

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, bright blue.

Washington State Economic and Revenue Forecast

June 2015
Volume XXXVIII, No. 2



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

June 2015
Volume XXXVIII, No. 2

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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.

On May 14, 2015 the Council unanimously requested that the quarterly June forecast be completed in advance of the regular schedule. This publication is the summary of the forecasts adopted on May 18, 2015.

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 June 1, 2015.

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Executive Summary

- **The national economy slowed considerably in the first quarter, contracting 0.7% (SAAR) after a 2.2% (SAAR) increase in the fourth quarter.**
- **Employment growth has been weaker this year, averaging 194,000 net new jobs per month. Last year the economy added 260,000 jobs per month.**
- **Federal fiscal policy remains a drag on economic growth through lower-than-average spending. Monetary policy remains accommodative, but rate increases are expected this year.**
- **The Blue Chip Consensus GDP forecast now calls for real GDP growth of 2.5% in 2015, down from 3.2% in the previous forecast. After increasing to 2.8% in 2016, we expect growth to moderate as the recovery matures.**
- **The forecasts for Washington housing permits and construction employment are higher than assumed in February.**
- **Washington personal income is also higher than assumed in February but growth in 2016 and 2017 is slower.**
- **Revenue collections since February have come in \$61 million over the forecasted amount, mainly due to real estate excise taxes.**
- **The main changes to the forecast were an increase in real estate excise taxes and slight increases to retail sales and business and occupation taxes due to an increase in forecasted residential building activity.**
- **Legislation passed after the February forecast is expected to add \$39 million in revenue for the 2015-17 biennium and \$122 million in the 2017-19 biennium.**
- **The forecast of General Fund-State (GF-S) revenue for the 2013-15 biennium was increased by \$106 million and the forecast for the 2015-17 biennium was increased by \$309 million. The forecast for the 2017-19 biennium was increased by \$443 million.**

U.S. Economic Forecast

The underlying economic trend remains positive

The national economy contracted in the first quarter although the underlying trend remains positive. Severe winter weather, port strikes, and declining oil prices all served to drag down economic growth. Job gains have continued, but have been at a slower pace so far this year than in 2014. Unemployment continues to fall and consumer confidence is picking up. Home values are once again increasing and stock prices are hitting records.

Significant threats to the economic recovery remain, however, keeping uncertainty elevated. Despite the temporary pause in growth in the first quarter, the underlying trend in the economic recovery remains solid.

GDP fell in the first quarter; 2015 growth has been revised down

Real GDP fell 0.7% (SAAR) in the first quarter of 2015 after growing 2.2% (SAAR) in the fourth quarter. The drop in economic activity was due in large part to a number of temporary factors. Severe winter weather, the now-settled West Coast port strike, and fallout from the decline in oil prices all negatively affected growth. Second quarter growth will be free from these factors. The Blue Chip Consensus GDP forecast now calls for real GDP growth of 2.5% in 2015, down from 3.2% in the previous forecast. After increasing to 2.8% growth in 2016, we expect growth to moderate as the recovery matures. The forecast calls for growth of 2.7%, 2.6%, and 2.4% in 2017 through 2019.

Employment growth has been weaker than expected

Employment growth has been weaker this year, averaging 194,000 net new jobs per month. In 2014, the average net employment gain per month was 260,000. The forecast for employment growth has been revised lower since the February forecast. Growth in payrolls is expected to be 2.1% this year after growing 1.9% in 2014. We expect employment growth to fall to just 1.5% in 2016 as the economy nears full employment. The forecast then calls for job growth to trend down through 2019, reaching 0.9% as labor force growth slows due to retiring baby boomers.

Oil prices and housing are minimally changed since February, but we now don't expect rate increase until September

The forecast for oil prices is only minimally changed after plunging in the February forecast. Oil prices have come in higher than predicted in February, but we expect slower growth throughout the forecast. The housing recovery so far has been modest, although we expect growth to pick up throughout the forecast. The forecast calls for total housing starts to reach 1.60 million in 2019, still 23% below the peak in 2005. Federal Reserve is now moving to normalize monetary policy after years of measures aimed at supporting the economy. With a string of weak economic data in the first quarter, the forecast now calls for the Federal Reserve to begin increasing the federal funds rate in September. The February forecast had assumed that rate increases would begin in June.

Washington Economic Forecast

The Washington economy is expanding at a solid pace

The Washington economy is expanding at a solid pace. In recent months Washington employment has performed about as expected in the February forecast but historical estimates were revised lower. Washington personal income growth was stronger than previously assumed in 2014 and the forecast is also higher. The forecast for housing permits and construction employment is also higher than projected in February. Seattle area consumer

price inflation remains tame thanks mainly to lower energy costs but shelter costs are rising rapidly.

The June Washington forecast is similar to February's

Our June forecast for 2015 Washington employment growth is slightly slower than assumed in February due to weaker growth at the end of 2014. Washington employment is expected to grow 2.6% this year compared to the 2.9% growth assumed in the February forecast. Employment growth in 2016 and 2017 is also slightly lower than assumed in the February forecast reflecting the weaker national employment growth, but growth in 2018 and 2019 is slightly stronger. Our forecast for nominal personal income growth this year of 4.9% is slightly higher than the 4.8% expected in February, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.6% per year, down slightly from 5.7% in the February forecast. We expect total housing units authorized by building permits to rise 25.0% to 41,700 units in 2015, largely on the strength of the strong first quarter. We expect a 3.9% decline in 2016 to 40,000 followed by growth of 8.0% to 43,300 units in 2017, 2.6% to 44,400 in 2018, and 0.8% to 44,700 in 2019. We expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. The reason is the recent drop in oil prices. We expect all-items Seattle area inflation rates of 2.3% in 2016 and 2017, 2.2% in 2018, and 2.1% in 2019.

Revenue Forecast

The forecast was increased due to higher real estate and building activity, along with some legislative changes

Revenue collections since the February forecast came in \$61 million higher than the expected total. Most of the surplus came from real estate excise taxes. As the real estate market has been performing above expectations, forecasted real estate excise tax collections have been increased. While the June economic forecast is very similar to February's, it does include slightly stronger residential building activity. As a result, forecasted retail sales and business and occupation tax receipts are also slightly increased. The other main forecast change was legislation that is expected to increase the portion of cannabis sales that is subject to taxes. The net results of all of these changes were revenue forecast increases of less than one percent for the current and 2015-17 biennia and just over one percent for the 2017-19 biennium.

GF-S forecast change by biennium (millions):

*13-15: +\$106
15-17: +\$309
17-19: +\$443*

As of May 10th, revenue collections for the 2013-15 biennium were \$60.6 million ahead of the February forecast. For the remainder of the biennium, forecasted revenue has been increased by \$45.5 million. The forecast increase would have been \$68.0 million if not for \$22.5 million in large refunds that are expected in May and June. The sum of these changes for the 2013-15 biennium is a forecast increase of \$106.2 million, with total biennial revenue of \$33,652.8 million. The forecast for the 2015-17 biennium has been increased by \$309.3 million. \$270.3 million of the increase was due to economy-related forecast

changes and \$39.0 million came from the impacts of new legislation passed after the February forecast. The forecast for the 2017-19 biennium has been increased by \$443.2 million, with \$321.0 million due to economic changes and \$122.2 million from legislative changes. GF-S revenue is now forecasted to total \$36,758.1 million in the 2015-17 biennium and \$40,200.1 million in the 2017-19 biennium.

Special Report: Changes in employment during and after a recession: comparing Washington to the U.S.

Analysis looks at changes through six previous recessionary periods.

Coming out of the “Great Recession,” Washington’s economy has improved at a slightly stronger pace than the nation as a whole, a trend that ERFC forecasts predict will continue through 2019. To get a sense of how this pattern compares to other post-recession periods, this analysis looks at relative changes in U.S. and Washington employment through six previous recessionary periods: 1969-70, 1973-75, 1980, 1981-82, 1990-91 and 2001.

The pattern of U.S. and Washington employment gains after the recession is similar to several previous recessions.

Although the magnitude of job losses associated with the Great Recession was much greater than in the last several recessions, the relative pattern of U.S. and Washington employment gains after the recession is similar to several previous recessions. Washington employment expanded at a faster pace than did national employment following four of the six recessions prior to the Great Recession. This is consistent with a broader historical trend: between 1950 and 2014, Washington employment has grown at an annual average rate of 2.3%, while U.S. employment has increased at an annual average rate of 1.7%.



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

- **The national economy slowed considerably in the first quarter, contracting 0.7% (SAAR) after a 2.2% (SAAR) increase in the fourth quarter.**
- **Employment growth has been weaker this year, averaging 194,000 net new jobs per month. Last year the economy added 260,000 jobs per month.**
- **The modest housing market recovery has continued and is starting to approach more “normal” levels.**
- **Federal fiscal policy remains a drag on economic growth through lower-than-average spending. Monetary policy remains accommodative, but rate increases are expected this year.**
- **Weak growth in Europe and China remains a threat to the U.S. economy.**
- **The Blue Chip Consensus GDP forecast now calls for real GDP growth of 2.5% in 2015, down from 3.2% in the previous forecast. After increasing to 2.8% in 2016, we expect growth to moderate as the recovery matures.**
- **A more robust recovery in housing remains the most significant upside risk. A slowdown in global growth is the major downside risk.**

Current Conditions

The national economy contracted in the first quarter

The national economy contracted in the first quarter although the underlying trend remains positive. Severe winter weather, port strikes, and declining oil prices all served to drag down economic growth. Job gains have continued, but have been at a slower pace so far this year than in 2014. Unemployment continues to fall and consumer confidence is picking up. Home values are once again increasing and stock prices are hitting records. Significant threats to the economic recovery remain, however, keeping uncertainty elevated. Despite the temporary pause in growth in the first quarter, the underlying trend in the economic recovery remains solid.

U.S. real GDP fell 0.7% (SAAR) in the first quarter

U.S. real GDP fell 0.7% (SAAR) in the first quarter of 2015 after growing 2.2% (SAAR) in the fourth quarter. The drop in economic activity was due in large part to a number of temporary factors. Severe winter weather, the now-settled West

Coast port strike, and fallout from the decline in oil prices all negatively affected growth. Second quarter growth will be free from these factors. Consumer spending made the largest contribution to growth in the first quarter, increasing 1.8% (SAAR) and adding 1.2 percentage points to overall GDP growth. Most of the increase in consumer spending was due to purchases of services. Fixed investment fell 1.3% (SAAR) due to a sharp 20.8% (SAAR) drop in nonresidential construction. Residential construction grew 5.0% (SAAR). Fixed investment subtracted 0.2 percentage points from overall GDP growth. Inventory investment contributed 0.3 percentage points. Net exports reduced growth by 1.9 percentage points as imports grew 5.6% and exports fell 7.6%. The deterioration in net exports was due to the strong U.S. dollar and will likely remain a drag going forward. Government spending was once again a drag on growth, reducing GDP by 1.1 percentage points. Most of the weakness came from a reduction in state and local government spending. Federal government spending was mostly flat as an increase in nondefense spending was largely offset by a decrease in defense spending.

Spending growth has been inconsistent

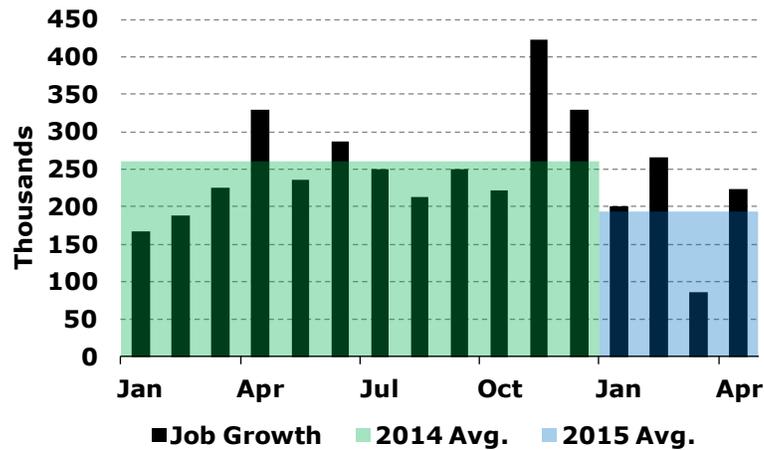
Rising personal income is essential for consumer spending to continue to improve. Personal income was up 0.4% in April after no change in March. Wage growth was slow, increasing just 0.2%. Dividend and interest income was strong in April, with total asset income increasing 1.2%. Real disposable personal income growth (income after taxes and adjusted for inflation) rebounded in April, growing 0.3% after falling 0.2% in March. With relatively low wage growth over the last few years, spending growth has been inconsistent. Consumption was unchanged in April following a 0.4% increase in March. Spending on goods was down 0.8% while spending on services was up just 0.2% due to low spending on utilities. The personal saving rate increased to 5.6% from 5.2%. New vehicle sales appear to have hit a plateau, coming in at 16.5 million units (SAAR) in April, down from 17.1 million units (SAAR) in March. Retail sales were unchanged in April, due partially to weak sales at vehicle dealers and gasoline stations. Excluding those two segments, sales rose just 0.2%. Department store sales plunged 2.2%. Low energy prices have freed up significant money for households recently. So far, however, these savings have not shown up in increased spending on other goods and services in a substantial way.

Employment growth has slowed

Employment growth has been weaker this year, averaging 194,000 net new jobs per month (see Figure 1.1). In 2014, the average net employment gain per month was 260,000. Job growth rebounded somewhat to 223,000 in April from the dismal 85,000 job gain in March. The private sector added 182,000 jobs in April and government payrolls made up the 9,000 job loss in March with a 10,000 job gain in April. Energy-related industries continue to cut back with a 15,000 decline in natural resources and mining. Construction remained strong with gains related to commercial and multi-family housing. Private services-providing

industries gained 182,000 jobs in April. Most of the gains were in professional and business services (+62,000) and education and health services (+61,000). Wholesale trade was the only notable major service industry to decline, with a net job loss of 4,500.

Figure 1.1: Nonfarm Payroll Employment Growth



Source: U.S. Bureau of Labor Statistics; data through April 2015

The labor market is improving

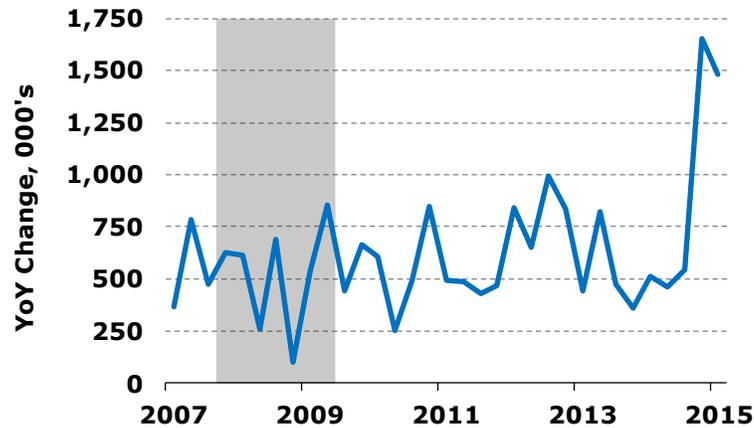
The ongoing labor market recovery is not only absorbing unemployed workers, but bringing some new entrants into the labor force as well. The unemployment rate has fallen from 6.2% in April 2014 to 5.4% in April 2015. During this time, the labor force increased by 1.65 million people. The labor force participation rate has held steady at 62.8% even with the recent increase in the labor force. Previously discouraged workers are re-entering the labor force now that they believe they have a chance at employment. Joblessness, while still elevated at 8.5 million people, has dropped by 1.15 million people since last year. 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 12.3% to 10.8% since last year. Job openings are rebounding as well. Job openings in February reached a post-recession high of 5.1 million before falling to 5.0 million in March. The number of job openings is at the highest level since data was first tracked in 2005 and is up 800,000 since last year.

Household formation has increased

The continued job growth has led to a surge in household formation. The number of households grew by 1.66 million in the fourth quarter of 2014 compared to the previous year (see Figure 1.2). The recent surge has been fueled by new renter-occupied homes. These homes grew by 1.87 million over the year in the first quarter while owner-occupied homes fell by 386,000. Builders have responded with more multi-family construction such as apartment buildings to meet the increased demand. Even with the increase in construction, the rental

vacancy rate is down 14% since last year. The fourth quarter rental vacancy rate of 7.0% was the lowest in 20 years.

Figure 1.2: Annual Household Formation



Source: U.S. Census Bureau; data through 2015Q1

Consumer confidence has broken out of recessionary territory

The upward trend in consumer confidence has paused after finally breaking out of recessionary territory last year. The recent fall in gasoline prices has given consumers some extra expendable income. An improving economy and continued job growth have enabled consumers to feel more confident. Rising home prices have also helped confidence recently. Equity markets continue to improve consumers' financial position. While the trend over the past few years has been positive, confidence is down so far this year. The Conference Board indicated that confidence rose slightly in May, up 1.1 points to 95.4 but this remains well below the first quarter average of 101.3. Respondents are expressing concern over future business conditions and pay. The University of Michigan reading of consumer sentiment fell in May, dropping 5.2 points to 90.7. This was also down significantly from the first quarter. Consumers indicated they felt worse about their current finances and believed the outlook has diminished. In both measures, the drop in confidence recently points to a weak second quarter for consumer spending.

Small business confidence remains weak

Small business confidence has deteriorated to start the year. After reaching a post-recession high of 100.4, the National Federation of Independent Business (NFIB) small business optimism index declined to 95.2 in March. The April reading bounced back to 96.9 with small across the board increases. The index still remains consistent with a slowly expanding economy as opposed to the recessionary readings of a year ago. In April, earnings trends improved the most and both current job openings and hiring plans increased slightly. Low quality of labor is now emerging as an issue, cited by 12% of respondents as the most important problem they face. Taxes and government

regulation remain the most concerning problems cited by a plurality of small businesses. Poor sales continue to be a concern facing businesses, cited by 11% of respondents as their most important issue.

Oil prices remain low after having dropped sharply

Oil prices have crept up after having dropped sharply in recent months. With weak global demand, oil prices dropped over \$50 per barrel since peaking last summer. West Texas Intermediate (WTI) was \$59 per barrel for the week ending May 22nd while the Brent price was \$64 per barrel. Both prices are up around \$15 per barrel since January. Increased domestic supply has continued even in the face of low prices. U.S. crude production has reached 9.56 million barrels per day, the highest in 44 years. Increased supply is largely meeting the increase in demand. The strong U.S. dollar has also kept oil prices contained. Internationally, OPEC won't fight the drop in prices in hopes that some of the more expensive drilling techniques being deployed in the U.S. will no longer be profitable and shut down. Amidst the recent drop in energy prices, geopolitical conflict has continued. 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. Although Islamic militants have kept their grip in Northern 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. Russia's intervention into Ukraine has continued as well, but this too has done little to raise prices. An agreement between the U.S. and Iran regarding Iran's nuclear capabilities has the potential to boost Iranian oil production, putting further downward pressure on prices.

Inflation remains low

Headline inflation has been nonexistent the past year as energy prices have fallen and remained low. In April the year-over-year change in the Consumer Price Index (CPI) fell to -0.2%. Energy prices were responsible for the decline, dropping another 1.3% in April, and are now down 19.4% from a year ago. Gasoline prices again declined, falling 1.7% in April. Fuel oil once again dropped sharply, down 8.4% from the prior month. Food prices were unchanged in April after declining the month before. Food prices are now up 2.0% year over year. Shelter costs increased 0.3% in April and are now up 3.0% year over year. Core inflation, which excludes food and energy, was 0.3% in April and 1.8% since last year.

The modest housing recovery has continued

The modest housing market recovery has continued and is starting to approach more "normal" levels. Recent data have generally been positive and there remains a great deal of upside in the housing recovery. The excess stock of distressed properties has largely been worked through and fewer are available for sale at deep discounts. Distressed sales made up 10% of the market of existing home sales in April, down from 15% a year ago. While the trend in home sales has generally

been positive, the recovery remains uneven. Sales of existing homes declined in April 3.3% to 5.04 million units (SAAR). Single-family home sales decreased 3.7% while condo and co-op sales were unchanged. The market for existing homes is tight, which is leading to bidding wars and putting upward pressure on prices. Roughly 40% of properties sold in April were at or above asking price. Total inventory in January rose 10.0% to 2.21 million but remains 0.9% lower than a year ago. Inventory is at a 5.3 month supply at the current sales pace, up from 4.6 in March. The number of new home sales increased in April by 6.8% to 517,000 units (SAAR). The supply of new homes has increased 1.5% over the month, but remains tight at 4.8 months. Mortgage rates remain at historically low levels, but are starting to trend up. The rate in May reached its highest level of the year at 3.87% for a conventional 30-year mortgage.

New construction is improving but remains weak

Home construction is improving but remains at levels normally only seen in recession. Housing starts increased in April to 1.135 million units (SAAR) after coming in at just 944,000 units (SAAR) in March. The sharp increase in April was mostly due to the severe weather induced slowdown affecting March. April new construction is consistent with the underlying weak but positive trend. Total housing starts for calendar year 2014 were 1.001 million units, up 7.7% from 2013. This ended six consecutive years where housing starts were fewer than 1.0 million units annually. Prior to the recession, the number of housing starts were never fewer than 1.0 million units annually in the post World War II era. The increase in April came from both the single and multi family segments. Multi-family housing increased 27.2% in April to 402,000 units (SAAR). Multi-family construction has now recovered to pre-recession levels. Single-family construction continues to trend upward, increasing 16.7% to 733,000 in April, and is now up 14.7% since last year. Housing permits show a similar trend to starts. Total permits increased 10.1% in April. Single family permits increased 3.7% while multi-family permits increased 20.5% in April. While housing activity has rebounded from severe winter conditions, homebuilder confidence has lagged. The National Association of Homebuilders (NAHB) housing market index, which measures confidence of homebuilders, indicates that homebuilders are feeling slightly less confident. In May, the composite index was 54, down two points from the month before and down from the post recession high of 59 in September.

Home prices continue to increase

Home price appreciation has accelerated to start the year. The seasonally adjusted Case-Shiller 20-city home price index increased a solid 1.0% over-the-month in March after increasing 1.2% in February. Home prices are up 5.0% from a year ago and seem to be settling into a more sustainable growth pattern (see Figure 1.3). Prices have increased 26.3% since the trough of the recession, but remain 14.0% below their previous peak. The rise in home prices has been positive for the overall housing market. Rising prices have typically encouraged new construction and are

enabling previously underwater homeowners to sell their homes and trade up for more expensive houses. Affordability issues have emerged however, especially among first time home buyers. Although homes remain affordable by historic standards, affordability is down sharply from the past two years. Stronger wage growth and easier access to credit will help growth going forward.

Figure 1.3: Case-Shiller U.S. Home Price Index



Source: S&P/Case-Shiller; data through March 2015

The manufacturing sector has slowed

The manufacturing sector continues to improve, but the pace is slowing. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector expanded again in May. The ISM index improved to 52.8 from 51.5 the month before (index levels above 50 indicate expansion), but still indicated modest growth. Details from the report were generally positive in comparison to the month before. New orders increased 2.3 points to 55.8 although production fell 1.5 points to 54.5. The employment component returned to positive territory in May, increasing 3.4 points to 51.7. The latest G-17 report from the Federal Reserve, which measures manufacturing output, indicated no change in output in April after increasing 0.3% in March. A small increase in the production of durable goods was offset by a small decrease in nondurable goods. Manufacturing output is 2.3% above last year. New orders for core capital goods (nondefense capital goods excluding aircraft) rebounded in March, growing 0.6% after declining 5.1% and 0.2% in February and January. New orders are now up 3.5% over the year. Shipments increased 0.9% in March and are up 1.6% over last year.

The Federal Reserve is setting the stage for rate increases

Monetary policy remains accommodative, but the nontraditional policies of the last few years employed by the Federal Reserve have essentially come to an end. Policymakers are now shifting their focus to determining when the fed funds rate should be raised. The Federal Reserve decision-making process remains

data driven. With inflation hovering around 1%, there does not appear to be a rush to raise rates. At the April meeting, the Federal Reserve discussed the potential transitory factors that hurt economic growth in the first quarter. However, there was also a view that the weakness in the first quarter could linger into the second quarter and beyond. Many participants also judged that the pace of improvement in the labor market has slowed. Given the uncertainty about the economy's path, policymakers have not taken a definitive stand on when to begin raising rates.

Weak global growth remains a threat

Weakness in economic growth abroad remains a threat to the U.S. recovery. Japan appears to have successfully navigated its economy out of a brief recession last year and growth is accelerating. Economic activity in China has continued to weaken, threatening U.S. exports. Last year Chinese year-over-year GDP was 7.4%, the slowest in 24 years. Chinese leaders have targeted an even slower growth rate this year of 7%. The International Monetary Fund predicts the Chinese economy will grow 6.8% this year and 6.25% in 2016. China has struggled to shift to a more consumer-based economy and lower its reliance on exports. European economies remain a threat to the U.S. economic recovery as well. Greece continues to struggle and a Eurozone exit remains possible. The European economy recently emerged from a recession that started at the end of 2011. Real GDP in the Eurozone is still lower than in 2008. Although the Eurozone economy is no longer contracting, growth remains weak. Real GDP in the Eurozone increased at a 1.6% annualized rate in the fourth quarter of 2014, up from a 1.3% rate the previous quarter. Some member countries continue to experience negative growth, including Italy and Greece. 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.

Forecast

Our forecast is based on the May Blue Chip Consensus forecast

The economic forecast was based on a modified version of Global Insight's May 2015 Control forecast for the U.S. economy. Consistent with our standard practice, the U.S. real GDP forecast was adjusted to match the May Blue Chip Consensus GDP forecasts for 2015 and 2016. We also incorporated the latest long term Blue Chip GDP forecast for 2017 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 lower

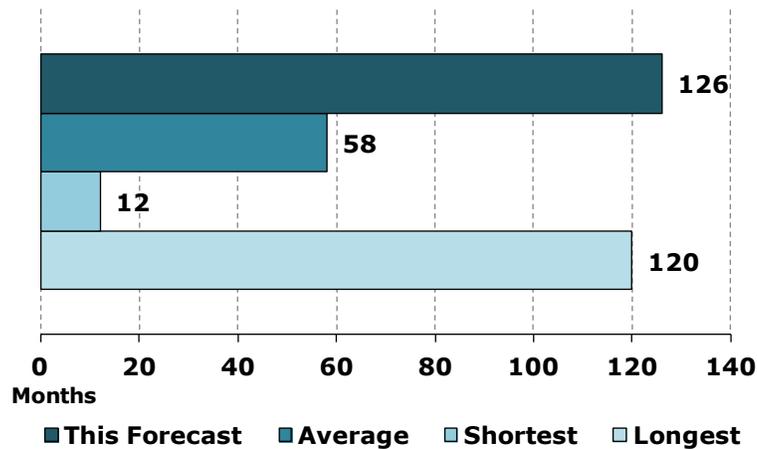
The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, now calls for real GDP growth of 2.5% in 2015, down from 3.2% in the previous forecast. The lower forecast is primarily due to weak GDP growth in the first quarter. The forecast for 2015 is still higher than the 2.4% growth in 2014. GDP growth is expected to rebound from the first quarter slump,

reaching 3.1% (SAAR) in the third quarter of 2015. Real GDP growth is only minimally changed from the February forecast for 2016 through 2019. After increasing to 2.8% growth in 2016, we expect growth to moderate as the recovery matures. The forecast calls for growth of 2.7%, 2.6%, and 2.4% in 2017 through 2019.

This recovery will be the longest on record

The positive GDP growth throughout the forecast will make the recovery from the 2007-09 recession the longest on record (see Figure 1.4). From the third quarter of 2009 through the end of our forecast in 2019, the recovery is forecasted to be 42 quarters. Prior to this, the longest recovery was from the 1990-91 recession, lasting 39 quarters. The primary reason for the exceptional length of the current recovery has been the depth of the recession. Despite solid GDP growth, the labor market remained weak for an extended period. It took 25 quarters of recovery just to reach the previous peak in employment. As a result of the soft labor market, the Federal Reserve had kept interest rates at historically low levels. Economic conditions are just now returning to “normal” levels.

Figure 1.4: U.S. Economic Expansions since 1945



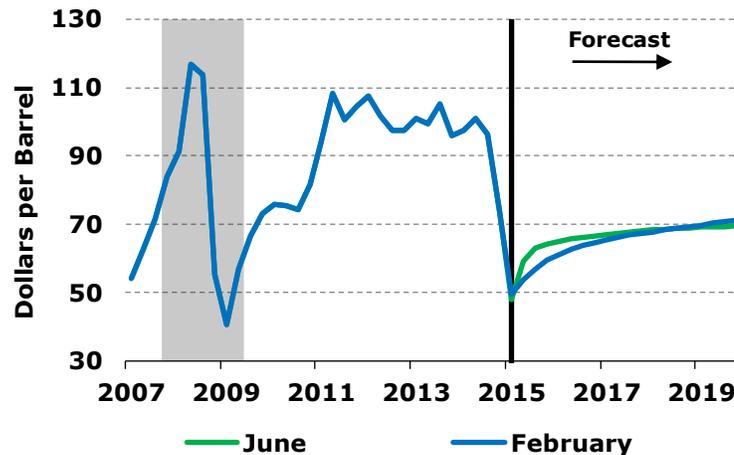
Source: NBER, ERFC June 2015 forecast; historical data through 2015Q1

Oil prices remain low

The forecast for oil prices is only minimally changed after plunging in the February forecast. Oil prices have come in higher than predicted in February, but we expect slower growth throughout the forecast. Brent crude prices have steadily climbed to \$65 per barrel in May after reaching a low of \$45 per barrel in January. This remains well below the \$111 per barrel of a year ago. WTI crude oil has followed a similar pattern over the same period. The rise in crude oil has caused gasoline prices to increase as well, although the latter has increased at a faster rate. Gasoline prices have increased from just over \$2 per gallon in January before rising to \$2.75 in May. Low oil prices are starting to affect U.S. oil production. After steadily increasing for

years, domestic oil production has started to fall. In the week ending May 15, U.S. domestic crude oil production fell by 112,000 barrels per day, the largest decline of the year. The decline in production is a sign that new shale wells are not being brought online fast enough to offset the depletion of existing wells. Turmoil in oil-producing countries has continued, although markets remain minimally affected. Weak economic growth in China and Europe has lowered the demand for oil. The strong dollar has kept downward pressure on oil prices recently. We expect the first quarter of 2015 to be the trough for oil prices at \$48 per barrel. Prices then rise to \$59 per barrel in the current quarter. The forecast calls for prices to gradually increase, reaching \$69 per barrel in 2019 (see Figure 1.5). With low oil prices, inflation (as measured by the implicit price deflator) is forecasted to be just 0.4% in 2015. We then expect low inflation throughout the forecast ranging from 1.7% to 1.8%.

Figure 1.5: Average Price of Crude Oil



Source: DOE, ERF June 2015 forecast; historical data through 2015Q1

Spending growth has been revised lower

Consumer spending was weak in the first quarter resulting in a slight downward revision to the forecast for 2015. We now expect consumer spending to grow 3.1% this year compared to 3.3% in the February forecast. Low energy prices will continue to help consumers' purchasing power. Consumers remain much more optimistic than earlier in the recovery and there are indications that real wages may be on the verge of increasing. Unemployment continues to fall and more part-time workers are finding full-time jobs. Equity markets continue to increase and home values are rising. We expect real spending growth to slightly outpace overall real GDP growth this year, growing 3.1% after 2.5% growth in 2014. We expect consumption growth to slow throughout the remainder of the forecast, reaching 2.5% in 2018 and 2019. We expect consumer spending to contribute 2.1 percentage points to real GDP growth this year followed by a 1.9 percentage point contribution on average for each year of the forecast through 2019.

Personal income growth will pick up

Real disposable personal income growth rebounded to 2.5% in 2014 after declining 0.2% in 2013. We expect growth to accelerate to 3.3% in 2015 before moderating to 2.5% in 2016. Lower energy prices will keep inflation low this year, providing a boost to real incomes. We expect growth in real disposable personal income to reach a post-recession high of 3.6% in 2017. Growth is then expected to slow to 3.5% in 2018 and 3.3% in 2019. These rates are still higher than assumed in the February forecast. Nominal disposable income is expected to grow 3.7% 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. The forecast then calls for growth in wages and salaries of over 5.0% each year for the remainder of the forecast. Income will also be boosted over the next few years by strong growth in dividend income as equity markets continue to rise. Interest income will add to overall personal income growth beginning in 2016 as interest rates rise and return to pre-recession rates.

The outlook for employment has been revised lower

The forecast for employment growth has been revised lower since the February forecast. Growth in payrolls is expected to be 2.1% this year after growing 1.9% in 2014. We expect employment growth to fall to just 1.5% in 2016 as the economy nears full employment. The forecast then calls for job growth to trend down through 2019, reaching 0.9% 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 to 5.3% in 2015 from 6.2% the year before. We expect the unemployment rate to average 5.0% for the rest of the forecast. The continued strengthening of the labor market and corresponding fall in the unemployment rate will create an incentive for more and more marginally attached workers to begin looking for a job. Older people are also staying in the workforce longer. These two factors will push the labor force participation rate up from a trough of 61.4% in 2014 to 62.2% in 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 2017. Private sector employment is estimated to have reached 116.0 million in the first quarter of last year, making up all of the jobs lost during the recession. We do not expect the job losses in the public sector to be made up until after 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 virtually no growth in 2014. Government payrolls are expected to decline 0.3% in 2016 driven by a 1.6% decline in federal government employment. We then expect growth in

overall government employment to turn positive and reach 1.4% in 2019. We expect private sector job growth of 2.5% this year, which would mark the fastest growth since 1999. The forecast calls for private sector job growth to gradually slow throughout the remainder of the forecast to just 0.8% in 2019.

Business investment is improving

Business investment continues to improve despite lingering headwinds. The drop in oil prices, which is good for overall growth, lowers the incentive for additional investment by energy companies. The weak economic outlook abroad has also given businesses pause. On the plus side, vacancy rates for office buildings fell to 16.6% in the first quarter, from 16.7% for the fourth quarter, the lowest since 2009. Companies still have a high level of cash on hand and borrowing rates remain low. We expect nonresidential construction to decline 6.7% this year, after growing 8.2% in 2014. The drop is due to a decline in mining and petroleum structures caused by the recent plunge in oil prices. The forecast calls for growth to strengthen to 3.0% in 2016 before picking back up with growth of 7.9% in 2017, as the drag of low oil prices diminishes. The forecast then calls for growth of 8.9% in 2018 before slowing to 4.5% in 2019. Equipment investment is expected to have strong growth throughout the forecast as businesses expand and improve productivity. Although we do not expect to see the double-digit growth experienced early in the recovery, we do expect capital equipment to remain an important driver of GDP growth. Investment in equipment and software is expected to grow 6.0% this year. The forecast then calls for growth to reach 8.1% in 2016 before gradually declining to 3.3% in 2019. We expect overall real nonresidential fixed investment to grow 3.8% this year and accelerate to 6.1% in 2016 and 2017. The forecast then calls for growth to moderate to 5.7% in 2018 and 3.7% in 2019.

The modest housing recovery will continue

The housing recovery so far has been modest, although we expect growth to pick up throughout the forecast. Some of the barriers facing the housing sector have gradually started to erode. Lending standards for homebuyers and developers continue to ease. 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 calls for growth in housing starts of 7.4% for this year, down slightly from 7.6% in 2014. The forecast then expects robust growth in housing starts over the next two years of 20.6% and 13.1%. Growth in single-family starts is expected to be 10.3% this year, up from 4.0% in 2014. Growth will accelerate to 21.7% in 2016 and 19.0% in 2017. The forecast then calls for single family housing to slow in 2018 and 2019 at 5.1% and 2.8%. The forecast calls for a pause in the multi-family housing segment this year after growing at a double-digit rate for each of the past four years. We expect 2.2% growth this year and then another solid year of growth in 2016 at 18.2%. We expect the multi-family segment to grow 1.2%, 4.0%, and 6.7% in 2017 through 2019. The housing market will

continue to improve, particularly while interest rates remain low by historical standards and inventories are lean. Mortgage rates for a conventional 30-year fixed rate mortgage are expected to rise from 3.9% this year to 5.8% in 2018 and then decline slightly to 5.7% in 2019. Population remains on an upward trend and employment continues to increase at a solid pace. The number of housing units remains at a historically low level and there is considerable pent-up demand created by the recent lack of household formation. The forecast calls for total housing starts to reach 1.60 million in 2019, still 23% below the peak in 2005.

Weak foreign demand has weighed down export growth

Economic growth of major foreign economies remains modest. After recently emerging from as prolonged recession, European growth has picked up. Greece remains engaged in bailout negotiations, although this has become the new normal and markets have adjusted. The latest Blue Chip forecast calls for 1.5% (SAAR) growth this year for the Eurozone followed by 1.8% (SAAR) growth in 2016. 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. Weak export demand from China has added to the struggle the Chinese have had transitioning to a more domestic consumer driven economy. Chinese GDP growth in 2014 was 7.3% (SAAR), well below the 2005-11 average of 11%. The most recent Blue Chip forecast calls for Chinese growth to slow further, with growth of 6.9% (SAAR) this year and 6.7% (SAAR) in 2016. Japan appears to be finally shaking off the effects of its most recent downturn. Japanese GDP growth in the first quarter was 2.4% (SAAR), much faster than the 1.5% (SAAR) forecasted by economists. The most recent Blue Chip forecasts expect slow growth in the near term of 1.0% (SAAR) this year followed by 1.5% (SAAR) in 2016. Canada, the largest U.S. trading partner, is experiencing similar economic weakness as that of the U.S. Severe winter weather limited growth in the first quarter of this year. The effect of low oil prices is also putting a damper on industrial production. Consumer spending in Canada is propping up the economy, although the withdrawal of Target stores, eliminating 17,600 jobs, and public sector deficit reduction have acted as headwinds. The May Blue Chip forecast calls for GDP growth to slow from 2.5% in 2014 to 2.0% this year before picking up to 2.2% in 2016.

Export growth will remain positive, but not at a level to stimulate the economy

Due to the modest economic growth of U.S. trading partners, foreign trade is not likely to provide a substantial boost to the U.S. economy. GDP growth in U.S. trading partners is expected to increase, but not at a rate sufficient to lift the U.S. economy in the near term. After growing 2.6% in 2014, the forecast calls for GDP growth in U.S. trading partners to slow to 2.5% this year before picking up to 3.0% in 2016. The forecast then calls for GDP growth in U.S. trading partners to grow 3.2% in 2017 and 3.3% in 2018 and 2019. We expect real U.S. export growth of just 2.1% this year due both to weak economic growth abroad

and a strong U.S. dollar. The forecast calls for real export growth to rebound in 2016 to 5.2%. We then expect real export growth to moderate and average 4.6% through the remainder of the forecast. Export growth is more than offset by increased imports in each year of the forecast. Net exports are expected to reduce overall GDP growth by 0.5 percentage points this year. Beyond 2015, net exports are expected to reduce GDP growth by 0.3 percentage points on average through 2019.

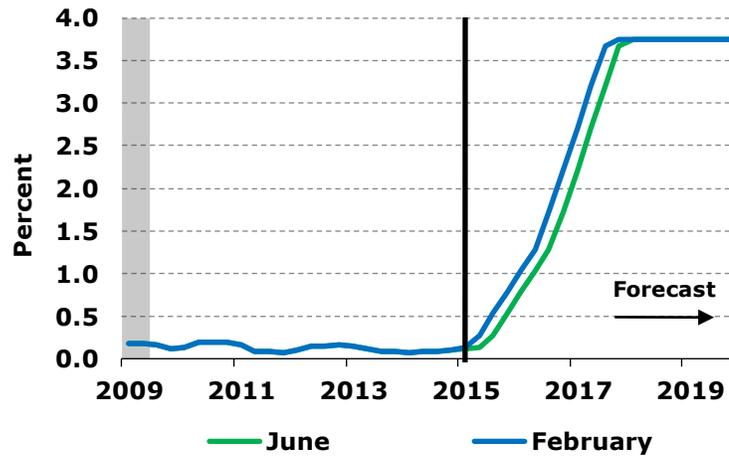
U.S. policymakers remain focused on deficit reduction

Uncertainty surrounding fiscal policy remains low as policymakers remain focused on deficit reduction in the near term. The forecast calls for a \$92.4 billion reduction in the federal deficit through 2016. After dropping by \$15.5 billion in 2014, we expect real defense spending to increase slightly this year before declining slowly through the remainder of the forecast. Real nondefense purchases will follow a similar pattern. We expect a \$0.8 billion increase this year followed by a \$2.7 billion per year average reduction through 2019. Although federal government spending will continue to decline throughout the forecast, this will be made up by increases in government spending at the state and local levels. The forecast assumes 2014 was the trough in total real government purchases. We expect total real government spending to increase 0.8% this year and then average 0.4% growth throughout the remainder of the forecast.

