

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

Washington State Economic and Revenue Forecast

February 2016
Volume XXXIX, No. 1



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

February 2016
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Preface

ERFC forecasting structure and schedule

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

Forecast Procedure

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

Data in this publication are accurate through March 1, 2016.

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Executive Summary

- **The national economy slowed sharply in the fourth quarter, although we believe the economic recovery will continue at a moderate pace.**
- **The labor market continues to improve slowly. Job growth has weakened, but unemployment continues to trend lower and wages are starting to improve.**
- **Oil prices have declined significantly since the November forecast. We expect the price to fall to just \$30 per barrel in the first quarter of this year.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.1% in 2016, down from 2.6% in the previous forecast. After increasing to 2.4% in 2017, we expect growth to moderate as the recovery matures.**
- **The forecasts for Washington employment growth, income growth, and inflation are weaker than in the November forecast.**
- **Annual Washington exports declined for the first time since 2009.**
- **Seattle home prices and Washington housing construction continue to improve.**
- **Declining energy costs are holding down Seattle-area inflation.**
- **Revenue collections since the November 2015 forecast have come in \$39 million over the forecasted amount.**
- **Slower forecasted growth and inflation have lowered expected collections.**
- **The forecast of General Fund-State (GF-S) revenue for the 2015-17 biennium was decreased by \$67 million and the forecast for the 2017-19 biennium was decreased by \$442 million.**
- **The GF-S revenue forecast now extends through the 2019-21 biennium.**

U.S. Economic Forecast

The national economy has slowed but we expect the recovery to continue

The national economy slowed sharply in the fourth quarter of last year. After growing 2.0% (SAAR) in the third quarter of the year, real GDP slowed to just 1.0% (SAAR). Even with the slowdown, however, we believe the recovery will continue at a moderate pace. Job gains have been weak to start the year, although unemployment continues to fall and is approaching pre-recession levels. The housing market continues to improve at a slow pace. Oil prices have dropped sharply, giving a boost to consumers.

Federal fiscal policy is stable although the uncertainty surrounding monetary policy has increased. Global economic growth remains weak, and geopolitical events have added to risks abroad. As the current recovery passed the five-year mark, the duration alone has caused doubts as to whether the recovery will continue.

GDP growth is slightly lower than anticipated in November

U.S. real GDP rose 1.0% (SAAR) in the fourth quarter of 2015 after growing 2.0% (SAAR) in the third quarter. Both the strong U.S. dollar and weak economic growth abroad are weighing heavily on exports which were the largest drag on growth. The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, calls for real GDP growth of 2.1% in 2016, down from 2.6% in the November forecast. Real GDP growth is expected to be 2.4% (SAAR) in 2017, down slightly from the 2.5% (SAAR) growth expected in the previous forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth of 2.4% in 2018 and 2.2% in 2019, unchanged from the November forecast. We then expect growth of 2.2% in 2020 and 2021.

The forecast for employment growth is only minimally changed

The forecast for employment is only minimally changed since the November forecast. Growth in payrolls is expected to be 1.7% this year after growing 2.1% in 2015. We expect employment growth to slow to 1.0% in 2016, down slightly from the 1.2% growth forecasted in November. The forecast then calls for job growth to trend down through 2021, reaching 0.6% as the economy nears full employment. As a result of the steady job growth, we expect the unemployment rate to average 4.8% in 2016, down from 5.3% the year before. We expect the unemployment rate to average 4.8% for the rest of the forecast.

Oil prices remain low

The forecast for oil prices has declined significantly since the November forecast. The refiner's acquisition price of crude oil fell to \$41 per barrel in the fourth quarter of last year. The forecast expects the price to fall further to just \$30 per barrel in the first quarter of this year. In November we expected the fourth quarter to be the trough in prices at \$47 per barrel. The refiner's acquisition price of crude oil in 2016 is expected to average \$33 per barrel, compared to \$51 per barrel in previous forecast. While oil prices are expected to rise starting in 2016, they will remain well below the levels seen earlier in the recovery. By the end of 2021, the refiner's acquisition price is expected to increase to \$49.

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 grown faster than expected in the November forecast but historical estimates were revised slightly lower. Annual Washington exports declined for the first time since 2009. Home prices and housing construction activity

are improving but construction employment growth has slowed in the last year. Seattle area consumer price inflation remains moderate thanks mainly to lower energy costs but shelter costs are rising rapidly.

The forecasts for Washington employment growth, income growth, and inflation are weaker than in the November forecast

Overall, our forecast for Washington State is weaker than we expected in November mainly as a result of the weaker national forecast. Washington employment growth in 2015 was 2.8% which was the highest rate since 2006. Washington employment is expected to grow 2.0% this year, slightly better than the 1.8% growth rate in the November forecast. We expect 1.2% growth in each year from 2017 through 2019, down from 1.5% in 2017, 1.5% in 2018, and 1.3% in 2019. Our initial forecast for the 2020 and 2021 years calls for employment growth rates of 1.2% and 1.1%. Our forecast for personal income growth this year is 4.2%, down from 4.8% in the November forecast. Our forecast for personal income growth from 2017 through 2019 averages 4.9% per year, also down from 5.3% in the November forecast. On an annual basis, we expect personal income to grow 4.6% in 2017, 5.1% in 2018, 5.0% in 2019, 4.8% in 2020, and 4.7% in 2021. We expect total housing units authorized by building permits to decline 4.1% this year to 38,300 units. We expect growth of 9.4% to 41,900 units in 2017, 3.9% to 43,600 units in 2018, 0.4% to 43,700 units in 2019, 1.5% to 44,400 units in 2020, and no change in 2021. Near-term inflation in Seattle is much lower than expected in November as oil prices continued to decline. We now expect the all-items Seattle CPI to rise only 1.6% this year, compared to 2.1% in the November forecast. We expect all-items Seattle area inflation rates of 2.1% in 2017, 2.3% in 2018, and 2.2% in 2019 and 2020, and 2.1% in 2021.

Revenue Forecast

Forecasted slower personal income growth and lower construction and inflation reduced expected revenue

While revenue collections since the November 2015 forecast have been slightly higher than expected, the outlook for the rest of the biennium and the next has dimmed somewhat. The February economic forecast was weaker in three areas that affect revenue growth: personal income, housing permits, and inflation. These factors have reduced forecasted revenue. The reduction is small for the current biennium but is larger for the next. Still, that biennium's change is relatively small, amounting to a reduction of just over one percent. This forecast period also saw an extension of the forecast through the 2019-21 biennium.

GF-S forecast change by biennium (millions):

15-17: -\$67
17-19: -\$442

Since the November forecast, revenue sources that are tracked monthly came in \$39.0 million higher than forecasted. Changes to the economic forecast, however, resulted in a \$106.2 million decrease to projected collections for the rest of the biennium. The total of these components was a \$67.2 million decrease in projected revenue for the current 2015-17 biennium. The forecast for the 2017-19 biennium has been decreased by \$442.2 million. GF-S revenue is now forecasted to total

\$37,137.3 million in the 2015-17 biennium and \$40,125.3 million in the 2017-19 biennium. Forecasted GF-S revenue for the 2019-21 biennium is \$43,441.0 million.



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

- **The national economy slowed sharply in the fourth quarter, although we believe the economic recovery will continue at a moderate pace.**
- **While a national recession is unlikely, the risks have increased in recent months.**
- **The labor market continues to improve slowly. Job growth has weakened, but unemployment continues to trend lower and wages are starting to improve.**
- **The manufacturing sector is now declining and the housing recovery has slowed.**
- **Consumer and business confidence is no longer improving.**
- **Weak foreign GDP growth and an appreciating U.S. dollar have hurt U.S. exports.**
- **Oil prices have declined significantly since the November forecast. We expect the price to fall to just \$30 per barrel in the first quarter of this year.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.1% in 2016, down from 2.6% in the previous forecast. After increasing to 2.4% in 2017, 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.**

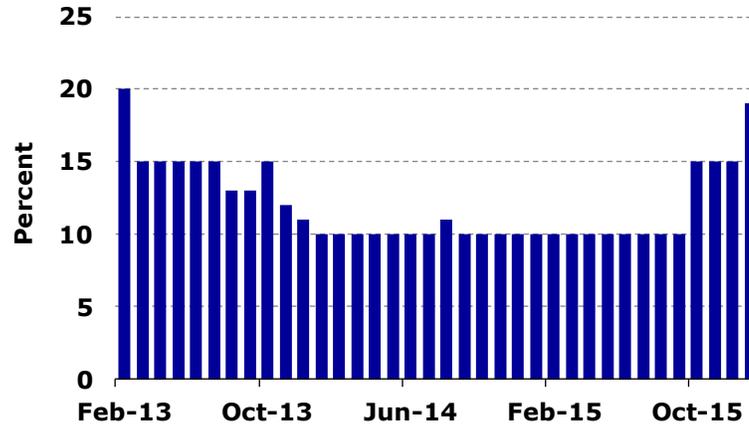
Current Conditions

The national economy has slowed but we expect the recovery to continue

The national economy slowed sharply in the fourth quarter of last year. After growing 2.0% (SAAR) in the third quarter of the year, real GDP slowed to just 1.0% (SAAR). Even with the slowdown, however, we believe the recovery will continue at a moderate pace. Job gains have been weak to start the year, although unemployment continues to fall and is approaching pre-recession levels. The housing market continues to improve at a slow pace. Oil prices have dropped sharply, giving a boost to consumers. Federal fiscal policy is stable although the uncertainty surrounding monetary policy has increased. Global economic growth remains weak, and geopolitical events have added to risks abroad. As the current recovery passed the five-year mark, the duration alone has caused doubts as to whether the recovery will continue. According a survey from Bloomberg, economists don't see another recession happening in the next year as

probable but the likelihood has increased in recent months (see Figure 1.1).

Figure 1.1: Risk of Recession



Source: Bloomberg surveys; data through January 2016

U.S. real GDP rose 1.0% (SAAR) in the fourth quarter

U.S. real GDP rose 1.0% (SAAR) in the fourth quarter of 2015 after growing 2.0% (SAAR) in the third quarter. Both the strong U.S. dollar and weak economic growth abroad are weighing heavily on exports. Exports were the largest drag on growth, declining at a 2.7% rate and reducing GDP growth by 0.49 percentage points. Businesses cut back on investment in the fourth quarter. Nonresidential fixed investment declined at a 1.9% rate, reducing GDP by 0.24 points. Inventories brought down growth by 0.14 percentage points. Government spending was mostly neutral, with a drop in state and local spending offset by an increase in federal spending, mostly on the defense side. Consumer spending accounted for the largest positive contribution to growth in the fourth quarter, increasing 2.0% (SAAR) and adding 1.4 percentage points to overall GDP growth. Spending growth was positive for both goods and services, adding 0.4 and 1.0 points to growth respectively. Residential investment grew 8.0% (SAAR) and added 0.26 points to GDP. For all of 2015, the economy grew 2.4%, the same growth as 2014 and stronger than the 2.1% average of the current recovery.

Spending growth has picked up recently

Rising personal income is essential for consumer spending to continue improving. Personal income growth improved to 6.3% (SAAR) in January after growing 3.6% (SAAR) the month before. Personal income is now up 4.3% from a year ago. Personal income growth was led by rental income and interest income, which increased 9.3% and 9.1% (SAAR) in January. Wages and salaries grew 7.5% (SAAR) led by 8.1% (SAAR) growth in the private sector. Wages and salaries are now up 4.5% year over year. Proprietors' income slightly exceeded overall growth at 6.7% (SAAR). Growth in transfer payments was 4.8% (SAAR)

due to drops in Social Security and veterans' benefits. Dividend income was weak at just 2.9% (SAAR) growth. Real disposable personal income growth (income after taxes and adjusted for inflation) in January was 4.4% (SAAR). Real disposable income is now up 2.8% over the year. Even with real income growth weakening in recent months, spending growth has picked up. Consumption increased 4.9% (SAAR) in January following a 2.0% (SAAR) increase in December. Spending on goods was up 8.2% (SAAR) while spending on services was up 3.4% (SAAR). Some of the increase in spending was due to stabilization in gas prices. The personal saving rate remained at 5.2% in January. Retail sales growth continued in January at 0.2% and sales are now up 3.4% over the year. Nonstore retailers again led overall growth, increasing 1.6%.

Employment growth has slowed

Employment growth was disappointing to start the year, with just 151,000 jobs added in January. The private sector added 158,000 jobs while government payrolls shrank by 7,000. Manufacturing was surprisingly strong in January, adding 29,000 jobs despite reports of weakness in the industry. Job growth in construction slowed but remained positive at 18,000 net new jobs. Retail trade led all sectors with a 58,000 job gain in January following a surprise 800 job drop in December. Health care employment increased by 44,000. Professional and business services gained just 9,000 new jobs compared to a 60,000 job gain in December. Temporary help services was responsible for the slowdown, erasing all of December's 25,000 employment increase with a 25,000 job decline in January. Energy-related industries continued to cut back with a 7,000 job decline in natural resources and mining. Transportation and warehousing shed 20,300 jobs in January and other services lost 5,000 jobs.

The labor market continues to improve

The ongoing labor market recovery is absorbing unemployed workers and bringing some new entrants into the labor force. The unemployment rate has fallen from 5.7% in January 2015 to 4.9% in January 2016 (see Figure 1.2). The unemployment rate is now equal to the average rate of the decade preceding the 2007-09 recession. Over the past year the labor force increased by 1.3 million people although the labor force participation rate has continued to slowly trend downward. Labor force participation for January was 62.7%, up 0.1 percentage points from December but down from 62.9% a year ago. Previously discouraged workers are re-entering the labor force now that they believe they have a chance at employment. Joblessness, while still elevated at 7.8 million people, has dropped by 1.1 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 11.3% to 9.9% since last year.

Figure 1.2: Unemployment Rate



Source: U.S. Bureau of Labor Statistics; data through January 2016

Consumer attitudes have deteriorated

Consumer attitudes have deteriorated since the beginning of last year. Two of the most prominent measures of confidence are both significantly lower than in January 2015. The University of Michigan Consumer Sentiment Index fell another 0.3 points to 91.7 in February and is now 6.4 points below the January 2015 reading. The current conditions component has held steady in recent months, but consumers remain skeptical about 2016. Half of respondents said they expect gas prices to increase and only a third expect their income to improve over the next year. The Conference Board Consumer Confidence measure fell 5.6 points in February and is now 6.6 points below January 2015. This measure also reflected relatively strong feelings about current conditions and apprehension regarding the future. People indicated they can generally find work, but it is not always the work they really want. Plans to purchase a home fell as did vacation plans. Plans to buy cars improved slightly as a result of low gas prices.

Small business confidence continues to worsen

Small business confidence has continued to trend down over the past year. After reaching a post-recession high of 100.4 in December 2014, the National Federation of Independent Business (NFIB) small business optimism index trended down. In January the index declined 1.3 points to 93.9. This is the lowest reading in business confidence since the recovery began. The level of the index is still consistent with a slowly expanding economy, but it is nearing recessionary territory. Lower expectations for business conditions and sales volumes were the primary causes of the decline in January. The survey continues to indicate that small businesses are having a hard time finding qualified labor. At the same time, however, businesses report that the cost of labor is not a significant issue. Rising real wages should help the supply of qualified labor going forward. Government regulation and taxes continue to be cited as the most important problem for small businesses.

*Oil prices
remain low*

Oil prices have fallen sharply since reaching a temporary high in October of last year. With weak global demand and strong supply, oil prices dropped by almost \$20 per barrel since the end of summer. West Texas Intermediate (WTI) was \$50 per barrel in October while the Brent price was \$51 per barrel. Prices in the last week of February were at \$31 per barrel and \$34 per barrel for Brent and WTI respectively. Despite the drop in prices, U.S. crude production remains near historic highs. In December 2015, U.S. field production of crude oil was 9.430 million barrels per day, just below the record set in 1970 of 9.637 million barrels per day. 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. An agreement between the U.S. and Iran regarding Iran's nuclear capabilities has the potential to boost Iranian oil production by up to another 700,000 barrels per day, putting further downward pressure on prices.

*Inflation
remains low*

Headline inflation has been very low the past two years as energy prices have fallen and remained low. In January the Consumer Price Index (CPI) was unchanged over the month, although the year-over-year change in the Consumer Price Index (CPI) increased to 1.4%. Energy prices fell another 2.8% and remain 6.5% lower than a year ago. Gasoline prices dropped 4.8% in January and remain 7.3% lower than last year. Food price inflation remains tame, unchanged over the month and up 0.9% over the year. Shelter costs increased 0.3% in January and are now up 3.2% year over year. Core inflation, which excludes food and energy, took a surprise jump in January, increasing 0.3%. This was the largest increase in more than four years. On an annual basis, core inflation remains modest at 2.2%.

*New
construction
has stalled*

New home construction has stalled and remains at levels normally only seen in recession. Housing starts declined in January to 1.099 million units (SAAR) from 1.143 million units (SAAR) in December. Starts are now up just 1.8% since last year. Total housing starts for calendar year 2015 were 1.106 million units, up 10.5% from 2014. The decline in January came from both the single-family and the multi-family segments. Housing permits show a slightly better trend recently, and hopefully point to a modest increase in new construction going forward. Total permits were unchanged in January although they are up 13.7% from a year ago. Single-family permits are up 10.8% while multi-family permits are up 18.4%. The stall in the housing market has caused the rise in homebuilder confidence to pause as well. The National Association of Homebuilders (NAHB) housing market index, which measures confidence of homebuilders, fell 3 points to 58 in February and down from a

post-recession high of 65 in October (readings above 50 indicate a positive view of conditions). New home sales continue to trend downward. The number of new home sales dropped 9.2% over-the-month in January to 494,000 units (SAAR). New home sales are now 5.2% lower than a year ago.

Home values are once again increasing

The pause in home price appreciation over the summer has ended and values are once again increasing. The seasonally adjusted Case-Shiller 20-city home price index increased 1.0% over-the-month in December, the fourth consecutive increase. Home prices are now 5.8% higher than a year ago, the highest annual increase in over a year. Home prices appear to be settling into a consistent growth pattern, averaging 5.1% annual growth over the past 18 months. Prices have increased 30.9% since the trough of the recession, but remain 10.8% below their previous peak. Rising prices encourage new construction and enable previously underwater homeowners to sell their homes and trade up for more expensive houses. Housing remains relatively affordable by historic standards, although affordability is down sharply from the past two years. Stronger wage growth and easier access to credit will help growth going forward.

The manufacturing sector is now declining

After consistently weak growth since the end of 2014, the manufacturing sector is now declining. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector contracted in February for the fourth consecutive month. The ISM index improved to 49.5 from 48.2 in January, but still indicates contraction in the manufacturing sector (index levels above 50 indicate expansion). Details from the report were generally positive in comparison to the month before, but remain weak. New orders were unchanged at 51.5 and production increased 2.6 points to 52.8. The employment component increased 2.6 points as well, but remains in negative territory at 48.5. The latest G-17 report from the Federal Reserve, which measures manufacturing output, indicated an increase in January of 0.5% after declining in each of the past two months. Both durable and nondurable goods manufacturing had increases of about 0.5%. Manufacturing output is now 1.2% above last year. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 3.9% in January, although this was after a 3.7% decline the month before. New orders remain 4.4% below year-ago levels.

U.S. exports have been adversely affected by weak global growth and a strong dollar

Along with weakness in economic growth abroad the strong U.S. dollar has caused U.S. exports to fall. Global growth remains sluggish and many of our largest trading partners are hovering in recessionary territory. The dollar has continued to strengthen, making U.S. exports more expensive to the rest of the world. Measured against major U.S. trading partners, the dollar is the strongest it has been in a decade (see Figure 1.3). In February, the dollar weakened slightly by 1.0% but remains 7.6% stronger than a year ago. The appreciation of the dollar is due to the U.S.

economy leading other major economies in growth and a flight to safety due to ongoing global uncertainty. U.S. exports have declined in each of the past four quarters. In the fourth quarter of 2015, exports were down 10.3% year over year. The total value of U.S. exports is the lowest since the recovery began. Declines were present in almost all sectors, with each of the 20 largest sectors posting annual declines.

