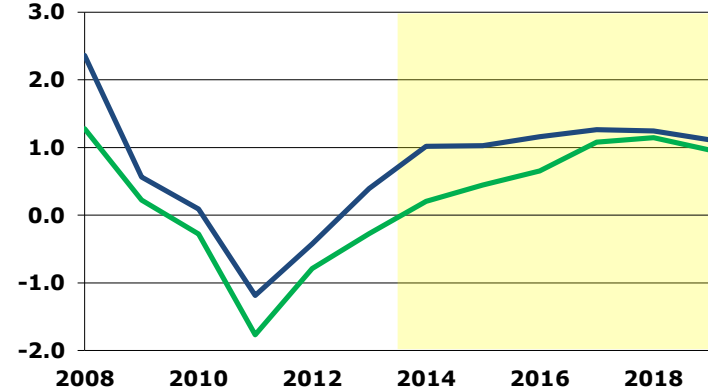
Source: WA State Employment Security Dept. 2013, ERFC 2019

Other private employment



Source: WA State Employment Security Dept. 2013, ERFC 2019

Government employment



Source: WA State Employment Security Dept. 2013, ERFC 2019

Washington

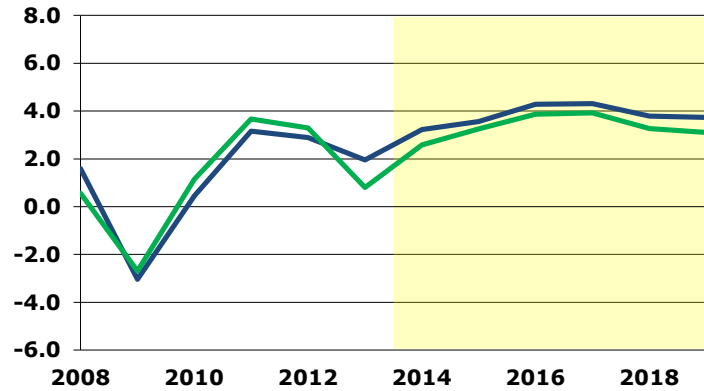
U.S.

Figure 2.7: Comparison of Washington and U.S. Economic Forecasts (continued)

(Percent change)

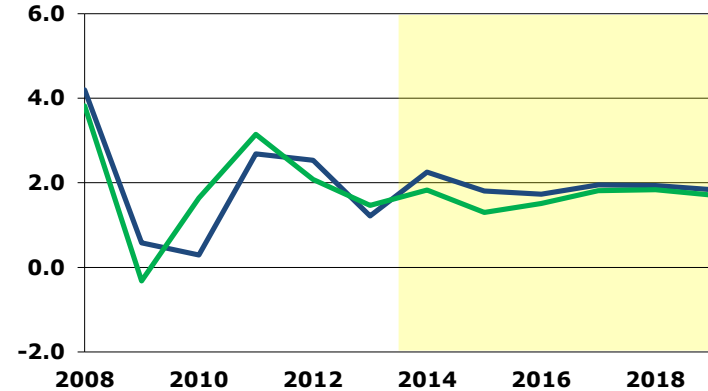
Forecast

Real personal income



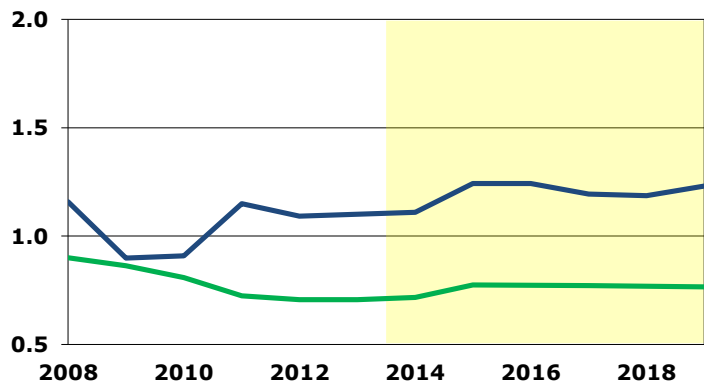
Source: Bureau of Economic Analysis 2012, ERFC 2019

Consumer price indices



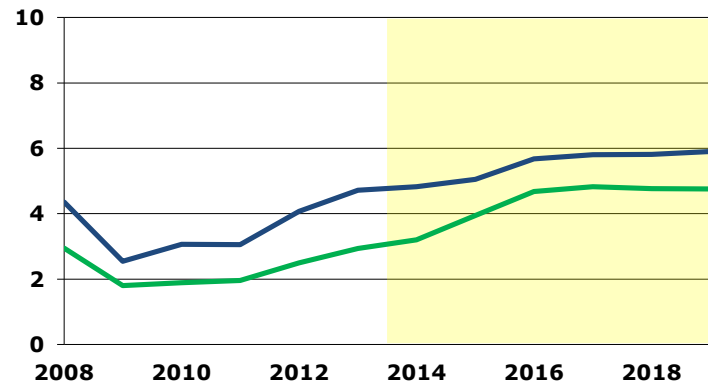
Source: Bureau of Labor Statistics 2013, ERFC 2019

Population



Source: Office of Financial Management 2010, ERFC 2019

New Housing Units Per 1,000 population (level)



Source: Census Bureau 2013, ERFC 2019

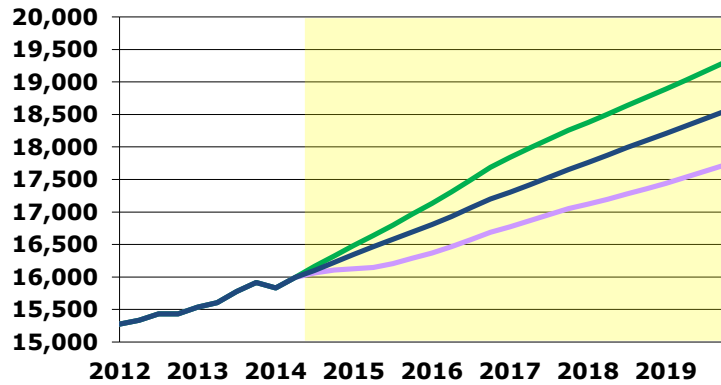
Washington

U.S.

Figure 2.8: Comparison of Alternative U.S. Economic Forecasts

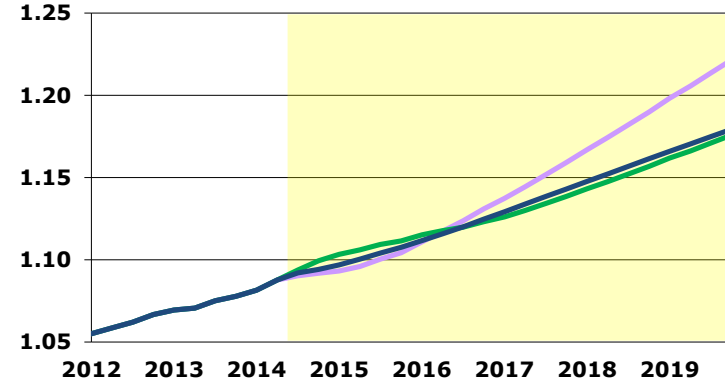
Forecast

Real GDP, billions of chained 2009 dollars



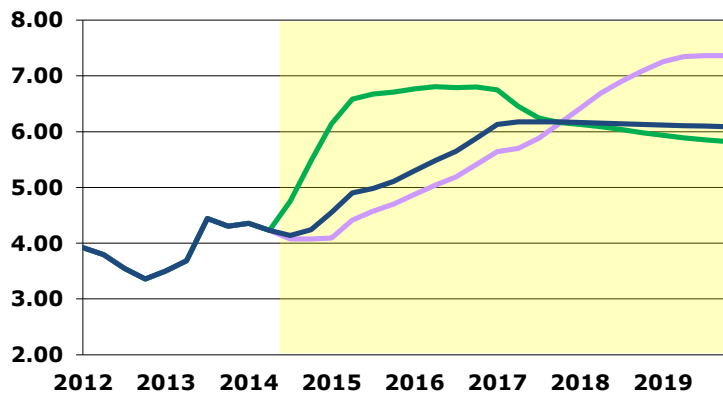
Source: Bureau of Economic Analysis 2014 Q2, ERFC 2019

Implicit price deflator, index 2009 = 1.0



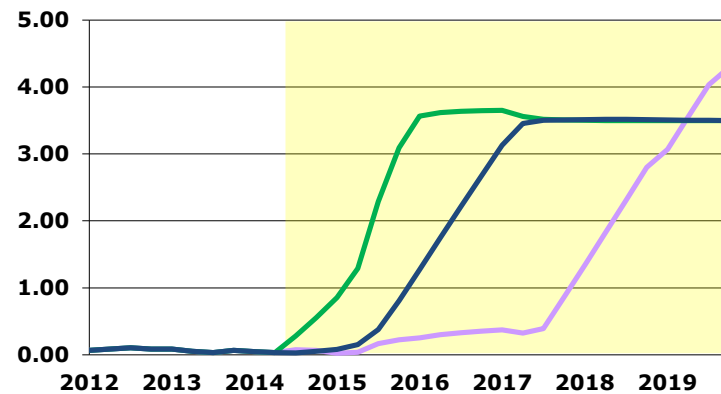
Source: Bureau of Economic Analysis 2014 Q2, ERFC 2019

Mortgage rate, percent



Source: Freddie Mac 2014 Q2, ERFC 2019

Three month T-bill rate, percent



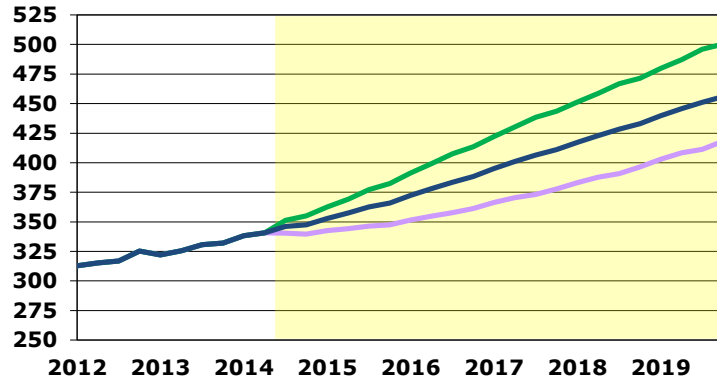
Source: Federal Reserve Board 2014 Q2, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

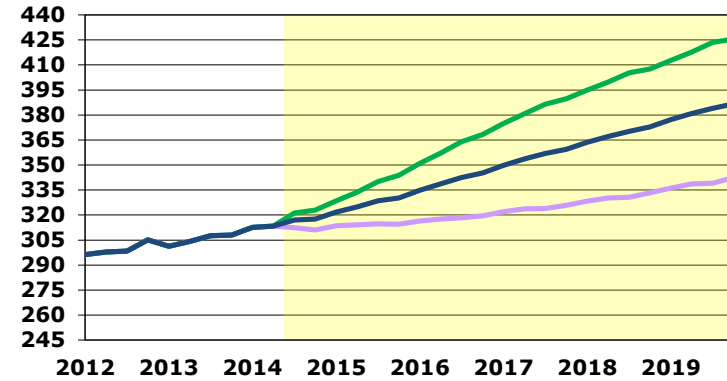
Forecast

Personal income, billions of dollars



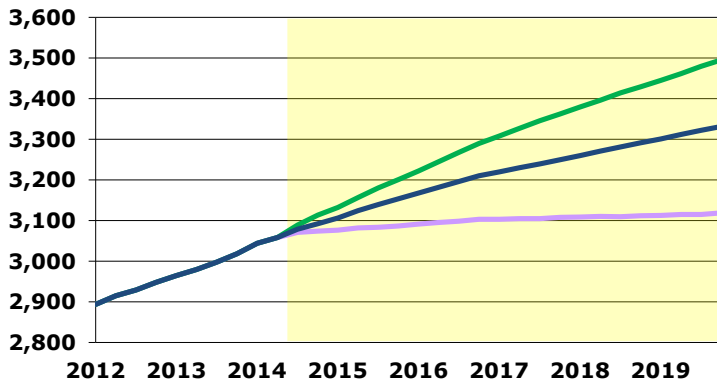
Source: Bureau of Economic Analysis 2012 Q4, ERFC 2019

Real personal income, billions of chained 2009 dollars



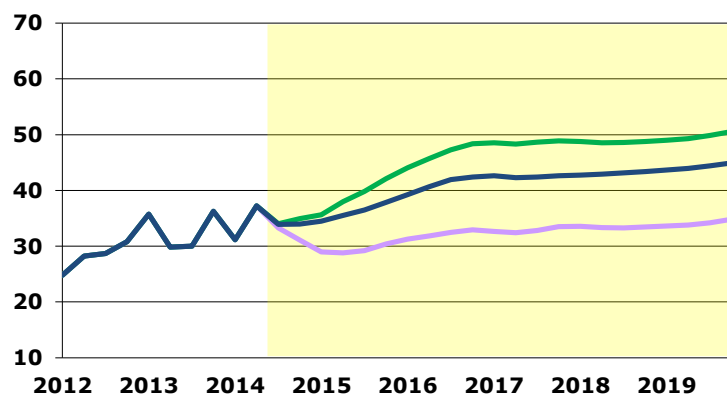
Source: Bureau of Economic Analysis 2012 Q4, ERFC 2019

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2014 Q2, ERFC 2019

Housing permits, thousands



Source: Census Bureau 2014 Q2, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic

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Chapter 3: Washington State Revenue Forecast Summary

- **Revenue collections since June have come in \$115 million over the forecasted amount, but much of the variance was due to non-economic events.**
- **Changes to the economic forecast and taxable activity since the June forecast were small and mixed but the net result was slightly positive. They resulted in increases in expected revenue of less than one percent for each of the forecasted biennia.**
- **The forecast of General Fund-State (GF-S) revenue for the 2013-15 biennium was increased by \$163 million and the forecast for the 2015-17 biennium was increased by \$143 million. The forecast for the 2017-19 biennium was increased by \$164 million.**

Overview

Changes to the revenue forecast in September were once again slight but positive

Revenue collections since the June 2014 forecast came in \$115 million higher than the expected total. Most of the surplus came from Revenue Act taxes (retail sales and use, business and occupation, public utility and tobacco products taxes), which came in \$106 million above the forecast. While preliminary data indicate that second quarter economic activity was slightly higher than forecasted, much of the extra revenue was the result of lower-than-expected refunds and redemptions of tax credits rather than increased activity. As the reduced level of refunds and tax credits is not expected to continue, and changes to the economic forecast were slight, total forecasted revenue for the current biennium has been increased by only \$47 million above the current collection variance. Forecasted collections for the 2015-17 and 2017-19 biennia have been increased by similar amounts. As was the case in June, forecast increases amounted to less than one percent for each of the forecasted biennia.

GF-S forecast change by biennium (millions):

13-15: +\$163
15-17: +\$143
17-19: +\$164

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2013-15 and 2015-17 biennia. As of September 10th, revenue collections for the 2013-15 biennium were \$115.1 million ahead of the June forecast. For the remainder of the biennium, changes to the economic forecast have increased forecasted revenue by \$47.4 million. The sum of these changes

for the 2013-15 biennium is a forecast increase of \$162.5 million, with total biennial revenue of \$33,331.9 million. The forecast for the 2015-17 biennium has been increased by \$143.0 million and the forecast for the 2017-19 biennium has been increased by \$164.2 million. GF-S revenue is now forecasted to total \$36,078.2 million in the 2015-17 biennium and \$39,187.6 million in the 2017-19 biennium.

GF-S forecast (\$millions):

2013-15:
\$33,332

2015-17:
\$36,078

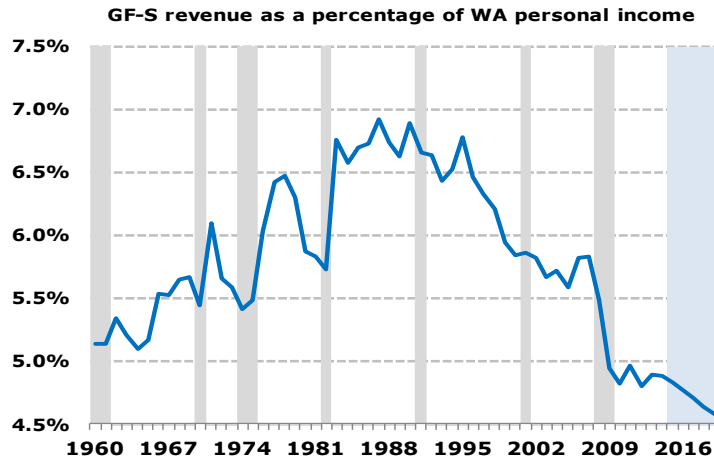
2017-19:
\$39,188

Table 3.1: Revisions to the General Fund-State forecast (cash basis, millions of dollars)

	2013-15 Biennium	2015-17 Biennium	2017-19 Biennium
Collection Experience	\$115.1	NA	NA
Non-Economic Change	\$0.0	\$0.0	\$0.0
Forecast Change	\$47.4	\$143.0	\$164.2
Total Change	\$162.5	\$143.0	\$164.2

Figure 3.1: GF-S Revenue (Current Definition) as Percentage of State Personal Income (Fiscal Years)

GF-S revenue relative to state personal income has been on a declining trend since 1995



Source: ERFC, data through fiscal year 2014 preliminary

The ratio of collections to income is at historical lows

As can be seen in Figure 3.1, the amount of GF-S revenue that is collected relative to state personal income is forecasted to reach its lowest levels in ERFC records. The ratio of revenue to income has been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 to mid-2008, and by temporary taxes and transfers of funds from non-GF-S sources into the GF-S that again boosted the ratio in fiscal years

2011 and 2013. The preliminary estimate of the ratio for FY 2014 is only slightly lower than that of FY 2013, but the September forecast, as shown in the light blue shaded area, has the ratio trending downward more or less continuously from FY 2015 through FY 2019.

Forecast details are at the end of the chapter

The history of nominal and real GF-S revenue by biennium can be found in Table 3.3. GF-S forecast changes by agency and major revenue classification for the 2015-17 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2015-17 biennium can be found in Table 3.7 (cash) and Table 3.8 (GAAP). The GF-S forecast by fiscal year and major source category through FY 2019 can be found in Table 3.9.

Recent Collection Experience

Cumulative receipts from major sources that are tracked monthly were \$115 million (3.1%) more than the June forecast

Revenue collections from the Department of Revenue (DOR), Department of Licensing, Administrative Office of the Courts, and Lottery are tracked monthly. In the period since the June forecast, total revenue from the above sources came in \$115.1 million (3.1%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$105.5 million (3.4%) above the forecast. Revenue from other DOR tax sources from June through August was \$9.8 million (1.7%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the June 2014 forecast, cash basis, millions of dollars)

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$105.5	3.4%
Non Revenue Act	\$9.8	1.7%
Subtotal	\$115.3	3.1%
Department of Licensing	\$0.2	1.5%
Administrative Office of the Courts	(\$0.4)	-1.9%
Total*	\$115.1	3.1%

* Detail may not add to total due to rounding.

Source: ERFC; Period: June 11 - September 10, 2014

Much of the positive variance in collections came from non-economic factors

While Revenue Act collections were well above the June forecast, much of the surplus was due to lower-than-expected refunds and redemptions of tax credits rather than increased activity. Real estate excise tax (REET) receipts also came in well above the forecast, beating it by \$20.2 million (12.2%). This surplus, however, was partially offset by shortfalls in other sources. The

biggest shortfall was in transfers of unclaimed property. Refunds of unclaimed property that had previously been transferred into the GF-S were \$11.2 million higher than forecasted. Property tax receipts were \$2.7 million (1.4%) lower than forecasted and liquor sales and liter tax receipts were \$0.6 million (0.9%) lower than forecasted. Cigarette tax receipts came in \$3.4 million (3.3%) higher than forecasted. Revenue from the Department of Licensing was \$0.2 million (1.5%) higher than forecasted and revenue from the Administrative Office of the Courts was \$0.4 million (1.9%) lower than forecasted.

Adjusted Revenue Act collections were up 7.7% year over year in the most recent collection period and up 5.1% in the previous period

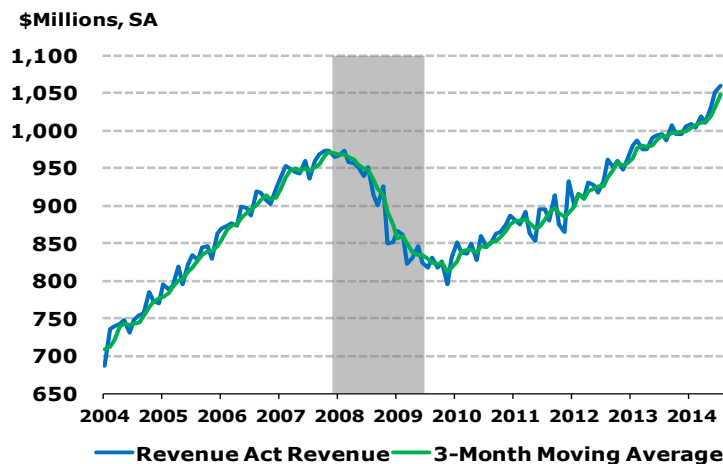
Second quarter Revenue Act collections grew 4.5% year over year

Figure 3.2 shows seasonally adjusted Revenue Act receipts excluding payments received under the tax amnesty program in early 2011 and other large payments. It is also adjusted for some changes in payment patterns. As shown in the figure, collections have been on an upward trend since November 2009. Growth was aided by a temporary increase in the business and occupation tax rate paid by service industries that took effect in May 2010. This temporary increase expired on July 1, 2013. Adjusted for large one-time payments and refunds, receipts grew 7.7% year over year in the August 11 - September 10 collection period and 5.1% in the previous period.

Adjusted Revenue Act collections from May 11 – August 10, 2014, which primarily reflected second quarter 2014 taxable activity, were up 4.5% year over year. Revenue Act collections from first quarter activity (February 11 – May 10, 2014 adjusted collections) were up 2.5% year over year, while fourth quarter 2013 growth was up 4.8% year over year. Year-over-year growth rates were lowered by about 2 percentage points due to the expiration of the temporary business and occupation tax surcharge on July 1, 2013.

Figure 3.2: Revenue Act Collections*

Seasonally adjusted Revenue Act collections remain on an upward trend



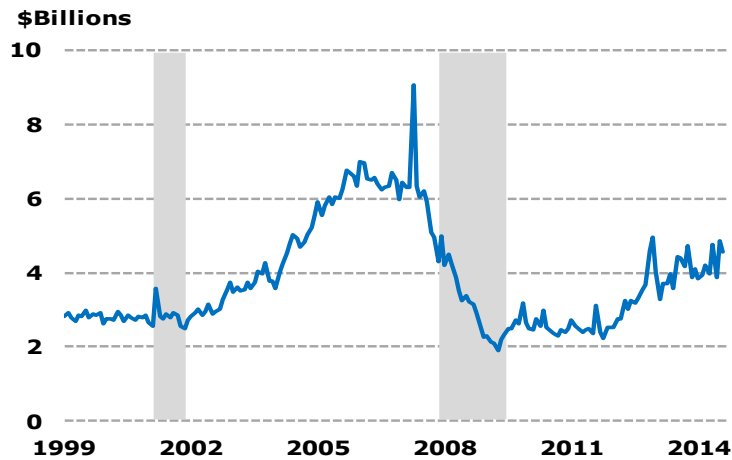
Source: ERFC; Data through September 10, 2014 preliminary allocation
*Adjusted for large payments/refunds and payment pattern change

Both large commercial sales and residential sales were higher than forecasted

Much of the large positive variance in REET collections was due to strong sales of commercial property, but residential sales were also higher than forecasted in two of the three months since the forecast. While June sales of properties valued at \$10 million or higher totaled \$609 million, weaker residential sales caused seasonally adjusted activity to fall from May's commercial property-fueled spike (see Figure 3.3). July's \$629 million in large sales created another spike in the chart of taxable activity, similar to the spikes created by other large commercial property sales over the last two years. While August large sales fell to \$311 million, strong residential sales caused seasonally adjusted activity to remain elevated.

Figure 3.3: Taxable Real Estate Excise Activity, SA

Large commercial sales caused another spike in taxable real estate activity in July but residential strength in August kept activity elevated



Source: ERFC; data through August 2014

Revenue Forecasts by Source

Department of Revenue

Taxes collected by DOR are most of GF-S taxes

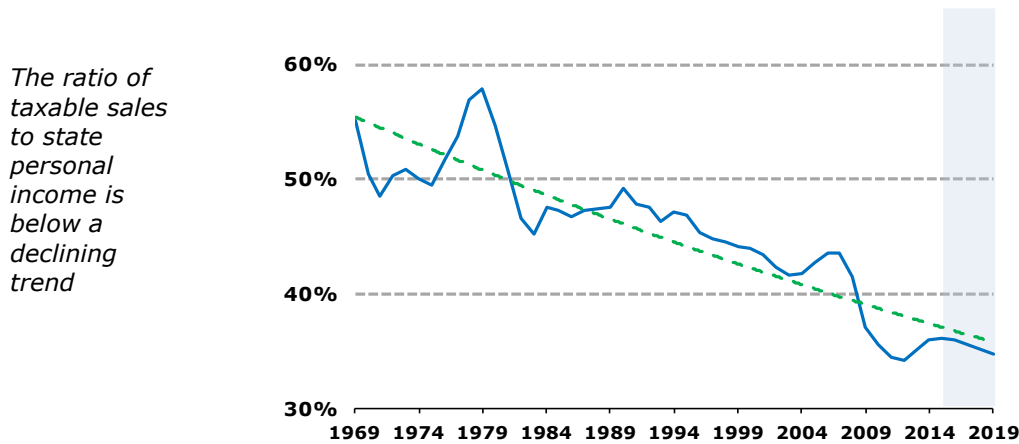
The Department of Revenue (DOR) collects and administers the majority of Washington's GF-S revenue, accounting for 95% of total GF-S revenue in the 2011-13 biennium. The largest tax sources administered by the DOR are the retail sales tax, business and occupation tax, property tax, use tax, cigarette tax and real estate excise tax. The revenue forecasts discussed below can be found in Tables 3.5-3.8.

Retail sales taxes are the largest source of GF-S revenue

The retail sales tax is the largest source of GF-S revenue, accounting for 46.8% of GF-S revenue in FY 2014 (preliminary estimate). The state's share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other

services are taxed, the tax does not apply to most services. Taxable sales as a share of personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 34.2% of personal income was spent on taxable items, the lowest percentage on record. The taxable sales share of personal income grew to 35.1% in FY 2013 and is forecasted to increase to 35.9% in FY 2014, due largely to the elimination of the sales tax exemption for wired phone lines that took effect on July 1, 2013. The share is then forecasted to increase slightly to 36.1% in FY 2015 before declining through FY 2019. The historical and forecasted relationship between taxable sales and income is illustrated in Figure 3.4.

Figure 3.4: Taxable Sales* as Percentage of State Personal Income



The ratio of taxable sales to state personal income is below a declining trend

*Past tax base adjusted to represent current base. Shaded area indicates forecast

Source: ERFC; forecast through FY 2019

Retail sales tax receipt growth forecast:

FY15: 5.4%
 FY16: 5.1%
 FY17: 5.0%
 FY18: 4.6%
 FY19: 4.2%

After declines of 10.4% in FY 2009 and 6.0% in FY 2010, taxable retail sales managed an increase of 1.8% in FY 2011 (see Table 3.4). Extra sales tax collections from the tax penalty amnesty program in the spring of 2011, however, brought the growth rate of actual collections up to 3.2% for the fiscal year. The growth rate of taxable activity improved from 4.1% in FY 2012 to 6.7% in FY 2013, due mainly to increasing construction activity. Continued growth in construction, along with the newly-revoked sales tax exemption on wired home phone lines, brought growth in taxable activity of 6.4% in FY 2014 (preliminary estimate). Growth is forecasted to slow to 5.1% in FY 2015 as the rate of construction activity growth slows, and continue slowing through the end of the forecast period, with 4.2% growth in FY 2019. Due to the lag between taxable activity and collections and the presence of tax deferrals, credits, refunds, and payments of past due taxes, the growth in actual collections differs from the growth in taxable activity. Growth in collections for FY 2014 was

7.0%. Forecasted FY 2015 growth is 5.4%. Growth is then forecasted to slow to 5.1% in FY 2016 and 5.0% in FY 2017. FY 2018 growth is forecasted at 4.6% and FY 2019 at 4.2%.

Business and Occupation taxes are the second largest source of GF-S revenue

The business and occupation (B&O) tax is the second largest source of GF-S revenue, accounting for 19.8% of GF-S revenue in FY 2014. It is a tax on the gross receipts of all businesses operating in Washington. The state portion of the tax applies ten different rates according to various classifications of business activities. In FY 2014, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 41% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 23% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 20% of taxes due.

B&O tax growth forecast:

*FY15: 5.0%
FY16: 5.1%
FY17: 5.6%
FY18: 5.1%
FY19: 4.9%*

In FY 2013, B&O tax receipts grew by 5.8%. The expiration of a temporary increase in the B&O service tax rate on July 1, 2013, in addition to several large refunds, caused receipts to shrink by 1.8% in FY 2014. Growth is forecasted to rebound to 5.0% in FY 2015, 5.1% in 2016 and 5.6% in FY 2017. Growth in FY 2018 and 2019 is forecasted at 5.1% and 4.9%.

State property taxes are the third largest source of GF-S revenue. Growth forecast:

*FY15: 2.2%
FY16: 2.3%
FY17: 2.3%
FY18: 2.3%
FY19: 2.5%*

The state property tax levy is the third largest source of GF-S revenue, accounting for 12.0% of total revenue in FY 2014. Though the tax goes into the GF-S, it is dedicated to the funding of basic education. By law, the total state tax levy on existing property can only increase by the lesser of 1% per year or the rate of inflation as measured by the year-over-year change in the U.S. Implicit Price Deflator in July of the year preceding the levy, unless a greater increase is approved by the voters. The year-to-year growth in the total amount levied, however, can exceed the aforementioned limits due to the value of new construction, property improvements, and other additions to real property assessed by the state. Collections can also grow faster or slower than the rate of assessment growth due to the payment of past due taxes or nonpayment of current taxes. Property tax receipts grew by 2.1% in FY 2014 and are forecasted to grow by 2.2% in FY 2015 and 2.4% in FY 2016. Growth in FY 2017 and 2018 is forecasted at 2.3%, with FY 2019 growth of 2.5%.

REET was the fourth largest GF-S source in FY 2014

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2014, accounting for 3.8% of total revenue. The state portion of REET is 1.28% of the sales price. The tax is divided between the GF-S (92.3%), a fund for local public works (2.0%), a fund for assistance of cities and counties (1.6%) and, as of July 1, 2013, the Education Legacy Trust Account (4.1%). The tax is applied to both residential and commercial real estate, including purchases of vacant land.

REET growth forecast:

*FY15: -4.5%
FY16: 3.2%
FY17: 5.6%
FY18: 2.3%
FY19: 5.3%*

Due to a high number of large sales of commercial property, REET receipts grew by 34.0% in FY 2013. FY 2014 receipts were also boosted by large commercial sales, resulting in growth of 15.2%. Despite forecasted further strengthening in residential sales, FY 2015 receipts are forecasted to fall by 4.5% and only grow by 3.2% in FY 2016 due to a reduced level of commercial sales. Growth in FY 2017, 2018 and 2019 is forecasted at 5.6%, 2.3% and 5.3% respectively.

Use tax was the fifth largest GF-S source in FY 2014

The state use tax was the fifth largest GF-S revenue source in FY 2014 at 3.4% of total receipts. The state portion of the tax is 6.5% of the purchase price for items used in the state that were not subject to the state retail sales tax. Examples of items subject to the state use tax are goods purchased out-of-state; online and mail-order purchases, where sales tax was not collected; or purchases of used vehicles from private individuals.

Use tax growth forecast:

*FY15: 2.7%
FY16: 2.8%
FY17: 5.0%
FY18: 4.2%
FY19: 4.1%*

Use tax receipts grew by 8.8% in FY 2013, boosted by strong sales of used vehicles and a temporary spike in payments from the manufacturing sector in the 4th quarter of 2013. The absence of the large payments from the manufacturing sector is forecasted to cause receipts to grow by only 2.7% in FY 2015. Forecasted lower growth in vehicle sales brings 2.8% growth in FY 2016. Growth then returns to a more normal pace in FY 2017, 2018 and 2019 with rates of 5.0%, 4.2% and 4.1% respectively.

Public utility taxes were the sixth largest GF-S source in FY 2014

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2014, bringing in 2.4% of total receipts. The tax applies to the gross income of sales to consumers by public and privately owned utilities and is in lieu of the B&O tax. The largest source of public utility taxes is the 3.873% tax on the distribution and generation of electrical power, followed by the 3.852% tax on the distribution of natural gas.

Growth forecast:

*FY15: 2.3%
FY16: 4.3%
FY17: 5.7%
FY18: 6.3%
FY19: 5.3%*

Public utility tax receipts grew by 4.5% in FY 2014. A slowdown in the rate of increases in natural gas prices is forecasted to lower growth to 2.3% in FY 2015. Larger increases in utility prices coupled with increased housing construction are forecasted to produce growth rates of 4.3% in FY 2016, 5.7% in FY 2017, 6.3% in FY 2018 and 5.3% in FY 2019.

The cigarette tax was the seventh largest GF-S source in FY 2014

The state tax on cigarettes was the seventh largest DOR GF-S revenue source in FY 2014 at 2.4% of total receipts. Prior to FY 2010, the tax made up a much smaller portion of GF-S revenue because much of the tax was dedicated to non-GF-S accounts. In FY 2010, all of the tax except the portion dedicated to the Education Legacy Trust account was redirected to the GF-S, and in FY 2011 all of the cigarette tax was redirected to the GF-S. The current tax rate, which took effect May 1, 2010, is \$3.025 per pack of 20 cigarettes.