The Fed is normalizing its monetary policy

The Federal Reserve is now moving to normalize monetary policy after years of measures aimed at supporting the economy. With a string of weak economic data in the first quarter, the forecast now calls for the Federal Reserve to begin increasing the federal funds rate in September. The February forecast had assumed that rate increases would begin in June (see Figure 1.6). Recent data also indicate the Federal Reserve failed to achieve its price stability mandate as inflation remains below the target rate of 2%. Federal Reserve policymakers remain data driven, and there are a number of risks that could delay the rise in rates. They have avoided committing to any particular timing or pace of rate increases in order to maintain as much flexibility as possible. While the forecast still assumes inflation will be low and the labor market not fully recovered, it is still anticipated that the Fed will be comfortable raising rates. We expect rates to rise gradually before leveling off at the end of 2017.

Figure 1.6: Federal Funds Rate



Source: Federal Reserve, ERFC June 2015 forecast; historical data through 2015Q1

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 outweigh upside risks

Our view of the risks to the forecast is slightly more negative than in the February forecast. Employment gains and GDP growth have been weaker than anticipated. The outlook for Chinese economic growth continues to be revised down and a Greek exit from the Eurozone remains a possibility. The level of uncertainty in the baseline remains elevated, and downside risks once again outweigh upside risks.

Downside Risks

Low household formation

Low wage growth, slower immigration, and other social and economic burdens restrain household formation. Demand for new homes dampens and the housing-sector recovery never materializes.

Employment growth is weak

The recent weak employment growth continues. Job growth is no longer sufficient to quickly reduce unemployment and bring new entrants back into the labor market.

Fiscal tightening

Policymakers misinterpret weak growth and depressed confidence, decide on austerity, and cut discretionary spending, further reducing growth.

Hard landing in China

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

<i>Sovereign debt contagion</i>	Breakdown in Greek bailout negotiations result in debt default and Eurozone exit.
<i>Geopolitical conflict</i>	Tensions in Ukraine escalate, destabilizing the region. Oil shipments and financial linkages to Europe are stressed.
<i>Military intervention</i>	The conflict in Iraq and Syria escalates. Major oil infrastructure is compromised, reducing supply globally. The U.S. expands its military presence.
<i>Low real wage growth</i>	Real wage growth remains flat, resulting in a drop in spending.

Upside Risks

<i>Oil price remain low</i>	OPEC producers do not respond to falling prices by cutting supply, and instead engage in a price war. Their hopes of making U.S. producers unprofitable do not materialize. U.S. producers keep expanding production.
<i>Housing recovery ignites</i>	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.
<i>Employment growth continues</i>	Greatly increased production brings significant wage and payroll gains. As employment and wage growth both pick up, they lift the pace of U.S. consumption growth.
<i>Eurozone monetary stimulus</i>	The European Central Bank's (ECB) quantitative easing successfully steers the Eurozone away from its current economic malaise.
<i>Emerging market growth</i>	Emerging market GDP growth accelerates. Global growth picks up and U.S. exports are boosted.
<i>Chinese growth</i>	China successfully transitions to a more consumption based economy.

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	15,884.6	16,306.2	16,720.6	17,180.7	17,635.0	18,078.6
% Ch	2.0	2.0	2.5	2.7	2.5	2.8	2.6	2.5
Real Consumption	10,351.7	10,566.3	10,820.4	11,138.8	11,468.8	11,778.4	12,089.6	12,388.6
% Ch	1.8	2.1	2.4	2.9	3.0	2.7	2.6	2.5
Real Nonresidential Fixed Investment	1,891.2	1,953.1	2,046.9	2,160.5	2,266.0	2,398.9	2,547.8	2,666.8
% Ch	9.5	3.3	4.8	5.5	4.9	5.9	6.2	4.7
Real Residential Fixed Investment	407.6	464.7	494.0	507.9	564.4	629.9	670.4	693.6
% Ch	8.9	14.0	6.3	2.8	11.1	11.6	6.4	3.5
Real Personal Income	12,844.4	13,172.0	13,349.5	13,801.8	14,223.1	14,689.3	15,231.5	15,730.1
% Ch	2.8	2.6	1.3	3.4	3.1	3.3	3.7	3.3
Real Per Capita Income (\$/Person)	40,981	41,732	41,996	43,083	44,038	45,114	46,404	47,542
% Ch	2.1	1.8	0.6	2.6	2.2	2.4	2.9	2.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.067	1.081	1.089	1.102	1.121	1.142	1.162
% Ch	2.4	1.4	1.3	0.8	1.1	1.8	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.276	2.314	2.350	2.367	2.396	2.449	2.502	2.555
% Ch	2.9	1.7	1.6	0.7	1.2	2.2	2.2	2.1
Employment Cost Index (Dec. 2005=1.0)	1.150	1.171	1.193	1.222	1.255	1.290	1.326	1.365
% Ch	1.7	1.8	1.9	2.4	2.7	2.7	2.8	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	15,855.9	16,430.8	17,080.7	17,745.3	18,502.2	19,434.2	20,361.2	21,276.0
% Ch	4.0	3.6	4.0	3.9	4.3	5.0	4.8	4.5
Personal Income	13,516.9	14,058.1	14,426.1	15,032.5	15,667.5	16,474.5	17,389.0	18,271.3
% Ch	5.3	4.0	2.6	4.2	4.2	5.2	5.6	5.1
Employment (Millions)								
U.S. Civilian Labor Force	154.3	155.3	155.5	156.7	158.9	161.2	163.3	165.0
Total U.S. Employment	141.2	143.3	145.0	147.7	150.7	153.1	155.2	156.6
Unemployment Rate (%)	8.53	7.77	6.76	5.67	5.12	4.92	4.91	5.01
Nonfarm Payroll Employment	133.00	135.18	137.60	140.58	143.11	145.09	147.00	148.40
% Ch	1.6	1.6	1.8	2.2	1.8	1.4	1.3	1.0
Manufacturing	11.83	11.98	12.09	12.29	12.46	12.54	12.60	12.60
% Ch	1.8	1.2	0.9	1.7	1.4	0.6	0.5	0.0
Durable Manufacturing	7.38	7.51	7.60	7.78	7.94	8.01	8.07	8.08
% Ch	3.1	1.7	1.2	2.3	2.1	0.9	0.7	0.2
Nondurable Manufacturing	4.45	4.47	4.49	4.51	4.53	4.53	4.54	4.52
% Ch	-0.2	0.4	0.5	0.5	0.3	0.1	0.2	-0.3
Construction	5.60	5.74	5.99	6.28	6.61	7.06	7.57	7.97
% Ch	2.0	2.4	4.4	4.9	5.2	6.8	7.2	5.3
Service-Providing	114.74	116.61	118.65	121.12	123.22	124.67	125.98	126.96
% Ch	1.5	1.6	1.7	2.1	1.7	1.2	1.1	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	95.0	92.3	101.2	69.4	63.5	65.4	66.7	67.5
Personal Saving/Disposable Income (%)	6.4	6.3	4.9	5.0	4.6	4.9	5.8	6.6
Auto Sales (Millions)	6.6	7.4	7.6	7.6	7.7	8.1	8.4	8.3
% Ch	11.5	12.1	2.1	0.4	1.2	5.0	4.5	-1.3
Housing Starts (Millions)	0.684	0.875	0.954	1.024	1.192	1.403	1.500	1.564
% Ch	20.1	27.8	9.1	7.3	16.4	17.7	6.9	4.3
Federal Budget Surplus (Billions)	-1,149.6	-863.2	-612.0	-566.3	-514.3	-485.8	-515.2	-550.7
Net Exports (Billions)	-593.5	-532.5	-515.0	-522.1	-508.2	-516.9	-566.4	-595.3
3-Month Treasury Bill Rate (%)	0.05	0.08	0.04	0.03	0.64	1.94	3.43	3.53
10-Year Treasury Note Yield (%)	2.08	1.82	2.71	2.21	2.65	3.26	3.84	3.86
Bond Index of 20 G.O. Munis. (%)	3.97	3.75	4.54	3.84	4.41	4.88	5.28	5.29
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	3.90	4.33	5.13	5.75	5.76

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>Feb.</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	5.6	6.0	5.2
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	2.5	1.7	1.9
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	0.08	0.07	0.04
Mortgage Rate	5.17	4.97	4.45	4.16	3.99	4.15	4.63	4.56	4.61	4.48	4.40	4.33	4.13	4.12

Table 1.3

Fiscal Years

Forecast Comparison

Forecast 2015 to 2019

	2013	2014	2015	2016	2017	2018	2019
U.S.							
Real GDP							
June Baseline	15502.5	15884.6	16306.2	16720.6	17180.7	17635.0	18078.6
% Ch	2.0	2.5	2.7	2.5	2.8	2.6	2.5
February Baseline	15502.5	15884.6	16369.7	16840.4	17313.3	17757.5	18193.7
% Ch	2.0	2.5	3.1	2.9	2.8	2.6	2.5
Implicit Price Deflator							
June Baseline	1.067	1.081	1.089	1.102	1.121	1.142	1.162
% Ch	1.4	1.3	0.8	1.1	1.8	1.8	1.7
February Baseline	1.067	1.081	1.089	1.102	1.121	1.140	1.160
% Ch	1.4	1.3	0.8	1.2	1.7	1.7	1.8
Unemployment Rate							
June Baseline	7.77	6.76	5.67	5.12	4.92	4.91	5.01
February Baseline	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Mortgage Rate							
June Baseline	3.53	4.33	3.90	4.33	5.13	5.75	5.76
February Baseline	3.53	4.33	3.94	4.71	5.67	5.75	5.68
3 Month T-Bill Rate							
June Baseline	0.08	0.04	0.03	0.64	1.94	3.43	3.53
February Baseline	0.08	0.04	0.09	0.90	2.47	3.53	3.53

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Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy continues to expand at a solid pace.**
- **Employment growth is similar to the February forecast but historical estimates have been revised down.**
- **The forecasts for housing permits and construction employment are higher than assumed in February.**
- **Washington personal income is also higher than assumed in February but growth in 2016 and 2017 is slower.**
- **Energy prices are down, benefitting local consumers, but Seattle shelter costs are rising rapidly.**
- **We expect the Washington economy to continue to outperform the U.S. economy.**

Current Conditions

The Washington economy is expanding at a solid pace

The Washington economy is expanding at a solid pace. In recent months Washington employment has performed about as expected in the February forecast but historical estimates were revised lower. Washington personal income growth was stronger than previously assumed in 2014 and the forecast is also higher. The forecast for housing permits and construction employment is also higher than projected in February. Seattle area consumer price inflation remains tame thanks mainly to lower energy costs but shelter costs are rising rapidly.

Employment growth has been close to the forecast

We have three months of new Washington employment data since the February forecast was released. Total nonfarm payroll employment rose 17,200 (seasonally adjusted) in February, March, and April, just 500 short of the 17,700 expected in the February forecast. As is usually the case, most of the jobs created in February, March, and April were in private, service-providing sectors which added 12,700 jobs. The February forecast had expected an increase of 15,700. The construction sector added 2,800 jobs in the last three months. The forecast had assumed a decline of 500 construction jobs after the very

strong increase in January. The manufacturing sector lost 600 jobs in February, March, and April thanks to a decline of 700 in aerospace. The forecast had assumed an increase of 1,500 manufacturing jobs. Government payrolls expanded by 2,500 jobs in the last three months compared to the forecast of 1,100 net new jobs.

Historical employment estimates were revised down

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 lowered the estimated level of total employment in January 2015 by 7,100 jobs. As a result of the downward revisions to history and slightly weaker-than-expected growth, the total effect is 7,600 (0.2%) fewer jobs in April 2015 than expected in the February forecast.

Initial claims reach remain low

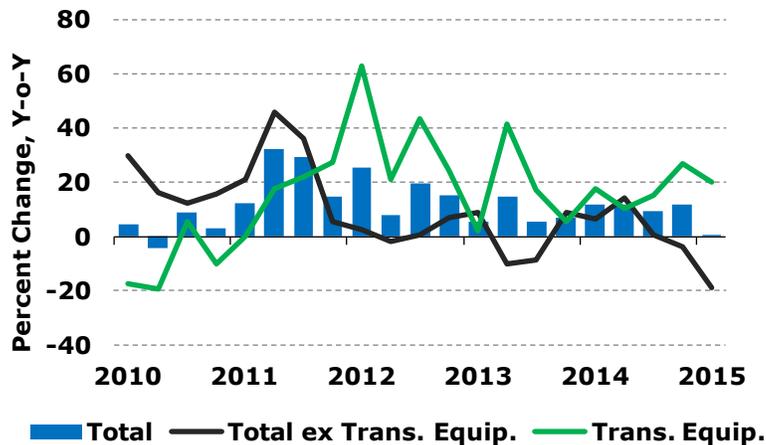
Initial claims for unemployment insurance reached new post-recession lows in early 2015. The four-week moving average edged up to 7,330 in the week ending May 23rd from 7,093 in the previous week. While slightly higher than earlier this year, claims have fallen more than 56% since the peak and are now lower than before the onset of the recession.

Average hourly earnings growth is improving

Recent hours and earnings data for Washington are mixed but show an overall improvement. Average weekly hours continue to slip but this is more than made up for by growth in average hourly earnings. Private sector average hourly earnings in the twelve months ending in April 2015 were up 3.5% over the previous twelve month period. A year ago the comparable rate of increase was only 1.7%. Average weekly hours declined 0.4% in the most recent twelve month period, however. A year ago the decline in average weekly hours was 0.1%. As a result of the improvement in average hourly earnings growth, average weekly earnings growth improved to 3.2% compared to 1.6% a year ago.

Non-transportation equipment exports have declined

Figure 2.1: Washington Exports



Source: Wisier Trade; data through 2015Q1

First quarter exports were hampered by the port slowdown

First quarter exports were up 0.5% over the year due to a 20.0% increase in transportation equipment exports (mostly Boeing planes). Exports other than transportation equipment were 19.1% lower than a year ago (see Figure 2.1). The drop likely reflects the impact of the port slowdown (which was resolved in late February) and possibly the negative influence of a stronger dollar.

Multi-family housing permits spiked in the first quarter of 2015

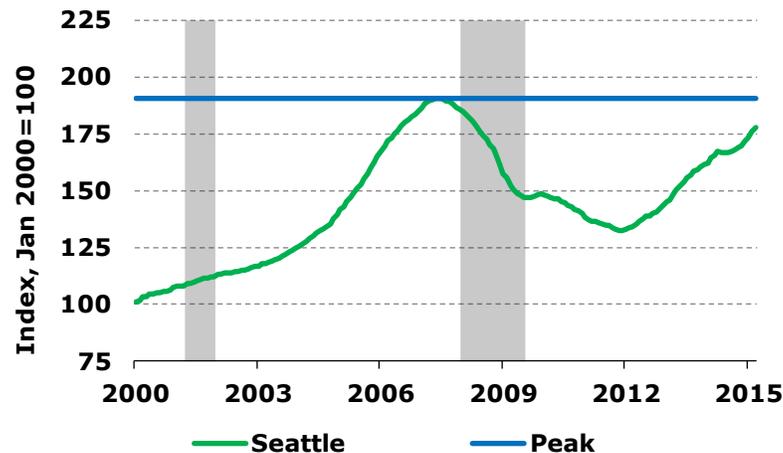
Housing construction got off to a very strong start in 2015 as the number of units authorized by building permits soared to 53,600 (SAAR) in the first quarter of 2015, the highest quarterly rate since the first quarter of 2007. The February forecast assumed an average of 34,400 units in the first quarter. The forecast error was almost entirely in multi-family housing. Single-family permits came in at 18,500 units in the first quarter which was almost exactly the 18,400 units expected in the forecast but the number of multi-family units was 35,200, more than twice the 16,000 in the forecast. The first quarter strength should be viewed cautiously for a couple of reasons. First, the weather was unseasonably mild. Second, the strength was in the volatile multi-family segment. We do not believe the exceptionally high rate of multi-family permits will continue.

Seattle-area home prices are up 34.4% since the trough

According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices increased 1.0% in March 2015 following a 1.6% increase in February and a 0.7% increase in January. Seattle area home prices have declined only once (last May) in the last year. March's index was 7.4% higher than the previous March and was 34.4% higher than the November 2011 trough. The steady gains in the Seattle area index have brought local home prices back to just 7.4% below the pre-recession peak (see Figure 2.2).

Seattle home prices are nearing the previous peak

Figure 2.2: Seattle Home Price Index



Source: S&P/Case Shiller; data through March 2015

Manufacturing growth slowed in April

The Institute of Supply Management - Western Washington Index (ISM-WW) declined from 64.1 in March to a still strong 60.4 in April (index values above 50 indicate positive growth while values below 50 indicate contractions). While the production and inventory components rose in April, the orders, employment, and deliveries components all fell. The last time the ISM-WW index was below 50 was July 2009.

Car and truck sales are near the post-recession high

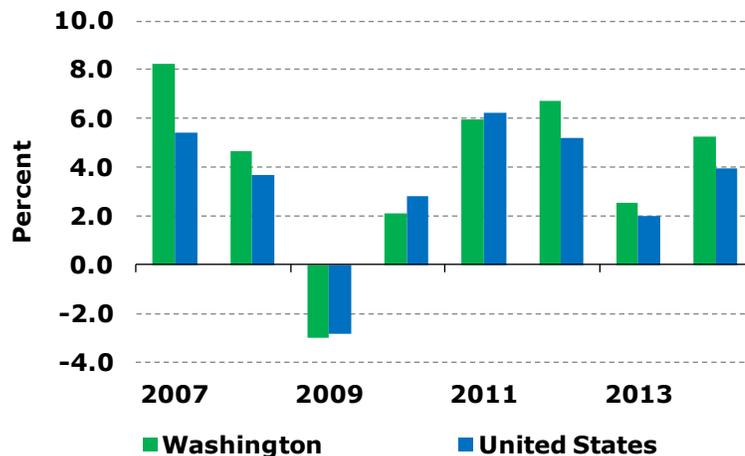
Washington car and truck sales increased 1.3% in April 2015, the third consecutive monthly increase. New vehicle registrations totaled 296,400 (SAAR) in April, just 0.9% below the post-recession high of 299,200 in December. April registrations were up 4.7% over the year.

Washington's personal income growth in 2014 was 7th highest in the nation

In March the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released preliminary state personal income estimates for the full year of 2014. According to these estimates, Washington personal income rose to \$350.1 billion in 2014 from \$332.7 billion in 2013. The 5.3% increase in Washington personal income was the 7th largest among the states and District of Columbia and substantially exceeded the 3.9% increase for the U.S. as a whole (see Figure 2.3). The February forecast had predicted a 4.6% increase in Washington personal income. Washington personal income growth was 1.4 percentage points higher than the national average due almost entirely to above average earnings growth, which contributed 0.8 percentage points to the difference, and above average transfer payments growth, which contributed 0.5 percentage points. The stronger earnings growth was mostly in retail trade and information. The stronger transfer payments growth was due to the Medicaid expansion which Washington accepted but many other states did not. Medicaid added 0.9 percentage points to Washington personal income in 2014 compared to the national average of 0.3 percentage points.

Washington personal income is growing faster than the national average

Figure 2.3: Personal Income Growth



Source: Bureau of Economic Analysis; data through 2014

Seattle shelter costs are rising rapidly

Seattle area consumer price inflation remains tame thanks mainly to falling energy costs. Over the last year, from April 2014 to April 2015, consumer prices in the Seattle area rose 0.4% compared to a 0.1% decline for the U.S. city average. Core prices, which exclude food and energy, were up 2.0% in Seattle compared to 1.8% for the nation. The higher Seattle inflation is due to more rapid growth in shelter costs. During the year, shelter costs in Seattle rose 4.7% compared to 3.0% for the nation. However, excluding shelter costs, Seattle inflation was -1.8% which was even lower than the national rate of -1.6%.

Washington State Forecast

The June Washington forecast reflects a new U.S. forecast

The June Washington State forecast is based on a new national forecast that is very similar to the forecast adopted in February. The June forecast for GDP growth in 2015 is 2.5%, down sharply from the 3.2% predicted in February. The slower growth this year is due to the very weak growth in the first quarter. Growth during the remainder of this year and in 2016 through 2019 is very similar to the February forecast. Employment growth, however, is slightly weaker, averaging 1.4% per year compared to 1.5%. Real personal income growth averages 3.4% per year, also slightly lower than the 3.5% rate assumed in February. Personal consumption expenditure inflation averages 1.5% per year, the same rate as expected in the February forecast. Near-term oil prices are higher than assumed in February but also grow more slowly during the remainder of the forecast. These revisions in the national forecast feed through to the state economic forecast.

The June Washington forecast is similar to February's

Our June forecast for 2015 Washington employment growth is slightly slower than assumed in February due to weaker growth at the end of 2014. Washington employment is expected to grow 2.6% this year compared to the 2.9% growth assumed in the February forecast. Employment growth in 2016 and 2017 is also slightly lower than assumed in the February forecast reflecting the weaker national employment growth, but growth in 2018 and 2019 is slightly stronger. Our forecast for nominal personal income growth this year of 4.9% is slightly higher than the 4.8% expected in February, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.6% per year, down slightly from 5.7% in the February forecast. We expect total housing units authorized by building permits to rise 25.0% to 41,700 units in 2015, largely on the strength of the strong first quarter. We expect a 3.9% decline in 2016 to 40,000 followed by growth of 8.0% to 43,300 units in 2017, 2.6% to 44,400 in 2018, and 0.8% to 44,700 in 2019. We expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. The reason is the recent drop in oil prices. We expect all-items Seattle area inflation rates of 2.3% in 2016 and 2017, 2.2% in 2018, and 2.1% in 2019.

Washington Payroll Employment

Washington employment is expected to grow 2.6% this year

Our June forecast for 2015 Washington employment growth is slightly slower than assumed in February due to weaker growth at the end of 2014. Washington employment is expected to grow 2.6% this year compared to the 2.9% growth assumed in the February forecast. Employment growth in 2016 and 2017 is also slightly lower than assumed in the February forecast reflecting the weaker national employment growth, but growth in 2018 and 2019 is slightly stronger. The June forecast for average annual employment growth in 2016 through 2019 is 1.6% per year, the same rate as in the February forecast.

Aerospace employment is slowly declining

The estimate of aerospace employment was revised up by 600 in the fourth quarter of 2014 but the downward trend continues. As in February, we expect this downward trend to continue over the next few years. We believe that this downturn will be relatively mild due to the large and increasing 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. On an annual average basis, we expect aerospace employment to decline 2.2% in 2015, 2.6% in 2016, 2.5% in 2017, 2.2% in 2018, and 2.0% in 2019.

The software layoffs have ended

Software employment grew continuously following the first ever Microsoft layoffs in 2009 through the third quarter of 2014, finally exceeding the previous peak by 5,400 jobs. In 2014 Microsoft initiated another set of layoffs with effective dates ranging from September to December 2014. With the layoffs now complete, we expect moderate positive growth to resume. Software employment rose 3.1% in 2014 which was the highest growth rate since 2008. We expect a 0.8% decline in 2015 as a result of the 2014 layoffs. Positive growth is expected to return in 2016 through 2019 with growth rates of 0.6% in 2016, 1.2% in 2017, 1.6% in 2018, and 1.5% in 2019.

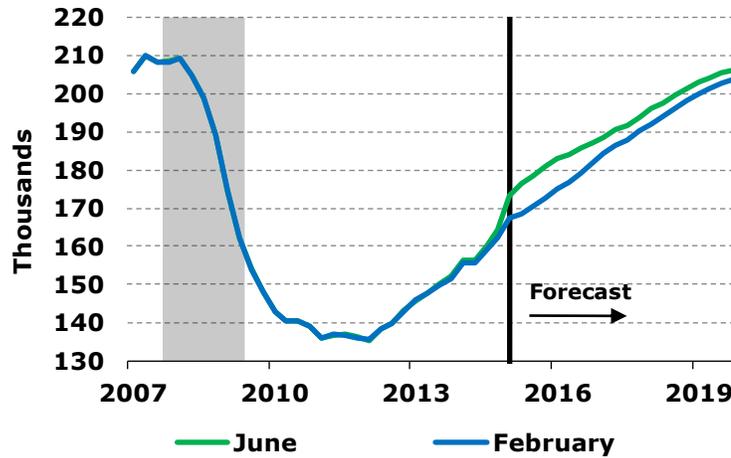
Construction employment is growing rapidly

Construction employment grew 7.0% in 2014, down slightly from 7.1% in 2013 but still very strong. Construction employment growth was even stronger in the first quarter of this year at 23.7% (SAAR). In February we had assumed that the strong growth in January was due to the unusually mild winter in Washington and that there would be offsetting declines in later months. However, with monthly data through May, growth has slowed but there have been no employment reductions. In addition, the estimate for the level of construction employment in January has been revised even higher. As a result of the upward revision to history and stronger than expected growth in recent months, the forecast for construction employment is higher than assumed in February (see Figure 2.4). Construction employment will grow 11.3% in 2015, 4.3% in 2016, 3.3% in 2017, 4.0% in 2018, and 3.0% in 2019. Even with these impressive growth

rates, construction employment will still be 3,600 below its previous peak at the end of 2019.

The construction employment forecast is higher

Figure 2.4: Construction Employment



Source: Bureau of Labor Statistics, ERFC June 2015 Forecast; historical data through 2015Q1

Financial activities employment will decline in 2016-19

Credit intermediation has not recovered at all since the recession but other financial sectors have improved, particularly insurance carriers and related activities. On a calendar year basis, financial activities employment grew 0.2% in 2011, 2.4% in 2012, 3.9% in 2013, and 1.1% in 2014. Going forward, we expect a declining trend in financial activities employment due to productivity growth and outsourcing. Employment will be unchanged in 2015 and will decline 1.0% in 2016, 2.2% in 2017, 1.8% in 2018, and 0.4% in 2019.

Retail trade employment is benefitting from strong growth in electronic shopping

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. Retail trade employment grew 1.5% in 2011, 2.1% in 2012, and 3.4% in 2013 and 2014 following declines of 0.2%, 5.5%, and 0.4% in 2008, 2009, and 2010. Growth this year is also expected to be moderate, at 2.1%. The forecast assumes weaker growth in the next four years as the recovery matures. We expect growth rates of 0.5% and 0.3% in 2016 and 2017 and no growth in 2018 and 2019.

Employment services and IT are driving professional and business services growth

As is typical during recoveries, professional and business services is 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 services employment has grown 47% in the last five years. IT employment growth has also been very

strong during the recovery. Computer systems design and related services employment grew 44% in the last five years. We expect growth to remain very strong in this sector in 2015 through 2017 with growth rates of 4.9%, 6.4%, and 4.0%. We expect growth to slow to 2.4% and 2.0% in 2018 and 2019.

State and local government employment will grow moderately

State and local government employment was a drag on the overall jobs recovery long after most other sectors turned around. 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. State and local government employment finally passed its pre-recession peak in the third quarter of 2014 only to drop below again in the fourth quarter. On an annual average basis, state and local government employment rose 0.8% in calendar 2013 and 1.5% in 2014 following three years of decline. We expect modest employment growth in the next two years with growth rates of 0.9% in 2015 and 0.7% in 2016, improving to 1.6% in 2017, 1.9% in 2018, and 2.0% in 2019.

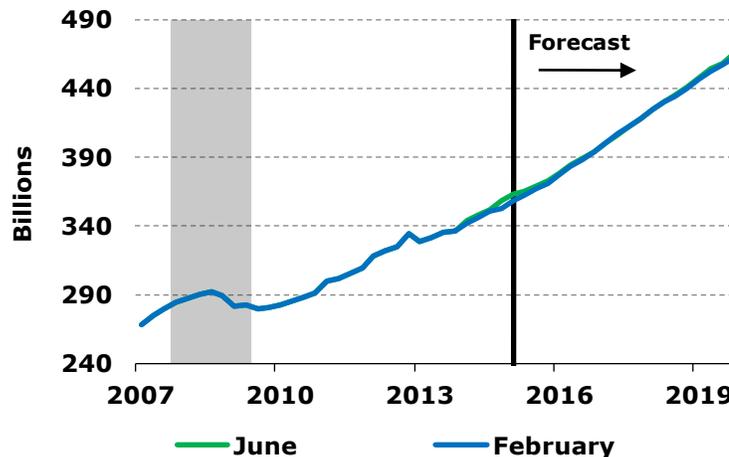
Washington Personal Income

Washington personal income is higher than we assumed in February

In March the Bureau of Economic Analysis released estimates for state personal income through the fourth quarter of 2014. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) and other wage data through the fourth quarter in our wage estimates. Our current estimate of Washington personal income in the fourth quarter of 2014 is \$358.7 billion which is \$6.0 billion (1.7%) higher than assumed in February. Roughly one-third (\$1.9 billion) of the forecast variance was due to unusually large bonus payments in the fourth quarter that are not expected to carry forward.

Personal income is higher than assumed in February but grows less through 2017.

Figure 2.5: Washington Personal Income



Source: Bureau of Economic Analysis, ERFC June 2015 Forecast; historical data through 2015Q1

Near-term income growth is slower than assumed in February

Our forecast for nominal personal income growth this year of 4.9% is slightly higher than the 4.8% expected in February, however, our new forecast for nominal personal income growth from 2016 through 2019 averages 5.6% per year, down slightly from 5.7% in the February forecast. The outlook for near-term (2015-17) personal income growth is weaker than assumed in February due to slower employment and property income (dividends, interest, and rent) growth but personal income growth in 2017-19 is slightly higher.

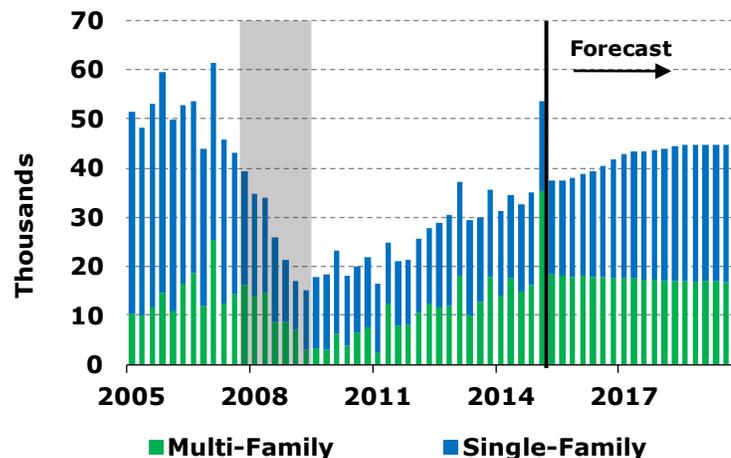
Washington Building Permits

Single-family construction will continue to strengthen

The housing recovery to date has been mostly in the multi-family segment. Multi-family housing recovered from a low of only 4,000 units in 2009 to 15,700 in 2014. We assume that the spike in multi-family permits that occurred in the first quarter of 2015 will not be repeated. We believe multi-family permits will peak at 22,300 in 2015 then decline gradually from 17,800 in 2016 to 16,800 in 2019. The recovery in single-family construction has been much less robust, from 13,000 units in 2009 to 17,600 in 2014. We expect single-family construction to continue to

The first quarter spike in multi-family permits was an outlier

Figure 2.6: Washington Housing Units



Source: U.S. Census Bureau, ERFC June 2015 Forecast; historical data through 2015Q1

strengthen with the number of units reaching 27,900 in 2019. We expect total housing units authorized by building permits to rise 25.0% to 41,700 units in 2015, largely on the strength of the strong first quarter. We expect a 3.9% decline in 2016 to 40,000 followed by growth of 8.0% to 43,300 units in 2017, 2.6% to 44,400 in 2018, and 0.8% to 44,700 in 2019.

Seattle Consumer Price Index

Rents are driving Seattle core inflation higher

Core inflation (excluding food and energy) in Seattle increased to 2.0% in 2014 from 1.5% in 2013 while national core inflation slowed from 1.8% to 1.7%. The reason for the divergence is shelter costs which are rising much faster in Seattle. We expect Seattle core inflation to rise to 2.6% in 2015 compared to 1.8% for the nation as this divergence in shelter costs continues. We expect core Seattle CPI inflation to decline to 2.1% by 2017.

Energy costs will temporarily reduce headline inflation

Thanks to the drop in oil prices compared to last year, we expect the all-items Seattle CPI to rise only 1.3% this year, down from 1.8% in 2014. Nationally we expect only 0.2% headline inflation in 2015. The reason Seattle inflation is so much higher than the national average in 2015 is much higher than average shelter cost inflation in Seattle. While the drop in energy costs reduces inflation in 2015, rising energy costs add to inflation in 2016 through 2019. We expect all-items Seattle area inflation rates of 2.3% in 2016 and 2017, 2.2% in 2018, and 2.1% 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

The optimistic scenario features stronger foreign growth and higher productivity

In the optimistic scenario, strong global growth initially pushes oil prices above their baseline levels, where they stay until the second half of 2016. Thereafter, oil prices drop permanently below the baseline as global production increases. Meanwhile, Eurozone growth strengthens more than in the baseline as fiscal conditions improve, credit conditions ease, and pent-up consumer and business demand is released. In addition to a stronger Eurozone, emerging-market GDP growth accelerates. Domestically, a permanent jump in total factor productivity (TFP) growth shifts the economy into a higher gear, leading to a virtuous cycle in which production and technological gains lead to employment gains, which lead to income gains, and then further production and technological gains. Increased production brings significant wage and payroll gains. As employment and wage growth both pick up, so does consumer spending. Real consumption climbs 3.7% in 2015 and 4.4% in 2016.

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 flattens out through 2016 rather than continuing to fall as in the baseline. Software employment growth is also much stronger than in the baseline forecast. In the optimistic scenario, Seattle consumer prices are initially lower than in the baseline forecast due to the lower inflation in the national optimistic forecast but eventually the stronger regional economy drives the price level above the baseline. Washington average wage growth is higher in the optimistic scenario than in the baseline. 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 fourth quarter of 2017. By the end of 2019, Washington nonfarm payroll employment is higher by 155,200 jobs than in the baseline forecast and Washington personal income is \$38.4 billion higher.

Pessimistic

Household formation stagnates and the housing market weakens

In the pessimistic scenario, wage growth, job creation, and productivity growth stumble. In spite of their improved real spending power, consumers burnt by the Great Recession exhibit especially restrained attitudes toward consumption, continuing to pare down debt and increase their savings, rather than spending more. Lending standards remain similarly high, resulting in reduced credit availability. As the population ages amid this poor labor market environment, many families prefer to consolidate households, continuing a recent trend of weak growth in household formation. Tight credit, a scarcity of developed lots, and rising construction costs further deter builders from adding to the housing stock. Housing starts weaken relative to the baseline forecast and demand wavers, causing home prices to sink and eroding the attractiveness of purchasing a home. In this scenario, US export growth declines as foreign growth opportunities fade. The double squeeze from weak domestic sales and slowing exports weakens businesses, further inhibiting payroll growth. Depressed wages and low profits ensue, with the unemployment rate rising back above 6.0% in early 2016.

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 continues to decline after the scheduled layoffs rather than turning positive as in the baseline forecast. Population growth is also weaker than in the baseline forecast as migration into Washington drops. Construction employment drifts lower in 2016 through 2019 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 218,900 lower than in the baseline forecast and Washington personal income is \$40.1 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 lower than the baseline forecast in each year. Real consumer spending growth is also lower in each year of the forecast in the Governor’s Council scenario. However, the Governor’s Council members expect higher inflation than predicted in the baseline forecast. As a result of the higher inflation assumption, nominal consumption growth in the Governor’s Council scenario is almost exactly the same as in the baseline forecast. The GCEA oil price forecast is slightly lower than the baseline in each year. The Council members’ mortgage rate forecast is a little higher than the baseline forecast this year but slightly lower in every other year.

The GCEA members expect weaker Washington income and job growth and lower housing construction

The GCEA scenario for Washington is also similar to the baseline forecast but generally a little more pessimistic. Their real personal income growth forecast averages 3.5% per year in 2015 through 2019 compared to the baseline forecast of 3.9% but, because they expect higher inflation, their nominal personal income growth forecast is closer (5.2% versus 5.4% in the baseline forecast). The Council members’ forecast for total employment growth is slightly weaker on average than the baseline forecast. Overall, their forecast expects a 1.7% average rate through 2019 compared to 1.8% per year in the baseline forecast. The GCEA forecast for manufacturing employment growth is lower than the baseline forecast as is their construction employment growth forecast. The Council members’ housing permit forecast is also slightly lower, averaging 40,700 units per year through 2019 compared to 42,800 in the baseline forecast. At the end of 2019, the GCEA forecast for Washington nonfarm payroll employment is 8,500 lower than in the baseline forecast and Washington personal income is \$4.9 billion lower.

Table 2.3 compares the GCEA forecast with the baseline forecast.