Figure 1.3: Broad Real U.S. Dollar Index



Source: U.S. Federal Reserve; data through February 2016

Forecast

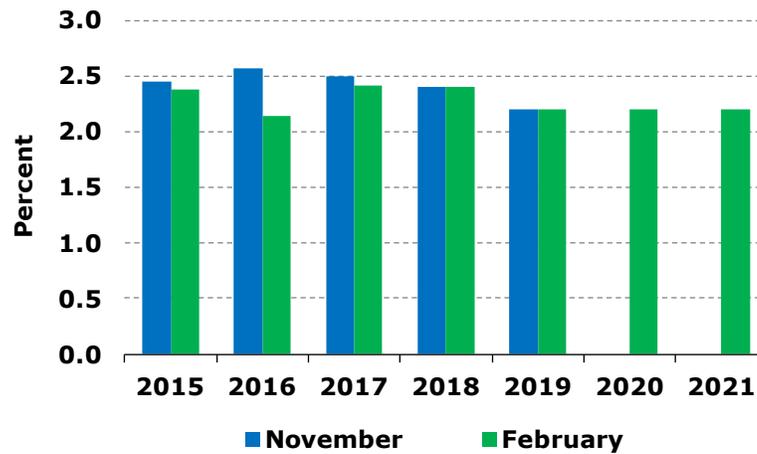
Our forecast is based on the February Blue Chip Consensus forecast

The economic forecast was based on a modified version of Global Insight's February 2016 Control forecast for the U.S. economy. Consistent with our standard practice, the U.S. real GDP forecast was adjusted to match the February Blue Chip Consensus GDP forecasts for 2016 and 2017. This is the first forecast to extend through 2021. We incorporated the latest long-term Blue Chip GDP forecast for 2018 through 2021. 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 economic outlook has weakened somewhat since the November forecast. The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, calls for real GDP growth of 2.1% in 2016, down from 2.6% in the November forecast. Real GDP growth is expected to be 2.4% (SAAR) in 2017, down slightly from the 2.5% (SAAR) growth expected in the previous forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth of 2.4% in 2018 and 2.2% in 2019, unchanged from the November forecast. We then expect growth of 2.2% in 2020 and 2021 (see Figure 1.5)

Figure 1.4: U.S. Real GDP Growth, SAAR



Source: U.S. Bureau of Economic Analysis, ERFC February 2016 forecast; historical data through 2015

This recovery will be the longest on record

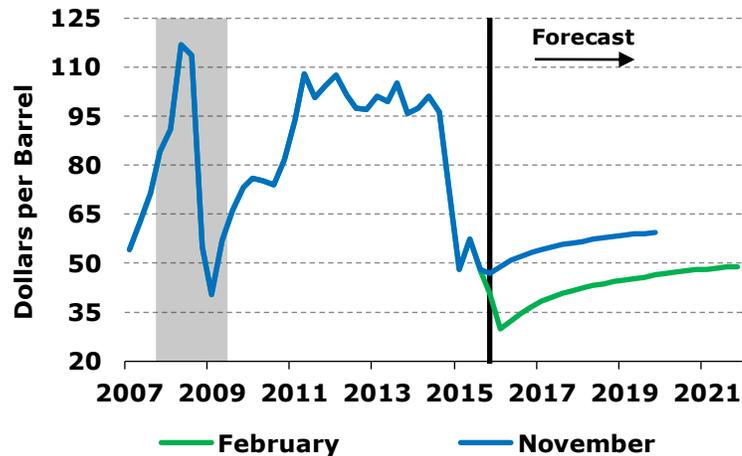
The positive GDP growth throughout the forecast will make the recovery from the 2007-09 recession the longest on record. From the second quarter of 2009 through the end of our forecast in 2021, the recovery is forecasted to be at least 150 months. Prior to this, the longest recovery was from the 1990-91 recession and lasted 120 months. The primary reason for the exceptional length of the current recovery was the depth of the recession. Despite positive GDP growth, the labor market remained weak for an extended period. It took 58 months of recovery just to reach the previous peak in employment. When comparing recoveries in the duration since reaching the previous employment peak, this expansion appears more in line with other long post war expansionary periods. The two longest post war expansions had 96 and 95 months of additional employment growth after reaching the previous peak. We expect growth to continue throughout the end of the forecast in 2021, which would result in 92 months of employment gains after reaching the previous peak.

Oil prices remain low

The forecast for oil prices has declined significantly since the November forecast (see Figure 1.6). The refiner's acquisition price of crude oil fell to \$41 per barrel in the fourth quarter of last year. The forecast expects the price to fall further to just \$30 per barrel in the first quarter of this year. In November we expected the fourth quarter to be the trough in prices at \$47 per barrel. The refiner's acquisition price of crude oil in 2016 is expected to average \$33 per barrel, compared to \$51 per barrel in the previous forecast. While oil prices are expected to rise starting in 2016, they will remain well below the levels seen earlier in the recovery. By the end of 2021, the refiner's acquisition price is expected to increase to \$49. Low oil prices continue to affect U.S. oil production, although output is no

longer falling. Oil production is up 117,000 barrels per day since last year. U.S. oil production still remains 376,000 barrels per day below its previous peak. Weak economic growth in China and Europe has lowered the demand for oil. The strong dollar has kept downward pressure on oil prices recently. With low oil prices, inflation (as measured by the implicit price deflator) is forecasted to be just 0.3% in 2015. We expect low inflation throughout the forecast ranging from 0.7% to 1.8%.

Figure 1.5: Average Price of Crude Oil



Source: DOE, February 2016 forecast; historical data through 2015Q4

Spending growth has been revised slightly lower

Real consumer spending was weaker than expected in the fourth quarter of 2015 growing just 2.2% (SAAR) compared to 3.1% (SAAR) expected in the previous forecast. We now expect real consumer spending to grow 2.7% this year compared to 2.9% in the November forecast. Low energy prices will continue to help consumers' purchasing power, although the impact so far has been low. Consumers remain more optimistic than earlier in the recovery. There are indications that wage growth is increasing. Unemployment continues to fall and more part-time workers are finding full-time jobs. We expect real spending growth to continue to outpace overall real GDP growth next year. The forecast calls for real consumption growth to slow from the 2.5% in 2017 to 2.3% in 2019, unchanged from the November forecast. We expect growth in real consumption to continue to slow as the recovery matures and gradually reach 2.2% in 2021. We expect consumer spending to contribute 1.8 percentage points to real GDP growth on average for each year of the forecast through 2021.

Personal income growth will remain solid

Real disposable personal income growth accelerated to 3.5% in 2015 from 2.7% in 2014. Lower energy prices will keep inflation low this year, providing a boost to real incomes. We expect growth to moderate but remain strong at 3.0% this year. Growth is expected to remain solid through 2019, averaging 2.9% per

year. We then expect growth to slow in 2020 and 2021 to 2.3% and 2.2%. Nominal disposable income is expected to grow 3.7% this year, led by strong growth in private sector wages and salaries of 4.9%. Total wages and salaries are expected to grow 4.5% this year after increasing 4.8% in 2015. The forecast then calls for growth in wages and salaries to moderate, reaching 4.0% in 2020 and 2021. Growth in government transfer payments is expected to increase throughout the forecast. We expect growth of 4.4% this year, gradually increasing to 5.0% in 2019 through 2021 as demographics shift to an older population. Income will also be boosted in the latter part of the forecast by interest income as interest rates rise and return to pre-recession rates.

The outlook for employment is only minimally changed

The forecast for employment is only minimally changed since the November forecast. Growth in payrolls is expected to be 1.7% this year after growing 2.1% in 2015. We expect employment growth to slow to 1.0% in 2016, down slightly from the 1.2% growth forecasted in November. The forecast then calls for job growth to trend down through 2021, reaching 0.6% as the economy nears full employment. As a result of the steady job growth, we expect the unemployment rate to average 4.8% in 2016, down from 5.3% the year before. We expect the unemployment rate to average 4.8% 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. We expect the decline in the labor force participation rate to end, reaching a trough of 61.2% in 2015.

Figure 1.6: Labor Force Participation Rate



Source: U.S. Bureau of Labor Statistics, ERFC February 2016 forecast; historical data through 2015Q4

The labor force participation rate will grow as the economy reaches full employment reaching a peak of 61.9% in 2019.

Going forward, the participation will resume its long term secular decline, and trend down for the remainder of the forecast (see Figure 1.6).

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 the first quarter of 2020. Federal government employment will continue to decline throughout the forecast. This will be more than offset by modest gains in state and local government employment, keeping total government employment growth positive. The forecast calls for total government employment to increase 0.3% this year after growing 0.6% in 2016. Growth in government payrolls is expected to accelerate through 2020, reaching 1.4%. The forecast calls for no growth in 2021. We expect private sector job growth of 2.0% this year, after growing 2.4% in 2015. The forecast calls for private sector job growth to gradually slow throughout the remainder of the forecast to just 0.7% in 2020 and 2021.

Business investment will be slower this year

Growth in business investment is expected to drop to just 2.6% this year, the lowest rate since the recovery began. The drop in oil prices, which is good for overall growth, lowers the incentive for additional investment by energy companies. The strong U.S. dollar has resulted in a drop in exports and brought the capital-intensive manufacturing sector to a standstill. The weak economic outlook abroad has also given businesses pause. On the plus side, vacancy rates for office buildings fell to 16.3% in the fourth quarter, from 16.5% for the third quarter. In spite of this, we expect real nonresidential construction to contract this year by 1.0%, after falling 1.5% in 2015. The slowdown is due to a decline in mining and petroleum structures caused by the recent plunge in oil prices. The forecast calls for growth to be positive in 2017 at 1.4% as the drag of low oil prices diminishes. The forecast then calls for growth to average 3.8% per year through 2021. 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 4.0% this year. The forecast then calls for growth to reach 6.3% in 2018 before averaging 4.1% through the remainder of the forecast. We expect overall real nonresidential fixed investment to grow 2.6% this year and accelerate to 4.1% in

2017 and 5.2% in 2018. We then expect growth to average 4.1% through 2021.

The housing recovery will continue

Despite stalling in the second half of the year, the housing recovery experienced its best full year of the recovery in 2015. Housing starts totaled 1.107 million units, the highest since 2007. Most of the barriers facing the housing sector have receded. Continued improvement in the housing market remains dependent on job growth and access to financing. There is still a considerable amount of pent-up demand for new housing. Household formation had been delayed by the depth of the recession and initial slow recovery. The forecast calls for growth in housing starts of 10.3% for this year, reaching 1.220 million units. The forecast expects the robust growth in housing starts to continue in 2017 at 16.9%. Growth in single-family starts is expected to be 15.8% this year, up from 10.3% in 2015. Growth will accelerate to 20.8% in 2017 before moderating throughout the forecast. The forecast calls for this year to be the end of exceptional growth in the multi-family housing segment after growing at double-digit rates in each of the past five years. We expect just 0.2% growth this year before averaging 6.2% through 2021. The forecast calls for total housing starts to continue to grow throughout the forecast and reach 1.629 million in 2021, still 21% below the peak in 2005.

The housing market will continue to improve

The housing market will continue to improve, particularly while interest rates remain low and inventories are lean. The Federal Reserve has worked to keep mortgage rates low and stimulate the housing market throughout the recovery. This support is ending as the Federal Reserve moves towards normalizing monetary policy. Mortgage rates for a conventional 30-year fixed rate mortgage are expected to rise gradually from 3.9% in 2015 to 5.6% in 2019 through 2021. Population remains on an upward trend and employment continues to increase at a solid pace. The number of new housing units remains low by historical standards and we expect rising demand as household formation returns to more typical levels.

Weak foreign demand has weighed down export growth

Economic growth of major foreign economies remains weak. Canada experienced a recession in the first half of 2015. Much of the recent weakness has been attributed to low oil and other commodity prices. The recovery in the Eurozone remains weak with real GDP growth increasing just 0.3% in the fourth quarter compared to the previous quarter. The latest Blue Chip forecast calls for 1.7% growth this year for the Eurozone followed by 1.8% growth in 2017. China, which is the largest U.S. export market outside of North America, continues to slow. Export demand for Chinese goods has weakened and the Chinese have had difficulty transitioning to a more domestic consumer driven economy. Chinese GDP growth in 2015 was 6.9% (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

6.4% (SAAR) this year and 6.3% (SAAR) in 2017. Japan continues to experience weak growth. Japan's economy contracted 1.4% (SAAR) in the fourth quarter of last year due to weak consumer spending. The most recent Blue Chip forecast expects slow growth in the near term of 1.0% this year followed by 0.7% in 2017.

Export growth will remain positive, but will be outweighed by import growth

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 the weakest since the recession. After growing 2.0% in 2015, the forecast calls for GDP growth in U.S. trading partners to grow 2.1% this year. The forecast then calls for GDP growth in U.S. trading partners to grow 2.7% in 2017 before averaging 3.0% growth through 2021. We expect real U.S. export growth of just 1.8% this year due both to weak economic growth abroad and a strong U.S. dollar. The forecast calls for real export growth to increase and average 3.5% through 2021. 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 0.3 percentage points this year. Beyond 2016, net exports are expected to reduce GDP growth by 0.3 percentage points on average through 2019.

Fiscal policy uncertainty remains low

Uncertainty surrounding fiscal policy remains low without any real push for dramatic deficit reduction or spending in the near term. After peaking at \$1,329 billion in 2010, the federal budget deficit has shrunk each year. The forecast calls for 2015 to be the trough in the deficit at \$588 billion. We believe the sharp cuts in real defense spending that started in 2011 ended with an \$8.1 billion reduction in 2015. The forecast calls for an \$18.7 billion increase in 2016 to reach \$700 billion and remain there in 2017. We then expect minimal declines in real defense spending through 2021. Real nondefense purchases are expected to grow this year before declining slowly through 2021. Combined, federal government spending will peak in 2016 then decline slowly throughout the forecast. State and local governments, having worked through the majority of their budget difficulties, will more than offset the decline at the federal level. The forecast assumes 2014 was the trough in total real government purchases. We expect total real government spending to grow 2.1% this year before falling to 0.5% in 2017. We then expect growth to average 0.4% per year from 2018 through 2021.

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. As expected in November, the Fed held the Federal Funds rate unchanged in January after increasing it by 0.25 percentage points in December. The forecast calls for the Federal Reserve to increase the federal funds rate twice this year, down from the four increases expected in the November forecast. Recent data point to a possible weakness in the labor market and 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, it is still anticipated that the Fed will be comfortable raising rates. We expect rates to rise gradually before leveling off in 2019.

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 unchanged since the November forecast. The recovery is forecasted to be the longest on record, creating some angst. The outlook for Chinese economic growth continues to be revised down and other U.S. trading partners continue to have weak or negative growth. The level of uncertainty in the baseline remains elevated, and downside risks once again outweigh upside risks.

Downside Risks

- Chinese economy experiences a “hard landing” (annual growth under 5%); growth is weaker in emerging market economies
- Weaker than expected employment growth
- Real wage growth stagnates, leading to slower consumer spending
- Slower household formation
- Breakdown in Greek debt, budget negotiations leads to default and exit from Eurozone
- Great Britain exiting the European Union
- Increasing geopolitical tensions negatively impact consumer confidence
- Weak global growth persists, further impacting exports

Upside Risks

- The housing sector improves faster than anticipated
- Oil prices decline further than expected
- Labor productivity returns to higher levels seen in 1995-2005
- Employment growth expands faster than in the baseline
- China successfully transitions to a more consumption based economy
- European and emerging market economies grow faster than expected

Table 1.1
U.S. Economic Forecast Summary
 Forecast 2016 to 2021

Fiscal Years

	2014	2015	2016	2017	2018	2019	2020	2021
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,750.6	16,182.8	16,506.8	16,897.3	17,297.0	17,696.5	18,085.3	18,478.8
% Ch	2.1	2.7	2.0	2.4	2.4	2.3	2.2	2.2
Real Consumption	10,710.1	11,053.0	11,363.0	11,661.3	11,945.3	12,225.2	12,506.2	12,788.3
% Ch	2.1	3.2	2.8	2.6	2.4	2.3	2.3	2.3
Real Nonresidential Fixed Investment	2,081.3	2,188.9	2,232.9	2,312.4	2,417.5	2,546.4	2,647.6	2,749.2
% Ch	4.7	5.2	2.0	3.6	4.5	5.3	4.0	3.8
Real Residential Fixed Investment	479.7	506.3	549.3	601.3	659.6	676.6	690.9	703.8
% Ch	3.9	5.5	8.5	9.5	9.7	2.6	2.1	1.9
Real Personal Income	13,241.5	13,751.7	14,264.8	14,632.0	15,039.8	15,450.1	15,852.9	16,251.8
% Ch	0.9	3.9	3.7	2.6	2.8	2.7	2.6	2.5
Real Per Capita Income (\$/Person)	41,601	42,886	44,138	44,909	45,791	46,666	47,506	48,324
% Ch	0.2	3.1	2.9	1.7	2.0	1.9	1.8	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.092	1.098	1.110	1.130	1.151	1.171	1.192
% Ch	1.4	0.8	0.5	1.1	1.8	1.8	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.350	2.367	2.378	2.411	2.466	2.522	2.577	2.631
% Ch	1.6	0.7	0.5	1.4	2.3	2.3	2.2	2.1
Employment Cost Index (Dec. 2005=1.0)	1.193	1.221	1.247	1.274	1.308	1.346	1.385	1.423
% Ch	1.9	2.3	2.1	2.2	2.7	2.9	2.9	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	16,984.9	17,675.3	18,239.4	18,971.1	19,802.4	20,641.0	21,490.1	22,356.4
% Ch	3.7	4.1	3.2	4.0	4.4	4.2	4.1	4.0
Personal Income	14,350.8	15,021.8	15,664.9	16,249.3	17,003.1	17,787.5	18,570.9	19,366.1
% Ch	2.3	4.7	4.3	3.7	4.6	4.6	4.4	4.3
Employment (Millions)								
U.S. Civilian Labor Force	155.5	156.6	158.0	160.6	162.5	164.2	165.8	167.0
Total U.S. Employment	145.0	147.7	150.1	152.8	154.7	156.4	157.8	158.8
Unemployment Rate (%)	6.77	5.70	4.96	4.79	4.74	4.72	4.78	4.84
Nonfarm Payroll Employment	137.56	140.43	143.16	145.10	146.38	147.67	148.81	149.77
% Ch	1.7	2.1	1.9	1.4	0.9	0.9	0.8	0.6
Manufacturing	12.09	12.28	12.34	12.41	12.50	12.61	12.66	12.70
% Ch	0.9	1.6	0.5	0.6	0.7	0.8	0.4	0.3
Durable Manufacturing	7.60	7.74	7.75	7.80	7.91	8.01	8.05	8.09
% Ch	1.1	1.9	0.1	0.6	1.4	1.3	0.6	0.5
Nondurable Manufacturing	4.49	4.54	4.59	4.62	4.60	4.60	4.61	4.60
% Ch	0.5	1.0	1.2	0.6	-0.5	0.0	0.2	-0.1
Construction	5.99	6.31	6.58	6.93	7.24	7.52	7.75	7.94
% Ch	4.4	5.4	4.3	5.3	4.5	3.9	3.0	2.4
Service-Providing	118.61	120.97	123.47	125.05	125.91	126.79	127.64	128.35
% Ch	1.7	2.0	2.1	1.3	0.7	0.7	0.7	0.6
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	101.2	69.2	38.2	39.5	43.8	46.2	47.9	49.1
Personal Saving/Disposable Income (%)	4.8	4.9	5.4	5.6	6.4	6.9	7.1	7.0
Auto Sales (Millions)	7.6	7.6	7.5	7.7	7.8	7.7	7.6	7.7
% Ch	2.2	0.7	-1.6	1.9	2.0	-1.2	-1.1	0.3
Housing Starts (Millions)	0.953	1.055	1.162	1.327	1.486	1.547	1.611	1.628
% Ch	8.7	10.7	10.1	14.2	12.0	4.1	4.1	1.1
Federal Budget Surplus (Billions)	-624.1	-607.6	-613.3	-663.4	-755.9	-852.7	-868.3	-840.8
Net Exports (Billions)	-509.3	-532.7	-499.1	-447.6	-527.4	-573.1	-588.3	-596.9
3-Month Treasury Bill Rate (%)	0.04	0.02	0.24	0.88	1.86	2.69	2.79	2.78
10-Year Treasury Note Yield (%)	2.71	2.23	2.18	2.42	2.73	3.48	3.55	3.52
Bond Index of 20 G.O. Munis. (%)	4.54	3.83	3.70	4.29	4.52	5.06	5.14	5.13
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.94	4.23	4.58	5.45	5.61	5.59

Table 1.2
Forecast Analysis
 Comparison of Forecasts for 2015-17

U.S.	Average Annual Rate of Growth (Percent) 2015:2-2017:2		Average Rate (Percent) 2015:3 to 2017:2	
	Real GDP	Implicit Price Deflator	3 Month T-Bill Rate	Mortgage Rate
2012				
September	2.9	1.9	2.17	5.92
November	2.9	1.6	2.56	6.08
2013				
March	2.9	1.6	1.71	5.68
June	2.8	1.5	1.98	5.63
September	2.9	1.5	2.13	5.66
November	2.7	1.5	2.12	5.67
2014				
February	2.7	1.3	2.13	5.75
June	2.8	1.4	2.13	5.78
September	2.8	1.5	1.96	5.59
November	2.8	1.6	1.72	5.48
2015				
February	2.8	1.7	1.69	5.19
June	2.8	1.7	1.29	4.73
September	2.7	1.5	0.84	4.38
November	2.5	1.6	0.82	4.35
2016				
February	2.2	1.1	0.56	4.09

Table 1.3

Forecast Analysis

Comparison of Forecasts for 2017-19

U.S.	Average Annual Rate of Growth (Percent) 2017:2-2019:2		Average Rate (Percent) 2017:3 to 2019:2	
	Real GDP	Implicit Price Deflator	3 Month T-Bill Rate	Mortgage Rate
2014				
February	2.6	1.3	3.72	6.57
June	2.6	1.5	3.73	6.63
September	2.6	1.6	3.51	6.15
November	2.5	1.9	3.53	6.14
2015				
February	2.5	1.8	3.53	5.71
June	2.5	1.8	3.48	5.75
September	2.5	1.8	2.66	5.16
November	2.3	1.8	2.67	5.23
2016				
February	2.3	1.8	2.28	5.02

Table 1.4
Forecast Comparison
Forecast 2016 to 2019

Fiscal Years

	2013	2014	2015	2016	2017	2018	2019
U.S.							
Real GDP							
February Baseline	15430.6	15750.6	16182.8	16506.8	16897.3	17297.0	17696.5
% Ch	1.4	2.1	2.7	2.0	2.4	2.4	2.3
November Baseline	15430.6	15750.6	16182.8	16557.7	16986.8	17394.7	17800.7
% Ch	1.4	2.1	2.7	2.3	2.6	2.4	2.3
Implicit Price Deflator							
February Baseline	1.069	1.084	1.092	1.098	1.110	1.130	1.151
% Ch	1.5	1.4	0.8	0.5	1.1	1.8	1.8
November Baseline	1.069	1.084	1.092	1.101	1.120	1.141	1.161
% Ch	1.5	1.4	0.8	0.8	1.7	1.9	1.8
Unemployment Rate							
February Baseline	7.78	6.77	5.70	4.96	4.79	4.74	4.72
November Baseline	7.77	6.76	5.68	5.02	4.90	4.89	4.95
Mortgage Rate							
February Baseline	3.53	4.33	3.92	3.94	4.23	4.58	5.45
November Baseline	3.53	4.33	3.92	4.12	4.58	4.87	5.59
3 Month T-Bill Rate							
February Baseline	0.08	0.04	0.02	0.24	0.88	1.86	2.69
November Baseline	0.08	0.04	0.02	0.33	1.31	2.33	3.01



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The forecasts for Washington employment growth, income growth, and inflation are weaker than in the November forecast.**
- **Washington employment growth has been stronger than expected in November but historical estimates were revised lower.**
- **Annual Washington exports declined for the first time since 2009.**
- **Washington car and truck sales reached yet another post-recession high.**
- **Seattle home prices and Washington housing construction continue to improve.**
- **Declining energy costs are holding down Seattle-area inflation.**
- **As in November, 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 grown faster than expected in the November forecast but historical estimates were revised slightly lower. Annual Washington exports declined for the first time since 2009. Home prices and housing construction activity are improving but construction employment growth has slowed in the last year. Seattle area consumer price inflation remains moderate thanks mainly to lower energy costs but shelter costs are rising rapidly.