Cigarette tax growth forecast:

*FY15: -1.9%
FY16: -3.1%
FY17: -3.4%
FY18: -3.3%
FY19: -3.0%*

The total number of taxed cigarettes has been on a downward trend due to a continuing decline in the number of smokers. Recently, the rate of decline has been increasing further due to increased consumption of e-cigarettes, which are not subject to the cigarette tax but are subject to retail sales taxes. FY 2014 receipts decreased by 3.6%. Receipts are forecasted to decline by 1.9% in FY 2015, 3.1% in FY 2016 and 3.4% in FY 2017. Collections in FY 2018 and 2019 are forecasted to decrease by 3.3% and 3.0%.

Forecasted Revenue from Cannabis-Related Sales

Sales of cannabis products in state-licensed stores began in July 2014

Initiative 502, approved by voters in the November 2012 election, legalized the sale and use of recreational cannabis and cannabis products in Washington. The first legal sales of cannabis products in state-licensed stores occurred in July 2014. Under the initiative, a cannabis excise tax of 25% is levied at each stage of growing, processing, and selling cannabis products. These taxes, along with annual license fees, will be collected by the Liquor Control Board and placed into a dedicated fund from which revenue will be distributed quarterly after required allotments are satisfied.

GF-S forecast of total cannabis-related revenue by biennium (millions):

*13-15: \$6.9
15-17: \$60.1
17-19: \$119.0*

Due to continuing delays in implementation of the initiative and moratoriums on sales in many locations, the June forecast assumed that no state-licensed sales would occur before FY 2016. While sales have now begun, sales volumes have been low due to supply shortages and a small number of licensed stores. Forecasted FY 2015 revenue from cannabis sales is therefore small. Distributions of cannabis excise taxes to the GF-S, which amount to 18.7% of the distributed funds, are forecasted to total only \$3.1 million in the 2013-15 biennium. GF-S distributions are forecasted at \$31.1 million in the 2015-17 biennium and \$63.0 million in the 2017-19 biennium. Details of the forecasted distributions from the account can be found in Table 3.18. In addition to this revenue, growers, processors and sellers will pay business and occupation (B&O) taxes and sellers will collect and remit retail sales taxes. These taxes, detailed in Table 3.19, are expected to total \$3.8 million in the 2013-15 biennium, \$28.9 million in the 2015-17 biennium and \$56.0 million in the 2017-19 biennium. The total forecasted GF-S impact of cannabis-related sales is therefore \$6.9 million in the 2013-15 biennium, \$60.1 million in the 2015-17 biennium and \$119.0 million in the 2017-19 biennium.

Department of Licensing

Forecast change by biennium (millions):

The majority of GF-S revenue collected by the Department of Licensing is from firearm and event licenses, watercraft excise tax, and boat registration fees. The forecast of GF-S revenue for

...
13-15: \$0.6
15-17: \$0.1
17-19: \$0.1

the 2013-15 biennium has been increased \$0.6 million to \$35.3 million and the forecast for the 2015-17 biennium has been increased \$1.0 million to \$35.3 million. The department's forecast of revenue for the 2017-19 biennium has been increased \$1.5 million to \$36.0 million.

The Office of Financial Management (Other Agencies)

*Forecast
change by
biennium
(millions):*

13-15: \$12.0
15-17: \$5.4
17-19: \$5.4

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Department of Licensing, the Liquor Control Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The office's forecast of revenue for the 2013-15 biennium was increased \$12.0 million to \$199.3 million due to an increased forecast of permit and fee revenue from the Department of Financial Institutions, increased transfers of revenue to the GF-S from the Commute Trip Reduction program and final transfers of residual balances from closed funds. The office's forecast for the 2015-17 biennium was increased \$5.4 million to \$165.8 million and the forecast for the 2017-19 biennium was increased \$5.4 million to \$174.7 million. Most of the forecast increases in the 2015-17 and 2017-19 biennia were due to increases in the forecasts of revenue from the Department of Financial Institutions.

State Treasurer

*Forecast
change by
biennium
(millions):*

13-15: \$1.4
15-17: -\$4.5
17-19: -\$14.6

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's forecast for the 2013-15 biennium has been increased \$1.4 million to negative \$3.8 million. The forecasted revenue is negative because the average daily balance of accounts that earn interest that goes into the GF-S is forecasted to be negative. When this occurs, the GF-S effectively pays interest to the other funds managed by the office. The forecast for the 2015-17 biennium has been decreased \$4.5 million to \$7.6 million and the forecast of revenue for the 2017-19 biennium has been decreased \$14.6 million to \$30.6 million. Forecast decreases in the 2015-17 and 2017-19 biennia were due to updates of forecasted distributions of interest earnings to local governments.

Insurance Commissioner

*Forecast
change by
biennium
(millions):...*

The Office of the Insurance Commissioner collects premium taxes on most classes of insurance sold in Washington State. These taxes are distributed to the GF-S and various accounts in support of fire services. The office's forecast of GF-S revenue for the 2013-15 biennium has been increased \$0.3 million to \$943.7

...
13-15: \$0.3
15-17: -\$24.8
17-19: -\$42.3

million. The forecast for the 2015-17 biennium has been decreased \$24.8 million to \$1,016.6 million and the forecast of revenue for the 2017-19 biennium has been decreased \$42.3 million to \$1,085.6 million. The forecast decreases were due to changes in the forecast of the amount of health insurance tax revenue that would be transferred to the Health Benefit Exchange.

Liquor Control Board

*Forecast
change by
biennium
(millions):*

13-15: \$6.2
15-17: \$7.6
17-19: -\$0.2

The Liquor Control Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational cannabis. The forecast of total GF-S revenue collected by the LCB for the 2013-15 biennium has been increased \$6.2 million to \$256.1 million. The forecast of LCB GF-S revenue for the 2015-17 biennium has been increased \$7.6 million to \$242.4 million and the forecast of revenue for the 2017-19 biennium has been decreased \$0.2 million to \$293.4 million. Most of the forecast changes were due to changes in forecasted cannabis excise tax receipts, which are transferred to the GF-S through the LCB.

Lottery Commission

*The Lottery
Commission
now transfers
funds to the
GF-S only
when the
revenue from
certain
games
exceeds a
\$102 million
threshold*

The disposition of proceeds from the state lottery was substantially changed by E2SSB 6409 in the 2010 legislative session. Prior to the passage of the bill, the Lottery Commission transferred the bulk of its net proceeds to the School Construction Account, and any proceeds remaining after that account and several smaller accounts received their allotments was transferred to the GF-S. Under the 2010 legislation, existing obligations to the Stadium/Exhibition Center, Problem Gambling and Economic Development accounts were maintained, but the remaining revenue, which represents the bulk of the proceeds, are transferred almost entirely to the Washington Opportunity Pathways Account (OPA). The exception is that when total profits from all Washington-only games plus the Powerball game exceed \$102 million per year, the amount above \$102 million gets transferred to the GF-S. In FY 2013, large Powerball jackpots pushed sales above the threshold, resulting in a \$9.3 million payment to the GF-S in FY 2014. Profits just exceeded the threshold again in FY 2014, resulting in a total GF-S transfer of \$9.9 million for the 2013-15 biennium. GF-S transfers totaling \$2.3 million are forecasted for the 2015-17 biennium and \$2.7 million for the 2017-19 biennium.

Washington Opportunities Pathways Account forecast change by biennium (millions):

13-15: \$5.4
15-17: -\$2.8
17-19: -\$0.3

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The forecast of transfers for the 2013-15 biennium has been increased \$5.4 million to \$232.6 million, and the forecast for the 2015-17 biennium has been decreased \$2.8 million to \$235.2 million. The forecast for the 2017-19 biennium has been decreased \$0.3 million to \$237.8 million. In addition to the transfers described above, legislation from the 2013 second special session and 2014 regular session also require the transfer of \$16.1 million in Lottery proceeds to the Education Legacy Trust Account in the 2013-15 biennium. Details of the forecast of the distribution of Lottery earnings can be found in Table 3.15 on a cash basis and Table 3.16 on a GAAP basis.

Administrative Office of the Courts

Forecast change by biennium (millions):

13-15: -\$2.2
15-17: -\$7.6
17-19: -\$7.0

The Administrative Office of the Courts collects surcharges on certain filing fees, fines, and infraction penalties and transfers this revenue to the GF-S on a monthly basis. The forecast of transfers to the GF-S for the 2013-15 biennium has been decreased \$2.2 million to \$170.0 million. The forecast for the 2015-17 biennium has been decreased \$7.6 million to \$174.4 million and the forecast of transfers for the 2017-19 biennium has been decreased \$7.0 million to \$186.4 million.

Track Record for the 2013-15 Biennium

The September 2014 forecast is \$904 million (2.8%) higher than the initial February 2012 forecast

Table 3.10 summarizes the historical changes to the GF-S revenue forecast for the 2013-15 biennium. The February 2012 forecast was the initial forecast for the biennium. The September 2014 forecast for the biennium is \$904 million (2.8%) higher than the initial forecast. Non-economic changes have increased the forecast by \$369 million (1.1%). Excluding non-economic changes, the current forecast is \$535 million (1.6%) higher than the initial forecast. The current forecast is \$547 million (1.7%) higher than the sum of the June 2013 forecast and the \$123 million in legislated revenue increases from the June 2013 second special session that were the basis of the initial budget for the 2013-15 biennium.

Track Record for the 2015-17 Biennium

The September forecast is \$560 million (1.6%) higher than the initial September 2012 forecast

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2015-17 biennium. The September 2012 forecast was the initial forecast for the biennium. The September 2014 forecast for the biennium is \$560 million (1.6%) higher than the initial forecast. Non-economic changes have increased the forecast by \$257 million (0.7%). Excluding

non-economic changes, the current forecast is \$303 million (0.9%) higher than the initial forecast.

The Relationship between the Cash and GAAP General Fund-State Revenue Forecasts

GAAP forecasts are based on the period in which the revenue is earned rather than received

Legislation enacted in 1987 requires that the state's biennial budget be in conformance with Generally Accepted Accounting Principles (GAAP). It also requires a GF-S revenue forecast on both a cash and GAAP basis. The GAAP forecasts of GF-S revenue for the 2011-13 and 2013-15 biennia are presented in Tables 3.6 and 3.8 and the GAAP forecast of Lottery revenue transfers for both biennia is in Table 3.15. The primary difference between the cash and GAAP forecasts is the timing of the receipt of revenue. On a GAAP basis, revenue is credited to the biennium in which it is earned even though it may not have been received. The cash forecast, on the other hand, reflects expected cash receipts during a fiscal period. The forecast on a GAAP, or accrual, basis is primarily used for financial reporting. The cash forecast is used for cash flow management and revenue tracking. The cash forecast is also the forecast used in the state's budgetary balance sheet, which is the principal tool for assessing the General Fund's current surplus or deficit position. References to the GF-S forecast in the text of this chapter refer to the cash forecast unless otherwise noted. Likewise, figures from revenue tables other than Tables 3.6, 3.8 and 3.16 are projected on a cash basis.

Budgetary Balance Sheet for the 2013-15 Biennium

The forecast implies GF-S reserves of \$1.19 billion at the end of the 2013-15 biennium and \$1.17 billion in reserves for GF-S, ELTA and OPA

Table 3.12 shows the budgetary balance sheet for the 2013-15 biennium as prepared by the Office of Financial Management and the House and Senate fiscal committees. The balance sheet shows not only projected GF-S spending and resources but also total projected spending and resources for the GF-S plus the other main non-transportation state-funded accounts: the Education Legacy Trust Account (ELTA) and the Washington Opportunity Pathways Account (OPA). As shown in the table, there was a beginning fund balance of \$167.5 million for the GF-S at the end of the 2011-13 biennium and the total balance for GF-S, ELTA and OPA stood at \$156.4 million. Based on the September 2014 revenue forecast and currently enacted budgets, total GF-S reserves are projected to be \$1,191.0 million at the end of the 2013-15 biennium. The projected total GF-S reserves are comprised of a GF-S ending balance of \$607.0 million and a balance of \$584.0 million in the Budget Stabilization Account. Projected combined reserves for the ELTA and OPA are -\$23.5 million, for total projected reserves of \$1,167.5 million for GF-S, ELTA and OPA at the end of the 2013-15 biennium.

Alternative Forecasts for the 2013-15 and 2015-17 Biennia

Optimistic scenarios (billions):

13-15: +\$0.9
15-17: +\$3.4

Pessimistic scenario:

13-15: -\$1.0
15-17: -\$3.5

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 55% to the baseline forecast, 20% to a scenario based on the upside risks and 25% to a scenario based on the downside risks. The revenue implications of these alternative scenarios for the 2013-15 biennium are shown in Table 3.13 and those of the 2015-17 biennium are shown in Table 3.14. For the 2013-15 biennium, the optimistic forecast generates \$34,260.1 million in GF-S revenue, \$928.2 million (2.8%) more than the baseline scenario, while the pessimistic forecast produces \$32,301.5 million in revenue, \$1,030.4 million (3.1%) less than the baseline. For the 2015-17 biennium, the optimistic forecast generates \$39,468.9 million in GF-S revenue, \$3,390.8 million (9.4%) more than the baseline scenario, while the pessimistic forecast produces \$32,599.9 million in revenue, \$3,478.3 million (9.6%) less than the baseline.

Near General Fund Forecasts for the 2013-15 - 2017-19 Biennia

Near General Fund Forecast (millions):

2013-15:
\$33,719.1

2015-17:
\$36,474.2

2017-19:
\$39,614.0

“Near General Fund” accounts are those included in the GF-S plus the Education Legacy Trust Account. The Education Legacy Trust Account was previously funded by a portion of the state tax on cigarettes and a tax on estates of over \$2 million. Legislation from the 2011 session, however, requires the cigarette taxes that formerly went into the account to instead be deposited into the GF-S. The Near General Fund forecast for the 2013-15 biennium is \$33,719.1 million, \$163.1 million more than the June forecast, and the forecast for the 2015-17 biennium is \$36,474.2 million, \$141.6 million more than the June forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$39,614.0 million, \$208.8 million more than the June forecast. The Near General Fund forecast and recent history by fiscal year are presented in Table 3.17.

Table 3.3
General Fund-State collections*
(millions of dollars, cash basis)

Biennium	Current Dollars	Percent Change	2009 Chained Dollars	Percent Change
1961-63	\$817.1		\$4,300.0	
1963-65	866.2	6.0%	4,439.3	3.2%
1965-67	1,128.6	30.3%	5,565.5	25.4%
1967-69	1,440.5	27.6%	6,658.6	19.6%
1969-71	1,732.7	20.3%	7,767.4	16.7%
1971-73	1,922.1	10.9%	7,971.9	2.6%
1973-75	2,372.4	23.4%	8,500.3	6.6%
1975-77	3,395.0	43.1%	10,581.0	24.5%
1977-79	4,490.0	32.3%	12,284.6	16.1%
1979-81	5,356.4	19.3%	12,197.5	-0.7%
1981-83	6,801.4	27.0%	13,492.9	10.6%
1983-85	8,202.4	20.6%	15,008.6	11.2%
1985-87	9,574.6	16.7%	16,528.5	10.1%
1987-89	10,934.1	14.2%	17,618.8	6.6%
1989-91	13,309.0	21.7%	19,773.1	12.2%
1991-93	14,862.2	11.7%	20,789.3	5.1%
1993-95	16,564.6	11.5%	22,140.6	6.5%
1995-97	17,637.7	6.5%	22,630.2	2.2%
1997-99	19,620.1	11.2%	24,520.7	8.4%
1999-01	21,262.1	8.4%	25,588.4	4.4%
2001-03	21,140.7	-0.6%	24,595.8	-3.9%
2003-05	23,388.5	10.6%	26,077.6	6.0%
2005-07	27,772.0	18.7%	29,316.5	12.4%
2007-09	27,703.0	-0.2%	27,888.8	-4.9%
2009-11	28,218.1	1.9%	27,708.4	-0.6%
2011-13	30,657.0	8.6%	28,948.6	4.5%
2013-15 ^F	33,331.9	8.7%	30,629.1	5.8%
2015-17 ^F	36,078.2	8.2%	32,221.3	5.2%
2017-19 ^F	39,187.6	8.6%	33,991.4	5.5%

^F September 2014 Forecast.

*Total General Fund-State revenue and transfers. Cash basis; includes rate base and administrative changes. Modified cash basis: 1985-87 and prior; pure cash basis: 1987-89 and after. May not be comparable because the collection totals include the impact of rate, base and administrative changes.

Source: Department of Revenue, the Office of Financial Management and the Economic and Revenue Forecast Council 's September 2014 forecast.

Table 3.4
Taxable retail sales*
(millions of dollars)

Fiscal Year	Amount	Percent Change
1979	22,309	5.6%
1980	24,057	7.8%
1981	25,197	4.7%
1982	26,097	3.6%
1983	29,368	12.5%
1984	29,156	-0.7%
1985	30,687	5.3%
1986	32,158	4.8%
1987	34,647	7.7%
1988	37,452	8.1%
1989	41,429	10.6%
1990	47,183	13.9%
1991	49,812	5.6%
1992	53,189	6.8%
1993	55,319	4.0%
1994	59,009	6.7%
1995	61,927	4.9%
1996	62,817	1.4%
1997	66,748	6.3%
1998	72,059	8.0%
1999	77,197	7.1%
2000	83,335	8.0%
2001	85,633	2.8%
2002	84,418	-1.4%
2003	86,165	2.1%
2004	90,139	4.6%
2005	97,253	7.9%
2006	107,071	10.1%
2007	115,527	7.9%
2008	118,676	2.7%
2009	106,379	-10.4%
2010	99,983	-6.0%
2011	101,825	1.8%
2012	106,036	4.1%
2013	113,173	6.7%
2014 ^P	120,439	6.4%
2015 ^F	126,527	5.1%
2016 ^F	132,913	5.0%
2017 ^F	139,463	4.9%
2018 ^F	145,821	4.6%
2019 ^F	151,914	4.2%

^P Preliminary

^F September 2014 forecast

Source: ERFC

* Actual Base. Includes statutory and administrative changes to the tax base. Historical fiscal year data are from quarterly taxable sales reported by taxpayers on the state's Combined Excise tax return. Reported totals affected by enacted legislation. Major base changes include: exemption of off-premises food, beginning 1978:3 (fiscal 1979); extension of the sales tax base to off premises food (1982:2 to 1983:2); food again exempt 1983:3 (fiscal 1984); extension of the sales tax base to candy, gum and bottled water (June 1 - December 2, 2010); elimination of sales tax exemption for residential phone service (July 1, 2013).

Table 3.5

Comparison of the General Fund-State forecast by agency

2013-15 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2014 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2014 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,658.6	\$0.0	\$93.1	\$15,751.7	\$93.1
Business & Occupation	6,627.0	0.0	30.6	6,657.5	30.6
Use	1,122.1	0.0	20.3	1,142.4	20.3
Public Utility	811.5	0.0	(10.3)	801.2	(10.3)
Liquor Sales/Liter	505.1	0.0	(8.1)	497.0	(8.1)
Cigarette	775.4	0.0	1.7	777.1	1.7
Property (State Levy)	3,962.5	0.0	(0.9)	3,961.6	(0.9)
Real Estate Excise	1,174.7	0.0	29.0	1,203.7	29.0
Timber Excise	5.6	0.0	0.1	5.7	0.1
Other	935.2	0.0	(11.9)	923.4	(11.9)
Subtotal	31,577.8	0.0	143.6	31,721.4	143.6
Department of Licensing					
Boat excise, licenses, fees & other	34.7	0.0	0.6	35.3	0.6
Insurance Commissioner					
Insurance Premiums	943.3	0.0	0.3	943.7	0.3
Liquor Control Board					
Liquor Profits and Fees	196.3	0.0	5.1	201.4	5.1
Beer & Wine Surtax	53.6	0.0	1.1	54.6	1.1
Lottery Commission					
Lottery Revenue	9.3	0.0	0.6	9.9	0.6
State Treasurer					
Interest Earnings	(5.2)	0.0	1.4	(3.8)	1.4
Office of Financial Management					
Other	187.3	0.0	12.0	199.3	12.0
Administrative Office of the Courts					
Fines and Forfeitures	172.2	0.0	(2.2)	170.0	(2.2)
Total General Fund-State *	\$33,169.4	\$0.0	\$162.5	\$33,331.9	\$162.5

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council June 2014.² Forecast for the 2013-15 biennium, adopted September 18, 2014.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.6

Comparison of the General Fund-State forecast by agency

2013-15 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	June 2014 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2014 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,634.5	\$0.0	\$178.3	\$15,812.9	\$178.3
Business & Occupation	6,625.9	0.0	21.1	6,647.0	21.1
Use	1,122.1	0.0	26.0	1,148.1	26.0
Public Utility	812.7	0.0	(10.8)	801.9	(10.8)
Liquor Sales/Liter	505.1	0.0	(8.5)	496.6	(8.5)
Cigarette	776.0	0.0	(1.8)	774.2	(1.8)
Property (State Levy)	3,952.3	0.0	9.3	3,961.6	9.3
Real Estate Excise	1,172.8	0.0	24.1	1,196.9	24.1
Timber Excise	5.8	0.0	(0.0)	5.8	(0.0)
Other	935.2	0.0	(13.8)	921.4	(13.8)
Subtotal	31,542.5	0.0	223.9	31,766.4	223.9
Department of Licensing					
Boat excise, licenses, fees & other	34.6	0.0	0.7	35.3	0.7
Insurance Commissioner					
Insurance Premiums	943.3	0.0	0.3	943.7	0.3
Liquor Control Board					
Liquor Profits and Fees	196.3	0.0	5.1	201.4	5.1
Beer & Wine Surtax	53.6	0.0	1.1	54.6	1.1
Lottery Commission					
Lottery Revenue	2.3	0.0	0.6	2.9	0.6
State Treasurer					
Interest Earnings	(5.2)	0.0	0.7	(4.5)	0.7
Office of Financial Management					
Other	187.3	0.0	12.0	199.3	12.0
Administrative Office of the Courts					
Fines and Forfeitures	172.2	0.0	(2.2)	170.0	(2.2)
Total General Fund-State *	\$33,126.9	\$0.0	\$242.2	\$33,369.2	\$242.2

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council June 2014.² Forecast for the 2013-15 biennium, adopted September 18, 2014.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.7

Comparison of the General Fund-State forecast by agency

2015-17 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2014 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2014 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,240.6	\$0.0	\$175.0	\$17,415.7	\$175.0
Business & Occupation	7,361.0	0.0	7.5	7,368.6	7.5
Use	1,209.7	0.0	10.0	1,219.7	10.0
Public Utility	880.1	0.0	(10.7)	869.4	(10.7)
Liquor Sales/Liter	506.8	0.0	(8.5)	498.2	(8.5)
Cigarette	742.5	0.0	(9.2)	733.3	(9.2)
Property (State Levy)	4,147.8	0.0	2.3	4,150.1	2.3
Real Estate Excise	1,243.7	0.0	4.0	1,247.7	4.0
Timber Excise	6.9	0.0	0.0	6.9	0.0
Other	927.0	0.0	(2.6)	924.3	(2.6)
Subtotal	34,266.0	0.0	167.9	34,433.9	167.9
Department of Licensing					
Boat excise, licenses, fees & other	35.2	0.0	0.1	35.3	0.1
Insurance Commissioner					
Insurance Premiums	1,041.4	0.0	(24.8)	1,016.6	(24.8)
Liquor Control Board					
Liquor Profits and Fees	181.9	0.0	7.1	189.0	7.1
Beer & Wine Surtax	52.9	0.0	0.5	53.4	0.5
Lottery Commission					
Lottery Revenue	3.3	0.0	(1.0)	2.3	(1.0)
State Treasurer					
Interest Earnings	12.0	0.0	(4.5)	7.6	(4.5)
Office of Financial Management					
Other Agencies	160.4	0.0	5.4	165.8	5.4
Administrative Office of the Courts					
Fines and Forfeitures	182.0	0.0	(7.6)	174.4	(7.6)
Total General Fund-State *	\$35,935.2	\$0.0	\$143.0	\$36,078.2	\$143.0

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council June 2014.² Forecast for the 2015-17 biennium, adopted September 18, 2014.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.8

Comparison of the General Fund-State forecast by agency

2015-17 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	June 2014 Forecast¹	Non- Economic Changes	Forecast Revision	Sept. 2014 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,240.6	\$0.0	\$175.0	\$17,415.7	\$175.0
Business & Occupation Use	7,361.0	0.0	7.5	7,368.6	7.5
Public Utility	1,209.7	0.0	10.0	1,219.7	10.0
Liquor Sales/Liter	880.1	0.0	(10.7)	869.4	(10.7)
Cigarette	506.8	0.0	(8.5)	498.2	(8.5)
Property (State Levy)	742.5	0.0	(9.2)	733.3	(9.2)
Real Estate Excise	4,147.8	0.0	2.3	4,150.1	2.3
Timber Excise	1,243.7	0.0	4.0	1,247.7	4.0
Other	7.0	0.0	0.0	7.0	0.0
Subtotal	927.0	0.0	(2.6)	924.3	(2.6)
	34,266.1	0.0	167.9	34,434.0	167.9
Department of Licensing					
Boat excise, licenses, fees & other	35.2	0.0	0.1	35.3	0.1
Insurance Commissioner					
Insurance Premiums	1,041.4	0.0	(24.8)	1,016.6	(24.8)
Liquor Control Board					
Liquor Profits and Fees	181.9	0.0	7.1	189.0	7.1
Beer & Wine Surtax	52.9	0.0	0.5	53.4	0.5
Lottery Commission					
Lottery Revenue	2.8	0.0	(2.5)	0.2	(2.5)
State Treasurer					
Interest Earnings	13.5	0.0	(5.0)	8.5	(5.0)
Office of Financial Management					
Other	160.4	0.0	5.4	165.8	5.4
Administrative Office of the Courts					
Fines and Forfeitures	182.0	0.0	(7.6)	174.4	(7.6)
Total General Fund-State *	\$35,936.1	\$0.0	\$141.0	\$36,077.2	\$141.0

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council June 2014.² Forecast for the 2015-17 biennium, adopted September 18, 2014.

*Detail may not add to totals because of rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.9

**September 2014 General Fund-State forecast
2013-15 to 2017-19 biennia; cash basis**

(Millions of Dollars)

Forecast by Source	Fiscal 2014	Fiscal 2015	2013-15 Biennium	Fiscal 2016	Fiscal 2017	2015-17 Biennium	Fiscal 2018	Fiscal 2019	2017-19 Biennium
State Taxes									
Retail sales**	\$7,670.1	\$8,081.5	\$15,751.7	\$8,493.8	\$8,921.9	\$17,415.7	\$9,332.8	\$9,724.3	\$19,057.0
Business & occupation Use**	3,247.9	3,409.6	6,657.5	3,584.4	3,784.2	7,368.6	3,977.7	4,173.4	8,151.1
Public Utility	563.6	578.9	1,142.4	595.1	624.6	1,219.7	651.1	677.7	1,328.8
Liquor sales/liter	396.0	405.2	801.2	422.7	446.7	869.4	475.0	500.2	975.2
Beer & wine surtax	246.3	250.7	497.0	245.8	252.4	498.2	259.1	265.5	524.6
Cigarette	27.7	27.0	54.6	26.8	26.6	53.4	26.5	26.4	52.8
Tobacco products	400.5	392.9	793.4	381.1	368.4	749.5	356.6	346.3	703.0
Cannabis Excise Taxes	47.2	47.2	94.4	47.6	48.1	95.7	48.5	48.9	97.4
Property (state school levy)	0.0	2.9	2.9	11.0	19.3	30.3	27.5	34.6	62.2
Leasehold Excise Tax	1,958.9	2,002.8	3,961.6	2,051.0	2,099.1	4,150.1	2,148.3	2,201.0	4,349.3
Public utility district	27.7	27.0	54.7	27.2	27.8	55.0	28.5	29.2	57.6
Brokered Natural Gas	49.3	50.7	100.1	51.9	53.2	105.1	54.3	55.5	109.8
Real estate excise***	34.4	35.3	69.7	36.2	37.0	73.2	37.8	38.6	76.4
Timber excise	615.6	588.1	1,203.7	606.8	641.0	1,247.7	656.0	690.5	1,346.5
Estate/inheritance	2.7	3.1	5.7	3.4	3.5	6.9	3.6	3.7	7.3
Boat excise	0.4	(0.3)	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Insurance premiums	13.0	12.6	25.6	12.6	12.6	25.3	12.6	12.6	25.3
Penalties and interest on past due taxes	456.7	487.0	943.7	502.4	514.2	1,016.6	529.4	556.2	1,085.6
Other	134.7	138.4	273.0	144.6	150.1	294.7	155.7	161.5	317.2
Total Taxes	72.3	72.8	145.1	55.3	56.9	112.1	58.5	37.4	95.8
Total Taxes	15,965.1	16,613.2	32,578.4	17,299.7	18,087.5	35,387.2	18,839.5	19,583.6	38,423.0
State Non-Tax Sources									
Licenses, permits, fees	127.9	129.0	257.0	130.7	132.4	263.1	133.7	134.3	268.0
Liquor profits & fees***	123.0	75.6	198.6	77.1	81.6	158.8	86.7	91.7	178.4
Earnings on investments	(2.6)	(1.2)	(3.8)	(1.4)	8.9	7.6	14.4	16.2	30.6
Administrative Office of the Courts	85.6	84.4	170.0	85.7	88.6	174.4	91.7	94.7	186.4
Transfers of unclaimed property	60.5	51.8	112.2	54.9	56.5	111.4	58.0	59.5	117.6
Other revenue & transfers	23.4	(3.8)	19.6	(8.5)	(15.8)	(24.3)	(18.1)	1.7	(16.4)
Total Non-Tax	417.7	335.8	753.6	338.6	352.4	691.0	366.4	398.2	764.6
Total General Fund-State *	\$16,382.8	\$16,949.1	\$33,331.9	\$17,638.3	\$18,439.9	\$36,078.2	\$19,205.9	\$19,981.7	\$39,187.6

a - Actual

* Detail may not add to totals due to rounding

**GFS portion after Initiative 900 transfer

***Includes cannabis license fees after FY 2014

Table 3.10

Track Record for the 2013-15 General Fund-State Cash Forecast

February 2012 through September 2014

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis#</u>
February 2012 #	\$31,110	\$1,319				\$32,428
Changes to Forecast						
June 2010	(120)	(13)	(133)	330 #1	197	32,626
September 2012	39	(15)	23	0	23	32,649
November 2012	(113)	25	(88)	0	(88)	32,561
March 2013	(38)	18	(19)	0	(19)	32,541
June 2013	156	20	176	(55) #2	121	32,662
September 2013	224	(2)	222	123 #3	345	33,007
November 2013	(22)	27	6	(30) #4	(25)	32,982
February 2014	21	10	30	0	30	33,013
June 2014	160	(5)	156	1 #5	157	33,169
September 2014	144	19	163	0	163	33,332
Total change***:						
From February 2012	451	84	535	369	904	
Percent change	1.4	6.4	1.6	1.1	2.8	

* Excludes legislative, judicial, statutorily required or other major non-economic changes.

** Includes legislative, judicial, statutorily required or other major non-economic changes.

*** Detail may not add to total due to rounding.

First official forecast for the 2011-13 biennium.

#1 Effects of legislation from 2012 special sessions subsequent to February forecast

#2 Expected refunds: -\$55 million; effects of legislation from 2013 regular and first special sessions: -\$29,000

#3 Legislative and budget-driven revenue changes from 2013 second special session

#4 Reclassification of biennial recoveries of prior expenditures from revenue to non-revenue resources, MSA arbitration payment

#5 Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session

Table 3.11

Track Record for the 2015-17 General Fund-State Cash Forecast

September 2012 through September 2014

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis</u>
September 2012[#]	\$34,102	\$1,416				\$35,518
Changes to Forecast						
November 2012	(196)	33	(163)	0	(163)	35,355
March 2013	(92)	44	(49)	0	(49)	35,306
June 2013	56	2	58	(7) ^{#1}	51	35,357
September 2013	95	(2)	93	249 ^{#2}	342	35,699
November 2013	(47)	3	(44)	(41) ^{#3}	(85)	35,615
February 2014	5	26	31	51 ^{#4}	82	35,697
June 2014	194	40	233	5 ^{#5}	238	35,935
September 2014	168	(25)	143	0	143	36,078
Total change***:						
From September 2012	183	120	303	257	560	
Percent change	0.5	8.5	0.9	0.7	1.6	

* Excludes legislative, judicial, statutorily required or other major non-economic changes.