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	298.029	308.689	315.248	330.309	341.592	354.435	368.950	382.859
% Ch	3.8	3.6	2.1	4.8	3.4	3.8	4.1	3.8
Real Wage and Salary Disb.	151.451	156.706	162.193	170.931	177.732	183.932	190.186	197.182
% Ch	2.7	3.5	3.5	5.4	4.0	3.5	3.4	3.7
Real Nonwage Income	146.578	151.983	153.055	159.378	163.860	170.504	178.763	185.677
% Ch	4.9	3.7	0.7	4.1	2.8	4.1	4.8	3.9
Real Per Capita Income (\$/Person)	43,389	44,450	44,851	46,395	47,337	48,458	49,790	51,019
% Ch	2.6	2.4	0.9	3.4	2.0	2.4	2.7	2.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.052	1.067	1.081	1.089	1.102	1.121	1.142	1.162
% Ch	2.4	1.4	1.3	0.8	1.1	1.8	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.360	2.404	2.437	2.473	2.522	2.579	2.638	2.695
% Ch	3.1	1.8	1.4	1.5	2.0	2.3	2.2	2.2
Average Nonfarm Annual Wage	52,723	54,133	55,501	57,507	59,202	61,401	63,692	66,332
% Ch	3.7	2.7	2.5	3.6	2.9	3.7	3.7	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.04	24.19	24.75	25.27	25.69	26.30	26.95	27.65
% Ch	1.2	0.6	2.3	2.1	1.7	2.4	2.5	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	313.633	329.448	340.671	359.755	376.285	397.514	421.217	444.716
% Ch	6.3	5.0	3.4	5.6	4.6	5.6	6.0	5.6
Disposable Personal Income	280.085	292.140	300.663	316.706	329.620	347.435	368.458	389.418
% Ch	5.7	4.3	2.9	5.3	4.1	5.4	6.1	5.7
Per Capita Income (\$/Person)	45,660	47,438	48,467	50,531	52,144	54,347	56,843	59,261
% Ch	5.1	3.9	2.2	4.3	3.2	4.2	4.6	4.3
Employment (Thousands)								
Washington Civilian Labor Force	3,458.9	3,456.9	3,463.3	3,527.6	3,601.5	3,669.9	3,734.3	3,793.7
Total Washington Employment	3,160.2	3,201.0	3,237.7	3,313.2	3,407.1	3,480.0	3,542.1	3,597.0
Unemployment Rate (%)	8.63	7.40	6.52	6.08	5.40	5.17	5.15	5.18
Nonfarm Payroll Employment	2,896.4	2,957.9	3,030.6	3,114.5	3,184.9	3,237.8	3,287.2	3,331.4
% Ch	1.4	2.1	2.5	2.8	2.3	1.7	1.5	1.3
Manufacturing	274.7	284.9	287.6	289.0	290.9	293.0	295.2	297.2
% Ch	4.8	3.7	0.9	0.5	0.7	0.7	0.8	0.7
Durable Manufacturing	199.1	208.6	209.4	209.7	210.1	210.8	211.6	212.8
% Ch	6.2	4.7	0.4	0.1	0.2	0.3	0.4	0.6
Aerospace	90.8	96.4	94.7	93.3	90.7	88.4	86.3	84.6
% Ch	10.0	6.2	-1.8	-1.5	-2.8	-2.5	-2.4	-2.0
Nondurable Manufacturing	75.6	76.3	78.1	79.3	80.8	82.2	83.6	84.4
% Ch	1.5	1.0	2.4	1.5	1.9	1.7	1.7	0.9
Construction	136.6	144.0	153.8	168.6	181.7	187.9	194.8	202.0
% Ch	-1.0	5.4	6.8	9.6	7.8	3.4	3.6	3.7
Service-Providing	2,479.2	2,522.9	2,583.0	2,650.8	2,706.3	2,750.9	2,791.0	2,825.9
% Ch	1.2	1.8	2.4	2.6	2.1	1.6	1.5	1.2
Software Publishers	52.1	52.9	55.0	55.3	55.2	55.7	56.5	57.4
% Ch	1.7	1.6	3.8	0.7	-0.2	0.9	1.5	1.6
Nonfarm Payroll Employment, EOP*	2,918.2	2,983.6	3,056.9	3,145.5	3,206.9	3,257.1	3,304.3	3,347.9
% Ch*	1.6	2.2	2.5	2.9	2.0	1.6	1.5	1.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	23.887	31.402	32.772	39.648	38.429	42.027	43.818	44.619
% Ch	15.5	31.5	4.4	21.0	-3.1	9.4	4.3	1.8
Single-Family	14.152	18.552	17.262	18.525	20.484	24.444	26.717	27.711
% Ch	4.9	31.1	-7.0	7.3	10.6	19.3	9.3	3.7
Multi-Family	9.736	12.850	15.510	21.123	17.945	17.584	17.101	16.909
% Ch	35.2	32.0	20.7	36.2	-15.0	-2.0	-2.7	-1.1
30-Year Fixed Mortgage Rate (%)	4.01	3.53	4.33	3.90	4.33	5.13	5.75	5.76

*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	2.5	2.7	3.6	3.9	3.5	3.2
Baseline	2.5	2.7	2.5	2.8	2.6	2.5
Pessimistic	2.5	2.4	0.5	1.6	1.9	2.0
Implicit Price Deflator, Percent Change						
Optimistic	1.3	0.7	0.7	1.2	1.5	1.7
Baseline	1.3	0.8	1.1	1.8	1.8	1.7
Pessimistic	1.3	0.7	0.5	2.2	2.8	2.9
Mortgage Rate, Percent						
Optimistic	4.33	4.16	5.77	5.93	5.65	5.51
Baseline	4.33	3.90	4.33	5.13	5.75	5.76
Pessimistic	4.33	3.87	3.93	4.69	5.90	6.81
3 Month T-Bill Rate, Percent						
Optimistic	0.04	0.13	1.85	3.58	3.59	3.52
Baseline	0.04	0.03	0.64	1.94	3.43	3.53
Pessimistic	0.04	0.04	0.22	0.32	1.19	2.92
Washington						
Real Personal Income, Percent Change						
Optimistic	2.1	5.2	6.6	6.9	5.8	4.6
Baseline	2.1	4.8	3.4	3.8	4.1	3.8
Pessimistic	2.1	4.4	0.0	0.5	1.6	2.2
Personal Income, Percent Change						
Optimistic	3.4	6.0	7.3	8.2	7.3	6.4
Baseline	3.4	5.6	4.6	5.6	6.0	5.6
Pessimistic	3.4	5.0	0.5	2.7	4.4	5.1
Employment, Percent Change						
Optimistic	2.5	2.9	2.9	2.7	2.7	2.3
Baseline	2.5	2.8	2.3	1.7	1.5	1.3
Pessimistic	2.5	2.6	0.8	0.0	0.1	0.1
Housing Permits, Thousands of Authorized Units						
Optimistic	32.8	39.8	39.8	44.8	49.2	50.6
Baseline	32.8	39.6	38.4	42.0	43.8	44.6
Pessimistic	32.8	39.5	34.0	34.3	33.8	32.0

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2015	2016	2017	2018	2019
U.S.					
Real GDP					
<i>Growth</i>					
ERFC	2.5	2.8	2.7	2.6	2.4
GCEA Average	2.4	2.7	2.5	2.3	2.3
Real Consumption					
<i>Growth</i>					
ERFC	3.1	2.8	2.7	2.5	2.5
GCEA Average	2.9	2.6	2.6	2.3	2.3
Implicit Price Deflator, PCE					
<i>Growth</i>					
ERFC	0.4	1.8	1.8	1.8	1.7
GCEA Average	0.6	1.9	1.9	1.8	2.0
Mortgage Rate					
<i>Percent</i>					
ERFC	3.9	4.8	5.5	5.8	5.7
GCEA Average	4.1	4.7	5.4	5.6	5.6
Oil Price (Brent)					
<i>Dollars per barrel</i>					
ERFC	64.1	71.2	73.3	74.4	75.1
GCEA Average	63.2	66.2	69.6	71.8	72.6
Washington State					
Real Personal Income					
<i>Growth</i>					
ERFC	4.4	3.3	4.1	3.9	3.6
GCEA Average	4.1	3.3	3.6	3.4	3.2
Wage and Salary Employment					
<i>Growth</i>					
ERFC	2.6	1.9	1.6	1.4	1.3
GCEA Average	2.6	1.9	1.6	1.3	1.3
Manufacturing Employment					
<i>Growth</i>					
ERFC	0.4	0.9	0.6	0.8	0.5
GCEA Average	0.8	0.7	0.0	0.0	0.0
Construction Employment					
<i>Growth</i>					
ERFC	11.3	4.3	3.3	4.0	3.0
GCEA Average	9.4	3.9	3.6	3.2	2.6
Housing Permits					
<i>Thousands of authorized units</i>					
ERFC	41.7	40.0	43.3	44.4	44.7
GCEA Average	39.0	38.0	41.3	42.6	42.5
Washington Average Annual Wage					
<i>Growth</i>					
ERFC	3.2	3.4	3.7	4.0	4.2
GCEA Average	2.8	3.2	3.5	3.7	3.8

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>Feb.</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	5.2	5.7	5.4
Personal Income	11.5	11.4	11.5	11.0	11.0	10.6	10.7	10.5	10.1	9.9	9.8	9.4	9.4	10.3
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	6.7	7.5	8.3
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	67.7	67.1	72.4

Table 2.5
Forecast Comparison
 Forecast 2015 to 2017

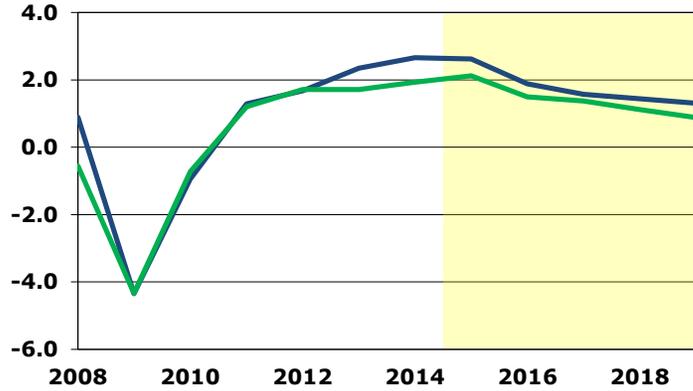
Fiscal Years

	2013	2014	2015	2016	2017	2018	2019
Washington							
Real Personal Income							
June Baseline	308.689	315.248	330.309	341.592	354.435	368.950	382.859
% Ch	3.6	2.1	4.8	3.4	3.8	4.1	3.8
February Baseline	308.689	314.587	326.789	339.668	354.727	369.519	382.314
% Ch	3.6	1.9	3.9	3.9	4.4	4.2	3.5
Personal Income							
June Baseline	329.448	340.671	359.755	376.285	397.514	421.217	444.716
% Ch	5.0	3.4	5.6	4.6	5.6	6.0	5.6
February Baseline	329.448	339.953	355.810	374.322	397.650	421.253	443.549
% Ch	5.0	3.2	4.7	5.2	6.2	5.9	5.3
Employment							
June Baseline	2957.9	3030.6	3114.5	3184.9	3237.8	3287.2	3331.4
% Ch	2.1	2.5	2.8	2.3	1.7	1.5	1.3
February Baseline	2955.6	3027.0	3119.2	3196.1	3262.6	3307.0	3348.1
% Ch	2.1	2.4	3.0	2.5	2.1	1.4	1.2
Housing Permits							
June Baseline	31.402	32.772	39.648	38.429	42.027	43.818	44.619
% Ch	31.5	4.4	21.0	-3.1	9.4	4.3	1.8
February Baseline	31.402	32.772	34.342	37.016	40.647	42.564	43.708
% Ch	31.5	4.4	4.8	7.8	9.8	4.7	2.7

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

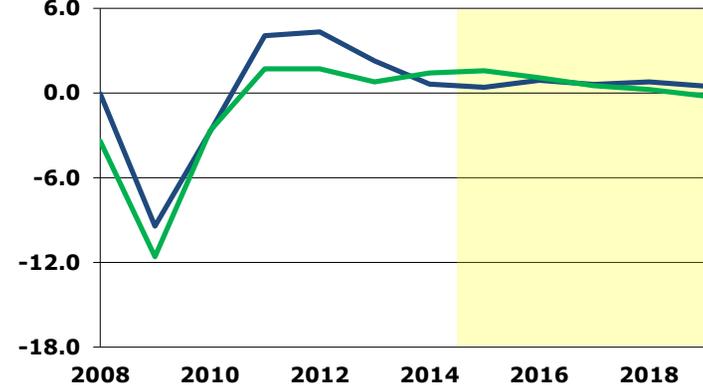
Forecast

Total nonfarm payroll employment



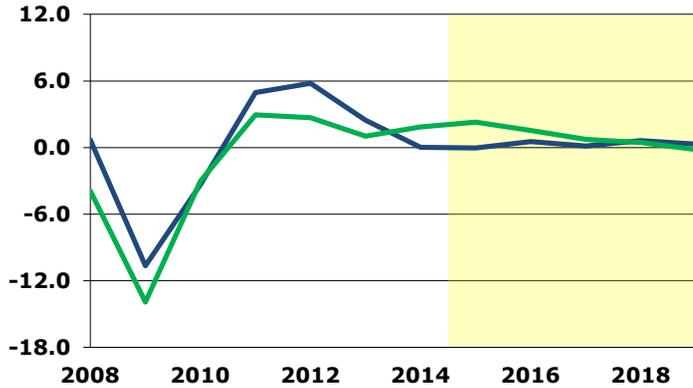
Source: WA State Employment Security Dept. 2014, ERFC 2019

Manufacturing employment



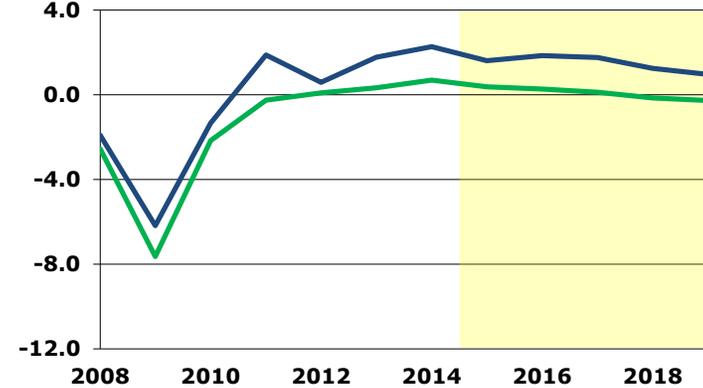
Source: WA State Employment Security Dept. 2014, ERFC 2019

Durable manufacturing employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

Nondurable manufacturing employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

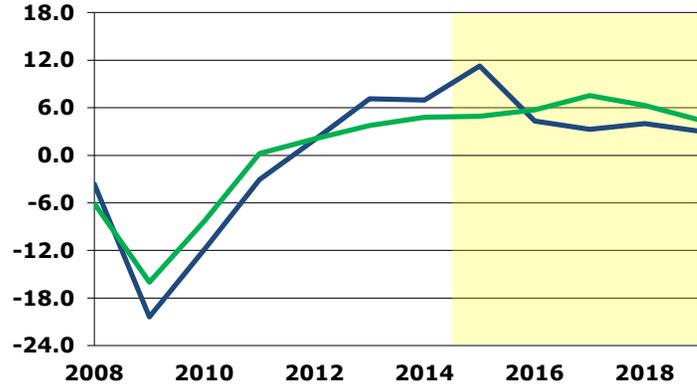
Washington

U.S.

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

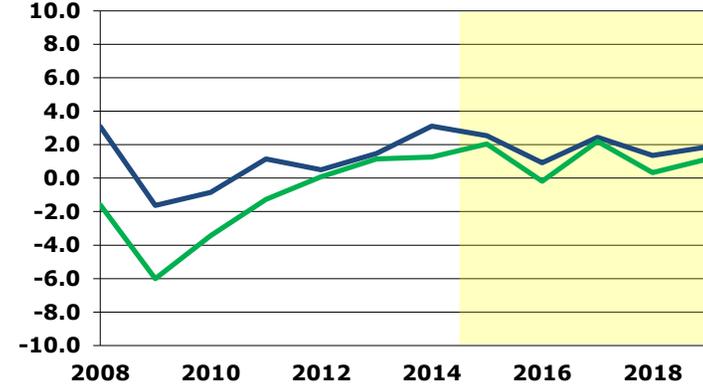
Forecast

Construction employment



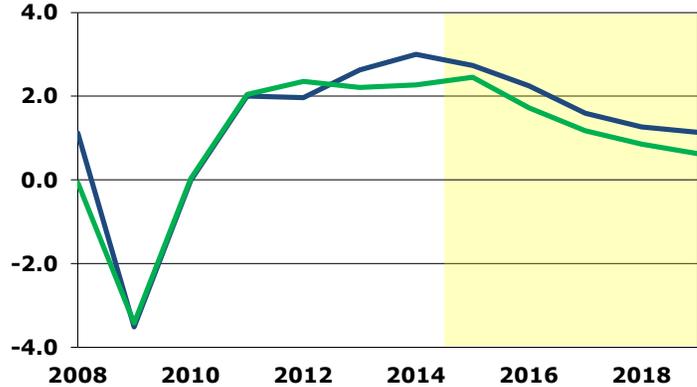
Source: WA State Employment Security Dept. 2014, ERFC 2019

Information employment



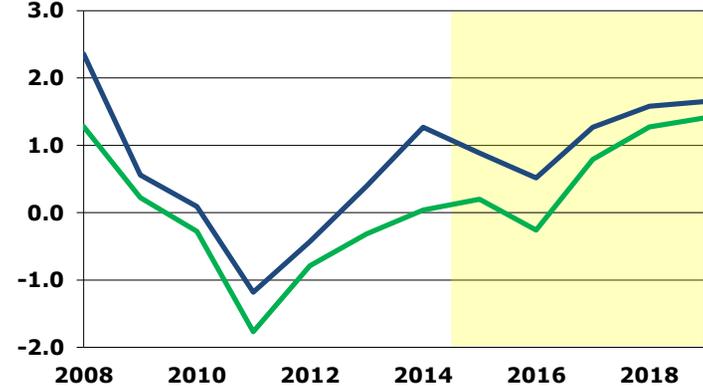
Source: WA State Employment Security Dept. 2014, ERFC 2019

Other private employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

Government employment



Source: WA State Employment Security Dept. 2014, ERFC 2019

Washington

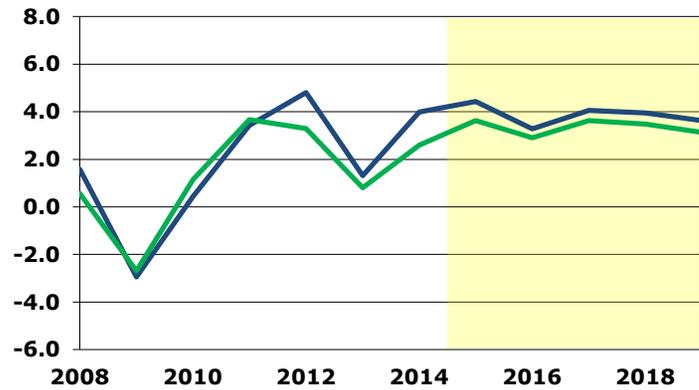
U.S.

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

(Percent change)

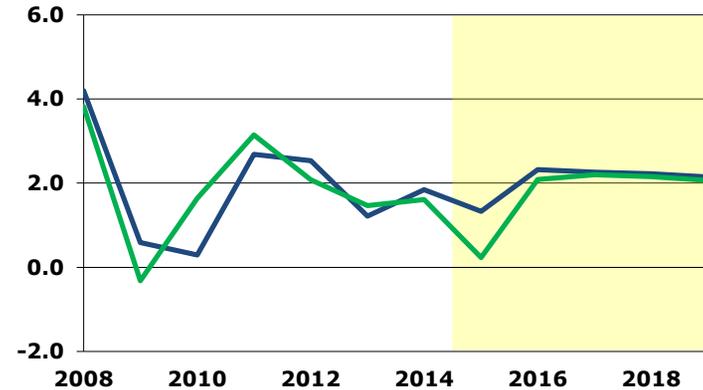
Forecast

Real personal income



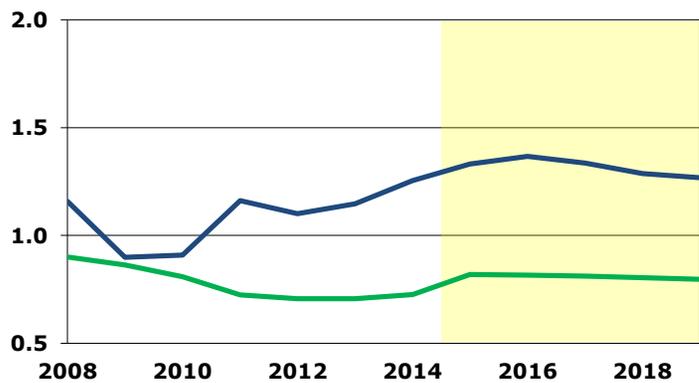
Source: Bureau of Economic Analysis 2013, ERFC 2019

Consumer price indices



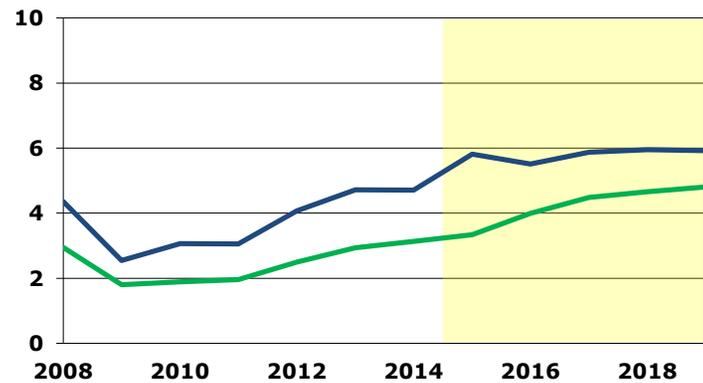
Source: Bureau of Labor Statistics 2014, ERFC 2019

Population



Source: Office of Financial Management/Census Bureau 2014, ERFC 2019

New Housing Units Per 1,000 population (level)



Source: Census Bureau 2014, ERFC 2019

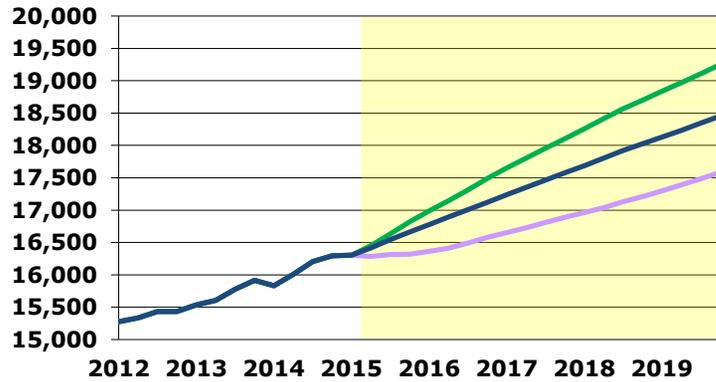
Washington

U.S.

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

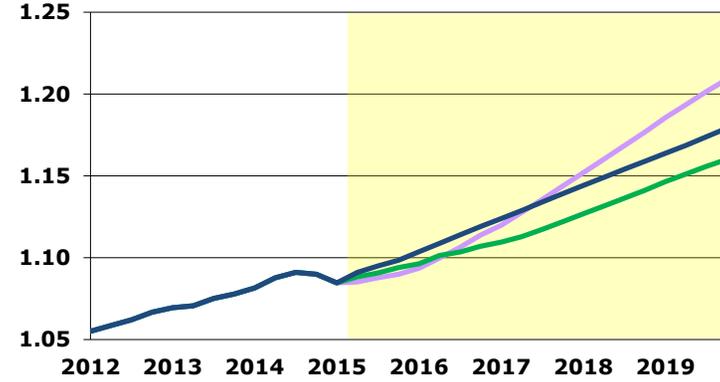
Forecast

Real GDP, billions of chained 2009 dollars



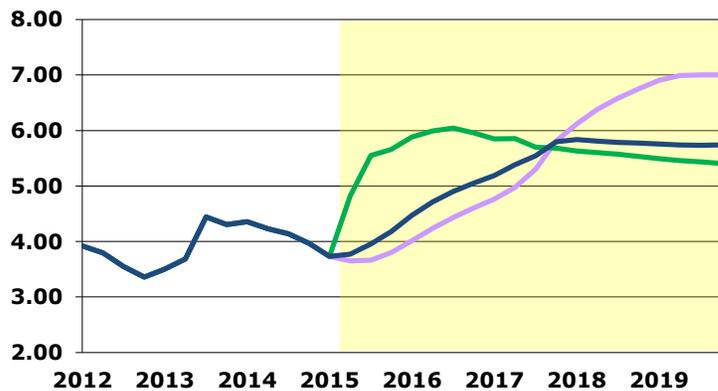
Source: Bureau of Economic Analysis 2015 Q1, ERFC 2019

Implicit price deflator, index 2009 = 1.0



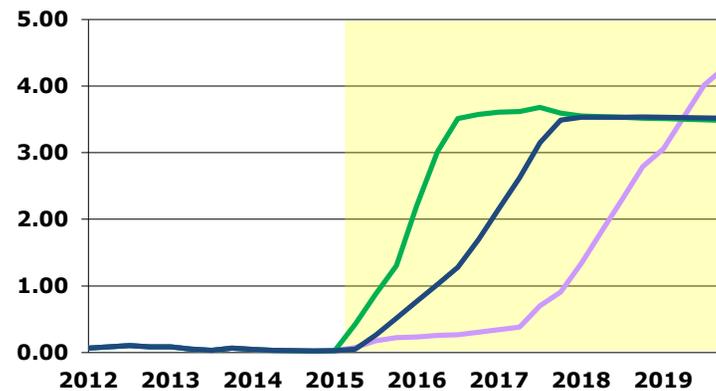
Source: Bureau of Economic Analysis 2015 Q1, ERFC 2019

Mortgage rate, percent



Source: Freddie Mac 2015 Q1, ERFC 2019

Three month T-bill rate, percent



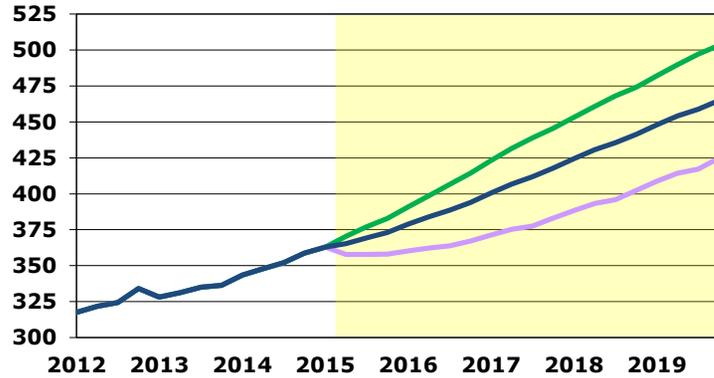
Source: Federal Reserve Board 2015 Q1, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

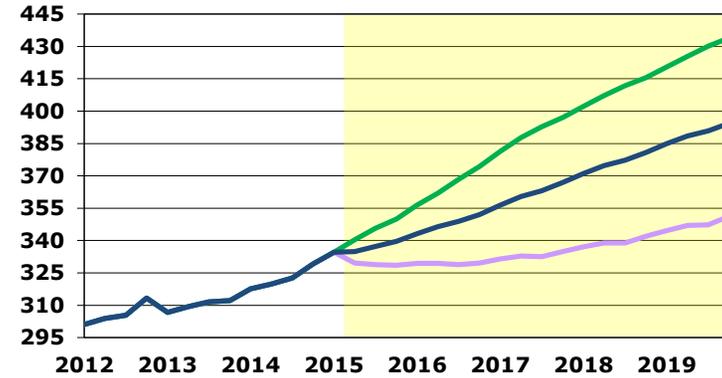
Forecast

Personal income, billions of dollars



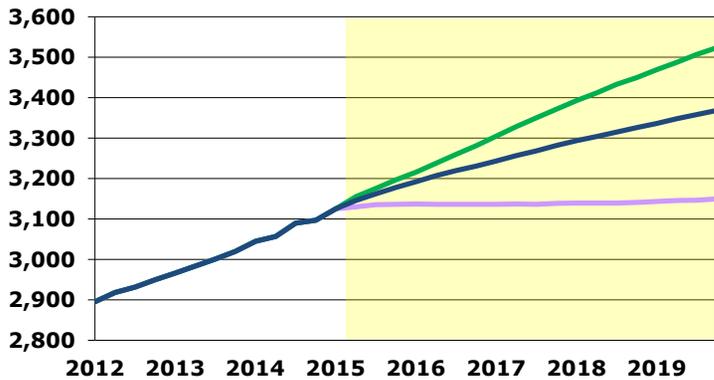
Source: Bureau of Economic Analysis 2013 Q4, ERFC 2019

Real personal income, billions of chained 2009 dollars



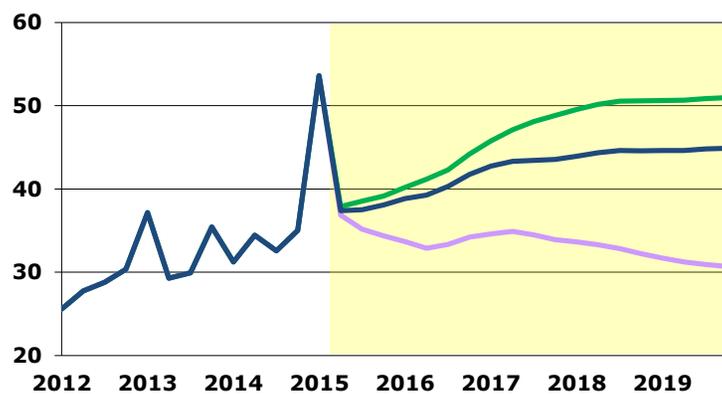
Source: Bureau of Economic Analysis 2013 Q4, ERFC 2019

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2015 Q1, ERFC 2019

Housing permits, thousands



Source: Census Bureau 2015 Q1, ERFC 2019

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **Revenue collections since February have come in \$61 million over the forecasted amount, mainly due to real estate excise taxes.**
- **The main changes to the forecast were an increase in real estate excise taxes and slight increases to retail sales and business and occupation taxes due to an increase in forecasted residential building activity.**
- **Legislation passed after the February forecast is expected to add \$39 million in revenue for the 2015-17 biennium and \$122 million in the 2017-19 biennium.**
- **The forecast of General Fund-State (GF-S) revenue for the 2013-15 biennium was increased by \$106 million and the forecast for the 2015-17 biennium was increased by \$309 million. The forecast for the 2017-19 biennium was increased by \$443 million.**

Overview

The forecast was increased due to higher real estate and building activity, along with some legislative changes

Revenue collections since the February forecast came in \$61 million higher than expected. Most of the surplus came from real estate excise taxes. As the real estate market has been performing above expectations, forecasted real estate excise tax collections have been increased. While the economic forecast is very similar to February's, it does include slightly stronger residential building activity. As a result, forecasted retail sales and business and occupation tax receipts are also slightly increased. The other main forecast change was legislation that is expected to increase the portion of cannabis sales that is subject to taxes. The net results of all of these changes were revenue forecast increases of less than one percent for the current and 2015-17 biennia and just over one percent for the 2017-19 biennium.

GF-S forecast change by biennium (millions):

13-15: +\$106
15-17: +\$309
17-19: +\$443

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2013-15 through 2017-19 biennia. As of May 10th, revenue collections for the 2013-15 biennium were \$60.6 million ahead of the February forecast. For the remainder of the biennium, forecasted revenue has been increased by \$45.5 million. The forecast increase would have been \$68.0 million if

not for \$22.5 million in large refunds that are expected in May and June. The sum of these changes for the 2013-15 biennium is a forecast increase of \$106.2 million, with total biennial revenue of \$33,652.8 million. The forecast for the 2015-17 biennium has been increased by \$309.3 million; \$270.3 million of the increase was due to economy-related forecast changes and \$39.0 million came from the impacts of new legislation passed after the February forecast. The forecast for the 2017-19 biennium has been increased by \$443.2 million, with \$321.0 million due to economic changes and \$122.2 million from legislative changes. GF-S revenue is now forecasted to total \$36,758.1 million in the 2015-17 biennium and \$40,200.1 million in the 2017-19 biennium.

GF-S forecast (\$millions):

2013-15:
\$33,653

2015-17:
\$36,758

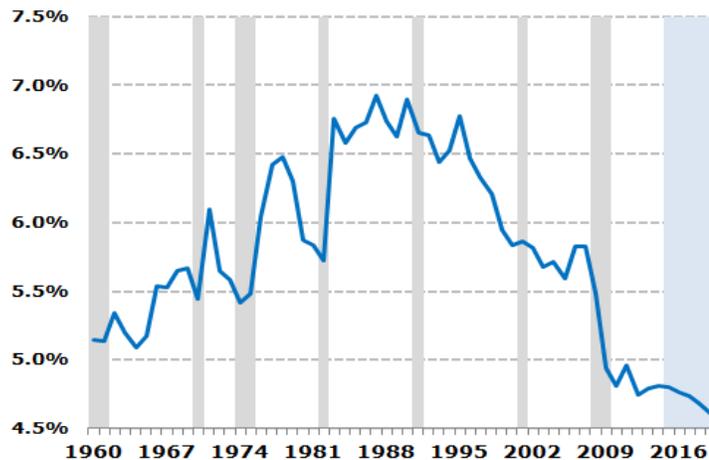
2017-19:
\$40,200

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	\$60.6	NA	NA
Non-Economic Change	(\$22.5)	\$39.0	\$122.2
Forecast Change	\$68.0	\$270.3	\$321.0
Total Change	\$106.2	\$309.3	\$443.2

Figure 3.1: GF-S Revenue (Current Definition) as a 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

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 ratio for FY 2014 is slightly higher than that of FY 2013, but the increase was due mainly to slow income growth in that fiscal year. The forecast, as shown in the light blue shaded area, has the ratio remaining roughly constant in FY 2015 before continuing its downward trend through the end of the forecast period in 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 2013-15 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 \$61 million (1.8%) more than the February forecast

Revenue collections from the Department of Revenue (DOR), Department of Licensing, and Administrative Office of the Courts are tracked monthly. In the period since the February forecast, total revenue from the above sources came in \$60.6 million (1.8%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$11.8 million (0.4%) above the forecast. Revenue from other DOR tax sources from February through April was \$47.7 million (10.5%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the February 2015 forecast, cash basis, millions of dollars)

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$11.8	0.4%
Non Revenue Act	\$47.7	10.5%
Subtotal	\$59.5	1.7%
Department of Licensing		
Administrative Office of the Courts	\$1.1	5.6%
Total*	\$60.6	1.8%

* Detail may not add to total due to rounding.

Source: ERFC; Period: February 11 - May 10, 2015

Real estate excise taxes came in much higher than forecasted

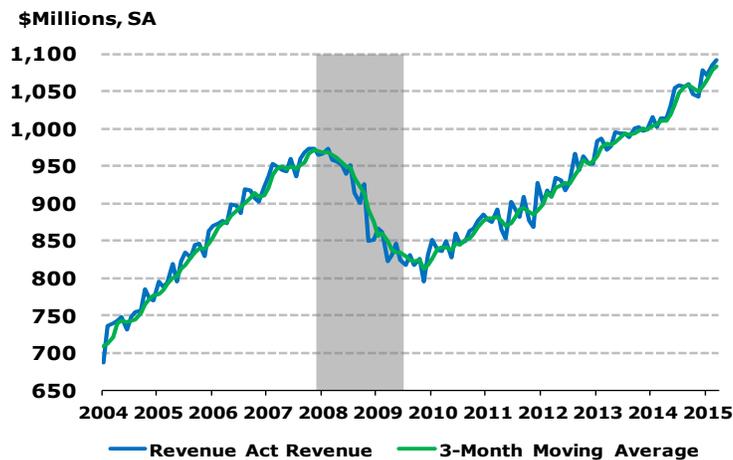
Most of the positive variance in DOR taxes came from real estate excise taxes (REET), which came in \$68.6 million (54.3%) higher than forecasted. Liquor sales and liter tax receipts came in \$2.2 million (4.1%) higher than forecasted, and transfers of unclaimed property into the GF-S were \$3.1 million higher than forecasted. Cigarette tax receipts came in \$3.5 million (4.3%) lower than forecasted, but data on deferred payments for tax stamps indicated the shortfall would more than be made up for in future months. Property tax receipts likewise came in \$21.1 million (14.0%) lower than forecasted, but this was due to a lower-than-average volume of early payments of the semi-annual tax, due April 30th, rather than a potential shortfall. Revenue from the Department of Licensing was \$49,000 (1.5%) higher than forecasted and revenue from the Administrative Office of the Courts was \$1.1 million (5.6%) higher than forecasted.

Adjusted Revenue Act collections were up 7.8% year over year in the most recent collection period and up 8.2% in the previous period

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 7.8% year over year in the April 11 - May 10 collection period and 8.2% in the previous period.

Figure 3.2: Revenue Act Collections*

Growth in seasonally adjusted Revenue Act collections has been strong in recent months



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

First quarter Revenue Act collections grew 7.3% year over year

Adjusted Revenue Act collections from February 11 – May 10, 2015, which primarily reflected first quarter 2015 taxable activity, were up 7.3% year over year. Revenue Act collections

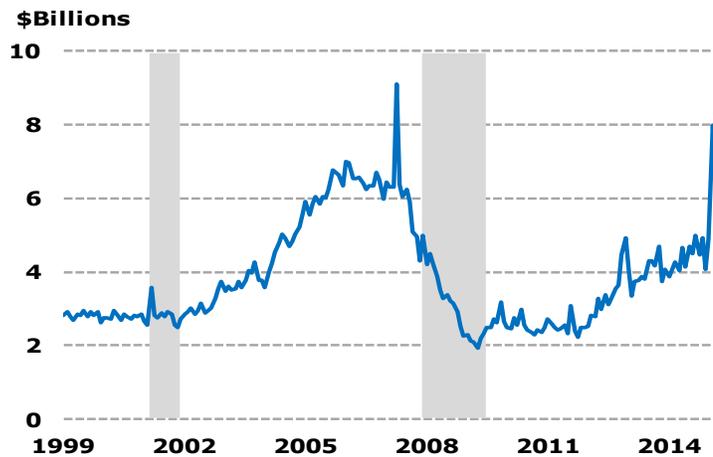
from fourth quarter 2014 activity (November 11, 2014 – February 10, 2015 adjusted collections) were up 5.8% year over year, while third quarter growth was 7.2% year over year.

REET collections were once again elevated by sales of large commercial properties

Much of the large positive variance in REET collections was once again due to strong sales of commercial property. Sales of property worth \$10 million or more totaled \$5.2 billion in the three months since the last forecast, generating \$61.7 million in GF-S REET. Residential sales were also higher than forecasted. Large commercial sales have been causing spikes in seasonally adjusted activity since November 2012 (see Figure 3.3). The most recent spike in February 2015 was due mainly to large transfers of controlling interest resulting from a corporate merger, but March and April activity still remained elevated.

Figure 3.3: Taxable Real Estate Excise Activity, SA

Large commercial sales have caused spikes in activity since November 2012



Source: ERFC; data through April 2015

Non-Economic Changes to the Forecast

Non-economic changes resulted from new legislation and expected refunds

The forecast for the 2013-15 biennium was reduced by \$22.5 million due to the expectation of several large refunds that would occur by the end of the biennium. The forecasts for the 2015-17 and 2017-19 biennia were increased due to the effects of legislation passed in the 2015 regular legislative session subsequent to the February forecast. These legislative changes are summarized in Table 3.20.

Most of the legislative changes stemmed from the "Cannabis Patient Protection Act"

Most of the legislative changes were small, with changes in tax exemptions, fine payment, and changes to various programs. The only legislation with a sizeable impact was 2SSB 5052, the "Cannabis Patient Protection Act." The bill brings unregulated medical marijuana dispensaries into the same regulatory regime as current licensed recreational cannabis outlets. Medical

marijuana dispensaries that would like to remain in business have to obtain licensing by July 1, 2016. It is expected that most current medical marijuana dispensaries will not be eligible for licensing due to locational issues and other considerations, and they will be shut down during FY 2016. As many dispensaries currently pay retail sales and B&O taxes, this will result in a slight loss in revenue in FY 2016. Further sales tax revenue loss occurs from a tax exemption for certain products sold by collective gardens prior to July 1, 2016. Beginning on July 1, 2016, certain low-THC products will be exempt from retail sales taxes at licensed stores, but will be subject to existing cannabis excise taxes.

Legislated changes in cannabis sales will bring in \$41 million in the 2015-17 biennium and \$126 million in 2017-19

Because most products sold at current medical marijuana dispensaries are not the low-THC products that will be tax exempt, and the only legal place to get other cannabis products will be licensed outlets, the bill is assumed to cause a large increase in taxed sales of cannabis products. In the 2015-17 biennium, the forecasted effect is an increase of \$19.6 million from retail sales and B&O taxes and \$21.5 million in the GF-S share of cannabis excise taxes. The expected increase in the 2017-19 biennium is \$65.4 million from retail sales and B&O taxes and \$60.6 million in the GF-S share of cannabis excise taxes.

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 FY 2014. 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.