Employment growth has been stronger than expected

We have three months of new Washington employment data since the November forecast was released. Total nonfarm payroll employment rose 23,900 (seasonally adjusted) in November, December, and January, 10,400 more than the 13,500 expected in the November forecast. The variance in job growth was mostly in goods-producing sectors. Construction employment rose 5,400 in the three-month period compared to a 100 job decline expected in the forecast. Manufacturing employment rose 800

compared to an expected decline of 900 jobs. Services-providing sectors added 14,900 net new jobs in November, December, and January compared to the forecast of 12,700 new jobs and government payrolls expanded by 2,900 jobs compared to the forecast of 1,800 jobs.

Historical employment estimates were revised lower

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 October 2015 by 2,100 jobs. As a result of the downward revision to history and stronger-than-expected growth, the net effect is 8,300 (0.3%) more jobs in January 2016 than expected in the November forecast.

Initial claims are falling again

Washington initial claims for unemployment insurance have fallen sharply in recent weeks, reaching a new post-recession low (see Figure 2.1). The four-week moving average of seasonally adjusted claims declined to 6,865 in the week ending February 20th from 6,892 in the previous week. Claims have fallen 59% since the peak in early 2009.

Washington initial claims reached a new post-recession low

Figure 2.1: Initial Claims for Unemployment Insurance



Source: U.S. Department of Labor, Employment and Training Administration; data through February 20, 2016

Average weekly earnings were up 4.6% over the previous year

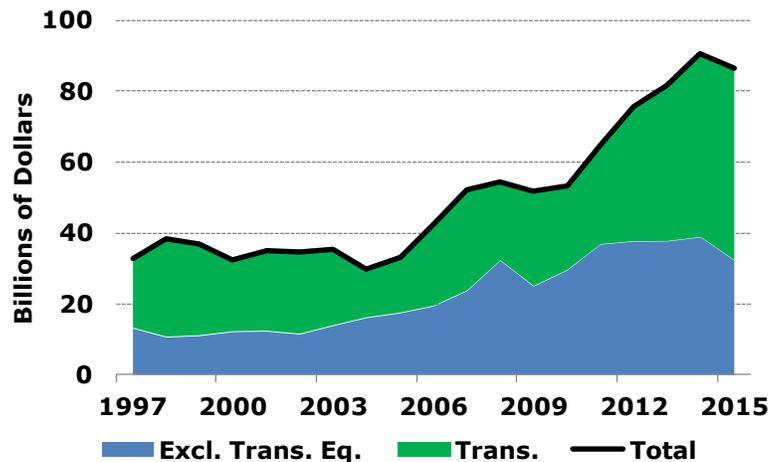
Recent hours and earnings data for Washington are improving. Private sector average hourly earnings in the twelve months ending in December 2015 were up 4.1% over the previous twelve month period. A year ago the comparable rate of increase was only 2.7%. Average weekly hours were up 0.5% in the most recent twelve month period. A year ago average weekly hours declined 0.2%. As a result of the improvement in average hourly earnings growth and average weekly hours growth, average weekly earnings growth improved to 4.6% compared to 2.5% a year ago.

Exports are down on a strong dollar and weak global growth

Fourth quarter exports were down 11.4% from the fourth quarter of 2014. Transportation equipment exports (mostly Boeing planes) declined 6.3% over the year. Exports other than transportation equipment were 18.1% lower than a year ago. The drop likely reflects the negative influence of a stronger dollar and weak economic growth abroad. For the year as a whole, Washington exports fell 4.6% from 2014 to 2015. Excluding transportation equipment, exports fell 16.8% in 2015. This was the first annual decline in Washington exports since 2009 (see Figure 2.2).

Figure 2.2: Washington Exports

Washington exports declined in 2015



Source: Wiser Trade; data through 2015

Washington housing permits edged up in the fourth quarter

Washington housing permits improved to 38,000 units (SAAR) in the fourth quarter of 2015 from 37,600 units in the third quarter. The November forecast projected 36,400 units in the fourth quarter. The variance was in single family permits which totaled 21,200 units in the fourth quarter compared to the forecast of 19,600 units. As forecasted in November, 16,800 multi-family units were permitted. Permits are slightly stronger so far in the first quarter of 2016. Permits totaled 38,500 units (SAAR) in January consisting of 22,000 single-family units and 16,400 multi-family units. The single-family figure was the highest since November 2007 (see Figure 2.3).

Seattle area home prices have recovered to just 0.6% below the May 2007 peak

Seattle home prices surged in the last five months of 2015 after three months of essentially no change. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices jumped 0.7% in August, 0.9% in September, 1.4% in October, 1.3% in November, and 1.5% in December. Seattle home prices are up 10.0% over the previous December and are 43.1% higher than the November 2011 trough. Seattle area home prices have recovered to just 0.6% below the May 2007 peak.

Single-family housing construction is improving

Figure 2.3: Single-Family Housing Permits



Source: Census Bureau; data through January, 2016

Manufacturing activity has returned to positive territory

The Institute of Supply Management - Western Washington Index (ISM-WW) remained in positive territory for a second consecutive month. The index, which measures conditions in the manufacturing sector, rose to 57.2 in January from 54.5 in December and 50.0 in November (index values above 50 indicate positive growth while values below 50 indicate contraction). The previous three months were all below 50. Prior to August 2015, the index had been above 50 in every month since July 2009. The employment and inventories components improved in January but the production, orders, and deliveries components worsened.

Vehicle sales reached a new post-recession high

Washington car and truck sales reached yet another post-recession high in January. Seasonally adjusted new vehicle registrations increased 7.1% to 340,300. Registrations were up 19.0% over the previous January.

Washington personal income grew 5.2% in the third quarter of 2015

In December, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released estimates of quarterly state personal income through the third quarter of 2015. Washington personal income grew at a 5.2% rate (SAAR) in the third quarter which ranked 27th among the states (including the District of Columbia). The national average personal income growth rate was also 5.2%.

Washington personal consumption expenditures rose 4.8% in 2014

Also in December, the BEA released estimates of personal consumption expenditures (PCE) by state for 1997 through 2014. These estimates are not adjusted for inflation. Washington personal consumption expenditures rose 4.8% in 2014 compared to 4.2% for the nation. Washington's 2014 consumption growth rate ranked tenth strongest among the states and District of Columbia. Washington PCE has now increased in every year since a 1.1% decline in 2009. The growth rate in 2014 matched 2011 as the highest so far in the recovery.

Declining energy costs are holding down headline inflation

Seattle area consumer price inflation remains moderate thanks to declining energy costs. Over the last year, from December 2014 to December 2015, consumer prices in the Seattle area rose 2.2% compared to 0.7% for the U.S. city average. Core prices, which exclude food and energy, were up 2.8% in Seattle compared to 2.1% for the nation. The higher Seattle inflation is largely due to more rapid growth in shelter costs. During the year, shelter costs in Seattle rose 5.0% compared to 3.2% for the nation. However, even with shelter excluded, Seattle inflation was higher at +0.6% compared to -0.6% for the nation.

Washington State Forecast

The February Washington forecast reflects a weaker U.S. forecast

The February Washington State forecast is based on a new national forecast that is weaker than the forecast adopted in November. The new forecast for GDP growth is slightly weaker in 2016 and 2017 at 2.1% and 2.4% versus 2.6% and 2.5%. The forecasted growth rates for 2018 and 2019 are unchanged at 2.4% and 2.2%. The employment growth forecast is unchanged at an average rate of 1.1% per year through 2019 with stronger growth in 2016 offset by weaker growth in 2017 and 2018. Real personal income growth averages 2.8% per year in the February forecast which is also lower than the 2.9% rate assumed in the November forecast. Personal consumption expenditure inflation averages 1.5% per year, down from 1.7% in the November forecast. These negative revisions in the national forecast feed through to the state economic forecast.

The forecasts for Washington employment growth, income growth, and inflation are weaker than in the November forecast

Overall, our forecast for Washington State is weaker than we expected in November mainly as a result of the weaker national forecast. Washington employment growth in 2015 was 2.8% which was the highest rate since 2006. Washington employment is expected to grow 2.0% this year, slightly better than the 1.8% growth rate in the November forecast. We expect 1.2% growth in each year from 2017 through 2019, down from 1.5% in 2017, 1.5% in 2018, and 1.3% in 2019. Our initial forecast for the 2020 and 2021 years calls for employment growth rates of 1.2% and 1.1%. Our forecast for personal income growth this year is 4.2%, down from 4.8% in the November forecast. Our forecast for personal income growth from 2017 through 2019 averages 4.9% per year, also down from 5.3% in the November forecast. On an annual basis, we expect personal income to grow 4.6% in 2017, 5.1% in 2018, 5.0% in 2019, 4.8% in 2020, and 4.7% in 2021. We expect total housing units authorized by building permits to decline 4.1% this year to 38,300 units. We expect growth of 9.4% to 41,900 units in 2017, 3.9% to 43,600 units in 2018, 0.4% to 43,700 units in 2019, 1.5% to 44,400 units in 2020, and no change in 2021. Near-term inflation in Seattle is much lower than expected in November as oil prices continued to decline. We now expect the all-items Seattle CPI to rise only 1.6% this year, compared to 2.1% in the November forecast. We expect all-items

Seattle area inflation rates of 2.1% in 2017, 2.3% in 2018, and 2.2% in 2019 and 2020, and 2.1% in 2021.

Washington Payroll Employment

Washington employment growth will slow

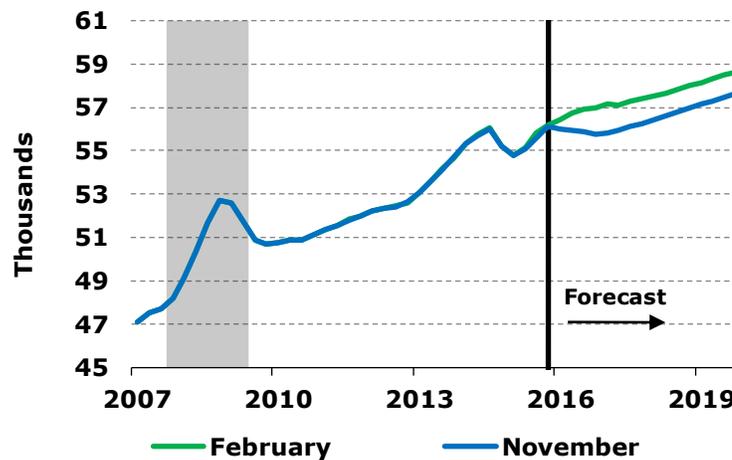
Washington employment growth in 2015 was 2.8% which was the highest rate since 2006. Washington employment is expected to grow 2.0% this year, slightly better than the 1.8% growth rate in the November forecast. The higher projected growth this year is based on stronger actual employment growth through January 2016. Our February forecast for Washington employment growth in 2017, 2018, and 2019 is weaker, however. We expect 1.2% growth in each year from 2017 through 2019, down from 1.5% in 2017, 1.5% in 2018, and 1.3% in 2019. Our initial forecast for the 2020 and 2021 years calls for employment growth rates of 1.2% and 1.1%.

Aerospace employment is slowly declining

Aerospace employment has been gradually declining since a cyclical peak in 2013. As in November, we assume the gradual decline in aerospace employment will continue through the end of 2019. We believe that this downturn will be relatively mild due to the large backlog of orders. The current reductions are due to improvements in productivity and restructuring rather than reductions in production. On an annual average basis, we expect aerospace employment to decline 2.4% in 2016, 2.5% in 2017, 2.2% in 2018, 2.0% in 2019, and 0.8% in 2020 with no change in 2021.

Software employment is growing again after layoffs in 2015

Figure 2.4: Software Employment



Source: Bureau of Labor Statistics, ERFC February 2016 Forecast; historical data through 2015Q4

The software employment forecast is higher

In July 2015 Microsoft announced layoffs of up to 7,800 employees company-wide, mostly related to its phone business. However, there have been no Worker Adjustment and Retraining

Construction employment growth is slowing

Notifications (WARN) in Washington since the announcement and software employment has continued to expand in the state. As a result, we have dropped the assumption of a small decline in Washington software employment (see Figure 2.4). Software employment did decline 0.1% in 2015 as a result of an earlier round of layoffs. We expect growth to return to a positive 2.3% in 2016 on strong monthly hiring through January 2016. We expect more moderate growth through the remainder of the forecast. Software employment is expected to grow 0.9% in 2017 and 2018, 1.2% in 2019, 1.1% in 2020, and 1.2% in 2021. Construction employment growth was very strong from June 2014 through January 2015 but has slowed down sharply since then. Still, on an annual average basis, construction employment grew 8.3% in 2015 which was the highest growth since 2006. We expect slower growth in 2016 and 2017, especially in nonresidential construction. Construction employment is expected to grow 2.6% per year in 2016 and 2017 before picking up to 4.3% in 2018, 3.1% in 2019, 2.6% in 2020, and 1.6% in 2021. Construction employment will still be 5,400 below its previous peak at the end of 2021.

Retail trade employment is benefitting from strong growth in electronic shopping

Washington retail trade employment growth 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 3.4% in 2014 and 4.0% in 2015 compared to 1.9% per year for the U.S. as a whole. Without the electronic shopping sector, which added an estimated 10,000 jobs in the last two years, Washington retail trade employment would have grown 1.8% in 2014 and 2.9% in 2015. Growth this year is also expected to be strong again at 3.1%. The forecast assumes much less growth in the following years as the recovery matures. We expect growth rates of 0.5%, -0.3%, 0.0%, 0.0%, and -0.1% in 2017, 2018, 2019, 2020, and 2021.

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 52% since the recession ended. IT employment growth has also been very strong during the recovery. Computer systems design and related services employment grew 63% since the end of the recession. We expect professional and business services employment growth to remain strong in 2016 through 2018 with growth rates of 3.3% in 2016, 3.7% in 2017, and 3.1% in 2018. We expect professional and business services employment growth to slow to 2.2%, 2.3%, and 2.7% in 2019, 2020, and 2021.

State and local government employment will grow moderately

State and local government employment peaked in the fourth quarter of 2008 and declined through the first quarter of 2012. On an annual average basis, state and local government employment rose 0.8% in calendar 2013, 1.7% in 2014, and 2.1% in 2015 following three years of decline. We expect moderate employment growth in the next six years with growth rates of 1.6% in 2016, 1.2% in 2017, 1.6% in 2018, 1.5% in 2019, and 1.2% per year in 2020 and 2021.

Washington Personal Income

Washington personal income is currently slightly higher than believed in November

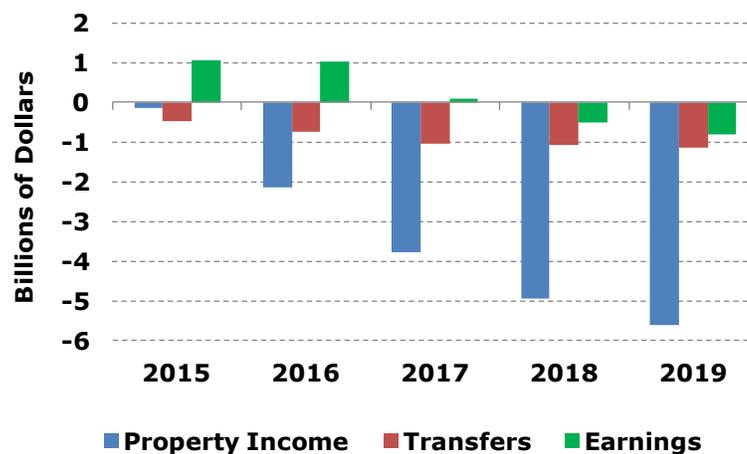
In December, the Bureau of Economic Analysis released estimates for state personal income through the third quarter of 2015. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) and other wage data also through the third quarter. Our current estimate of Washington personal income in the third quarter of 2015 is \$372.5 billion which is \$1.5 billion (0.4%) higher than assumed in the November forecast.

Income growth is lower than expected in November

Our forecast for personal income growth this year is 4.2%, down from 4.8% in the November forecast. Our forecast for personal income growth from 2017 through 2019 averages 4.9% per year, also down from 5.3% in the November forecast. The downward revision to the personal income forecast is mostly due to much lower projections for property income (interest, dividends, and rents). On an annual basis, we expect personal income to grow 4.6% in 2017, 5.1% in 2018, 5.0% in 2019, 4.8% in 2020, and 4.7% in 2021.

Figure 2.5: Washington Personal Income Revision

Lower property income is the main reason for the lower forecast



Source: Bureau of Economic Analysis, ERFC February 2016 Forecast; historical data through 2015Q3

Washington Building Permits

Single-family construction will continue to improve

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 21,600 in 2015. 2015 was boosted by a huge spike in the first quarter. We expect multi-family permits will decline to 16,800 in 2016. We do not expect much change from this already high level during the remainder of the forecast. The recovery in single-family construction has been less robust, from 13,000 units in 2009 to 19,600 in 2015. We expect single-family construction to continue to strengthen with the number of units rising to 28,000 in 2021 see. We expect total housing units authorized by building permits to decline 4.1% this year to 38,300 units, coming off the 2015 spike in multi-family permits. We expect growth of 9.4% to 41,900 units in 2017, 3.9% to 43,600 units in 2018, 0.4% to 43,700 units in 2019, 1.5% to 44,400 units in 2020, and no change in 2021.

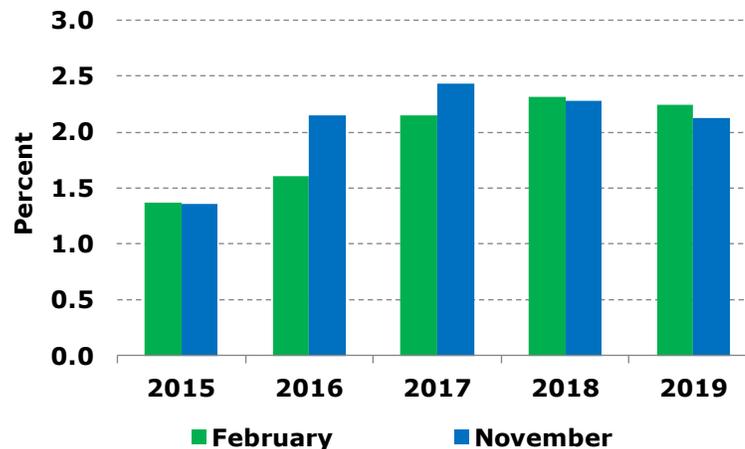
Seattle Consumer Price Index

Energy costs temporarily reduce headline inflation

Near-term inflation in Seattle is much lower than expected in November as oil prices continued to decline. We now expect the all-items Seattle CPI to rise only 1.6% this year, compared to 2.1% in the November forecast (See Figure 2.6). While the drop in energy costs will reduce inflation in 2016, rising energy costs add to inflation in 2017 through 2021. We expect all-items Seattle area inflation rates of 2.1% in 2017, 2.3% in 2018, and 2.2% in 2019 and 2020, and 2.1% in 2021.

Figure 2.6: Seattle CPI Inflation

Near-term inflation in Seattle is much lower than expected in November



Source: Bureau of Labor Statistics, ERFC February 2016 Forecast; historical data through December 2015

Rents are driving Seattle core inflation higher

Core inflation (excluding food and energy) in Seattle was 2.6% in 2015 while national core inflation was 1.8%. The reason for the difference was shelter costs which were rising much faster in Seattle. Recent data suggest that while shelter costs continue to rise much faster in Seattle than in the U.S. city average, other prices are also rising faster. We expect Seattle core inflation in Seattle will moderate as shelter costs stabilize. We expect core Seattle CPI inflation to decline to 2.2% in 2016, 1.8% in 2017, 2.1% per year in 2018 and 2019, and 2.0% per year in 2020 and 2021.

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 a pickup in productivity growth, an increase in household formation, and stronger global growth

In the optimistic scenario, the U.S. economy gains momentum with the help of a pickup in total factor productivity growth, an increase in household formation, and stronger global growth. Residential construction picks up as a result of increased household formation and housing starts rise rapidly, reaching 1.5 million by the end of 2016. As credit conditions ease, nonresidential fixed investment rises 4.0% in 2016. Meanwhile, foreign growth strengthens. Initially, oil prices rise above the baseline as demand outstrips supply. By 2018, global oil production rebounds to push oil prices below their baseline levels. With a stronger outlook and less fiscal uncertainty, both consumer and business confidence rise sharply. The labor market continues to heat up, and by the end of 2016 the economy is adding 260,000 jobs per month. The unemployment rate gradually declines, reaching 4.1% by the second half of 2018 before returning to the 4.2-4.4% range.