** Includes legislative, judicial, statutorily required or other major non-economic changes.

*** Detail may not add to total due to rounding.

[#] First official forecast for the 2015-17 biennium.^{#1} Transfer of GF-S funds to Child and Family Reinvestment Account^{#2} Legislative and budget-driven revenue changes from 2013 second special session^{#3} Re-classification of prior period adjustments as non-revenue resources^{#4} Cannabis excise taxes and fees plus retail sales and B&O taxes on cannabis production and sales resulting from Initiative 502^{#5} Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session

Table 3.12

2013-15 Enacted Budget Balance Sheet

Including 2014 Supplemental Budget

General Fund-State (GFS), Education Legacy Trust Account (ELTA),

Washington Opportunity Pathways Account (OPA) and Budget Stabilization Account

Dollars in Millions

	GFS	ELTA and OPA	TOTAL
RESOURCES			
Beginning Fund Balance	167.5	(11.1)	156.4
June 2014 Forecast	33,169.4	613.8	33,783.2
September 2014 Update	162.5	6.0	168.5
Current Revenue Totals	33,331.9	619.8	33,951.7
Transfer to Budget Stabilization Account	(313.7)	-	(313.7)
Other Enacted Fund Transfers	134.2	293.3	427.5
Prior Period Adjustments	15.7	-	15.7
Total Resources (including beginning fund balance)	33,335.6	902.0	34,237.6
EXPENDITURES			
2013-15 Enacted Budget			
Enacted 2013-15 Budget (including supplementals)	32,868.6	925.5	33,794.1
Assumed Reversions	(140.0)	-	(140.0)
Total Expenditures	32,728.6	925.5	33,654.1
RESERVES			
Projected Ending GFS, ELTA & OPA Balances	607.0	(23.5)	583.5
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	269.7	-	269.7
Transfer from General Fund and Interest Earnings	314.4	-	314.4
Projected Budget Stabilization Account Ending Balance	584.0	-	584.0
Total Reserves (Including Budget Stabilization)	1,191.0	(23.5)	1,167.5

Table 3.13

**Alternative forecasts compared to the baseline forecast
2013-15 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$16,321.5	\$15,751.7	\$15,134.9
Business & Occupation Use	6,892.7	6,657.5	6,419.9
Public Utility	1,184.8	1,142.4	1,098.2
Property (school levy)	828.4	801.2	773.3
Real Estate Excise	3,962.6	3,961.6	3,960.6
Other	1,273.3	1,203.7	1,161.5
Subtotal	2,150.3	2,203.2	2,179.3
	32,613.7	31,721.4	30,727.7
Department of Licensing			
	35.7	35.3	35.0
Insurance Commissioner¹			
	955.9	943.7	931.5
Lottery Commission			
	10.4	9.9	9.4
State Treasurer - Interest earnings			
	1.9	(3.8)	(4.0)
Liquor Surtaxes & Fees²			
	265.6	256.1	240.3
Office of Financial Management			
Other agencies	204.9	199.3	193.6
Administrative Office of the Courts			
Fines and Forfeitures	172.1	170.0	167.8
Total General Fund - State*	\$34,260.1	\$33,331.9	\$32,301.5
Difference from September 2014 Baseline	\$928.2		(\$1,030.4)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, distributor fees, retailer fees, licensing fees.

* Detail may not add to total due to rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.14

**Alternative forecasts compared to the baseline forecast
2015-17 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$19,546.8	\$17,415.7	\$15,372.7
Business & Occupation Use	8,172.4	7,368.6	6,650.3
Public Utility	1,350.6	1,219.7	1,085.8
Property (school levy)	956.3	869.4	791.5
Real Estate Excise	4,180.5	4,150.1	4,114.1
Other	1,378.7	1,247.7	990.6
Subtotal	2,190.2	2,162.7	2,052.2
	37,775.5	34,433.9	31,057.3
Department of Licensing			
	36.0	35.3	34.6
Insurance Commissioner¹			
	1,042.0	1,016.6	991.2
Lottery Commission			
	2.4	2.3	2.2
State Treasurer - Interest earnings			
	32.6	7.6	(7.0)
Liquor Surtaxes & Fees²			
	221.9	242.4	200.7
Office of Financial Management			
Other agencies	174.1	165.8	157.5
Administrative Office of the Courts			
Fines and Forfeitures	184.4	174.4	163.5
Total General Fund - State*	\$39,468.9	\$36,078.2	\$32,599.9
Difference from September 2014 Baseline	\$3,390.8		(\$3,478.3)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, distributor fees, retailer fees, licensing fees.

* Detail may not add to total due to rounding.

Source: ERFC, Department of Licensing, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.15

Lottery transfers by fundSeptember 2014 Forecast
(cash basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2008	124.1	0.0	4.7	8.5	0.0	106.9	0.3	3.7	0.0	0.0	0.0
2009	122.2	11.1	4.9	8.9	0.0	94.4	0.2	2.7	0.0	0.0	0.0
2007-09 Biennium	246.4	11.1	9.6	17.4	0.0	201.3	0.5	6.4	0.0	0.0	0.0
2010	126.4	12.9	5.1	9.2	0.0	95.6	0.3	3.3	0.0	0.0	0.0
2011	137.2	8.6	5.3	9.6	0.0	9.4	0.3	4.5	99.5	0.0	0.0
2009-11 Biennium	263.6	21.5	10.4	18.8	0.0	105.0	0.5	7.9	99.5	0.0	0.0
2012	135.1	0.0	2.7	10.0	0.0	0.0	0.3	3.3	118.5	0.2	0.0
2013	139.7	0.0	0.0	10.4	0.0	0.0	0.3	3.5	125.5	0.0	0.0
2011-13 Biennium	274.8	0.0	2.7	20.4	0.0	0.0	0.6	6.9	244.0	0.2	0.0
2014	147.9	9.3	0.0	10.8	0.0	0.0	0.3	3.7	113.7	0.0	10.1
2015	140.5	0.6	0.0	11.2	0.0	0.0	0.3	3.5	118.9	0.0	6.1
2013-15 Biennium	288.4	9.9	0.0	22.0	0.0	0.0	0.6	7.2	232.6	0.0	16.1
2016	134.8	2.3	0.0	11.7	0.0	0.0	0.3	3.8	116.7	0.0	0.0
2017	134.8	0.0	0.0	12.2	0.0	0.0	0.3	3.8	118.6	0.0	0.0
2015-17 Biennium	269.6	2.3	0.0	23.8	0.0	0.0	0.6	7.6	235.2	0.0	0.0
2018	135.0	0.2	0.0	11.7	0.0	0.0	0.3	3.8	119.0	0.0	0.0
2019	137.7	2.5	0.0	12.2	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2017-19 Biennium	272.7	2.7	0.0	23.8	0.0	0.0	0.6	7.6	237.8	0.0	0.0

Table 3.16

Lottery transfers by fundSeptember 2014 Forecast
(GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2008	124.1	0.0	4.7	8.5	0.0	106.9	0.3	3.7	0.0	0.0	0.0
2009	122.2	11.1	4.9	8.9	0.0	94.4	0.2	2.7	0.0	0.0	0.0
2007-09 Biennium	246.4	11.1	9.6	17.4	0.0	201.3	0.5	6.4	0.0	0.0	0.0
2010	129.4	12.9	5.1	9.2	0.0	97.4	0.3	4.6	0.0	0.0	0.0
2011	138.2	7.0	5.3	9.6	0.0	0.0	0.3	3.7	112.3	0.0	0.0
2009-11 Biennium	267.6	19.9	10.4	18.8	0.0	97.4	0.5	8.3	112.3	0.0	0.0
2012	138.0	0.0	2.7	10.0	0.0	0.0	0.3	3.0	121.8	0.2	0.0
2013	139.2	9.3	0.0	10.4	0.0	0.0	0.3	3.6	115.5	0.0	0.0
2011-13 Biennium	277.2	9.3	2.7	20.4	0.0	0.0	0.6	6.6	237.4	0.2	0.0
2014	147.7	0.6	0.0	10.8	0.0	0.0	0.3	4.0	121.9	0.0	10.1
2015	142.4	2.3	0.0	11.2	0.0	0.0	0.3	3.8	118.6	0.0	6.1
2013-15 Biennium	290.0	2.9	0.0	22.0	0.0	0.0	0.6	7.8	240.5	0.0	16.1
2016	132.2	0.0	0.0	11.7	0.0	0.0	0.3	3.8	116.4	0.0	0.0
2017	135.3	0.2	0.0	12.2	0.0	0.0	0.3	3.8	118.8	0.0	0.0
2015-17 Biennium	267.6	0.2	0.0	23.8	0.0	0.0	0.6	7.6	235.3	0.0	0.0
2018	137.2	2.5	0.0	11.7	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2019	141.1	5.9	0.0	12.2	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2017-19 Biennium	278.3	8.4	0.0	23.8	0.0	0.0	0.6	7.6	237.8	0.0	0.0

* Total Transfers are equal to total sales less total expenses (prizes, cost of sales, administration etc.)

Source: Lottery Commission, ERFC

Table 3.17

General Fund-State: History and Forecast of Components

History and Forecast by Fiscal Year (Cash basis)

September 2014 - Millions of Dollars

History:	General Fund-State		Related Fund		General Fund-State plus Related Fund (current definition of GF-S)		Other Near General Fund*		Total Near General Fund	
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.
FY 1995	\$8,551		\$248		\$8,799				\$8,799	
FY 1996	\$8,581	0.3%	\$353	42.6%	\$8,934	1.5%			\$8,934	1.5%
FY 1997	\$9,057	5.5%	\$392	11.1%	\$9,449	5.8%			\$9,449	5.8%
FY 1998	\$9,641	6.5%	\$416	6.1%	\$10,057	6.4%			\$10,057	6.4%
FY 1999	\$9,979	3.5%	\$435	4.5%	\$10,414	3.6%			\$10,414	3.6%
FY 2000	\$10,433	4.5%	\$634	45.9%	\$11,068	6.3%			\$11,068	6.3%
FY 2001	\$10,829	3.8%	\$731	15.2%	\$11,560	4.4%			\$11,560	4.4%
FY 2002	\$10,451	-3.5%	\$1,182	61.6%	\$11,632	0.6%			\$11,632	0.6%
FY 2003	\$10,690	2.3%	\$1,031	-12.7%	\$11,721	0.8%			\$11,721	0.8%
FY 2004	\$11,321	5.9%	\$1,037	0.6%	\$12,358	5.4%			\$12,358	5.4%
FY 2005	\$12,067	6.6%	\$969	-6.6%	\$13,036	5.5%			\$13,036	5.5%
FY 2006	\$13,329	10.5%	\$989	2.0%	\$14,318	9.8%	\$115		\$14,432	10.7%
FY 2007	\$14,443	8.4%	\$1,024	3.6%	\$15,467	8.0%	\$266	132.2%	\$15,734	9.0%
FY 2008	\$14,614	1.2%	\$1,045	2.0%	\$15,659	1.2%	\$213	-20.1%	\$15,872	0.9%
FY 2009	\$13,089	-10.4%	\$1,069	2.3%	\$14,158	-9.6%	\$224	5.4%	\$14,382	-9.4%
FY 2010	\$13,571	3.7%	\$0	-100.0%	\$13,571	-4.1%	\$157	-29.9%	\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$0	0.0%	\$14,648	7.9%	\$112	-29.0%	\$14,759	7.5%
FY 2012	\$14,874	1.5%	\$0	0.0%	\$14,874	1.5%	\$114	2.3%	\$14,988	1.6%
FY 2013	\$15,783	6.1%	\$0	0.0%	\$15,783	6.1%	\$101	-11.5%	\$15,884	6.0%
FY 2014 (prelim.)	\$16,383	3.8%	\$0	0.0%	\$16,383	3.8%	\$197	95.3%	\$16,580	4.4%
Forecast:										
FY 2015	\$16,949	3.5%	\$0	0.0%	\$16,949	3.5%	\$190	-3.9%	\$17,139	3.4%
FY 2016	\$17,638	4.1%	\$0	0.0%	\$17,638	4.1%	\$199	4.7%	\$17,837	4.1%
FY 2017	\$18,440	4.5%	\$0	0.0%	\$18,440	4.5%	\$197	-0.6%	\$18,637	4.5%
FY 2018	\$19,206	4.2%	\$0	0.0%	\$19,206	4.2%	\$200	1.6%	\$19,406	4.1%
FY 2019	\$19,982	4.0%	\$0	0.0%	\$19,982	4.0%	\$226	12.7%	\$20,208	4.1%
Biennial Totals										
03-05 Biennium	\$23,389	10.6%	\$2,006	-9.3%	\$25,395	8.7%	\$0	NA	\$25,395	8.7%
05-07 Biennium	\$27,772	18.7%	\$2,013	0.3%	\$29,785	17.3%	\$381	NA	\$30,166	18.8%
07-09 Biennium	\$27,703	-0.2%	\$2,114	5.0%	\$29,817	0.1%	\$437	14.8%	\$30,254	0.3%
09-11 Biennium	\$28,218	1.9%	\$0	-100.0%	\$28,218	-5.4%	\$269	-38.5%	\$28,487	-5.8%
11-13 Biennium	\$30,657	8.6%	\$0	0.0%	\$30,657	8.6%	\$215	-19.9%	\$30,872	8.4%
13-15 Biennium	\$33,332	8.7%	\$0	0.0%	\$33,332	8.7%	\$387	79.9%	\$33,719	9.2%
15-17 Biennium	\$36,078	8.2%	\$0	0.0%	\$36,078	8.2%	\$396	2.3%	\$36,474	8.2%
17-19 Biennium	\$39,188	8.6%	\$0	0.0%	\$39,188	8.6%	\$426	7.7%	\$39,614	8.6%

*Education legacy trust fund excluding FY 14 and FY 15 lottery fund transfers. Includes pension stabilization fund interest in FY 08 and FY 09.

Table 3.18

Forecasted Distribution of Excise Tax and License Fees from Cannabis Sales

Thousands of Dollars

Biennium	Total of Cannabis Excise Taxes plus License Fees	Pre-distribution Allotments				Distribution of Remaining Funds						
		DSHS State Healthy Youth Survey	Washington State Institute for Public Policy Study	UW Alcohol and Drug Abuse Institute	LCB for Administration	DSHS Substance Abuse Program (15%)	Dept. of Health Cannabis Education Program (10%)	UW/WSU Research (1%)	Basic Health Plan Trust Account (50%)	Health Care Authority Community Health Centers (5%)	OSPI Dropout Prevention (0.3%)	General Fund-State (18.7%)
2013-15	\$21,635	\$375	\$150	\$15	\$4,555	\$2,481	\$1,654	\$165	\$8,270	\$827	\$50	\$3,093
2015-17	\$177,934	\$1,000	\$400	\$40	\$10,000	\$24,974	\$16,649	\$1,665	\$83,247	\$8,325	\$499	\$31,134
2017-19	\$348,440	\$1,000	\$400	\$40	\$10,000	\$50,550	\$33,700	\$3,370	\$168,500	\$16,850	\$1,011	\$63,019

Table 3.19

Forecasted Retail Sales and B&O Taxes from Cannabis Sales

Thousands of Dollars

	Retail Sales Tax from Cannabis Sales	B&O Tax from Cannabis Sales	Total GF-S B&O and Retail Sales Tax
2013-15	\$3,494	\$343	\$3,837
2015-17	\$26,340	\$2,585	\$28,925
2017-19	\$51,020	\$5,006	\$56,026

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Chapter 4: Washington Boom Monitor Index

- **The Boom Monitor Index (BMI) is a coincident index based on Data Resources, Inc.'s national Boom Monitor. The index measures the sustainability of Washington growth while also providing insight to upside and downside risks.**
- **A boom is a period of unsustainable growth in the economy, advancing at a rate that far exceeds historical and balanced growth rates.**
- **Rapid expansions in major sectors such as the housing market or technology fields can cause a boom to occur.**
- **A boom reading is classified as any reading above 70, with the index historically averaging 50. Readings above 70 indicate unsustainable growth.**
- **This latest revision comprises several component changes and a reweighting of the index, improving current and historical accuracy.**

The Original Data Resources, Inc. Boom Monitor

The Boom Monitor Index measures the sustainability of growth

The original Boom Monitor Index (BMI) was designed and constructed by Data Resources, Inc, an economic data firm who later merged with Wharton Econometric Forecasting Associates to form Global Insight, now IHS Global, Inc. At its inception the original BMI measured the sustainability of growth rates in the national economy. There were a total of eight components in this index, each of which measured a specific sector in the economy that was historically shown to have cyclical behavior that contributed to economic booms and busts. The eight chosen components were (1) the change in the ratio of consumer credit outstanding to disposable income, (2) the ratio of car sales to the driving age of the population, (3) the ratio of housing starts to the population age 20 and older, (4) the DRI Index of Labor Market Tightness, (5) the eighteen-month growth in the real monetary base, (6) the Federal Reserve Board capacity utilization rate for materials industries, (7) the ratio of capital spending to real trend-line Gross National Product, and (8) vendor performance. In addition to their contribution to economic booms, these series were chosen because their readings are both timely and reliable from month to month. Data Resources, Inc. discontinued the Boom Monitor Index in April 1985.

Each component series is detrended and weighted

To construct the composite index, each of the eight series is first regressed against time in order to correct for any historical upward or downward trends. Then, the series are adjusted so they have an average value of 50 and a standard deviation of 20. These indexed values are then weighted according to their standard errors in regressions against the U.S. Department of Commerce's Index of Coincident Indicators. The sum of these weighted component series comprises the Boom Monitor Composite Index.

Readings above 70 indicate unsustainable growth

The BMI Composite has a historical average of 50 and a standard deviation of 20, just like the component series. Any reading more than one standard deviation away from the average (above 70) indicates growth rates that are only temporarily sustainable. During the 1960s and 70s boom periods, the BMI averaged a level of 66.1, a reading near the threshold of unsustainable growth.

The Original Washington Boom Monitor

Some data sets are not available at the state level

While timely, reliable data often exists on a national level, the same information is either inapplicable at the state level, not collected with appropriate frequency, or simply does not exist. Thus, candidate component series for the Washington Boom Monitor are much more limited. Series such as capital spending, capacity utilization and consumer credit do not exist at the state level or are limited in their historical ranges. Other measures, such as vendor performance, are not published on a monthly basis and were not applicable for this index.

Washington BMI is composed of six component series

The six chosen component series for the Washington BMI were (1) aerospace employment, (2) the unemployment rate in Washington, (3) housing units authorized by building permits, (4) new car and truck registrations in Washington, (5) real estate excise tax collections, and (6) the dollar amount of repossessions and delinquent loans outstanding at Federal Home Loan Bank member institutions in Washington. The Washington BMI is constructed in the same fashion as DRI's national BMI. Each component series is first seasonally adjusted and then detrended by regressing the series against a time trend. The detrended components are then adjusted to have a long run mean of 50 and standard deviation of 20. These adjusted components are then weighted by their standard errors in regressions against total employment and revenues. The sum of the weighted component series comprises the Washington Boom Monitor Composite Index.

BMI available from December 1970 forward

Due to their volatility, several components of this index, such as new car and truck registrations and housing unit authorizations, were smoothed. In addition, a majority of these components only date back to 1968-1970, whereas DRI's national data was available back to the late 1940s. Due to these limitations and the method of constructing the Boom Monitor Index, Washington's BMI is available only as far back as December 1970.

Washington's Boom Monitor Index – 1999 Revision

First revision was in 1999

After its inception in the June 1990 publication, the Washington Boom Monitor Index underwent its first revision in March 1999. These revisions included (1) updating the detrending regressions, (2) updating the regression of index components against employment, and (3) correcting and updating historical data for several of the series.

Revisions included reweighting and updates to component series

The component variables had not been reweighted for some time and were out of date, given the influx of new data since their initial weighting. Initially, weighting regressions were run through 1990, but the new data allowed for updated regressions to be run through November 1998. Aerospace employment received the largest modification to its weight during this revision. Originally the series was weighted at just under sixteen percent, but was updated with the revised weighting for an overall weight of twenty-three percent, the largest of all component series.

New vehicle registrations were separated into car and truck registrations

Additionally, the weights for real estate excise tax and new vehicle registrations were both adjusted accordingly using the revised reweighting procedure. In particular, new vehicle registrations were broken down into two components: new car registrations and new truck registrations. This change was made in order to correct for a 1973 change in data source for this series and to better isolate the effects of car and truck sales on the composite index. The Seattle Times help wanted/ unemployment rate index was also added during this time.

Weighting now based on payroll data

Finally, a major change to the weighting procedure was made during this first revision. In the original model, all component variables were weighted against total employment and revenues. However, total employment is based on sample data and is likely less representative of actual employment than payroll data. Since nonfarm employment is based on actual payroll data, future series and the 1999 revision were weighted using Washington nonfarm employment.

Washington's Boom Monitor Index – 2014 Revision

Old index was volatile from month to month

After the 1999 revision, Washington's Boom Monitor Index was not revised until September 2014, except for annual reweighting. The BMI underwent a large number of changes with the goal of smoothing out the volatile month-to-month readings of the old index, updating components to take into account the most recent housing bubble and subsequent collapse, and to reweight the index for a more accurate picture of the sustainability of Washington's economic growth.

Components were changed to more accurately reflect recent history

First, many of the BMI's components were updated for new data or changed completely to more accurately reflect recent economic events. Components that remain unchanged are (1) unemployment rate, (2) aerospace employment, and (3) real estate excise tax. It should be noted that real estate excise taxes are divided by an implicit price deflator in order to adjust for inflation. The log base-10 of these values

is then taken to compensate for their historical exponential upward trend and to allow for linear detrending.

Other components were either eliminated or modified

While the aforementioned variables were simply updated for new data, the other components were either eliminated or modified to present a more accurate picture of the Washington state economy, including (1) construction employment, (2) help wanted/labor force index, (3) Seattle-area house price index, (4) new vehicle registrations, and (5) taxable retail sales (minus automotive and construction).

A house price index and construction employment are used instead of housing authorizations

Previously, housing authorizations were used to measure the housing market. However, authorizations are a leading indicator, where as the BMI Composite is a coincident indicator. Additionally, authorizations are one of the more volatile measures of housing activity, which contradicts one of the goals of this revision. In its stead, construction employment and a Seattle-area house price index are used. Construction employment is viewed as an actual measure of current housing activity, while the house price index is a much less volatile measure of the housing market and captures the full effect of housing value changes on economic growth. Large changes in housing prices have typically been associated with economic booms and recessions. Skyrocketing house prices played a large part in creating unsustainable growth both in Washington State and across the nation prior to the most recent 2007-09 recession.

Help wanted divided by labor force instead of unemployment

The help wanted/labor force index was previously a help wanted/unemployment rate index. However, dividing help wanted by a labor force index captures all of the labor force, not just those who are unemployed. Also, all individuals in the labor force can respond to a help wanted ad, not just the unemployed, and an increased willingness to leave one's job for a new position is indicative of a strong labor market.

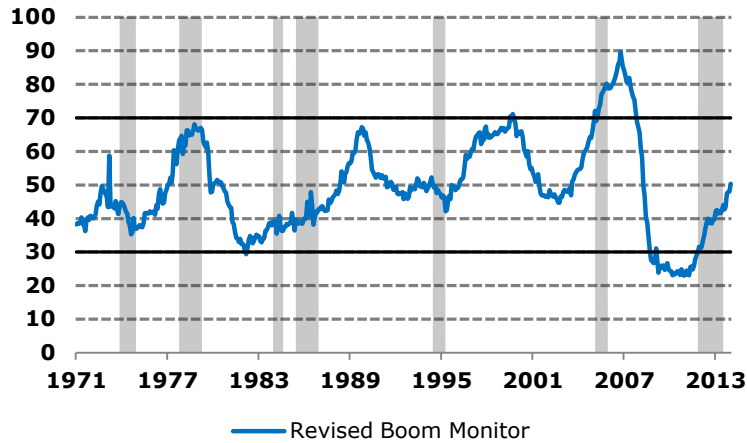
Taxable retail sales (minus automotive and construction) are added

Previously separated passenger car and truck sales have once again been combined back into new vehicle registrations as the old index might have placed too much emphasis on the automotive industry in its measurements. In an attempt to avoid double-weighting an indicator, taxable retail sales, a measure of consumer spending, does not include automotive purchases or purchases from the construction sector.

Technical notes

The most recent revision to the Washington Boom Monitor Index follows a similar methodology to that previously used. After undergoing seasonal adjustment, the component series are regressed against time and time-squared, as well as solely time and solely time-squared. The appropriate detrending regression is determined using adjusted R^2 and then confirmed using the Schwarz criterion and adjusted R^2 . Detrended variables are then adjusted to have an average of 50 and a standard deviation of 20. These variables are then weighted based on their standard errors in a regression against Washington nonfarm employment. The summation of the weighted values is the Boom Monitor Index.

Figure 4.1: Revised Washington Boom Monitor Index



Source: ERFC, data through August 2014

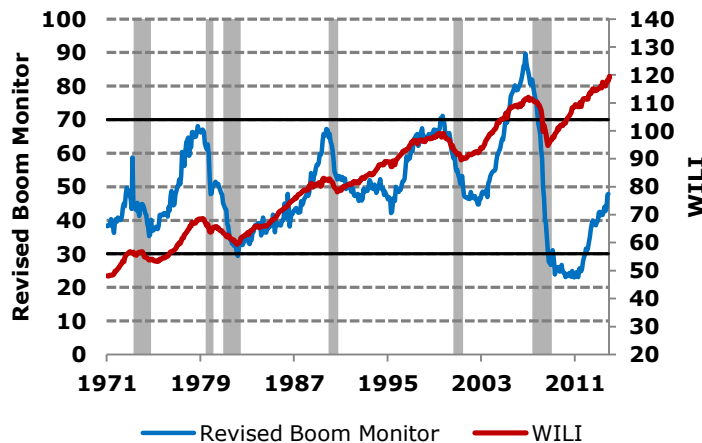
The Washington Boom Monitor and the Washington Index of Leading Indicators

BMI accurately follows WILI

Although there is an upward trend to the Washington Index of Leading Indicators (WILI) and the Boom Monitor Index is detrended, there is a clear correlation between the two indicators (see Figure 4.2). Peaks and troughs for the BMI correspond with the WILI directly and their slopes are very similar for periods of rise and fall.

Figure 4.2: Washington Boom Monitor and Washington Index of Leading Indicators

Both BMI and WILI on upward trends recently



Source: ERFC, data through August 2014

The Washington Boom Monitor and Employment

Comparing BMI to employment...

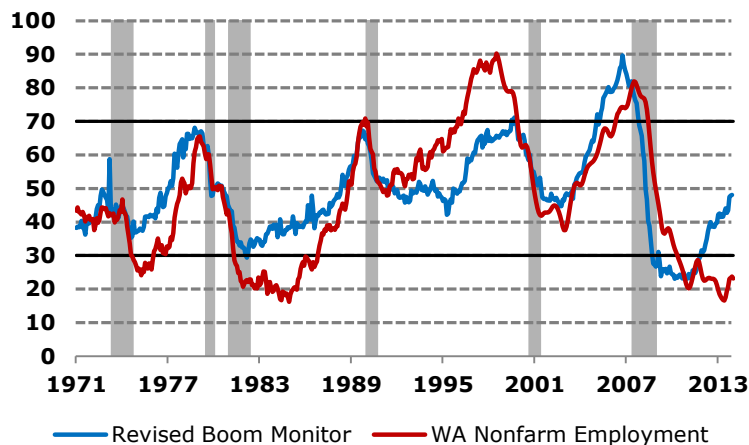
The methodology used to create the Washington Nonfarm Employment Index is the same methodology used to create each of the component

... serves as a check for readings

series in the BMI. Although the Employment Index is not a component series in and of itself, it plays an integral part in weighting each component as part of the composite BMI. Comparing the Employment Index and the BMI can also serve as a check and balance to confirm the movements of the BMI. However, current slack in the labor market is causing the Employment Index to move in the opposite direction of the BMI. Yet, historically, opposite movements of the indices have a precedent in post-recession periods until the labor market recovers, as seen in Figure 4.3.

Figure 4.3: Revised Washington Boom Monitor and WA Nonfarm Employment

Slack in the labor market causes a lag after recessions



Source: ERFC, data through August 2014

The Washington Boom Monitor and Components

Correlation between measures

Figures 4.5 through 4.7 illustrate the relationship between the revised Boom Monitor Index and the Unemployment Rate Index, Aerospace Employment Index, and the Construction Employment Index. Although the Unemployment Rate Index is slightly more volatile from peak to trough than the Boom Monitor, there is a strong and obvious correlation between the two measures.

There is a lag between BMI and aerospace employment

The same correlation is also found in Figure 4.6 when comparing the Boom Monitor to Aerospace Employment. There is a lag between the two indices, most notably in the 1970s-80s and from the late 1990s to mid 2000s, but the same cyclical pattern is immediately apparent to the casual observer.

Compared to the Construction Employment Index

Illustrated in Figure 4.7 is the relationship between the Revised Boom Monitor and the Construction Employment Index. This series shows a remarkable propensity towards following the BMI, even obtaining similar magnitudes throughout its history, with the exception of the housing-fueled bubble and subsequent collapse in the late 2000's, where construction employment reached a higher peak and a lower depth than the composite reading.

There is a clear correlation between the composite and help wanted/labor force index

Figures 4.8 through 4.10 depict the relationship between the composite BMI and the Seattle Times Help Wanted index divided by labor force, New Vehicle Registrations, and Real Estate Excise Tax collections, adjusted for inflation. There is a clear correlation between the BMI and the help wanted/labor force index. While the latter has a much larger amplitude than the composite reading, the same cyclical pattern is inherently obvious.

Compared to New Vehicle Registrations Index

Figure 4.9 exhibits the correlation between the revised BMI and the New Vehicle Registrations Index. While it is historically an extremely volatile month-to-month indicator, the index follows the revised Boom Monitor's trends quite well if one looks past the white noise and at the overall trend.

Compared to Real Real Estate Excise Tax

The inflation-adjusted Real Estate Excise Tax (RREET) Index has a clear connection with the composite Boom Monitor, as illustrated in figure 4.10. While it is another inherently noisy measure due to fluctuations in the housing market, the RREET Index follows the larger cyclical pattern of the BMI quite well. Its correlation is especially clear during the most recent recession as collections plummeted due to the housing market collapse.

Compared to housing indices

Figures 4.11 and 4.12 depict the Boom Monitor alongside a Seattle House Price Index and Taxable Retail Sales, respectively. While there is a small lag between house prices and the Boom Monitor, the correlation between the two measures is inherently clear.

BMI and taxable retail sales follow each other closely

There is also an obvious relationship between the revised Boom Monitor and the Taxable Retail Sales Index. Taxable Retail Sales, as an approximate measure of consumer spending, follows the overall trend of the composite Boom Monitor fairly well, with periods of rise and fall having similar slopes. Taxable Retail Sales are of a slightly lower magnitude than the composite index coming out of the most recent recession, but prerecession sales were artificially inflated due to high housing prices and unsustainable levels of consumer spending. It should be noted that in 1977 the state sales tax on food products was eliminated, only to be temporarily reintroduced in 1982 in response to economic recession, leading to dramatic fluctuations in taxes collected during these periods.

Index Limitations

The index does not come without its drawbacks due to data availability

While the Boom Monitor is an important tool, it does not come without its drawbacks. First and most importantly is the limited availability of appropriate data. Some component series which may be theoretically appropriate for use on the state level may not exist or may not be reliable enough for accurate use. Second, some series have inherent flaws due to changes over time in data collection or reporting methodologies, but need to be used because the most appropriate data set may not exist on a state level. As additional data sources are identified, future revisions may take into account this additional information.

Recent Activity

*Washington
back on
upward trend*

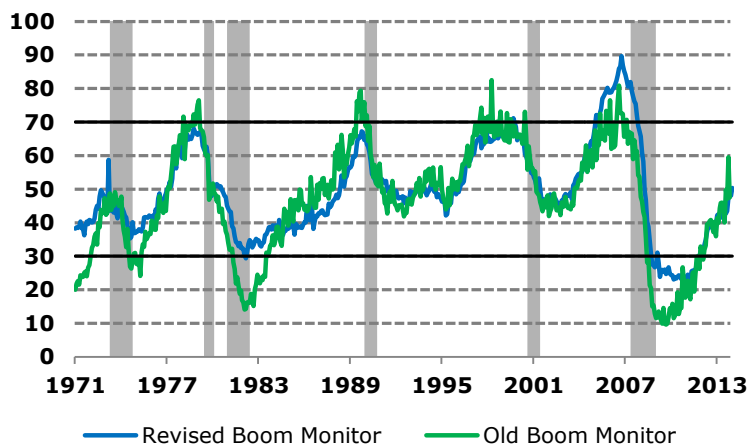
For the past twelve months, the Boom Monitor has averaged 44.6, a moderate distance from the historical average of 50, but well above the low 20's readings experienced during the immediate aftermath of the recession. The index has a current upward trend as Washington's economy continues to recover and approach sustainable growth levels. Year-over-year, the index is up 19.1 percent with its most recent reading coming in at 50.4.

The Washington Boom Monitor as an Economic Indicator

*Revised
index is
smoother
and more
representa-
tive of recent
events*

With the updated weights, new data, and revised components, the Boom Monitor reveals a slightly narrower range than the previous iteration, with a range of 23.0 to 89.7, as opposed to 9.6 to 82.5. The revised index is much smoother than the old index, with much less month to month volatility. Additionally the revisions now allow the index to fully capture the effect of the housing market on Washington's economy, an important trait, taking into account the recent housing bubble.

Figure 4.4: Revised and Old Washington Boom Monitor



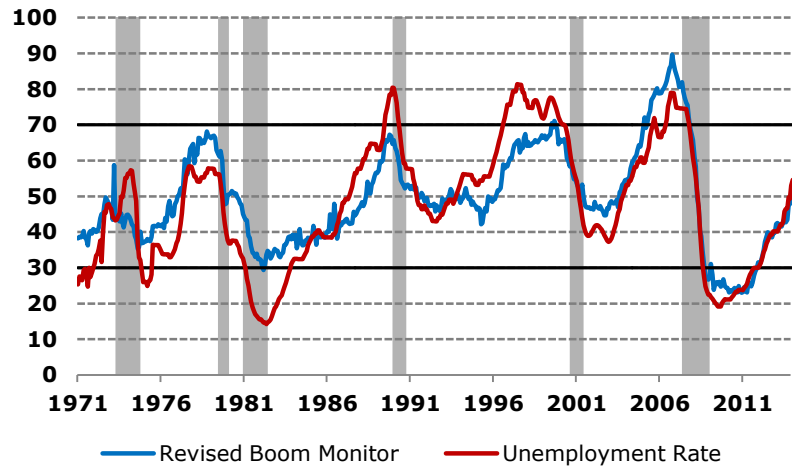
Source: ERFC, data through August 2014

*Also offers
insight into
upside and
downside risk
adjustments*

Despite the caveats mentioned above, the Boom Monitor Index is an important economic indicator. It indicates whether current growth levels are sustainable or simply part of a temporary boom. While high growth levels bode favorably for consumer confidence, they can falsely lead to extended periods of optimism that are not sustainable in the long run. The Boom Monitor gives forecasters a glimpse into growth rate sustainability and provides useful information for making upside and downside risk probability adjustments.