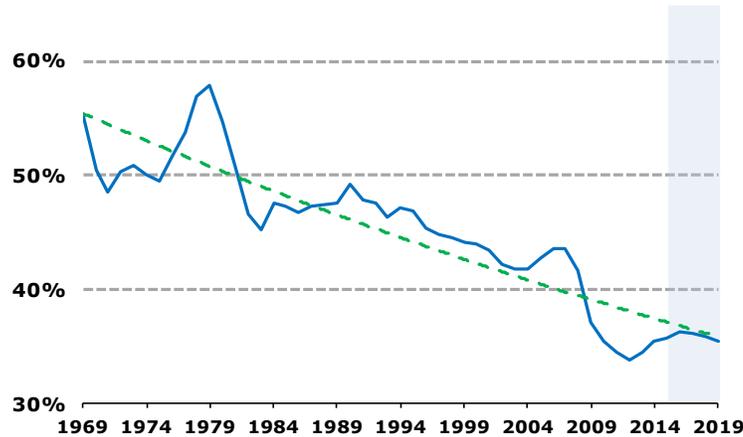
Retail sales taxes are the largest source of GF-S revenue

The retail sales tax is the largest source of GF-S revenue, accounting for 46.9% of GF-S revenue in FY 2014. 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, 33.8% of personal income was spent on taxable items, the lowest percentage on record. The taxable sales share of personal income grew to 34.4% in FY 2013 and 35.4% 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 now forecasted to increase slightly to 35.7% in FY 2015 and

36.2% in FY 2016 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 on 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: 7.3%*
- FY16: 5.5%*
- FY17: 5.6%*
- FY18: 5.0%*
- FY19: 4.5%*

The growth rate of taxable retail 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. Growth is forecasted to increase to 7.3% in FY 2015 but the rate is forecasted to then diminish through the end of the forecast period as the rate of construction activity growth slows, reaching 4.5% growth in FY 2019 (see Table 3.4). The overall level of sales has been increased due to an increase in forecasted residential building activity. 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 7.1%. Forecasted FY 2015 growth is 7.3%. Growth is forecasted to slow to 5.5% in FY 2016 and 5.6% in FY 2017. FY 2018 growth is forecasted at 5.0% and FY 2019 at 4.5%.

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: 3.5%
FY16: 7.5%
FY17: 5.9%
FY18: 5.3%
FY19: 5.1%*

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 in FY 2015, also affected by large refunds, is forecasted to increase to 3.5%, followed by 7.5% growth in FY 2016. Growth is then forecasted to decrease to 5.9% in FY 2017, 5.3% in FY 2018 and 5.1% in FY 2019. As was the case with retail sales taxes, the B&O tax forecast has been increased since February due to higher expected residential building activity.

*State property
taxes are the
third largest
source of
GF-S revenue*

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 the second quarter 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
growth
forecast:*

*FY15: 2.0%
FY16: 2.1%
FY17: 2.3%
FY18: 2.5%
FY19: 2.5%*

Property tax collections grew by 2.1% in FY 2014 and are forecasted to grow 2.0% in FY 2015. Forecasted second quarter 2015 year-over-year inflation of less than 1% restrains the growth rate of the calendar year 2016 levy, keeping forecasted collections growth at a low 2.1% in FY 2016 and 2.3% in FY 2017 despite healthy forecasted levels of new construction. Property tax receipts are forecasted to grow by 2.5% in FY 2018 and FY 2019.

*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: 15.9%
FY16: -6.5%
FY17: 5.6%*

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%. Even higher commercial sales coupled with

REET growth forecast (cont):

*FY18: 3.7%
FY19: 3.0%*

strengthening residential sales are forecasted to boost FY 2015 growth to 15.9%. Lower commercial sales are then forecasted to cause collections to decrease by 6.5% in FY 2016 despite further strengthening in residential sales. Residential sales growth brings forecasted growth of 5.6% in FY 2017, slowing to 3.7% growth in FY 2018 and 3.0% in FY 2019.

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: 8.0%
FY16: -1.0%
FY17: 5.6%
FY18: 5.9%
FY19: 4.8%*

Use tax receipts grew by 7.8% in FY 2014, boosted by strong sales of used vehicles and a temporary increase in payments from the manufacturing sector in the 4th quarter of 2013. Another temporary increase in the 3rd quarter of 2014, coupled with continued strong growth in construction and used vehicle sales is forecasted to bring growth to 8.0% in FY 2015. Due to the expected temporary nature of the FY 2015 spike in collections from the manufacturing sector, FY 2016 collections are forecasted to be 1.0% lower than FY 2015 collections. Growth is then forecasted to return to a more normal pace in FY 2017, 2018 and 2019 with rates of 5.6%, 5.9% and 4.8% 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: -3.0%
FY16: 3.0%
FY17: 4.9%
FY18: 6.1%
FY19: 4.7%*

Public utility tax receipts grew by 4.5% in FY 2014. Lower utility use due to favorable weather, along with stable natural gas and electricity prices, are forecasted to decrease collections by 3.0% in FY 2015. Increases in utility prices coupled with increased housing construction are forecasted to produce growth rates of 3.0% in FY 2016, 4.9% in FY 2017, 6.1% in FY 2018 and 4.7% 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: 0.7%
FY16: -5.9%
FY17: -3.1%
FY18: -3.1%
FY19: -2.8%

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%. The decline in collections has paused in recent months, bringing forecasted FY 2015 revenues to a level 0.7% above that of FY 2014. The long-term decline in sales expected to resume in future fiscal years, however, with forecasted decreases of 5.9% in FY 2016, 3.1% in FY 2017 and FY 2018 and 2.8% in FY 2019.

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.

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

13-15: +\$4.2
15-17: +\$54.1
17-19: +\$128.7

Most of the forecast change was due to the effects of new legislation

Revenue from first quarter 2015 cannabis sales came in above the February forecast. Due to the small number of licensed retail establishments that have opened so far, however, forecasted FY 2015 revenue is still relatively low. Distributions of cannabis excise taxes to the GF-S, which amount to 18.7% of the distributed funds, plus license fees, are forecasted to total only \$8.4 million in the 2013-15 biennium, an increase of \$1.7 million from the February forecast. As outlined above, the forecasts for the 2015-17 and 2017-19 biennia were substantially increased by the effects of 2SSB 5052. Forecasted GF-S distributions and fees for the 2015-17 biennium were increased by \$28.5 million, \$21.5 of which came from 2SSB 5052. GF-S distributions and fees for the biennium are now forecasted at \$67.8 million. GF-S distributions and fees are now forecasted at \$127.8 million in the 2017-19 biennium, an increase of \$62.1 million. \$60.6 million of the increase stemmed from 2SSB 5052. Details of the forecasted distributions from the account can be found in Table 3.18. In addition to this revenue, growers, processors and sellers pay business and occupation (B&O) taxes and sellers collect and remit retail sales taxes. These taxes, detailed in Table 3.19, are expected to total \$9.7 million in the 2013-15 biennium, an increase of \$2.4 million from the February forecast. The taxes are forecasted to total \$60.3 million in the 2015-17 biennium, an

increase of \$25.6 million, and \$124.0 million in the 2017-19 biennium, an increase of \$66.6 million. The total forecasted GF-S impact of cannabis-related sales is therefore \$18.1 million in the 2013-15 biennium, \$128.1 million in the 2015-17 biennium and \$251.7 million in the 2017-19 biennium.

Department of Licensing

*Forecast
change by
biennium
(millions):*

13-15: \$0.0
15-17: \$0.1
17-19: \$0.0

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 the 2013-15 biennium is unchanged at \$35.5 million. The department's forecast for the 2015-17 biennium has been increased \$0.1 million to \$35.6 million and the forecast of revenue for the 2017-19 biennium is unchanged at \$36.2 million.

The Office of Financial Management (Other Agencies)

*Forecast
change by
biennium
(millions):*

13-15: \$1.5
15-17: \$9.9
17-19: \$6.8

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 \$1.5 million to \$218.7 million. The office's forecast for the 2015-17 biennium was increased \$9.9 million to \$177.7 million and the forecast for the 2017-19 biennium was increased \$6.8 million to \$184.8 million. The forecast increases were the result of higher expected revenue from securities licenses, permits, and fees collected by the Department of Financial Institutions.

State Treasurer

*Forecast
change by
biennium
(millions):*

13-15: \$1.3
15-17: -\$0.9
17-19: \$6.0

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 \$1.3 million to negative \$1.8 million due to an increase in the average balance of GF-S funds. The forecasted revenue is negative because the average daily balance of accounts that earn interest that goes into the GF-S is still 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 \$0.9 million to \$7.6 million due to a decrease in expected interest rates that offset increased average daily balances. The forecast of revenue for the 2017-19 biennium has been increased \$6.0 million to \$42.3 million due to higher expected average daily balances.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

13-15: \$40.1
15-17: \$51.2
17-19: \$50.0

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 \$40.1 million to \$985.5 million. The forecast for the 2015-17 biennium has been increased \$51.2 million to \$1,083.8 million and the forecast for the 2017-19 biennium has been increased \$50.0 million to \$1,171.5 million. The forecast increases were the result of changes to the forecasted distribution of health insurance premiums between the GF-S and the state Health Benefit Exchange.

Liquor Control Board

*Forecast
change by
biennium
(millions):*

13-15: \$2.8
15-17: \$32.0
17-19: \$62.3

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 spirits 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 \$2.8 million to \$265.4 million. The forecast of LCB GF-S revenue for the 2015-17 biennium has been increased \$32.0 million to \$284.8 million. \$21.5 million of the forecasted increase was due to the effects of 2SSB 5052 outlined above. The forecast of revenue for the 2017-19 biennium has been increased \$62.3 million to \$362.7 million. \$60.6 million of the forecasted increase came from the effects of 2SSB 5052.

Lottery Commission

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

13-15: \$0.0
15-17: \$2.7
17-19: \$3.1

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions are also made to programs such as Problem Gambling, Economic Development and the Stadium/Exhibition Center. 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. 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 \$6.1 million are forecasted for the 2015-17 biennium, an increase of \$2.7 million from the February forecast,

and \$15.8 million for the 2017-19 biennium, an increase of \$3.1 million.

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

13-15: \$5.0
15-17: \$0.6
17-19: \$0.6

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 \$5.0 million to \$237.1 million, and the forecast for the 2015-17 biennium has been increased \$0.6 million to \$237.6 million. The forecast for the 2017-19 biennium has been increased \$0.6 million to \$237.7 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.

Administrative Office of the Courts

Forecast change by biennium (millions):

13-15: \$0.2
15-17: -\$4.1
17-19: -\$4.1

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 increased \$0.2 million to \$168.8 million. The forecast for the 2015-17 biennium has been decreased \$4.1 million to \$163.8 million and the forecast of transfers for the 2017-19 biennium has been decreased \$4.1 million to \$174.6 million.

Track Record for the 2013-15 Biennium

The June 2015 forecast is \$1.2 billion (3.8%) 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 June 2015 forecast for the biennium is \$1.224 billion (3.8%) higher than the initial forecast. Non-economic changes have increased the forecast by \$378 million (1.2%). Excluding non-economic changes, the current forecast is \$847 million (2.6%) higher than the initial forecast. The current forecast is \$868 million (2.6%) 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 forecast is \$1.2 billion (3.5%) 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 June 2015 forecast for the biennium is \$1.24 billion (3.5%) higher than the initial forecast. Non-economic changes have increased the forecast by \$296 million (0.8%). Excluding non-economic

changes, the current forecast is \$944 million (2.7%) 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 2013-15 and 2015-17 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 \$1.38 billion at the end of the 2013-15 biennium and \$1.36 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 June 2015 revenue forecast and currently enacted budgets, total GF-S reserves are projected to be \$1,377.4 million at the end of the 2013-15 biennium. The projected total GF-S reserves are comprised of a GF-S ending balance of \$865.6 million and a balance of \$511.8 million in the Budget Stabilization Account. Projected combined reserves for the ELTA and OPA are negative \$15.7 million, for total projected reserves of \$1,361.8 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
scenario
(billions):*

13-15: +\$0.2
15-17: +\$2.8

*Pessimistic
scenario:*

13-15: -\$0.3
15-17: -\$3.0

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 60% to the baseline forecast, 15% 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 \$33,899.4 million in GF-S revenue, \$246.6 million (0.7%) more than the baseline scenario, while the pessimistic forecast produces \$33,349.0 million in revenue, \$303.7 million (0.9%) less than the baseline. For the 2015-17 biennium, the optimistic forecast generates \$39,533.3 million in GF-S revenue, \$2,775.2 million (7.5%) more than the baseline scenario, while the pessimistic forecast produces \$33,736.4 million in revenue, \$3,021.8 million (8.2%) less than the baseline.

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

*Near General
Fund
Forecast
(millions):*

2013-15:
\$34,043.3

2015-17:
\$37,213.5

2017-19:
\$40,700.5

“Near General Fund” accounts are those included in the GF-S plus the Education Legacy Trust Account (ELTA). The ELTA 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 \$34,043.3 million, \$74.2 million more than the February forecast, and the forecast for the 2015-17 biennium is \$37,213.5 million, \$326.1 million more than the February forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$40,700.5 million, \$461.2 million more than the February forecast. The Near General Fund forecast and recent history by fiscal year are presented in Table 3.17. The table also includes projected revenue for the OPA and the sum of Near General Fund plus OPA revenues by fiscal year.

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%	7,767.2	16.6%
1971-73	1,922.1	10.9%	7,971.8	2.6%
1973-75	2,372.4	23.4%	8,500.2	6.6%
1975-77	3,395.0	43.1%	10,580.8	24.5%
1977-79	4,490.0	32.3%	12,284.4	16.1%
1979-81	5,356.4	19.3%	12,197.3	-0.7%
1981-83	6,801.4	27.0%	13,492.7	10.6%
1983-85	8,202.4	20.6%	15,008.4	11.2%
1985-87	9,574.6	16.7%	16,528.2	10.1%
1987-89	10,934.1	14.2%	17,618.6	6.6%
1989-91	13,309.0	21.7%	19,772.8	12.2%
1991-93	14,862.2	11.7%	20,789.0	5.1%
1993-95	16,564.6	11.5%	22,140.3	6.5%
1995-97	17,637.7	6.5%	22,629.9	2.2%
1997-99	19,620.1	11.2%	24,520.3	8.4%
1999-01	21,262.1	8.4%	25,587.4	4.4%
2001-03	21,140.7	-0.6%	24,595.4	-3.9%
2003-05	23,388.5	10.6%	26,077.7	6.0%
2005-07	27,772.0	18.7%	29,316.2	12.4%
2007-09	27,703.0	-0.2%	27,888.3	-4.9%
2009-11	28,218.1	1.9%	27,704.7	-0.7%
2011-13	30,657.0	8.6%	28,928.3	4.4%
2013-15 ^F	33,652.8	9.8%	31,024.7	7.2%
2015-17 ^F	36,758.1	9.2%	33,072.4	6.6%
2017-19 ^F	40,200.1	9.4%	34,955.8	5.7%

^F June 2015 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 June 2015 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	120,453	6.4%
2015 ^F	128,454	6.6%
2016 ^F	136,292	6.1%
2017 ^F	143,703	5.4%
2018 ^F	150,815	4.9%
2019 ^F	157,550	4.5%

^F June 2015 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	Feb. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	June 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,855.4	\$0.0	\$58.9	\$15,914.3	\$58.9
Business & Occupation Use	6,654.9	(22.5)	(26.2)	6,606.2	(48.7)
Public Utility	1,179.9	0.0	(18.9)	1,161.0	(18.9)
Liquor Sales/Liter	799.6	0.0	(19.4)	780.2	(19.4)
Cigarette	498.5	0.0	1.6	500.1	1.6
Property (State Levy)	784.4	0.0	2.7	787.1	2.7
Real Estate Excise	3,956.3	0.0	1.0	3,957.3	1.0
Timber Excise	1,250.6	0.0	78.6	1,329.2	78.6
Other	5.2	0.0	0.2	5.3	0.2
Subtotal	925.5	0.0	4.4	930.0	4.4
	31,910.4	(22.5)	82.8	31,970.7	60.3
Department of Licensing					
Boat excise, licenses, fees & other	35.5	0.0	0.0	35.5	0.0
Insurance Commissioner					
Insurance Premiums	945.5	0.0	40.1	985.5	40.1
Liquor Control Board					
Fees, Cannabis Excise Tax	207.2	0.0	2.6	209.8	2.6
Beer & Wine Surtax	55.4	0.0	0.2	55.6	0.2
Lottery Commission					
Lottery Revenue	9.9	0.0	0.0	9.9	0.0
State Treasurer					
Interest Earnings	(3.1)	0.0	1.3	(1.8)	1.3
Office of Financial Management					
Other	217.2	0.0	1.5	218.7	1.5
Administrative Office of the Courts					
Fines and Forfeitures	168.6	0.0	0.2	168.8	0.2
Total General Fund-State *	\$33,546.6	(\$22.5)	\$128.7	\$33,652.8	\$106.2

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council February 2015.² Forecast for the 2013-15 biennium, adopted May 18, 2015.

*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	Feb. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	June 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$15,934.0	\$0.0	\$58.4	\$15,992.4	\$58.4
Business & Occupation Use	6,647.8	(22.5)	(26.1)	6,599.2	(48.6)
Public Utility	1,186.9	0.0	(18.6)	1,168.3	(18.6)
Liquor Sales/Liter	800.9	0.0	(19.3)	781.6	(19.3)
Cigarette	498.1	0.0	1.6	499.7	1.6
Property (State Levy)	781.5	0.0	2.7	784.2	2.7
Real Estate Excise	3,971.9	0.0	(13.0)	3,958.9	(13.0)
Timber Excise	1,244.3	0.0	78.6	1,322.8	78.6
Other	5.3	0.0	0.2	5.5	0.2
Subtotal	920.4	0.0	7.9	928.4	7.9
	31,991.1	(22.5)	72.4	32,041.0	49.9
Department of Licensing					
Boat excise, licenses, fees & other	35.5	0.0	0.0	35.5	0.0
Insurance Commissioner					
Insurance Premiums	945.5	0.0	40.1	985.5	40.1
Liquor Control Board					
Fees, Cannabis Excise Tax	207.2	0.0	2.6	209.8	2.6
Beer & Wine Surtax	55.4	0.0	0.2	55.6	0.2
Lottery Commission					
Lottery Revenue	0.6	0.0	1.5	2.1	1.5
State Treasurer					
Interest Earnings	(3.2)	0.0	1.6	(1.6)	1.6
Office of Financial Management					
Other	215.2	0.0	(0.5)	214.7	(0.5)
Administrative Office of the Courts					
Fines and Forfeitures	168.6	0.0	0.2	168.8	0.2
Total General Fund-State *	\$33,615.9	(\$22.5)	\$118.1	\$33,711.4	\$95.6

¹ Forecast for the 2013-15 biennium adopted by the Economic and Revenue Forecast Council February 2015.² Forecast for the 2013-15 biennium, adopted May 18, 2015.

*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	Feb. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	June 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,729.0	\$16.0	\$122.3	\$17,867.2	\$138.3
Business & Occupation	7,427.6	1.7	6.7	7,436.0	8.4
Use	1,219.4	0.0	7.6	1,227.0	7.6
Public Utility	845.0	0.0	(34.0)	811.0	(34.0)
Liquor Sales/Liter	498.4	0.0	3.5	501.9	3.5
Cigarette	731.9	0.0	(0.3)	731.6	(0.3)
Property (State Levy)	4,121.7	0.0	7.6	4,129.4	7.6
Real Estate Excise	1,285.1	0.0	87.0	1,372.1	87.0
Timber Excise	6.7	0.0	(0.0)	6.6	(0.0)
Other	915.4	0.0	0.4	915.8	0.4
Subtotal	34,780.2	17.7	200.7	34,998.6	218.4
Department of Licensing					
Boat excise, licenses, fees & other	35.6	0.0	0.1	35.6	0.1
Insurance Commissioner					
Insurance Premiums	1,032.6	0.0	51.2	1,083.8	51.2
Liquor Control Board					
Fees, Cannabis Excise Tax	198.3	21.5	10.4	230.2	31.9
Beer & Wine Surtax	54.6	0.0	0.1	54.6	0.1
Lottery Commission					
Lottery Revenue	3.4	0.0	2.7	6.1	2.7
State Treasurer					
Interest Earnings	8.5	0.0	(0.9)	7.6	(0.9)
Office of Financial Management					
Other Agencies	167.8	0.0	9.9	177.7	9.9
Administrative Office of the Courts					
Fines and Forfeitures	167.9	(0.2)	(3.8)	163.8	(4.1)
Total General Fund-State *	\$36,448.9	\$39.0	\$270.3	\$36,758.1	\$309.3

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council February 2015.² Forecast for the 2015-17 biennium, adopted May 18, 2015.

*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	Feb. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	June 2015 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,729.0	\$16.0	\$122.3	\$17,867.2	\$138.3
Business & Occupation Use	7,427.6	1.7	6.7	7,436.0	8.4
Public Utility	1,219.4	0.0	7.6	1,227.0	7.6
Liquor Sales/Liter	845.0	0.0	(34.0)	811.0	(34.0)
Cigarette	498.4	0.0	3.5	501.9	3.5
Property (State Levy)	731.9	0.0	(0.3)	731.6	(0.3)
Real Estate Excise	4,121.7	0.0	7.6	4,129.4	7.6
Timber Excise	1,285.1	0.0	87.0	1,372.1	87.0
Other	6.8	0.0	(0.0)	6.7	(0.0)
Subtotal	915.4	0.0	0.4	915.8	0.4
	34,780.3	17.7	200.7	34,998.7	218.4
Department of Licensing					
Boat excise, licenses, fees & other	35.6	0.0	0.1	35.6	0.1
Insurance Commissioner					
Insurance Premiums	1,032.6	0.0	51.2	1,083.8	51.2
Liquor Control Board					
Fees, Cannabis Excise Tax	198.3	21.5	10.4	230.2	31.9
Beer & Wine Surtax	54.6	0.0	0.1	54.6	0.1
Lottery Commission					
Lottery Revenue	8.2	0.0	2.9	11.1	2.9
State Treasurer					
Interest Earnings	9.4	0.0	(1.2)	8.2	(1.2)
Office of Financial Management					
Other	167.8	0.0	9.9	177.7	9.9
Administrative Office of the Courts					
Fines and Forfeitures	167.9	(0.2)	(3.8)	163.8	(4.1)
Total General Fund-State *	\$36,454.6	\$39.0	\$270.2	\$36,763.8	\$309.2

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council February 2015.² Forecast for the 2015-17 biennium, adopted May 18, 2015.

*Detail may not add to totals because of rounding.

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

Table 3.9
June 2015 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**	\$7,678.6	\$8,235.7	\$15,914.3	\$8,690.1	\$9,177.2	\$17,867.2	\$9,634.9	\$10,068.6	\$19,703.5
Business & occupation Use**	3,246.4	3,359.8	6,606.2	3,611.0	3,825.0	7,436.0	4,028.6	4,232.6	8,261.2
Public Utility	558.3	602.8	1,161.0	596.7	630.3	1,227.0	667.5	699.8	1,367.3
Liquor sales/liter	395.9	384.2	780.2	395.8	415.2	811.0	440.5	461.4	901.9
Beer & wine surtax	246.3	253.8	500.1	248.3	253.5	501.9	259.8	266.6	526.3
Cigarette	27.7	27.9	55.6	27.4	27.3	54.6	27.2	27.1	54.2
Tobacco products	400.5	402.9	803.4	379.6	368.1	747.7	357.1	347.2	704.3
Cannabis Excise Taxes	46.5	47.9	94.4	48.4	48.8	97.3	49.3	49.7	99.0
Property (state school levy)	0.0	8.2	8.2	20.0	46.9	67.0	59.3	67.6	126.9
Leasehold Excise Tax	1,958.9	1,998.4	3,957.3	2,041.2	2,088.1	4,129.4	2,140.8	2,195.1	4,335.9
Public utility district	27.7	28.9	56.7	29.5	30.0	59.5	30.5	31.0	61.5
Brokered Natural Gas	49.3	50.3	99.6	51.1	51.9	103.0	53.0	54.2	107.2
Real estate excise***	34.4	28.7	63.1	28.8	29.1	57.9	29.7	30.6	60.3
Timber excise	615.6	713.6	1,329.2	667.3	704.9	1,372.1	731.3	753.5	1,484.7
Estate/inheritance	2.7	2.7	5.3	3.2	3.5	6.6	3.6	3.7	7.3
Boat excise	0.4	(1.0)	(0.6)	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	13.0	12.8	25.8	12.8	12.8	25.6	12.8	12.8	25.6
Penalties and interest on past due taxes	456.7	528.8	985.5	531.4	552.4	1,083.8	573.7	597.8	1,171.5
Other	133.8	135.1	268.9	138.4	143.7	282.1	149.2	154.9	304.2
Total Taxes	72.3	75.3	147.7	56.6	57.7	114.3	58.9	38.8	97.6
Total Taxes	15,965.1	16,896.8	32,861.9	17,577.4	18,466.6	36,044.0	19,307.7	20,092.9	39,400.6
State Non-Tax Sources									
Licenses, permits, fees	127.9	134.2	262.1	135.9	138.0	273.9	139.6	140.0	279.6
Liquor & Cannabis fees	123.0	78.7	201.6	78.9	84.3	163.2	88.5	93.1	181.6
Earnings on investments	(3.0)	1.2	(1.8)	0.2	7.4	7.6	18.7	23.6	42.3
Administrative Office of the Courts	85.6	83.2	168.8	80.8	83.0	163.8	85.9	88.7	174.6
Transfers of unclaimed property	60.5	64.5	125.0	60.8	61.1	121.9	61.4	61.8	123.2
Other revenue & transfers	23.5	11.7	35.2	(7.9)	(8.4)	(16.3)	(0.9)	(0.8)	(1.7)
Total Non-Tax	417.4	373.5	790.9	348.8	365.4	714.2	393.2	406.3	799.5
Total General Fund-State *	\$16,382.5	\$17,270.2	\$33,652.8	\$17,926.2	\$18,832.0	\$36,758.1	\$19,701.0	\$20,499.1	\$40,200.1

* Detail may not add to totals due to rounding
**GFS portion after Initiative 900 transfer
***Includes penalties and interest

Table 3.10

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

February 2012 through June 2015

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 2012	(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
November 2014	111	(3)	108	0	108	33,440
February 2015	65	10	75	31 #6	107	33,547
June 2015	83	46	129	(23) #7	106	33,653
Total change***:						
From February 2012	709	137	847	378	1,224	
Percent change	2.3	10.4	2.6	1.2	3.8	

* 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

#6 Payment from legal settlement plus expected large audit payment

#7 Large expected refunds

Table 3.11

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

September 2012 through June 2015

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
November 2014	239	3	241	0	241	36,319
February 2015	108	22	129	0	129	36,449
June 2015	201	70	270	39 ^{#6}	309	36,758
Total change***:						
From September 2012	730	214	944	296	1,240	
Percent change	2.1	15.1	2.7	0.8	3.5	

* 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^{#6} Legislative revenue changes from 2015 regular legislative session

Table 3.12

2013-15 Enacted Budget Balance Sheet

Including 2014 Supplemental Budget and 2015 Early Supplemental

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
February 2015 Forecast	33,546.6	654.5	34,201.2
June 2015 Update			
Non-economic Changes	(22.5)	-	(22.5)
Revenue Update (Economic Changes)	128.7	(26.9)	101.7
Current Revenue Totals	33,652.8	627.6	34,280.4
Transfer to Budget Stabilization Account	(317.3)	-	(317.3)
Other Enacted Fund Transfers	135.0	293.3	428.3
Prior Period Adjustments	15.7	-	15.7
Alignment to the Comprehensive Financial Statements	(2.9)	-	(2.9)
Total Resources (including beginning fund balance)	33,650.8	909.9	34,560.6
EXPENDITURES			
2013-15 Enacted Budget			
Enacted 2013-15 Budgets and Legislation (pre 2015 Session)	32,868.6	925.5	33,794.1
Enacted 2015 Early Supplemental	66.2	-	66.2
Actual Reversions in Fiscal Year 2014	(79.7)		(79.7)
Assumed Reversions for Fiscal Year 2015	(70.0)		(70.0)
Total Expenditures	32,785.1	925.5	33,710.6
RESERVES			
Projected Ending GFS, ELTA & OPA Balances	865.6	(15.7)	850.0
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	269.7		269.7
Transfer from General Fund and Interest Earnings	319.3		319.3
Less Expenditures in Enacted 2015 Early Supplemental	(77.2)		(77.2)
Projected Budget Stabilization Account Ending Balance	511.8		511.8
Total Reserves (Including Budget Stabilization)	1,377.4	(15.7)	1,361.8

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	\$16,061.9	\$15,914.3	\$15,742.2
Business & Occupation Use	6,663.7	6,606.2	6,536.7
Public Utility	1,171.8	1,161.0	1,148.9
Property (school levy)	787.2	780.2	772.1
Real Estate Excise	3,966.8	3,957.3	3,947.8
Other	1,406.0	1,329.2	1,319.2
Subtotal	2,151.4	2,222.6	2,216.6
	32,208.9	31,970.7	31,683.4
Department of Licensing			
	36.2	35.5	34.8
Insurance Commissioner¹			
	985.3	985.5	985.8
Lottery Commission			
	10.0	9.9	9.9
State Treasurer - Interest earnings			
	(0.5)	(1.8)	(2.5)
Liquor and Cannabis Surtaxes & Fees²			
	270.7	265.4	251.7
Office of Financial Management			
Other agencies	219.8	218.7	217.6
Administrative Office of the Courts			
Fines and Forfeitures	169.1	168.8	168.3
Total General Fund - State*	\$33,899.4	\$33,652.8	\$33,349.0
Difference from June 2015 Baseline	\$246.6		(\$303.7)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, cannabis excise tax, 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	\$19,517.9	\$17,867.2	\$16,209.6
Business & Occupation Use	8,074.4	7,436.0	6,748.7
Public Utility	1,323.8	1,227.0	1,117.8
Property (school levy)	873.3	811.0	751.6
Real Estate Excise	4,162.5	4,129.4	4,071.9
Other	1,573.7	1,372.1	1,183.2
Subtotal	2,170.4	2,155.9	2,031.8
	37,696.1	34,998.6	32,114.7
Department of Licensing			
	36.4	35.6	34.9
Insurance Commissioner¹			
	1,110.9	1,083.8	1,056.7
Lottery Commission			
	6.4	6.1	5.8
State Treasurer - Interest earnings			
	30.6	7.6	(5.1)
Liquor and Cannabis Surtaxes & Fees²			
	295.7	284.8	206.2
Office of Financial Management			
Other agencies	186.6	177.7	168.9
Administrative Office of the Courts			
Fines and Forfeitures	170.6	163.8	154.4
Total General Fund - State*	\$39,533.3	\$36,758.1	\$33,736.4
Difference from June 2015 Baseline	\$2,775.2		(\$3,021.8)

1 Insurance premiums, General Fund-State portion.

2 Includes beer and wine surtax, cannabis excise tax, 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 fund

June 2015 Forecast

(cash basis, millions of dollars)

	Lottery: Total Transfers:*	Mariners 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	145.4	0.6	0.0	11.2	0.0	0.0	0.3	3.8	123.4	0.0	6.1
2013-15 Biennium	293.3	9.9	0.0	22.0	0.0	0.0	0.6	7.5	237.1	0.0	16.1
2016	136.1	1.5	0.0	11.7	0.0	0.0	0.3	3.8	118.8	0.0	0.0
2017	139.7	4.6	0.0	12.2	0.0	0.0	0.3	3.8	118.8	0.0	0.0
2015-17 Biennium	275.8	6.1	0.0	23.8	0.0	0.0	0.6	7.6	237.6	0.0	0.0
2018	141.1	6.4	0.0	11.7	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2019	144.6	9.4	0.0	12.2	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2017-19 Biennium	285.7	15.8	0.0	23.8	0.0	0.0	0.7	7.6	237.7	0.0	0.0

Table 3.16

Lottery transfers by fund

June 2015 Forecast

(GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	Mariners 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	141.6	1.5	0.0	11.2	0.0	0.0	0.3	3.8	118.7	0.0	6.1
2013-15 Biennium	289.3	2.1	0.0	22.0	0.0	0.0	0.6	7.8	240.6	0.0	16.1
2016	139.3	4.6	0.0	11.7	0.0	0.0	0.3	3.8	118.8	0.0	0.0
2017	141.5	6.4	0.0	12.2	0.0	0.0	0.3	3.8	118.8	0.0	0.0
2015-17 Biennium	280.8	11.1	0.0	23.8	0.0	0.0	0.6	7.6	237.6	0.0	0.0
2018	144.1	9.4	0.0	11.7	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2019	145.8	10.6	0.0	12.2	0.0	0.0	0.3	3.8	118.9	0.0	0.0
2017-19 Biennium	289.9	20.1	0.0	23.8	0.0	0.0	0.7	7.6	237.7	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, Education Legacy Trust Account and Opportunity Pathways Account

History and Forecast by Fiscal Year (Cash basis)

June 2015 - Millions of Dollars

	General Fund-State (GF-S) (current definition)		Education Legacy Trust Fund* (ELTA)		Total GF-S plus ELTA		WA Opportunity Pathways Account (OPA)		Total GF-S plus ELTA and OPA	
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.
History:										
FY 1995	\$8,799				\$8,799				\$8,799	
FY 1996	\$8,934	1.5%			\$8,934	1.5%			\$8,934	1.5%
FY 1997	\$9,449	5.8%			\$9,449	5.8%			\$9,449	5.8%
FY 1998	\$10,057	6.4%			\$10,057	6.4%			\$10,057	6.4%
FY 1999	\$10,414	3.6%			\$10,414	3.6%			\$10,414	3.6%
FY 2000	\$11,068	6.3%			\$11,068	6.3%			\$11,068	6.3%
FY 2001	\$11,560	4.4%			\$11,560	4.4%			\$11,560	4.4%
FY 2002	\$11,632	0.6%			\$11,632	0.6%			\$11,632	0.6%
FY 2003	\$11,721	0.8%			\$11,721	0.8%			\$11,721	0.8%
FY 2004	\$12,358	5.4%			\$12,358	5.4%			\$12,358	5.4%
FY 2005	\$13,036	5.5%			\$13,036	5.5%			\$13,036	5.5%
FY 2006	\$14,318	9.8%	\$115		\$14,432	10.7%			\$14,432	10.7%
FY 2007	\$15,467	8.0%	\$266	132.2%	\$15,734	9.0%			\$15,734	9.0%
FY 2008	\$15,659	1.2%	\$213	-20.1%	\$15,872	0.9%			\$15,872	0.9%
FY 2009	\$14,158	-9.6%	\$224	5.4%	\$14,382	-9.4%			\$14,382	-9.4%
FY 2010	\$13,571	-4.1%	\$157	-29.9%	\$13,728	-4.6%			\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$14,759	7.5%	\$99		\$14,859	8.2%
FY 2012	\$14,874	1.5%	\$114	2.3%	\$14,988	1.6%	\$118	19.1%	\$15,107	1.7%
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$15,884	6.0%	\$126	5.9%	\$16,009	6.0%
FY 2014	\$16,383	3.8%	\$197	95.3%	\$16,580	4.4%	\$114	-9.4%	\$16,694	4.3%
Forecast:										
FY 2015	\$17,270	5.4%	\$193	-2.2%	\$17,463	5.3%	\$123	8.5%	\$17,587	5.3%
FY 2016	\$17,926	3.8%	\$224	16.2%	\$18,151	3.9%	\$119	-3.7%	\$18,269	3.9%
FY 2017	\$18,832	5.1%	\$231	2.9%	\$19,063	5.0%	\$119	0.0%	\$19,182	5.0%
FY 2018	\$19,701	4.6%	\$237	2.6%	\$19,938	4.6%	\$119	0.0%	\$20,057	4.6%
FY 2019	\$20,499	4.1%	\$264	11.3%	\$20,763	4.1%	\$119	0.0%	\$20,882	4.1%
Biennial Totals										
03-05 Biennium	\$25,395	8.7%	\$0	NA	\$25,395	8.7%	\$0	NA	\$25,395	8.7%
05-07 Biennium	\$29,785	17.3%	\$381	NA	\$30,166	18.8%	\$0	NA	\$30,166	18.8%
07-09 Biennium	\$29,817	0.1%	\$437	14.8%	\$30,254	0.3%	\$0	NA	\$30,254	0.3%
09-11 Biennium	\$28,218	-5.4%	\$269	-38.5%	\$28,487	-5.8%	\$99	NA	\$28,586	-5.5%
11-13 Biennium	\$30,657	8.6%	\$215	-19.9%	\$30,872	8.4%	\$244	145.2%	\$31,116	8.8%
13-15 Biennium	\$33,653	9.8%	\$390	81.4%	\$34,043	10.3%	\$237	-2.8%	\$34,280	10.2%
15-17 Biennium	\$36,758	9.2%	\$455	16.6%	\$37,213	9.3%	\$238	0.2%	\$37,451	9.2%
17-19 Biennium	\$40,200	9.4%	\$500	9.9%	\$40,700	9.4%	\$238	0.0%	\$40,938	9.3%

*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	\$52,762	\$375	\$150	\$15	\$7,350	\$6,731	\$4,487	\$449	\$22,436	\$2,244	\$135	\$8,391
2015-17	\$374,119	\$1,000	\$400	\$40	\$10,000	\$54,402	\$36,268	\$3,627	\$181,340	\$18,134	\$1,088	\$67,821
2017-19	\$694,679	\$1,000	\$400	\$40	\$10,000	\$102,486	\$68,324	\$6,832	\$341,620	\$34,162	\$2,050	\$127,766

Table 3.19

Forecasted retail sales and B&O taxes from cannabis sales

Thousands of dollars

Biennium	Retail Sales Tax from Cannabis Sales	B&O Tax from Cannabis Sales	Total GF-S B&O and Retail Sales Tax
2013-15	\$8,803	\$941	\$9,744
2015-17	\$54,934	\$5,390	\$60,324
2017-19	\$112,876	\$11,076	\$123,952

Table 3.20

Legislation from 2015 regular session with GF-S revenue impact

Millions of dollars

Bill ID	Description	FY 2016	FY 2017	FY 2018	FY 2019	2015-17 Biennium	2017-19 Biennium
ESHB 1060	Litter tax revenues	(0.001)	(0.002)	(0.002)	(0.002)	(0.003)	(0.004)
SHB 1516	Lodging services tax exemption	0.018	0.024	0.024	0.024	0.042	0.048
HB 1550	Recreation services etc. tax exemption	(0.561)	(1.413)	(1.706)	(1.775)	(1.974)	(3.481)
SHB 1619	Environmental handling charges	(0.008)	(0.009)	(0.009)	(0.009)	(0.017)	(0.018)
2SSB 5052	Cannabis patient protection-DOR revenue	(1.519)	21.129	29.993	35.362	19.610	65.355
2SSB 5052	Cannabis patient protection-LCB transfers to GF-S	0.116	21.414	28.188	32.393	21.530	60.581
E2SSB 5564	Juvenile records and fines	(0.103)	(0.133)	(0.133)	(0.133)	(0.237)	(0.267)
Total GF-S Revenue Impact		(2.058)	41.010	56.355	65.860	38.951	122.215

Source: Office of Financial Management, May 2015

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Chapter 4: Special Report– Changes in employment during and after a recession: comparing Washington to the U.S.

- **Following the “Great Recession”, Washington’s economy has improved at a slightly stronger pace than the nation as a whole.**
- **Analysis looks at relative changes in Washington and U.S. employment through six previous recessionary periods: 1969-70, 1973-75, 1980, 1981-82, 1990-91 and 2001.**
- **For each of these six periods, Washington and U.S. employment growth are tracked relative to the pre-recession peak in the business cycle, followed through the recession and then to the subsequent business cycle peak.**
- **Although the magnitude of job losses associated with the Great Recession was much greater than in the last several recessions, the relative pattern of U.S. and Washington employment gains after the recession is similar to several past recessions.**

Background

Analysis looks at changes through six previous recessionary periods.

Coming out of the “Great Recession,” Washington’s economy has improved at a slightly stronger pace than the nation as a whole, a trend that ERFC forecasts predict will continue through 2019. To get a sense of how this pattern compares to other post-recession periods, the following analysis looks at relative changes in U.S. and Washington employment through six previous recessionary periods: 1969-70, 1973-75, 1980, 1981-82, 1990-91 and 2001.

Analysis tracks employment growth from one business cycle peak to the next.

For each of these six periods, U.S. and Washington employment growth are tracked relative to the pre-recession peak in the U.S. business cycle, followed through the recession and then to the subsequent U.S. business cycle peak.¹ For example, in the 1969-

¹ The analysis compares monthly U.S. and Washington seasonally-adjusted nonfarm employment. Seasonally adjusted U.S. employment data is available from the U.S. Bureau of Labor Statistics (BLS) for the entire period of the analysis. For Washington, non-seasonally adjusted data are available from BLS for the entire analysis period but seasonally adjusted Washington employment data is available only back to 1990. Therefore, we have applied seasonal adjustments to the available BLS non-seasonally adjusted

70 recession, the previous business cycle peak was December 1969.² Therefore, December 1969 employment is the baseline against which employment changes are measured; employment is tracked until November 1973, the next business cycle peak. While there are other economic indicators besides employment that could be used to show the relative performance of the state and national economies, they are either reported less frequently (e.g., personal income is only available on a quarterly basis) or are not strictly comparable (U.S. retail sales and Washington taxable retail sales).