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 remains flat in 2016 and gradually rises in 2017 through 2021 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, the stronger regional economy drives Seattle consumer price inflation above the baseline. Washington average wage growth is also higher in the optimistic scenario than in the baseline. Washington population growth is higher in the optimistic scenario as migrants from other states are attracted by the strong local

economy. The recovery in construction employment is much stronger than in the baseline forecast with employment in the sector exceeding the previous peak in the second quarter of 2018. By the end of 2021, Washington nonfarm payroll employment is higher by 202,300 jobs than in the baseline forecast and Washington personal income is \$65.0 billion higher.

Pessimistic

In the pessimistic scenario, the U.S. economy suffers a two-quarter recession in the latter half of 2016

In the pessimistic scenario, the U.S. economy suffers a two-quarter recession in the latter half of 2016. With Europe's recovery stumbling, China's engine sputtering, and the slump in commodity prices continuing to put pressure on emerging markets, external pressures squeeze out U.S. growth. Meanwhile, the expected contraction in spending on manufacturing construction hits harder than anticipated in the baseline. In this scenario, equity prices continue plunging through 2016 in response to defaults and slowing growth in overseas markets. Consumer confidence declines in reaction to the stock market slump and recovers only slowly. Risk-averse investors seek security in U.S. assets, pushing up the value of the dollar. With young adults exercising caution around taking on debt, new single-family home sales slow in 2016. The economy contracts in the third and fourth quarters of 2016 with 0.6% and 0.7% annualized declines. The unemployment rises and remains elevated until 2019, peaking at 6.3%.

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 than assumed in the baseline forecast. Software employment declines rather than growing moderately 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 then flattens out in 2020 and 2021 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 2021, Washington nonfarm payroll employment is 186,700 lower than in the baseline forecast and Washington personal income is \$28.2 billion lower.

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

Governor's Council of Economic Advisors (GCEA)

The Governor's Council of Economic Advisors' national forecast is weaker than the baseline

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

At the national level, the GCEA outlook for real GDP growth is slightly higher than the baseline forecast in 2016 but lower in 2017 through 2021. Average GDP growth over the entire six-year

period is slightly lower in the GCEA scenario. The GCEA forecast of real consumer spending growth is lower or the same in each year. The lower real growth in the GCEA scenario is not offset by higher inflation. Compared to the baseline, the Governor's Council members expect higher inflation in 2016, lower inflation in 2017 and 2018, the same inflation in 2019, and higher inflation in 2020 and 2021. Average inflation over the six-year period is almost exactly the same as in the baseline forecast. The Council members' mortgage rate forecast is higher than the baseline forecast in 2016 and 2017 but lower in 2018 through 2021. The GCEA oil price forecast is slightly higher than the baseline in each year.

The GCEA members also expect weaker Washington growth

The GCEA scenario for Washington is also weaker than the baseline forecast. Their real personal income growth forecast averages 2.8% per year in 2016 through 2021 compared to the baseline forecast of 3.1%. Because their inflation forecast is similar to ours, their nominal personal income forecast is also lower at 4.5% per year versus 4.7% in the baseline forecast. At an average rate of 1.3% per year, the Council members' forecast for total employment growth over the six-year period is virtually the same as the baseline forecast. The GCEA forecasts for manufacturing employment growth and construction employment growth are both weaker than in the baseline forecast, however. The Council members' housing permit forecast is slightly lower, averaging 41,300 units per year through 2021 compared to 42,700 in the baseline forecast. At the end of 2021, the GCEA forecast for Washington nonfarm payroll employment is 11,000 lower than in the baseline forecast and Washington personal income is \$6.5 billion lower.

Table 2.3 compares the GCEA forecast with the baseline forecast.

Table 2.1
Washington Economic Forecast Summary
 Forecast 2016 to 2021

Fiscal Years

	2014	2015	2016	2017	2018	2019	2020	2021
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	313.475	329.809	344.174	354.086	365.108	376.559	387.995	399.575
% Ch	1.6	5.2	4.4	2.9	3.1	3.1	3.0	3.0
Real Wage and Salary Disb.	162.331	171.835	179.889	185.766	190.622	195.618	200.860	206.387
% Ch	3.8	5.9	4.7	3.3	2.6	2.6	2.7	2.8
Real Nonwage Income	151.144	157.975	164.285	168.320	174.485	180.941	187.135	193.188
% Ch	-0.6	4.5	4.0	2.5	3.7	3.7	3.4	3.2
Real Per Capita Income (\$/Person)	44,663	46,409	47,806	48,542	49,444	50,387	51,302	52,212
% Ch	0.4	3.9	3.0	1.5	1.9	1.9	1.8	1.8
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.092	1.098	1.110	1.130	1.151	1.171	1.192
% Ch	1.4	0.8	0.5	1.1	1.8	1.8	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.437	2.473	2.516	2.560	2.618	2.678	2.737	2.796
% Ch	1.4	1.5	1.7	1.7	2.3	2.3	2.2	2.1
Average Nonfarm Annual Wage	55,773	57,969	59,651	61,383	63,391	65,484	67,625	69,949
% Ch	3.0	3.9	2.9	2.9	3.3	3.3	3.3	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.75	25.28	25.82	26.22	26.82	27.50	28.19	28.87
% Ch	2.3	2.1	2.1	1.5	2.3	2.5	2.5	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	339.735	360.258	377.950	393.228	412.774	433.534	454.524	476.153
% Ch	3.0	6.0	4.9	4.0	5.0	5.0	4.8	4.8
Disposable Personal Income	299.138	315.469	329.890	343.801	362.189	381.178	399.155	416.826
% Ch	2.4	5.5	4.6	4.2	5.3	5.2	4.7	4.4
Per Capita Income (\$/Person)	48,403	50,694	52,498	53,907	55,898	58,010	60,098	62,218
% Ch	1.8	4.7	3.6	2.7	3.7	3.8	3.6	3.5
Employment (Thousands)								
Washington Civilian Labor Force	3,463.3	3,525.7	3,550.0	3,617.6	3,676.4	3,732.9	3,787.8	3,838.2
Total Washington Employment	3,237.7	3,313.7	3,360.8	3,426.4	3,486.6	3,543.3	3,595.6	3,643.4
Unemployment Rate (%)	6.52	6.02	5.33	5.29	5.16	5.08	5.07	5.07
Nonfarm Payroll Employment	3,030.5	3,119.2	3,193.6	3,242.6	3,281.3	3,320.6	3,360.4	3,396.8
% Ch	2.5	2.9	2.4	1.5	1.2	1.2	1.2	1.1
Manufacturing	287.5	288.9	288.3	287.2	288.2	289.8	291.1	293.5
% Ch	0.9	0.5	-0.2	-0.4	0.3	0.6	0.5	0.8
Durable Manufacturing	209.4	209.9	208.4	205.9	206.8	208.0	208.7	210.4
% Ch	0.4	0.2	-0.7	-1.2	0.4	0.6	0.3	0.8
Aerospace	94.7	93.6	91.9	89.6	87.4	85.6	84.2	84.1
% Ch	-1.8	-1.1	-1.8	-2.6	-2.4	-2.0	-1.6	-0.1
Nondurable Manufacturing	78.1	79.0	79.9	81.3	81.4	81.8	82.5	83.1
% Ch	2.3	1.1	1.1	1.9	0.1	0.4	0.9	0.7
Construction	153.7	167.4	174.7	178.3	186.0	192.1	198.1	202.1
% Ch	6.8	8.9	4.3	2.1	4.3	3.3	3.1	2.0
Service-Providing	2,583.0	2,656.5	2,724.7	2,771.2	2,801.2	2,832.6	2,865.0	2,895.0
% Ch	2.4	2.8	2.6	1.7	1.1	1.1	1.1	1.0
Software Publishers	55.0	55.3	56.3	57.0	57.4	58.1	58.7	59.4
% Ch	3.9	0.6	1.8	1.3	0.7	1.1	1.1	1.1
Nonfarm Payroll Employment, EOP*	3,055.2	3,152.7	3,217.9	3,256.1	3,296.7	3,335.2	3,379.3	3,410.4
% Ch*	2.4	3.2	2.1	1.2	1.2	1.2	1.3	0.9
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	33.057	38.934	37.071	40.170	42.993	43.631	44.124	44.409
% Ch	5.3	17.8	-4.8	8.4	7.0	1.5	1.1	0.6
Single-Family	17.398	18.577	20.651	23.577	26.713	27.286	27.639	27.917
% Ch	-6.2	6.8	11.2	14.2	13.3	2.1	1.3	1.0
Multi-Family	15.659	20.357	16.420	16.594	16.279	16.345	16.485	16.492
% Ch	21.9	30.0	-19.3	1.1	-1.9	0.4	0.9	0.0
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.94	4.23	4.58	5.45	5.61	5.59

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

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2016	2017	2018	2019	2020	2021
U.S.						
Real GDP, Percent Change						
Optimistic	2.3	4.2	3.3	2.9	2.5	2.4
Baseline	2.0	2.4	2.4	2.3	2.2	2.2
Pessimistic	1.9	0.3	1.5	2.1	2.3	2.2
Implicit Price Deflator, Percent Change						
Optimistic	0.7	1.7	1.5	1.6	2.0	2.1
Baseline	0.5	1.1	1.8	1.8	1.8	1.7
Pessimistic	0.4	0.9	2.3	2.7	2.7	2.9
Mortgage Rate, Percent						
Optimistic	3.97	4.90	5.69	6.24	6.39	6.33
Baseline	3.94	4.23	4.58	5.45	5.61	5.59
Pessimistic	3.88	3.65	3.72	4.96	6.15	6.55
3 Month T-Bill Rate, Percent						
Optimistic	0.28	1.44	2.47	3.09	3.26	3.26
Baseline	0.24	0.88	1.86	2.69	2.79	2.78
Pessimistic	0.23	0.06	0.21	1.38	3.11	3.93
Washington						
Real Personal Income, Percent Change						
Optimistic	5.1	5.4	6.2	5.4	4.3	4.0
Baseline	4.4	2.9	3.1	3.1	3.0	3.0
Pessimistic	3.8	0.2	0.0	1.1	2.3	2.6
Personal Income, Percent Change						
Optimistic	5.8	7.2	7.8	7.0	6.4	6.2
Baseline	4.9	4.0	5.0	5.0	4.8	4.8
Pessimistic	4.2	1.0	2.3	3.8	5.0	5.6
Employment, Percent Change						
Optimistic	2.6	2.7	2.4	2.3	2.0	1.9
Baseline	2.4	1.5	1.2	1.2	1.2	1.1
Pessimistic	2.2	0.1	-0.3	0.2	0.6	0.6
Housing Permits, Thousands of Authorized Units						
Optimistic	37.9	43.9	47.0	49.3	50.2	51.3
Baseline	37.1	40.2	43.0	43.6	44.1	44.4
Pessimistic	36.6	34.9	34.9	35.4	36.0	35.5

Table 2.3
Governor's Council of Economic Advisor's Forecast

Calendar Years

	2016	2017	2018	2019	2020	2021
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	2.1	2.4	2.4	2.2	2.2	2.2
GCEA Average	2.2	2.3	2.2	2.0	2.1	2.1
Real Consumption						
<i>Growth</i>						
ERFC	2.7	2.5	2.4	2.3	2.3	2.2
GCEA Average	2.5	2.4	2.3	2.2	2.2	2.2
Implicit Price Deflator, PCE						
<i>Growth</i>						
ERFC	0.7	1.6	1.8	1.8	1.7	1.7
GCEA Average	0.9	1.5	1.7	1.8	1.8	1.9
Mortgage Rate						
<i>Percent</i>						
ERFC	4.1	4.4	5.0	5.6	5.6	5.6
GCEA Average	4.2	4.5	4.8	4.8	4.9	5.0
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	35.2	41.9	45.7	48.2	50.3	51.7
GCEA Average	38.5	43.2	46.5	49.3	51.9	52.9
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	3.4	2.9	3.2	3.1	3.0	2.9
GCEA Average	2.9	2.7	2.9	2.9	2.7	2.8
Wage and Salary Employment						
<i>Growth</i>						
ERFC	2.0	1.2	1.2	1.2	1.2	1.1
GCEA Average	1.7	1.3	1.2	1.2	1.1	1.1
Manufacturing Employment						
<i>Growth</i>						
ERFC	-0.6	0.1	0.4	0.5	0.6	1.0
GCEA Average	-0.7	0.0	0.1	0.1	0.1	0.1
Construction Employment						
<i>Growth</i>						
ERFC	2.6	2.6	4.3	3.1	2.6	1.6
GCEA Average	1.6	2.6	2.3	2.3	2.0	1.3
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	38.3	41.9	43.6	43.7	44.4	44.4
GCEA Average	39.2	41.4	41.7	41.5	41.9	42.0
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	2.8	3.2	3.3	3.3	3.3	3.5
GCEA Average	3.0	3.1	3.2	3.1	3.1	3.2

Table 2.4

Forecast Analysis

Comparison of Forecasts for 2015-17

Washington	Average Annual Rate of Growth (Percent) 2015:2-2017:2			Average Annual Rate (Thousands) 2015:3 to 2017:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2012				
September	1.7	5.1	3.1	38.5
November	1.7	4.9	3.2	38.4
2013				
March	1.7	5.1	3.5	41.6
June	1.7	5.0	3.5	42.2
September	1.6	5.1	3.5	40.6
November	1.7	5.1	3.6	40.6
2014				
February	1.8	5.2	3.9	40.8
June	1.7	5.7	4.3	40.5
September	1.7	5.9	4.3	40.4
November	1.8	6.1	4.4	38.8
2015				
February	2.0	6.1	4.2	38.8
June	1.8	5.5	3.7	40.2
September	1.8	5.2	3.6	39.1
November	1.6	4.8	3.2	39.2
2016				
February	1.6	4.3	3.1	38.6

Table 2.5

Forecast Analysis

Comparison of Forecasts for 2017-19

Washington	Average Annual Rate of Growth (Percent) 2017:2-2019:2			Average Annual Rate (Thousands) 2017:3 to 2019:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2014				
February	1.3	4.9	3.5	42.5
June	1.2	5.3	3.8	43.0
September	1.3	5.4	3.8	43.1
November	1.1	5.5	3.6	43.2
2015				
March	1.3	5.4	3.6	43.1
June	1.4	5.6	3.8	44.2
September	1.3	5.4	3.6	43.9
November	1.4	5.4	3.5	44.0
2016				
February	1.2	5.0	3.2	43.3

Table 2.6

Fiscal Years

Forecast Comparison

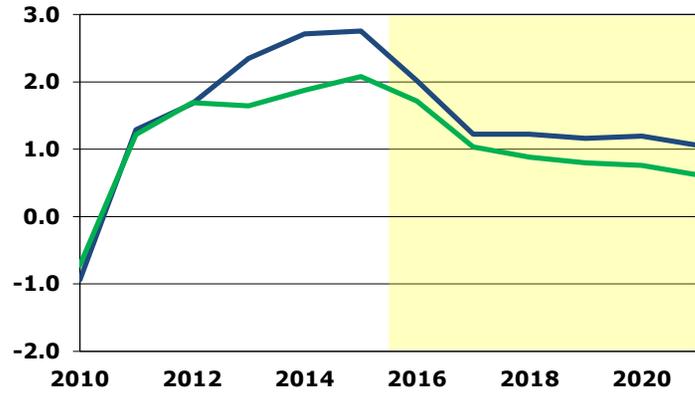
Forecast 2016 to 2019

	2013	2014	2015	2016	2017	2018	2019
Washington							
Real Personal Income							
February Baseline	308.552	313.475	329.809	344.174	354.086	365.108	376.559
% Ch	3.0	1.6	5.2	4.4	2.9	3.1	3.1
November Baseline	308.552	313.475	329.765	343.149	354.151	366.695	379.428
% Ch	3.0	1.6	5.2	4.1	3.2	3.5	3.5
Personal Income							
February Baseline	329.746	339.735	360.258	377.950	393.228	412.774	433.534
% Ch	4.6	3.0	6.0	4.9	4.0	5.0	5.0
November Baseline	329.746	339.735	360.210	377.934	396.730	418.564	440.721
% Ch	4.6	3.0	6.0	4.9	5.0	5.5	5.3
Employment							
February Baseline	2957.8	3030.5	3119.2	3193.6	3242.6	3281.3	3320.6
% Ch	2.1	2.5	2.9	2.4	1.5	1.2	1.2
November Baseline	2957.9	3030.5	3118.7	3189.7	3237.2	3288.5	3332.8
% Ch	2.1	2.5	2.9	2.3	1.5	1.6	1.3
Housing Permits							
February Baseline	31.402	33.057	38.934	37.071	40.170	42.993	43.631
% Ch	31.5	5.3	17.8	-4.8	8.4	7.0	1.5
November Baseline	31.402	33.057	39.788	37.415	40.938	43.555	44.416
% Ch	31.5	5.3	20.4	-6.0	9.4	6.4	2.0

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

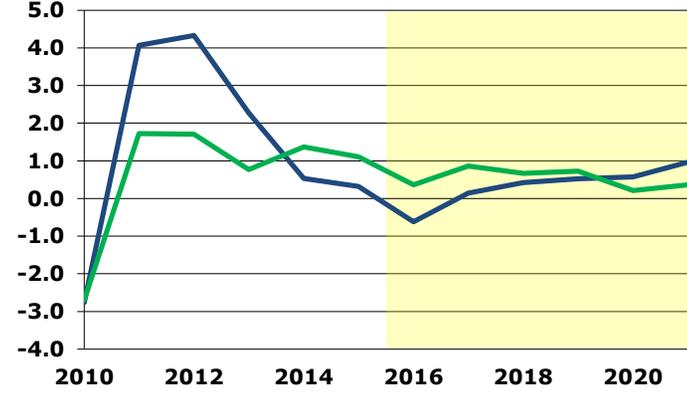
Forecast

Total nonfarm payroll employment



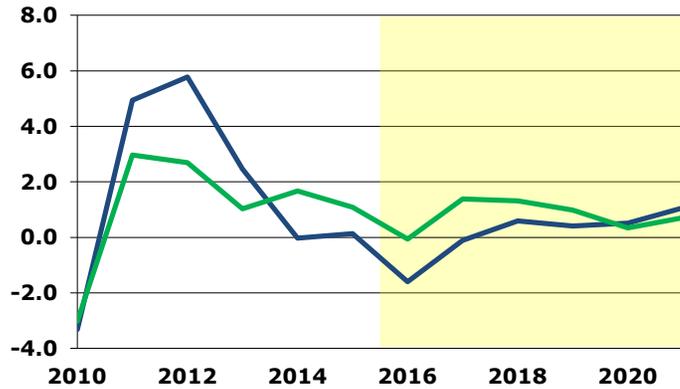
Source: WA State Employment Security Dept. 2015, ERFC 2021

Manufacturing employment



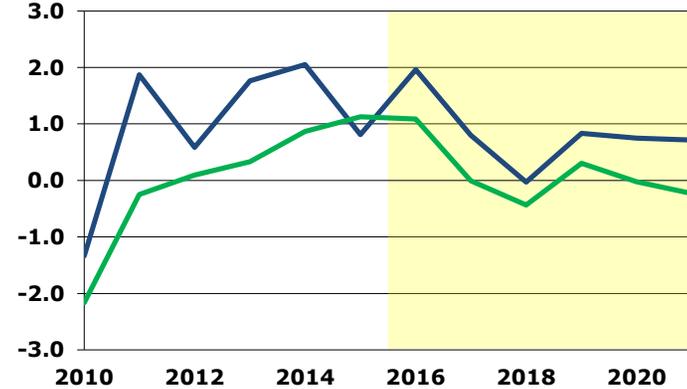
Source: WA State Employment Security Dept. 2015, ERFC 2021

Durable manufacturing employment



Source: WA State Employment Security Dept. 2015, ERFC 2021

Nondurable manufacturing employment



Source: WA State Employment Security Dept. 2015, ERFC 2021

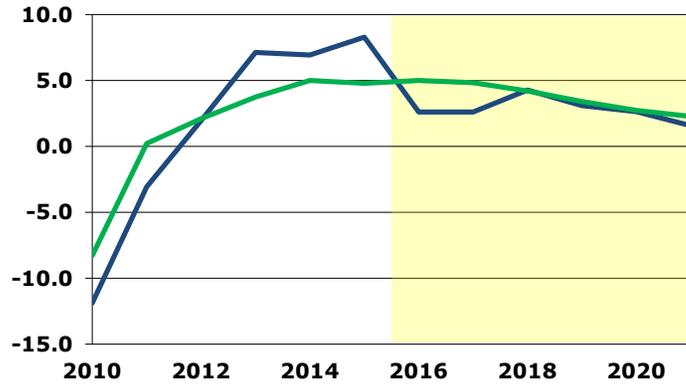
■ Washington

■ U.S.