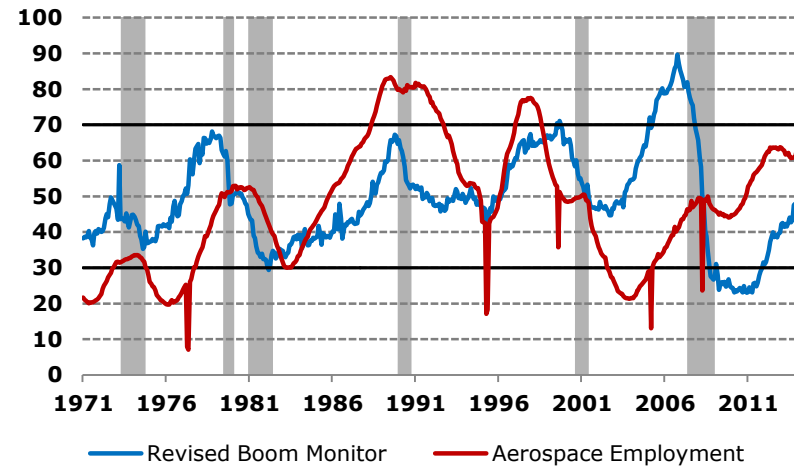
Figures 4.5-4.8: Revised Boom Monitor and Components

Figure 4.5: Revised Boom Monitor and Unemployment Rate Index



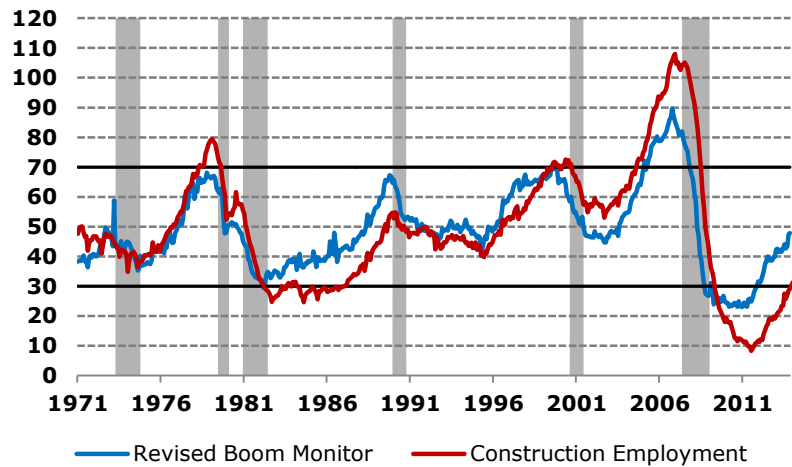
Source: Bureau of Labor Statistics, ERFC

Figure 4.6: Revised Boom Monitor and Aerospace Employment Index



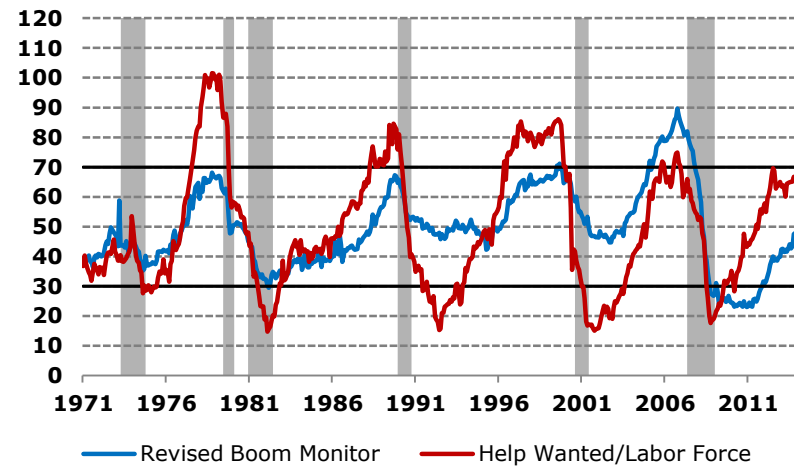
Source: Bureau of Labor Statistics, ERFC

Figure 4.7: Revised Boom Monitor and Construction Employment Index



Source: McGraw-Hill Construction, ERFC

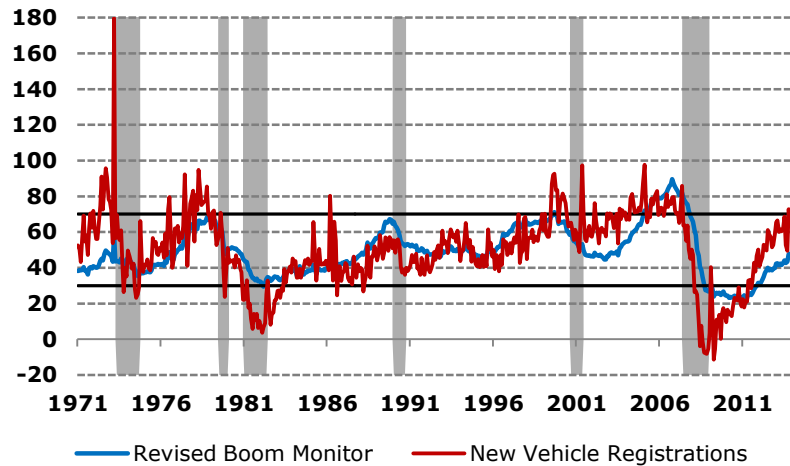
Figure 4.8: Revised Boom Monitor and Help Wanted/Labor Force Index



Source: Bureau of Labor Statistics, ERFC

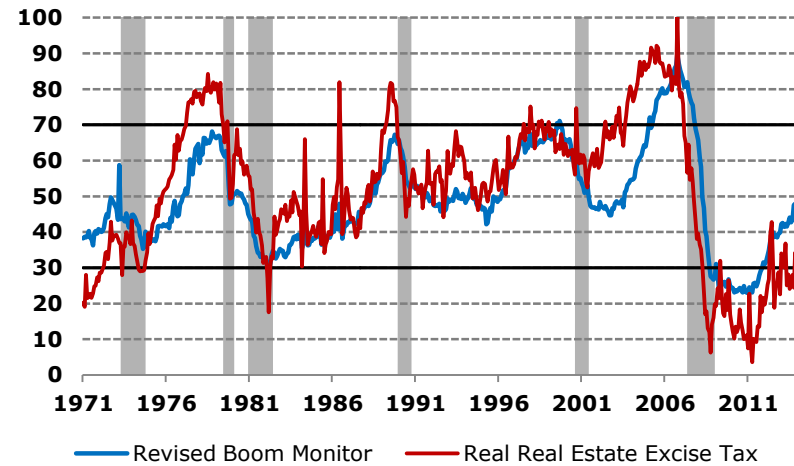
Figures 4.9-4.12: Revised Boom Monitor and Components

Figure 4.9: Revised Boom Monitor and New Vehicle Registrations Index



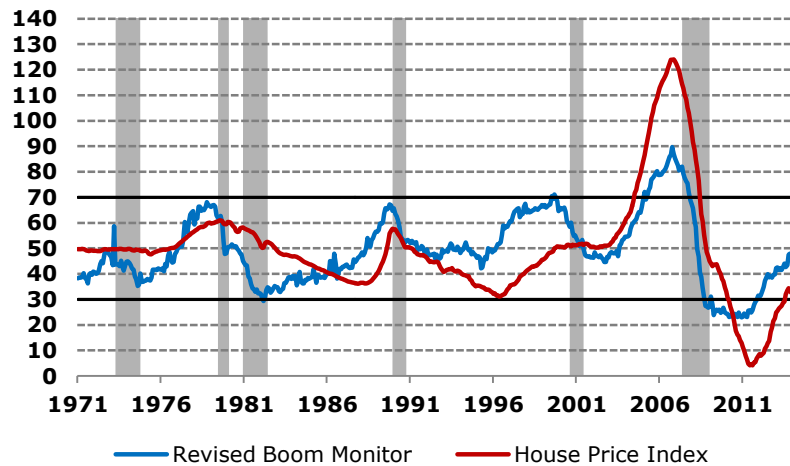
Source: WA State Department of Licensing, ERFC

Figure 4.10: Revised Boom Monitor and Real Real Estate Excise Tax Index



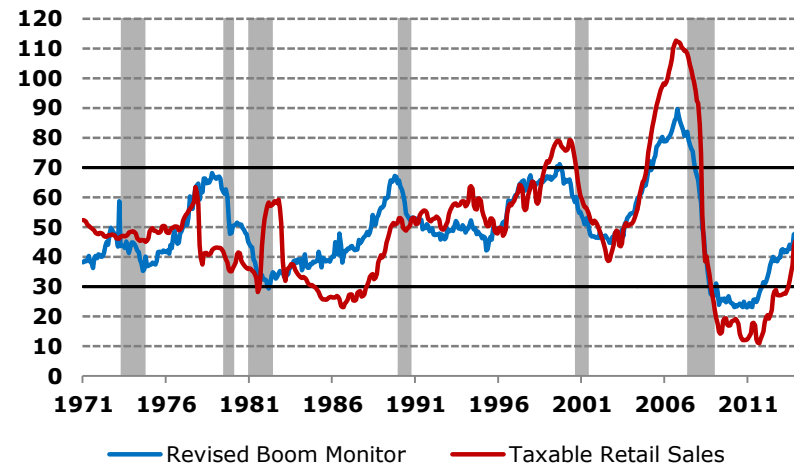
Source: WA State Department of Revenue, ERFC

Figure 4.11: Revised Boom Monitor and Seattle House Price Index



Source: Case-Shiller, ERFC

Figure 4.12: Revised Boom Monitor and Taxable Retail Sales Index



Source: WA State Department of Revenue, ERFC



Detail Components of the Washington State Economic and Revenue Forecast

Calendar Years

Note: The economic data discussed in these tables were current at the time the forecast was prepared. Many concepts have changed since then due to new releases and data revisions.

Table A1.1
U.S. Economic Forecast Summary
Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,369.2	15,710.3	16,038.5	16,522.0	17,001.1	17,477.1	17,931.5	18,379.8
% Ch	2.3	2.2	2.1	3.0	2.9	2.8	2.6	2.5
Real Consumption	10,449.7	10,699.7	10,942.5	11,241.0	11,544.5	11,844.5	12,140.3	12,431.2
% Ch	1.8	2.4	2.3	2.7	2.7	2.6	2.5	2.4
Real Nonresidential Fixed Investment	1,931.8	1,990.6	2,097.8	2,218.6	2,353.2	2,506.5	2,639.5	2,733.1
% Ch	7.2	3.0	5.4	5.8	6.1	6.5	5.3	3.5
Real Residential Fixed Investment	436.5	488.4	503.6	573.1	662.6	694.7	696.3	707.3
% Ch	13.5	11.9	3.1	13.8	15.6	4.8	0.2	1.6
Real Personal Income	13,093.3	13,198.7	13,539.2	13,980.1	14,521.8	15,091.8	15,584.6	16,069.1
% Ch	3.3	0.8	2.6	3.3	3.9	3.9	3.3	3.1
Real Per Capita Income (\$/Person)	41,628	41,669	42,440	43,485	44,823	46,226	47,371	48,473
% Ch	2.6	0.1	1.8	2.5	3.1	3.1	2.5	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.073	1.089	1.102	1.118	1.136	1.155	1.173
% Ch	1.8	1.2	1.5	1.2	1.4	1.6	1.6	1.6
U.S. Consumer Price Index (1982-84=1.0)	2.296	2.330	2.372	2.403	2.439	2.484	2.529	2.573
% Ch	2.1	1.5	1.8	1.3	1.5	1.8	1.8	1.7
Employment Cost Index (Dec. 2005=1.0)	1.161	1.182	1.204	1.232	1.265	1.300	1.337	1.376
% Ch	1.8	1.9	1.9	2.3	2.7	2.8	2.9	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	16,163.2	16,768.1	17,381.3	18,230.4	19,116.6	20,051.6	20,960.2	21,872.8
% Ch	4.2	3.7	3.7	4.9	4.9	4.9	4.5	4.4
Personal Income	13,887.7	14,166.9	14,743.1	15,409.9	16,237.4	17,147.7	17,994.2	18,844.8
% Ch	5.2	2.0	4.1	4.5	5.4	5.6	4.9	4.7
Employment (Millions)								
U.S. Civilian Labor Force	155.0	155.4	156.0	158.2	160.5	162.4	163.8	164.9
Total U.S. Employment	142.5	143.9	146.3	149.1	151.5	153.6	155.1	156.1
Unemployment Rate (%)	8.08	7.35	6.28	5.79	5.57	5.40	5.33	5.30
Nonfarm Payroll Employment	134.10	136.36	138.80	141.33	143.69	145.61	146.88	147.88
% Ch	1.7	1.7	1.8	1.8	1.7	1.3	0.9	0.7
Manufacturing	11.93	12.00	12.15	12.37	12.46	12.47	12.43	12.38
% Ch	1.7	0.7	1.2	1.8	0.8	0.1	-0.3	-0.4
Durable Manufacturing	7.47	7.54	7.68	7.91	8.05	8.09	8.07	8.04
% Ch	2.7	1.0	1.8	3.1	1.7	0.5	-0.2	-0.3
Nondurable Manufacturing	4.46	4.46	4.47	4.45	4.41	4.39	4.36	4.34
% Ch	0.1	0.1	0.2	-0.4	-0.9	-0.6	-0.5	-0.6
Construction	5.65	5.83	6.04	6.39	6.99	7.58	7.91	8.10
% Ch	2.1	3.3	3.5	5.9	9.3	8.5	4.3	2.5
Service-Providing	115.68	117.66	119.70	121.63	123.29	124.57	125.54	126.39
% Ch	1.6	1.7	1.7	1.6	1.4	1.0	0.8	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	94.2	98.0	97.8	90.7	88.9	87.7	87.3	87.0
Personal Saving/Disposable Income (%)	7.2	4.9	5.1	5.1	6.1	7.3	7.9	8.4
Auto Sales (Millions)	7.2	7.6	7.7	8.0	8.2	8.4	8.4	8.5
% Ch	19.0	4.7	1.3	3.7	2.7	2.1	0.2	1.3
Housing Starts (Millions)	0.784	0.930	1.023	1.269	1.515	1.576	1.568	1.576
% Ch	28.1	18.6	10.0	24.1	19.4	4.0	-0.5	0.5
Federal Budget Surplus (Billions)	-1,079.1	-649.1	-583.9	-559.4	-548.2	-586.4	-611.0	-626.3
Net Exports (Billions)	-568.3	-508.2	-524.9	-457.3	-463.1	-465.3	-440.3	-387.7
3-Month Treasury Bill Rate (%)	0.09	0.06	0.04	0.35	1.98	3.40	3.51	3.50
10-Year Treasury Note Yield (%)	1.80	2.35	2.61	3.21	3.70	4.16	4.16	4.12
Bond Index of 20 G.O. Munis. (%)	3.73	4.26	4.38	4.90	5.22	5.58	5.60	5.56
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.24	4.89	5.58	6.16	6.15	6.10

Table A1.2
U.S. Economic Forecast Summary
Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,831.7	15,994.3	16,104.4	16,223.5	16,347.7	16,467.1	16,581.7	16,691.5
% Ch , Annual Rate	-2.1	4.2	2.8	3.0	3.1	3.0	2.8	2.7
Real Consumption	10,844.3	10,910.4	10,968.3	11,047.0	11,130.3	11,208.0	11,279.8	11,346.0
% Ch , Annual Rate	1.2	2.5	2.1	2.9	3.1	2.8	2.6	2.4
Real Nonresidential Fixed Investment	2,051.5	2,093.3	2,111.9	2,134.5	2,171.1	2,200.7	2,232.8	2,269.8
% Ch , Annual Rate	1.6	8.4	3.6	4.4	7.0	5.6	6.0	6.8
Real Residential Fixed Investment	485.3	493.8	513.9	521.6	539.8	560.0	584.1	608.5
% Ch , Annual Rate	-5.3	7.2	17.3	6.2	14.7	15.8	18.4	17.8
Real Personal Income	13,392.4	13,516.7	13,581.2	13,666.4	13,822.8	13,922.7	14,026.4	14,148.4
% Ch , Annual Rate	3.5	3.8	1.9	2.5	4.7	2.9	3.0	3.5
Real Per Capita Income (\$/Person)	42,102	42,411	42,531	42,715	43,121	43,349	43,588	43,882
% Ch , Annual Rate	2.9	3.0	1.1	1.7	3.9	2.1	2.2	2.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.082	1.088	1.092	1.094	1.097	1.100	1.104	1.108
% Ch , Annual Rate	1.4	2.3	1.6	0.7	1.0	1.3	1.4	1.2
U.S. Consumer Price Index (1982-84=1.0)	2.352	2.370	2.381	2.386	2.391	2.400	2.408	2.415
% Ch , Annual Rate	1.9	3.0	1.8	0.8	0.9	1.5	1.4	1.1
Employment Cost Index (Dec. 2005=1.0)	1.193	1.202	1.208	1.214	1.221	1.228	1.236	1.244
% Ch , Annual Rate	0.7	3.1	2.0	2.0	2.3	2.4	2.6	2.7
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	17,044.0	17,311.3	17,480.5	17,689.6	17,916.4	18,128.7	18,337.9	18,538.4
% Ch , Annual Rate	-0.8	6.4	4.0	4.9	5.2	4.8	4.7	4.4
Personal Income	14,484.7	14,703.2	14,832.1	14,952.5	15,161.7	15,320.7	15,487.3	15,670.0
% Ch , Annual Rate	4.9	6.2	3.6	3.3	5.7	4.3	4.4	4.8
Employment (Millions)								
U.S. Civilian Labor Force	155.8	155.6	156.1	156.7	157.3	157.9	158.6	159.1
Total U.S. Employment	145.4	145.9	146.5	147.2	148.0	148.7	149.5	150.1
Unemployment Rate (%)	6.67	6.23	6.17	6.04	5.89	5.82	5.74	5.70
Nonfarm Payroll Employment	137.75	138.52	139.14	139.78	140.33	141.08	141.69	142.23
% Ch , Annual Rate	1.5	2.2	1.8	1.9	1.6	2.2	1.7	1.5
Manufacturing	12.08	12.11	12.18	12.22	12.27	12.36	12.40	12.44
% Ch , Annual Rate	1.3	1.2	2.3	1.3	1.5	3.1	1.4	1.2
Durable Manufacturing	7.60	7.64	7.71	7.75	7.80	7.90	7.95	8.00
% Ch , Annual Rate	1.2	2.4	3.6	2.1	2.7	4.9	2.8	2.3
Nondurable Manufacturing	4.48	4.47	4.47	4.47	4.46	4.46	4.45	4.44
% Ch , Annual Rate	1.4	-0.9	0.2	-0.1	-0.6	-0.1	-1.2	-0.8
Construction	5.95	6.01	6.06	6.13	6.22	6.32	6.45	6.59
% Ch , Annual Rate	4.8	4.2	3.1	5.1	5.8	6.6	8.4	9.4
Service-Providing	118.84	119.50	119.98	120.50	120.91	121.46	121.90	122.26
% Ch , Annual Rate	1.3	2.2	1.6	1.7	1.4	1.9	1.5	1.2
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	98.7	103.0	97.7	92.0	91.3	91.0	90.5	90.1
Personal Saving/Disposable Income (%)	4.9	5.3	5.2	4.9	5.1	5.0	5.1	5.3
Auto Sales (Millions)	7.3	7.8	7.9	7.8	7.9	7.9	8.0	8.0
% Ch , Annual Rate	-16.8	30.5	5.9	-1.7	2.1	2.2	5.2	0.8
Housing Starts (Millions)	0.925	0.997	1.058	1.111	1.172	1.236	1.301	1.366
% Ch , Annual Rate	-33.7	35.1	26.5	21.6	24.0	23.5	22.7	21.8
Federal Budget Surplus (Billions)	-560.1	-588.6	-609.4	-577.5	-599.2	-572.1	-549.7	-516.7
Net Exports (Billions)	-538.0	-551.8	-528.6	-481.1	-464.9	-453.6	-454.1	-456.5
3-Month Treasury Bill Rate (%)	0.05	0.03	0.03	0.05	0.08	0.15	0.38	0.80
10-Year Treasury Note Yield (%)	2.76	2.62	2.47	2.58	2.93	3.22	3.30	3.39
Bond Index of 20 G.O. Munis. (%)	4.49	4.33	4.28	4.41	4.67	4.90	4.98	5.04
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	4.24	4.55	4.90	4.98	5.11

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	16,806.4	16,930.2	17,066.7	17,201.1	17,303.6	17,416.6	17,533.5	17,654.8
% Ch , Annual Rate	2.8	3.0	3.3	3.2	2.4	2.6	2.7	2.8
Real Consumption	11,428.5	11,505.0	11,581.8	11,662.7	11,726.8	11,803.1	11,883.2	11,964.8
% Ch , Annual Rate	2.9	2.7	2.7	2.8	2.2	2.6	2.7	2.8
Real Nonresidential Fixed Investment	2,295.5	2,332.9	2,372.2	2,412.4	2,450.0	2,488.7	2,525.9	2,561.3
% Ch , Annual Rate	4.6	6.7	6.9	7.0	6.4	6.5	6.1	5.7
Real Residential Fixed Investment	631.4	654.7	675.6	688.8	697.4	695.8	693.3	692.2
% Ch , Annual Rate	15.9	15.5	13.4	8.1	5.1	-0.9	-1.4	-0.6
Real Personal Income	14,318.4	14,452.4	14,586.2	14,730.1	14,896.4	15,034.3	15,157.7	15,278.7
% Ch , Annual Rate	4.9	3.8	3.8	4.0	4.6	3.8	3.3	3.2
Real Per Capita Income (\$/Person)	44,324	44,653	44,979	45,336	45,760	46,094	46,384	46,664
% Ch , Annual Rate	4.1	3.0	3.0	3.2	3.8	3.0	2.5	2.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.112	1.116	1.120	1.125	1.129	1.134	1.138	1.143
% Ch , Annual Rate	1.5	1.4	1.5	1.7	1.6	1.6	1.6	1.6
U.S. Consumer Price Index (1982-84=1.0)	2.425	2.434	2.444	2.456	2.466	2.478	2.490	2.501
% Ch , Annual Rate	1.7	1.5	1.7	2.0	1.7	1.9	1.9	1.9
Employment Cost Index (Dec. 2005=1.0)	1.252	1.261	1.269	1.278	1.287	1.296	1.305	1.314
% Ch , Annual Rate	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	18,759.4	18,984.3	19,234.0	19,488.7	19,709.3	19,934.2	20,163.5	20,399.6
% Ch , Annual Rate	4.9	4.9	5.4	5.4	4.6	4.6	4.7	4.8
Personal Income	15,918.5	16,125.3	16,337.0	16,568.7	16,822.3	17,046.8	17,256.7	17,465.2
% Ch , Annual Rate	6.5	5.3	5.4	5.8	6.3	5.4	5.0	4.9
Employment (Millions)								
U.S. Civilian Labor Force	159.7	160.1	160.7	161.3	161.7	162.2	162.6	163.0
Total U.S. Employment	150.7	151.2	151.8	152.5	152.9	153.4	153.8	154.3
Unemployment Rate (%)	5.65	5.61	5.54	5.47	5.44	5.42	5.39	5.36
Nonfarm Payroll Employment	142.80	143.36	143.98	144.60	145.04	145.43	145.80	146.16
% Ch , Annual Rate	1.6	1.6	1.7	1.7	1.2	1.1	1.0	1.0
Manufacturing	12.45	12.45	12.47	12.47	12.49	12.48	12.47	12.45
% Ch , Annual Rate	0.5	-0.1	0.5	0.2	0.5	-0.2	-0.3	-0.8
Durable Manufacturing	8.03	8.03	8.06	8.08	8.09	8.09	8.09	8.07
% Ch , Annual Rate	1.3	0.3	1.4	0.9	0.8	-0.1	0.0	-0.9
Nondurable Manufacturing	4.43	4.42	4.41	4.39	4.40	4.39	4.38	4.37
% Ch , Annual Rate	-0.8	-0.9	-1.2	-1.0	0.0	-0.4	-0.8	-0.6
Construction	6.73	6.90	7.07	7.25	7.40	7.54	7.65	7.74
% Ch , Annual Rate	8.9	9.9	10.6	10.1	9.0	7.4	6.0	5.1
Service-Providing	122.67	123.07	123.49	123.92	124.17	124.44	124.70	124.98
% Ch , Annual Rate	1.3	1.3	1.4	1.4	0.8	0.9	0.8	0.9
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	89.6	89.0	88.6	88.4	88.0	87.7	87.5	87.6
Personal Saving/Disposable Income (%)	5.7	5.9	6.2	6.5	6.9	7.2	7.4	7.6
Auto Sales (Millions)	8.1	8.2	8.2	8.2	8.3	8.3	8.4	8.4
% Ch , Annual Rate	3.5	3.6	1.4	1.0	2.5	2.3	4.1	-0.2
Housing Starts (Millions)	1.428	1.492	1.555	1.586	1.597	1.580	1.565	1.562
% Ch , Annual Rate	19.2	19.2	18.2	8.1	2.8	-4.1	-3.8	-0.8
Federal Budget Surplus (Billions)	-547.2	-547.3	-540.6	-557.7	-559.2	-582.9	-591.5	-611.8
Net Exports (Billions)	-458.7	-465.2	-465.1	-463.5	-468.0	-468.0	-464.4	-460.9
3-Month Treasury Bill Rate (%)	1.27	1.75	2.21	2.68	3.13	3.46	3.50	3.51
10-Year Treasury Note Yield (%)	3.54	3.63	3.74	3.88	4.11	4.17	4.17	4.18
Bond Index of 20 G.O. Munis. (%)	5.09	5.16	5.25	5.38	5.54	5.59	5.60	5.61
30-Year Fixed Mortgage Rate (%)	5.30	5.48	5.65	5.88	6.13	6.18	6.18	6.18

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	17,759.4	17,874.3	17,990.8	18,101.6	18,210.2	18,322.4	18,436.6	18,550.1
% Ch , Annual Rate	2.4	2.6	2.6	2.5	2.4	2.5	2.5	2.5
Real Consumption	12,029.4	12,105.7	12,178.3	12,247.8	12,319.9	12,394.9	12,467.2	12,542.6
% Ch , Annual Rate	2.2	2.6	2.4	2.3	2.4	2.5	2.4	2.4
Real Nonresidential Fixed Investment	2,595.6	2,625.3	2,654.4	2,682.5	2,704.3	2,724.4	2,743.0	2,760.9
% Ch , Annual Rate	5.5	4.7	4.5	4.3	3.3	3.0	2.8	2.6
Real Residential Fixed Investment	692.3	693.9	698.3	700.8	702.4	704.1	709.3	713.4
% Ch , Annual Rate	0.0	0.9	2.6	1.5	0.9	1.0	3.0	2.4
Real Personal Income	15,412.3	15,529.4	15,641.6	15,755.3	15,897.2	16,015.4	16,127.5	16,236.3
% Ch , Annual Rate	3.5	3.1	2.9	2.9	3.7	3.0	2.8	2.7
Real Per Capita Income (\$/Person)	46,982	47,249	47,499	47,753	48,092	48,357	48,603	48,838
% Ch , Annual Rate	2.8	2.3	2.1	2.2	2.9	2.2	2.1	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.148	1.152	1.157	1.162	1.166	1.170	1.175	1.179
% Ch , Annual Rate	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5
U.S. Consumer Price Index (1982-84=1.0)	2.513	2.524	2.535	2.546	2.557	2.567	2.578	2.588
% Ch , Annual Rate	1.9	1.7	1.8	1.8	1.7	1.6	1.6	1.7
Employment Cost Index (Dec. 2005=1.0)	1.323	1.332	1.342	1.352	1.362	1.371	1.381	1.391
% Ch , Annual Rate	2.8	2.9	3.0	2.9	2.9	2.9	2.9	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,621.0	20,846.0	21,075.5	21,298.4	21,528.4	21,755.9	21,987.4	22,219.5
% Ch , Annual Rate	4.4	4.4	4.5	4.3	4.4	4.3	4.3	4.3
Personal Income	17,688.4	17,892.7	18,095.6	18,299.9	18,536.0	18,745.0	18,948.4	19,149.6
% Ch , Annual Rate	5.2	4.7	4.6	4.6	5.3	4.6	4.4	4.3
Employment (Millions)								
U.S. Civilian Labor Force	163.3	163.7	164.0	164.3	164.5	164.8	165.0	165.2
Total U.S. Employment	154.6	154.9	155.3	155.6	155.8	156.0	156.3	156.4
Unemployment Rate (%)	5.35	5.33	5.32	5.31	5.31	5.31	5.30	5.30
Nonfarm Payroll Employment	146.45	146.76	147.04	147.29	147.50	147.77	148.02	148.25
% Ch, Annual Rate	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.6
Manufacturing	12.43	12.43	12.43	12.44	12.42	12.40	12.37	12.34
% Ch, Annual Rate	-0.7	0.0	0.1	0.3	-0.7	-0.6	-1.0	-1.0
Durable Manufacturing	8.06	8.06	8.07	8.08	8.07	8.06	8.04	8.01
% Ch, Annual Rate	-0.7	0.3	0.5	0.5	-0.7	-0.6	-1.0	-1.1
Nondurable Manufacturing	4.37	4.36	4.36	4.36	4.35	4.34	4.33	4.32
% Ch, Annual Rate	-0.5	-0.4	-0.4	-0.1	-0.7	-0.7	-1.0	-0.8
Construction	7.82	7.88	7.94	7.99	8.04	8.08	8.13	8.18
% Ch, Annual Rate	4.0	3.2	2.8	2.6	2.4	2.2	2.4	2.4
Service-Providing	125.21	125.45	125.67	125.85	126.04	126.28	126.52	126.73
% Ch, Annual Rate	0.7	0.8	0.7	0.6	0.6	0.8	0.8	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	87.6	87.4	87.2	87.2	87.1	87.0	86.9	86.9
Personal Saving/Disposable Income (%)	7.7	7.8	7.9	8.1	8.3	8.4	8.4	8.5
Auto Sales (Millions)	8.4	8.4	8.4	8.4	8.5	8.5	8.5	8.5
% Ch, Annual Rate	-0.6	-0.3	-1.3	-0.5	4.6	0.5	2.9	-0.3
Housing Starts (Millions)	1.566	1.566	1.571	1.571	1.570	1.570	1.577	1.588
% Ch, Annual Rate	0.9	0.1	1.1	0.0	-0.1	-0.1	1.9	2.9
Federal Budget Surplus (Billions)	-594.5	-611.8	-614.5	-623.3	-632.6	-634.5	-621.1	-617.0
Net Exports (Billions)	-454.4	-448.8	-435.6	-422.2	-408.1	-396.8	-379.9	-366.1
3-Month Treasury Bill Rate (%)	3.51	3.52	3.52	3.51	3.51	3.51	3.50	3.50
10-Year Treasury Note Yield (%)	4.17	4.17	4.16	4.15	4.14	4.12	4.11	4.10
Bond Index of 20 G.O. Munis. (%)	5.61	5.61	5.60	5.59	5.58	5.57	5.55	5.54
30-Year Fixed Mortgage Rate (%)	6.17	6.15	6.14	6.13	6.12	6.11	6.10	6.09

Table A1.3
Washington Economic Forecast Summary
Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	299.417	305.252	315.109	326.326	340.327	354.982	368.429	382.203
% Ch	2.9	1.9	3.2	3.6	4.3	4.3	3.8	3.7
Real Wage and Salary Disb.	154.234	158.198	164.265	169.915	176.278	182.445	189.051	196.157
% Ch	3.6	2.6	3.8	3.4	3.7	3.5	3.6	3.8
Real Nonwage Income	145.183	147.054	150.844	156.411	164.049	172.538	179.377	186.046
% Ch	2.1	1.3	2.6	3.7	4.9	5.2	4.0	3.7
Real Per Capita Income (\$/Person)	43,362	43,725	44,642	45,663	47,037	48,484	49,730	50,962
% Ch	1.8	0.8	2.1	2.3	3.0	3.1	2.6	2.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.073	1.089	1.102	1.118	1.136	1.155	1.173
% Ch	1.8	1.2	1.5	1.2	1.4	1.6	1.6	1.6
Seattle Cons. Price Index (1982-84=1.0)	2.386	2.416	2.470	2.515	2.558	2.608	2.658	2.707
% Ch	2.5	1.2	2.3	1.8	1.7	1.9	1.9	1.8
Average Nonfarm Annual Wage	53,696	54,494	56,045	57,555	59,512	61,746	64,239	66,910
% Ch	3.8	1.5	2.8	2.7	3.4	3.8	4.0	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.14	24.34	25.08	25.54	26.13	26.76	27.43	28.13
% Ch	0.7	0.8	3.0	1.8	2.3	2.4	2.5	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	317.575	327.639	343.124	359.705	380.534	403.343	425.394	448.224
% Ch	4.8	3.2	4.7	4.8	5.8	6.0	5.5	5.4
Disposable Personal Income	283.190	289.208	302.559	315.622	333.544	353.816	373.326	393.394
% Ch	4.5	2.1	4.6	4.3	5.7	6.1	5.5	5.4
Per Capita Income (\$/Person)	45,991	46,932	48,610	50,333	52,593	55,088	57,418	59,764
% Ch	3.6	2.0	3.6	3.5	4.5	4.7	4.2	4.1
Employment (Thousands)								
Washington Civilian Labor Force	3,483.8	3,461.4	3,475.2	3,533.6	3,597.0	3,653.5	3,705.3	3,755.2
Total Washington Employment	3,202.1	3,219.0	3,270.7	3,343.9	3,408.3	3,463.9	3,514.2	3,561.6
Unemployment Rate (%)	8.08	7.00	5.89	5.37	5.25	5.19	5.16	5.16
Nonfarm Payroll Employment	2,921.6	2,990.3	3,068.2	3,131.0	3,189.1	3,234.9	3,276.0	3,316.6
% Ch	1.7	2.4	2.6	2.0	1.9	1.4	1.3	1.2
Manufacturing	280.3	286.6	288.2	291.5	294.1	295.2	296.5	297.7
% Ch	4.3	2.3	0.6	1.1	0.9	0.4	0.4	0.4
Durable Manufacturing	204.5	209.6	210.4	213.2	215.5	215.9	216.6	217.3
% Ch	5.8	2.5	0.4	1.3	1.1	0.2	0.3	0.3
Aerospace	94.2	96.3	93.9	91.5	89.1	86.9	85.0	83.2
% Ch	8.8	2.2	-2.5	-2.6	-2.5	-2.5	-2.2	-2.0
Nondurable Manufacturing	75.7	77.0	77.9	78.3	78.7	79.3	79.9	80.4
% Ch	0.6	1.7	1.2	0.6	0.4	0.8	0.7	0.7
Construction	139.0	148.8	159.5	168.4	178.8	187.8	196.0	202.0
% Ch	1.9	7.0	7.2	5.5	6.2	5.0	4.4	3.1
Service-Providing	2,496.4	2,548.8	2,614.0	2,664.6	2,709.6	2,745.0	2,776.6	2,809.9
% Ch	1.4	2.1	2.6	1.9	1.7	1.3	1.2	1.2
Software Publishers	52.4	53.9	55.4	55.1	55.8	56.5	57.2	57.9
% Ch	1.4	3.0	2.7	-0.5	1.2	1.2	1.2	1.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	28.118	32.962	34.059	36.093	41.062	42.483	43.045	44.236
% Ch	34.8	17.2	3.3	6.0	13.8	3.5	1.3	2.8
Single-Family	16.508	18.396	17.524	21.020	25.956	27.491	27.421	27.882
% Ch	25.5	11.4	-4.7	19.9	23.5	5.9	-0.3	1.7
Multi-Family	11.610	14.566	16.535	15.073	15.106	14.992	15.624	16.354
% Ch	50.7	25.5	13.5	-8.8	0.2	-0.8	4.2	4.7
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.24	4.89	5.58	6.16	6.15	6.10