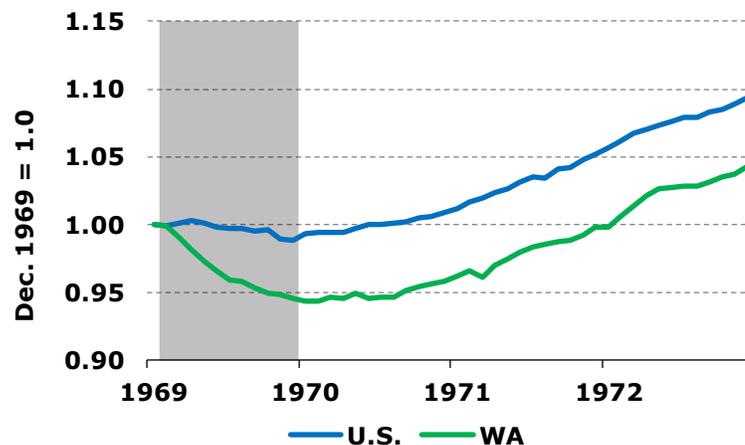
1969-70 Recession

The 1969-70 recession started in December 1969 and ended in November, 1970.

The 1969-70 recession started in December 1969 and ended in November, 1970. The subsequent expansion lasted for 36 months, until November 1973. As Figure 4.1 indicates, this recession had a much more negative impact on Washington than the U.S.; national employment fell by just over 1% relative to the pre-recession peak while Washington employment declined by more than 5.5%. In November 1973, U.S. employment was over 9% higher than the previous peak, while Washington employment had increased by about 4%.

Figure 4.1: 1969-70 Recession

In November 1973, U.S. employment was over 9% higher than the previous peak, while Washington employment had increased by about 4%.



Source: U.S. Bureau of Labor Statistics, ERFC; data Dec. 1969-Nov. 1973

1973-75 Recession

The 1973-75 recession lasted from November 1973 until March 1975. While U.S. employment fell by almost 2%, Washington

data. While seasonally-adjusted employment data would typically be created at the industry level and then summed to get total employment, the seasonally adjusted Washington data used in this analysis is very similar to the BLS seasonally-adjusted series from 1990 through April 2015.

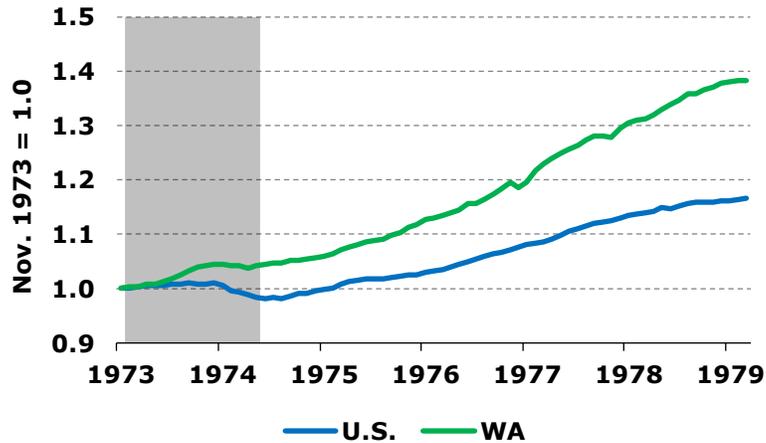
² The analysis uses the business cycle dates determined by the National Bureau of Economic Research's Business Cycle Dating Committee. available at www.nber.org/cycles/cyclesmain.html.

The 1973-75 recession lasted from November 1973 until March 1975.

employment continued to rise throughout the recession and subsequent expansion. By the next business cycle peak in January 1980, employment had increased by over 38% in Washington compared to the previous peak but by 16% for the U.S.

Figure 4.2: 1973-75 Recession

In January 1980, Washington employment was 38% over the previous peak while U.S. employment had increased by 16%.



Source: U.S. Bureau of Labor Statistics, ERFC; data Nov. 1973-Jan. 1980

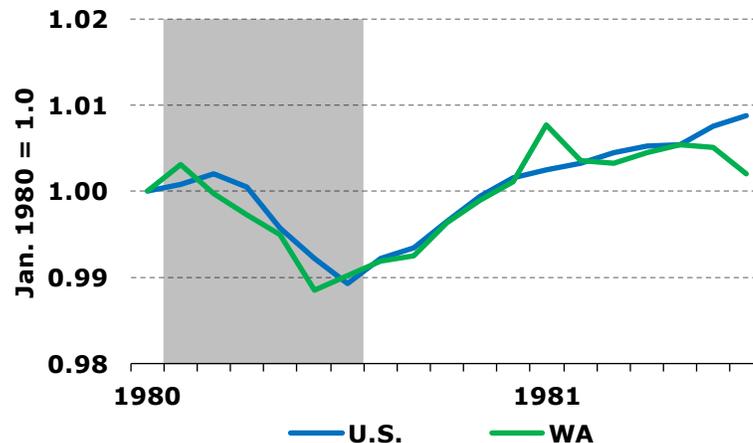
1980 Recession

The 1980 recession lasted six months, from January to July; the expansion that followed lasted only 12 months.

The employment experience of Washington and the U.S. was fairly similar; an employment drop of just over 1% from the previous peak followed by a very small employment gain during the short expansion.

Figure 4.3: 1980 Recession

Washington and U.S. employment dropped by 1% from the previous peak followed by a very small employment gain during the short expansion.



Source: U.S. Bureau of Labor Statistics, ERFC; data Jan. 1980-July 1981

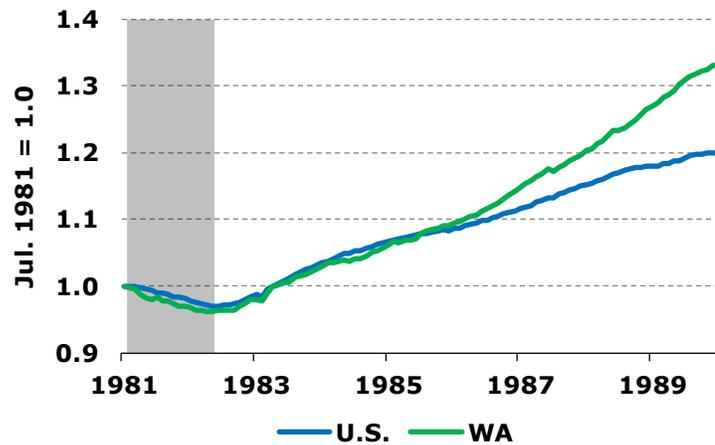
1981-82 Recession

The 1981-82 recession lasted 16 months through November 1982.

A considerably longer recession than in 1980, the 1981-82 recession lasted 16 months through November 1982 and had a much more severe impact on employment. As Figure 4.4 indicates, Washington's employment loss was slightly larger than the U.S. loss (nearly 4% compared to just over 3%). However, by midway through the subsequent expansion, Washington employment was growing at a much faster rate than the U.S. At the end of the 92 month expansion, Washington employment was 33% higher than at the previous business cycle peak, compared to just under a 20% increase for national employment.

Figure 4.4: 1981-82 Recession

By midway through the subsequent expansion, Washington employment was growing at a much faster rate than the U.S.



Source: U.S. Bureau of Labor Statistics, ERFC; data July 1981-July 1990

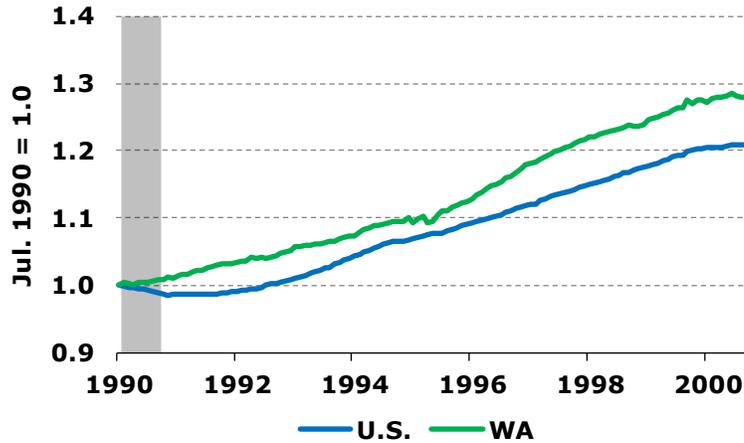
1990-91 Recession

The 1990-91 recession lasted from July 1990 to March 1991.

Like the 1973-75 recession, U.S. employment declined (by about 1%) while Washington employment continued to grow. By the end of the subsequent expansion, Washington employment was 28% above the previous business cycle peak, while national employment had increased by nearly 21% in the same time period.

Figure 4.5: 1990-91 Recession

By the end of the expansion, Washington employment was 28% above the previous peak.



Source: U.S. Bureau of Labor Statistics, ERFC; data July 1990-Mar. 2001

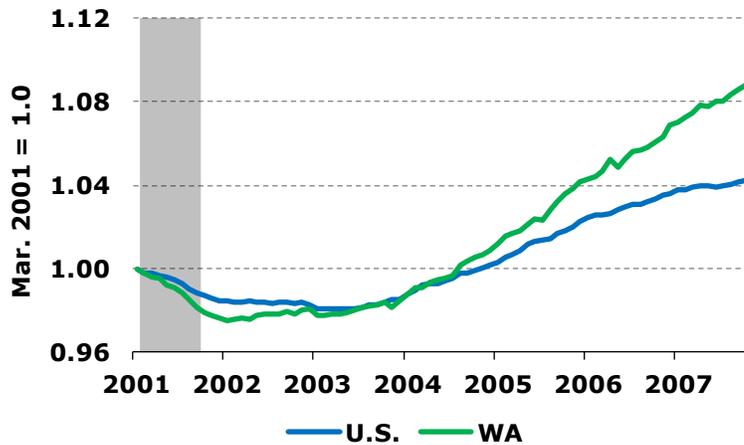
2001 Recession

The 2001 recession lasted from March to November.

The pattern in Figure 4.6 for the 2001 recession looks similar to the 1981-82 recession. Both Washington and U.S. employment declined during the recession (although less severely than in 1981-82), followed by much stronger Washington employment growth compared to the U.S.

Figure 4.6: 2001 Recession

Following the recession, Washington employment growth was much stronger than the U.S.



Source: U.S. Bureau of Labor Statistics, ERFC; data Mar. 2001-Dec. 2007

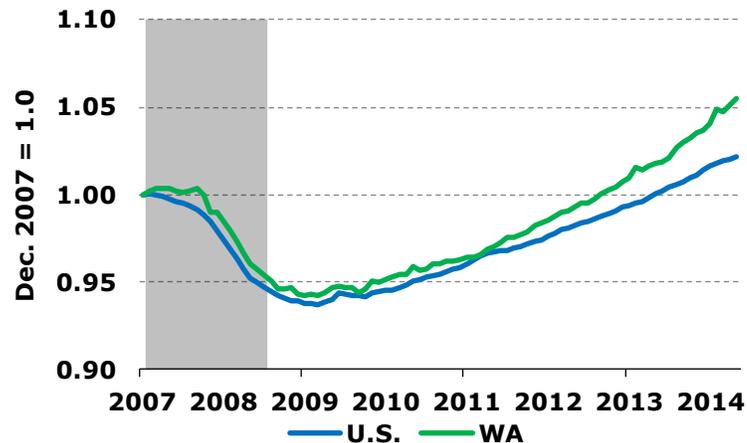
2007-09 Recession

The analysis of the post-Great Recession expansion is incomplete because the expansion is ongoing.

The analysis of employment in the post-Great Recession expansion is by definition incomplete because the expansion is ongoing. The employment drop from the previous business cycle peak was much greater than in any of the above recessions (just over 6% for the U.S., just under 6% for Washington). And, despite the 70 months of expansion through April 2015, the modest employment gains relative to the last peak of 2% nationally and 5% in Washington suggest how muted the recovery has been. However, the pattern in Figure 4.7 does have a shape similar to those in Figure 4.6 (2001 recession) and Figure 4.4 (1981-82 recession).

Figure 4.7: 2007-09 Recession

The modest employment gains relative to the last peak of 2% nationally and 5% in Washington suggest how muted the recovery has been.



Source: U.S. Bureau of Labor Statistics, ERFC; data Dec. 2007-Apr. 2015

Conclusion

The pattern of U.S. and Washington employment gains after the recession is similar to several previous recessions.

Although the magnitude of job losses associated with the Great Recession was much greater than in the last several recessions, the relative pattern of U.S. and Washington employment gains after the recession is similar to several previous recessions. Washington employment expanded at a faster pace than did national employment following four of the six recessions prior to the Great Recession. This is consistent with a broader historical trend: between 1950 and 2014, Washington employment has grown at an annual average rate of 2.3%, while U.S. employment has increased at an annual average rate of 1.7%.

Table 4.1: U.S. and Washington Employment Changes over the Business Cycle

Recession	Prior business cycle peak	Employment change: prior peak to lowest		Following business cycle peak	Employment change: prior peak to following peak	
		U.S.	WA		U.S.	WA
Dec 1969 - Nov 1970	Dec-70	-1%	-6%	Nov-73	9%	4%
Nov 1973 - Mar 1975	Nov-73	-2%	0%	Jan-80	17%	38%
Jan 1980 - Jul 1980	Jan-80	-1%	-1%	Jul-81	1%	0%
Jul 1981 - Nov 1982	Jul-81	-3%	-4%	Jul-90	20%	33%
Jul 1990 - Mar 1991	Jul-90	-1%	0%	Mar-01	21%	28%
Mar 2001 - Nov 2001	Mar-01	-2%	-3%	Dec-07	4%	9%
Dec 2007 - Jul 2009	Dec-07	-6%	-6%	n/a		

Source: U.S. Bureau of Labor Statistics, National Bureau of Economic Research, ERFC

Sources

Business cycle dates: Business Cycle Dating Committee, National Bureau of Economic Research;
www.nber.org/cycles/cyclesmain.html

U.S. total nonfarm employment data: U.S. Department of Labor, Bureau of Labor Statistics; <http://www.bls.gov/ces/>

Washington total nonfarm employment data: U.S. Department of Labor, Bureau of Labor Statistics;
<http://www.bls.gov/sae/data.htm> and ERFC calculations

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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 2015 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	16,085.6	16,483.1	16,951.4	17,409.1	17,861.7	18,290.4
% Ch	2.3	2.2	2.4	2.5	2.8	2.7	2.6	2.4
Real Consumption	10,449.7	10,699.7	10,969.0	11,303.9	11,623.8	11,937.6	12,235.8	12,541.5
% Ch	1.8	2.4	2.5	3.1	2.8	2.7	2.5	2.5
Real Nonresidential Fixed Investment	1,931.8	1,990.6	2,116.4	2,196.3	2,331.4	2,474.5	2,614.6	2,712.3
% Ch	7.2	3.0	6.3	3.8	6.1	6.1	5.7	3.7
Real Residential Fixed Investment	436.5	488.4	496.2	531.4	595.9	656.3	682.5	705.8
% Ch	13.5	11.9	1.6	7.1	12.1	10.1	4.0	3.4
Real Personal Income	13,093.3	13,198.7	13,541.5	14,032.4	14,440.7	14,964.5	15,484.5	15,969.6
% Ch	3.3	0.8	2.6	3.6	2.9	3.6	3.5	3.1
Real Per Capita Income (\$/Person)	41,628	41,669	42,443	43,625	44,531	45,774	46,987	48,076
% Ch	2.6	0.1	1.9	2.8	2.1	2.8	2.6	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.073	1.088	1.092	1.111	1.131	1.152	1.171
% Ch	1.8	1.2	1.3	0.4	1.8	1.8	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.296	2.330	2.367	2.373	2.422	2.475	2.529	2.581
% Ch	2.1	1.5	1.6	0.2	2.1	2.2	2.1	2.1
Employment Cost Index (Dec. 2005=1.0)	1.160	1.182	1.206	1.238	1.273	1.308	1.345	1.386
% Ch	1.8	1.9	2.0	2.7	2.8	2.8	2.9	3.0
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	16,163.2	16,768.1	17,418.9	18,059.2	18,961.5	19,898.8	20,826.6	21,722.5
% Ch	4.2	3.7	3.9	3.7	5.0	4.9	4.7	4.3
Personal Income	13,887.7	14,166.9	14,728.6	15,327.8	16,050.1	16,932.7	17,833.3	18,708.7
% Ch	5.2	2.0	4.0	4.1	4.7	5.5	5.3	4.9
Employment (Millions)								
U.S. Civilian Labor Force	155.0	155.4	155.9	157.8	160.0	162.3	164.2	165.7
Total U.S. Employment	142.5	143.9	146.3	149.3	152.0	154.2	155.9	157.3
Unemployment Rate (%)	8.07	7.37	6.15	5.34	4.98	4.90	4.97	5.02
Nonfarm Payroll Employment	134.10	136.39	139.02	141.98	144.11	146.10	147.74	149.04
% Ch	1.7	1.7	1.9	2.1	1.5	1.4	1.1	0.9
Manufacturing	11.93	12.02	12.19	12.38	12.51	12.58	12.61	12.58
% Ch	1.7	0.8	1.4	1.6	1.1	0.5	0.2	-0.2
Durable Manufacturing	7.47	7.55	7.69	7.86	7.98	8.04	8.08	8.06
% Ch	2.7	1.0	1.8	2.3	1.5	0.7	0.5	-0.2
Nondurable Manufacturing	4.46	4.47	4.50	4.52	4.53	4.54	4.53	4.52
% Ch	0.1	0.3	0.7	0.4	0.3	0.1	-0.1	-0.3
Construction	5.65	5.86	6.14	6.44	6.81	7.32	7.78	8.13
% Ch	2.1	3.7	4.8	4.9	5.7	7.5	6.3	4.5
Service-Providing	115.68	117.66	119.80	122.30	123.97	125.36	126.49	127.46
% Ch	1.7	1.7	1.8	2.1	1.4	1.1	0.9	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	94.2	98.0	93.0	58.2	64.7	66.1	67.2	67.8
Personal Saving/Disposable Income (%)	7.2	4.9	4.9	4.9	4.6	5.4	6.2	6.9
Auto Sales (Millions)	7.2	7.6	7.7	7.5	7.9	8.3	8.4	8.4
% Ch	19.0	4.7	1.2	-2.4	5.0	5.9	0.6	0.5
Housing Starts (Millions)	0.784	0.930	1.001	1.075	1.296	1.466	1.536	1.597
% Ch	28.1	18.6	7.6	7.4	20.6	13.1	4.8	3.9
Federal Budget Surplus (Billions)	-1,079.1	-649.1	-582.3	-541.4	-489.9	-499.8	-526.9	-568.0
Net Exports (Billions)	-568.3	-508.2	-538.2	-508.0	-508.9	-542.0	-585.0	-598.3
3-Month Treasury Bill Rate (%)	0.09	0.06	0.03	0.21	1.19	2.86	3.53	3.52
10-Year Treasury Note Yield (%)	1.80	2.35	2.54	2.22	3.00	3.58	3.89	3.83
Bond Index of 20 G.O. Munis. (%)	3.73	4.26	4.25	3.92	4.68	5.11	5.32	5.27
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.17	3.91	4.78	5.48	5.80	5.74

Table A1.2
U.S. Economic Forecast Summary
Forecast 2015 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	16,010.4	16,205.6	16,294.7	16,304.8	16,419.5	16,543.5	16,664.8
% Ch , Annual Rate	-2.1	4.6	5.0	2.2	0.2	2.8	3.1	3.0
Real Consumption	10,844.3	10,912.6	10,999.5	11,119.6	11,173.1	11,263.0	11,348.2	11,431.4
% Ch , Annual Rate	1.2	2.5	3.2	4.4	1.9	3.3	3.1	3.0
Real Nonresidential Fixed Investment	2,051.5	2,099.6	2,144.8	2,169.8	2,151.1	2,176.2	2,208.3	2,249.7
% Ch , Annual Rate	1.6	9.7	8.9	4.7	-3.4	4.7	6.0	7.7
Real Residential Fixed Investment	485.3	495.6	499.6	504.3	505.9	521.8	542.0	555.9
% Ch , Annual Rate	-5.3	8.8	3.3	3.8	1.3	13.2	16.4	10.7
Real Personal Income	13,392.4	13,477.0	13,573.8	13,722.9	13,928.5	13,981.8	14,059.3	14,160.0
% Ch , Annual Rate	3.5	2.5	2.9	4.5	6.1	1.5	2.2	2.9
Real Per Capita Income (\$/Person)	42,102	42,286	42,503	42,882	43,435	43,513	43,664	43,888
% Ch , Annual Rate	2.9	1.8	2.1	3.6	5.3	0.7	1.4	2.1
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.082	1.088	1.091	1.090	1.085	1.091	1.095	1.099
% Ch , Annual Rate	1.4	2.3	1.2	-0.4	-2.0	2.4	1.5	1.3
U.S. Consumer Price Index (1982-84=1.0)	2.354	2.368	2.375	2.370	2.352	2.370	2.380	2.388
% Ch , Annual Rate	2.1	2.4	1.2	-0.9	-3.1	3.1	1.8	1.3
Employment Cost Index (Dec. 2005=1.0)	1.194	1.203	1.211	1.217	1.226	1.234	1.243	1.251
% Ch , Annual Rate	1.0	3.0	2.7	2.0	3.0	2.7	2.8	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	17,044.0	17,328.2	17,599.8	17,703.7	17,710.0	17,967.6	18,174.7	18,384.6
% Ch , Annual Rate	-0.8	6.8	6.4	2.4	0.1	5.9	4.7	4.7
Personal Income	14,484.7	14,660.5	14,811.2	14,958.1	15,106.7	15,254.0	15,395.4	15,555.2
% Ch , Annual Rate	4.9	4.9	4.2	4.0	4.0	4.0	3.8	4.2
Employment (Millions)								
U.S. Civilian Labor Force	155.8	155.6	156.0	156.3	157.0	157.4	158.1	158.6
Total U.S. Employment	145.4	145.9	146.5	147.3	148.3	148.9	149.7	150.3
Unemployment Rate (%)	6.63	6.20	6.07	5.70	5.57	5.34	5.27	5.17
Nonfarm Payroll Employment	137.84	138.64	139.38	140.23	141.01	141.70	142.33	142.86
% Ch , Annual Rate	1.6	2.3	2.2	2.5	2.2	2.0	1.8	1.5
Manufacturing	12.12	12.16	12.20	12.27	12.32	12.35	12.39	12.46
% Ch , Annual Rate	1.7	1.3	1.5	2.3	1.5	1.1	1.2	2.3
Durable Manufacturing	7.61	7.66	7.71	7.76	7.80	7.83	7.88	7.94
% Ch , Annual Rate	1.6	2.4	2.5	3.0	1.8	1.9	2.2	3.2
Nondurable Manufacturing	4.51	4.50	4.50	4.51	4.52	4.52	4.51	4.52
% Ch , Annual Rate	2.0	-0.6	-0.2	1.2	1.0	-0.1	-0.6	0.8
Construction	6.03	6.11	6.17	6.24	6.34	6.39	6.47	6.57
% Ch , Annual Rate	6.7	5.4	3.8	4.3	6.5	3.5	5.3	5.8
Service-Providing	118.81	119.48	120.10	120.81	121.46	122.09	122.64	123.01
% Ch , Annual Rate	1.3	2.3	2.1	2.4	2.2	2.1	1.8	1.2
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	98.7	103.0	97.1	73.2	48.7	58.5	62.2	63.3
Personal Saving/Disposable Income (%)	4.9	5.1	4.8	4.6	5.5	5.0	4.7	4.5
Auto Sales (Millions)	7.3	7.8	7.8	7.8	7.3	7.5	7.5	7.7
% Ch , Annual Rate	-16.8	30.5	3.8	0.2	-25.5	9.6	4.3	8.6
Housing Starts (Millions)	0.925	0.985	1.030	1.063	0.969	1.037	1.121	1.174
% Ch , Annual Rate	-33.7	28.8	19.2	13.4	-31.0	31.2	36.5	20.2
Federal Budget Surplus (Billions)	-560.1	-598.6	-611.0	-559.5	-522.6	-572.1	-562.2	-508.7
Net Exports (Billions)	-538.0	-549.2	-516.5	-549.2	-537.9	-484.6	-499.8	-509.6
3-Month Treasury Bill Rate (%)	0.05	0.03	0.03	0.02	0.03	0.05	0.26	0.52
10-Year Treasury Note Yield (%)	2.76	2.62	2.50	2.28	1.97	2.08	2.32	2.52
Bond Index of 20 G.O. Munis. (%)	4.49	4.33	4.24	3.95	3.48	3.71	4.14	4.35
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	3.97	3.73	3.77	3.95	4.18

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2015 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	16,779.2	16,895.1	17,008.3	17,123.0	17,239.5	17,351.9	17,468.0	17,577.0
% Ch , Annual Rate	2.8	2.8	2.7	2.7	2.8	2.6	2.7	2.5
Real Consumption	11,509.7	11,585.9	11,662.6	11,737.0	11,817.8	11,896.2	11,977.9	12,058.4
% Ch , Annual Rate	2.8	2.7	2.7	2.6	2.8	2.7	2.8	2.7
Real Nonresidential Fixed Investment	2,286.5	2,319.5	2,342.0	2,377.5	2,419.1	2,457.0	2,492.9	2,529.0
% Ch , Annual Rate	6.7	5.9	3.9	6.2	7.2	6.4	6.0	5.9
Real Residential Fixed Investment	572.3	587.4	602.3	621.7	642.0	653.4	662.5	667.1
% Ch , Annual Rate	12.3	11.0	10.5	13.5	13.8	7.3	5.7	2.8
Real Personal Income	14,286.1	14,386.9	14,486.0	14,604.1	14,766.3	14,900.9	15,029.7	15,161.1
% Ch , Annual Rate	3.6	2.9	2.8	3.3	4.5	3.7	3.5	3.5
Real Per Capita Income (\$/Person)	44,189	44,410	44,625	44,898	45,305	45,626	45,928	46,237
% Ch , Annual Rate	2.8	2.0	2.0	2.5	3.7	2.9	2.7	2.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.104	1.109	1.114	1.119	1.124	1.129	1.134	1.139
% Ch , Annual Rate	1.9	1.8	1.9	1.9	1.7	1.8	1.8	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.402	2.415	2.429	2.443	2.455	2.468	2.482	2.496
% Ch , Annual Rate	2.4	2.1	2.4	2.3	2.0	2.2	2.3	2.2
Employment Cost Index (Dec. 2005=1.0)	1.260	1.269	1.277	1.285	1.294	1.303	1.312	1.321
% Ch , Annual Rate	2.8	2.8	2.7	2.6	2.8	2.8	2.8	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	18,609.4	18,840.0	19,077.2	19,319.2	19,558.3	19,782.2	20,015.9	20,239.0
% Ch , Annual Rate	5.0	5.0	5.1	5.2	5.0	4.7	4.8	4.5
Personal Income	15,768.2	15,951.2	16,137.3	16,343.6	16,595.9	16,821.3	17,043.8	17,269.9
% Ch , Annual Rate	5.6	4.7	4.7	5.2	6.3	5.5	5.4	5.4
Employment (Millions)								
U.S. Civilian Labor Force	159.2	159.7	160.4	160.9	161.5	162.0	162.6	163.1
Total U.S. Employment	151.0	151.7	152.3	152.9	153.4	153.9	154.6	155.0
Unemployment Rate (%)	5.06	4.98	4.95	4.92	4.91	4.90	4.88	4.90
Nonfarm Payroll Employment	143.35	143.91	144.37	144.81	145.33	145.84	146.37	146.84
% Ch , Annual Rate	1.4	1.6	1.3	1.2	1.5	1.4	1.5	1.3
Manufacturing	12.50	12.50	12.53	12.52	12.55	12.57	12.59	12.60
% Ch , Annual Rate	1.4	0.0	0.9	-0.4	0.9	0.7	0.6	0.5
Durable Manufacturing	7.97	7.97	8.00	7.99	8.02	8.03	8.05	8.06
% Ch , Annual Rate	1.6	-0.2	1.7	-0.3	1.2	0.8	0.8	0.7
Nondurable Manufacturing	4.53	4.54	4.53	4.53	4.53	4.54	4.54	4.54
% Ch , Annual Rate	1.0	0.2	-0.4	-0.4	0.3	0.6	0.3	0.1
Construction	6.65	6.74	6.85	6.99	7.13	7.26	7.39	7.51
% Ch , Annual Rate	5.5	5.6	6.6	8.2	8.1	8.0	7.2	6.4
Service-Providing	123.37	123.85	124.17	124.49	124.84	125.17	125.55	125.88
% Ch , Annual Rate	1.2	1.5	1.0	1.0	1.1	1.1	1.2	1.1
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	64.1	64.5	64.8	65.3	65.6	65.9	66.3	66.7
Personal Saving/Disposable Income (%)	4.6	4.5	4.5	4.7	4.9	5.2	5.5	5.8
Auto Sales (Millions)	7.7	7.8	7.9	8.0	8.2	8.3	8.4	8.5
% Ch , Annual Rate	2.5	4.7	5.4	2.2	9.7	4.8	8.7	2.4
Housing Starts (Millions)	1.224	1.251	1.314	1.394	1.442	1.463	1.473	1.485
% Ch , Annual Rate	18.5	9.0	21.7	26.6	14.5	6.1	2.8	3.3
Federal Budget Surplus (Billions)	-503.3	-483.2	-484.2	-488.9	-476.3	-493.6	-503.8	-525.5
Net Exports (Billions)	-511.1	-512.4	-504.6	-507.4	-521.4	-534.1	-548.3	-564.3
3-Month Treasury Bill Rate (%)	0.77	1.02	1.28	1.69	2.16	2.62	3.15	3.49
10-Year Treasury Note Yield (%)	2.77	2.97	3.08	3.18	3.31	3.48	3.64	3.88
Bond Index of 20 G.O. Munis. (%)	4.52	4.64	4.73	4.81	4.92	5.04	5.14	5.32
30-Year Fixed Mortgage Rate (%)	4.47	4.71	4.90	5.05	5.19	5.38	5.54	5.80

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2015 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	17,688.9	17,806.2	17,925.9	18,025.9	18,129.6	18,233.1	18,344.3	18,454.6
% Ch , Annual Rate	2.6	2.7	2.7	2.3	2.3	2.3	2.5	2.4
Real Consumption	12,123.6	12,198.5	12,273.6	12,347.7	12,428.8	12,504.2	12,578.6	12,654.4
% Ch , Annual Rate	2.2	2.5	2.5	2.4	2.7	2.4	2.4	2.4
Real Nonresidential Fixed Investment	2,568.1	2,601.2	2,630.8	2,658.3	2,678.1	2,699.9	2,723.9	2,747.2
% Ch , Annual Rate	6.3	5.3	4.6	4.3	3.0	3.3	3.6	3.5
Real Residential Fixed Investment	672.9	679.2	687.0	691.0	695.0	701.3	710.0	716.9
% Ch , Annual Rate	3.5	3.8	4.7	2.4	2.3	3.7	5.0	3.9
Real Personal Income	15,305.3	15,429.7	15,543.9	15,659.1	15,800.5	15,916.8	16,025.5	16,135.8
% Ch , Annual Rate	3.9	3.3	3.0	3.0	3.7	3.0	2.8	2.8
Real Per Capita Income (\$/Person)	46,583	46,868	47,121	47,376	47,709	47,965	48,197	48,433
% Ch , Annual Rate	3.0	2.5	2.2	2.2	2.8	2.2	2.0	2.0
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.144	1.149	1.154	1.159	1.164	1.169	1.174	1.179
% Ch , Annual Rate	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.509	2.522	2.535	2.548	2.561	2.574	2.588	2.601
% Ch , Annual Rate	2.1	2.0	2.2	2.0	2.1	2.0	2.2	2.1
Employment Cost Index (Dec. 2005=1.0)	1.331	1.340	1.350	1.360	1.370	1.380	1.391	1.401
% Ch , Annual Rate	2.9	2.9	2.9	2.9	3.1	3.0	3.0	3.0
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,477.3	20,712.4	20,953.6	21,163.1	21,384.9	21,602.5	21,834.9	22,067.7
% Ch , Annual Rate	4.8	4.7	4.7	4.1	4.3	4.1	4.4	4.3
Personal Income	17,512.2	17,730.3	17,940.7	18,150.1	18,390.8	18,603.8	18,813.8	19,026.6
% Ch , Annual Rate	5.7	5.1	4.8	4.8	5.4	4.7	4.6	4.6
Employment (Millions)								
U.S. Civilian Labor Force	163.5	163.9	164.4	164.8	165.2	165.5	165.9	166.1
Total U.S. Employment	155.4	155.7	156.1	156.5	156.8	157.1	157.5	157.7
Unemployment Rate (%)	4.92	4.95	4.99	5.01	5.03	5.03	5.03	5.02
Nonfarm Payroll Employment	147.21	147.58	147.93	148.23	148.56	148.89	149.21	149.51
% Ch, Annual Rate	1.0	1.0	0.9	0.8	0.9	0.9	0.9	0.8
Manufacturing	12.61	12.61	12.60	12.61	12.60	12.60	12.58	12.55
% Ch, Annual Rate	0.1	0.2	-0.3	0.3	-0.3	-0.1	-0.7	-0.9
Durable Manufacturing	8.07	8.08	8.08	8.09	8.08	8.08	8.06	8.04
% Ch, Annual Rate	0.3	0.5	-0.1	0.5	-0.4	-0.1	-0.8	-1.1
Nondurable Manufacturing	4.54	4.53	4.53	4.52	4.52	4.52	4.52	4.51
% Ch, Annual Rate	-0.3	-0.5	-0.6	0.0	-0.3	-0.1	-0.4	-0.5
Construction	7.63	7.74	7.84	7.93	8.01	8.09	8.17	8.25
% Ch, Annual Rate	6.4	6.0	5.4	4.6	4.2	4.0	4.1	3.9
Service-Providing	126.12	126.38	126.62	126.83	127.08	127.33	127.59	127.83
% Ch, Annual Rate	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	66.9	67.1	67.3	67.5	67.7	67.7	67.8	68.0
Personal Saving/Disposable Income (%)	5.9	6.2	6.3	6.4	6.7	6.8	6.9	7.1
Auto Sales (Millions)	8.5	8.4	8.3	8.3	8.3	8.4	8.4	8.5
% Ch, Annual Rate	-0.6	-2.9	-3.2	-1.6	-0.1	5.4	1.7	3.1
Housing Starts (Millions)	1.508	1.532	1.548	1.556	1.568	1.585	1.609	1.625
% Ch, Annual Rate	6.2	6.6	4.2	1.9	3.2	4.4	6.1	4.1
Federal Budget Surplus (Billions)	-504.5	-526.9	-533.7	-542.6	-556.7	-570.0	-568.0	-577.2
Net Exports (Billions)	-569.2	-584.0	-590.2	-596.6	-595.8	-598.4	-597.9	-601.1
3-Month Treasury Bill Rate (%)	3.53	3.53	3.53	3.54	3.53	3.53	3.52	3.52
10-Year Treasury Note Yield (%)	3.92	3.90	3.88	3.87	3.84	3.83	3.82	3.83
Bond Index of 20 G.O. Munis. (%)	5.34	5.32	5.31	5.30	5.28	5.27	5.26	5.26
30-Year Fixed Mortgage Rate (%)	5.83	5.81	5.79	5.77	5.76	5.74	5.73	5.74

Table A1.3
Washington Economic Forecast Summary
Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	305.902	309.927	322.284	336.566	347.612	361.713	375.977	389.614
% Ch	4.8	1.3	4.0	4.4	3.3	4.1	3.9	3.6
Real Wage and Salary Disb.	154.512	159.121	166.168	174.830	180.813	186.953	193.596	200.875
% Ch	3.9	3.0	4.4	5.2	3.4	3.4	3.6	3.8
Real Nonwage Income	151.390	150.807	156.115	161.736	166.799	174.761	182.381	188.739
% Ch	5.8	-0.4	3.5	3.6	3.1	4.8	4.4	3.5
Real Per Capita Income (\$/Person)	44,292	44,368	45,564	46,959	47,845	49,130	50,418	51,593
% Ch	3.7	0.2	2.7	3.1	1.9	2.7	2.6	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.061	1.073	1.088	1.092	1.111	1.131	1.152	1.171
% Ch	1.8	1.2	1.3	0.4	1.8	1.8	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.387	2.416	2.460	2.493	2.551	2.608	2.666	2.724
% Ch	2.5	1.2	1.8	1.3	2.3	2.3	2.2	2.1
Average Nonfarm Annual Wage	53,653	54,700	56,529	58,313	60,270	62,499	64,975	67,734
% Ch	3.8	2.0	3.3	3.2	3.4	3.7	4.0	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.14	24.34	25.16	25.37	26.00	26.62	27.29	28.02
% Ch	0.7	0.8	3.4	0.8	2.5	2.4	2.5	2.7
Current Dollar Income (Billions of Dollars)								
Personal Income	324.458	332.655	350.531	367.634	386.353	409.289	433.010	456.442
% Ch	6.7	2.5	5.4	4.9	5.1	5.9	5.8	5.4
Disposable Personal Income	289.327	293.635	309.050	322.985	337.919	357.841	378.820	400.108
% Ch	6.5	1.5	5.2	4.5	4.6	5.9	5.9	5.6
Per Capita Income (\$/Person)	46,979	47,621	49,557	51,293	53,177	55,591	58,065	60,441
% Ch	5.6	1.4	4.1	3.5	3.7	4.5	4.5	4.1
Employment (Thousands)								
Washington Civilian Labor Force	3,462.6	3,456.5	3,486.7	3,567.1	3,636.1	3,702.7	3,764.6	3,821.2
Total Washington Employment	3,184.7	3,216.9	3,268.5	3,363.5	3,445.6	3,512.1	3,570.0	3,624.1
Unemployment Rate (%)	8.03	6.93	6.26	5.71	5.24	5.15	5.17	5.16
Nonfarm Payroll Employment	2,923.8	2,992.6	3,072.2	3,152.8	3,212.4	3,262.9	3,309.8	3,353.0
% Ch	1.7	2.4	2.7	2.6	1.9	1.6	1.4	1.3
Manufacturing	280.3	286.7	288.5	289.6	292.2	294.0	296.3	297.8
% Ch	4.3	2.3	0.6	0.4	0.9	0.6	0.8	0.5
Durable Manufacturing	204.5	209.6	209.6	209.5	210.7	211.0	212.3	212.9
% Ch	5.8	2.5	0.0	0.0	0.5	0.1	0.6	0.3
Aerospace	94.2	96.1	93.9	91.9	89.6	87.3	85.4	83.7
% Ch	8.8	2.0	-2.2	-2.2	-2.6	-2.5	-2.2	-2.0
Nondurable Manufacturing	75.7	77.1	78.8	80.1	81.6	83.0	84.0	84.8
% Ch	0.6	1.8	2.3	1.6	1.8	1.8	1.2	1.0
Construction	139.1	149.0	159.3	177.3	185.0	191.0	198.7	204.8
% Ch	2.0	7.1	7.0	11.3	4.3	3.3	4.0	3.0
Service-Providing	2,498.6	2,550.9	2,618.3	2,679.8	2,729.2	2,771.7	2,808.5	2,844.1
% Ch	1.4	2.1	2.6	2.4	1.8	1.6	1.3	1.3
Software Publishers	52.4	53.9	55.5	55.1	55.4	56.1	57.0	57.8
% Ch	1.4	2.8	3.1	-0.8	0.6	1.2	1.6	1.5
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	28.118	32.962	33.320	41.651	40.042	43.262	44.379	44.740
% Ch	34.8	17.2	1.1	25.0	-3.9	8.0	2.6	0.8
Single-Family	16.508	18.396	17.623	19.302	22.262	25.915	27.420	27.914
% Ch	25.5	11.4	-4.2	9.5	15.3	16.4	5.8	1.8
Multi-Family	11.610	14.566	15.697	22.349	17.781	17.347	16.959	16.825
% Ch	50.7	25.5	7.8	42.4	-20.4	-2.4	-2.2	-0.8
30-Year Fixed Mortgage Rate (%)	3.66	3.98	4.17	3.91	4.78	5.48	5.80	5.74