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

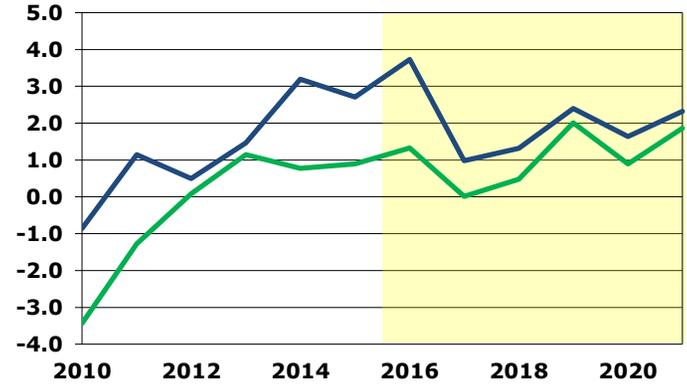
Forecast

Construction employment



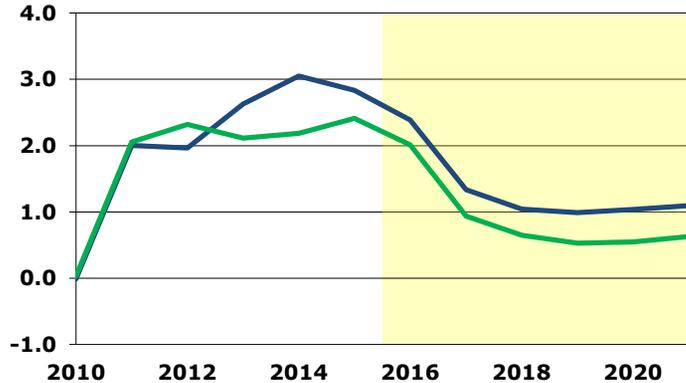
Source: WA State Employment Security Dept. 2015, ERFC 2021

Information employment



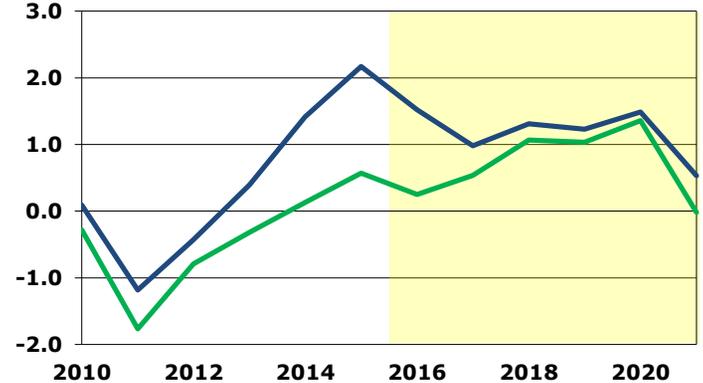
Source: WA State Employment Security Dept. 2015, ERFC 2021

Other private employment



Source: WA State Employment Security Dept. 2015, ERFC 2021

Government employment



Source: WA State Employment Security Dept. 2015, ERFC 2021

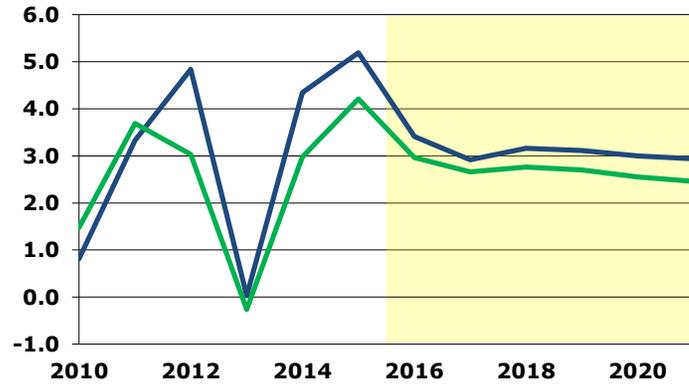
Washington

U.S.

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

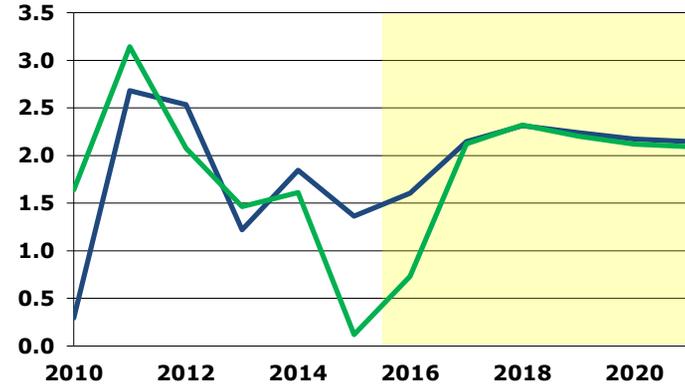
Forecast

Real personal income



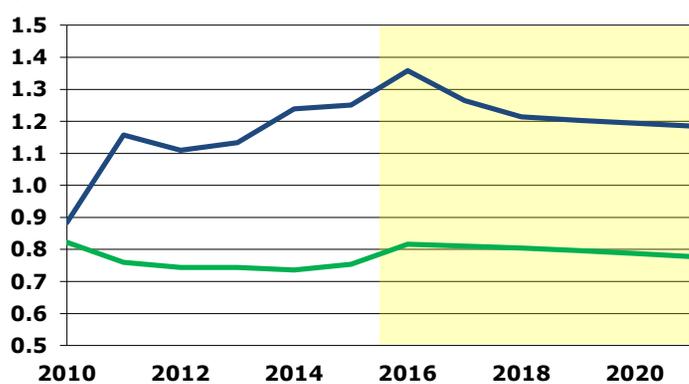
Source: Bureau of Economic Analysis 2014, ERFC 2021

Consumer price indices



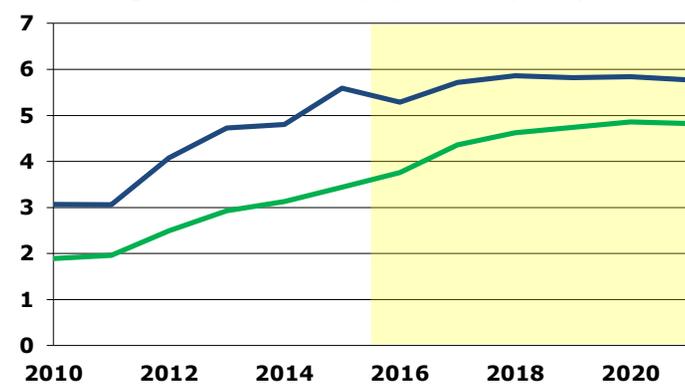
Source: Bureau of Labor Statistics 2015, ERFC 2021

Population



Source: Office of Financial Management/Census Bureau 2015, ERFC 2021

New Housing Units Per 1,000 population (level)



Source: Census Bureau 2015, ERFC 2021

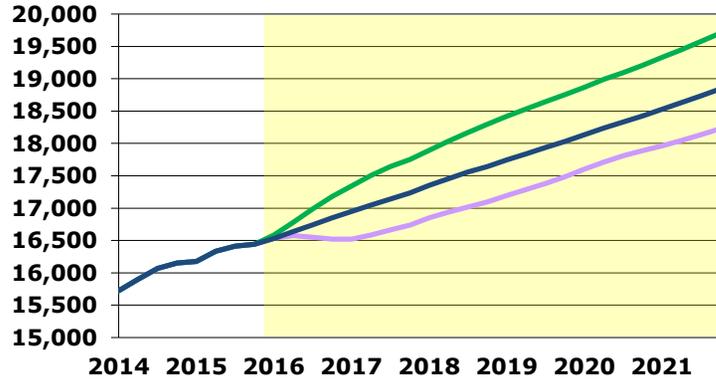
Washington

U.S.

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

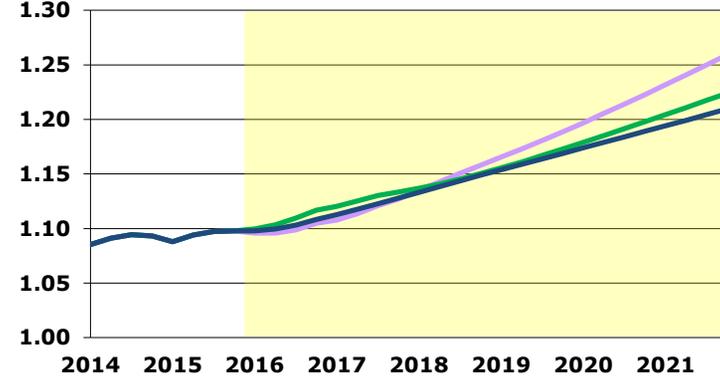
Forecast

Real GDP, billions of chained 2009 dollars



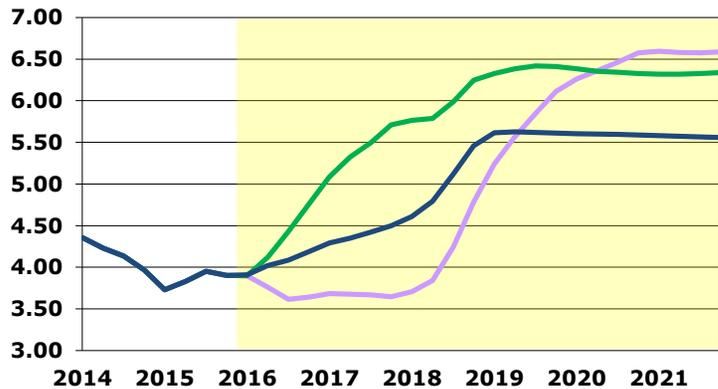
Source: Bureau of Economic Analysis 2015 Q4, ERFC 2021

Implicit price deflator, index 2009 = 1.0



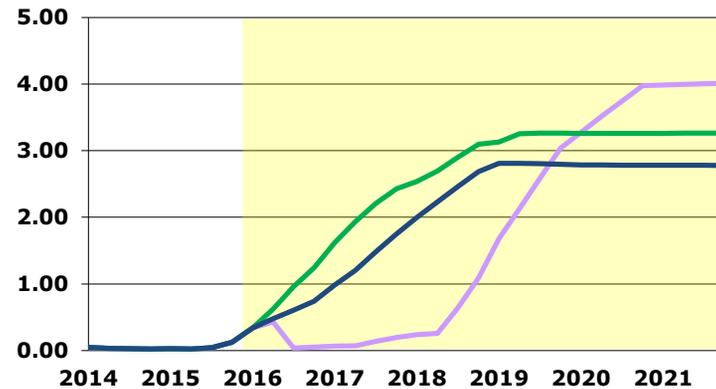
Source: Bureau of Economic Analysis 2015 Q4, ERFC 2021

Mortgage rate, percent



Source: Freddie Mac 2015 Q4, ERFC 2021

Three month T-bill rate, percent



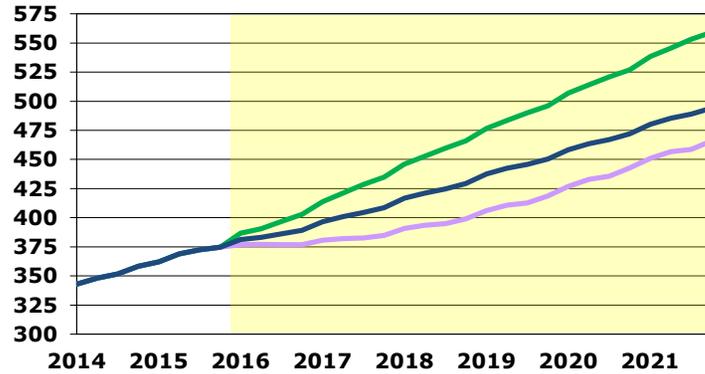
Source: Federal Reserve Board 2015 Q4, ERFC 2021

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

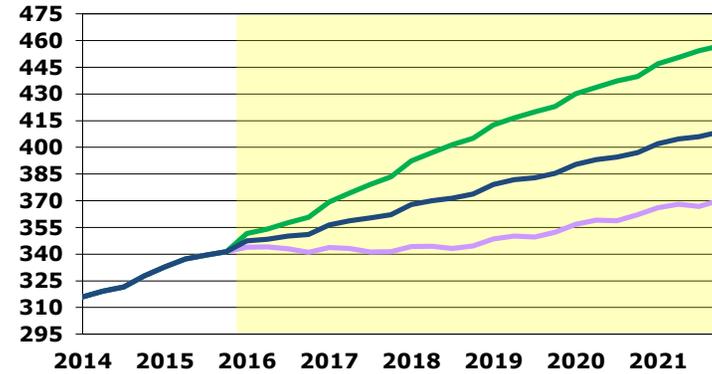
Forecast

Personal income, billions of dollars



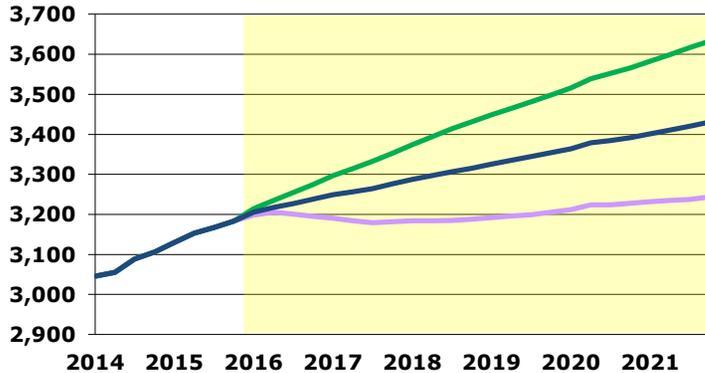
Source: Bureau of Economic Analysis 2014 Q4, ERFC 2021

Real personal income, billions of chained 2009 dollars



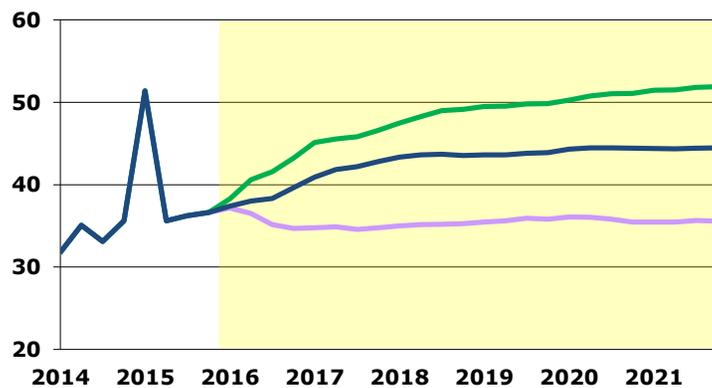
Source: Bureau of Economic Analysis 2014 Q4, ERFC 2021

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2015 Q4, ERFC 2021

Housing permits, thousands



Source: Census Bureau 2015 Q4, ERFC 2021

■ Baseline ■ Optimistic ■ Pessimistic

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Chapter 3: Washington State Revenue Forecast Summary

- **Revenue collections since the November 2015 forecast have come in \$39 million over the forecasted amount.**
- **Slower forecasted growth and inflation have lowered expected collections.**
- **The forecast of General Fund-State (GF-S) revenue for the 2015-17 biennium was decreased by \$67 million and the forecast for the 2017-19 biennium was decreased by \$442 million.**
- **The GF-S revenue forecast now extends through the 2019-21 biennium.**

Overview

Forecasted slower personal income growth and lower construction and inflation reduced expected revenue

While revenue collections since the November 2015 forecast have been slightly higher than expected, the outlook for the rest of the biennium and the next has dimmed somewhat. The February economic forecast was weaker in three areas that affect revenue growth: personal income, housing permits, and inflation. These factors have reduced forecasted revenue. The reduction is small for the current biennium but is larger for the next. Still, that biennium's change is relatively small, amounting to a reduction of just over one percent. This forecast period also saw an extension of the forecast through the 2019-21 biennium.

GF-S forecast change by biennium (millions):

*15-17: -\$67
17-19: -\$442*

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2015-17 and 2017-19 biennia. Since the November forecast, revenue sources that are tracked monthly came in \$39.0 million higher than forecasted. Changes to the economic forecast, however, resulted in a \$106.2 million decrease to projected collections for the rest of the biennium. The total of these components was a \$67.2 million decrease in projected revenue for the current 2015-17 biennium. The forecast for the 2017-19 biennium has been decreased by \$442.2 million. GF-S revenue is now forecasted to total \$37,137.3 million in the 2015-17 biennium and \$40,125.3 million in the 2017-19 biennium.

GF-S forecast
(\$millions):

2015-17:
\$37,137

2017-19:
\$40,125

2019-21:
\$43,441

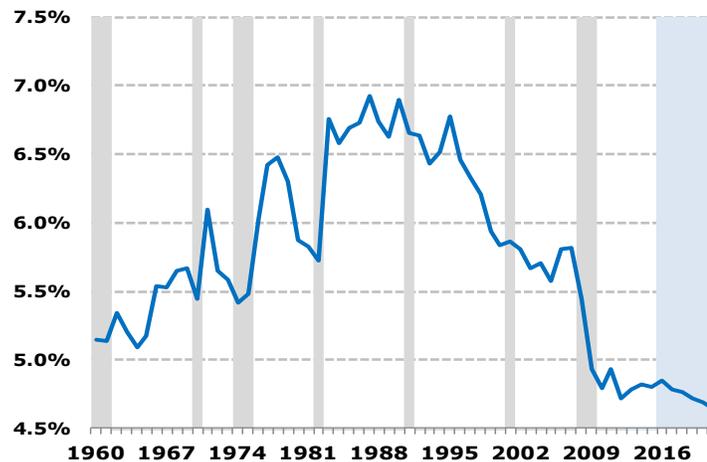
**Table 3.1: Revisions to the General Fund-State forecast
(cash basis, millions of dollars)**

	2015-17 Biennium	2017-19 Biennium
Collection Experience	\$39.0	NA
Non-Economic Change	\$0.0	\$0.0
Forecast Change	(\$106.2)	(\$442.2)
Total Change	(\$67.2)	(\$442.2)

The forecast period has now been extended through the 2019-21 biennium. Forecasted GF-S revenue for the biennium is \$43,441.0 million, an increase of 8.3% from the previous biennium.

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 2015

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 current personal income estimate indicates the FY 2015 ratio declined just slightly. The forecast, as shown in the light blue shaded area, has the ratio increasing in FY 2016 due to the revenue increases resulting from legislative changes but then trending downward through the end of the

forecast period in FY 2021. In that fiscal year, GF-S revenues are projected to be 4.65% of personal income.

Forecast details are at the end of the chapter

The history of nominal and real GF-S revenue by biennium can be found in Table 3.3. GF-S forecast changes by agency and major revenue classification for the 2015-17 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2017-19 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 \$39 million (0.8%) more than the November 2015 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 November forecast, total revenue from the above sources came in \$39.0 million (0.8%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$0.5 million (0.0%) above the forecast. Revenue from other DOR tax sources was \$39.6 million (3.1%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the November 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	\$0.5	0.0%
Non Revenue Act	\$39.6	3.1%
Subtotal	\$40.1	0.8%
Department of Licensing		
Administrative Office of the Courts	(\$1.2)	-5.9%
Total*	\$39.0	0.8%

* Detail may not add to total due to rounding.

Source: ERFC; Period: November 11 - February 10, 2016

Real estate excise taxes once again came in higher than forecasted

Most of the positive variance in DOR taxes came from real estate excise taxes (REET), which came in \$19.2 million (11.0%) higher than forecasted. Transfers of unclaimed property into the GF-S were \$15.0 million (62.1%) higher than forecasted. Cigarette tax receipts came in \$9.5 million (10.0%) higher than forecasted and liquor sales and liter tax receipts came in \$1.4 million (2.0%) higher than forecasted. Property tax receipts came in \$0.2 million (0.0%) higher than forecasted. All other DOR revenue sources came in \$5.7 million (14.0%) lower than forecasted.

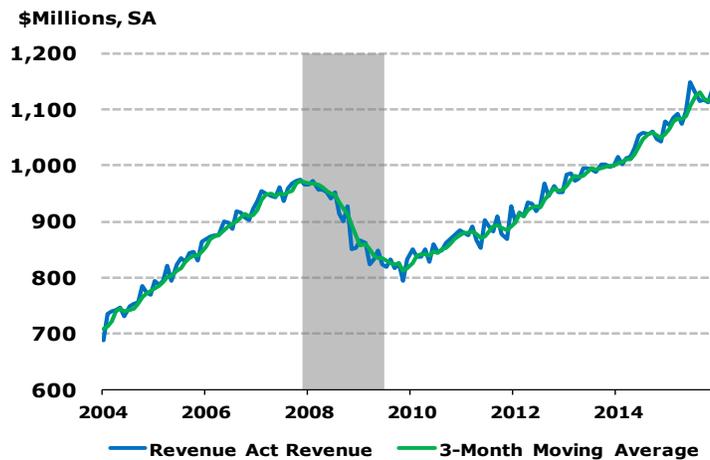
Revenue from the Department of Licensing was \$0.1 million (17.1%) higher than forecasted and revenue from the Administrative Office of the Courts was \$1.2 million (5.9%) lower than forecasted.

Adjusted Revenue Act collections were up 6.2% year over year in the most recent collection period and up 8.0% 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. As can be seen in the chart, collections spiked in the July 11 – August 10, 2015 collection period, with year-over-year growth of 10.9% after adjustment for large payments and refunds. This spike brought adjusted growth for second quarter activity (May 11 – August 10 collections) to 7.3% year over year, the same as first quarter growth. Collections growth for third quarter activity (August 11 - November 10 collections) slowed to 5.5%. Collections growth for fourth quarter activity (November 11, 2015 – February 10, 2016 collections) rebounded to 6.9%. Year-over-year collections growth for the January 11 – February 10 collection period, which mainly represents December activity, was 6.2% after 8.0% growth in the previous period.

Figure 3.2: Revenue Act Collections*

Growth in seasonally adjusted Revenue Act collections slowed in the third quarter



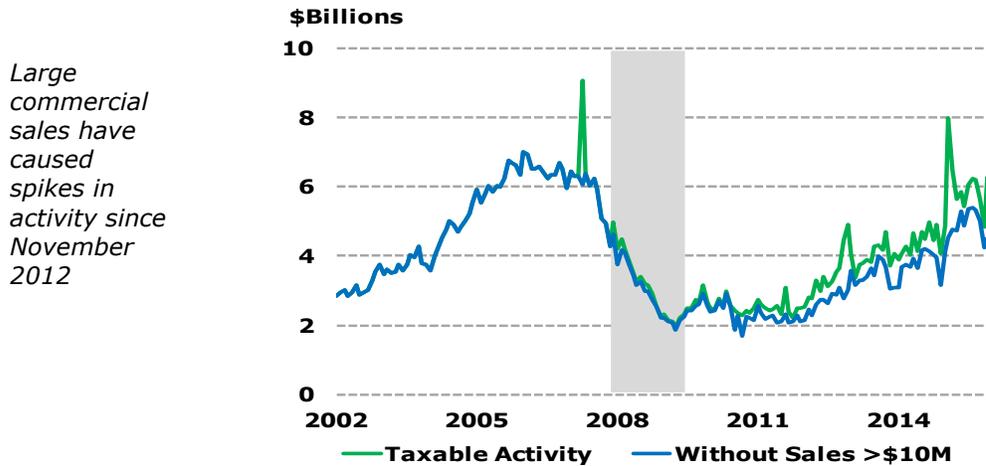
Source: ERFC; Data through February 10, 2016 preliminary allocation
*Adjusted for large payments/refunds and payment pattern change

Sales of large commercial properties spiked after the November forecast

Most of the large positive variance in REET collections was due to stronger-than-expected sales of large commercial property. Sales of property worth \$10 million or more totaled \$3.4 billion in the three months since the last forecast. Large commercial sales have been responsible for much of the increase in taxable activity since November 2012 (see Figure 3.3). The visible spike

in February 2015 was due mainly to large transfers of controlling interest resulting from a corporate merger, but activity since has been elevated in most months.