Table A1.4
Washington Economic Forecast Summary
Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	312.677	313.295	316.929	317.535	321.817	324.815	328.438	330.237
% Ch, Annual Rate	6.1	0.8	4.7	0.8	5.5	3.8	4.5	2.2
Real Wage and Salary Disb.	163.865	162.767	165.217	165.209	167.312	169.122	171.495	171.731
% Ch, Annual Rate	9.4	-2.7	6.2	0.0	5.2	4.4	5.7	0.6
Real Nonwage Income	148.812	150.528	151.711	152.326	154.505	155.693	156.942	158.506
% Ch, Annual Rate	2.7	4.7	3.2	1.6	5.8	3.1	3.2	4.0
Real Per Capita Income (\$/Person)	44,485	44,451	44,844	44,788	45,247	45,524	45,886	45,994
% Ch, Annual Rate	5.0	-0.3	3.6	-0.5	4.2	2.5	3.2	0.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.082	1.088	1.092	1.094	1.097	1.100	1.104	1.108
% Ch, Annual Rate	1.4	2.3	1.6	0.7	1.0	1.3	1.4	1.2
Seattle Cons. Price Index (1982-84=1.0)	2.440	2.466	2.483	2.491	2.499	2.510	2.520	2.529
% Ch, Annual Rate	2.6	4.4	2.8	1.3	1.4	1.7	1.6	1.5
Average Nonfarm Annual Wage	55,960	55,644	56,359	56,215	56,808	57,298	58,053	58,060
% Ch, Annual Rate	7.5	-2.2	5.2	-1.0	4.3	3.5	5.4	0.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.81	25.15	25.13	25.22	25.34	25.47	25.60	25.75
% Ch, Annual Rate	0.3	5.5	-0.3	1.5	1.9	2.0	2.2	2.3
Current Dollar Income (Billions of Dollars)								
Personal Income	338.170	340.788	346.120	347.419	352.989	357.431	362.646	365.753
% Ch, Annual Rate	7.6	3.1	6.4	1.5	6.6	5.1	6.0	3.5
Disposable Personal Income	298.205	300.836	305.390	305.805	310.163	313.600	318.170	320.554
% Ch, Annual Rate	7.5	3.6	6.2	0.5	5.8	4.5	6.0	3.0
Per Capita Income (\$/Person)	48,112	48,352	48,974	49,004	49,630	50,095	50,666	50,941
% Ch, Annual Rate	6.4	2.0	5.2	0.2	5.2	3.8	4.6	2.2
Employment (Thousands)								
Washington Civilian Labor Force	3,459.0	3,475.4	3,475.5	3,491.0	3,508.0	3,524.7	3,543.1	3,558.6
Total Washington Employment	3,238.8	3,267.8	3,279.2	3,296.9	3,317.4	3,334.7	3,354.0	3,369.5
Unemployment Rate (%)	6.37	5.97	5.65	5.56	5.43	5.39	5.34	5.31
Nonfarm Payroll Employment	3,043.8	3,058.2	3,078.7	3,092.0	3,106.4	3,124.6	3,139.6	3,153.4
% Ch, Annual Rate	3.4	1.9	2.7	1.7	1.9	2.4	1.9	1.8
Manufacturing	287.4	287.9	289.0	288.7	289.6	291.3	292.1	293.0
% Ch, Annual Rate	1.1	0.7	1.5	-0.4	1.2	2.4	1.1	1.3
Durable Manufacturing	209.3	210.1	211.2	210.8	211.5	212.9	213.7	214.5
% Ch, Annual Rate	0.0	1.5	2.2	-0.8	1.4	2.7	1.6	1.5
Aerospace	93.9	94.2	94.5	92.9	92.3	91.7	91.2	90.6
% Ch, Annual Rate	-5.0	1.0	1.5	-6.6	-2.5	-2.5	-2.5	-2.5
Nondurable Manufacturing	78.1	77.8	77.7	77.9	78.1	78.4	78.4	78.5
% Ch, Annual Rate	4.1	-1.5	-0.5	1.0	0.9	1.6	0.0	0.6
Construction	155.9	158.6	161.1	162.4	164.9	167.2	169.5	171.9
% Ch, Annual Rate	11.0	7.1	6.5	3.3	6.1	5.8	5.6	5.9
Service-Providing	2,594.1	2,605.3	2,622.2	2,634.3	2,645.3	2,659.5	2,671.5	2,681.9
% Ch, Annual Rate	3.2	1.7	2.6	1.9	1.7	2.2	1.8	1.6
Software Publishers	55.3	55.5	56.0	54.9	54.9	55.1	55.2	55.3
% Ch, Annual Rate	3.4	1.9	3.0	-7.5	0.5	1.0	1.0	0.8
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	31.174	37.212	33.899	33.953	34.472	35.538	36.501	37.862
% Ch, Annual Rate	-45.4	103.0	-31.1	0.6	6.3	13.0	11.3	15.8
Single-Family	17.051	16.647	18.347	18.052	19.208	20.333	21.590	22.949
% Ch, Annual Rate	-24.3	-9.1	47.5	-6.3	28.2	25.6	27.1	27.7
Multi-Family	14.123	20.565	15.552	15.901	15.265	15.205	14.911	14.913
% Ch, Annual Rate	-62.0	349.5	-67.3	9.3	-15.1	-1.5	-7.5	0.0
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	4.24	4.55	4.90	4.98	5.11

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	334.903	338.708	342.471	345.227	349.803	353.658	356.955	359.514
% Ch, Annual Rate	5.8	4.6	4.5	3.3	5.4	4.5	3.8	2.9
Real Wage and Salary Disb.	173.734	175.654	177.555	178.169	180.143	181.890	183.417	184.329
% Ch, Annual Rate	4.7	4.5	4.4	1.4	4.5	3.9	3.4	2.0
Real Nonwage Income	161.169	163.054	164.915	167.058	169.660	171.768	173.538	175.185
% Ch, Annual Rate	6.9	4.8	4.6	5.3	6.4	5.1	4.2	3.8
Real Per Capita Income (\$/Person)	46,500	46,885	47,262	47,500	47,988	48,375	48,683	48,889
% Ch, Annual Rate	4.5	3.4	3.3	2.0	4.2	3.3	2.6	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.112	1.116	1.120	1.125	1.129	1.134	1.138	1.143
% Ch, Annual Rate	1.5	1.4	1.5	1.7	1.6	1.6	1.6	1.6
Seattle Cons. Price Index (1982-84=1.0)	2.541	2.552	2.563	2.577	2.589	2.601	2.614	2.627
% Ch, Annual Rate	1.8	1.7	1.9	2.1	1.9	2.0	2.0	2.0
Average Nonfarm Annual Wage	58,677	59,299	59,928	60,143	60,854	61,519	62,117	62,493
% Ch, Annual Rate	4.3	4.3	4.3	1.4	4.8	4.4	3.9	2.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.90	26.05	26.20	26.36	26.52	26.68	26.84	27.00
% Ch, Annual Rate	2.4	2.3	2.4	2.5	2.4	2.4	2.4	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	372.329	377.914	383.577	388.316	395.026	400.999	406.385	410.963
% Ch, Annual Rate	7.4	6.1	6.1	5.0	7.1	6.2	5.5	4.6
Disposable Personal Income	326.143	331.039	336.271	340.722	345.993	351.548	356.667	361.056
% Ch, Annual Rate	7.2	6.1	6.5	5.4	6.3	6.6	6.0	5.0
Per Capita Income (\$/Person)	51,696	52,312	52,935	53,429	54,192	54,850	55,425	55,885
% Ch, Annual Rate	6.1	4.8	4.9	3.8	5.8	5.0	4.3	3.4
Employment (Thousands)								
Washington Civilian Labor Force	3,574.8	3,589.0	3,604.4	3,619.8	3,633.3	3,647.2	3,660.1	3,673.3
Total Washington Employment	3,385.9	3,399.8	3,415.8	3,431.8	3,444.5	3,457.7	3,470.1	3,483.2
Unemployment Rate (%)	5.29	5.27	5.23	5.20	5.20	5.20	5.19	5.18
Nonfarm Payroll Employment	3,168.1	3,182.2	3,196.2	3,210.0	3,219.8	3,230.0	3,239.7	3,250.1
% Ch, Annual Rate	1.9	1.8	1.8	1.7	1.2	1.3	1.2	1.3
Manufacturing	293.6	293.9	294.3	294.6	295.1	295.2	295.3	295.3
% Ch, Annual Rate	0.8	0.4	0.6	0.4	0.7	0.2	0.1	0.0
Durable Manufacturing	215.0	215.2	215.7	215.9	216.1	216.0	215.9	215.8
% Ch, Annual Rate	0.9	0.4	0.8	0.4	0.3	-0.2	-0.1	-0.3
Aerospace	90.0	89.4	88.9	88.3	87.7	87.2	86.6	86.1
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Nondurable Manufacturing	78.6	78.7	78.7	78.7	79.0	79.3	79.4	79.5
% Ch, Annual Rate	0.6	0.3	-0.1	0.2	1.7	1.2	0.5	0.7
Construction	174.8	177.5	180.1	182.6	184.5	186.8	188.8	191.0
% Ch, Annual Rate	6.9	6.5	5.9	5.7	4.3	5.0	4.3	4.7
Service-Providing	2,693.1	2,704.1	2,715.1	2,726.0	2,733.3	2,741.1	2,748.7	2,756.9
% Ch, Annual Rate	1.7	1.6	1.6	1.6	1.1	1.1	1.1	1.2
Software Publishers	55.6	55.8	55.9	56.1	56.3	56.4	56.6	56.8
% Ch, Annual Rate	1.6	1.5	1.3	1.2	1.3	1.2	1.1	1.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	39.261	40.655	41.916	42.418	42.607	42.304	42.373	42.646
% Ch, Annual Rate	15.6	15.0	13.0	4.9	1.8	-2.8	0.6	2.6
Single-Family	24.245	25.409	26.671	27.499	27.762	27.527	27.362	27.314
% Ch, Annual Rate	24.6	20.6	21.4	13.0	3.9	-3.3	-2.4	-0.7
Multi-Family	15.016	15.246	15.246	14.918	14.845	14.778	15.011	15.333
% Ch, Annual Rate	2.8	6.3	0.0	-8.3	-2.0	-1.8	6.5	8.9
30-Year Fixed Mortgage Rate (%)	5.30	5.48	5.65	5.88	6.13	6.18	6.18	6.18

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	363.558	367.079	370.207	372.871	377.219	380.878	384.041	386.674
% Ch, Annual Rate	4.6	3.9	3.5	2.9	4.7	3.9	3.4	2.8
Real Wage and Salary Disb.	186.476	188.418	190.069	191.242	193.530	195.553	197.191	198.354
% Ch, Annual Rate	4.7	4.2	3.6	2.5	4.9	4.2	3.4	2.4
Real Nonwage Income	177.082	178.662	180.138	181.629	183.689	185.325	186.849	188.320
% Ch, Annual Rate	4.4	3.6	3.3	3.4	4.6	3.6	3.3	3.2
Real Per Capita Income (\$/Person)	49,294	49,624	49,897	50,105	50,534	50,867	51,129	51,316
% Ch, Annual Rate	3.4	2.7	2.2	1.7	3.5	2.7	2.1	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.148	1.152	1.157	1.162	1.166	1.170	1.175	1.179
% Ch, Annual Rate	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5
Seattle Cons. Price Index (1982-84=1.0)	2.640	2.652	2.665	2.677	2.689	2.701	2.713	2.725
% Ch, Annual Rate	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8
Average Nonfarm Annual Wage	63,265	63,983	64,615	65,091	65,918	66,667	67,290	67,763
% Ch, Annual Rate	5.0	4.6	4.0	3.0	5.2	4.6	3.8	2.8
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.17	27.34	27.52	27.69	27.87	28.04	28.22	28.39
% Ch, Annual Rate	2.5	2.6	2.6	2.6	2.5	2.5	2.5	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	417.248	422.944	428.290	433.094	439.835	445.794	451.214	456.055
% Ch, Annual Rate	6.3	5.6	5.2	4.6	6.4	5.5	5.0	4.4
Disposable Personal Income	365.883	371.107	375.981	380.334	386.099	391.282	395.974	400.220
% Ch, Annual Rate	5.5	5.8	5.4	4.7	6.2	5.5	4.9	4.4
Per Capita Income (\$/Person)	56,573	57,176	57,726	58,197	58,923	59,536	60,072	60,524
% Ch, Annual Rate	5.0	4.3	3.9	3.3	5.1	4.2	3.6	3.0
Employment (Thousands)								
Washington Civilian Labor Force	3,685.8	3,698.9	3,711.9	3,724.5	3,737.0	3,749.1	3,761.6	3,773.2
Total Washington Employment	3,495.3	3,508.0	3,520.7	3,532.7	3,544.5	3,555.9	3,567.6	3,578.4
Unemployment Rate (%)	5.17	5.16	5.15	5.15	5.15	5.15	5.16	5.16
Nonfarm Payroll Employment	3,260.2	3,271.0	3,281.5	3,291.4	3,301.1	3,311.7	3,321.9	3,331.6
% Ch, Annual Rate	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2
Manufacturing	295.5	296.2	296.7	297.4	297.6	297.8	297.7	297.7
% Ch, Annual Rate	0.3	0.9	0.8	0.9	0.2	0.3	-0.1	0.0
Durable Manufacturing	215.9	216.4	216.8	217.3	217.3	217.4	217.3	217.2
% Ch, Annual Rate	0.2	0.9	0.8	0.8	0.1	0.1	-0.1	-0.1
Aerospace	85.6	85.2	84.7	84.3	83.9	83.5	83.0	82.6
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Nondurable Manufacturing	79.6	79.8	79.9	80.2	80.2	80.4	80.4	80.5
% Ch, Annual Rate	0.5	0.8	0.7	1.2	0.4	0.7	0.2	0.4
Construction	193.1	195.1	197.0	198.7	200.3	201.6	202.6	203.5
% Ch, Annual Rate	4.6	4.2	3.9	3.6	3.1	2.6	2.1	1.7
Service-Providing	2,764.7	2,772.8	2,780.8	2,788.3	2,796.3	2,805.4	2,814.5	2,823.3
% Ch, Annual Rate	1.1	1.2	1.2	1.1	1.2	1.3	1.3	1.3
Software Publishers	57.0	57.1	57.3	57.5	57.7	57.8	58.0	58.2
% Ch, Annual Rate	1.4	1.2	1.3	1.3	1.3	1.1	1.1	1.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	42,759	42,894	43,148	43,380	43,650	43,945	44,399	44,950
% Ch, Annual Rate	1.1	1.3	2.4	2.2	2.5	2.7	4.2	5.1
Single-Family	27,350	27,374	27,441	27,518	27,619	27,723	27,934	28,253
% Ch, Annual Rate	0.5	0.3	1.0	1.1	1.5	1.5	3.1	4.6
Multi-Family	15,408	15,520	15,707	15,862	16,031	16,222	16,465	16,697
% Ch, Annual Rate	2.0	2.9	4.9	4.0	4.3	4.8	6.1	5.8
30-Year Fixed Mortgage Rate (%)	6.17	6.15	6.14	6.13	6.12	6.11	6.10	6.09

Table A2.1

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	134.10	136.36	138.80	141.33	143.69	145.61	146.88	147.88
% Ch	1.7	1.7	1.8	1.8	1.7	1.3	0.9	0.7
Manufacturing	11.93	12.00	12.15	12.37	12.46	12.47	12.43	12.38
% Ch	1.7	0.7	1.2	1.8	0.8	0.1	-0.3	-0.4
Durable Manufacturing	7.47	7.54	7.68	7.91	8.05	8.09	8.07	8.04
% Ch	2.7	1.0	1.8	3.1	1.7	0.5	-0.2	-0.3
Wood Products	0.34	0.35	0.37	0.40	0.44	0.46	0.46	0.47
% Ch	0.7	3.8	4.7	8.7	9.2	4.2	0.3	2.0
Primary and Fabricated Metals	1.81	1.83	1.86	1.92	1.98	2.01	2.01	2.02
% Ch	4.4	0.9	1.5	3.3	3.4	1.3	0.3	0.2
Computer and Electronic Products	1.09	1.07	1.06	1.07	1.07	1.08	1.09	1.11
% Ch	-1.3	-1.9	-0.8	1.4	0.1	0.2	1.6	1.1
Machinery and Electrical Equipment	1.47	1.48	1.50	1.54	1.57	1.58	1.58	1.58
% Ch	3.5	0.5	1.3	2.8	1.9	0.8	0.0	-0.2
Transportation Equipment	1.46	1.50	1.56	1.62	1.60	1.58	1.54	1.50
% Ch	5.8	3.0	3.8	3.5	-0.9	-1.4	-2.6	-2.3
Other Durables	1.30	1.31	1.34	1.37	1.38	1.39	1.39	1.37
% Ch	0.3	1.2	1.8	2.5	1.1	0.2	-0.1	-0.8
Nondurable Manufacturing	4.46	4.46	4.47	4.45	4.41	4.39	4.36	4.34
% Ch	0.1	0.1	0.2	-0.4	-0.9	-0.6	-0.5	-0.6
Food Manufacturing	1.47	1.47	1.48	1.48	1.48	1.49	1.50	1.50
% Ch	0.7	0.3	0.3	0.1	0.2	0.7	0.3	0.1
Paper and Paper Products	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.36
% Ch	-1.9	-0.3	-1.1	-1.6	-0.5	0.0	-0.1	-0.3
Other Nondurables	2.61	2.61	2.62	2.60	2.56	2.53	2.50	2.47
% Ch	0.0	0.1	0.3	-0.6	-1.6	-1.5	-1.1	-1.0
Natural Resources and Mining	0.85	0.87	0.91	0.94	0.95	0.98	1.00	1.01
% Ch	7.5	2.4	5.2	2.8	1.7	2.8	2.1	0.3
Construction	5.65	5.83	6.04	6.39	6.99	7.58	7.91	8.10
% Ch	2.1	3.3	3.5	5.9	9.3	8.5	4.3	2.5
Trade, Transportation, and Utilities	25.47	25.86	26.40	26.76	27.05	27.26	27.35	27.36
% Ch	1.6	1.5	2.1	1.4	1.1	0.8	0.3	0.0
Wholesale Trade	5.67	5.75	5.86	5.97	6.10	6.22	6.30	6.36
% Ch	2.2	1.4	2.0	1.8	2.2	1.9	1.3	0.9
Retail Trade	14.84	15.07	15.37	15.47	15.46	15.39	15.30	15.21
% Ch	1.1	1.6	2.0	0.7	-0.1	-0.4	-0.6	-0.5
Trans., Warehousing, and Utilities	4.97	5.04	5.17	5.32	5.49	5.65	5.75	5.78
% Ch	2.3	1.5	2.4	2.9	3.3	2.9	1.8	0.5
Information	2.68	2.68	2.67	2.65	2.69	2.74	2.77	2.83
% Ch	0.1	0.3	-0.6	-0.7	1.7	1.5	1.2	2.2
Publishing Industries	0.74	0.73	0.73	0.71	0.70	0.69	0.69	0.68
% Ch	-1.3	-0.8	-0.8	-2.4	-0.9	-1.2	-1.1	-1.0
Other Information	1.94	1.95	1.94	1.94	1.99	2.04	2.08	2.15
% Ch	0.6	0.8	-0.5	0.0	2.6	2.5	2.0	3.3
Financial Activities	7.78	7.88	7.96	7.98	7.96	7.81	7.67	7.62
% Ch	1.1	1.2	1.0	0.4	-0.4	-1.8	-1.8	-0.6
Professional and Business Services	17.93	18.57	19.19	20.05	20.82	21.34	21.67	22.03
% Ch	3.5	3.5	3.3	4.5	3.8	2.5	1.6	1.6
Education and Health Services	20.70	21.10	21.47	21.85	22.16	22.41	22.58	22.73
% Ch	2.3	2.0	1.7	1.8	1.4	1.1	0.8	0.6
Leisure and Hospitality	13.77	14.24	14.62	14.85	14.97	15.12	15.33	15.46
% Ch	3.2	3.4	2.7	1.5	0.8	1.0	1.4	0.8
Other Services	5.43	5.46	5.50	5.50	5.50	5.52	5.53	5.51
% Ch	1.3	0.6	0.7	-0.1	0.0	0.4	0.2	-0.3
Federal Government	2.82	2.77	2.71	2.68	2.65	2.61	2.57	2.54
% Ch	-1.3	-2.0	-2.0	-1.0	-1.4	-1.4	-1.6	-1.1
State and Local Government	19.10	19.09	19.19	19.32	19.50	19.77	20.07	20.32
% Ch	-0.7	0.0	0.5	0.6	0.9	1.4	1.5	1.2

Table A2.2

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	137.75	138.52	139.14	139.78	140.33	141.08	141.69	142.23
% Ch, Annual Rate	1.5	2.2	1.8	1.9	1.6	2.2	1.7	1.5
Manufacturing	12.08	12.11	12.18	12.22	12.27	12.36	12.40	12.44
% Ch, Annual Rate	1.3	1.2	2.3	1.3	1.5	3.1	1.4	1.2
Durable Manufacturing	7.60	7.64	7.71	7.75	7.80	7.90	7.95	8.00
% Ch, Annual Rate	1.2	2.4	3.6	2.1	2.7	4.9	2.8	2.3
Wood Products	0.36	0.37	0.37	0.38	0.38	0.40	0.41	0.42
% Ch, Annual Rate	5.6	4.8	2.9	7.7	7.8	13.7	12.2	9.8
Primary and Fabricated Metals	1.84	1.85	1.86	1.87	1.88	1.91	1.93	1.95
% Ch, Annual Rate	1.2	1.4	2.0	1.9	3.2	5.4	4.1	4.1
Computer and Electronic Products	1.06	1.06	1.06	1.07	1.07	1.07	1.07	1.08
% Ch, Annual Rate	-1.7	-0.8	0.0	4.2	0.3	2.0	0.8	1.4
Machinery and Electrical Equipment	1.49	1.50	1.50	1.50	1.51	1.54	1.55	1.56
% Ch, Annual Rate	2.2	2.6	-0.3	1.1	3.3	6.1	3.0	2.0
Transportation Equipment	1.52	1.54	1.59	1.60	1.61	1.62	1.62	1.62
% Ch, Annual Rate	1.5	5.6	12.5	2.1	2.5	3.6	0.3	-0.3
Other Durables	1.32	1.33	1.34	1.34	1.35	1.37	1.38	1.38
% Ch, Annual Rate	1.1	2.1	3.5	0.7	2.0	4.5	2.9	1.5
Nondurable Manufacturing	4.48	4.47	4.47	4.47	4.46	4.46	4.45	4.44
% Ch, Annual Rate	1.4	-0.9	0.2	-0.1	-0.6	-0.1	-1.2	-0.8
Food Manufacturing	1.49	1.48	1.47	1.47	1.48	1.48	1.48	1.48
% Ch, Annual Rate	3.1	-3.0	-1.8	0.7	0.7	1.3	-0.3	0.5
Paper and Paper Products	0.38	0.38	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-0.4	-0.7	-2.4	-2.2	-1.7	-0.8	-2.0	-1.0
Other Nondurables	2.61	2.61	2.63	2.62	2.62	2.61	2.60	2.59
% Ch, Annual Rate	0.7	0.3	1.7	-0.2	-1.3	-0.8	-1.6	-1.4
Natural Resources and Mining	0.89	0.90	0.92	0.93	0.94	0.94	0.94	0.94
% Ch, Annual Rate	4.8	5.5	7.6	5.6	2.4	-0.4	-0.3	0.9
Construction	5.95	6.01	6.06	6.13	6.22	6.32	6.45	6.59
% Ch, Annual Rate	4.8	4.2	3.1	5.1	5.8	6.6	8.4	9.4
Trade, Transportation, and Utilities	26.19	26.34	26.48	26.58	26.64	26.71	26.81	26.87
% Ch, Annual Rate	1.5	2.4	2.1	1.6	0.9	1.1	1.4	0.9
Wholesale Trade	5.83	5.86	5.87	5.89	5.92	5.96	5.99	6.02
% Ch, Annual Rate	3.1	2.4	0.2	1.8	1.8	2.5	2.3	1.9
Retail Trade	15.25	15.33	15.43	15.47	15.47	15.47	15.48	15.47
% Ch, Annual Rate	0.7	2.2	2.7	1.1	-0.1	0.0	0.4	-0.4
Trans., Warehousing, and Utilities	5.11	5.15	5.18	5.22	5.26	5.29	5.34	5.38
% Ch, Annual Rate	2.3	2.9	2.4	2.7	3.1	2.8	3.4	3.3
Information	2.66	2.66	2.66	2.69	2.63	2.63	2.66	2.69
% Ch, Annual Rate	-3.0	-0.6	0.6	3.6	-8.3	-0.5	4.9	4.7
Publishing Industries	0.73	0.73	0.72	0.73	0.71	0.71	0.71	0.71
% Ch, Annual Rate	-0.7	-0.9	-2.0	1.2	-6.8	-1.7	-1.6	-1.8
Other Information	1.93	1.93	1.94	1.96	1.92	1.91	1.95	1.98
% Ch, Annual Rate	-3.9	-0.5	1.6	4.4	-8.8	-0.1	7.5	7.1
Financial Activities	7.91	7.93	7.97	8.02	8.01	7.99	7.98	7.97
% Ch, Annual Rate	0.3	1.2	2.2	2.2	-0.4	-1.1	-0.5	-0.3
Professional and Business Services	18.96	19.15	19.22	19.41	19.69	19.96	20.19	20.36
% Ch, Annual Rate	3.3	4.1	1.4	3.9	5.9	5.7	4.6	3.4
Education and Health Services	21.29	21.42	21.52	21.63	21.71	21.88	21.90	21.91
% Ch, Annual Rate	1.2	2.3	1.9	2.2	1.3	3.2	0.3	0.3
Leisure and Hospitality	14.49	14.60	14.68	14.72	14.77	14.82	14.88	14.93
% Ch, Annual Rate	2.3	2.8	2.4	1.1	1.1	1.4	1.6	1.4
Other Services	5.49	5.51	5.51	5.51	5.51	5.50	5.49	5.49
% Ch, Annual Rate	0.9	1.4	0.1	0.0	0.1	-0.9	-0.4	-0.4
Federal Government	2.72	2.71	2.72	2.70	2.69	2.69	2.68	2.67
% Ch, Annual Rate	-2.7	-0.6	0.3	-2.3	-0.9	-0.8	-1.0	-1.4
State and Local Government	19.13	19.18	19.22	19.24	19.26	19.29	19.33	19.38
% Ch, Annual Rate	0.2	1.0	0.9	0.4	0.5	0.7	0.7	1.1

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	142.80	143.36	143.98	144.60	145.04	145.43	145.80	146.16
% Ch, Annual Rate	1.6	1.6	1.7	1.7	1.2	1.1	1.0	1.0
Manufacturing	12.45	12.45	12.47	12.47	12.49	12.48	12.47	12.45
% Ch, Annual Rate	0.5	-0.1	0.5	0.2	0.5	-0.2	-0.3	-0.8
Durable Manufacturing	8.03	8.03	8.06	8.08	8.09	8.09	8.09	8.07
% Ch, Annual Rate	1.3	0.3	1.4	0.9	0.8	-0.1	0.0	-0.9
Wood Products	0.43	0.43	0.44	0.45	0.46	0.46	0.46	0.46
% Ch, Annual Rate	9.1	7.7	7.5	6.0	5.8	2.3	-0.3	-1.6
Primary and Fabricated Metals	1.96	1.98	1.99	2.00	2.01	2.01	2.01	2.01
% Ch, Annual Rate	3.5	2.3	2.9	2.3	1.1	0.3	0.1	-0.3
Computer and Electronic Products	1.08	1.07	1.07	1.07	1.07	1.07	1.08	1.08
% Ch, Annual Rate	-0.3	-2.1	0.4	0.4	0.1	0.0	1.1	0.9
Machinery and Electrical Equipment	1.56	1.56	1.57	1.57	1.58	1.58	1.58	1.58
% Ch, Annual Rate	1.4	0.9	1.5	1.1	1.0	0.5	0.4	-0.5
Transportation Equipment	1.61	1.60	1.60	1.59	1.59	1.58	1.58	1.57
% Ch, Annual Rate	-1.6	-2.6	-1.0	-1.6	-0.6	-1.4	-1.4	-3.2
Other Durables	1.38	1.38	1.39	1.39	1.39	1.39	1.39	1.38
% Ch, Annual Rate	0.4	0.2	0.7	0.1	0.9	-0.5	-0.1	-0.7
Nondurable Manufacturing	4.43	4.42	4.41	4.39	4.40	4.39	4.38	4.37
% Ch, Annual Rate	-0.8	-0.9	-1.2	-1.0	0.0	-0.4	-0.8	-0.6
Food Manufacturing	1.48	1.48	1.48	1.48	1.49	1.49	1.49	1.50
% Ch, Annual Rate	0.3	0.1	-0.4	0.1	1.8	1.3	0.4	0.5
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-0.1	-0.1	-0.2	-0.1	0.5	-0.1	-0.6	-0.4
Other Nondurables	2.58	2.57	2.56	2.55	2.54	2.53	2.52	2.51
% Ch, Annual Rate	-1.6	-1.6	-1.8	-1.7	-1.0	-1.4	-1.6	-1.3
Natural Resources and Mining	0.94	0.95	0.96	0.96	0.97	0.98	0.98	0.99
% Ch, Annual Rate	1.8	2.9	3.7	2.6	3.7	1.8	2.4	2.4
Construction	6.73	6.90	7.07	7.25	7.40	7.54	7.65	7.74
% Ch, Annual Rate	8.9	9.9	10.6	10.1	9.0	7.4	6.0	5.1
Trade, Transportation, and Utilities	26.93	27.01	27.09	27.17	27.21	27.24	27.28	27.30
% Ch, Annual Rate	1.0	1.1	1.2	1.2	0.6	0.5	0.5	0.4
Wholesale Trade	6.05	6.08	6.12	6.16	6.19	6.21	6.23	6.25
% Ch, Annual Rate	1.9	2.6	2.5	2.6	1.8	1.4	1.5	1.3
Retail Trade	15.47	15.45	15.45	15.45	15.42	15.39	15.38	15.36
% Ch, Annual Rate	-0.1	-0.3	0.0	-0.2	-0.8	-0.6	-0.5	-0.5
Trans., Warehousing, and Utilities	5.42	5.47	5.51	5.56	5.60	5.64	5.67	5.69
% Ch, Annual Rate	3.1	3.6	3.4	3.6	3.0	2.3	2.2	2.0
Information	2.68	2.68	2.70	2.71	2.73	2.74	2.74	2.74
% Ch, Annual Rate	-1.2	0.3	3.1	1.7	1.7	1.6	0.7	0.2
Publishing Industries	0.71	0.70	0.70	0.70	0.70	0.70	0.69	0.69
% Ch, Annual Rate	0.1	-0.3	-0.9	-1.2	-1.1	-1.5	-1.5	-1.7
Other Information	1.97	1.98	2.00	2.01	2.03	2.04	2.05	2.05
% Ch, Annual Rate	-1.7	0.5	4.5	2.8	2.7	2.6	1.5	0.9
Financial Activities	7.97	7.97	7.95	7.92	7.89	7.84	7.79	7.73
% Ch, Annual Rate	0.1	0.1	-1.0	-1.5	-1.8	-2.3	-2.8	-2.6
Professional and Business Services	20.54	20.72	20.91	21.11	21.21	21.29	21.38	21.47
% Ch, Annual Rate	3.6	3.5	3.8	3.8	2.0	1.4	1.7	1.8
Education and Health Services	22.01	22.12	22.19	22.30	22.32	22.38	22.43	22.50
% Ch, Annual Rate	1.9	2.0	1.2	2.0	0.3	1.1	0.8	1.3
Leisure and Hospitality	14.97	14.96	14.97	14.98	15.03	15.09	15.16	15.22
% Ch, Annual Rate	1.1	-0.1	0.3	0.3	1.1	1.7	1.8	1.6
Other Services	5.49	5.49	5.50	5.51	5.51	5.51	5.52	5.52
% Ch, Annual Rate	0.0	0.3	0.5	0.7	0.2	0.2	0.3	0.4
Federal Government	2.66	2.65	2.64	2.63	2.62	2.62	2.60	2.59
% Ch, Annual Rate	-1.3	-1.9	-1.4	-1.5	-1.2	-1.3	-1.7	-1.8
State and Local Government	19.42	19.46	19.53	19.58	19.65	19.73	19.81	19.90
% Ch, Annual Rate	0.7	1.0	1.3	1.1	1.5	1.6	1.7	1.7