Table A1.4
Washington Economic Forecast Summary
Forecast 2015 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	317.568	319.797	322.669	329.100	334.606	334.862	337.240	339.555
% Ch, Annual Rate	7.2	2.8	3.6	8.2	6.9	0.3	2.9	2.8
Real Wage and Salary Disb.	164.149	164.010	165.867	170.647	173.658	173.551	175.442	176.669
% Ch, Annual Rate	8.2	-0.3	4.6	12.0	7.2	-0.2	4.4	2.8
Real Nonwage Income	153.419	155.787	156.803	158.453	160.948	161.310	161.798	162.886
% Ch, Annual Rate	6.2	6.3	2.6	4.3	6.4	0.9	1.2	2.7
Real Per Capita Income (\$/Person)	45,112	45,287	45,550	46,306	46,924	46,801	46,974	47,137
% Ch, Annual Rate	5.9	1.6	2.3	6.8	5.4	-1.0	1.5	1.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.082	1.088	1.091	1.090	1.085	1.091	1.095	1.099
% Ch, Annual Rate	1.4	2.3	1.2	-0.4	-2.0	2.4	1.5	1.3
Seattle Cons. Price Index (1982-84=1.0)	2.440	2.463	2.465	2.472	2.467	2.488	2.503	2.514
% Ch, Annual Rate	2.4	3.8	0.3	1.1	-0.8	3.4	2.4	1.9
Average Nonfarm Annual Wage	55,984	56,041	56,283	57,808	58,001	57,936	58,498	58,819
% Ch, Annual Rate	6.5	0.4	1.7	11.3	1.3	-0.4	3.9	2.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.82	25.13	25.33	25.36	25.08	25.31	25.46	25.61
% Ch, Annual Rate	0.5	5.2	3.2	0.4	-4.2	3.7	2.4	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	343.460	347.876	352.075	358.713	362.903	365.330	369.291	373.012
% Ch, Annual Rate	8.7	5.2	4.9	7.8	4.8	2.7	4.4	4.1
Disposable Personal Income	302.870	307.174	310.476	315.681	319.402	321.265	324.336	326.938
% Ch, Annual Rate	8.6	5.8	4.4	6.9	4.8	2.4	3.9	3.2
Per Capita Income (\$/Person)	48,790	49,264	49,701	50,473	50,893	51,060	51,439	51,781
% Ch, Annual Rate	7.3	3.9	3.6	6.4	3.4	1.3	3.0	2.7
Employment (Thousands)								
Washington Civilian Labor Force	3,464.3	3,471.9	3,493.8	3,516.9	3,543.6	3,556.3	3,575.8	3,592.7
Total Washington Employment	3,244.0	3,257.6	3,277.4	3,295.1	3,325.0	3,355.3	3,376.7	3,397.0
Unemployment Rate (%)	6.36	6.17	6.19	6.31	6.17	5.65	5.57	5.45
Nonfarm Payroll Employment	3,044.8	3,056.9	3,090.0	3,097.2	3,125.3	3,145.5	3,162.4	3,178.1
% Ch, Annual Rate	3.3	1.6	4.4	0.9	3.7	2.6	2.2	2.0
Manufacturing	287.7	288.7	289.4	288.0	289.5	288.9	289.2	290.7
% Ch, Annual Rate	1.2	1.3	1.0	-1.9	2.1	-0.8	0.4	2.1
Durable Manufacturing	209.4	209.4	210.5	209.2	209.8	209.0	209.2	210.1
% Ch, Annual Rate	0.2	0.0	2.2	-2.4	1.1	-1.5	0.3	1.9
Aerospace	94.0	93.8	94.3	93.7	93.0	92.2	91.6	91.0
% Ch, Annual Rate	-3.2	-1.1	2.4	-2.5	-3.2	-3.4	-2.5	-2.5
Nondurable Manufacturing	78.3	79.3	78.9	78.8	79.7	79.9	80.1	80.6
% Ch, Annual Rate	3.8	4.8	-2.0	-0.3	4.8	0.8	0.9	2.6
Construction	156.3	156.4	160.3	164.4	173.4	176.3	178.5	181.1
% Ch, Annual Rate	10.8	0.3	10.3	10.6	23.7	7.1	5.1	5.8
Service-Providing	2,594.5	2,605.7	2,634.2	2,638.7	2,656.3	2,674.1	2,688.7	2,700.4
% Ch, Annual Rate	3.1	1.7	4.4	0.7	2.7	2.7	2.2	1.7
Software Publishers	55.3	55.7	56.0	55.3	55.0	55.1	55.1	55.2
% Ch, Annual Rate	4.2	2.8	2.3	-4.7	-2.1	0.5	0.3	0.5
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	31.238	34.463	32.557	35.022	53.623	37.390	37.507	38.084
% Ch, Annual Rate	-39.7	48.1	-20.4	33.9	449.6	-76.4	1.3	6.3
Single-Family	17.184	16.839	17.691	18.779	18.456	19.175	19.401	20.178
% Ch, Annual Rate	-12.8	-7.8	21.8	27.0	-6.7	16.5	4.8	17.0
Multi-Family	14.055	17.624	14.866	16.243	35.168	18.215	18.106	17.907
% Ch, Annual Rate	-59.9	147.3	-49.4	42.5	2,097.5	-92.8	-2.4	-4.3
30-Year Fixed Mortgage Rate (%)	4.36	4.23	4.14	3.97	3.73	3.77	3.95	4.18

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2015 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	343.200	346.372	348.874	352.001	356.459	360.409	363.138	366.847
% Ch, Annual Rate	4.4	3.7	2.9	3.6	5.2	4.5	3.1	4.1
Real Wage and Salary Disb.	178.476	180.341	181.544	182.889	184.731	186.562	187.391	189.126
% Ch, Annual Rate	4.2	4.2	2.7	3.0	4.1	4.0	1.8	3.8
Real Nonwage Income	164.723	166.031	167.330	169.111	171.727	173.847	175.747	177.721
% Ch, Annual Rate	4.6	3.2	3.2	4.3	6.3	5.0	4.4	4.6
Real Per Capita Income (\$/Person)	47,480	47,756	47,939	48,206	48,655	49,033	49,244	49,587
% Ch, Annual Rate	2.9	2.3	1.5	2.3	3.8	3.1	1.7	2.8
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.104	1.109	1.114	1.119	1.124	1.129	1.134	1.139
% Ch, Annual Rate	1.9	1.8	1.9	1.9	1.7	1.8	1.8	1.8
Seattle Cons. Price Index (1982-84=1.0)	2.529	2.543	2.558	2.573	2.586	2.601	2.616	2.630
% Ch, Annual Rate	2.4	2.2	2.4	2.3	2.1	2.2	2.3	2.3
Average Nonfarm Annual Wage	59,425	60,065	60,529	61,061	61,680	62,332	62,671	63,312
% Ch, Annual Rate	4.2	4.4	3.1	3.6	4.1	4.3	2.2	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.77	25.93	26.07	26.22	26.38	26.54	26.70	26.86
% Ch, Annual Rate	2.4	2.5	2.3	2.3	2.4	2.4	2.5	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	378.806	384.034	388.643	393.928	400.626	406.858	411.800	417.873
% Ch, Annual Rate	6.4	5.6	4.9	5.6	7.0	6.4	4.9	6.0
Disposable Personal Income	331.554	335.651	339.872	344.599	349.796	355.475	360.190	365.902
% Ch, Annual Rate	5.8	5.0	5.1	5.7	6.2	6.7	5.4	6.5
Per Capita Income (\$/Person)	52,406	52,949	53,403	53,948	54,684	55,353	55,843	56,484
% Ch, Annual Rate	4.9	4.2	3.5	4.1	5.6	5.0	3.6	4.7
Employment (Thousands)								
Washington Civilian Labor Force	3,610.5	3,627.1	3,645.2	3,661.7	3,678.3	3,694.3	3,711.4	3,726.6
Total Washington Employment	3,418.0	3,436.9	3,455.5	3,472.1	3,488.5	3,504.1	3,520.9	3,535.0
Unemployment Rate (%)	5.33	5.25	5.20	5.18	5.16	5.15	5.13	5.14
Nonfarm Payroll Employment	3,192.3	3,206.9	3,219.5	3,230.9	3,243.8	3,257.1	3,269.0	3,281.7
% Ch, Annual Rate	1.8	1.8	1.6	1.4	1.6	1.6	1.5	1.6
Manufacturing	291.7	292.0	292.6	292.6	293.1	293.6	294.3	294.9
% Ch, Annual Rate	1.4	0.3	0.9	0.0	0.6	0.8	0.9	0.8
Durable Manufacturing	210.6	210.5	211.0	210.7	210.7	210.8	211.1	211.4
% Ch, Annual Rate	0.8	-0.1	0.9	-0.6	0.1	0.2	0.6	0.5
Aerospace	90.4	89.9	89.3	88.7	88.2	87.6	87.1	86.5
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Nondurable Manufacturing	81.2	81.5	81.6	81.9	82.3	82.8	83.2	83.6
% Ch, Annual Rate	2.9	1.5	0.7	1.4	2.1	2.4	1.9	1.6
Construction	183.1	184.2	185.6	187.1	188.5	190.6	191.5	193.6
% Ch, Annual Rate	4.6	2.3	3.2	3.2	3.0	4.6	2.0	4.5
Service-Providing	2,711.5	2,724.8	2,735.3	2,745.2	2,756.3	2,766.8	2,777.0	2,786.9
% Ch, Annual Rate	1.7	2.0	1.5	1.5	1.6	1.5	1.5	1.4
Software Publishers	55.3	55.4	55.5	55.6	55.8	56.0	56.2	56.4
% Ch, Annual Rate	0.6	0.7	1.0	0.8	1.1	1.4	1.7	1.6
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	38.845	39.279	40.308	41.737	42.749	43.316	43.437	43.544
% Ch, Annual Rate	8.2	4.5	10.9	14.9	10.1	5.4	1.1	1.0
Single-Family	20.917	21.442	22.553	24.135	25.231	25.855	26.156	26.417
% Ch, Annual Rate	15.5	10.4	22.4	31.2	19.4	10.3	4.7	4.0
Multi-Family	17.929	17.837	17.755	17.602	17.518	17.461	17.281	17.127
% Ch, Annual Rate	0.5	-2.0	-1.8	-3.4	-1.9	-1.3	-4.1	-3.5
30-Year Fixed Mortgage Rate (%)	4.47	4.71	4.90	5.05	5.19	5.38	5.54	5.80

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2015 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	371.050	374.764	377.284	380.810	384.865	388.477	390.797	394.317
% Ch, Annual Rate	4.7	4.1	2.7	3.8	4.3	3.8	2.4	3.7
Real Wage and Salary Disb.	191.139	193.090	194.065	196.090	198.204	200.369	201.369	203.556
% Ch, Annual Rate	4.3	4.1	2.0	4.2	4.4	4.4	2.0	4.4
Real Nonwage Income	179.911	181.674	183.219	184.720	186.661	188.108	189.428	190.761
% Ch, Annual Rate	5.0	4.0	3.4	3.3	4.3	3.1	2.8	2.8
Real Per Capita Income (\$/Person)	49,995	50,336	50,515	50,827	51,207	51,525	51,669	51,969
% Ch, Annual Rate	3.3	2.8	1.4	2.5	3.0	2.5	1.1	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.144	1.149	1.154	1.159	1.164	1.169	1.174	1.179
% Ch, Annual Rate	1.8	1.7	1.8	1.7	1.7	1.7	1.8	1.8
Seattle Cons. Price Index (1982-84=1.0)	2.645	2.659	2.674	2.688	2.702	2.716	2.731	2.745
% Ch, Annual Rate	2.2	2.1	2.2	2.1	2.1	2.1	2.2	2.2
Average Nonfarm Annual Wage	64,021	64,765	65,169	65,946	66,703	67,509	67,934	68,789
% Ch, Annual Rate	4.6	4.7	2.5	4.9	4.7	4.9	2.5	5.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.03	27.20	27.38	27.55	27.74	27.92	28.11	28.30
% Ch, Annual Rate	2.6	2.5	2.6	2.6	2.7	2.7	2.7	2.7
Current Dollar Income (Billions of Dollars)								
Personal Income	424.553	430.640	435.458	441.389	447.960	454.058	458.792	464.961
% Ch, Annual Rate	6.5	5.9	4.6	5.6	6.1	5.6	4.2	5.5
Disposable Personal Income	371.064	376.676	381.103	386.435	392.272	397.861	402.288	408.010
% Ch, Annual Rate	5.8	6.2	4.8	5.7	6.2	5.8	4.5	5.8
Per Capita Income (\$/Person)	57,204	57,840	58,304	58,913	59,602	60,224	60,659	61,279
% Ch, Annual Rate	5.2	4.5	3.2	4.2	4.8	4.2	2.9	4.2
Employment (Thousands)								
Washington Civilian Labor Force	3,742.2	3,756.8	3,772.6	3,787.0	3,801.0	3,814.1	3,828.8	3,841.1
Total Washington Employment	3,549.8	3,562.8	3,577.0	3,590.3	3,603.7	3,616.9	3,631.5	3,644.1
Unemployment Rate (%)	5.14	5.16	5.18	5.19	5.19	5.17	5.15	5.13
Nonfarm Payroll Employment	3,293.8	3,304.3	3,315.4	3,325.8	3,336.7	3,347.9	3,358.6	3,368.9
% Ch, Annual Rate	1.5	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Manufacturing	295.5	296.1	296.5	297.2	297.4	297.8	297.9	298.0
% Ch, Annual Rate	0.8	0.8	0.5	0.9	0.3	0.5	0.2	0.1
Durable Manufacturing	211.7	212.1	212.4	212.8	212.9	213.0	213.0	212.9
% Ch, Annual Rate	0.7	0.8	0.5	0.8	0.1	0.3	-0.1	-0.2
Aerospace	86.1	85.6	85.2	84.8	84.3	83.9	83.5	83.1
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Nondurable Manufacturing	83.8	83.9	84.1	84.3	84.5	84.7	84.9	85.1
% Ch, Annual Rate	1.0	0.8	0.6	1.2	0.8	1.2	1.0	0.8
Construction	196.3	197.6	199.6	201.4	202.9	204.3	205.4	206.4
% Ch, Annual Rate	5.6	2.8	4.0	3.6	3.2	2.6	2.2	1.9
Service-Providing	2,795.8	2,804.4	2,813.0	2,820.9	2,830.0	2,839.4	2,848.9	2,858.1
% Ch, Annual Rate	1.3	1.2	1.2	1.1	1.3	1.3	1.3	1.3
Software Publishers	56.6	56.8	57.1	57.3	57.5	57.7	57.9	58.1
% Ch, Annual Rate	1.6	1.5	1.6	1.6	1.6	1.4	1.4	1.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	43.936	44.355	44.639	44.587	44.623	44.628	44.814	44.895
% Ch, Annual Rate	3.6	3.9	2.6	-0.5	0.3	0.0	1.7	0.7
Single-Family	26.897	27.397	27.639	27.748	27.674	27.781	28.036	28.166
% Ch, Annual Rate	7.5	7.7	3.6	1.6	-1.1	1.6	3.7	1.9
Multi-Family	17.039	16.957	17.000	16.839	16.949	16.847	16.778	16.728
% Ch, Annual Rate	-2.0	-1.9	1.0	-3.7	2.6	-2.4	-1.6	-1.2
30-Year Fixed Mortgage Rate (%)	5.83	5.81	5.79	5.77	5.76	5.74	5.73	5.74

Table A2.1

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	134.10	136.39	139.02	141.98	144.11	146.10	147.74	149.04
% Ch	1.7	1.7	1.9	2.1	1.5	1.4	1.1	0.9
Manufacturing	11.93	12.02	12.19	12.38	12.51	12.58	12.61	12.58
% Ch	1.7	0.8	1.4	1.6	1.1	0.5	0.2	-0.2
Durable Manufacturing	7.47	7.55	7.69	7.86	7.98	8.04	8.08	8.06
% Ch	2.7	1.0	1.8	2.3	1.5	0.7	0.5	-0.2
Wood Products	0.34	0.35	0.37	0.38	0.42	0.44	0.45	0.46
% Ch	0.7	4.2	5.3	3.3	8.1	5.8	3.2	2.3
Primary and Fabricated Metals	1.81	1.83	1.86	1.90	1.94	1.96	1.98	1.99
% Ch	4.3	0.8	1.6	2.2	2.2	1.3	0.7	0.5
Computer and Electronic Products	1.09	1.07	1.05	1.06	1.08	1.07	1.08	1.08
% Ch	-1.3	-2.2	-1.4	1.2	1.8	-0.7	0.8	-0.4
Machinery and Electrical Equipment	1.47	1.48	1.50	1.52	1.52	1.52	1.53	1.53
% Ch	3.5	0.5	1.7	1.1	-0.1	-0.2	0.8	0.4
Transportation Equipment	1.46	1.51	1.56	1.61	1.61	1.62	1.61	1.59
% Ch	5.8	3.3	3.6	2.8	0.2	0.7	-0.5	-1.2
Other Durables	1.30	1.31	1.34	1.39	1.42	1.43	1.42	1.41
% Ch	0.3	1.3	2.1	3.7	2.0	0.6	-0.3	-1.2
Nondurable Manufacturing	4.46	4.47	4.50	4.52	4.53	4.54	4.53	4.52
% Ch	0.1	0.3	0.7	0.4	0.3	0.1	-0.1	-0.3
Food Manufacturing	1.47	1.47	1.48	1.50	1.53	1.55	1.57	1.57
% Ch	0.7	0.3	0.5	1.2	1.8	1.7	0.8	0.5
Paper and Paper Products	0.38	0.38	0.37	0.37	0.37	0.36	0.36	0.36
% Ch	-1.9	-0.5	-1.7	-1.3	-0.4	-0.2	-0.4	-0.7
Other Nondurables	2.61	2.62	2.65	2.65	2.64	2.62	2.60	2.58
% Ch	0.0	0.5	1.1	0.1	-0.5	-0.8	-0.7	-0.7
Natural Resources and Mining	0.85	0.86	0.90	0.85	0.81	0.84	0.86	0.87
% Ch	7.6	1.8	3.8	-4.9	-4.5	2.7	3.0	1.5
Construction	5.65	5.86	6.14	6.44	6.81	7.32	7.78	8.13
% Ch	2.1	3.7	4.8	4.9	5.7	7.5	6.3	4.5
Trade, Transportation, and Utilities	25.47	25.86	26.38	26.97	27.19	27.39	27.51	27.53
% Ch	1.6	1.5	2.0	2.3	0.8	0.7	0.4	0.1
Wholesale Trade	5.67	5.73	5.83	5.96	6.05	6.15	6.25	6.32
% Ch	2.2	1.2	1.6	2.2	1.5	1.7	1.6	1.1
Retail Trade	14.84	15.07	15.36	15.67	15.65	15.60	15.50	15.41
% Ch	1.1	1.6	1.9	2.0	-0.1	-0.3	-0.6	-0.6
Trans., Warehousing, and Utilities	4.97	5.05	5.19	5.35	5.49	5.64	5.76	5.80
% Ch	2.3	1.6	2.8	3.2	2.6	2.7	2.2	0.7
Information	2.68	2.71	2.74	2.80	2.79	2.85	2.86	2.90
% Ch	0.1	1.2	1.3	2.0	-0.2	2.2	0.3	1.2
Publishing Industries	0.74	0.73	0.72	0.71	0.68	0.67	0.67	0.67
% Ch	-1.3	-0.9	-1.1	-1.4	-4.5	-1.4	-0.4	-0.2
Other Information	1.94	1.97	2.02	2.08	2.11	2.18	2.19	2.23
% Ch	0.6	1.9	2.1	3.3	1.3	3.4	0.6	1.6
Financial Activities	7.78	7.89	7.98	8.10	8.04	7.93	7.84	7.83
% Ch	1.1	1.3	1.2	1.5	-0.7	-1.4	-1.2	-0.1
Professional and Business Services	17.93	18.52	19.09	19.84	21.04	21.76	22.15	22.43
% Ch	3.5	3.3	3.1	3.9	6.1	3.4	1.7	1.3
Education and Health Services	20.70	21.10	21.47	21.98	22.34	22.60	22.81	22.99
% Ch	2.3	1.9	1.8	2.3	1.6	1.2	0.9	0.8
Leisure and Hospitality	13.77	14.26	14.71	15.10	15.15	15.27	15.50	15.68
% Ch	3.2	3.5	3.2	2.6	0.4	0.8	1.5	1.1
Other Services	5.43	5.48	5.57	5.62	5.57	5.52	5.52	5.50
% Ch	1.3	1.0	1.6	0.8	-0.9	-0.8	-0.1	-0.3
Federal Government	2.82	2.77	2.73	2.72	2.68	2.64	2.60	2.57
% Ch	-1.3	-1.8	-1.6	-0.2	-1.6	-1.5	-1.5	-1.1
State and Local Government	19.10	19.08	19.13	19.18	19.17	19.38	19.70	20.04
% Ch	-0.7	-0.1	0.3	0.3	-0.1	1.1	1.7	1.7

Table A2.2

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	137.84	138.64	139.38	140.23	141.01	141.70	142.33	142.86
% Ch, Annual Rate	1.6	2.3	2.2	2.5	2.2	2.0	1.8	1.5
Manufacturing	12.12	12.16	12.20	12.27	12.32	12.35	12.39	12.46
% Ch, Annual Rate	1.7	1.3	1.5	2.3	1.5	1.1	1.2	2.3
Durable Manufacturing	7.61	7.66	7.71	7.76	7.80	7.83	7.88	7.94
% Ch, Annual Rate	1.6	2.4	2.5	3.0	1.8	1.9	2.2	3.2
Wood Products	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.40
% Ch, Annual Rate	6.6	5.7	4.0	2.4	2.3	0.4	4.9	12.0
Primary and Fabricated Metals	1.84	1.85	1.86	1.87	1.88	1.89	1.90	1.92
% Ch, Annual Rate	1.5	1.4	1.9	3.4	2.0	1.0	2.3	4.2
Computer and Electronic Products	1.05	1.05	1.05	1.05	1.06	1.06	1.06	1.07
% Ch, Annual Rate	-2.3	-1.3	0.6	1.6	1.4	1.7	0.6	2.5
Machinery and Electrical Equipment	1.49	1.50	1.51	1.52	1.51	1.52	1.52	1.53
% Ch, Annual Rate	2.1	2.9	1.9	2.0	-0.2	0.9	0.1	3.4
Transportation Equipment	1.54	1.55	1.57	1.59	1.59	1.60	1.61	1.61
% Ch, Annual Rate	2.8	4.7	4.7	3.5	2.1	2.6	2.0	0.2
Other Durables	1.33	1.34	1.35	1.36	1.37	1.38	1.40	1.41
% Ch, Annual Rate	1.4	2.7	2.8	4.1	3.3	3.8	5.1	3.5
Nondurable Manufacturing	4.51	4.50	4.50	4.51	4.52	4.52	4.51	4.52
% Ch, Annual Rate	2.0	-0.6	-0.2	1.2	1.0	-0.1	-0.6	0.8
Food Manufacturing	1.49	1.48	1.47	1.48	1.49	1.50	1.50	1.51
% Ch, Annual Rate	2.9	-2.9	-1.5	1.3	4.1	0.8	-0.2	3.1
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-1.2	-1.4	-4.0	-1.7	-1.3	1.5	-2.6	0.1
Other Nondurables	2.64	2.65	2.65	2.66	2.66	2.65	2.65	2.65
% Ch, Annual Rate	2.0	0.8	1.1	1.6	-0.3	-0.9	-0.5	-0.4
Natural Resources and Mining	0.88	0.89	0.90	0.91	0.90	0.86	0.84	0.82
% Ch, Annual Rate	3.4	5.1	7.2	3.4	-7.3	-15.1	-10.5	-8.0
Construction	6.03	6.11	6.17	6.24	6.34	6.39	6.47	6.57
% Ch, Annual Rate	6.7	5.4	3.8	4.3	6.5	3.5	5.3	5.8
Trade, Transportation, and Utilities	26.16	26.31	26.44	26.60	26.75	26.92	27.09	27.14
% Ch, Annual Rate	1.3	2.2	2.0	2.5	2.3	2.5	2.5	0.8
Wholesale Trade	5.79	5.82	5.84	5.86	5.90	5.93	5.98	6.01
% Ch, Annual Rate	2.2	2.1	1.6	1.7	2.3	2.5	3.5	1.6
Retail Trade	15.25	15.33	15.39	15.48	15.56	15.65	15.73	15.72
% Ch, Annual Rate	0.7	2.0	1.6	2.3	2.2	2.4	2.0	-0.3
Trans., Warehousing, and Utilities	5.12	5.16	5.21	5.26	5.29	5.33	5.37	5.41
% Ch, Annual Rate	2.2	3.2	3.5	4.2	2.5	2.9	3.1	3.0
Information	2.72	2.73	2.75	2.76	2.78	2.79	2.80	2.81
% Ch, Annual Rate	-0.3	0.9	3.2	1.6	2.6	2.3	1.1	1.5
Publishing Industries	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.70
% Ch, Annual Rate	-1.1	-1.1	-0.7	-1.2	-0.8	0.7	-3.7	-7.3
Other Information	1.99	2.00	2.03	2.04	2.06	2.07	2.09	2.11
% Ch, Annual Rate	0.0	1.7	4.6	2.6	3.8	2.9	2.8	4.6
Financial Activities	7.93	7.95	8.00	8.04	8.08	8.10	8.13	8.10
% Ch, Annual Rate	0.8	1.3	2.1	2.0	2.0	1.3	1.3	-1.0
Professional and Business Services	18.83	19.01	19.18	19.36	19.50	19.68	19.89	20.27
% Ch, Annual Rate	2.5	3.9	3.6	3.8	3.0	3.8	4.3	7.8
Education and Health Services	21.28	21.40	21.54	21.67	21.81	21.96	22.08	22.06
% Ch, Annual Rate	1.2	2.4	2.6	2.3	2.7	2.7	2.2	-0.3
Leisure and Hospitality	14.53	14.66	14.75	14.90	15.02	15.08	15.13	15.15
% Ch, Annual Rate	2.6	3.6	2.6	3.9	3.4	1.6	1.2	0.6
Other Services	5.54	5.57	5.58	5.60	5.62	5.63	5.62	5.61
% Ch, Annual Rate	1.9	2.0	0.8	1.6	1.5	0.4	-0.7	-0.9
Federal Government	2.73	2.73	2.73	2.73	2.73	2.73	2.72	2.71
% Ch, Annual Rate	-1.9	-0.5	-0.1	0.2	0.1	0.3	-1.5	-1.6
State and Local Government	19.09	19.12	19.14	19.17	19.17	19.20	19.18	19.16
% Ch, Annual Rate	0.0	0.6	0.5	0.5	0.1	0.6	-0.3	-0.5

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	143.35	143.91	144.37	144.81	145.33	145.84	146.37	146.84
% Ch, Annual Rate	1.4	1.6	1.3	1.2	1.5	1.4	1.5	1.3
Manufacturing	12.50	12.50	12.53	12.52	12.55	12.57	12.59	12.60
% Ch, Annual Rate	1.4	0.0	0.9	-0.4	0.9	0.7	0.6	0.5
Durable Manufacturing	7.97	7.97	8.00	7.99	8.02	8.03	8.05	8.06
% Ch, Annual Rate	1.6	-0.2	1.7	-0.3	1.2	0.8	0.8	0.7
Wood Products	0.41	0.41	0.42	0.42	0.43	0.44	0.44	0.45
% Ch, Annual Rate	10.4	7.8	7.4	4.2	5.9	6.3	5.3	4.2
Primary and Fabricated Metals	1.93	1.93	1.95	1.95	1.96	1.96	1.97	1.97
% Ch, Annual Rate	2.1	1.0	2.9	1.0	1.2	1.1	0.9	0.9
Computer and Electronic Products	1.08	1.08	1.09	1.08	1.08	1.07	1.07	1.07
% Ch, Annual Rate	2.3	1.6	2.6	-1.5	-2.6	-1.4	0.1	0.8
Machinery and Electrical Equipment	1.53	1.52	1.52	1.51	1.51	1.51	1.52	1.52
% Ch, Annual Rate	0.0	-2.4	-1.7	-2.7	0.9	1.1	1.6	0.9
Transportation Equipment	1.61	1.60	1.61	1.61	1.62	1.62	1.62	1.62
% Ch, Annual Rate	-0.2	-2.5	2.0	0.6	2.8	-0.7	-0.3	0.0
Other Durables	1.42	1.42	1.42	1.42	1.42	1.43	1.43	1.43
% Ch, Annual Rate	1.7	-0.2	1.3	-1.0	1.2	1.5	0.4	-0.2
Nondurable Manufacturing	4.53	4.54	4.53	4.53	4.53	4.54	4.54	4.54
% Ch, Annual Rate	1.0	0.2	-0.4	-0.4	0.3	0.6	0.3	0.1
Food Manufacturing	1.52	1.52	1.53	1.53	1.54	1.55	1.56	1.56
% Ch, Annual Rate	2.9	1.4	0.7	1.8	2.1	2.3	1.6	1.2
Paper and Paper Products	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	0.4	-0.4	-1.1	-1.5	0.5	0.4	0.3	-0.3
Other Nondurables	2.65	2.65	2.64	2.63	2.62	2.62	2.62	2.62
% Ch, Annual Rate	-0.1	-0.5	-1.0	-1.5	-0.7	-0.3	-0.5	-0.5
Natural Resources and Mining	0.81	0.81	0.81	0.82	0.82	0.83	0.84	0.85
% Ch, Annual Rate	-2.0	-0.8	-0.5	2.1	3.2	4.4	4.3	3.5
Construction	6.65	6.74	6.85	6.99	7.13	7.26	7.39	7.51
% Ch, Annual Rate	5.5	5.6	6.6	8.2	8.1	8.0	7.2	6.4
Trade, Transportation, and Utilities	27.14	27.18	27.22	27.23	27.28	27.35	27.45	27.49
% Ch, Annual Rate	0.0	0.7	0.5	0.3	0.7	1.1	1.4	0.6
Wholesale Trade	6.01	6.04	6.06	6.08	6.10	6.14	6.17	6.20
% Ch, Annual Rate	0.3	1.6	1.3	1.3	1.8	2.1	2.2	1.7
Retail Trade	15.68	15.67	15.65	15.62	15.60	15.60	15.62	15.59
% Ch, Annual Rate	-0.8	-0.4	-0.5	-0.9	-0.5	0.1	0.4	-0.6
Trans., Warehousing, and Utilities	5.44	5.48	5.51	5.54	5.58	5.62	5.66	5.70
% Ch, Annual Rate	2.1	2.6	2.4	2.4	2.7	3.0	3.0	2.6
Information	2.78	2.79	2.80	2.80	2.85	2.87	2.85	2.85
% Ch, Annual Rate	-4.1	0.8	1.3	-0.2	7.3	2.9	-1.9	-1.0
Publishing Industries	0.69	0.68	0.68	0.68	0.67	0.67	0.67	0.67
% Ch, Annual Rate	-7.0	-3.0	-1.7	-2.2	-1.6	-0.9	-0.2	-0.3
Other Information	2.09	2.10	2.12	2.12	2.17	2.19	2.18	2.17
% Ch, Annual Rate	-3.0	2.1	2.2	0.5	10.3	4.1	-2.5	-1.2
Financial Activities	8.08	8.06	8.03	8.00	7.98	7.95	7.92	7.89
% Ch, Annual Rate	-1.0	-1.3	-1.5	-1.3	-0.9	-1.7	-1.7	-1.5
Professional and Business Services	20.61	20.92	21.19	21.43	21.61	21.70	21.82	21.93
% Ch, Annual Rate	6.9	6.1	5.2	4.7	3.2	1.8	2.2	2.0
Education and Health Services	22.14	22.34	22.41	22.46	22.49	22.57	22.63	22.72
% Ch, Annual Rate	1.5	3.6	1.2	0.9	0.6	1.4	1.1	1.5
Leisure and Hospitality	15.17	15.15	15.14	15.15	15.17	15.22	15.31	15.39
% Ch, Annual Rate	0.5	-0.7	-0.1	0.1	0.6	1.3	2.3	2.1
Other Services	5.59	5.58	5.56	5.55	5.53	5.52	5.52	5.52
% Ch, Annual Rate	-1.1	-1.0	-1.1	-1.0	-0.9	-0.7	-0.3	-0.3
Federal Government	2.70	2.68	2.67	2.66	2.65	2.64	2.63	2.62
% Ch, Annual Rate	-1.9	-1.9	-1.7	-1.7	-1.2	-1.2	-1.6	-1.7
State and Local Government	19.15	19.15	19.16	19.20	19.27	19.34	19.41	19.49
% Ch, Annual Rate	-0.1	-0.1	0.1	1.0	1.4	1.3	1.6	1.6

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	147.21	147.58	147.93	148.23	148.56	148.89	149.21	149.51
% Ch, Annual Rate	1.0	1.0	0.9	0.8	0.9	0.9	0.9	0.8
Manufacturing	12.61	12.61	12.60	12.61	12.60	12.60	12.58	12.55
% Ch, Annual Rate	0.1	0.2	-0.3	0.3	-0.3	-0.1	-0.7	-0.9
Durable Manufacturing	8.07	8.08	8.08	8.09	8.08	8.08	8.06	8.04
% Ch, Annual Rate	0.3	0.5	-0.1	0.5	-0.4	-0.1	-0.8	-1.1
Wood Products	0.45	0.45	0.45	0.46	0.46	0.46	0.47	0.47
% Ch, Annual Rate	2.1	2.4	2.1	3.2	2.5	2.1	1.6	1.9
Primary and Fabricated Metals	1.97	1.98	1.98	1.98	1.98	1.99	1.99	1.99
% Ch, Annual Rate	0.4	1.0	0.1	0.8	0.6	0.7	0.0	-0.3
Computer and Electronic Products	1.08	1.08	1.08	1.09	1.08	1.08	1.08	1.07
% Ch, Annual Rate	1.3	1.0	1.1	0.9	-1.6	-1.3	-0.8	-0.6
Machinery and Electrical Equipment	1.53	1.53	1.53	1.53	1.53	1.54	1.54	1.54
% Ch, Annual Rate	0.8	0.8	0.1	0.9	0.1	1.0	0.0	-0.1
Transportation Equipment	1.62	1.62	1.61	1.61	1.60	1.60	1.59	1.58
% Ch, Annual Rate	-0.4	-0.5	-1.5	-0.8	-1.4	-0.6	-1.8	-3.1
Other Durables	1.42	1.42	1.42	1.42	1.42	1.41	1.40	1.39
% Ch, Annual Rate	-1.0	-0.3	-0.8	-0.1	-1.1	-1.9	-2.6	-2.4
Nondurable Manufacturing	4.54	4.53	4.53	4.52	4.52	4.52	4.52	4.51
% Ch, Annual Rate	-0.3	-0.5	-0.6	0.0	-0.3	-0.1	-0.4	-0.5
Food Manufacturing	1.56	1.56	1.56	1.57	1.57	1.57	1.57	1.58
% Ch, Annual Rate	0.5	0.3	0.2	0.9	0.3	0.7	0.5	0.4
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	-0.5	-0.9	-1.0	-0.5	-0.9	-0.4	-0.6	-0.6
Other Nondurables	2.61	2.60	2.60	2.59	2.59	2.59	2.58	2.58
% Ch, Annual Rate	-0.7	-0.9	-1.0	-0.5	-0.5	-0.6	-0.9	-1.0
Natural Resources and Mining	0.85	0.86	0.86	0.87	0.87	0.87	0.87	0.88
% Ch, Annual Rate	2.8	2.4	2.2	1.7	1.7	0.6	1.4	1.4
Construction	7.63	7.74	7.84	7.93	8.01	8.09	8.17	8.25
% Ch, Annual Rate	6.4	6.0	5.4	4.6	4.2	4.0	4.1	3.9
Trade, Transportation, and Utilities	27.52	27.52	27.51	27.51	27.52	27.53	27.54	27.54
% Ch, Annual Rate	0.4	0.1	-0.2	0.0	0.1	0.1	0.2	0.1
Wholesale Trade	6.22	6.24	6.26	6.28	6.30	6.32	6.33	6.34
% Ch, Annual Rate	1.5	1.3	1.4	1.3	1.3	0.9	0.9	0.7
Retail Trade	15.57	15.52	15.48	15.45	15.42	15.41	15.40	15.40
% Ch, Annual Rate	-0.7	-1.1	-1.2	-0.8	-0.7	-0.2	-0.2	-0.2
Trans., Warehousing, and Utilities	5.73	5.76	5.77	5.78	5.79	5.80	5.80	5.81
% Ch, Annual Rate	2.3	2.0	0.8	0.9	0.8	0.3	0.3	0.2
Information	2.85	2.86	2.87	2.87	2.87	2.89	2.90	2.92
% Ch, Annual Rate	1.1	1.1	0.7	0.1	0.9	2.0	2.2	1.6
Publishing Industries	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
% Ch, Annual Rate	-0.2	-0.8	-0.4	0.3	0.0	-0.4	-0.6	-0.8
Other Information	2.18	2.19	2.20	2.20	2.20	2.22	2.24	2.25
% Ch, Annual Rate	1.5	1.7	1.1	0.1	1.2	2.7	3.1	2.4
Financial Activities	7.87	7.84	7.83	7.81	7.82	7.83	7.83	7.83
% Ch, Annual Rate	-1.0	-1.2	-0.8	-0.7	0.4	0.4	0.2	0.1
Professional and Business Services	22.03	22.11	22.20	22.25	22.32	22.38	22.47	22.57
% Ch, Annual Rate	1.8	1.5	1.6	0.9	1.3	1.2	1.5	1.8
Education and Health Services	22.73	22.80	22.84	22.88	22.93	22.98	23.00	23.03
% Ch, Annual Rate	0.3	1.2	0.8	0.6	1.0	0.7	0.4	0.5
Leisure and Hospitality	15.43	15.47	15.52	15.58	15.61	15.66	15.70	15.74
% Ch, Annual Rate	1.0	1.1	1.3	1.6	0.7	1.1	1.2	0.9
Other Services	5.52	5.52	5.52	5.51	5.51	5.50	5.49	5.48
% Ch, Annual Rate	0.2	-0.3	0.0	-0.3	-0.1	-0.7	-0.5	-0.6
Federal Government	2.61	2.60	2.59	2.58	2.58	2.57	2.57	2.56
% Ch, Annual Rate	-1.5	-1.5	-1.4	-1.4	-0.9	-1.0	-0.8	-0.7
State and Local Government	19.57	19.65	19.74	19.83	19.91	20.00	20.09	20.16
% Ch, Annual Rate	1.5	1.8	1.8	1.8	1.7	1.8	1.7	1.5