Figure 3.3: Taxable Real Estate Excise Activity, SA



Source: ERFC; data through January 2016

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 2015. 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.

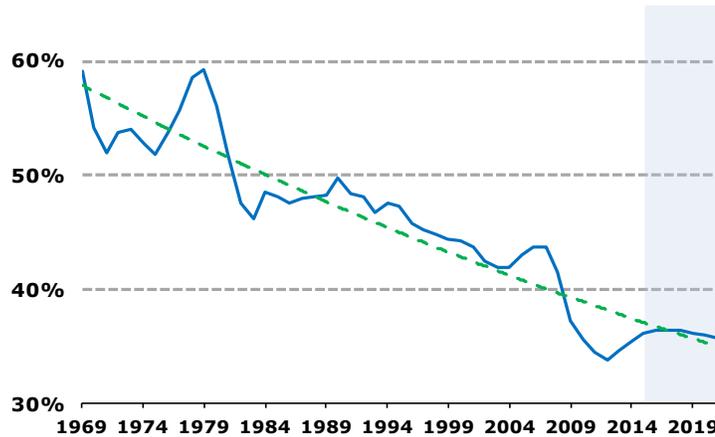
Retail sales taxes are the largest source of GF-S revenue

The retail sales tax is the largest source of GF-S revenue, accounting for 47.5% of GF-S revenue in FY 2015. 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. Increased spending on construction and autos caused the share to grow through FY 2015, reaching an estimated 36.2% of personal income. Recent legislative changes that will tax some online sales and eliminate some exemptions are expected to increase taxable sales' share of personal income to 36.4% in FY 2016. After remaining at that level through FY 2018, the share is expected to decline through

FY 2021, reaching 35.7% in that year. 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; Data through FY 2015, forecast through FY 2021

Retail sales tax receipt growth forecast:

FY16: 6.9%
 FY17: 4.0%
 FY18: 4.8%
 FY19: 4.6%

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. Construction and auto sales brought growth to 8.1% in FY 2015. Despite the legislative changes in the last session that will bring in additional tax revenue, growth in FY 2016 taxable activity is forecasted to slow to 5.6% due to slowing growth in construction and auto sales. Growth dips to 4.1% in FY 2017 due to the relatively elevated level of FY 2016 activity. Growth then returns to 4.8% in FY 2018 and slows each fiscal year through the end of the forecast period, reaching 4.0% growth in FY 2021 (see Table 3.4). 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 2015 was 6.9%. Forecasted FY 2016 growth is also 6.9%. Growth is forecasted at 4.0% in FY 2017, 4.8% in FY 2018, 4.6% in FY 2019, 4.4% in FY 2020 and 4.1% in FY 2021.

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 19.6% of GF-S revenue in FY 2015. 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 2015, 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 43% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 25% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 21% of taxes due.

B&O tax growth forecast:

FY16: 6.9%
FY17: 3.9%
FY18: 5.3%
FY19: 5.3%

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, was 4.5%. Growth in FY 2016 is forecasted at 6.9%, due largely to legislative changes from the 2015 session. Growth is then forecasted to decrease to 3.9% in FY 2017, 5.3% in FY 2018 through FY 2020 and 5.0% in FY 2021.

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 11.6% of total revenue in FY 2015. Although 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:

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

Property tax collections grew by 2.3% in FY 2015. Second quarter 2015 and forecasted second quarter 2016 year-over-year inflation of less than 1% restrains the growth rate of the calendar year 2016 and 2017 levies, keeping forecasted collections growth at 2.1% in FY 2016 and 2.0% in FY 2017 despite forecasted increases in the level of new construction. Property tax receipts are forecasted to grow by 2.3% in FY 2018 and 2.5% in FY 2019 through FY 2021.

REET was the fourth largest GF-S source in FY 2015

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2015, accounting for 4.3% 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, from July 1, 2013 – June 30, 2019, the Education Legacy Trust Account (4.1%). The tax is applied to both residential and commercial real estate, including purchases of vacant land.

Due to a high number of large sales of commercial property, REET receipts grew by 34.0% in FY 2013. FY 2014 receipts were

REET growth forecast:

*FY16: 7.2%
FY17: -9.4%
FY18: 3.6%
FY19: 3.3%*

also boosted by large commercial sales, resulting in growth of 15.2%. Even higher commercial sales coupled with strengthening residential sales boosted FY 2015 growth to 20.4%. Further strengthening in residential sales is expected to allow FY 2016 sales to grow another 7.2% despite lower commercial sales. Commercial sales are expected to decline to more normal levels in FY 2017, resulting in a 9.4% decrease in collections despite continued but slowing residential sales growth. Growth is forecasted at 3.6% in FY 2018, 3.3% in FY 2019 and 3.4% in FY 2020 and 2021.

Use tax was the fifth largest GF-S source in FY 2015

The state use tax was the fifth largest GF-S revenue source in FY 2015 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:

*FY16: 8.5%
FY17: -1.6%
FY18: 5.5%
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. Despite a reduction in collections from the manufacturing sector, increases in construction and used vehicle sales brought growth to 4.9% in FY 2015. An expected large audit payment plus the legislated elimination of certain tax exemptions is expected to boost growth to 8.5% in FY 2016. Coming off of FY 2016's high level, collections are forecasted to decrease by 1.6% in FY 2017. Growth is then expected to occur at more normal levels of 5.5% in FY 2018, 4.8% in FY 2019, 4.2% in FY 2020 and 3.9% in FY 2021.

The cigarette tax was the sixth largest GF-S source in FY 2015

The state tax on cigarettes was the sixth largest DOR GF-S revenue source in FY 2015 at 2.3% 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:

*FY16: -3.0%
FY17: -2.3%
FY18: -2.9%
FY19: -2.6%*

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 paused in FY 2015, bringing revenues to a level 1.7% above that of FY 2014. Despite a planned increase in tax enforcement established in the most recent legislative session, collections are expected to decrease by 3.0% in FY 2016. Further ramp-up of the

enforcement efforts in FY 2017 is forecasted to temporarily slow the long-term decline in collections, leading to a 2.3% decline in that year. Collections are then forecasted to decline by 2.9% in FY 2018, 2.6% in FY 2019, 3.0% in FY 2020 and 2.4% in FY 2021.

Public utility taxes were the seventh largest GF-S source in FY 2015

Public utility taxes were the seventh largest DOR source of GF-S revenue in FY 2015, bringing in 2.2% 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:

*FY16: 6.1%
FY17: 3.2%
FY18: 4.7%
FY19: 4.1%*

Public utility tax receipts decreased by 3.3% in FY 2015 due to low and declining natural gas and electricity prices and moderate weather. Large increases in electricity prices in some markets bring expected growth of 6.1% in FY 2016. FY 2017 growth then slows to 3.2% from FY 2016's elevated level. Other increases in projected utility prices bring expected growth of 4.7% in FY 2018, slowing to 4.1% in FY 2019, 4.2% in FY 2020 and 3.7% in FY 2021.

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. During the 2015 regular and special sessions, legislation was passed that substantially altered the market rules set up by the initiative. 2SSB 5052, passed during the regular session, brought previously unregulated medical marijuana dispensaries into the same regulatory regime as licensed recreational cannabis outlets. This legislation was outlined in our June forecast publication. Subsequent to the June forecast, 2E2SHB 2136, passed in the second special session, changed the cannabis excise tax from a 25 percent tax collected from growers, processors and retailers to a 37 percent tax on retail sales only. The law also made changes to the distribution of tax and fee revenue. Cannabis taxes and license fees are still collected by the Liquor and Cannabis Board and are placed into a dedicated fund and appropriated annually.

*Change in GF-S forecast of total cannabis-related revenue by biennium (millions):
15-17: -\$0.1
17-19: -\$6.3*

Distributions of cannabis excise taxes to the GF-S totaled \$15.3 million in the 2013-15 biennium. Forecasted GF-S distributions and fees for the 2015-17 biennium are now expected to total \$133.1 million, \$0.1 million less than forecasted in November. GF-S distributions are forecasted at \$224.0 million in the 2017-19 biennium, a decrease of \$6.3 million from the November forecast. GF-S distributions are forecasted at \$263.8 million in

the 2019-21 biennium. Details of the forecasted distributions from the account can be found in Table 3.18.

Department of Licensing

*Forecast
change by
biennium
(millions):*

15-17: \$0.3
17-19: -\$0.1

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 department's forecast for the 2015-17 biennium has been increased \$0.3 million to \$37.0 million and the forecast of revenue for the 2017-19 biennium has been decreased \$0.1 million to \$37.1 million. The department's initial forecast of revenue for the 2019-21 biennium is \$37.0 million.

The Office of Financial Management (Other Agencies)

*Forecast
change by
biennium
(millions):*

15-17: \$7.2
17-19: -\$2.1

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 and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The office's forecast for the 2015-17 biennium was increased \$7.2 million to \$214.4 million. The forecast for the 2017-19 biennium was decreased \$2.1 million to \$203.9 million. The office's initial forecast of revenue for the 2019-21 biennium is \$196.4 million.

State Treasurer

*Forecast
change by
biennium
(millions):*

15-17: \$2.7
17-19: \$12.0

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's forecast for the 2015-17 biennium has been increased \$2.7 million to \$12.7 million and the forecast for the 2017-19 biennium has been increased \$12.0 million to \$54.2 million. The forecast increases in both biennia were due to higher expected average fund balances. The office's initial forecast of revenue for the 2019-21 biennium is \$67.5 million.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

15-17: \$0.8
17-19: \$0.7

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 revenue for the 2015-17 biennium has been increased \$0.8 million to \$1,097.7 million and the forecast for the 2017-19 biennium has been increased \$0.7 million to \$1,184.1 million. The office's initial forecast of revenue for the 2019-21 biennium is \$1,278.5 million.

Liquor and Cannabis Board

*Forecast
change by
biennium
(millions):*

15-17: \$2.9
17-19: -\$8.4

The recently renamed Liquor and Cannabis 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 and medicinal cannabis discussed previously. The forecast of LCB GF-S revenue for the 2015-17 biennium has been increased \$2.9 million to \$346.1 million. The forecast of revenue for the 2017-19 biennium has been decreased \$8.4 million to \$462.2 million. The initial forecast of revenue for the 2019-21 biennium is \$518.3 million.

Lottery Commission

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

15-17: \$27.1
17-19: \$15.1

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. High ticket sales ahead of the record Powerball jackpot in January have increased projected GF-S transfers for the 2015-17 biennium. Transfers are now forecasted at \$32.0 million, a \$27.1 million increase from November's forecast. Forecasted increases in future Powerball jackpots due to recent rule changes have added \$15.1 million to projected transfers in the 2017-19 biennium. Transfers for the biennium are now forecasted at \$36.3 million. The initial forecast of transfers to the GF-S for the 2019-21 biennium is \$44.4 million.

*OPA forecast
change by
biennium
(millions):*

15-17: -\$2.5
17-19: -\$1.9

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. Due to lower projected sales of Mega Millions tickets, the forecast for the 2015-17 biennium has been decreased \$2.5 million to \$262.7 million. The forecast for the 2017-19 biennium has been decreased \$1.9 million to \$253.0 million. The initial forecast of revenue for the 2019-21 biennium is \$255.6 million.

Administrative Office of the Courts

*Forecast
change by
biennium
(millions):*

15-17: -\$7.6
17-19: -\$10.6

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 for the 2015-17 biennium has been decreased \$7.6 million to \$159.7 million and the forecast of transfers for the 2017-19 biennium

has been decreased \$10.6 million to \$166.2 million. The initial forecast of revenue for the 2019-21 biennium is \$173.6 million.

Track Record for the 2015-17 Biennium

The February 2016 forecast is \$1.6 billion (4.6%) higher than the initial September 2012 forecast

Table 3.10 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 February 2016 forecast for the biennium is \$1.62 billion (4.6%) higher than the initial forecast. Non-economic changes have increased the forecast by \$504 million (1.4%). Excluding non-economic changes, the current forecast is \$1.11 billion (3.1%) higher than the initial forecast. The June 2015 forecast, coupled with the \$193 million in legislative and budget-driven revenue changes passed in the 2015 special legislative sessions, was the basis for the initial budget for the 2015-17 biennium. The February 2016 forecast is \$186 million (0.5%) higher than that sum.

Track Record for the 2017-19 Biennium

The February 2016 forecast is \$1.4 billion (3.7%) higher than the initial February 2014 forecast

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2017-19 biennium. The February 2014 forecast was the initial forecast for the biennium. The February 2016 forecast is \$1.42 billion (3.7%) higher than the initial forecast. Non-economic changes have increased the forecast by \$407 million (1.1%). Excluding non-economic changes, the current forecast is \$1.01 billion (2.6%) 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 2015-17 and 2017-19 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 2015-17 Biennium

The forecast implies GF-S reserves of \$1.53 billion at the end of the 2015-17 biennium and \$1.54 billion in reserves for GF-S, ELTA and OPA

Table 3.12 shows the budgetary balance sheet for the 2015-17 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, the GF-S beginning fund balance for the 2015-17 biennium is \$990.9 million and the total estimated beginning balance for GF-S, ELTA and OPA is \$1,011.2 million. Based on the February 2016 revenue forecast and currently enacted budgets, unrestricted GF-S reserves are projected to be \$638.9 million at the end of the 2015-17 biennium and GF-S, ELTA and OPA reserves are projected to be \$647.5 million. In addition, the Budget Stabilization Account is projected to have a balance of \$892.5 million, bringing total projected GF-S reserves to \$1,531.4 million. Projected combined reserves for the ELTA and OPA are \$8.6 million, for total projected reserves of \$1,539.9 million for GF-S, ELTA and OPA at the end of the 2015-17 biennium.

Alternative Forecasts for the 2015-17 and 2017-19 Biennia

Optimistic scenario (billions):

*15-17: +\$1.6
17-19: +\$3.7*

Pessimistic scenario:

*15-17: -\$1.5
17-19: -\$3.6*

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 55% to the baseline forecast, 15% to a scenario based on the upside risks and 30% to a scenario based on the downside risks. The revenue implications of these alternative scenarios for the 2015-17 biennium are shown in Table 3.13 and those of the 2017-19 biennium are shown in Table 3.14. For the 2015-17 biennium, the optimistic forecast generates \$38,705.0 million in GF-S revenue, \$1,567.8 million (4.2%) more than the baseline scenario, while the pessimistic forecast produces \$35,617.2 million in revenue, \$1,520.1 million (4.1%) less than the baseline. For the 2017-19 biennium, the optimistic forecast generates \$43,825.9 million in GF-S revenue, \$3,700.6 million (9.2%) more than the baseline scenario, while the pessimistic forecast produces \$36,499.8 million in revenue, \$3,625.5 million (9.0%) less than the baseline.

Near General Fund Forecasts for the 2015-17–2019-21 Biennia

*Near General
Fund
Forecast
(millions):*

*2015-17:
\$37,574.7*

*2017-19:
\$40,638.8*

*2019-21:
\$43,796.5*

“Near General Fund” accounts are those included in the GF-S plus the Education Legacy Trust Account (ELTA). The ELTA is primarily funded by a tax on estates of over \$2 million. Legislation from the 2013 special session, however, added revenue from public utility and real estate excise taxes which had previously gone into non-GF-S accounts. Subsequent legislation also added revenue from solid waste taxes beginning in FY 2016. All of these added revenue sources will cease to be transferred into the ELTA beginning in FY 2020. The forecast for the 2015-17 biennium is \$37,574.7 million, \$75.7 million less than the November 2015 forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$40,638.8 million, \$433.7 million less than the November forecast. The initial forecast of Near General Fund revenue for the 2019-21 biennium is \$43,796.5 million. 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%	28,905.6	4.3%
2013-15	33,666.0	9.8%	30,942.4	7.0%
2015-17 ^F	37,137.3	10.3%	33,629.4	8.7%
2017-19 ^F	40,125.3	8.0%	35,170.8	4.6%
2019-21 ^F	43,441.0	8.3%	36,767.6	4.5%

^F February 2016 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 February 2016 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	130,168	8.1%
2016 ^F	137,432	5.6%
2017 ^F	143,033	4.1%
2018 ^F	149,957	4.8%
2019 ^F	156,709	4.5%
2020 ^F	163,532	4.4%
2021 ^F	170,069	4.0%

^F February 2016 forecast
Source: ERFRC

* 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

2015-17 biennium; cash basis

(millions of dollars)

Forecast by Agency	Nov. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Feb. 2016 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,976.6	\$0.0	(\$83.4)	\$17,893.2	(\$83.4)
Business & Occupation Use	7,458.6	0.0	(87.0)	7,371.6	(87.0)
Public Utility	1,262.9	0.0	15.6	1,278.5	15.6
Liquor Sales/Liter	825.5	0.0	0.5	826.0	0.5
Cigarette	504.5	0.0	2.0	506.5	2.0
Property (State Levy)	757.5	0.0	7.4	764.8	7.4
Real Estate Excise	4,140.7	0.0	(4.5)	4,136.2	(4.5)
Timber Excise	1,492.2	0.0	22.8	1,515.1	22.8
Other	5.5	0.0	(1.3)	4.2	(1.3)
Subtotal	914.2	0.0	27.2	941.4	27.2
	35,338.2	0.0	(100.7)	35,237.6	(100.7)
Department of Licensing					
Boat excise, licenses, fees & other	36.6	0.00	0.3	37.0	0.3
Insurance Commissioner					
Insurance Premiums	1,096.9	0.0	0.8	1,097.7	0.8
Liquor Control Board					
Fees, Cannabis Excise Tax	287.1	0.0	3.2	290.3	3.2
Beer & Wine Surtax	56.1	0.0	(0.3)	55.8	(0.3)
Lottery Commission					
Lottery Revenue	4.9	0.0	27.1	32.0	27.1
State Treasurer					
Interest Earnings	10.0	0.0	2.7	12.7	2.7
Office of Financial Management					
Other Agencies	207.2	0.0	7.2	214.4	7.2
Administrative Office of the Courts					
Fines and Forfeitures	167.3	0.0	(7.6)	159.7	(7.6)
Total General Fund-State *	\$37,204.4	\$0.0	(\$67.2)	\$37,137.3	(\$67.2)

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council November 18, 2015.² Forecast for the 2015-17 biennium, adopted February 17, 2016

*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

2015-17 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Nov. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Feb. 2016 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$17,976.6	\$0.0	(\$83.4)	\$17,893.2	(\$83.4)
Business & Occupation	7,458.6	0.0	(87.0)	7,371.6	(87.0)
Use	1,262.9	0.0	15.6	1,278.5	15.6
Public Utility	825.5	0.0	0.5	826.0	0.5
Liquor Sales/Liter	504.5	0.0	3.2	507.7	3.2
Cigarette	757.5	0.0	7.4	764.8	7.4
Property (State Levy)	4,140.7	0.0	(4.5)	4,136.2	(4.5)
Real Estate Excise	1,492.2	0.0	22.8	1,515.1	22.8
Timber Excise	5.5	0.0	(1.3)	4.1	(1.3)
Other	914.2	0.0	31.9	946.1	31.9
Subtotal	35,338.2	0.0	(94.8)	35,243.4	(94.8)
Department of Licensing					
Boat excise, licenses, fees & other	36.6	0.00	0.3	37.0	0.3
Insurance Commissioner					
Insurance Premiums	1,096.9	0.0	0.8	1,097.7	0.8
Liquor Control Board					
Fees, Cannabis Excise Tax	287.1	0.0	3.2	290.3	3.2
Beer & Wine Surtax	56.1	0.0	(0.3)	55.8	(0.3)
Lottery Commission					
Lottery Revenue	15.0	0.0	27.1	42.0	27.1
State Treasurer					
Interest Earnings	9.8	0.0	2.8	12.6	2.8
Office of Financial Management					
Other	207.2	0.0	7.2	214.4	7.2
Administrative Office of the Courts					
Fines and Forfeitures	167.3	0.0	(7.6)	159.7	(7.6)
Total General Fund-State *	\$37,214.3	\$0.0	(\$61.2)	\$37,153.0	(\$61.2)

¹ Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council November 18, 2015.² Forecast for the 2015-17 biennium, adopted February 17, 2016

*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

2017-19 biennium; cash basis

(millions of dollars)