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	146.45	146.76	147.04	147.29	147.50	147.77	148.02	148.25
% Ch, Annual Rate	0.8	0.8	0.8	0.7	0.6	0.7	0.7	0.6
Manufacturing	12.43	12.43	12.43	12.44	12.42	12.40	12.37	12.34
% Ch, Annual Rate	-0.7	0.0	0.1	0.3	-0.7	-0.6	-1.0	-1.0
Durable Manufacturing	8.06	8.06	8.07	8.08	8.07	8.06	8.04	8.01
% Ch, Annual Rate	-0.7	0.3	0.5	0.5	-0.7	-0.6	-1.0	-1.1
Wood Products	0.45	0.46	0.46	0.46	0.46	0.47	0.47	0.47
% Ch, Annual Rate	-0.8	1.2	2.2	3.0	1.6	1.6	1.8	2.7
Primary and Fabricated Metals	2.01	2.01	2.02	2.02	2.02	2.02	2.02	2.01
% Ch, Annual Rate	0.0	1.0	0.7	0.5	0.0	0.1	-0.4	-0.7
Computer and Electronic Products	1.08	1.09	1.10	1.10	1.10	1.10	1.11	1.11
% Ch, Annual Rate	1.7	2.0	2.4	2.6	0.3	0.1	0.4	0.3
Machinery and Electrical Equipment	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.57
% Ch, Annual Rate	-0.3	0.4	0.1	0.4	-0.4	-0.3	-0.8	-0.9
Transportation Equipment	1.55	1.54	1.54	1.53	1.52	1.51	1.50	1.49
% Ch, Annual Rate	-4.0	-2.7	-1.1	-1.3	-2.9	-2.1	-3.1	-3.1
Other Durables	1.38	1.39	1.39	1.39	1.38	1.38	1.37	1.37
% Ch, Annual Rate	-0.5	0.7	0.3	0.2	-1.1	-1.4	-2.0	-1.8
Nondurable Manufacturing	4.37	4.36	4.36	4.36	4.35	4.34	4.33	4.32
% Ch, Annual Rate	-0.5	-0.4	-0.4	-0.1	-0.7	-0.7	-1.0	-0.8
Food Manufacturing	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
% Ch, Annual Rate	0.0	0.3	0.2	0.8	-0.3	0.2	-0.3	0.0
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.36	0.36
% Ch, Annual Rate	0.0	0.1	0.0	0.2	-0.5	-0.3	-0.7	-0.4
Other Nondurables	2.51	2.50	2.50	2.49	2.49	2.48	2.47	2.46
% Ch, Annual Rate	-0.9	-0.8	-0.9	-0.7	-1.0	-1.2	-1.5	-1.4
Natural Resources and Mining	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00
% Ch, Annual Rate	2.8	1.8	1.4	0.9	0.7	-1.0	-0.4	-0.5
Construction	7.82	7.88	7.94	7.99	8.04	8.08	8.13	8.18
% Ch, Annual Rate	4.0	3.2	2.8	2.6	2.4	2.2	2.4	2.4
Trade, Transportation, and Utilities	27.33	27.35	27.36	27.36	27.36	27.36	27.36	27.35
% Ch, Annual Rate	0.4	0.3	0.1	0.0	0.0	0.0	0.0	-0.2
Wholesale Trade	6.27	6.29	6.31	6.33	6.34	6.35	6.37	6.38
% Ch, Annual Rate	1.4	1.0	1.2	1.0	1.0	0.8	0.8	0.6
Retail Trade	15.33	15.31	15.29	15.26	15.24	15.22	15.21	15.19
% Ch, Annual Rate	-0.7	-0.6	-0.5	-0.6	-0.7	-0.4	-0.4	-0.6
Trans., Warehousing, and Utilities	5.73	5.75	5.76	5.77	5.78	5.78	5.79	5.79
% Ch, Annual Rate	2.4	1.8	0.6	0.5	0.6	0.2	0.2	0.1
Information	2.75	2.76	2.77	2.79	2.80	2.82	2.84	2.85
% Ch, Annual Rate	1.8	1.0	1.6	1.9	2.8	2.4	2.5	1.9
Publishing Industries	0.69	0.69	0.69	0.69	0.68	0.68	0.68	0.68
% Ch, Annual Rate	-0.6	-1.2	-0.8	-0.7	-0.8	-1.4	-1.4	-1.5
Other Information	2.06	2.07	2.09	2.10	2.12	2.14	2.16	2.18
% Ch, Annual Rate	2.6	1.8	2.4	2.8	3.9	3.7	3.7	3.0
Financial Activities	7.71	7.68	7.66	7.64	7.63	7.62	7.62	7.62
% Ch, Annual Rate	-1.2	-1.5	-1.0	-1.2	-0.6	-0.1	0.0	0.0
Professional and Business Services	21.57	21.64	21.71	21.78	21.88	21.97	22.08	22.19
% Ch, Annual Rate	1.9	1.1	1.4	1.3	1.8	1.7	2.1	2.0
Education and Health Services	22.50	22.58	22.62	22.64	22.66	22.72	22.74	22.78
% Ch, Annual Rate	0.0	1.4	0.7	0.5	0.4	0.9	0.5	0.6
Leisure and Hospitality	15.25	15.30	15.35	15.40	15.41	15.44	15.47	15.50
% Ch, Annual Rate	1.0	1.2	1.4	1.3	0.3	0.7	0.8	0.7
Other Services	5.53	5.53	5.53	5.53	5.53	5.52	5.51	5.50
% Ch, Annual Rate	0.7	-0.1	0.0	-0.3	-0.1	-0.6	-0.5	-0.6
Federal Government	2.58	2.57	2.56	2.55	2.55	2.54	2.54	2.53
% Ch, Annual Rate	-1.6	-1.5	-1.4	-1.5	-1.0	-1.0	-0.8	-0.8
State and Local Government	19.97	20.04	20.11	20.17	20.23	20.29	20.35	20.41
% Ch, Annual Rate	1.5	1.5	1.3	1.2	1.2	1.3	1.2	1.1

Table A2.3

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	2,921.6	2,990.3	3,068.2	3,131.0	3,189.1	3,234.9	3,276.0	3,316.6
% Ch	1.7	2.4	2.6	2.0	1.9	1.4	1.3	1.2
Manufacturing	280.3	286.6	288.2	291.5	294.1	295.2	296.5	297.7
% Ch	4.3	2.3	0.6	1.1	0.9	0.4	0.4	0.4
Durable Manufacturing	204.5	209.6	210.4	213.2	215.5	215.9	216.6	217.3
% Ch	5.8	2.5	0.4	1.3	1.1	0.2	0.3	0.3
Wood Products	12.4	13.0	13.5	14.4	15.5	15.9	15.8	15.9
% Ch	-1.4	4.7	3.4	7.1	7.2	2.8	-0.7	0.8
Primary and Fabricated Metals	24.2	24.9	25.7	27.0	28.4	29.1	29.6	30.0
% Ch	5.9	3.0	2.9	5.0	5.3	2.5	1.7	1.4
Computer and Electronic Products	20.2	20.1	20.3	21.1	21.5	21.9	22.8	23.5
% Ch	2.5	-0.2	0.6	4.0	1.8	2.1	4.1	3.3
Machinery and Electrical Equipment	18.4	19.7	20.8	22.4	23.9	25.1	26.0	27.0
% Ch	6.6	6.7	5.9	7.6	6.5	5.0	3.9	3.6
Aerospace	94.2	96.3	93.9	91.5	89.1	86.9	85.0	83.2
% Ch	8.8	2.2	-2.5	-2.6	-2.5	-2.5	-2.2	-2.0
Other Transportation Equip.	10.0	9.7	9.7	9.4	9.1	8.6	8.4	8.1
% Ch	8.4	-3.3	-0.6	-2.2	-3.9	-5.7	-1.9	-2.9
Other Durables	25.0	25.9	26.6	27.4	28.0	28.5	29.0	29.5
% Ch	0.1	3.2	2.8	3.1	2.4	1.7	1.7	1.5
Nondurable Manufacturing	75.7	77.0	77.9	78.3	78.7	79.3	79.9	80.4
% Ch	0.6	1.7	1.2	0.6	0.4	0.8	0.7	0.7
Food Manufacturing	34.8	35.7	35.3	35.1	35.1	35.4	35.5	35.5
% Ch	0.5	2.5	-1.0	-0.6	0.0	0.8	0.3	-0.1
Paper and Paper Products	8.2	8.2	8.2	8.1	8.0	8.0	8.0	8.0
% Ch	-8.8	-0.5	0.5	-1.3	-0.6	-0.1	-0.2	-0.3
Other Nondurables	32.7	33.1	34.4	35.1	35.5	35.8	36.3	36.9
% Ch	3.3	1.3	3.7	2.2	1.0	1.0	1.4	1.6
Natural Resources and Mining	5.9	6.1	6.4	6.5	6.7	6.9	6.9	7.0
% Ch	-1.2	3.2	5.1	2.0	2.0	3.4	0.5	1.0
Construction	139.0	148.8	159.5	168.4	178.8	187.8	196.0	202.0
% Ch	1.9	7.0	7.2	5.5	6.2	5.0	4.4	3.1
Trade, Transportation, and Utilities	536.0	550.9	567.9	577.4	584.1	588.8	592.6	595.7
% Ch	2.1	2.8	3.1	1.7	1.2	0.8	0.6	0.5
Wholesale Trade	124.0	127.1	131.2	134.1	136.8	138.9	141.1	143.2
% Ch	1.9	2.5	3.2	2.3	1.9	1.6	1.6	1.4
Retail Trade	319.3	329.7	340.6	344.8	346.4	346.6	346.5	346.8
% Ch	2.1	3.3	3.3	1.3	0.4	0.1	0.0	0.1
Trans., Warehousing, and Utilities	92.7	94.0	96.2	98.4	101.0	103.2	104.9	105.7
% Ch	2.2	1.4	2.3	2.3	2.6	2.2	1.7	0.8
Information	104.7	106.5	109.7	109.9	112.2	114.4	116.5	119.4
% Ch	0.5	1.7	3.0	0.2	2.1	2.0	1.8	2.5
Software Publishers	52.4	53.9	55.4	55.1	55.8	56.5	57.2	57.9
% Ch	1.4	3.0	2.7	-0.5	1.2	1.2	1.2	1.2
Other Publishing Industries	7.5	7.0	6.9	6.6	6.3	6.0	5.7	5.5
% Ch	-4.4	-6.7	-1.3	-4.4	-3.9	-4.6	-4.7	-4.7
Other Information	44.8	45.6	47.4	48.2	50.0	51.9	53.6	56.0
% Ch	0.3	1.6	4.1	1.6	3.8	3.8	3.2	4.6
Financial Activities	144.1	150.1	152.8	152.8	151.3	147.4	144.3	143.3
% Ch	2.4	4.1	1.8	0.0	-0.9	-2.6	-2.1	-0.7
Professional and Business Services	350.0	360.3	370.9	389.6	406.3	418.5	427.7	437.7
% Ch	3.1	2.9	2.9	5.0	4.3	3.0	2.2	2.3
Education and Health Services	432.4	439.0	452.1	462.3	471.8	479.9	486.7	493.4
% Ch	0.5	1.5	3.0	2.3	2.0	1.7	1.4	1.4
Leisure and Hospitality	277.2	287.4	297.9	303.0	306.8	310.7	315.3	319.4
% Ch	2.4	3.7	3.6	1.7	1.3	1.3	1.5	1.3
Other Services	110.9	111.3	113.8	115.1	116.2	117.4	118.5	119.5
% Ch	2.2	0.4	2.2	1.1	1.0	1.0	1.0	0.8
Federal Government	73.2	71.6	71.0	70.8	70.2	69.6	68.9	68.5
% Ch	-1.1	-2.1	-0.9	-0.4	-0.8	-0.9	-1.0	-0.6
State and Local Government	468.0	471.7	477.8	483.7	490.7	498.4	506.1	512.9
% Ch	-0.3	0.8	1.3	1.2	1.4	1.6	1.6	1.3

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	3,043.8	3,058.2	3,078.7	3,092.0	3,106.4	3,124.6	3,139.6	3,153.4
% Ch, Annual Rate	3.4	1.9	2.7	1.7	1.9	2.4	1.9	1.8
Manufacturing	287.4	287.9	289.0	288.7	289.6	291.3	292.1	293.0
% Ch, Annual Rate	1.1	0.7	1.5	-0.4	1.2	2.4	1.1	1.3
Durable Manufacturing	209.3	210.1	211.2	210.8	211.5	212.9	213.7	214.5
% Ch, Annual Rate	0.0	1.5	2.2	-0.8	1.4	2.7	1.6	1.5
Wood Products	13.3	13.4	13.5	13.7	13.9	14.3	14.6	14.9
% Ch, Annual Rate	3.4	2.5	4.5	5.9	6.0	11.2	9.9	7.8
Primary and Fabricated Metals	25.6	25.6	25.6	25.9	26.3	26.8	27.2	27.6
% Ch, Annual Rate	6.9	0.6	0.3	4.4	5.5	8.2	6.4	6.0
Computer and Electronic Products	20.1	20.0	20.3	20.7	20.8	21.0	21.2	21.4
% Ch, Annual Rate	-0.3	-0.8	4.8	7.9	2.1	4.6	2.9	3.8
Machinery and Electrical Equipment	20.5	20.8	20.9	21.2	21.6	22.3	22.7	23.1
% Ch, Annual Rate	9.1	6.5	3.0	5.4	8.5	12.4	8.0	6.6
Aerospace	93.9	94.2	94.5	92.9	92.3	91.7	91.2	90.6
% Ch, Annual Rate	-5.0	1.0	1.5	-6.6	-2.5	-2.5	-2.5	-2.5
Other Transportation Equip.	9.8	9.7	9.6	9.5	9.5	9.5	9.4	9.3
% Ch, Annual Rate	10.3	-2.7	-4.9	-5.1	2.7	-1.4	-5.2	-1.7
Other Durables	26.2	26.4	26.8	26.9	27.1	27.3	27.5	27.7
% Ch, Annual Rate	0.3	3.6	5.5	2.2	2.2	3.7	2.9	2.7
Nondurable Manufacturing	78.1	77.8	77.7	77.9	78.1	78.4	78.4	78.5
% Ch, Annual Rate	4.1	-1.5	-0.5	1.0	0.9	1.6	0.0	0.6
Food Manufacturing	36.0	35.5	34.9	35.0	35.1	35.2	35.1	35.2
% Ch, Annual Rate	2.1	-5.3	-6.1	0.8	0.8	1.6	-0.7	0.4
Paper and Paper Products	8.2	8.2	8.2	8.2	8.1	8.1	8.1	8.0
% Ch, Annual Rate	2.7	1.5	-0.3	-2.4	-1.8	-0.9	-2.1	-1.1
Other Nondurables	34.0	34.1	34.6	34.7	34.9	35.1	35.2	35.3
% Ch, Annual Rate	6.6	1.8	5.6	1.9	1.6	2.2	1.1	1.1
Natural Resources and Mining	6.4	6.3	6.4	6.5	6.6	6.5	6.5	6.5
% Ch, Annual Rate	10.9	-2.6	4.3	9.5	3.8	-3.3	-3.6	0.7
Construction	155.9	158.6	161.1	162.4	164.9	167.2	169.5	171.9
% Ch, Annual Rate	11.0	7.1	6.5	3.3	6.1	5.8	5.6	5.9
Trade, Transportation, and Utilities	562.7	565.8	570.4	572.8	574.6	576.4	578.6	580.0
% Ch, Annual Rate	3.3	2.2	3.3	1.7	1.2	1.3	1.5	0.9
Wholesale Trade	130.0	130.6	131.8	132.3	133.0	133.9	134.6	135.1
% Ch, Annual Rate	4.3	2.0	3.6	1.8	2.1	2.5	2.0	1.6
Retail Trade	337.0	339.4	342.2	343.6	344.0	344.5	345.3	345.5
% Ch, Annual Rate	3.2	2.9	3.3	1.6	0.5	0.6	1.0	0.2
Trans., Warehousing, and Utilities	95.8	95.7	96.4	96.9	97.5	98.1	98.7	99.3
% Ch, Annual Rate	2.4	-0.2	3.0	2.0	2.6	2.2	2.7	2.6
Information	108.6	109.5	110.6	110.1	109.0	109.1	110.2	111.3
% Ch, Annual Rate	3.2	3.3	3.9	-1.5	-4.2	0.6	4.0	3.9
Software Publishers	55.3	55.5	56.0	54.9	54.9	55.1	55.2	55.3
% Ch, Annual Rate	3.4	1.9	3.0	-7.5	0.5	1.0	1.0	0.8
Other Publishing Industries	6.8	6.9	6.9	6.9	6.7	6.6	6.5	6.4
% Ch, Annual Rate	-8.0	8.8	1.8	-0.6	-12.2	-5.0	-5.0	-5.3
Other Information	46.6	47.1	47.7	48.3	47.3	47.4	48.5	49.5
% Ch, Annual Rate	4.7	4.1	5.3	5.8	-8.3	1.0	9.1	8.7
Financial Activities	152.0	152.5	152.9	153.7	153.5	152.9	152.5	152.2
% Ch, Annual Rate	1.5	1.1	1.1	2.0	-0.5	-1.4	-1.1	-0.9
Professional and Business Services	366.3	368.5	372.4	376.4	382.1	387.7	392.5	396.2
% Ch, Annual Rate	3.2	2.4	4.2	4.4	6.2	6.0	5.0	3.9
Education and Health Services	449.2	450.5	452.8	455.9	458.2	462.4	463.7	464.9
% Ch, Annual Rate	4.2	1.2	2.1	2.8	2.0	3.7	1.1	1.1
Leisure and Hospitality	295.5	296.9	299.0	300.0	301.1	302.4	303.7	304.9
% Ch, Annual Rate	5.8	1.9	2.8	1.4	1.5	1.6	1.7	1.6
Other Services	113.3	113.5	114.1	114.4	114.7	114.9	115.2	115.4
% Ch, Annual Rate	3.4	0.5	2.4	1.0	1.1	0.7	0.9	0.8
Federal Government	70.9	71.1	71.2	70.9	70.8	70.8	70.7	70.6
% Ch, Annual Rate	0.1	0.8	0.8	-1.7	-0.4	-0.2	-0.4	-0.7
State and Local Government	475.4	477.0	478.8	479.9	481.3	482.8	484.4	486.4
% Ch, Annual Rate	1.7	1.3	1.5	1.0	1.1	1.3	1.3	1.7

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	3,168.1	3,182.2	3,196.2	3,210.0	3,219.8	3,230.0	3,239.7	3,250.1
% Ch, Annual Rate	1.9	1.8	1.8	1.7	1.2	1.3	1.2	1.3
Manufacturing	293.6	293.9	294.3	294.6	295.1	295.2	295.3	295.3
% Ch, Annual Rate	0.8	0.4	0.6	0.4	0.7	0.2	0.1	0.0
Durable Manufacturing	215.0	215.2	215.7	215.9	216.1	216.0	215.9	215.8
% Ch, Annual Rate	0.9	0.4	0.8	0.4	0.3	-0.2	-0.1	-0.3
Wood Products	15.1	15.4	15.6	15.8	15.9	16.0	15.9	15.8
% Ch, Annual Rate	7.1	5.9	5.7	4.4	4.3	1.1	-1.2	-2.4
Primary and Fabricated Metals	28.0	28.2	28.5	28.8	29.0	29.1	29.2	29.2
% Ch, Annual Rate	5.5	3.9	4.4	3.5	2.3	1.5	1.3	0.8
Computer and Electronic Products	21.4	21.3	21.5	21.6	21.7	21.8	22.0	22.1
% Ch, Annual Rate	1.3	-1.4	2.4	2.3	1.9	1.7	3.4	3.1
Machinery and Electrical Equipment	23.4	23.7	24.0	24.4	24.7	24.9	25.2	25.4
% Ch, Annual Rate	5.8	5.1	6.0	5.3	5.2	4.5	4.4	3.2
Aerospace	90.0	89.4	88.9	88.3	87.7	87.2	86.6	86.1
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Other Transportation Equip.	9.2	9.2	9.0	8.9	8.7	8.6	8.5	8.4
% Ch, Annual Rate	-5.4	-2.7	-4.8	-6.5	-6.8	-7.0	-4.5	-2.0
Other Durables	27.9	28.0	28.1	28.2	28.4	28.5	28.6	28.7
% Ch, Annual Rate	2.3	1.9	2.0	1.6	2.0	1.5	1.6	1.4
Nondurable Manufacturing	78.6	78.7	78.7	78.7	79.0	79.3	79.4	79.5
% Ch, Annual Rate	0.6	0.3	-0.1	0.2	1.7	1.2	0.5	0.7
Food Manufacturing	35.2	35.2	35.1	35.1	35.3	35.4	35.5	35.5
% Ch, Annual Rate	0.3	-0.1	-0.8	-0.1	2.3	1.7	0.4	0.4
Paper and Paper Products	8.0	8.0	8.0	8.0	8.1	8.0	8.0	8.0
% Ch, Annual Rate	-0.1	-0.1	-0.2	-0.1	0.5	-0.1	-0.7	-0.5
Other Nondurables	35.4	35.4	35.5	35.6	35.7	35.8	35.8	36.0
% Ch, Annual Rate	1.1	0.9	0.7	0.7	1.3	1.0	0.8	1.3
Natural Resources and Mining	6.6	6.6	6.7	6.8	6.9	6.9	6.9	6.9
% Ch, Annual Rate	4.0	4.0	4.0	4.7	5.2	2.0	0.9	0.2
Construction	174.8	177.5	180.1	182.6	184.5	186.8	188.8	191.0
% Ch, Annual Rate	6.9	6.5	5.9	5.7	4.3	5.0	4.3	4.7
Trade, Transportation, and Utilities	581.6	583.3	585.0	586.6	587.4	588.3	589.3	590.2
% Ch, Annual Rate	1.1	1.1	1.2	1.1	0.6	0.6	0.7	0.6
Wholesale Trade	135.7	136.5	137.1	137.8	138.2	138.7	139.2	139.7
% Ch, Annual Rate	1.8	2.2	1.9	2.0	1.3	1.3	1.5	1.5
Retail Trade	345.9	346.2	346.6	346.9	346.7	346.6	346.7	346.6
% Ch, Annual Rate	0.5	0.2	0.5	0.3	-0.2	-0.1	0.0	0.0
Trans., Warehousing, and Utilities	100.0	100.7	101.3	102.0	102.5	103.0	103.5	103.9
% Ch, Annual Rate	2.5	2.8	2.6	2.7	2.3	1.8	1.8	1.7
Information	111.3	111.7	112.5	113.1	113.7	114.3	114.7	115.0
% Ch, Annual Rate	0.3	1.3	3.0	2.1	2.2	2.0	1.5	1.2
Software Publishers	55.6	55.8	55.9	56.1	56.3	56.4	56.6	56.8
% Ch, Annual Rate	1.6	1.5	1.3	1.2	1.3	1.2	1.1	1.1
Other Publishing Industries	6.4	6.4	6.3	6.2	6.1	6.1	6.0	5.9
% Ch, Annual Rate	-2.5	-3.1	-4.0	-4.5	-4.4	-5.1	-5.2	-5.5
Other Information	49.4	49.6	50.3	50.8	51.3	51.8	52.1	52.4
% Ch, Annual Rate	-0.7	1.6	5.9	4.1	3.9	3.9	2.7	2.0
Financial Activities	152.1	151.9	151.2	150.2	149.2	148.0	146.7	145.6
% Ch, Annual Rate	-0.3	-0.5	-1.9	-2.4	-2.8	-3.0	-3.5	-3.1
Professional and Business Services	400.3	404.2	408.4	412.6	415.2	417.2	419.6	422.1
% Ch, Annual Rate	4.1	4.0	4.2	4.2	2.6	2.0	2.3	2.4
Education and Health Services	467.7	470.7	472.8	475.8	477.0	479.0	480.6	482.8
% Ch, Annual Rate	2.4	2.6	1.8	2.5	1.0	1.7	1.4	1.8
Leisure and Hospitality	305.9	306.4	307.1	307.8	308.8	310.0	311.3	312.6
% Ch, Annual Rate	1.4	0.7	0.9	0.8	1.3	1.7	1.7	1.6
Other Services	115.7	116.0	116.3	116.7	117.0	117.2	117.5	117.8
% Ch, Annual Rate	1.0	1.1	1.1	1.2	1.0	0.9	0.9	1.0
Federal Government	70.5	70.3	70.1	70.0	69.8	69.7	69.5	69.3
% Ch, Annual Rate	-0.7	-1.2	-0.8	-0.9	-0.7	-0.8	-1.1	-1.2
State and Local Government	488.0	489.7	491.7	493.3	495.3	497.3	499.4	501.5
% Ch, Annual Rate	1.3	1.4	1.6	1.3	1.6	1.7	1.7	1.7

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	3,260.2	3,271.0	3,281.5	3,291.4	3,301.1	3,311.7	3,321.9	3,331.6
% Ch, Annual Rate	1.3	1.3	1.3	1.2	1.2	1.3	1.2	1.2
Manufacturing	295.5	296.2	296.7	297.4	297.6	297.8	297.7	297.7
% Ch, Annual Rate	0.3	0.9	0.8	0.9	0.2	0.3	-0.1	0.0
Durable Manufacturing	215.9	216.4	216.8	217.3	217.3	217.4	217.3	217.2
% Ch, Annual Rate	0.2	0.9	0.8	0.8	0.1	0.1	-0.1	-0.1
Wood Products	15.8	15.8	15.8	15.9	15.9	15.9	15.9	16.0
% Ch, Annual Rate	-1.7	0.2	1.0	1.7	0.5	0.5	0.7	1.5
Primary and Fabricated Metals	29.3	29.5	29.7	29.8	29.9	30.0	30.0	30.0
% Ch, Annual Rate	1.3	2.8	2.3	2.0	1.2	1.2	0.3	-0.1
Computer and Electronic Products	22.4	22.6	22.9	23.2	23.4	23.5	23.6	23.7
% Ch, Annual Rate	4.2	4.7	5.2	5.5	2.1	1.9	2.4	2.2
Machinery and Electrical Equipment	25.6	25.9	26.2	26.4	26.7	26.9	27.1	27.3
% Ch, Annual Rate	3.5	4.4	4.0	4.4	3.4	3.5	2.8	2.7
Aerospace	85.6	85.2	84.7	84.3	83.9	83.5	83.0	82.6
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Other Transportation Equip.	8.4	8.4	8.4	8.3	8.3	8.2	8.1	8.0
% Ch, Annual Rate	-1.1	0.5	-1.0	-3.1	-3.8	-2.7	-4.8	-3.0
Other Durables	28.8	29.0	29.1	29.2	29.4	29.4	29.5	29.6
% Ch, Annual Rate	1.6	2.2	2.1	1.9	1.4	1.3	0.9	0.9
Nondurable Manufacturing	79.6	79.8	79.9	80.2	80.2	80.4	80.4	80.5
% Ch, Annual Rate	0.5	0.8	0.7	1.2	0.4	0.7	0.2	0.4
Food Manufacturing	35.5	35.5	35.5	35.6	35.5	35.5	35.5	35.5
% Ch, Annual Rate	-0.3	0.2	0.1	0.9	-0.7	0.0	-0.6	-0.2
Paper and Paper Products	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
% Ch, Annual Rate	0.0	0.1	0.0	0.2	-0.5	-0.3	-0.7	-0.5
Other Nondurables	36.1	36.2	36.4	36.5	36.7	36.8	36.9	37.1
% Ch, Annual Rate	1.5	1.7	1.6	1.8	1.7	1.5	1.2	1.3
Natural Resources and Mining	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.0
% Ch, Annual Rate	0.9	-0.2	0.3	0.3	1.1	1.0	2.2	2.5
Construction	193.1	195.1	197.0	198.7	200.3	201.6	202.6	203.5
% Ch, Annual Rate	4.6	4.2	3.9	3.6	3.1	2.6	2.1	1.7
Trade, Transportation, and Utilities	591.3	592.2	593.1	593.9	594.6	595.4	596.2	596.8
% Ch, Annual Rate	0.7	0.6	0.6	0.5	0.5	0.5	0.5	0.4
Wholesale Trade	140.3	140.8	141.4	142.0	142.5	143.0	143.4	143.8
% Ch, Annual Rate	1.8	1.5	1.7	1.6	1.5	1.3	1.2	1.0
Retail Trade	346.5	346.5	346.6	346.6	346.5	346.7	347.0	347.0
% Ch, Annual Rate	-0.1	0.0	0.1	0.0	0.0	0.2	0.2	0.1
Trans., Warehousing, and Utilities	104.5	104.9	105.1	105.3	105.5	105.7	105.8	105.9
% Ch, Annual Rate	2.2	1.7	0.8	0.8	0.9	0.6	0.6	0.5
Information	115.7	116.2	116.8	117.4	118.3	119.0	119.8	120.5
% Ch, Annual Rate	2.2	1.7	2.1	2.3	2.9	2.6	2.6	2.3
Software Publishers	57.0	57.1	57.3	57.5	57.7	57.8	58.0	58.2
% Ch, Annual Rate	1.4	1.2	1.3	1.3	1.3	1.1	1.1	1.1
Other Publishing Industries	5.8	5.8	5.7	5.6	5.6	5.5	5.4	5.4
% Ch, Annual Rate	-3.9	-4.9	-4.2	-4.1	-4.4	-5.5	-5.4	-5.7
Other Information	52.9	53.3	53.8	54.3	55.0	55.7	56.4	57.0
% Ch, Annual Rate	3.8	3.0	3.7	4.1	5.3	5.0	5.0	4.2
Financial Activities	145.1	144.5	144.1	143.6	143.4	143.3	143.3	143.2
% Ch, Annual Rate	-1.4	-1.6	-1.0	-1.3	-0.6	-0.2	-0.1	-0.1
Professional and Business Services	424.6	426.5	428.7	430.8	433.5	436.1	439.1	442.1
% Ch, Annual Rate	2.5	1.8	2.0	2.0	2.5	2.5	2.8	2.7
Education and Health Services	483.7	486.0	487.7	489.2	490.6	492.7	494.3	496.0
% Ch, Annual Rate	0.8	1.9	1.4	1.2	1.2	1.7	1.3	1.4
Leisure and Hospitality	313.6	314.7	315.9	317.1	317.9	318.9	319.9	321.0
% Ch, Annual Rate	1.3	1.4	1.6	1.5	1.0	1.2	1.3	1.3
Other Services	118.1	118.4	118.6	118.9	119.2	119.4	119.6	119.9
% Ch, Annual Rate	1.1	0.8	0.9	0.8	0.9	0.8	0.8	0.8
Federal Government	69.1	69.0	68.8	68.7	68.6	68.5	68.5	68.4
% Ch, Annual Rate	-1.0	-0.9	-0.8	-0.9	-0.5	-0.5	-0.3	-0.2
State and Local Government	503.4	505.3	507.0	508.7	510.3	512.1	513.8	515.5
% Ch, Annual Rate	1.5	1.5	1.4	1.3	1.3	1.4	1.4	1.3

Table A3.1

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	13,887.7	14,166.9	14,743.1	15,409.9	16,237.4	17,147.7	17,994.2	18,844.8
% Ch	5.2	2.0	4.1	4.5	5.4	5.6	4.9	4.7
Total Wage and Salary Disbursements	6,932.1	7,124.7	7,472.9	7,830.0	8,223.9	8,642.3	9,062.7	9,491.1
% Ch	4.5	2.8	4.9	4.8	5.0	5.1	4.9	4.7
Nonwage Personal Income	6,955.6	7,042.2	7,270.2	7,580.0	8,013.5	8,505.5	8,931.5	9,353.6
% Ch	5.9	1.2	3.2	4.3	5.7	6.1	5.0	4.7
Supplements to Wages and Salaries	1,674.4	1,720.1	1,778.7	1,848.0	1,940.7	2,046.5	2,152.2	2,247.6
% Ch	2.4	2.7	3.4	3.9	5.0	5.5	5.2	4.4
Proprietor's Income	1,260.2	1,336.7	1,377.1	1,460.8	1,536.8	1,586.8	1,648.5	1,727.9
% Ch	10.2	6.1	3.0	6.1	5.2	3.3	3.9	4.8
Farm	72.3	83.2	62.9	70.2	79.6	82.1	82.6	85.0
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,187.9	1,253.5	1,314.2	1,390.6	1,457.2	1,504.7	1,565.8	1,642.9
% Ch	11.2	5.5	4.8	5.8	4.8	3.3	4.1	4.9
Less: Contribution For Govt. Soc. Ins.	951.2	1,104.5	1,166.9	1,235.5	1,315.4	1,391.1	1,468.9	1,547.3
% Ch	3.6	16.1	5.7	5.9	6.5	5.8	5.6	5.3
Dividends/Int./Rent	2,621.6	2,675.6	2,766.7	2,870.8	3,085.8	3,375.6	3,580.8	3,753.5
% Ch	9.3	2.1	3.4	3.8	7.5	9.4	6.1	4.8
Transfer Payments	2,350.7	2,414.6	2,514.7	2,635.7	2,765.6	2,887.5	3,018.8	3,171.9
% Ch	1.9	2.7	4.1	4.8	4.9	4.4	4.5	5.1