Table A2.3

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Payroll Employment	2,923.8	2,992.6	3,072.2	3,152.8	3,212.4	3,262.9	3,309.8	3,353.0
% Ch	1.7	2.4	2.7	2.6	1.9	1.6	1.4	1.3
Manufacturing	280.3	286.7	288.5	289.6	292.2	294.0	296.3	297.8
% Ch	4.3	2.3	0.6	0.4	0.9	0.6	0.8	0.5
Durable Manufacturing	204.5	209.6	209.6	209.5	210.7	211.0	212.3	212.9
% Ch	5.8	2.5	0.0	0.0	0.5	0.1	0.6	0.3
Wood Products	12.4	13.1	13.4	13.5	14.3	14.9	15.2	15.4
% Ch	-1.5	4.9	2.5	0.7	6.2	4.2	2.0	1.1
Primary and Fabricated Metals	24.2	25.0	25.6	25.8	26.5	27.2	27.9	28.4
% Ch	6.0	3.1	2.2	1.0	2.6	2.7	2.4	1.8
Computer and Electronic Products	20.2	20.2	20.1	20.2	21.1	21.2	21.8	22.1
% Ch	2.4	0.0	-0.5	0.8	4.1	0.7	3.0	1.1
Machinery and Electrical Equipment	18.4	19.9	20.8	21.5	22.2	23.1	24.3	25.4
% Ch	6.5	7.7	4.8	3.1	3.5	3.8	5.2	4.6
Aerospace	94.2	96.1	93.9	91.9	89.6	87.3	85.4	83.7
% Ch	8.8	2.0	-2.2	-2.2	-2.6	-2.5	-2.2	-2.0
Other Transportation Equip.	10.0	9.7	9.6	9.3	8.9	8.6	8.4	8.3
% Ch	8.6	-3.0	-1.4	-3.6	-3.4	-3.7	-2.1	-1.8
Other Durables	25.0	25.7	26.3	27.4	28.1	28.7	29.3	29.8
% Ch	0.1	2.5	2.3	4.2	2.7	2.0	2.1	1.7
Nondurable Manufacturing	75.7	77.1	78.8	80.1	81.6	83.0	84.0	84.8
% Ch	0.6	1.8	2.3	1.6	1.8	1.8	1.2	1.0
Food Manufacturing	34.8	35.7	36.3	36.5	37.3	38.1	38.5	38.6
% Ch	0.5	2.4	1.7	0.7	2.0	2.2	1.0	0.5
Paper and Paper Products	8.2	8.1	8.2	8.6	8.6	8.5	8.5	8.4
% Ch	-8.7	-0.8	0.5	4.9	-0.2	-0.2	-0.4	-0.7
Other Nondurables	32.7	33.3	34.3	35.0	35.7	36.4	37.1	37.7
% Ch	3.3	1.7	3.3	1.8	2.2	1.7	1.9	1.8
Natural Resources and Mining	5.9	6.1	6.2	6.0	5.9	6.1	6.3	6.4
% Ch	-1.1	3.5	0.8	-2.4	-1.2	3.0	2.4	1.8
Construction	139.1	149.0	159.3	177.3	185.0	191.0	198.7	204.8
% Ch	2.0	7.1	7.0	11.3	4.3	3.3	4.0	3.0
Trade, Transportation, and Utilities	536.0	551.0	569.3	585.1	591.6	596.7	600.7	603.3
% Ch	2.1	2.8	3.3	2.8	1.1	0.9	0.7	0.4
Wholesale Trade	124.0	126.9	130.1	134.2	136.5	138.5	140.7	142.6
% Ch	1.9	2.3	2.6	3.2	1.7	1.4	1.6	1.3
Retail Trade	319.3	330.1	341.4	348.7	350.6	351.6	351.5	351.4
% Ch	2.1	3.4	3.4	2.1	0.5	0.3	0.0	0.0
Trans., Warehousing, and Utilities	92.7	94.0	97.7	102.2	104.4	106.6	108.5	109.3
% Ch	2.2	1.4	3.9	4.6	2.2	2.1	1.8	0.8
Information	104.7	106.2	109.5	112.3	113.4	116.1	117.7	119.9
% Ch	0.5	1.5	3.1	2.5	0.9	2.4	1.4	1.9
Software Publishers	52.4	53.9	55.5	55.1	55.4	56.1	57.0	57.8
% Ch	1.4	2.8	3.1	-0.8	0.6	1.2	1.6	1.5
Other Publishing Industries	7.5	6.9	6.6	6.6	6.0	5.7	5.5	5.3
% Ch	-4.4	-7.0	-4.4	-0.9	-9.0	-5.2	-3.7	-3.6
Other Information	44.8	45.4	47.4	50.7	51.9	54.4	55.3	56.8
% Ch	0.3	1.3	4.3	7.0	2.5	4.7	1.7	2.8
Financial Activities	144.9	150.6	152.3	152.3	150.7	147.5	144.9	144.2
% Ch	2.4	3.9	1.1	0.0	-1.0	-2.2	-1.8	-0.4
Professional and Business Services	350.0	361.1	372.7	390.8	415.7	432.4	442.9	451.8
% Ch	3.1	3.2	3.2	4.9	6.4	4.0	2.4	2.0
Education and Health Services	433.8	440.1	453.1	464.2	475.5	484.8	492.8	500.2
% Ch	0.6	1.5	3.0	2.4	2.4	1.9	1.7	1.5
Leisure and Hospitality	277.2	287.3	297.3	304.6	308.0	312.0	317.3	321.9
% Ch	2.4	3.6	3.5	2.5	1.1	1.3	1.7	1.5
Other Services	110.9	111.3	113.9	115.5	116.4	117.3	118.5	119.5
% Ch	2.2	0.4	2.3	1.5	0.8	0.8	0.9	0.8
Federal Government	73.1	71.6	71.3	72.1	71.6	71.0	70.4	70.0
% Ch	-1.1	-2.1	-0.4	1.1	-0.7	-0.8	-0.9	-0.5
State and Local Government	468.0	471.6	478.8	482.9	486.3	494.0	503.5	513.4
% Ch	-0.3	0.8	1.5	0.9	0.7	1.6	1.9	2.0

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Nonfarm Payroll Employment	3,044.8	3,056.9	3,090.0	3,097.2	3,125.3	3,145.5	3,162.4	3,178.1
% Ch, Annual Rate	3.3	1.6	4.4	0.9	3.7	2.6	2.2	2.0
Manufacturing	287.7	288.7	289.4	288.0	289.5	288.9	289.2	290.7
% Ch, Annual Rate	1.2	1.3	1.0	-1.9	2.1	-0.8	0.4	2.1
Durable Manufacturing	209.4	209.4	210.5	209.2	209.8	209.0	209.2	210.1
% Ch, Annual Rate	0.2	0.0	2.2	-2.4	1.1	-1.5	0.3	1.9
Wood Products	13.4	13.5	13.5	13.1	13.4	13.3	13.4	13.8
% Ch, Annual Rate	4.6	1.8	1.3	-11.1	8.0	-1.5	3.4	9.7
Primary and Fabricated Metals	25.5	25.5	25.7	25.5	25.8	25.6	25.8	26.1
% Ch, Annual Rate	5.8	0.0	1.7	-3.1	5.5	-3.6	3.2	5.2
Computer and Electronic Products	20.1	20.0	20.2	20.1	20.2	20.1	20.2	20.5
% Ch, Annual Rate	-2.0	-1.4	4.6	-3.2	2.1	-1.5	2.7	5.5
Machinery and Electrical Equipment	20.4	20.7	21.0	21.1	21.2	21.2	21.5	21.9
% Ch, Annual Rate	3.0	6.0	5.0	1.4	2.9	0.5	4.2	8.8
Aerospace	94.0	93.8	94.3	93.7	93.0	92.2	91.6	91.0
% Ch, Annual Rate	-3.2	-1.1	2.4	-2.5	-3.2	-3.4	-2.5	-2.5
Other Transportation Equip.	9.8	9.7	9.5	9.4	9.4	9.4	9.1	9.1
% Ch, Annual Rate	8.8	-6.7	-7.4	-2.9	0.8	-3.2	-8.9	-1.2
Other Durables	26.1	26.2	26.4	26.4	26.8	27.3	27.6	27.8
% Ch, Annual Rate	2.1	2.3	2.2	0.5	7.0	7.0	3.8	3.2
Nondurable Manufacturing	78.3	79.3	78.9	78.8	79.7	79.9	80.1	80.6
% Ch, Annual Rate	3.8	4.8	-2.0	-0.3	4.8	0.8	0.9	2.6
Food Manufacturing	35.9	36.7	36.1	36.4	36.8	36.4	36.3	36.7
% Ch, Annual Rate	1.1	9.7	-6.9	4.0	3.9	-4.7	-0.5	4.2
Paper and Paper Products	8.0	8.1	8.0	8.5	8.5	8.6	8.6	8.6
% Ch, Annual Rate	-1.6	3.7	-4.1	25.7	0.3	5.8	-2.6	0.1
Other Nondurables	34.4	34.4	34.7	33.8	34.4	34.9	35.2	35.3
% Ch, Annual Rate	8.1	0.2	4.1	-9.9	7.0	5.8	3.2	1.7
Natural Resources and Mining	6.3	6.2	6.1	6.1	6.1	6.1	5.9	5.9
% Ch, Annual Rate	3.6	-8.5	-1.9	-4.0	5.2	-4.2	-8.9	-2.6
Construction	156.3	156.4	160.3	164.4	173.4	176.3	178.5	181.1
% Ch, Annual Rate	10.8	0.3	10.3	10.6	23.7	7.1	5.1	5.8
Trade, Transportation, and Utilities	562.8	566.3	572.7	575.2	579.7	583.8	587.7	589.3
% Ch, Annual Rate	3.2	2.5	4.6	1.8	3.2	2.8	2.7	1.1
Wholesale Trade	128.8	129.1	130.8	131.8	132.8	133.7	134.9	135.5
% Ch, Annual Rate	2.5	0.8	5.3	3.4	2.9	2.9	3.4	2.0
Retail Trade	337.7	340.1	343.9	344.1	346.0	348.1	350.2	350.5
% Ch, Annual Rate	3.2	2.8	4.6	0.2	2.3	2.4	2.5	0.3
Trans., Warehousing, and Utilities	96.3	97.2	98.0	99.3	100.9	101.9	102.6	103.2
% Ch, Annual Rate	4.1	3.9	3.4	5.1	7.0	4.0	2.5	2.5
Information	108.1	109.1	110.5	110.5	111.4	112.2	112.6	113.2
% Ch, Annual Rate	3.0	3.7	5.3	0.1	3.1	2.9	1.4	2.1
Software Publishers	55.3	55.7	56.0	55.3	55.0	55.1	55.1	55.2
% Ch, Annual Rate	4.2	2.8	2.3	-4.7	-2.1	0.5	0.3	0.5
Other Publishing Industries	6.7	6.7	6.6	6.5	6.6	6.7	6.6	6.4
% Ch, Annual Rate	-7.0	-2.9	-6.2	-1.7	4.2	6.9	-8.0	-13.4
Other Information	46.1	46.7	48.0	48.7	49.8	50.4	50.9	51.6
% Ch, Annual Rate	3.1	5.9	10.8	6.2	9.1	5.1	4.0	6.0
Financial Activities	152.2	152.8	153.5	150.7	151.6	152.3	152.8	152.4
% Ch, Annual Rate	1.6	1.6	1.9	-7.2	2.5	2.0	1.3	-1.2
Professional and Business Services	366.7	368.4	375.7	380.1	383.9	387.5	392.1	399.7
% Ch, Annual Rate	2.6	1.8	8.2	4.7	4.1	3.8	4.8	7.9
Education and Health Services	449.5	451.2	455.4	456.4	458.9	463.4	466.7	467.6
% Ch, Annual Rate	3.7	1.5	3.8	0.9	2.2	4.0	2.9	0.7
Leisure and Hospitality	295.4	295.5	297.5	300.7	302.5	304.2	305.4	306.3
% Ch, Annual Rate	5.8	0.2	2.7	4.4	2.4	2.2	1.6	1.3
Other Services	113.3	113.4	114.4	114.4	115.0	115.5	115.7	115.9
% Ch, Annual Rate	4.1	0.6	3.3	-0.1	2.2	1.6	0.9	0.8
Federal Government	71.0	71.3	71.6	71.5	71.7	72.4	72.2	72.1
% Ch, Annual Rate	0.5	1.4	1.9	-0.6	1.3	3.9	-0.8	-0.9
State and Local Government	475.4	477.7	482.9	479.3	481.5	482.8	483.5	483.9
% Ch, Annual Rate	2.1	1.9	4.5	-3.0	1.8	1.1	0.5	0.4

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	3,192.3	3,206.9	3,219.5	3,230.9	3,243.8	3,257.1	3,269.0	3,281.7
% Ch, Annual Rate	1.8	1.8	1.6	1.4	1.6	1.6	1.5	1.6
Manufacturing	291.7	292.0	292.6	292.6	293.1	293.6	294.3	294.9
% Ch, Annual Rate	1.4	0.3	0.9	0.0	0.6	0.8	0.9	0.8
Durable Manufacturing	210.6	210.5	211.0	210.7	210.7	210.8	211.1	211.4
% Ch, Annual Rate	0.8	-0.1	0.9	-0.6	0.1	0.2	0.6	0.5
Wood Products	14.0	14.2	14.4	14.5	14.7	14.9	15.0	15.1
% Ch, Annual Rate	8.3	6.0	5.7	2.8	4.3	4.7	3.8	2.8
Primary and Fabricated Metals	26.2	26.3	26.6	26.7	26.9	27.1	27.3	27.5
% Ch, Annual Rate	2.1	1.3	4.9	1.8	2.9	2.8	2.5	2.8
Computer and Electronic Products	20.8	21.0	21.3	21.2	21.1	21.1	21.2	21.4
% Ch, Annual Rate	5.3	4.3	5.7	-0.5	-2.1	-0.3	1.9	3.0
Machinery and Electrical Equipment	22.1	22.2	22.3	22.3	22.6	22.9	23.2	23.5
% Ch, Annual Rate	4.0	0.7	1.7	0.3	5.3	5.6	6.3	5.3
Aerospace	90.4	89.9	89.3	88.7	88.2	87.6	87.1	86.5
% Ch, Annual Rate	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Other Transportation Equip.	9.0	8.9	8.9	8.9	8.8	8.6	8.5	8.5
% Ch, Annual Rate	-2.9	-6.4	2.0	-1.6	-4.1	-8.7	-3.4	-2.1
Other Durables	27.9	28.1	28.2	28.2	28.4	28.6	28.8	28.9
% Ch, Annual Rate	2.3	1.7	1.7	1.1	2.3	2.6	2.2	2.0
Nondurable Manufacturing	81.2	81.5	81.6	81.9	82.3	82.8	83.2	83.6
% Ch, Annual Rate	2.9	1.5	0.7	1.4	2.1	2.4	1.9	1.6
Food Manufacturing	37.0	37.2	37.3	37.5	37.7	38.0	38.2	38.4
% Ch, Annual Rate	4.0	1.8	0.7	2.3	2.8	3.0	2.1	1.5
Paper and Paper Products	8.6	8.6	8.6	8.5	8.5	8.5	8.5	8.5
% Ch, Annual Rate	0.4	-0.4	-1.1	-1.5	0.5	0.4	0.3	-0.3
Other Nondurables	35.6	35.7	35.8	35.9	36.1	36.3	36.5	36.7
% Ch, Annual Rate	2.5	1.7	1.2	1.1	1.8	2.2	2.1	2.1
Natural Resources and Mining	5.9	5.9	5.9	6.0	6.0	6.1	6.2	6.2
% Ch, Annual Rate	2.7	-1.1	1.0	2.0	4.2	4.5	4.3	3.2
Construction	183.1	184.2	185.6	187.1	188.5	190.6	191.5	193.6
% Ch, Annual Rate	4.6	2.3	3.2	3.2	3.0	4.6	2.0	4.5
Trade, Transportation, and Utilities	589.9	591.2	592.2	592.9	594.0	595.9	597.8	598.9
% Ch, Annual Rate	0.4	0.9	0.7	0.4	0.8	1.2	1.3	0.7
Wholesale Trade	135.8	136.4	136.8	137.2	137.6	138.2	138.8	139.4
% Ch, Annual Rate	0.9	1.5	1.3	1.0	1.4	1.8	1.6	1.7
Retail Trade	350.4	350.6	350.7	350.6	350.7	351.3	352.1	352.1
% Ch, Annual Rate	-0.1	0.3	0.1	-0.2	0.2	0.7	1.0	0.0
Trans., Warehousing, and Utilities	103.7	104.2	104.7	105.2	105.7	106.3	106.9	107.4
% Ch, Annual Rate	1.8	2.0	2.0	1.8	2.1	2.3	2.1	2.1
Information	112.8	113.1	113.6	113.9	115.5	116.3	116.3	116.4
% Ch, Annual Rate	-1.5	1.4	1.7	0.8	5.7	3.0	-0.1	0.5
Software Publishers	55.3	55.4	55.5	55.6	55.8	56.0	56.2	56.4
% Ch, Annual Rate	0.6	0.7	1.0	0.8	1.1	1.4	1.7	1.6
Other Publishing Industries	6.1	6.0	5.9	5.8	5.8	5.7	5.6	5.6
% Ch, Annual Rate	-13.2	-7.4	-5.5	-6.4	-5.4	-4.5	-3.2	-3.5
Other Information	51.3	51.8	52.2	52.4	53.9	54.7	54.4	54.4
% Ch, Annual Rate	-2.2	3.3	3.5	1.6	12.1	5.5	-1.6	-0.2
Financial Activities	151.9	151.2	150.3	149.5	148.8	147.9	146.9	146.2
% Ch, Annual Rate	-1.3	-1.9	-2.2	-2.2	-1.8	-2.4	-2.7	-2.1
Professional and Business Services	406.7	413.1	418.8	424.1	428.1	430.8	433.8	436.7
% Ch, Annual Rate	7.2	6.5	5.6	5.1	3.8	2.5	2.8	2.6
Education and Health Services	470.2	475.0	477.4	479.4	481.1	483.7	485.8	488.4
% Ch, Annual Rate	2.3	4.1	2.0	1.8	1.4	2.2	1.8	2.1
Leisure and Hospitality	307.3	307.7	308.3	309.0	309.9	311.1	312.8	314.3
% Ch, Annual Rate	1.2	0.5	0.8	0.9	1.2	1.6	2.1	2.0
Other Services	116.1	116.3	116.6	116.8	117.0	117.2	117.5	117.7
% Ch, Annual Rate	0.7	0.8	0.7	0.7	0.7	0.8	0.9	0.9
Federal Government	71.9	71.7	71.5	71.3	71.2	71.1	70.9	70.7
% Ch, Annual Rate	-1.2	-1.2	-1.0	-1.0	-0.6	-0.6	-1.0	-1.0
State and Local Government	484.8	485.6	486.5	488.4	490.6	492.7	495.1	497.5
% Ch, Annual Rate	0.7	0.7	0.8	1.5	1.8	1.8	1.9	1.9

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	3,293.8	3,304.3	3,315.4	3,325.8	3,336.7	3,347.9	3,358.6	3,368.9
% Ch, Annual Rate	1.5	1.3	1.3	1.3	1.3	1.3	1.3	1.2
Manufacturing	295.5	296.1	296.5	297.2	297.4	297.8	297.9	298.0
% Ch, Annual Rate	0.8	0.8	0.5	0.9	0.3	0.5	0.2	0.1
Durable Manufacturing	211.7	212.1	212.4	212.8	212.9	213.0	213.0	212.9
% Ch, Annual Rate	0.7	0.8	0.5	0.8	0.1	0.3	-0.1	-0.2
Wood Products	15.1	15.2	15.2	15.3	15.3	15.4	15.4	15.4
% Ch, Annual Rate	1.0	1.2	0.9	1.9	1.3	1.0	0.5	0.8
Primary and Fabricated Metals	27.6	27.8	27.9	28.1	28.2	28.4	28.4	28.4
% Ch, Annual Rate	2.2	2.7	1.6	2.6	1.9	1.9	0.7	0.1
Computer and Electronic Products	21.6	21.7	21.9	22.1	22.1	22.0	22.1	22.1
% Ch, Annual Rate	3.7	3.3	3.5	3.2	-0.7	-0.2	0.5	0.8
Machinery and Electrical Equipment	23.8	24.1	24.4	24.7	24.9	25.3	25.5	25.8
% Ch, Annual Rate	5.1	5.1	4.1	5.2	4.2	5.4	4.1	3.9
Aerospace	86.1	85.6	85.2	84.8	84.3	83.9	83.5	83.1
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Other Transportation Equip.	8.5	8.4	8.4	8.4	8.4	8.3	8.3	8.2
% Ch, Annual Rate	-1.6	-0.4	-0.9	-1.5	-2.1	-0.9	-3.3	-4.0
Other Durables	29.0	29.2	29.3	29.5	29.6	29.7	29.8	29.9
% Ch, Annual Rate	2.0	2.3	1.9	2.2	1.7	1.4	1.0	1.0
Nondurable Manufacturing	83.8	83.9	84.1	84.3	84.5	84.7	84.9	85.1
% Ch, Annual Rate	1.0	0.8	0.6	1.2	0.8	1.2	1.0	0.8
Food Manufacturing	38.4	38.4	38.4	38.5	38.6	38.6	38.7	38.7
% Ch, Annual Rate	0.5	0.2	0.1	1.1	0.2	0.8	0.5	0.4
Paper and Paper Products	8.5	8.5	8.5	8.5	8.5	8.5	8.4	8.4
% Ch, Annual Rate	-0.5	-0.9	-1.0	-0.5	-0.9	-0.4	-0.6	-0.6
Other Nondurables	36.8	37.0	37.1	37.3	37.5	37.7	37.8	38.0
% Ch, Annual Rate	2.0	1.7	1.5	1.8	1.9	1.9	1.7	1.6
Natural Resources and Mining	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.4
% Ch, Annual Rate	1.5	1.0	1.9	2.1	2.4	1.3	1.5	1.8
Construction	196.3	197.6	199.6	201.4	202.9	204.3	205.4	206.4
% Ch, Annual Rate	5.6	2.8	4.0	3.6	3.2	2.6	2.2	1.9
Trade, Transportation, and Utilities	600.1	600.5	600.8	601.3	602.0	602.9	603.7	604.5
% Ch, Annual Rate	0.8	0.3	0.2	0.4	0.5	0.6	0.6	0.5
Wholesale Trade	140.0	140.4	141.0	141.5	142.0	142.4	142.8	143.1
% Ch, Annual Rate	1.8	1.2	1.6	1.5	1.5	1.1	1.1	0.9
Retail Trade	352.1	351.6	351.2	350.9	350.9	351.2	351.5	351.9
% Ch, Annual Rate	0.0	-0.5	-0.6	-0.2	-0.1	0.4	0.4	0.4
Trans., Warehousing, and Utilities	108.0	108.4	108.7	108.9	109.1	109.3	109.4	109.5
% Ch, Annual Rate	2.0	1.6	0.9	1.0	0.9	0.5	0.5	0.4
Information	117.0	117.5	118.0	118.3	118.8	119.5	120.3	120.9
% Ch, Annual Rate	1.9	1.9	1.6	1.2	1.7	2.4	2.5	2.1
Software Publishers	56.6	56.8	57.1	57.3	57.5	57.7	57.9	58.1
% Ch, Annual Rate	1.6	1.5	1.6	1.6	1.6	1.4	1.4	1.3
Other Publishing Industries	5.5	5.5	5.4	5.4	5.4	5.3	5.2	5.2
% Ch, Annual Rate	-3.4	-4.3	-3.8	-2.5	-3.2	-3.8	-4.2	-4.7
Other Information	54.8	55.2	55.5	55.6	56.0	56.5	57.1	57.6
% Ch, Annual Rate	2.7	2.9	2.2	1.1	2.3	4.0	4.4	3.6
Financial Activities	145.7	145.0	144.6	144.2	144.2	144.3	144.3	144.1
% Ch, Annual Rate	-1.2	-1.9	-1.2	-1.0	0.1	0.1	-0.1	-0.3
Professional and Business Services	439.4	441.8	444.3	446.1	448.3	450.4	452.9	455.7
% Ch, Annual Rate	2.5	2.1	2.3	1.6	2.0	1.9	2.2	2.5
Education and Health Services	489.8	492.0	493.9	495.5	497.6	499.5	501.0	502.6
% Ch, Annual Rate	1.1	1.8	1.5	1.3	1.7	1.5	1.2	1.3
Leisure and Hospitality	315.5	316.6	317.9	319.2	320.2	321.3	322.5	323.6
% Ch, Annual Rate	1.5	1.4	1.6	1.7	1.2	1.5	1.5	1.4
Other Services	118.1	118.3	118.6	118.8	119.1	119.3	119.6	119.8
% Ch, Annual Rate	1.1	0.9	1.0	0.9	0.9	0.7	0.8	0.8
Federal Government	70.6	70.4	70.3	70.2	70.1	70.0	70.0	69.9
% Ch, Annual Rate	-0.9	-0.9	-0.8	-0.8	-0.4	-0.4	-0.3	-0.2
State and Local Government	499.8	502.3	504.8	507.2	509.6	512.2	514.7	516.9
% Ch, Annual Rate	1.9	2.0	2.0	2.0	1.9	2.0	1.9	1.8

Table A3.1

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

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	13,887.7	14,166.9	14,728.6	15,327.8	16,050.1	16,932.7	17,833.3	18,708.7
% Ch	5.2	2.0	4.0	4.1	4.7	5.5	5.3	4.9
Total Wage and Salary Disbursements	6,932.1	7,124.7	7,446.0	7,809.9	8,204.2	8,615.8	9,050.2	9,504.8
% Ch	4.5	2.8	4.5	4.9	5.0	5.0	5.0	5.0
Nonwage Personal Income	6,955.6	7,042.2	7,282.7	7,517.9	7,845.9	8,316.9	8,783.1	9,203.9
% Ch	5.9	1.2	3.4	3.2	4.4	6.0	5.6	4.8
Supplements to Wages and Salaries	1,674.4	1,720.1	1,775.6	1,838.1	1,915.0	2,011.1	2,115.8	2,216.0
% Ch	2.4	2.7	3.2	3.5	4.2	5.0	5.2	4.7
Proprietor's Income	1,260.2	1,336.7	1,380.2	1,421.2	1,504.2	1,573.5	1,632.0	1,706.8
% Ch	10.2	6.1	3.3	3.0	5.8	4.6	3.7	4.6
Farm	72.3	83.2	63.6	46.9	47.0	51.1	55.2	59.0
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,187.9	1,253.5	1,316.6	1,374.3	1,457.2	1,522.4	1,576.8	1,647.7
% Ch	11.2	5.5	5.0	4.4	6.0	4.5	3.6	4.5
Less: Contribution For Govt. Soc. Ins.	951.2	1,104.5	1,161.3	1,213.4	1,284.4	1,363.6	1,446.9	1,532.4
% Ch	3.6	16.1	5.1	4.5	5.8	6.2	6.1	5.9
Dividends/Int./Rent	2,621.6	2,675.6	2,765.6	2,819.6	2,936.8	3,190.4	3,440.0	3,617.9
% Ch	9.3	2.1	3.4	2.0	4.2	8.6	7.8	5.2
Transfer Payments	2,350.7	2,414.6	2,522.7	2,652.5	2,774.3	2,905.6	3,042.2	3,195.8
% Ch	1.9	2.7	4.5	5.1	4.6	4.7	4.7	5.0

Table A3.2

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

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	14,484.7	14,660.5	14,811.2	14,958.1	15,106.7	15,254.0	15,395.4	15,555.2
% Ch, Annual Rate	4.9	4.9	4.2	4.0	4.0	4.0	3.8	4.2
Total Wage and Salary Disbursements	7,339.8	7,391.7	7,478.9	7,573.4	7,663.4	7,762.0	7,860.1	7,954.1
% Ch, Annual Rate	7.5	2.9	4.8	5.2	4.8	5.2	5.2	4.9
Nonwage Personal Income	7,144.9	7,268.8	7,332.3	7,384.7	7,443.3	7,491.9	7,535.3	7,601.1
% Ch, Annual Rate	2.4	7.1	3.5	2.9	3.2	2.6	2.3	3.5
Supplements to Wages and Salaries	1,756.4	1,767.7	1,781.8	1,796.4	1,813.8	1,829.5	1,846.2	1,862.9
% Ch, Annual Rate	4.2	2.6	3.2	3.3	3.9	3.5	3.7	3.7
Proprietor's Income	1,351.0	1,381.0	1,386.4	1,402.4	1,391.5	1,405.6	1,432.1	1,455.6
% Ch, Annual Rate	2.5	9.2	1.6	4.7	-3.1	4.1	7.8	6.7
Farm	58.1	73.4	62.2	60.7	49.7	43.3	45.1	49.4
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,292.9	1,307.6	1,324.2	1,341.7	1,341.8	1,362.3	1,387.0	1,406.2
% Ch, Annual Rate	6.5	4.6	5.2	5.4	0.0	6.3	7.5	5.6
Less: Contribution For Govt. Soc. Ins.	1,146.6	1,154.2	1,166.1	1,178.4	1,192.2	1,206.7	1,220.0	1,234.7
% Ch, Annual Rate	10.8	2.7	4.2	4.3	4.8	4.9	4.5	4.9
Dividends/Int./Rent	2,713.3	2,762.4	2,785.0	2,801.5	2,814.9	2,809.5	2,813.1	2,840.8
% Ch, Annual Rate	0.9	7.4	3.3	2.4	1.9	-0.8	0.5	4.0
Transfer Payments	2,470.9	2,511.8	2,545.3	2,562.7	2,615.4	2,653.9	2,663.9	2,676.5
% Ch, Annual Rate	6.5	6.8	5.4	2.8	8.5	6.0	1.5	1.9

Table A3.2 (continued)

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

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	15,768.2	15,951.2	16,137.3	16,343.6	16,595.9	16,821.3	17,043.8	17,269.9
% Ch, Annual Rate	5.6	4.7	4.7	5.2	6.3	5.5	5.4	5.4
Total Wage and Salary Disbursements	8,055.3	8,154.9	8,253.8	8,352.8	8,458.5	8,561.4	8,668.5	8,775.0
% Ch, Annual Rate	5.2	5.0	4.9	4.9	5.2	5.0	5.1	5.0
Nonwage Personal Income	7,712.9	7,796.3	7,883.5	7,990.8	8,137.4	8,259.9	8,375.2	8,495.0
% Ch, Annual Rate	6.0	4.4	4.5	5.6	7.5	6.2	5.7	5.8
Supplements to Wages and Salaries	1,886.1	1,904.1	1,924.3	1,945.2	1,976.8	1,999.2	2,021.8	2,046.5
% Ch, Annual Rate	5.1	3.9	4.3	4.4	6.6	4.6	4.6	5.0
Proprietor's Income	1,474.2	1,495.4	1,514.3	1,533.0	1,550.2	1,568.3	1,580.3	1,595.1
% Ch, Annual Rate	5.2	5.9	5.2	5.0	4.5	4.8	3.1	3.8
Farm	47.7	44.5	47.5	48.2	49.3	49.5	51.3	54.3
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,426.5	1,450.8	1,466.8	1,484.8	1,500.9	1,518.8	1,529.0	1,540.9
% Ch, Annual Rate	5.9	7.0	4.5	5.0	4.4	4.9	2.7	3.1
Less: Contribution For Govt. Soc. Ins.	1,263.8	1,277.5	1,290.7	1,305.4	1,342.2	1,356.1	1,370.1	1,385.8
% Ch, Annual Rate	9.8	4.4	4.2	4.7	11.8	4.2	4.2	4.6
Dividends/Int./Rent	2,874.0	2,907.5	2,952.4	3,013.2	3,084.4	3,156.4	3,225.1	3,295.6
% Ch, Annual Rate	4.8	4.7	6.3	8.5	9.8	9.7	9.0	9.0
Transfer Payments	2,742.4	2,766.9	2,783.2	2,804.8	2,868.3	2,892.1	2,918.3	2,943.5
% Ch, Annual Rate	10.2	3.6	2.4	3.1	9.4	3.4	3.7	3.5

Table A3.2 (continued)

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

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	17,512.2	17,730.3	17,940.7	18,150.1	18,390.8	18,603.8	18,813.8	19,026.6
% Ch, Annual Rate	5.7	5.1	4.8	4.8	5.4	4.7	4.6	4.6
Total Wage and Salary Disbursements	8,886.7	8,995.1	9,104.6	9,214.4	9,331.2	9,446.2	9,562.3	9,679.5
% Ch, Annual Rate	5.2	5.0	5.0	4.9	5.2	5.0	5.0	5.0
Nonwage Personal Income	8,625.5	8,735.2	8,836.1	8,935.7	9,059.6	9,157.5	9,251.5	9,347.1
% Ch, Annual Rate	6.3	5.2	4.7	4.6	5.7	4.4	4.2	4.2
Supplements to Wages and Salaries	2,081.8	2,105.0	2,126.9	2,149.5	2,181.7	2,204.2	2,226.8	2,251.2
% Ch, Annual Rate	7.1	4.5	4.2	4.3	6.1	4.2	4.2	4.5
Proprietor's Income	1,605.4	1,623.7	1,640.2	1,658.7	1,677.7	1,698.1	1,715.8	1,735.4
% Ch, Annual Rate	2.6	4.6	4.1	4.6	4.7	5.0	4.2	4.6
Farm	54.7	54.8	54.8	56.6	58.4	59.0	59.1	59.8
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,550.7	1,568.9	1,585.4	1,602.1	1,619.4	1,639.1	1,656.7	1,675.6
% Ch, Annual Rate	2.6	4.8	4.3	4.3	4.4	5.0	4.4	4.6
Less: Contribution For Govt. Soc. Ins.	1,424.6	1,439.3	1,453.8	1,470.0	1,508.4	1,524.3	1,539.7	1,557.2
% Ch, Annual Rate	11.7	4.2	4.1	4.5	10.9	4.3	4.1	4.6
Dividends/Int./Rent	3,359.6	3,416.7	3,468.0	3,515.9	3,559.3	3,599.8	3,637.6	3,674.8
% Ch, Annual Rate	8.0	7.0	6.1	5.6	5.0	4.6	4.3	4.2
Transfer Payments	3,003.2	3,029.1	3,054.8	3,081.6	3,149.3	3,179.7	3,211.1	3,243.0
% Ch, Annual Rate	8.4	3.5	3.4	3.6	9.1	3.9	4.0	4.0

Table A3.3

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2012	2013	2014	2015	2016	2017	2018	2019
Personal Income	324.458	332.655	350.531	367.634	386.353	409.289	433.010	456.442
% Ch	6.7	2.5	5.4	4.9	5.1	5.9	5.8	5.4
Total Wage and Salary Disbursements	163.880	170.790	180.732	190.970	200.964	211.540	222.963	235.330
% Ch	5.8	4.2	5.8	5.7	5.2	5.3	5.4	5.5
Manufacturing	19.577	20.557	21.455	21.619	22.283	23.133	24.143	25.207
% Ch	6.3	5.0	4.4	0.8	3.1	3.8	4.4	4.4
Durable Manufacturing	15.716	16.600	17.382	17.351	17.776	18.374	19.129	19.926
% Ch	7.5	5.6	4.7	-0.2	2.5	3.4	4.1	4.2
Nondurable Manufacturing	3.861	3.958	4.073	4.268	4.507	4.759	5.014	5.281
% Ch	1.9	2.5	2.9	4.8	5.6	5.6	5.4	5.3
Nonmanufacturing	137.300	143.144	152.227	162.238	171.336	180.800	190.921	201.916
% Ch	5.5	4.3	6.3	6.6	5.6	5.5	5.6	5.8
Other Private Wages	1.070	1.083	1.113	1.141	1.188	1.235	1.284	1.336
% Ch	10.5	1.2	2.7	2.6	4.1	3.9	4.0	4.1
Farm Wages	1.568	1.691	1.754	1.830	1.920	2.012	2.110	2.216
% Ch	40.4	7.9	3.7	4.3	4.9	4.8	4.9	5.0
Military Wages	4.365	4.314	4.183	4.141	4.236	4.360	4.504	4.656
% Ch	1.9	-1.2	-3.0	-1.0	2.3	2.9	3.3	3.4
Nonwage Personal Income	160.578	161.865	169.799	176.664	185.389	197.749	210.047	221.112
% Ch	7.7	0.8	4.9	4.0	4.9	6.7	6.2	5.3
Supplements to Wages and Salaries	40.184	41.638	43.356	45.105	47.239	49.748	52.506	55.258
% Ch	3.8	3.6	4.1	4.0	4.7	5.3	5.5	5.2
Proprietor's Income	24.073	25.279	26.505	27.649	29.476	30.870	32.036	33.547
% Ch	6.9	5.0	4.9	4.3	6.6	4.7	3.8	4.7
Farm	1.342	1.372	0.986	0.791	0.906	0.988	1.042	1.080
% Ch	...	...	...	...	...	...	...	...
Nonfarm	22.732	23.906	25.519	26.858	28.571	29.882	30.994	32.466
% Ch	10.2	5.2	6.7	5.2	6.4	4.6	3.7	4.7
Less: Contribution For Govt. Soc. Ins.	24.734	28.845	30.676	32.203	34.170	36.313	38.608	41.028
% Ch	3.0	16.6	6.3	5.0	6.1	6.3	6.3	6.3
Plus: Residence Adjustment	2.815	3.041	3.253	3.462	3.667	3.882	4.109	4.344
% Ch	0.4	8.0	7.0	6.4	5.9	5.9	5.8	5.7
Dividends/Int./Rent	68.242	69.758	72.208	73.881	77.370	84.492	91.546	96.735
% Ch	13.8	2.2	3.5	2.3	4.7	9.2	8.3	5.7
Transfer Payments	49.998	50.993	55.154	58.770	61.806	65.069	68.458	72.256
% Ch	1.9	2.0	8.2	6.6	5.2	5.3	5.2	5.5
State U.I. Benefits	2.374	1.720	1.092	1.028	0.841	0.785	0.799	0.789
% Ch	-23.3	-27.5	-36.5	-5.8	-18.2	-6.6	1.7	-1.2
Other Transfers	47.625	49.273	54.061	57.742	60.966	64.284	67.660	71.468
% Ch	3.6	3.5	9.7	6.8	5.6	5.4	5.3	5.6

Table A3.4

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2014:1	2014:2	2014:3	2014:4	2015:1	2015:2	2015:3	2015:4
Personal Income	343.460	347.876	352.075	358.713	362.903	365.330	369.291	373.012
% Ch, Annual Rate	8.7	5.2	4.9	7.8	4.8	2.7	4.4	4.1
Total Wage and Salary Disbursements	177.532	178.410	180.983	186.002	188.344	189.342	192.116	194.076
% Ch, Annual Rate	9.7	2.0	5.9	11.6	5.1	2.1	6.0	4.1
Manufacturing	22.228	21.551	20.966	21.075	21.951	21.302	21.484	21.741
% Ch, Annual Rate	33.8	-11.6	-10.4	2.1	17.7	-11.3	3.5	4.9
Durable Manufacturing	18.183	17.495	16.899	16.950	17.753	17.063	17.199	17.390
% Ch, Annual Rate	39.4	-14.3	-13.0	1.2	20.4	-14.7	3.2	4.5
Nondurable Manufacturing	4.045	4.056	4.067	4.126	4.198	4.239	4.285	4.351
% Ch, Annual Rate	11.8	1.1	1.1	5.9	7.2	3.9	4.5	6.3
Nonmanufacturing	148.232	149.761	152.948	157.966	159.319	160.933	163.510	165.189
% Ch, Annual Rate	6.9	4.2	8.8	13.8	3.5	4.1	6.6	4.2
Other Private Wages	1.067	1.125	1.149	1.110	1.127	1.134	1.146	1.158
% Ch, Annual Rate	14.9	23.4	8.8	-12.9	6.5	2.5	4.2	4.2
Farm Wages	1.737	1.749	1.760	1.772	1.802	1.817	1.839	1.862
% Ch, Annual Rate	1.2	2.7	2.6	2.6	7.1	3.3	5.0	5.0
Military Wages	4.268	4.224	4.159	4.080	4.144	4.156	4.137	4.127
% Ch, Annual Rate	0.5	-4.0	-6.0	-7.5	6.5	1.1	-1.9	-0.9
Nonwage Personal Income	165.928	169.465	171.093	172.711	174.559	175.988	177.175	178.935
% Ch, Annual Rate	7.6	8.8	3.9	3.8	4.3	3.3	2.7	4.0
Supplements to Wages and Salaries	42.983	43.168	43.435	43.837	44.417	44.872	45.322	45.809
% Ch, Annual Rate	8.0	1.7	2.5	3.8	5.4	4.2	4.1	4.4
Proprietor's Income	25.908	26.638	26.584	26.890	26.901	27.374	27.932	28.389
% Ch, Annual Rate	11.1	11.8	-0.8	4.7	0.2	7.2	8.4	6.7
Farm	0.910	1.362	0.910	0.763	0.747	0.753	0.803	0.863
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	24.998	25.276	25.675	26.128	26.154	26.621	27.129	27.526
% Ch, Annual Rate	12.6	4.5	6.5	7.2	0.4	7.3	7.9	6.0
Less: Contribution For Govt. Soc. Ins.	30.306	30.499	30.784	31.115	31.590	32.023	32.389	32.808
% Ch, Annual Rate	14.1	2.6	3.8	4.4	6.2	5.6	4.6	5.3
Plus: Residence Adjustment	3.170	3.219	3.282	3.343	3.381	3.439	3.490	3.537
% Ch, Annual Rate	9.6	6.4	8.0	7.6	4.6	7.0	6.1	5.6
Dividends/Int./Rent	70.748	72.162	72.759	73.162	73.619	73.564	73.756	74.584
% Ch, Annual Rate	0.8	8.2	3.4	2.2	2.5	-0.3	1.1	4.6
Transfer Payments	53.426	54.778	55.817	56.594	57.831	58.763	59.064	59.424
% Ch, Annual Rate	19.3	10.5	7.8	5.7	9.0	6.6	2.1	2.5
State U.I. Benefits	1.231	1.128	1.016	0.994	1.067	1.067	1.023	0.957
% Ch, Annual Rate	-48.8	-29.4	-34.3	-8.2	32.7	0.0	-15.6	-23.2
Other Transfers	52.195	53.650	54.801	55.599	56.764	57.696	58.041	58.467
% Ch, Annual Rate	22.0	11.6	8.9	6.0	8.6	6.7	2.4	3.0