Forecast by Agency	Nov. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Feb. 2016 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$19,774.7	\$0.0	(\$214.6)	\$19,560.2	(\$214.6)
Business & Occupation Use	8,319.9	0.0	(194.8)	8,125.2	(194.8)
Public Utility	1,387.7	0.0	(17.1)	1,370.6	(17.1)
Liquor Sales/Liter	896.7	0.0	(0.2)	896.5	(0.2)
Cigarette	526.1	0.0	1.2	527.2	1.2
Property (State Levy)	724.6	0.0	(0.4)	724.2	(0.4)
Real Estate Excise	4,351.7	0.0	(23.8)	4,327.9	(23.8)
Timber Excise	1,517.0	0.0	(0.5)	1,516.5	(0.5)
Other	6.4	0.0	(1.8)	4.6	(1.8)
Subtotal	925.3	0.0	3.1	928.4	3.1
Department of Licensing					
Boat excise, licenses, fees & other	38,430.1	0.0	(448.9)	37,981.2	(448.9)
Insurance Commissioner					
Insurance Premiums	37.2	0.0	(0.1)	37.1	(0.1)
Liquor Control Board					
Fees, Cannabis Excise Tax	1,183.3	0.0	0.7	1,184.1	0.7
Beer & Wine Surtax	414.5	0.0	(8.1)	406.4	(8.1)
Lottery Commission					
Lottery Revenue	56.2	0.0	(0.4)	55.8	(0.4)
State Treasurer					
Interest Earnings	21.2	0.0	15.1	36.3	15.1
Office of Financial Management					
Other	42.2	0.0	12.0	54.2	12.0
Administrative Office of the Courts					
Fines and Forfeitures	205.9	0.0	(2.1)	203.9	(2.1)
Total General Fund-State *	\$40,567.5	\$0.0	(\$442.2)	\$40,125.3	(\$442.2)

¹ Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council November 18, 2015.² Forecast for the 2017-19 biennium, adopted February 17, 2016

*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

2017-19 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Nov. 2015 Forecast¹	Non- Economic Changes	Forecast Revision	Feb. 2016 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$19,774.7	\$0.0	(\$214.6)	\$19,560.2	(\$214.6)
Business & Occupation Use	8,319.9	0.0	(194.8)	8,125.2	(194.8)
Public Utility	1,387.7	0.0	(17.1)	1,370.6	(17.1)
Liquor Sales/Liter	896.7	0.0	(0.2)	896.5	(0.2)
Cigarette	526.1	0.0	1.2	527.2	1.2
Property (State Levy)	724.6	0.0	(0.4)	724.2	(0.4)
Real Estate Excise	4,351.7	0.0	(23.8)	4,327.9	(23.8)
Timber Excise	1,517.0	0.0	(0.5)	1,516.5	(0.5)
Other	6.8	0.0	(2.3)	4.5	(2.3)
Subtotal	925.3	0.0	3.1	928.4	3.1
	38,430.4	0.0	(449.3)	37,981.1	(449.3)
Department of Licensing					
Boat excise, licenses, fees & other	37.2	0.0	(0.1)	37.1	(0.1)
Insurance Commissioner					
Insurance Premiums	1,183.3	0.0	0.7	1,184.1	0.7
Liquor Control Board					
Fees, Cannabis Excise Tax	414.5	0.0	(8.0)	406.4	(8.0)
Beer & Wine Surtax	56.2	0.0	(0.4)	55.8	(0.4)
Lottery Commission					
Lottery Revenue	23.7	0.0	13.6	37.3	13.6
State Treasurer					
Interest Earnings	43.8	0.0	12.5	56.3	12.5
Office of Financial Management					
Other	205.9	0.0	(2.1)	203.9	(2.1)
Administrative Office of the Courts					
Fines and Forfeitures	176.8	0.0	(10.6)	166.2	(10.6)
Total General Fund-State *	\$40,571.9	\$0.0	(\$443.7)	\$40,128.3	(\$443.7)

¹ Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council November 18, 2015.² Forecast for the 2017-19 biennium, adopted February 17, 2016

*Detail may not add to totals because of rounding.

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

Table 3.9

February 2016 General Fund-State history and forecast**2015-17 to 2019-21 biennia; cash basis**

(Millions of Dollars)

Forecast by Source	Fiscal 2016	Fiscal 2017	2015-17 Biennium	Fiscal 2018	Fiscal 2019	2017-19 Biennium	Fiscal 2020	Fiscal 2021	2019-21 Biennium
State Taxes									
Retail sales**	\$8,772.2	\$9,121.0	\$17,893.2	\$9,561.7	\$9,998.4	\$19,560.2	\$10,443.0	\$10,871.5	\$21,314.5
Business & occupation	3,614.6	3,757.0	7,371.6	3,957.3	4,167.9	8,125.2	4,387.1	4,606.0	8,993.1
Use**	644.3	634.2	1,278.5	669.4	701.2	1,370.6	730.7	759.0	1,489.7
Public Utility	406.6	419.5	826.0	439.2	457.2	896.5	476.5	494.0	970.5
Liquor sales/liter	251.4	255.1	506.5	260.6	266.6	527.2	272.0	277.2	549.2
Beer & wine surtax	28.0	27.8	55.8	27.9	27.9	55.8	27.9	28.0	55.9
Cigarette	393.6	386.2	779.8	375.2	365.5	740.7	354.8	346.4	701.2
Tobacco products	49.9	47.7	97.6	48.1	48.5	96.6	48.9	49.3	98.3
Cannabis Excise Taxes	49.2	79.1	128.2	102.3	116.9	219.2	126.3	132.7	259.0
Property (state school levy)	2,047.1	2,089.1	4,136.2	2,137.7	2,190.2	4,327.9	2,244.8	2,301.6	4,546.4
Leasehold Excise Tax	26.1	27.1	53.2	28.1	28.9	57.0	29.7	30.4	60.0
Public utility district	52.1	53.2	105.3	54.3	55.4	109.6	56.4	57.4	113.8
Brokered Natural Gas	23.4	23.3	46.7	23.7	24.2	47.9	24.7	25.1	49.8
Real estate excise***	794.9	720.2	1,515.1	745.9	770.5	1,516.5	796.9	823.7	1,620.7
Timber excise	2.1	2.1	4.2	2.2	2.4	4.6	2.4	2.5	4.9
Estate/inheritance	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Boat excise	13.3	13.3	26.6	13.3	13.3	26.6	13.3	13.3	26.6
Insurance premiums	539.3	558.4	1,097.7	579.9	604.2	1,184.1	627.2	651.2	1,278.5
Penalties and interest on past due taxes	162.0	143.1	305.1	148.6	154.3	302.8	160.2	166.5	326.7
Other	56.9	56.7	113.6	58.0	37.5	95.4	38.1	38.7	76.8
Total Taxes	17,927.2	18,414.0	36,341.2	19,233.4	20,030.9	39,264.3	20,861.1	21,674.4	42,535.5
State Non-Tax Sources									
Licenses, permits, fees	142.4	139.4	281.8	142.8	144.9	287.8	146.3	147.6	293.9
Liquor & Cannabis fees	75.0	87.1	162.1	91.6	95.6	187.2	99.9	103.4	203.4
Earnings on investments	4.8	7.9	12.7	21.6	32.7	54.2	34.0	33.5	67.5
Administrative Office of the Courts	80.1	79.6	159.7	82.0	84.3	166.2	86.0	87.7	173.6
Transfers of unclaimed property	73.4	63.9	137.3	65.1	66.2	131.3	67.1	68.0	135.2
Other revenue & transfers	22.8	19.6	42.5	14.8	19.5	34.3	17.1	14.9	32.0
Total Non-Tax	398.5	397.6	796.1	417.8	443.1	860.9	450.4	455.2	905.6
Total General Fund-State *	\$18,325.7	\$18,811.6	\$37,137.3	\$19,651.2	\$20,474.0	\$40,125.3	\$21,311.5	\$22,129.6	\$43,441.0

* 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 2015-17 General Fund-State Cash Forecast

September 2012 through February 2016

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
September 2015	80	60	139	193 ^{#7}	333	37,091
November 2015	107	(8)	99	15 ^{#8}	113	37,204
February 2016	(101)	33	(67)	0	(67)	37,137
Total change***:						
From September 2012	816	299	1,115	504	1,619	
Percent change	2.4	21.1	3.1	1.4	4.6	

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

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

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

[#] First official forecast for the 2015-17 biennium.^{#1} Transfer of GF-S funds to Child and Family Reinvestment Account^{#2} Legislative and budget-driven revenue changes from 2013 second special session^{#3} Re-classification of prior period adjustments as non-revenue resources^{#4} Cannabis excise taxes and fees plus retail sales and B&O taxes on cannabis production and sales resulting from Initiative 502^{#5} Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session^{#6} Legislative revenue changes from 2015 regular legislative session^{#7} Legislative and budget driven revenue changes from 2015 special legislative sessions^{#8} Sum of large expected audit payments

Table 3.11

Track Record for the 2017-19 General Fund-State Cash Forecast

February 2014 through February 2016

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 2014 ##	\$36,887	\$1,823				\$38,710
Changes to Forecast						
June 2014	265	50	315	(1) #1	313	39,023
September 2014	227	(63)	164	0	164	39,188
November 2014	388	26	415	0	415	39,602
February 2015	126	28	154	0	154	39,757
June 2015	257	64	321	122 #2	443	40,200
September 2015	4	47	52	286 #3	338	40,538
November 2015	35	(5)	30	0	30	40,567
February 2016	(449)	7	(442)	0	(442)	40,125
Total change***:						
From February 2014	855	154	1,008	407	1,415	
Percent change	2.3	8.4	2.6	1.1	3.7	

* 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 2017-19 biennium.

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

#2 Legislative revenue changes from 2015 regular legislative session

#3 Legislative and budget driven revenue changes from 2015 special legislative sessions

Table 3.12

2015-17 Enacted Budget Balance Sheet

General Fund-State (GFS), Education Legacy Trust Account (ELTA),
Opportunity Pathways Account (OPA) and Budget Stabilization Account

Dollars in Millions

	2015-17		
	GFS	ELTA and OPA	TOTAL
RESOURCES			
Beginning Fund Balance	990.9	20.3	1,011.2
November 2015 Revenue Forecast	37,204.4	711.2	37,915.6
February 2016 Change	(67.2)	(11.0)	(78.2)
Current Revenue Totals	37,137.3	700.2	37,837.4
Transfer to Budget Stabilization Account (BSA)	(373.3)		(373.3)
Previously Enacted Fund Transfers	178.0	-	178.0
Prior Period Adjustments	40.8		40.8
2015 Legislative Sessions			
Extraordinary Revenue Growth transfer to BSA	(135.9)		(135.9)
Transfer back from BSA	135.9		135.9
Total Resources (including beginning fund balance)	37,973.7	720.5	38,694.2
EXPENDITURES			
Enacted Budgets			
Enacted 2015-17 Budget	37,507.3	711.9	38,219.2
Actual and Assumed Reversions	(172.5)		(172.5)
Total Expenditures	37,334.8	711.9	38,046.7
RESERVES			
Projected Ending GFS, ELTA & OPA Balances	638.9	8.6	647.5
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	513.1		513.1
Transfer from General Fund and Interest Earnings	515.3		515.3
Transfer to General Fund	(135.9)		(135.9)
Projected Budget Stabilization Account Ending Balance	892.5		892.5
Total Reserves (Including Budget Stabilization)	1,531.4	8.6	1,539.9

Table 3.13

**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	\$18,766.7	\$17,893.2	\$17,075.0
Business & Occupation Use	7,732.9	7,371.6	7,042.2
Public Utility	1,351.0	1,278.5	1,214.4
Property (school levy)	859.9	826.0	794.6
Real Estate Excise	4,155.8	4,136.2	4,116.5
Other	1,605.9	1,515.1	1,359.3
Subtotal	2,259.9	2,216.9	2,178.6
	36,732.1	35,237.6	33,780.6
Department of Licensing			
	37.7	37.0	36.2
Insurance Commissioner¹			
	1,125.1	1,097.7	1,070.3
Lottery Commission			
	33.6	32.0	30.4
State Treasurer - Interest earnings			
	31.7	12.7	3.2
Liquor and Cannabis Surtaxes & Fees²			
	360.4	346.1	332.2
Office of Financial Management			
Other agencies	220.9	214.4	208.0
Administrative Office of the Courts			
Fines and Forfeitures	163.5	159.7	156.3
Total General Fund - State*	\$38,705.0	\$37,137.3	\$35,617.2
Difference from February 2016 Baseline	\$1,567.8		(\$1,520.1)

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
2017-19 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$21,765.0	\$19,560.2	\$17,537.5
Business & Occupation Use	8,994.6	8,125.2	7,384.7
Public Utility	1,500.4	1,370.6	1,243.5
Property (school levy)	963.0	896.5	837.6
Real Estate Excise	4,365.5	4,327.9	4,288.2
Other	1,711.4	1,516.5	1,108.1
Subtotal	2,247.4	2,184.4	2,067.4
	41,547.3	37,981.2	34,466.9
Department of Licensing			
	37.9	37.1	36.4
Insurance Commissioner¹			
	1,213.7	1,184.1	1,154.5
Lottery Commission			
	38.2	36.3	34.5
State Treasurer - Interest earnings			
	108.2	54.2	18.9
Liquor and Cannabis Surtaxes & Fees²			
	491.6	462.2	435.5
Office of Financial Management			
Other agencies	210.0	203.9	197.7
Administrative Office of the Courts			
Fines and Forfeitures	179.1	166.2	155.3
Total General Fund - State*	\$43,825.9	\$40,125.3	\$36,499.8
Difference from February 2016 Baseline	\$3,700.6		(\$3,625.5)

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

February 2016 Forecast

(cash basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
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	143.1	0.6	0.0	11.2	0.0	0.0	0.3	4.7	120.2	0.0	6.1
2013-15 Biennium	291.0	9.9	0.0	22.0	0.0	0.0	0.6	8.4	233.9	0.0	16.1
2016	166.2	16.7	0.0	11.7	0.0	0.0	0.4	4.4	133.0	0.0	0.0
2017	161.8	15.3	0.0	12.2	0.0	0.0	0.3	3.8	129.7	0.0	0.0
2015-17 Biennium	328.0	32.0	0.0	23.8	0.0	0.0	0.7	8.2	262.7	0.0	0.0
2018	160.9	16.7	0.0	12.6	0.0	0.0	0.3	3.8	126.9	0.0	0.0
2019	163.5	19.6	0.0	13.1	0.0	0.0	0.3	3.8	126.1	0.0	0.0
2017-19 Biennium	324.4	36.3	0.0	25.8	0.0	0.0	0.7	7.6	253.0	0.0	0.0
2020	168.1	21.7	0.0	13.7	0.0	0.0	0.3	3.8	128.1	0.0	0.0
2021	169.1	22.7	0.0	14.2	0.0	0.0	0.3	3.8	127.6	0.0	0.0
2019-21 Biennium	337.2	44.4	0.0	27.9	0.0	0.0	0.7	7.6	255.6	0.0	0.0

Table 3.16

Lottery transfers by fund

February 2016 Forecast

(GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
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	141.3	0.0	0.0	11.2	0.0	0.0	0.3	4.7	119.0	0.0	6.1
2013-15 Biennium	288.9	0.6	0.0	22.0	0.0	0.0	0.6	8.7	240.9	0.0	16.1
2016	172.1	27.0	0.0	11.7	0.0	0.0	0.3	3.5	129.1	0.0	0.0
2017	158.6	15.0	0.0	12.2	0.0	0.0	0.3	3.8	126.7	0.0	0.0
2015-17 Biennium	330.7	42.0	0.0	23.8	0.0	0.0	0.7	7.3	255.8	0.0	0.0
2018	161.1	17.7	0.0	12.6	0.0	0.0	0.3	3.8	126.1	0.0	0.0
2019	163.5	19.6	0.0	13.1	0.0	0.0	0.3	3.8	126.1	0.0	0.0
2017-19 Biennium	324.6	37.3	0.0	25.8	0.0	0.0	0.7	7.6	252.2	0.0	0.0
2020	166.2	21.7	0.0	13.7	0.0	0.0	0.3	3.8	126.2	0.0	0.0
2021	168.4	22.7	0.0	14.2	0.0	0.0	0.3	3.8	126.8	0.0	0.0
2019-21 Biennium	334.6	44.4	0.0	27.9	0.0	0.0	0.7	7.6	253.0	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)

February 2016 - 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 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%
FY 2015	\$17,283	5.5%	\$207	5.0%	\$17,491	5.5%	\$120	5.7%	\$17,611	5.5%
Forecast:										
FY 2016	\$18,326	6.0%	\$201	-3.1%	\$18,527	5.9%	\$133	10.6%	\$18,660	6.0%
FY 2017	\$18,812	2.7%	\$236	17.7%	\$19,048	2.8%	\$130	-2.5%	\$19,178	2.8%
FY 2018	\$19,651	4.5%	\$243	2.8%	\$19,894	4.4%	\$127	-2.2%	\$20,021	4.4%
FY 2019	\$20,474	4.2%	\$270	11.3%	\$20,745	4.3%	\$126	-0.6%	\$20,871	4.2%
FY 2020	\$21,311	4.1%	\$176	-34.9%	\$21,488	3.6%	\$128	1.5%	\$21,616	3.6%
FY 2021	\$22,130	3.8%	\$179	1.9%	\$22,309	3.8%	\$128	-0.4%	\$22,437	3.8%
Biennial Totals										
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	\$33,666	9.8%	\$405	88.0%	\$34,071	10.4%	\$234	-4.1%	\$34,305	10.2%
15-17 Biennium	\$37,137	10.3%	\$437	8.1%	\$37,575	10.3%	\$263	12.3%	\$37,837	10.3%
17-19 Biennium	\$40,125	8.0%	\$514	17.4%	\$40,639	8.2%	\$253	-3.7%	\$40,892	8.1%
19-21 Biennium	\$43,441	8.3%	\$356	-30.8%	\$43,797	7.8%	\$256	1.0%	\$44,052	7.7%

*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
 February 2016
 Thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	Administrative expenses and pre-distribution allotments	Total to distribute	Distribution of remaining funds						
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention	General Fund-State
2015	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2016	\$164,064	\$8,182	\$155,882	\$12,814	\$7,500	\$345	\$77,941	\$5,351	\$251	\$51,680
2017	\$268,750	\$8,541	\$260,209	\$27,786	\$7,500	\$345	\$130,105	\$12,520	\$511	\$81,443
2018	\$329,549	\$8,541	\$321,008	\$27,786	\$9,750	\$1,702	\$160,504	\$16,050	\$511	\$104,705
2019	\$361,898	\$8,541	\$353,357	\$27,786	\$9,750	\$1,702	\$176,679	\$17,668	\$511	\$119,262
2020	\$382,918	\$8,541	\$374,377	\$27,786	\$9,750	\$1,702	\$187,188	\$18,719	\$511	\$128,720
2021	\$396,970	\$8,541	\$388,429	\$27,786	\$9,750	\$1,702	\$194,214	\$19,421	\$511	\$135,044
Biennial totals										
2013-15	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2015-17	\$432,814	\$16,723	\$416,091	\$40,600	\$15,000	\$690	\$208,046	\$17,871	\$762	\$133,123
2017-19	\$691,447	\$17,082	\$674,365	\$55,572	\$19,500	\$3,404	\$337,183	\$33,718	\$1,022	\$223,966
2019-21	\$779,888	\$17,082	\$762,806	\$55,572	\$19,500	\$3,404	\$381,403	\$38,140	\$1,022	\$263,764

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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.