Table A3.2

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	14,484.7	14,703.2	14,832.1	14,952.5	15,161.7	15,320.7	15,487.3	15,670.0
% Ch, Annual Rate	4.9	6.2	3.6	3.3	5.7	4.3	4.4	4.8
Total Wage and Salary Disbursements	7,339.8	7,443.4	7,509.3	7,599.2	7,693.3	7,783.3	7,874.5	7,968.7
% Ch, Annual Rate	7.5	5.8	3.6	4.9	5.0	4.8	4.8	4.9
Nonwage Personal Income	7,144.9	7,259.8	7,322.8	7,353.3	7,468.4	7,537.4	7,612.7	7,701.3
% Ch, Annual Rate	2.4	6.6	3.5	1.7	6.4	3.7	4.1	4.7
Supplements to Wages and Salaries	1,756.4	1,771.6	1,786.6	1,800.0	1,822.1	1,837.9	1,855.8	1,876.4
% Ch, Annual Rate	4.2	3.5	3.4	3.0	5.0	3.5	4.0	4.5
Proprietor's Income	1,351.0	1,376.4	1,380.4	1,400.4	1,426.2	1,451.4	1,472.4	1,493.2
% Ch, Annual Rate	2.5	7.7	1.2	5.9	7.6	7.2	5.9	5.8
Farm	58.1	69.7	62.0	61.8	65.8	67.1	71.4	76.6
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,292.9	1,306.7	1,318.4	1,338.7	1,360.4	1,384.3	1,400.9	1,416.7
% Ch, Annual Rate	6.5	4.3	3.6	6.3	6.7	7.2	4.9	4.6
Less: Contribution For Govt. Soc. Ins.	1,146.6	1,161.2	1,172.4	1,187.4	1,215.9	1,228.7	1,241.2	1,256.1
% Ch, Annual Rate	10.8	5.2	3.9	5.2	9.9	4.3	4.1	4.9
Dividends/Int./Rent	2,713.3	2,762.2	2,796.1	2,795.3	2,823.1	2,849.2	2,882.6	2,928.4
% Ch, Annual Rate	0.9	7.4	5.0	-0.1	4.0	3.8	4.8	6.5
Transfer Payments	2,470.9	2,510.8	2,532.1	2,544.9	2,612.9	2,627.5	2,643.1	2,659.4
% Ch, Annual Rate	6.5	6.6	3.4	2.0	11.1	2.3	2.4	2.5

Table A3.2 (continued)

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	15,918.5	16,125.3	16,337.0	16,568.7	16,822.3	17,046.8	17,256.7	17,465.2
% Ch, Annual Rate	6.5	5.3	5.4	5.8	6.3	5.4	5.0	4.9
Total Wage and Salary Disbursements	8,069.9	8,169.8	8,274.1	8,381.6	8,489.0	8,590.6	8,692.8	8,796.8
% Ch, Annual Rate	5.2	5.0	5.2	5.3	5.2	4.9	4.8	4.9
Nonwage Personal Income	7,848.5	7,955.5	8,062.9	8,187.0	8,333.3	8,456.2	8,563.9	8,668.4
% Ch, Annual Rate	7.9	5.6	5.5	6.3	7.3	6.0	5.2	5.0
Supplements to Wages and Salaries	1,907.1	1,928.8	1,951.0	1,976.1	2,009.3	2,034.0	2,058.5	2,084.3
% Ch, Annual Rate	6.7	4.6	4.7	5.3	6.9	5.0	4.9	5.1
Proprietor's Income	1,509.9	1,531.6	1,546.0	1,559.6	1,568.1	1,582.2	1,590.2	1,606.9
% Ch, Annual Rate	4.5	5.9	3.8	3.6	2.2	3.7	2.0	4.3
Farm	76.6	78.9	81.2	81.8	81.7	81.5	82.0	83.4
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,433.3	1,452.7	1,464.8	1,477.8	1,486.4	1,500.7	1,508.2	1,523.6
% Ch, Annual Rate	4.8	5.5	3.4	3.6	2.3	3.9	2.0	4.1
Less: Contribution For Govt. Soc. Ins.	1,293.6	1,307.7	1,322.0	1,338.4	1,370.0	1,384.0	1,397.5	1,413.0
% Ch, Annual Rate	12.5	4.4	4.5	5.1	9.8	4.1	4.0	4.5
Dividends/Int./Rent	2,985.6	3,047.2	3,115.4	3,195.1	3,275.5	3,349.8	3,413.2	3,464.1
% Ch, Annual Rate	8.0	8.5	9.3	10.6	10.5	9.4	7.8	6.1
Transfer Payments	2,739.6	2,755.6	2,772.6	2,794.8	2,850.4	2,874.1	2,899.6	2,926.0
% Ch, Annual Rate	12.6	2.4	2.5	3.2	8.2	3.4	3.6	3.7

Table A3.2 (continued)

U.S. Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	17,688.4	17,892.7	18,095.6	18,299.9	18,536.0	18,745.0	18,948.4	19,149.6
% Ch, Annual Rate	5.2	4.7	4.6	4.6	5.3	4.6	4.4	4.3
Total Wage and Salary Disbursements	8,903.8	9,008.5	9,115.6	9,222.8	9,332.8	9,438.3	9,543.9	9,649.5
% Ch, Annual Rate	5.0	4.8	4.8	4.8	4.9	4.6	4.6	4.5
Nonwage Personal Income	8,784.6	8,884.2	8,980.0	9,077.2	9,203.2	9,306.7	9,404.5	9,500.2
% Ch, Annual Rate	5.5	4.6	4.4	4.4	5.7	4.6	4.3	4.1
Supplements to Wages and Salaries	2,117.5	2,141.2	2,163.5	2,186.6	2,216.8	2,237.7	2,257.5	2,278.5
% Ch, Annual Rate	6.5	4.6	4.2	4.3	5.7	3.8	3.6	3.8
Proprietor's Income	1,619.2	1,639.4	1,657.2	1,678.0	1,697.5	1,719.4	1,737.9	1,756.9
% Ch, Annual Rate	3.1	5.1	4.4	5.1	4.7	5.3	4.4	4.5
Farm	82.9	82.3	82.2	83.1	84.1	85.0	85.6	85.5
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,536.3	1,557.1	1,575.0	1,594.9	1,613.4	1,634.5	1,652.2	1,671.4
% Ch, Annual Rate	3.4	5.5	4.7	5.2	4.7	5.3	4.4	4.7
Less: Contribution For Govt. Soc. Ins.	1,446.9	1,461.3	1,475.6	1,491.7	1,525.5	1,540.0	1,554.0	1,569.8
% Ch, Annual Rate	10.0	4.0	4.0	4.4	9.4	3.9	3.7	4.1
Dividends/Int./Rent	3,514.1	3,559.0	3,603.7	3,646.5	3,692.6	3,735.0	3,774.8	3,811.6
% Ch, Annual Rate	5.9	5.2	5.1	4.8	5.2	4.7	4.3	4.0
Transfer Payments	2,980.7	3,005.8	3,031.1	3,057.7	3,121.8	3,154.6	3,188.4	3,223.0
% Ch, Annual Rate	7.7	3.4	3.4	3.6	8.6	4.3	4.4	4.4

Table A3.3

Washington Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	317.575	327.639	343.124	359.705	380.534	403.343	425.394	448.224
% Ch	4.8	3.2	4.7	4.8	5.8	6.0	5.5	5.4
Total Wage and Salary Disbursements	163.586	169.801	178.867	187.295	197.102	207.298	218.282	230.041
% Ch	5.6	3.8	5.3	4.7	5.2	5.2	5.3	5.4
Manufacturing	19.579	20.536	21.417	21.715	22.542	23.384	24.340	25.358
% Ch	6.3	4.9	4.3	1.4	3.8	3.7	4.1	4.2
Durable Manufacturing	15.718	16.609	17.362	17.513	18.175	18.813	19.545	20.331
% Ch	7.5	5.7	4.5	0.9	3.8	3.5	3.9	4.0
Nondurable Manufacturing	3.861	3.928	4.055	4.202	4.366	4.572	4.794	5.027
% Ch	1.9	1.7	3.2	3.6	3.9	4.7	4.9	4.9
Nonmanufacturing	137.306	142.424	150.540	158.496	167.259	176.364	186.116	196.561
% Ch	5.4	3.7	5.7	5.3	5.5	5.4	5.5	5.6
Other Private Wages	1.011	1.021	1.039	1.076	1.120	1.165	1.212	1.261
% Ch	9.4	0.9	1.7	3.6	4.1	4.0	4.0	4.1
Farm Wages	1.290	1.322	1.362	1.435	1.521	1.610	1.704	1.804
% Ch	15.4	2.5	3.0	5.4	6.0	5.8	5.8	5.9
Military Wages	4.400	4.497	4.509	4.573	4.661	4.776	4.911	5.056
% Ch	3.3	2.2	0.3	1.4	1.9	2.5	2.8	2.9
Nonwage Personal Income	153.989	157.839	164.257	172.410	183.432	196.045	207.112	218.184
% Ch	4.0	2.5	4.1	5.0	6.4	6.9	5.6	5.3
Supplements to Wages and Salaries	39.458	40.770	42.509	44.574	47.205	50.078	53.105	56.076
% Ch	2.2	3.3	4.3	4.9	5.9	6.1	6.0	5.6
Proprietor's Income	23.552	25.578	25.955	27.823	29.346	30.357	31.648	33.283
% Ch	4.0	8.6	1.5	7.2	5.5	3.4	4.3	5.2
Farm	1.208	1.609	0.611	0.913	1.099	1.178	1.213	1.244
% Ch	...	...	...	...	...	...	...	...
Nonfarm	22.344	23.969	25.344	26.910	28.246	29.179	30.435	32.039
% Ch	7.6	7.3	5.7	6.2	5.0	3.3	4.3	5.3
Less: Contribution For Govt. Soc. Ins.	24.522	28.465	30.127	31.953	34.058	36.019	38.134	40.352
% Ch	2.8	16.1	5.8	6.1	6.6	5.8	5.9	5.8
Plus: Residence Adjustment	3.336	3.463	3.636	3.829	4.037	4.261	4.481	4.701
% Ch	13.7	3.8	5.0	5.3	5.4	5.5	5.2	4.9
Dividends/Int./Rent	62.038	64.650	67.777	70.741	76.395	83.925	89.403	94.157
% Ch	5.8	4.2	4.8	4.4	8.0	9.9	6.5	5.3
Transfer Payments	50.126	51.843	54.507	57.396	60.507	63.443	66.609	70.318
% Ch	2.0	3.4	5.1	5.3	5.4	4.9	5.0	5.6
State U.I. Benefits	2.389	1.842	1.060	0.802	0.734	0.699	0.677	0.674
% Ch	-23.1	-22.9	-42.4	-24.4	-8.5	-4.8	-3.2	-0.3
Other Transfers	47.736	50.001	53.446	56.594	59.773	62.744	65.932	69.644
% Ch	3.7	4.7	6.9	5.9	5.6	5.0	5.1	5.6

Table A3.4

Washington Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	338.170	340.788	346.120	347.419	352.989	357.431	362.646	365.753
% Ch, Annual Rate	7.6	3.1	6.4	1.5	6.6	5.1	6.0	3.5
Total Wage and Salary Disbursements	177.225	177.050	180.435	180.757	183.519	186.104	189.357	190.201
% Ch, Annual Rate	10.9	-0.4	7.9	0.7	6.3	5.8	7.2	1.8
Manufacturing	22.539	20.882	21.081	21.165	21.385	21.616	21.818	22.041
% Ch, Annual Rate	51.6	-26.3	3.9	1.6	4.2	4.4	3.8	4.1
Durable Manufacturing	18.504	16.847	17.028	17.070	17.245	17.430	17.599	17.779
% Ch, Annual Rate	62.3	-31.3	4.4	1.0	4.1	4.4	3.9	4.2
Nondurable Manufacturing	4.036	4.035	4.053	4.095	4.141	4.186	4.219	4.262
% Ch, Annual Rate	12.5	0.0	1.8	4.2	4.5	4.4	3.2	4.1
Nonmanufacturing	147.792	149.285	152.432	152.650	155.080	157.416	160.445	161.044
% Ch, Annual Rate	6.2	4.1	8.7	0.6	6.5	6.2	7.9	1.5
Other Private Wages	1.036	1.030	1.040	1.049	1.060	1.070	1.081	1.092
% Ch, Annual Rate	25.8	-2.1	3.8	3.6	4.3	3.9	4.0	4.0
Farm Wages	1.351	1.347	1.366	1.384	1.405	1.425	1.445	1.466
% Ch, Annual Rate	3.5	-1.1	5.7	5.5	6.3	5.7	5.8	5.8
Military Wages	4.507	4.505	4.516	4.509	4.588	4.577	4.568	4.558
% Ch, Annual Rate	0.5	-0.2	1.0	-0.6	7.2	-0.9	-0.8	-0.9
Nonwage Personal Income	160.945	163.738	165.685	166.662	169.471	171.326	173.289	175.553
% Ch, Annual Rate	4.1	7.1	4.8	2.4	6.9	4.5	4.7	5.3
Supplements to Wages and Salaries	41.929	42.257	42.712	43.137	43.798	44.283	44.814	45.400
% Ch, Annual Rate	6.9	3.2	4.4	4.0	6.3	4.5	4.9	5.3
Proprietor's Income	25.341	25.782	26.114	26.585	27.116	27.659	28.065	28.451
% Ch, Annual Rate	-5.0	7.2	5.2	7.4	8.2	8.3	6.0	5.6
Farm	0.441	0.618	0.656	0.728	0.815	0.875	0.946	1.015
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	24.900	25.164	25.457	25.857	26.301	26.784	27.119	27.436
% Ch, Annual Rate	6.9	4.3	4.7	6.4	7.1	7.6	5.1	4.8
Less: Contribution For Govt. Soc. Ins.	29.590	29.942	30.298	30.677	31.427	31.768	32.109	32.506
% Ch, Annual Rate	9.9	4.8	4.8	5.1	10.2	4.4	4.4	5.0
Plus: Residence Adjustment	3.550	3.628	3.659	3.708	3.757	3.804	3.852	3.902
% Ch, Annual Rate	1.0	9.0	3.5	5.4	5.4	5.2	5.1	5.3
Dividends/Int./Rent	66.228	67.618	68.598	68.664	69.434	70.165	71.075	72.289
% Ch, Annual Rate	1.5	8.7	5.9	0.4	4.6	4.3	5.3	7.0
Transfer Payments	53.487	54.394	54.900	55.245	56.793	57.183	57.592	58.017
% Ch, Annual Rate	13.6	7.0	3.8	2.5	11.7	2.8	2.9	3.0
State U.I. Benefits	1.300	1.095	0.945	0.901	0.836	0.813	0.785	0.773
% Ch, Annual Rate	-51.5	-49.6	-44.5	-17.1	-26.2	-10.3	-13.1	-6.3
Other Transfers	52.187	53.300	53.955	54.343	55.957	56.370	56.806	57.244
% Ch, Annual Rate	16.3	8.8	5.0	2.9	12.4	3.0	3.1	3.1

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	372.329	377.914	383.577	388.316	395.026	400.999	406.385	410.963
% Ch, Annual Rate	7.4	6.1	6.1	5.0	7.1	6.2	5.5	4.6
Total Wage and Salary Disbursements	193.149	195.987	198.867	200.407	203.432	206.238	208.816	210.708
% Ch, Annual Rate	6.3	6.0	6.0	3.1	6.2	5.6	5.1	3.7
Manufacturing	22.245	22.436	22.642	22.843	23.074	23.280	23.488	23.695
% Ch, Annual Rate	3.8	3.5	3.7	3.6	4.1	3.6	3.6	3.6
Durable Manufacturing	17.940	18.089	18.257	18.415	18.583	18.733	18.891	19.043
% Ch, Annual Rate	3.7	3.4	3.7	3.5	3.7	3.3	3.4	3.3
Nondurable Manufacturing	4.305	4.347	4.385	4.428	4.490	4.547	4.598	4.652
% Ch, Annual Rate	4.1	4.0	3.6	3.9	5.7	5.2	4.5	4.8
Nonmanufacturing	163.651	166.265	168.901	170.218	172.867	175.426	177.752	179.410
% Ch, Annual Rate	6.6	6.5	6.5	3.2	6.4	6.1	5.4	3.8
Other Private Wages	1.103	1.114	1.126	1.137	1.149	1.159	1.170	1.181
% Ch, Annual Rate	4.4	4.1	4.1	4.1	4.2	3.8	3.7	3.8
Farm Wages	1.488	1.510	1.532	1.554	1.577	1.599	1.620	1.643
% Ch, Annual Rate	6.3	5.9	6.0	5.9	6.1	5.5	5.5	5.6
Military Wages	4.661	4.661	4.666	4.655	4.766	4.773	4.784	4.779
% Ch, Annual Rate	9.4	0.0	0.5	-1.0	9.9	0.6	0.9	-0.5
Nonwage Personal Income	179.180	181.928	184.710	187.909	191.594	194.761	197.569	200.255
% Ch, Annual Rate	8.5	6.3	6.3	7.1	8.1	6.8	5.9	5.5
Supplements to Wages and Salaries	46.276	46.883	47.496	48.166	49.076	49.737	50.398	51.102
% Ch, Annual Rate	7.9	5.3	5.3	5.8	7.8	5.5	5.4	5.7
Proprietor's Income	28.817	29.249	29.520	29.795	29.972	30.270	30.428	30.759
% Ch, Annual Rate	5.3	6.1	3.8	3.8	2.4	4.0	2.1	4.4
Farm	1.045	1.086	1.122	1.144	1.159	1.170	1.184	1.202
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	27.772	28.163	28.399	28.651	28.813	29.100	29.244	29.558
% Ch, Annual Rate	5.0	5.8	3.4	3.6	2.3	4.0	2.0	4.4
Less: Contribution For Govt. Soc. Ins.	33.491	33.862	34.232	34.646	35.471	35.831	36.183	36.590
% Ch, Annual Rate	12.7	4.5	4.4	4.9	9.9	4.1	4.0	4.6
Plus: Residence Adjustment	3.955	4.008	4.064	4.122	4.179	4.233	4.288	4.343
% Ch, Annual Rate	5.6	5.5	5.7	5.8	5.7	5.3	5.3	5.3
Dividends/Int./Rent	73.787	75.396	77.169	79.228	81.308	83.238	84.899	86.254
% Ch, Annual Rate	8.5	9.0	9.7	11.1	10.9	9.8	8.2	6.5
Transfer Payments	59.835	60.254	60.693	61.245	62.531	63.114	63.739	64.387
% Ch, Annual Rate	13.1	2.8	2.9	3.7	8.7	3.8	4.0	4.1
State U.I. Benefits	0.756	0.749	0.726	0.704	0.703	0.703	0.700	0.689
% Ch, Annual Rate	-8.3	-3.9	-11.5	-11.7	-0.4	-0.3	-1.6	-6.1
Other Transfers	59.079	59.506	59.967	60.541	61.827	62.412	63.040	63.698
% Ch, Annual Rate	13.5	2.9	3.1	3.9	8.8	3.8	4.1	4.2

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2014 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	417.248	422.944	428.290	433.094	439.835	445.794	451.214	456.055
% Ch, Annual Rate	6.3	5.6	5.2	4.6	6.4	5.5	5.0	4.4
Total Wage and Salary Disbursements	214.015	217.092	219.890	222.130	225.654	228.882	231.683	233.945
% Ch, Annual Rate	6.4	5.9	5.3	4.1	6.5	5.8	5.0	4.0
Manufacturing	23.932	24.198	24.471	24.758	25.005	25.247	25.474	25.708
% Ch, Annual Rate	4.1	4.5	4.6	4.8	4.1	3.9	3.6	3.7
Durable Manufacturing	19.226	19.435	19.649	19.870	20.061	20.245	20.420	20.598
% Ch, Annual Rate	3.9	4.4	4.5	4.6	3.9	3.7	3.5	3.5
Nondurable Manufacturing	4.705	4.763	4.822	4.888	4.944	5.001	5.054	5.110
% Ch, Annual Rate	4.7	5.0	5.0	5.6	4.7	4.7	4.3	4.5
Nonmanufacturing	182.327	185.090	187.563	189.483	192.600	195.536	198.058	200.051
% Ch, Annual Rate	6.7	6.2	5.5	4.2	6.7	6.2	5.3	4.1
Other Private Wages	1.194	1.206	1.218	1.230	1.243	1.255	1.268	1.279
% Ch, Annual Rate	4.4	4.0	4.1	4.0	4.4	4.0	3.9	3.8
Farm Wages	1.668	1.691	1.716	1.740	1.767	1.792	1.817	1.842
% Ch, Annual Rate	6.2	5.8	5.9	5.8	6.3	5.8	5.7	5.6
Military Wages	4.894	4.907	4.922	4.919	5.039	5.052	5.067	5.064
% Ch, Annual Rate	10.0	1.1	1.2	-0.2	10.1	1.1	1.1	-0.2
Nonwage Personal Income	203.233	205.851	208.400	210.964	214.181	216.912	219.532	222.111
% Ch, Annual Rate	6.1	5.3	5.0	5.0	6.2	5.2	4.9	4.8
Supplements to Wages and Salaries	52.075	52.767	53.441	54.138	55.088	55.753	56.397	57.067
% Ch, Annual Rate	7.8	5.4	5.2	5.3	7.2	4.9	4.7	4.8
Proprietor's Income	31.028	31.462	31.839	32.263	32.660	33.107	33.483	33.881
% Ch, Annual Rate	3.5	5.7	4.9	5.4	5.0	5.6	4.6	4.8
Farm	1.206	1.209	1.213	1.224	1.233	1.242	1.249	1.251
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	29.822	30.253	30.625	31.039	31.427	31.865	32.234	32.630
% Ch, Annual Rate	3.6	5.9	5.0	5.5	5.1	5.7	4.7	5.0
Less: Contribution For Govt. Soc. Ins.	37.518	37.920	38.324	38.775	39.719	40.141	40.549	41.001
% Ch, Annual Rate	10.5	4.4	4.3	4.8	10.1	4.3	4.1	4.5
Plus: Residence Adjustment	4.398	4.453	4.509	4.564	4.620	4.674	4.728	4.783
% Ch, Annual Rate	5.2	5.1	5.1	5.0	5.0	4.8	4.7	4.7
Dividends/Int./Rent	87.591	88.807	90.022	91.194	92.456	93.631	94.746	95.796
% Ch, Annual Rate	6.3	5.7	5.6	5.3	5.7	5.2	4.8	4.5
Transfer Payments	65.658	66.283	66.915	67.579	69.076	69.887	70.725	71.585
% Ch, Annual Rate	8.1	3.9	3.9	4.0	9.2	4.8	4.9	5.0
State U.I. Benefits	0.684	0.678	0.673	0.671	0.671	0.673	0.675	0.678
% Ch, Annual Rate	-2.9	-3.1	-3.2	-0.9	0.0	0.8	1.3	2.1
Other Transfers	64.975	65.605	66.242	66.908	68.404	69.214	70.050	70.906
% Ch, Annual Rate	8.3	3.9	3.9	4.1	9.3	4.8	4.9	5.0

Table A4.1
Selected Inflation Indicators
 (Deflator 2009=1; CPI 1982-84=1)

	Price Deflator*		U.S. CPI#		Seattle CPI+	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	0.233	4.2	0.405	4.2	0.382	2.1
1972	0.241	3.4	0.418	3.3	0.393	2.9
1973	0.254	5.4	0.444	6.3	0.418	6.4
1974	0.280	10.4	0.493	11.0	0.464	11.0
1975	0.303	8.3	0.538	9.1	0.511	10.2
1976	0.320	5.5	0.569	5.8	0.540	5.5
1977	0.341	6.5	0.606	6.5	0.583	8.0
1978	0.365	7.0	0.652	7.6	0.640	9.9
1979	0.397	8.9	0.726	11.3	0.709	10.8
1980	0.440	10.7	0.824	13.5	0.827	16.7
1981	0.478	8.8	0.909	10.4	0.916	10.8
1982	0.505	5.5	0.965	6.2	0.978	6.7
1983	0.526	4.3	0.996	3.2	0.993	1.5
1984	0.546	3.8	1.039	4.4	1.030	3.8
1985	0.566	3.5	1.076	3.5	1.056	2.5
1986	0.578	2.2	1.097	1.9	1.066	1.0
1987	0.596	3.2	1.136	3.6	1.092	2.4
1988	0.620	3.9	1.183	4.1	1.128	3.3
1989	0.646	4.3	1.239	4.8	1.181	4.7
1990	0.674	4.3	1.307	5.4	1.268	7.3
1991	0.696	3.3	1.362	4.2	1.341	5.8
1992	0.715	2.6	1.403	3.0	1.390	3.7
1993	0.733	2.5	1.445	3.0	1.429	2.8
1994	0.748	2.1	1.482	2.6	1.478	3.4
1995	0.764	2.1	1.524	2.8	1.522	3.0
1996	0.780	2.1	1.569	2.9	1.575	3.4
1997	0.793	1.7	1.605	2.3	1.630	3.5
1998	0.799	0.8	1.630	1.5	1.677	2.9
1999	0.811	1.5	1.666	2.2	1.728	3.0
2000	0.831	2.5	1.722	3.4	1.792	3.7
2001	0.847	1.9	1.770	2.8	1.857	3.6
2002	0.859	1.3	1.799	1.6	1.893	2.0
2003	0.876	2.0	1.840	2.3	1.924	1.6
2004	0.897	2.4	1.889	2.7	1.947	1.2
2005	0.923	2.9	1.953	3.4	2.002	2.8
2006	0.947	2.7	2.016	3.2	2.076	3.7
2007	0.971	2.5	2.073	2.9	2.157	3.9
2008	1.001	3.1	2.153	3.8	2.247	4.2
2009	1.000	-0.1	2.146	-0.3	2.260	0.6
2010	1.016	1.7	2.181	1.6	2.267	0.3
2011	1.041	2.5	2.249	3.1	2.328	2.7
2012	1.061	1.8	2.296	2.1	2.386	2.5
2013	1.073	1.2	2.330	1.5	2.416	1.2
Forecast						
2014	1.089	1.5	2.372	1.8	2.470	2.3
2015	1.102	1.2	2.403	1.3	2.515	1.8
2016	1.118	1.4	2.439	1.5	2.558	1.7
2017	1.136	1.6	2.484	1.8	2.608	1.9
2018	1.155	1.6	2.529	1.8	2.658	1.9
2019	1.173	1.6	2.573	1.7	2.707	1.8

* Chain-Weight Implicit Price Deflator for Personal Consumption Expenditures
 # Consumer Price Index for all Urban Consumers
 + Consumer Price Index for the Seattle-Tacoma-Bremerton, WA CMSA
 Consumer Price Index and Implicit Price Deflator values shown here are annual averages of seasonally adjusted quarterly data and may differ slightly from the annual values published by the Bureau of Labor Statistics and Bureau of Economic Analysis.

Table A4.2
Chain-Weighted Price Indices
 (2009=100)

	Services		Food		Fuels		Gasoline	
	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	17.9	5.5	22.8	2.3	7.4	6.4	14.0	0.7
1972	18.7	4.2	23.9	4.8	7.5	0.6	14.2	1.3
1973	19.6	4.8	26.9	12.7	8.6	14.6	15.5	9.6
1974	21.3	8.5	31.0	15.2	13.6	58.9	21.0	35.1
1975	23.1	8.6	33.3	7.5	14.8	8.5	22.4	6.7
1976	24.7	6.9	34.0	1.9	15.9	7.3	23.3	4.2
1977	26.6	7.5	36.0	5.9	17.9	13.2	24.7	5.8
1978	28.6	7.8	39.4	9.6	19.0	5.7	25.8	4.3
1979	31.0	8.4	43.3	9.8	26.2	37.9	34.5	34.0
1980	34.2	10.3	46.9	8.4	36.7	40.4	47.9	38.8
1981	37.7	10.2	50.3	7.1	44.9	22.3	53.3	11.3
1982	40.6	7.8	51.6	2.6	44.1	-1.9	50.6	-5.1
1983	43.2	6.2	52.2	1.1	40.6	-7.8	48.9	-3.3
1984	45.4	5.2	53.7	3.0	41.5	2.2	48.2	-1.5
1985	47.7	5.0	54.3	1.1	39.9	-3.9	48.6	0.8
1986	49.6	4.1	55.6	2.4	31.2	-21.7	38.2	-21.5
1987	51.1	2.9	57.4	3.2	32.1	2.6	39.6	3.8
1988	53.5	4.8	59.1	3.0	32.0	0.0	40.0	0.8
1989	56.0	4.6	62.2	5.3	34.0	6.0	43.7	9.2
1990	58.5	4.5	65.2	4.9	40.9	20.4	49.7	13.8
1991	60.7	3.8	67.3	3.1	38.9	-4.8	49.1	-1.3
1992	62.8	3.5	67.8	0.8	37.3	-4.1	48.9	-0.4
1993	65.0	3.5	68.7	1.4	37.1	-0.7	48.4	-1.0
1994	66.8	2.7	69.9	1.7	36.4	-1.8	48.6	0.5
1995	68.6	2.7	71.4	2.2	36.1	-0.9	49.4	1.6
1996	70.5	2.7	73.6	3.1	40.9	13.3	52.4	6.1
1997	72.4	2.8	75.0	1.9	41.0	0.2	52.4	0.0
1998	73.9	2.1	75.9	1.3	36.3	-11.4	45.6	-12.9
1999	75.4	2.0	77.2	1.6	36.9	1.7	49.6	8.9
2000	77.5	2.8	79.0	2.3	54.1	46.6	63.4	27.8
2001	79.9	3.1	81.3	2.9	53.1	-2.0	61.2	-3.6
2002	82.0	2.6	82.5	1.5	47.3	-10.8	57.5	-6.0
2003	84.5	3.1	84.1	1.9	57.2	20.9	67.0	16.5
2004	87.1	3.0	86.7	3.1	66.6	16.4	78.8	17.6
2005	89.9	3.3	88.2	1.7	88.6	33.0	95.8	21.6
2006	93.0	3.4	89.7	1.7	100.7	13.7	108.0	12.8
2007	96.0	3.2	93.2	3.9	107.7	6.9	117.1	8.4
2008	98.9	3.1	98.9	6.1	146.0	35.6	136.6	16.6
2009	100.0	1.1	100.0	1.2	100.0	-31.5	100.0	-26.8
2010	101.7	1.7	100.3	0.3	117.0	17.0	118.2	18.2
2011	103.5	1.8	104.3	4.0	148.8	27.2	149.3	26.3
2012	105.7	2.1	106.6	2.3	150.7	1.3	154.6	3.5
2013	107.9	2.1	107.8	1.0	149.0	-1.2	150.4	-2.7

Forecast

2014	110.3	2.2	109.6	1.7	151.8	1.9	149.1	-0.9
2015	112.4	1.9	110.4	0.8	146.9	-3.2	140.5	-5.7
2016	114.7	2.1	111.3	0.8	146.6	-0.2	137.6	-2.1
2017	117.3	2.3	112.8	1.3	146.6	0.0	135.0	-1.9
2018	120.0	2.2	114.1	1.1	147.6	0.7	134.2	-0.6
2019	122.6	2.2	115.6	1.4	148.8	0.8	133.9	-0.2

Table A5.1

Washington Resident Population and Components of Change*
(Thousands)

	<u>Population</u>	<u>Change</u>	<u>Percent Change</u>	<u>Births</u>	<u>Deaths</u>	<u>Net Migration</u>
1970	3413.2	16.2	0.5	59.9	30.0	-13.7
1971	3436.3	23.1	0.7	60.0	29.8	-7.1
1972	3430.3	-6.0	-0.2	53.1	30.4	-28.7
1973	3444.3	14.0	0.4	47.7	30.4	-3.3
1974	3508.7	64.4	1.9	48.2	29.9	46.1
1975	3567.9	59.2	1.7	50.1	30.3	39.4
1976	3634.9	67.0	1.9	51.4	30.2	45.8
1977	3715.4	80.5	2.2	54.2	29.1	55.4
1978	3836.2	120.8	3.3	57.3	30.4	93.9
1979	3979.2	143.0	3.7	60.2	30.2	113.0
1980	4132.2	153.0	3.8	65.4	31.3	118.9
1981	4229.3	97.1	2.4	68.2	31.8	60.8
1982	4276.5	47.3	1.1	70.1	31.7	8.9
1983	4307.2	30.7	0.7	69.5	32.5	-6.2
1984	4354.1	46.8	1.1	68.5	33.2	11.6
1985	4415.8	61.7	1.4	69.1	34.0	26.6
1986	4462.2	46.4	1.1	70.2	34.0	10.2
1987	4527.1	64.9	1.5	69.3	34.4	30.0
1988	4616.9	89.8	2.0	71.0	36.0	54.8
1989	4728.1	111.2	2.4	73.0	36.0	74.2
1990	4866.7	138.6	2.9	76.4	36.2	98.5
1991	5021.3	154.6	3.2	79.1	36.6	112.1
1992	5141.2	119.8	2.4	80.2	37.2	76.8
1993	5265.7	124.5	2.4	79.1	39.4	84.8
1994	5364.3	98.7	1.9	78.2	39.5	60.0
1995	5470.1	105.8	2.0	77.5	40.0	68.3
1996	5567.8	97.7	1.8	77.0	41.2	61.8
1997	5663.8	96.0	1.7	78.0	42.6	60.6
1998	5750.0	86.3	1.5	78.8	41.6	49.0
1999	5830.8	80.8	1.4	79.8	43.1	44.2
2000	5894.1	63.3	1.1	79.9	43.7	27.2
2001	5970.3	76.2	1.3	80.7	43.9	39.4
2002	6059.3	89.0	1.5	79.3	44.9	54.6
2003	6126.9	67.6	1.1	79.1	44.7	33.2
2004	6208.5	81.6	1.3	81.0	46.0	46.7
2005	6298.8	90.3	1.5	81.8	45.6	54.1
2006	6420.3	121.4	1.9	83.2	45.3	83.5
2007	6525.1	104.8	1.6	87.8	46.2	63.2
2008	6608.2	83.2	1.3	89.6	47.9	41.5
2009	6672.2	63.9	1.0	89.8	48.1	22.2
2010	6724.5	52.4	0.8	88.4	47.7	11.6
2011	6767.9	43.4	0.6	86.4	48.8	5.8
2012	6817.8	49.9	0.7	87.1	49.2	12.0
2013	6882.4	64.6	0.9	87.5	50.4	27.5
Forecast						
2014	6951.8	69.4	1.0	87.9	51.5	33.0
2015	7024.0	72.2	1.0	88.8	53.0	36.4
2016	7096.9	72.9	1.0	89.3	55.5	39.2
2017	7173.3	76.4	1.1	90.7	56.4	42.0
2018	7250.2	77.0	1.1	92.2	57.3	42.0
2019	7327.3	77.1	1.1	93.3	58.2	42.0