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	378.806	384.034	388.643	393.928	400.626	406.858	411.800	417.873
% Ch, Annual Rate	6.4	5.6	4.9	5.6	7.0	6.4	4.9	6.0
Total Wage and Salary Disbursements	196.993	199.950	202.239	204.674	207.621	210.606	212.503	215.432
% Ch, Annual Rate	6.1	6.1	4.7	4.9	5.9	5.9	3.7	5.6
Manufacturing	21.981	22.169	22.399	22.584	22.791	23.011	23.247	23.484
% Ch, Annual Rate	4.5	3.5	4.2	3.3	3.7	3.9	4.2	4.2
Durable Manufacturing	17.558	17.688	17.867	17.993	18.134	18.284	18.452	18.625
% Ch, Annual Rate	3.9	3.0	4.1	2.8	3.2	3.3	3.7	3.8
Nondurable Manufacturing	4.424	4.481	4.532	4.591	4.657	4.727	4.795	4.859
% Ch, Annual Rate	6.9	5.2	4.7	5.3	5.9	6.2	5.8	5.5
Nonmanufacturing	167.721	170.452	172.471	174.700	177.288	180.007	181.622	184.282
% Ch, Annual Rate	6.3	6.7	4.8	5.3	6.1	6.3	3.6	6.0
Other Private Wages	1.171	1.182	1.194	1.205	1.218	1.229	1.240	1.252
% Ch, Annual Rate	4.5	4.1	4.0	3.8	4.2	3.8	3.6	3.7
Farm Wages	1.886	1.909	1.932	1.954	1.978	2.001	2.023	2.046
% Ch, Annual Rate	5.3	4.9	4.9	4.6	5.1	4.7	4.5	4.6
Military Wages	4.233	4.237	4.243	4.231	4.346	4.357	4.370	4.368
% Ch, Annual Rate	10.7	0.4	0.5	-1.1	11.3	1.1	1.2	-0.2
Nonwage Personal Income	181.813	184.084	186.405	189.255	193.005	196.253	199.298	202.441
% Ch, Annual Rate	6.6	5.1	5.1	6.3	8.2	6.9	6.4	6.5
Supplements to Wages and Salaries	46.477	46.957	47.494	48.031	48.903	49.470	50.002	50.618
% Ch, Annual Rate	6.0	4.2	4.7	4.6	7.5	4.7	4.4	5.0
Proprietor's Income	28.825	29.324	29.686	30.070	30.413	30.790	31.006	31.272
% Ch, Annual Rate	6.3	7.1	5.0	5.3	4.6	5.1	2.8	3.5
Farm	0.879	0.882	0.920	0.941	0.961	0.974	0.995	1.022
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	27.946	28.442	28.766	29.129	29.452	29.816	30.011	30.251
% Ch, Annual Rate	6.2	7.3	4.6	5.1	4.5	5.0	2.6	3.2
Less: Contribution For Govt. Soc. Ins.	33.608	33.982	34.347	34.744	35.750	36.125	36.479	36.896
% Ch, Annual Rate	10.1	4.5	4.4	4.7	12.1	4.3	4.0	4.7
Plus: Residence Adjustment	3.589	3.641	3.692	3.744	3.799	3.853	3.911	3.967
% Ch, Annual Rate	6.0	5.9	5.7	5.8	6.0	5.8	6.1	5.9
Dividends/Int./Rent	75.560	76.545	77.833	79.543	81.530	83.537	85.463	87.438
% Ch, Annual Rate	5.3	5.3	6.9	9.1	10.4	10.2	9.5	9.6
Transfer Payments	60.970	61.600	62.046	62.611	64.112	64.728	65.395	66.042
% Ch, Annual Rate	10.8	4.2	2.9	3.7	9.9	3.9	4.2	4.0
State U.I. Benefits	0.892	0.845	0.820	0.806	0.794	0.787	0.778	0.782
% Ch, Annual Rate	-24.5	-19.6	-11.1	-6.7	-6.0	-3.2	-4.7	1.8
Other Transfers	60.078	60.755	61.225	61.804	63.318	63.941	64.617	65.260
% Ch, Annual Rate	11.5	4.6	3.1	3.8	10.2	4.0	4.3	4.0

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2015 to 2019

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	424.553	430.640	435.458	441.389	447.960	454.058	458.792	464.961
% Ch, Annual Rate	6.5	5.9	4.6	5.6	6.1	5.6	4.2	5.5
Total Wage and Salary Disbursements	218.699	221.879	223.988	227.284	230.698	234.194	236.405	240.024
% Ch, Annual Rate	6.2	5.9	3.9	6.0	6.1	6.2	3.8	6.3
Manufacturing	23.745	24.009	24.267	24.553	24.809	25.081	25.338	25.598
% Ch, Annual Rate	4.5	4.5	4.4	4.8	4.2	4.5	4.2	4.2
Durable Manufacturing	18.823	19.027	19.226	19.442	19.633	19.834	20.023	20.213
% Ch, Annual Rate	4.3	4.4	4.2	4.6	4.0	4.2	3.8	3.9
Nondurable Manufacturing	4.922	4.982	5.042	5.111	5.176	5.247	5.316	5.385
% Ch, Annual Rate	5.3	5.0	4.9	5.6	5.2	5.6	5.4	5.3
Nonmanufacturing	187.130	189.994	191.792	194.767	197.762	200.930	202.827	206.146
% Ch, Annual Rate	6.3	6.3	3.8	6.4	6.3	6.6	3.8	6.7
Other Private Wages	1.265	1.277	1.290	1.302	1.316	1.330	1.343	1.356
% Ch, Annual Rate	4.5	3.9	4.0	3.9	4.4	4.1	4.1	4.0
Farm Wages	2.073	2.097	2.122	2.147	2.175	2.202	2.229	2.256
% Ch, Annual Rate	5.3	4.8	4.9	4.8	5.3	5.0	5.0	5.0
Military Wages	4.487	4.501	4.516	4.514	4.636	4.651	4.668	4.667
% Ch, Annual Rate	11.3	1.3	1.4	-0.2	11.2	1.3	1.4	0.0
Nonwage Personal Income	205.853	208.761	211.470	214.105	217.262	219.864	222.386	224.937
% Ch, Annual Rate	6.9	5.8	5.3	5.1	6.0	4.9	4.7	4.7
Supplements to Wages and Salaries	51.612	52.210	52.799	53.402	54.323	54.939	55.556	56.216
% Ch, Annual Rate	8.1	4.7	4.6	4.6	7.1	4.6	4.6	4.8
Proprietor's Income	31.489	31.866	32.214	32.576	32.950	33.368	33.735	34.133
% Ch, Annual Rate	2.8	4.9	4.4	4.6	4.7	5.2	4.5	4.8
Farm	1.031	1.038	1.042	1.058	1.072	1.079	1.082	1.088
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	30.458	30.828	31.171	31.518	31.878	32.289	32.653	33.045
% Ch, Annual Rate	2.8	4.9	4.5	4.5	4.6	5.3	4.6	4.9
Less: Contribution For Govt. Soc. Ins.	37.980	38.389	38.803	39.261	40.337	40.794	41.241	41.740
% Ch, Annual Rate	12.3	4.4	4.4	4.8	11.4	4.6	4.5	4.9
Plus: Residence Adjustment	4.024	4.081	4.138	4.195	4.255	4.314	4.374	4.434
% Ch, Annual Rate	5.9	5.8	5.7	5.6	5.8	5.7	5.7	5.7
Dividends/Int./Rent	89.246	90.870	92.341	93.726	94.995	96.190	97.318	98.437
% Ch, Annual Rate	8.5	7.5	6.6	6.1	5.5	5.1	4.8	4.7
Transfer Payments	67.462	68.123	68.781	69.467	71.076	71.847	72.645	73.457
% Ch, Annual Rate	8.9	4.0	3.9	4.0	9.6	4.4	4.5	4.5
State U.I. Benefits	0.781	0.795	0.807	0.812	0.808	0.796	0.783	0.767
% Ch, Annual Rate	-0.4	7.3	6.3	2.5	-1.7	-6.0	-6.3	-7.8
Other Transfers	66.681	67.329	67.975	68.655	70.268	71.051	71.862	72.689
% Ch, Annual Rate	9.0	3.9	3.9	4.1	9.7	4.5	4.6	4.7

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	2.387	2.5
2013	1.073	1.2	2.330	1.5	2.416	1.2
2014	1.088	1.3	2.367	1.6	2.460	1.8
Forecast						
2015	1.092	0.4	2.373	0.2	2.493	1.3
2016	1.111	1.8	2.422	2.1	2.551	2.3
2017	1.131	1.8	2.475	2.2	2.608	2.3
2018	1.152	1.8	2.529	2.1	2.666	2.2
2019	1.171	1.7	2.581	2.1	2.724	2.1

* 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
2014	110.3	2.2	109.8	1.9	148.3	-0.4	144.9	-3.7

Forecast

2015	112.3	1.8	111.2	1.3	126.4	-14.8	110.7	-23.6
2016	114.7	2.2	113.8	2.3	134.3	6.3	112.7	1.7
2017	117.5	2.4	115.9	1.8	138.4	3.1	113.8	1.0
2018	120.2	2.3	117.9	1.8	142.5	3.0	115.2	1.2
2019	123.0	2.3	119.8	1.6	146.5	2.8	116.3	1.0

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	87.3	51.1	28.5
2014	6968.2	85.8	1.2	87.7	51.6	49.7
Forecast						
2015	7054.8	86.6	1.2	88.2	52.1	50.5
2016	7142.2	87.4	1.2	89.2	53.0	51.3
2017	7227.5	85.3	1.2	89.9	54.0	49.4
2018	7308.9	81.3	1.1	91.5	55.0	44.8
2019	7383.5	74.6	1.0	92.1	58.9	41.3

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	<u>2010</u>	<u>2011</u>	Actual <u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	Forecast <u>2017</u>	<u>2018</u>	<u>2019</u>
Total Population	6724.5	6767.9	6817.8	6882.4	6968.2	7054.8	7142.2	7227.5	7308.9	7383.5
Percent Change	0.8	0.6	0.7	0.9	1.2	1.2	1.2	1.2	1.1	1.0
Age 17 and Under	1581.4	1574.8	1573.6	1578.7	1591.2	1603.9	1617.1	1629.7	1641.6	1653.2
Percent of Total	23.5	23.3	23.1	22.9	22.8	22.7	22.6	22.5	22.5	22.4
Age 6-18	1149.6	1142.5	1137.4	1141.0	1150.9	1160.9	1171.0	1179.9	1188.7	1196.0
Percent of Total	17.1	16.9	16.7	16.6	16.5	16.5	16.4	16.3	16.3	16.2
Age 18 and Over	5143.2	5193.1	5244.2	5303.7	5377.0	5450.9	5525.2	5597.8	5667.3	5730.3
Percent of Total	76.5	76.7	76.9	77.1	77.2	77.3	77.4	77.5	77.5	77.6
Age 21 and Over	4860.6	4910.6	4964.3	5027.8	5104.8	5180.0	5253.8	5324.7	5391.9	5453.6
Percent of Total	72.3	72.6	72.8	73.1	73.3	73.4	73.6	73.7	73.8	73.9
Age 20-34	1395.3	1403.5	1413.2	1427.0	1446.1	1456.2	1466.0	1473.7	1479.4	1485.5
Percent of Total	20.7	20.7	20.7	20.7	20.8	20.6	20.5	20.4	20.2	20.1
Age 18-64	4315.5	4341.7	4350.5	4367.2	4398.9	4428.9	4459.5	4486.6	4506.8	4523.0
Percent of Total	64.2	64.2	63.8	63.5	63.1	62.8	62.4	62.1	61.7	61.3
Age 65 and Over	827.7	851.4	893.7	936.5	978.1	1022.0	1065.7	1111.2	1160.5	1207.3
Percent of Total	12.3	12.6	13.1	13.6	14.0	14.5	14.9	15.4	15.9	16.4

* 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	April 2015	+
U.S. Real GDP Growth	1st quarter 2015	-
U.S. ISM Index	April 2015	+
U.S. Employment YoY%Δ	April 2015	unchanged
U.S. Unemployment Rate	April 2015	+
U.S. Fed Funds Target	May 2015	unchanged
U.S. Consumer Confidence	May 2015	+
U.S. Consumer Sentiment	May 2015	-
U.S. Light Vehicle Sales	April 2015	-
U.S. CPI	April 2015	+
U.S. Home Prices	March 2014	+
S&P 500 Index	May 2015	+
WA Leading Index	April 2015	+
WA ISM-WW Index	April 2015	-
WA Employment YoY%Δ	April 2015	+
WA Aerospace Empl. YoY%Δ	April 2015	-
WA Unemployment Rate	April 2015	+
WA Help Wanted Index	April 2015	-
WA Business Cycle Indicator	April 2015	-
WA Initial Unemploy. Claims	April 2015	+
WA Housing Permits	April 2015	-
WA Weekly Hours in Mfg.	April 2015	unchanged
WA New Vehicle Registration	April 2015	+
WA In-Migration	April 2015	-
WA Exports-Total YoY%Δ	1st quarter 2015	-
WA Exports- w/o Trans. Equip. YoY%Δ	1st quarter 2015	-
Seattle CPI	April 2015	+
Seattle Home Prices	March 2014	+
WA Construction Activity Index	April 2015	-

*Change from the previous reading

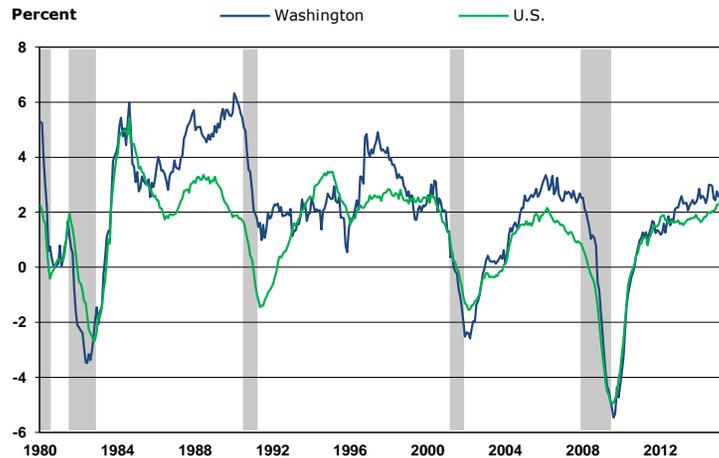
Table A6.2
Washington Business Indicators
 Historical Data

	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	108.4	106.6	24.8	81.3	107.0	68.5	52.8
2012:02	109.9	107.2	26.1	83.8	104.9	68.9	52.4
2012:03	111.1	107.7	28.1	91.3	110.0	62.9	53.0
2012:04	111.1	107.4	28.9	90.8	113.5	64.9	53.7
2012:05	111.0	107.5	29.7	91.2	111.2	58.5	53.2
2012:06	110.9	107.2	31.7	91.6	113.4	57.0	51.0
2012:07	111.4	107.5	30.7	91.6	114.8	58.8	50.6
2012:08	111.1	107.3	31.4	88.6	110.5	53.5	51.1
2012:09	112.5	107.8	33.4	93.2	116.6	56.0	52.2
2012:10	113.3	108.1	34.9	95.2	117.9	56.3	51.2
2012:11	112.9	108.1	37.3	91.0	120.6	60.1	49.5
2012:12	113.8	108.5	38.8	89.3	125.9	58.1	50.4
2013:01	114.6	109.1	39.8	94.2	128.7	60.2	52.3
2013:02	114.7	109.5	39.1	95.9	127.2	56.3	53.1
2013:03	114.1	109.2	39.4	96.0	118.8	65.4	51.5
2013:04	114.2	110.0	38.4	92.8	120.2	59.5	50.0
2013:05	114.3	110.2	39.5	93.0	120.0	53.7	50.0
2013:06	114.3	110.4	40.1	92.7	121.0	61.0	52.5
2013:07	114.5	110.8	41.9	96.1	118.6	60.3	54.9
2013:08	114.9	111.6	42.3	94.3	118.7	53.8	56.3
2013:09	115.1	112.5	41.6	92.4	116.6	52.7	56.0
2013:10	114.6	112.8	42.3	94.6	112.7	54.2	56.6
2013:11	116.2	113.8	41.8	94.0	118.2	61.1	57.0
2013:12	116.3	113.8	42.7	97.4	118.2	62.3	56.5
2014:01	116.0	113.7	44.1	95.6	118.2	63.5	51.8
2014:02	115.5	114.3	43.4	93.6	118.5	68.7	54.3
2014:03	116.5	115.4	44.1	95.0	118.6	63.6	54.4
2014:04	117.1	115.8	46.8	96.6	120.6	53.7	55.3
2014:05	117.1	116.5	47.4	93.7	118.7	59.6	55.6
2014:06	118.5	117.2	48.1	96.5	121.0	67.0	55.7
2014:07	118.6	118.4	49.8	96.6	121.3	50.1	56.4
2014:08	118.6	118.5	49.7	96.3	121.6	62.9	58.1
2014:09	118.3	119.2	49.8	96.9	114.3	60.3	56.1
2014:10	119.1	119.9	49.3	100.3	119.0	57.6	57.9
2014:11	119.8	120.5	50.1	100.5	128.0	63.1	57.6
2014:12	119.5	121.0	50.6	101.4	122.0	53.3	55.1
2015:01	119.4	121.2	52.1	98.5	127.6	66.6	53.5
2015:02	120.2	121.0	57.2	108.5	137.2	65.9	52.9
2015:03	119.9	121.5	57.2	101.2	138.8	64.1	51.5
2015:04	120.2	122.3	57.1	99.0	135.7	60.4	52.8

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

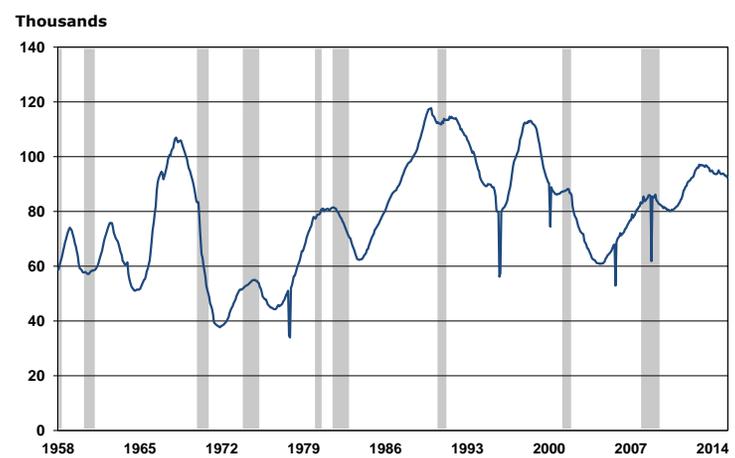
January 1980 to April 2015



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

Washington Aircraft and Parts Employment

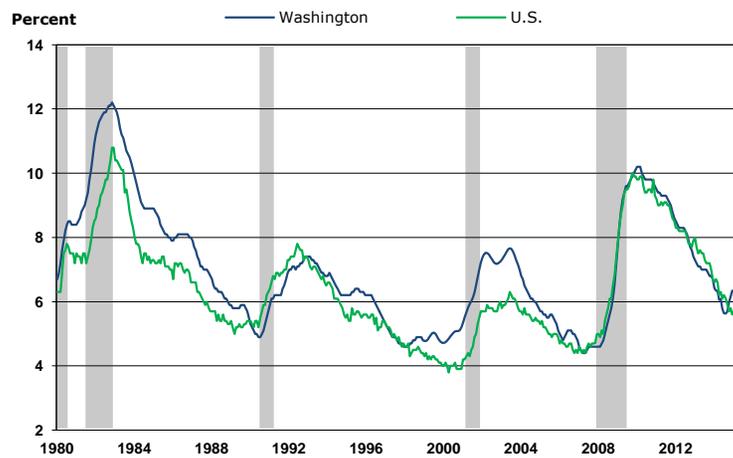
January 1958 to April 2015



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

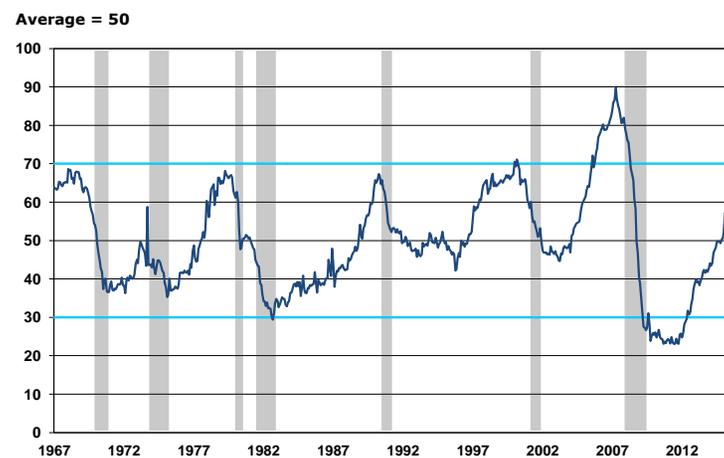
January 1980 to April 2015



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to April 2015



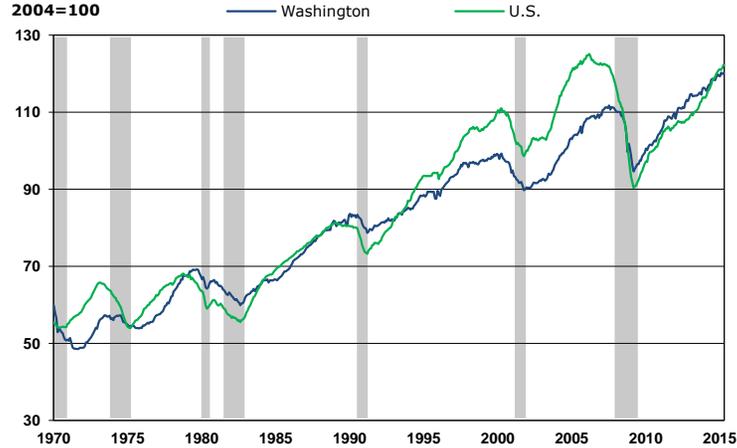
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

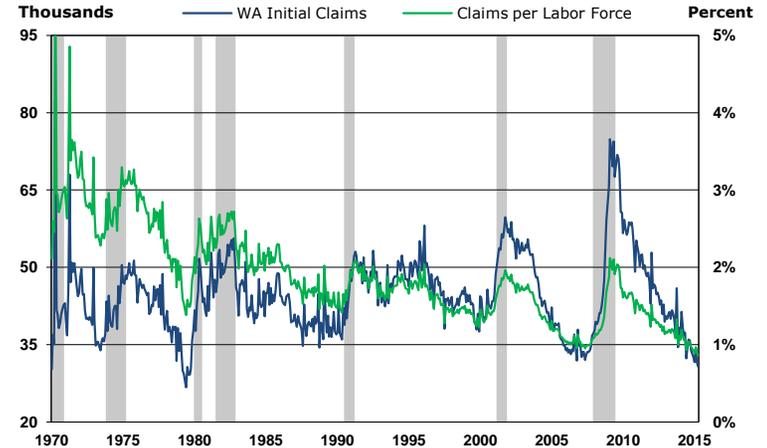
January 1970 to April 2015



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

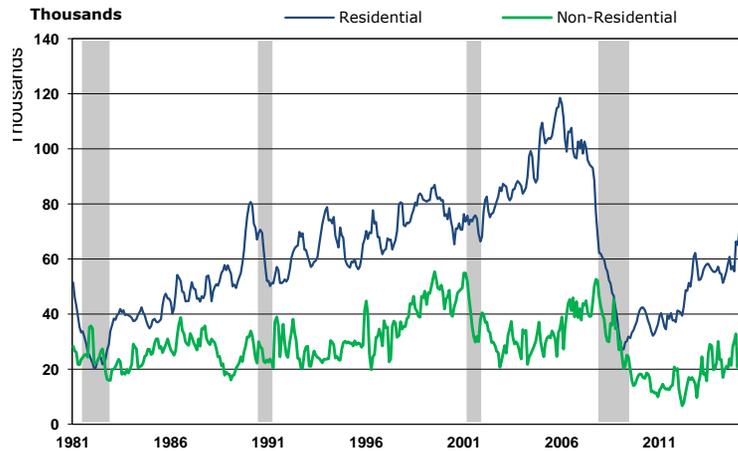
January 1970 to April 2015, S.A.



* Source: WA State Employment Security, ERFC

Square Footage of Construction Projects in WA State

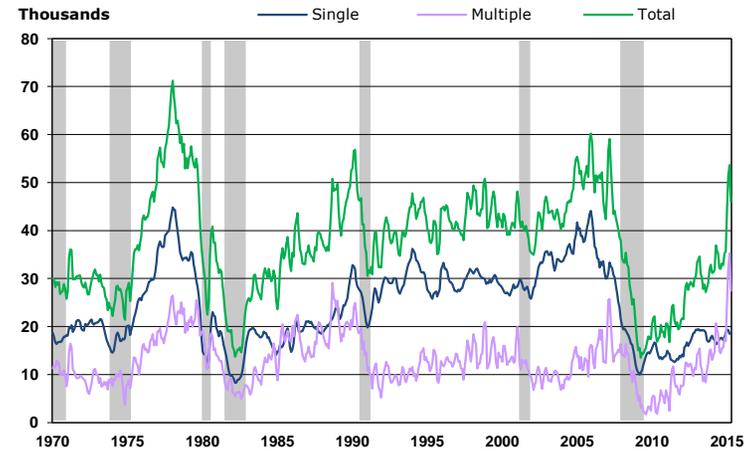
January 1981 to April 2015, 3mma, SAAR



* Source: McGraw-Hill Construction, ERFC

Housing Units Authorized in Washington State

January 1970 to April 2015, 3mma, SAAR



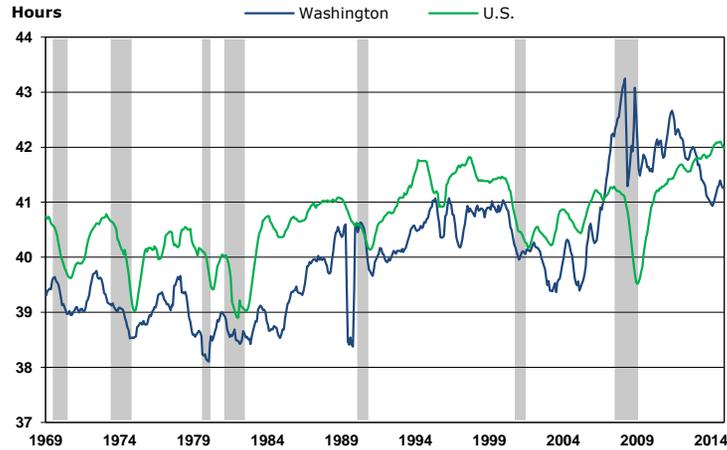
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

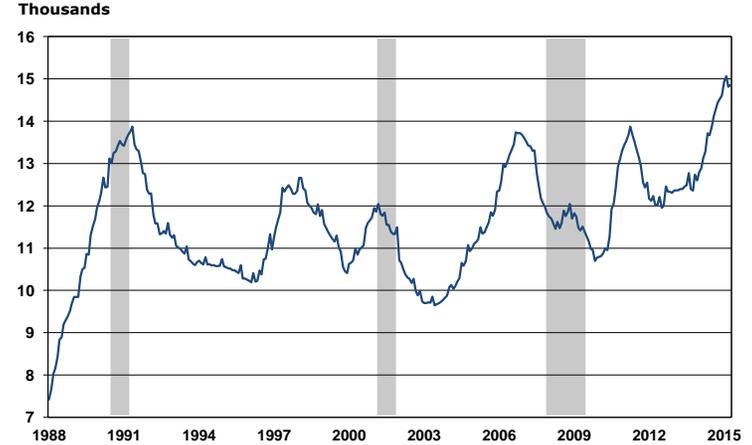
June 1969 to April 2015, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

January 1988 to April 2015, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

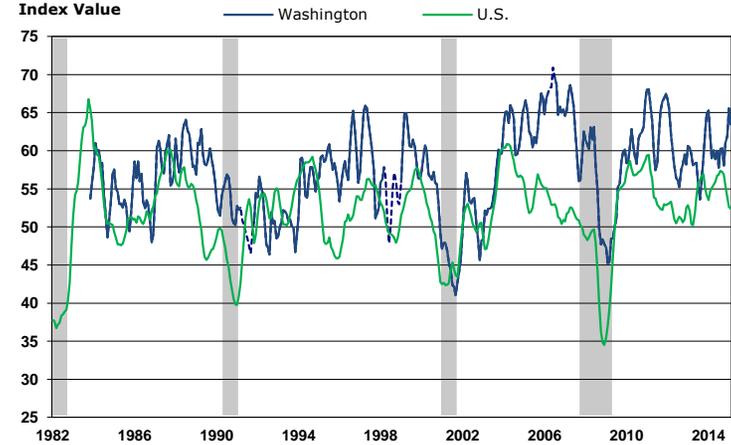
September 1970 to April 2015, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

March 1982 to April 2015, 3-Month Moving Average, S.A.



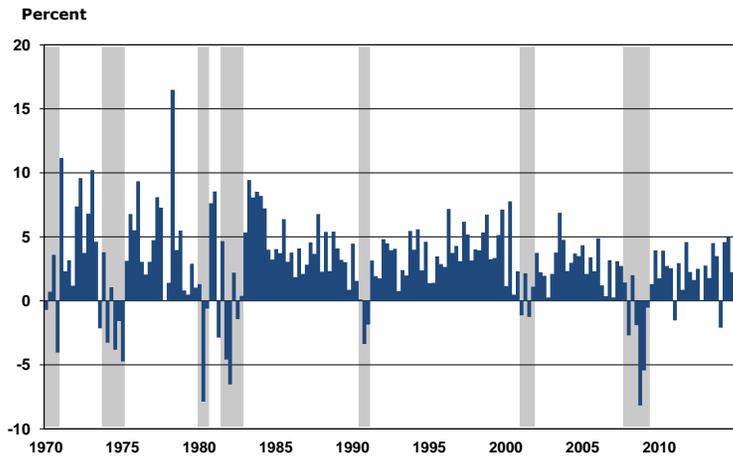
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

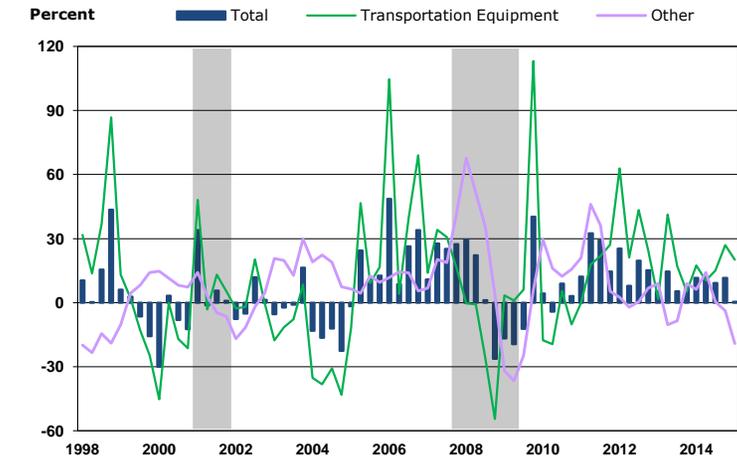
1970Q1 to 2015Q1, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

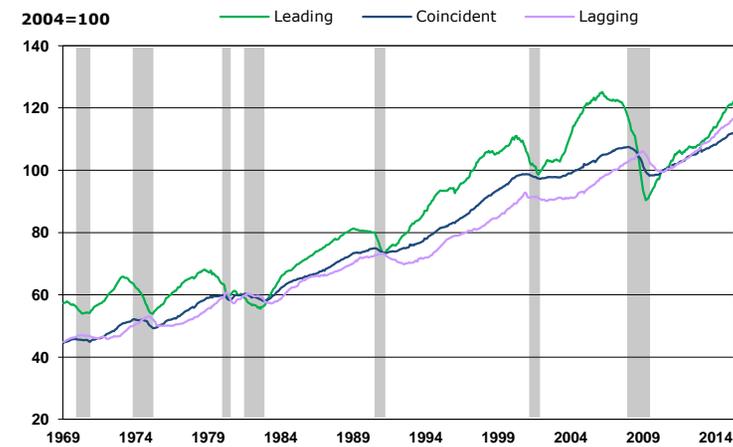
1998Q1 to 2015Q1, Year-over-year percent change



* Source: WISER

U.S. Economic Indicators

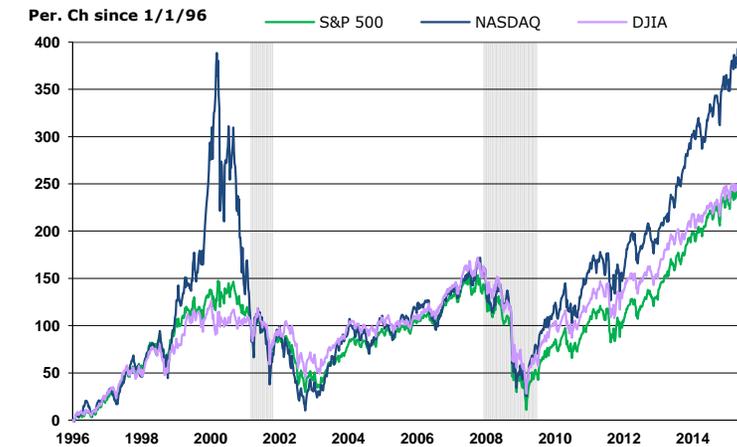
January 1969 to April 2015



* Source: The Conference Board

National Stock Indexes

January 1, 1996 to March 6, 2015



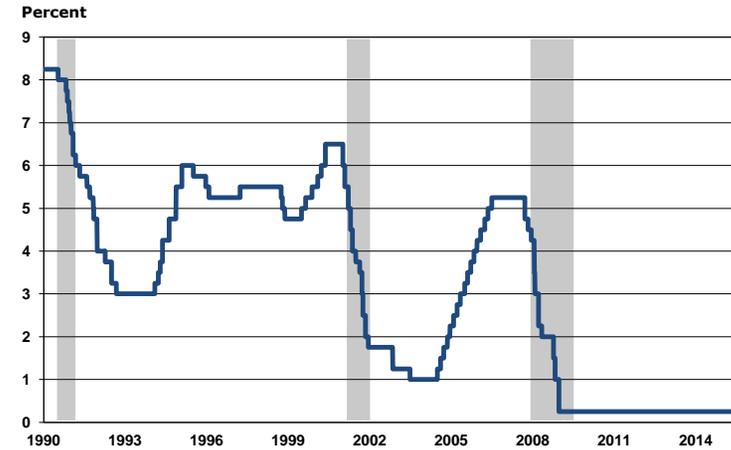
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Federal Funds Target Rate

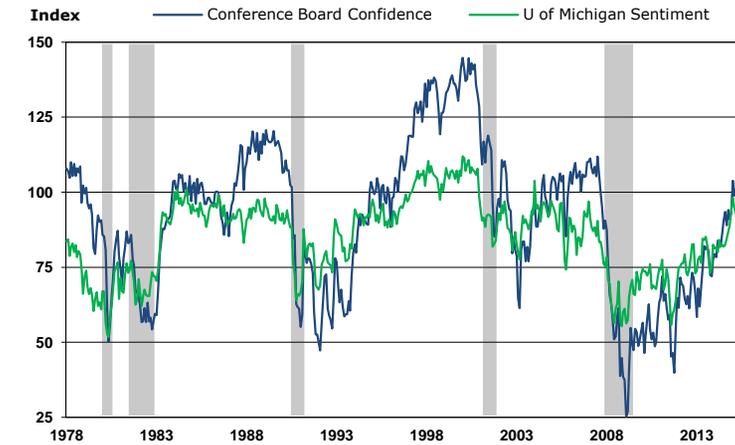
January 1, 1990 to June 1, 2015



* Federal Reserve

Consumer Confidence

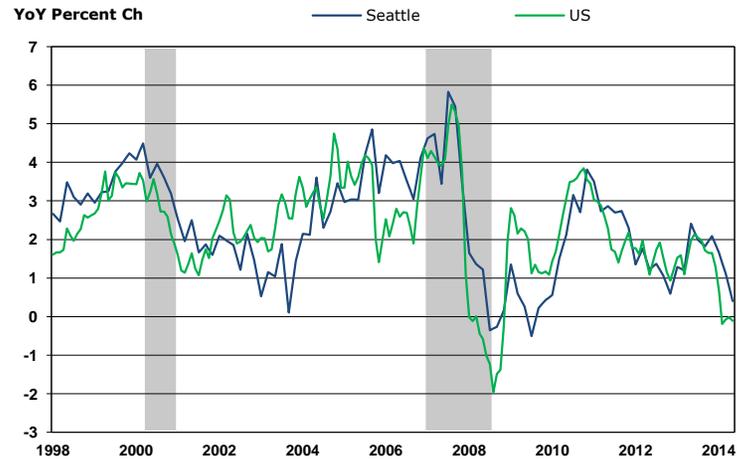
March 1978 to May 2015



* Source: The Conference Board, University of Michigan

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

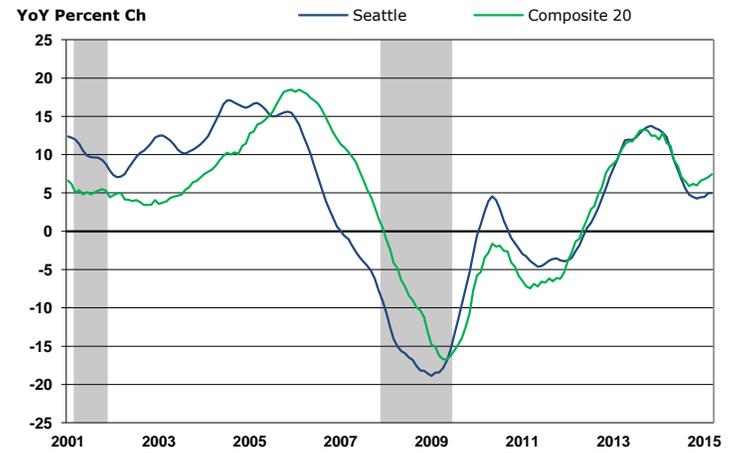
December 1998 to April 2015



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to March 2015, 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.