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	2010	Actual			2014	Forecast			2017	2018	2019
		2011	2012	2013		2015	2016	2016			
Total Population	6724.5	6767.9	6817.8	6882.4	6951.8	7024.0	7096.9	7173.3	7250.2	7327.3	
Percent Change	0.8	0.6	0.7	0.9	1.0	1.0	1.0	1.1	1.1	1.1	
Age 17 and Under	1581.4	1574.8	1573.6	1578.7	1586.8	1596.5	1606.9	1618.8	1631.3	1644.9	
Percent of Total	23.5	23.3	23.1	22.9	22.8	22.7	22.6	22.6	22.5	22.4	
Age 6-18	1149.6	1142.5	1137.4	1140.8	1147.5	1154.8	1162.4	1169.6	1177.4	1184.8	
Percent of Total	17.1	16.9	16.7	16.6	16.5	16.4	16.4	16.3	16.2	16.2	
Age 18 and Over	5143.2	5193.1	5244.2	5303.7	5364.9	5427.4	5490.0	5554.4	5619.0	5682.4	
Percent of Total	76.5	76.7	76.9	77.1	77.2	77.3	77.4	77.4	77.5	77.6	
Age 21 and Over	4860.6	4910.6	4964.3	5027.9	5093.8	5158.3	5220.9	5283.6	5345.9	5407.8	
Percent of Total	72.3	72.6	72.8	73.1	73.3	73.4	73.6	73.7	73.7	73.8	
Age 20-34	1395.3	1403.5	1413.2	1426.7	1439.1	1443.7	1448.7	1453.5	1458.3	1465.1	
Percent of Total	20.7	20.7	20.7	20.7	20.7	20.6	20.4	20.3	20.1	20.0	
Age 18-64	4315.5	4341.7	4350.5	4366.7	4387.2	4407.4	4429.1	4450.5	4468.0	4484.5	
Percent of Total	64.2	64.2	63.8	63.4	63.1	62.7	62.4	62.0	61.6	61.2	
Age 65 and Over	827.7	851.4	893.7	937.0	977.7	1020.0	1060.9	1104.0	1150.9	1197.9	
Percent of Total	12.3	12.6	13.1	13.6	14.1	14.5	14.9	15.4	15.9	16.3	

* As of April 1 of Each Year

Source: Office of Financial Management

Table A6.1

Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	August 2014	+
U.S. Real GDP Growth	2nd quarter 2014	+
U.S. ISM Index	August 2014	+
U.S. Employment YoY%Δ	August 2014	unchanged
U.S. Unemployment Rate	August 2014	+
U.S. Fed Funds Target	September 2014	unchanged
U.S. Consumer Confidence	September 2014	-
U.S. Consumer Sentiment	September 2014	+
U.S. Light Vehicle Sales	August 2014	+
U.S. CPI	August 2014	+
U.S. Home Prices	July 2014	-
S&P 500 Index	September 2014	+
WA Leading Index	August 2014	unchanged
WA ISM-WW Index	August 2014	+
WA Employment YoY%Δ	August 2014	-
WA Aerospace Empl. YoY%Δ	August 2014	-
WA Unemployment Rate	August 2014	unchanged
WA Business Cycle Indicator	August 2014	-
WA Initial Unemploy. Claims	August 2014	-
WA Housing Permits	August 2014	-
WA Weekly Hours in Mfg.	August 2014	unchanged
WA New Vehicle Registration	August 2014	+
WA In-Migration	August 2014	+
WA Exports-Total YoY%Δ	2nd quarter 2014	+
WA Exports- w/o Trans. Equip. YoY%Δ	2nd quarter 2014	+
Seattle CPI	August 2014	+
Seattle Home Prices	July 2014	-
WA Residential Const. Contracts	August 2014	-
WA Non-Residential Const. Contracts	August 2014	+

*Change from the previous reading

Table A6.2

Washington Business Indicators

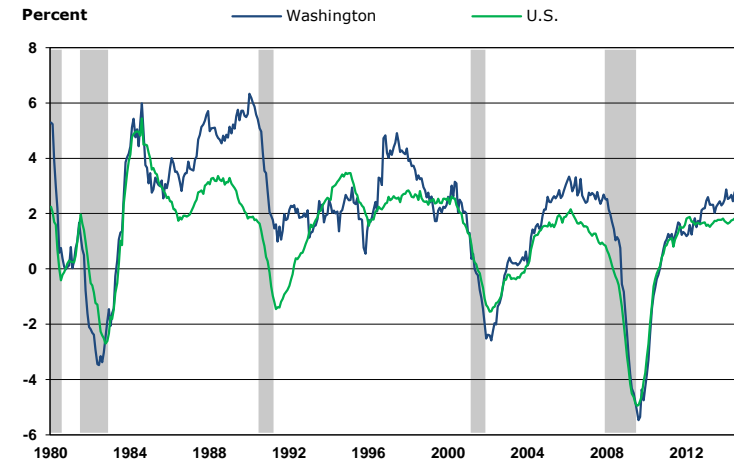
Historical Data

	WA Index of Leading Indicators	U.S. Index of Leading Indicators	WA State Business Cycle Indicator	WA State Construction Index	WA State Help Wanted Index	WA Purchasing Management Index	U.S. Purchasing Management Index
2012:01	108.7	92.2	24.8	81.4	107.0	68.5	53.7
2012:02	110.3	92.9	25.8	83.6	104.9	68.9	51.9
2012:03	111.4	93.1	27.9	90.7	110.0	62.9	53.3
2012:04	111.5	92.9	29.0	91.4	113.5	64.9	54.1
2012:05	111.4	93.3	29.8	91.0	111.2	58.5	52.5
2012:06	111.3	92.7	31.5	92.0	113.4	57.0	50.2
2012:07	111.7	93.1	31.0	91.2	114.8	58.8	50.5
2012:08	111.4	92.7	31.6	88.6	110.5	53.5	50.7
2012:09	112.8	93.2	33.4	92.7	116.6	56.0	51.6
2012:10	113.7	93.4	34.9	94.9	117.9	56.3	51.7
2012:11	113.2	93.4	37.2	90.9	120.6	60.1	49.9
2012:12	114.2	93.7	38.8	89.8	125.9	58.1	50.2
2013:01	115.0	94.1	39.9	94.2	128.7	60.2	53.1
2013:02	115.0	94.6	38.6	95.7	127.2	56.3	54.2
2013:03	114.4	94.3	39.1	95.4	118.8	65.4	51.3
2013:04	114.6	95.1	38.5	93.3	120.2	59.5	50.7
2013:05	114.6	95.3	39.6	92.8	120.0	53.7	49.0
2013:06	114.9	96.1	39.8	93.0	121.0	61.0	50.9
2013:07	115.1	96.5	42.3	95.7	118.6	60.3	55.4
2013:08	115.5	97.2	42.6	94.2	118.7	53.8	55.7
2013:09	115.9	98.2	41.5	92.9	116.6	52.7	56.2
2013:10	115.4	98.5	42.3	94.5	112.7	54.2	56.4
2013:11	117.4	99.4	41.6	98.1	118.2	61.1	57.3
2013:12	117.0	99.5	42.8	94.9	118.2	62.3	57.0
2014:01	116.8	99.3	44.1	95.4	118.2	63.5	51.3
2014:02	116.1	99.9	42.7	91.3	118.5	68.7	53.2
2014:03	117.1	100.9	43.5	94.0	118.6	63.6	53.7
2014:04	118.1	101.2	47.6	98.3	120.6	53.7	54.9
2014:05	117.8	101.8	47.9	93.7	118.7	59.6	55.4
2014:06	119.4	102.5	48.1	97.1	121.0	67.0	55.3
2014:07	119.5	103.6	50.5	96.5	121.3	50.1	57.1
2014:08	119.5	103.8	49.9	96.4	121.6	62.9	59.0

Figure A7.1: Washington State Economic Indicators

August

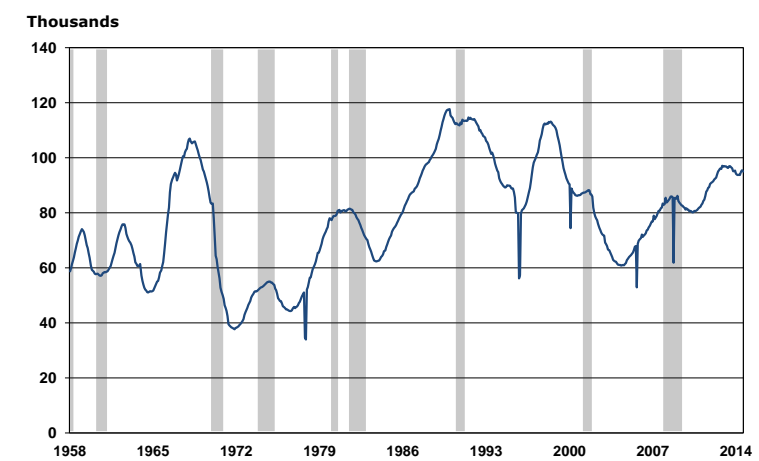
January 1980 to September 2014



* Bureau of Labor Statistics, WA State Employment Security, ERFC Kalman Filtered Data

Washington Aircraft and Parts Employment

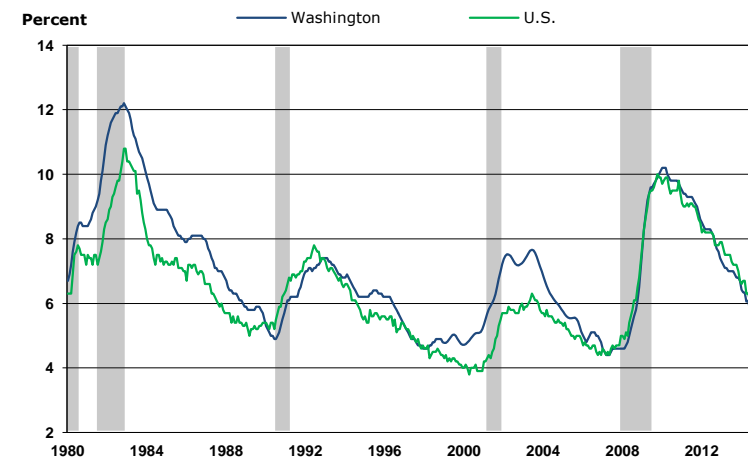
January 1958 to August 2014



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

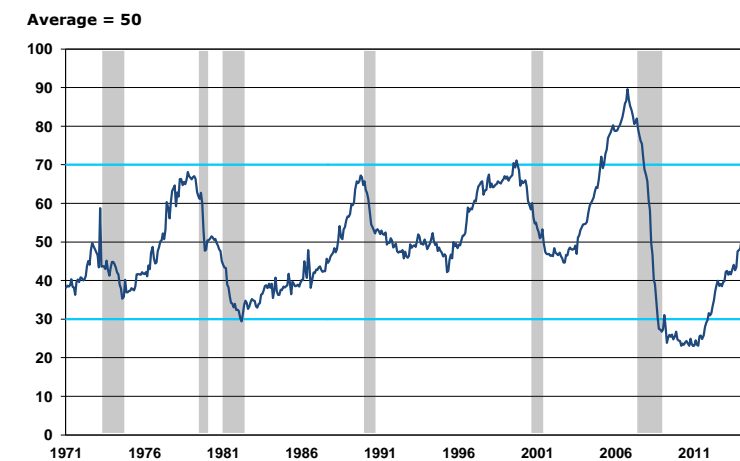
January 1980 to August 2014



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

July 1971 to August 2014



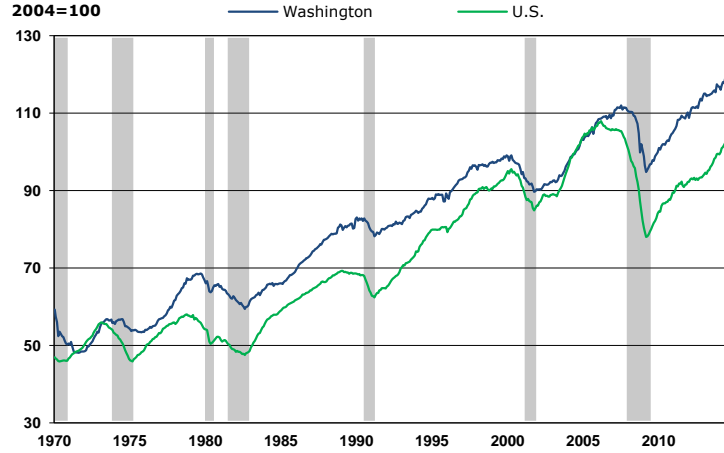
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

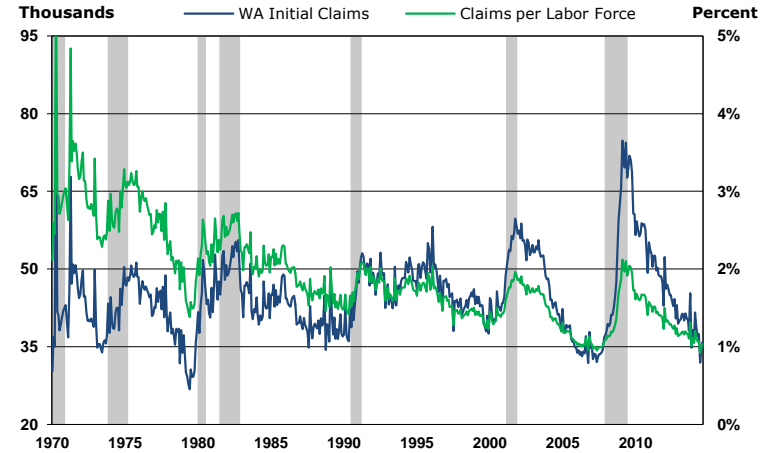
January 1970 to August 2014



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

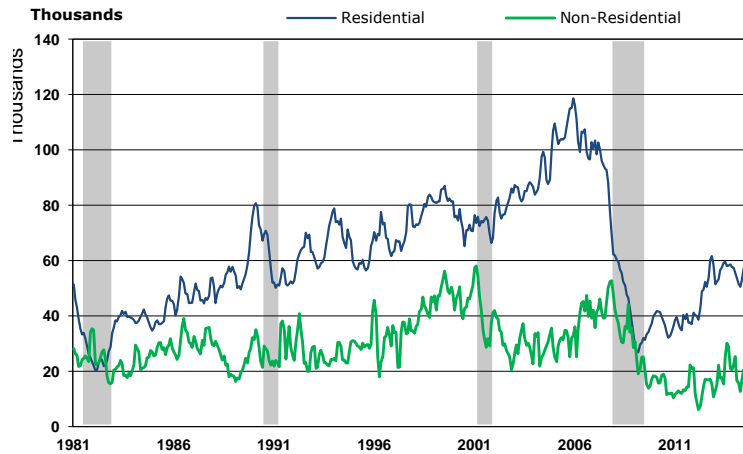
January 1970 to August 2014, S.A.



* Source: WA State Employment Security, ERFC

Square Footage of Construction Projects in WA State

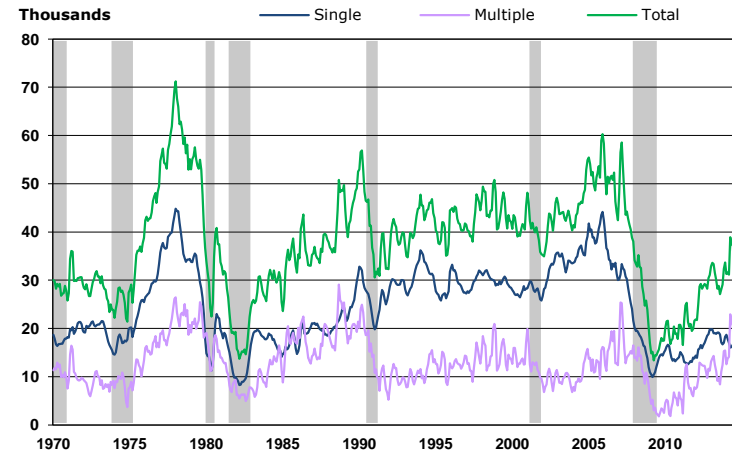
January 1981 to August 2014, 3mma, SAAR



* Source: McGraw-Hill Construction, ERFC

Housing Units Authorized in Washington State

January 1970 to August 2014, 3mma, SAAR



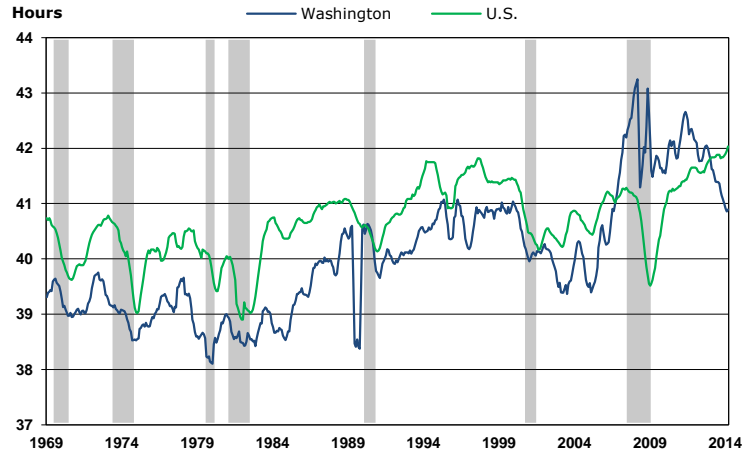
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

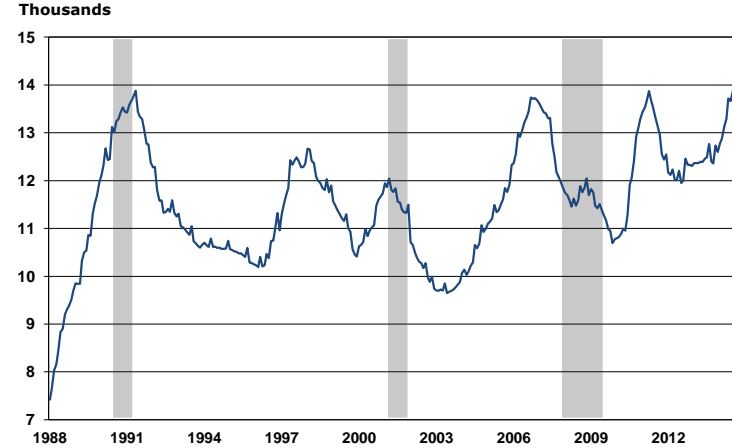
June 1969 to August 2014, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

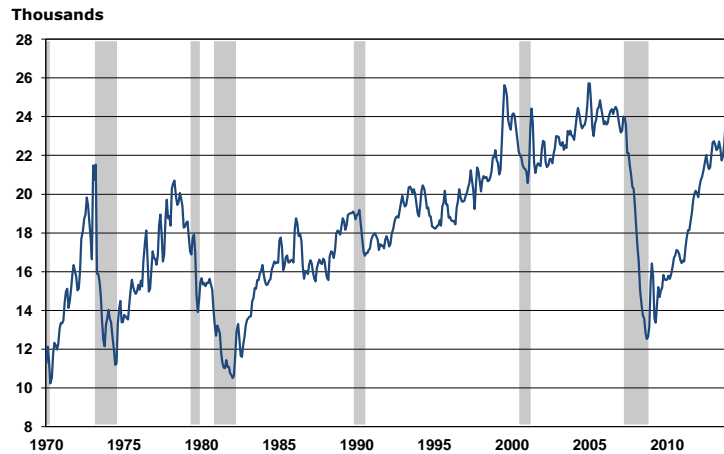
January 1988 to August 2014, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

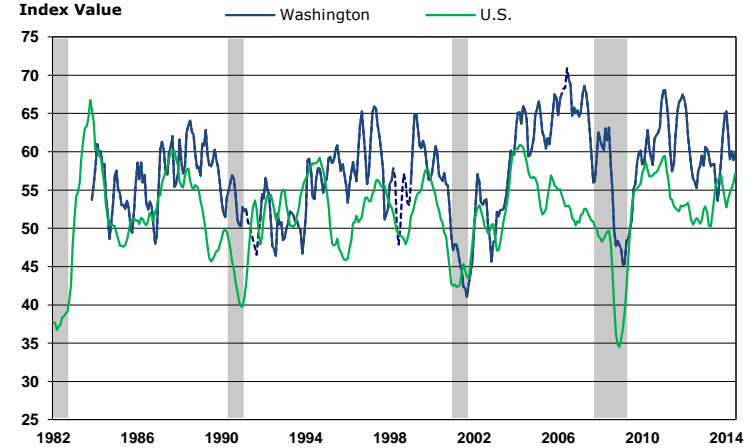
September 1970 to August 2014, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

March 1982 to August 2014, 3-Month Moving Average, S.A.



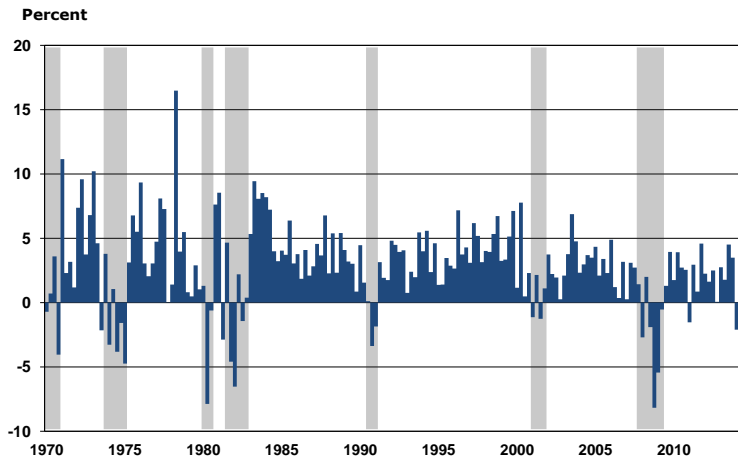
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

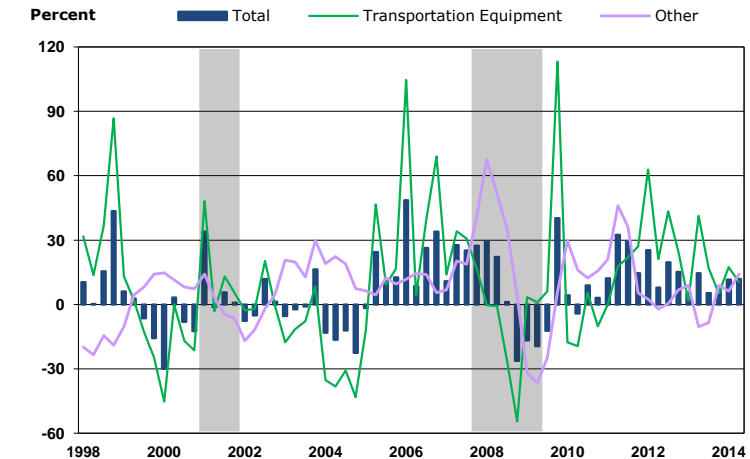
1970Q1 to 2014Q2, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

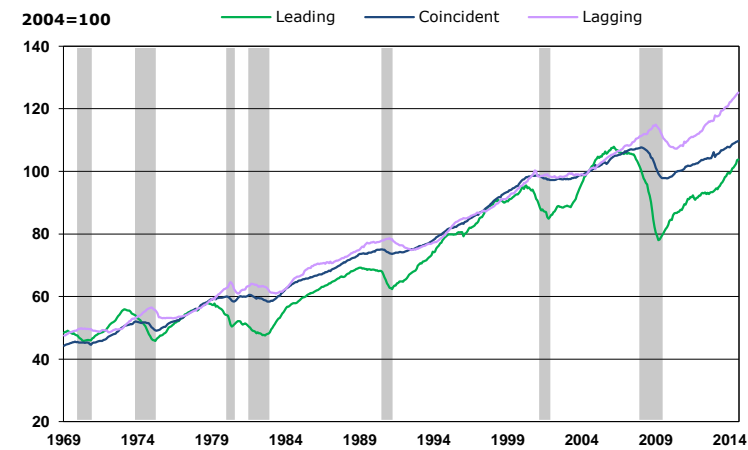
1998Q1 to 2014Q2, Year-over-year percent change



* Source: WISER

U.S. Economic Indicators

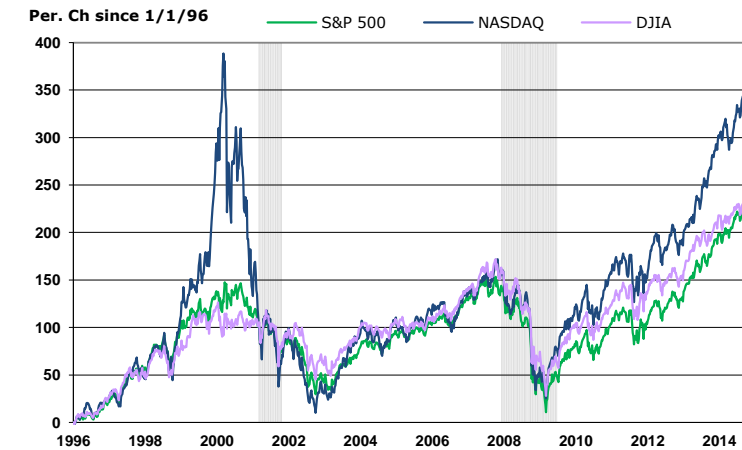
January 1969 to August 2014



* Source: The Conference Board

National Stock Indexes

January 1, 1996 to September 26, 2014



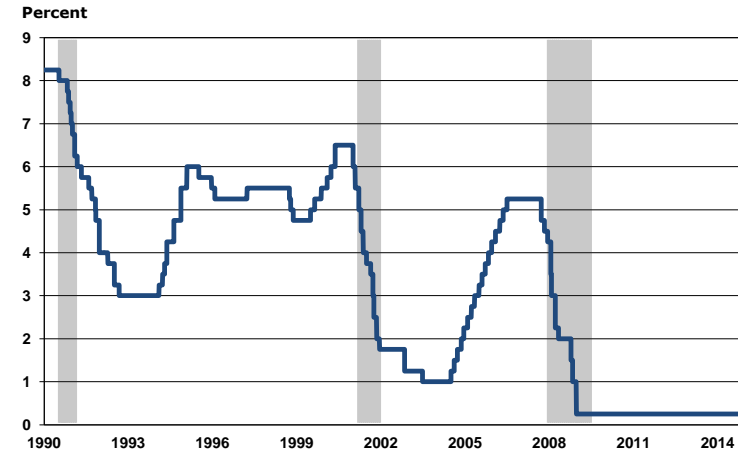
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Federal Funds Target Rate

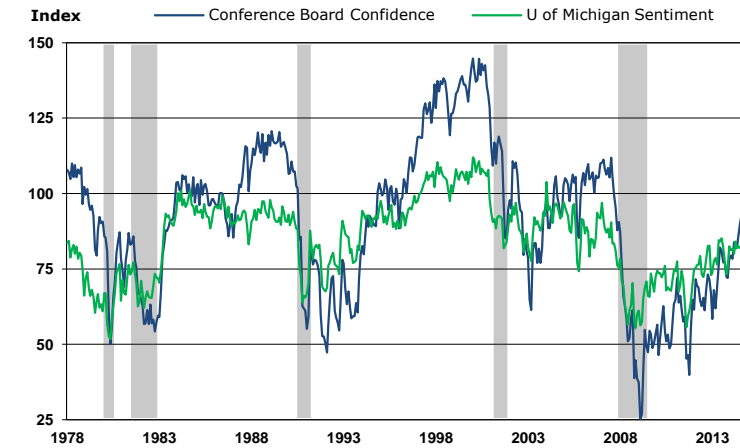
January 1, 1990 to September 30, 2014



* Federal Reserve

Consumer Confidence

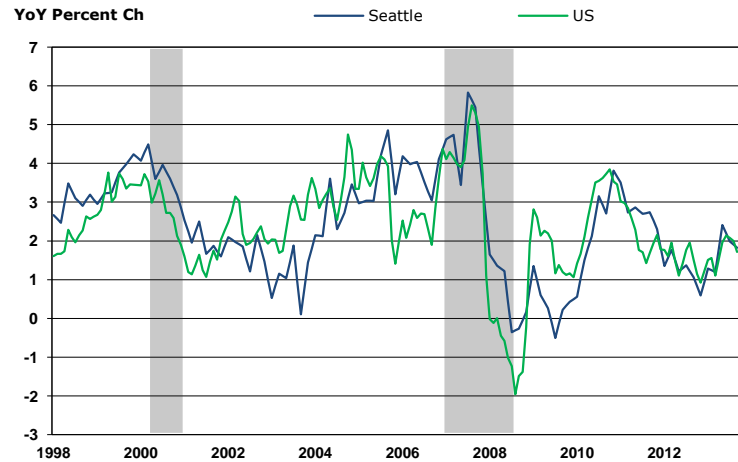
March 1978 to September 2014



* Source: The Conference Board, University of Michigan

Seattle vs U.S. CPI (All Urban Consumers)

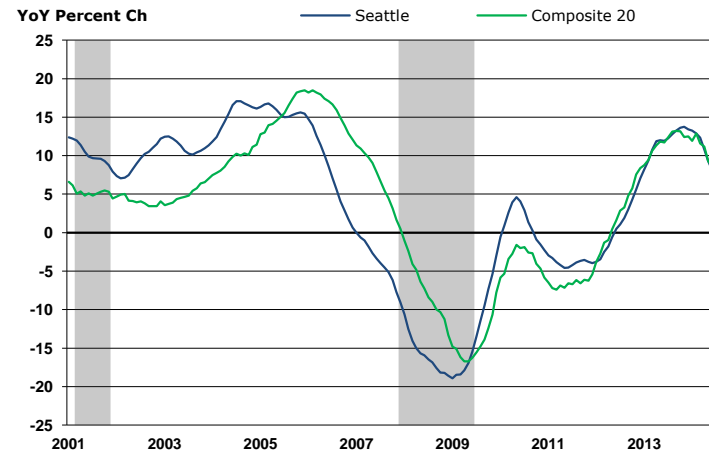
December 1998 to August 2014



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to July 2014, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.
Appendix



Glossary

Biennium: The state's two years budget cycle.

Cash Basis: Cash receipts received during a period. The Forecast Council forecasts revenues on a Cash and GAAP (Generally Accepted Accounting Principles) basis.

CPI: The Consumer Price Index for All Urban Consumers. The Bureau of Labor Statistics (BLS) updates the CPI monthly, surveying over 60,000 goods in 85 urban areas.

Tax Elasticity: A measure of how tax revenues respond to changes in personal income. If tax revenue elasticity is greater than one, a one percent change in personal income will be associated with more than a one percent increase in tax revenues. If elasticity is less than one, a one percent increase in personal income will be associated with less than a one percent increase in tax revenues.

Fiscal Year: The state's budget year. Washington State's fiscal year runs from July 1 through June 30. Fiscal year 2014, for example, ran from July 1, 2013 through June 30, 2014.

GAAP Basis: Generally Accepted Accounting Principles measure revenue in the period during which they accrue rather than the period in which they are received.
General Fund: Accounts for all financial resources and transactions not accounted for in another fund.

General Fund-State (GF-S) Revenue: Resources from state sources only, excludes federal monies. The general fund is the principal state fund supporting the operation of the state.

Implicit Price Deflator, PCE (IPD): The IPD for consumption is a by-product of the National Income and Product Accounts. It is derived by dividing current dollar (nominal) consumer expenditures by constant dollar (real) consumer expenditures.

Mortgage Rate: The average interest rate on 30 year conventional loan (as reported by Freddie Mac).

Near General Fund: All accounts included in the General Fund - State plus the Education Legacy Trust Account.

Non-Wage Income: Personal income other than from wages and salaries. The major components are: proprietor's income, transfer payments, and dividends, interest and rent.

Real GDP: Gross Domestic Production adjusted for the price level.

Revenue Act: Revenue Act taxes consist of the retail sales tax, use tax, business and occupation tax, public utility tax and tobacco products tax, plus penalty and interest payments associated with those taxes.

Personal Income: Income from wages and salaries; other labor income; proprietor's income; dividends, interest and rent; transfer payments; and a residence adjustment. It is reduced by employee contributions for social insurance.

Seasonally Adjusted: Adjusted for normal seasonal variations. Monthly statistics, such as the unemployment rate, are seasonally adjusted to make month-to-month comparisons possible.

Seasonally Adjusted Annual Rate: A rate for a given period that is typically less than one year, but that is computed as if the rate were for a full year and seasonally adjusted.

Nonfarm Payroll Employment: Civilian non-farm payroll employees. The self-employed, farm workers, members of the armed forces, private household employees, and workers on strike are excluded.