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Table A1.1
U.S. Economic Forecast Summary
Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	15,961.7	16,341.8	16,690.7	17,093.2	17,503.4	17,888.5	18,282.1	18,684.3
% Ch	2.4	2.4	2.1	2.4	2.4	2.2	2.2	2.2
Real Consumption	10,875.7	11,211.3	11,510.4	11,803.2	12,086.5	12,364.4	12,648.9	12,927.2
% Ch	2.7	3.1	2.7	2.5	2.4	2.3	2.3	2.2
Real Nonresidential Fixed Investment	2,148.3	2,209.7	2,267.0	2,360.6	2,484.4	2,599.1	2,696.7	2,806.1
% Ch	6.2	2.9	2.6	4.1	5.2	4.6	3.8	4.1
Real Residential Fixed Investment	486.4	529.0	571.6	634.1	673.2	681.3	699.2	707.4
% Ch	1.8	8.7	8.1	10.9	6.2	1.2	2.6	1.2
Real Personal Income	13,467.6	14,034.1	14,449.7	14,834.0	15,243.1	15,655.1	16,054.0	16,448.1
% Ch	3.0	4.2	3.0	2.7	2.8	2.7	2.5	2.5
Real Per Capita Income (\$/Person)	42,156	43,601	44,529	45,346	46,225	47,099	47,922	48,719
% Ch	2.2	3.4	2.1	1.8	1.9	1.9	1.7	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.091	1.094	1.102	1.120	1.141	1.161	1.181	1.202
% Ch	1.4	0.3	0.7	1.6	1.8	1.8	1.7	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.367	2.370	2.387	2.438	2.495	2.550	2.604	2.658
% Ch	1.6	0.1	0.7	2.1	2.3	2.2	2.1	2.1
Employment Cost Index (Dec. 2005=1.0)	1.206	1.233	1.260	1.291	1.327	1.365	1.404	1.442
% Ch	2.0	2.2	2.2	2.4	2.8	2.9	2.8	2.7
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	17,348.1	17,937.9	18,575.5	19,379.7	20,227.3	21,058.3	21,923.1	22,804.2
% Ch	4.1	3.4	3.6	4.3	4.4	4.1	4.1	4.0
Personal Income	14,694.2	15,357.4	15,927.2	16,618.6	17,392.6	18,180.7	18,968.2	19,768.0
% Ch	4.4	4.5	3.7	4.3	4.7	4.5	4.3	4.2
Employment (Millions)								
U.S. Civilian Labor Force	155.9	157.1	159.5	161.6	163.4	165.0	166.5	167.5
Total U.S. Employment	146.3	148.8	151.7	153.8	155.6	157.1	158.4	159.3
Unemployment Rate (%)	6.17	5.28	4.82	4.76	4.71	4.75	4.81	4.86
Nonfarm Payroll Employment	138.94	141.83	144.27	145.76	147.05	148.22	149.35	150.27
% Ch	1.9	2.1	1.7	1.0	0.9	0.8	0.8	0.6
Manufacturing	12.18	12.32	12.36	12.47	12.55	12.65	12.67	12.72
% Ch	1.4	1.1	0.4	0.9	0.7	0.7	0.2	0.4
Durable Manufacturing	7.67	7.76	7.75	7.86	7.96	8.04	8.07	8.12
% Ch	1.7	1.1	-0.1	1.4	1.3	1.0	0.3	0.7
Nondurable Manufacturing	4.51	4.56	4.61	4.61	4.59	4.61	4.60	4.59
% Ch	0.9	1.1	1.1	0.0	-0.4	0.3	0.0	-0.2
Construction	6.15	6.44	6.76	7.09	7.39	7.64	7.85	8.03
% Ch	5.0	4.8	5.0	4.8	4.2	3.4	2.7	2.3
Service-Providing	119.71	122.25	124.42	125.49	126.36	127.17	128.05	128.73
% Ch	1.8	2.1	1.8	0.9	0.7	0.6	0.7	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	93.0	48.8	35.0	42.2	45.1	47.1	48.6	49.6
Personal Saving/Disposable Income (%)	4.8	5.2	5.5	6.0	6.7	7.1	7.0	6.9
Auto Sales (Millions)	7.7	7.5	7.5	7.8	7.8	7.7	7.6	7.7
% Ch	1.4	-2.4	0.4	2.9	0.4	-1.6	-0.6	1.3
Housing Starts (Millions)	1.001	1.107	1.220	1.426	1.525	1.575	1.628	1.629
% Ch	7.8	10.6	10.3	16.9	7.0	3.3	3.4	0.1
Federal Budget Surplus (Billions)	-631.5	-588.0	-629.9	-704.4	-812.2	-871.2	-856.0	-835.8
Net Exports (Billions)	-530.0	-531.9	-451.1	-486.0	-557.4	-579.6	-597.0	-593.5
3-Month Treasury Bill Rate (%)	0.03	0.05	0.54	1.35	2.34	2.81	2.78	2.78
10-Year Treasury Note Yield (%)	2.54	2.14	2.25	2.56	3.10	3.58	3.53	3.52
Bond Index of 20 G.O. Munis. (%)	4.25	3.64	3.96	4.41	4.77	5.16	5.13	5.14
30-Year Fixed Mortgage Rate (%)	4.17	3.85	4.05	4.39	4.99	5.62	5.60	5.57

Table A1.2
U.S. Economic Forecast Summary
 Forecast 2016 to 2021

	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	16,532.5	16,638.3	16,743.6	16,848.5	16,948.8	17,048.4	17,143.0	17,232.6
% Ch , Annual Rate	2.2	2.6	2.6	2.5	2.4	2.4	2.2	2.1
Real Consumption	11,395.3	11,471.8	11,549.4	11,625.3	11,699.3	11,771.3	11,838.5	11,903.7
% Ch , Annual Rate	2.6	2.7	2.7	2.7	2.6	2.5	2.3	2.2
Real Nonresidential Fixed Investment	2,231.8	2,260.2	2,279.7	2,296.5	2,326.5	2,346.9	2,368.3	2,400.7
% Ch , Annual Rate	3.1	5.2	3.5	3.0	5.3	3.6	3.7	5.6
Real Residential Fixed Investment	553.2	564.4	578.3	590.4	609.6	626.9	643.4	656.7
% Ch , Annual Rate	6.2	8.3	10.2	8.7	13.6	11.8	11.0	8.5
Real Personal Income	14,345.4	14,403.5	14,486.7	14,563.3	14,686.2	14,791.8	14,882.8	14,975.3
% Ch , Annual Rate	3.7	1.6	2.3	2.1	3.4	2.9	2.5	2.5
Real Per Capita Income (\$/Person)	44,343	44,432	44,598	44,744	45,030	45,263	45,449	45,640
% Ch , Annual Rate	2.9	0.8	1.5	1.3	2.6	2.1	1.7	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.098	1.100	1.103	1.108	1.113	1.118	1.123	1.128
% Ch , Annual Rate	0.0	0.7	1.2	2.0	1.6	1.7	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.376	2.379	2.389	2.405	2.418	2.431	2.445	2.459
% Ch , Annual Rate	-0.6	0.4	1.7	2.8	2.0	2.2	2.3	2.4
Employment Cost Index (Dec. 2005=1.0)	1.250	1.257	1.264	1.270	1.278	1.286	1.295	1.304
% Ch , Annual Rate	2.2	2.3	2.0	2.1	2.4	2.6	2.7	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	18,291.8	18,477.5	18,659.8	18,873.1	19,073.3	19,278.4	19,485.1	19,682.1
% Ch , Annual Rate	3.7	4.1	4.0	4.7	4.3	4.4	4.4	4.1
Personal Income	15,748.5	15,838.4	15,979.1	16,142.9	16,343.2	16,532.1	16,708.5	16,890.7
% Ch , Annual Rate	3.7	2.3	3.6	4.2	5.1	4.7	4.3	4.4
Employment (Millions)								
U.S. Civilian Labor Force	158.5	159.2	159.8	160.4	160.9	161.3	161.8	162.3
Total U.S. Employment	150.7	151.4	152.0	152.6	153.1	153.6	154.0	154.4
Unemployment Rate (%)	4.84	4.84	4.82	4.79	4.77	4.76	4.76	4.76
Nonfarm Payroll Employment	143.49	144.11	144.53	144.94	145.35	145.59	145.88	146.22
% Ch , Annual Rate	1.8	1.7	1.2	1.1	1.1	0.7	0.8	0.9
Manufacturing	12.37	12.35	12.34	12.39	12.45	12.47	12.47	12.49
% Ch , Annual Rate	1.6	-0.4	-0.4	1.7	1.8	0.7	-0.2	0.9
Durable Manufacturing	7.76	7.74	7.73	7.77	7.82	7.86	7.86	7.90
% Ch , Annual Rate	1.2	-0.8	-0.8	2.2	2.7	1.6	0.2	1.8
Nondurable Manufacturing	4.61	4.61	4.61	4.62	4.62	4.62	4.61	4.60
% Ch , Annual Rate	2.2	0.3	0.2	1.0	0.2	-0.8	-0.8	-0.7
Construction	6.64	6.71	6.82	6.89	6.97	7.05	7.13	7.21
% Ch , Annual Rate	5.9	4.5	6.3	4.5	4.6	4.9	4.6	4.2
Service-Providing	123.74	124.33	124.67	124.95	125.23	125.36	125.56	125.79
% Ch , Annual Rate	1.6	1.9	1.1	0.9	0.9	0.4	0.7	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	30.3	33.7	37.0	38.9	40.5	41.8	42.7	43.6
Personal Saving/Disposable Income (%)	5.7	5.5	5.5	5.5	5.7	5.9	6.1	6.2
Auto Sales (Millions)	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8
% Ch , Annual Rate	1.5	-2.9	6.2	3.2	5.5	-1.3	4.0	1.5
Housing Starts (Millions)	1.159	1.198	1.223	1.301	1.366	1.418	1.441	1.479
% Ch , Annual Rate	9.3	14.2	8.8	28.1	21.3	16.2	6.6	11.1
Federal Budget Surplus (Billions)	-632.9	-621.8	-618.0	-646.8	-684.2	-704.4	-708.4	-720.7
Net Exports (Billions)	-494.1	-445.6	-431.2	-433.7	-450.5	-475.0	-501.8	-516.8
3-Month Treasury Bill Rate (%)	0.34	0.48	0.61	0.74	0.98	1.20	1.48	1.75
10-Year Treasury Note Yield (%)	2.09	2.21	2.32	2.38	2.47	2.52	2.59	2.66
Bond Index of 20 G.O. Munis. (%)	3.47	3.93	4.20	4.26	4.33	4.37	4.42	4.50
30-Year Fixed Mortgage Rate (%)	3.91	4.02	4.08	4.19	4.29	4.35	4.42	4.50

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2016 to 2021

	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	17,354.3	17,458.2	17,558.9	17,642.3	17,745.1	17,839.9	17,938.3	18,030.8
% Ch , Annual Rate	2.9	2.4	2.3	1.9	2.4	2.2	2.2	2.1
Real Consumption	11,986.7	12,052.2	12,120.7	12,186.2	12,263.5	12,330.2	12,397.4	12,466.7
% Ch , Annual Rate	2.8	2.2	2.3	2.2	2.6	2.2	2.2	2.3
Real Nonresidential Fixed Investment	2,432.8	2,468.4	2,502.9	2,533.6	2,561.5	2,587.5	2,611.3	2,636.2
% Ch , Annual Rate	5.4	6.0	5.7	5.0	4.5	4.1	3.7	3.9
Real Residential Fixed Investment	666.1	672.1	677.2	677.3	675.1	676.6	683.7	689.9
% Ch , Annual Rate	5.9	3.7	3.1	0.0	-1.3	0.9	4.2	3.7
Real Personal Income	15,104.5	15,196.7	15,286.1	15,385.0	15,514.8	15,614.4	15,700.8	15,790.3
% Ch , Annual Rate	3.5	2.5	2.4	2.6	3.4	2.6	2.2	2.3
Real Per Capita Income (\$/Person)	45,942	46,130	46,309	46,516	46,816	47,023	47,190	47,366
% Ch , Annual Rate	2.7	1.6	1.6	1.8	2.6	1.8	1.4	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.133	1.138	1.144	1.149	1.154	1.159	1.164	1.169
% Ch , Annual Rate	1.8	1.9	1.9	1.8	1.7	1.7	1.8	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.473	2.487	2.502	2.516	2.529	2.542	2.557	2.570
% Ch , Annual Rate	2.3	2.3	2.4	2.2	2.2	2.1	2.2	2.1
Employment Cost Index (Dec. 2005=1.0)	1.313	1.322	1.332	1.341	1.351	1.360	1.370	1.380
% Ch , Annual Rate	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	19,916.0	20,126.4	20,337.8	20,529.2	20,746.9	20,950.2	21,164.8	21,371.6
% Ch , Annual Rate	4.8	4.3	4.3	3.8	4.3	4.0	4.2	4.0
Personal Income	17,114.5	17,298.7	17,482.2	17,675.0	17,900.4	18,092.3	18,273.4	18,456.6
% Ch , Annual Rate	5.4	4.4	4.3	4.5	5.2	4.4	4.1	4.1
Employment (Millions)								
U.S. Civilian Labor Force	162.7	163.2	163.6	164.1	164.4	164.8	165.2	165.6
Total U.S. Employment	154.9	155.4	155.8	156.2	156.6	156.9	157.3	157.6
Unemployment Rate (%)	4.73	4.71	4.70	4.72	4.73	4.75	4.76	4.78
Nonfarm Payroll Employment	146.53	146.89	147.24	147.52	147.82	148.08	148.35	148.61
% Ch , Annual Rate	0.9	1.0	1.0	0.7	0.8	0.7	0.7	0.7
Manufacturing	12.51	12.54	12.56	12.60	12.63	12.63	12.65	12.67
% Ch , Annual Rate	0.5	1.1	0.6	1.0	1.1	0.1	0.6	0.4
Durable Manufacturing	7.92	7.95	7.97	8.00	8.03	8.03	8.04	8.06
% Ch , Annual Rate	1.2	1.8	1.0	1.4	1.4	0.0	0.7	0.5
Nondurable Manufacturing	4.59	4.59	4.59	4.60	4.60	4.60	4.61	4.61
% Ch , Annual Rate	-0.7	-0.1	0.1	0.4	0.4	0.3	0.4	0.3
Construction	7.28	7.35	7.43	7.50	7.55	7.61	7.67	7.73
% Ch , Annual Rate	4.1	4.1	4.4	3.6	3.1	2.9	3.4	3.0
Service-Providing	126.02	126.26	126.50	126.68	126.88	127.08	127.27	127.45
% Ch , Annual Rate	0.7	0.8	0.8	0.5	0.7	0.6	0.6	0.6
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	44.2	44.8	45.4	46.0	46.5	46.9	47.3	47.7
Personal Saving/Disposable Income (%)	6.6	6.6	6.7	6.8	7.1	7.1	7.1	7.0
Auto Sales (Millions)	7.8	7.8	7.8	7.7	7.7	7.7	7.6	7.6
% Ch , Annual Rate	0.4	0.5	-2.1	-3.5	-1.2	-0.9	-1.6	-0.1
Housing Starts (Millions)	1.504	1.520	1.536	1.541	1.551	1.561	1.586	1.604
% Ch , Annual Rate	6.8	4.3	4.5	1.1	2.8	2.4	6.5	4.7
Federal Budget Surplus (Billions)	-788.6	-805.7	-815.2	-839.1	-873.6	-882.9	-869.7	-858.6
Net Exports (Billions)	-537.8	-553.1	-565.5	-573.0	-574.4	-579.5	-580.2	-584.4
3-Month Treasury Bill Rate (%)	2.00	2.23	2.46	2.68	2.81	2.81	2.80	2.79
10-Year Treasury Note Yield (%)	2.75	2.92	3.21	3.51	3.60	3.59	3.57	3.55
Bond Index of 20 G.O. Munis. (%)	4.53	4.64	4.86	5.07	5.15	5.17	5.16	5.14
30-Year Fixed Mortgage Rate (%)	4.61	4.79	5.12	5.46	5.61	5.63	5.62	5.61

Table A1.2 (continued)
U.S. Economic Forecast Summary
 Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real National Income Accounts (Billions of Chained 2009 Dollars)								
Real Gross Domestic Product	18,135.0	18,237.2	18,330.0	18,426.0	18,529.1	18,630.1	18,734.9	18,843.0
% Ch , Annual Rate	2.3	2.3	2.0	2.1	2.3	2.2	2.3	2.3
Real Consumption	12,547.5	12,613.3	12,680.7	12,754.0	12,825.7	12,892.6	12,959.1	13,031.6
% Ch , Annual Rate	2.6	2.1	2.2	2.3	2.3	2.1	2.1	2.3
Real Nonresidential Fixed Investment	2,658.7	2,684.3	2,710.1	2,733.7	2,761.8	2,791.0	2,820.8	2,850.9
% Ch , Annual Rate	3.5	3.9	3.9	3.5	4.2	4.3	4.3	4.3
Real Residential Fixed Investment	692.9	697.2	702.6	704.2	703.5	704.9	709.4	711.9
% Ch , Annual Rate	1.8	2.5	3.1	1.0	-0.4	0.8	2.6	1.4
Real Personal Income	15,912.2	16,008.3	16,101.0	16,194.8	16,308.1	16,403.3	16,493.2	16,587.7
% Ch , Annual Rate	3.1	2.4	2.3	2.4	2.8	2.4	2.2	2.3
Real Per Capita Income (\$/Person)	47,638	47,832	48,015	48,201	48,445	48,634	48,806	48,992
% Ch , Annual Rate	2.3	1.6	1.5	1.6	2.0	1.6	1.4	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.174	1.179	1.184	1.189	1.194	1.199	1.204	1.209
% Ch , Annual Rate	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.584	2.597	2.610	2.624	2.637	2.651	2.665	2.679
% Ch , Annual Rate	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0
Employment Cost Index (Dec. 2005=1.0)	1.389	1.399	1.409	1.418	1.428	1.438	1.447	1.457
% Ch , Annual Rate	2.8	2.8	2.8	2.8	2.7	2.7	2.7	2.7
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,602.1	21,821.9	22,028.8	22,239.7	22,469.1	22,687.9	22,914.9	23,144.8
% Ch , Annual Rate	4.4	4.1	3.8	3.9	4.2	4.0	4.1	4.1
Personal Income	18,680.0	18,873.6	19,063.2	19,256.1	19,474.1	19,671.1	19,864.4	20,062.5
% Ch , Annual Rate	4.9	4.2	4.1	4.1	4.6	4.1	4.0	4.0
Employment (Millions)								
U.S. Civilian Labor Force	166.0	166.4	166.7	166.9	167.2	167.4	167.6	167.8
Total U.S. Employment	157.9	158.3	158.6	158.7	159.0	159.1	159.3	159.6
Unemployment Rate (%)	4.79	4.80	4.82	4.84	4.85	4.86	4.87	4.87
Nonfarm Payroll Employment	148.91	149.39	149.47	149.61	149.86	150.13	150.40	150.69
% Ch, Annual Rate	0.8	1.3	0.2	0.4	0.7	0.7	0.7	0.8
Manufacturing	12.67	12.66	12.67	12.69	12.70	12.72	12.73	12.73
% Ch, Annual Rate	0.1	-0.3	0.4	0.5	0.5	0.4	0.3	0.0
Durable Manufacturing	8.06	8.06	8.07	8.09	8.10	8.12	8.13	8.14
% Ch, Annual Rate	0.3	-0.2	0.6	0.8	0.9	0.8	0.8	0.3
Nondurable Manufacturing	4.61	4.60	4.60	4.60	4.60	4.60	4.59	4.58
% Ch, Annual Rate	-0.3	-0.4	0.1	-0.1	-0.2	-0.3	-0.5	-0.6
Construction	7.78	7.83	7.88	7.92	7.96	8.00	8.05	8.10
% Ch, Annual Rate	2.5	2.5	2.7	2.2	1.9	2.2	2.5	2.3
Service-Providing	127.69	128.14	128.15	128.23	128.42	128.62	128.83	129.07
% Ch, Annual Rate	0.8	1.4	0.0	0.2	0.6	0.6	0.6	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	48.1	48.4	48.7	49.0	49.3	49.5	49.7	50.0
Personal Saving/Disposable Income (%)	7.1	7.1	7.0	6.9	7.0	7.0	6.9	6.9
Auto Sales (Millions)	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.8
% Ch, Annual Rate	-0.9	-0.7	-0.1	1.1	2.6	0.3	2.5	2.3
Housing Starts (Millions)	1.625	1.629	1.630	1.629	1.627	1.625	1.632	1.634
% Ch, Annual Rate	5.3	1.1	0.3	-0.4	-0.3	-0.6	1.7	0.5
Federal Budget Surplus (Billions)	-871.0	-873.9	-845.7	-833.3	-842.9	-841.1	-831.5	-827.8
Net Exports (Billions)	-589.3	-599.4	-600.4	-599.0	-594.6	-593.8	-591.3	-594.5
3-Month Treasury Bill Rate (%)	2.79	2.78	2.78	2.78	2.78	2.78	2.78	2.78
10-Year Treasury Note Yield (%)	3.54	3.53	3.53	3.52	3.52	3.52	3.52	3.51
Bond Index of 20 G.O. Munis. (%)	5.14	5.13	5.13	5.13	5.14	5.14	5.14	5.13
30-Year Fixed Mortgage Rate (%)	5.60	5.60	5.60	5.59	5.58	5.57	5.56	5.56

Table A1.3
Washington Economic Forecast Summary
Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	321.086	337.738	349.244	359.427	370.774	382.326	393.783	405.353
% Ch	4.3	5.2	3.4	2.9	3.2	3.1	3.0	2.9
Real Wage and Salary Disb.	166.791	176.017	183.159	188.134	193.106	198.180	203.582	209.250
% Ch	5.2	5.5	4.1	2.7	2.6	2.6	2.7	2.8
Real Nonwage Income	154.295	161.721	166.084	171.293	177.668	184.146	190.201	196.104
% Ch	3.5	4.8	2.7	3.1	3.7	3.6	3.3	3.1
Real Per Capita Income (\$/Person)	45,463	47,230	48,186	48,971	49,912	50,855	51,761	52,658
% Ch	3.1	3.9	2.0	1.6	1.9	1.9	1.8	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.091	1.094	1.102	1.120	1.141	1.161	1.181	1.202
% Ch	1.4	0.3	0.7	1.6	1.8	1.8	1.7	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.460	2.494	2.534	2.588	2.648	2.707	2.766	2.826
% Ch	1.8	1.4	1.6	2.1	2.3	2.2	2.2	2.1
Average Nonfarm Annual Wage	56,965	58,787	60,441	62,360	64,427	66,543	68,747	71,147
% Ch	4.2	3.2	2.8	3.2	3.3	3.3	3.3	3.5
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.16	25.50	25.98	26.50	27.16	27.84	28.53	29.21
% Ch	3.4	1.3	1.9	2.0	2.5	2.5	2.5	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	350.322	369.572	384.951	402.665	423.057	444.004	465.263	487.170
% Ch	5.8	5.5	4.2	4.6	5.1	5.0	4.8	4.7
Disposable Personal Income	307.877	322.727	336.168	352.579	371.734	390.352	407.909	425.944
% Ch	5.6	4.8	4.2	4.9	5.4	5.0	4.5	4.4
Per Capita Income (\$/Person)	49,602	51,682	53,112	54,862	56,949	59,058	61,155	63,285
% Ch	4.5	4.2	2.8	3.3	3.8	3.7	3.6	3.5
Employment (Thousands)								
Washington Civilian Labor Force	3,486.7	3,538.8	3,585.4	3,647.3	3,705.1	3,760.4	3,814.1	3,861.0
Total Washington Employment	3,268.5	3,342.9	3,393.8	3,456.7	3,516.1	3,569.5	3,620.6	3,665.2
Unemployment Rate (%)	6.26	5.54	5.35	5.23	5.10	5.08	5.07	5.07
Nonfarm Payroll Employment	3,073.7	3,158.4	3,222.1	3,261.5	3,301.5	3,339.9	3,379.7	3,415.4
% Ch	2.7	2.8	2.0	1.2	1.2	1.2	1.2	1.1
Manufacturing	288.2	289.1	287.3	287.7	288.9	290.5	292.1	295.0
% Ch	0.5	0.3	-0.6	0.1	0.4	0.5	0.6	1.0
Durable Manufacturing	209.5	209.8	206.5	206.2	207.5	208.3	209.4	211.6
% Ch	0.0	0.1	-1.6	-0.1	0.6	0.4	0.5	1.1
Aerospace	93.9	92.9	90.7	88.4	86.5	84.8	84.1	84.1
% Ch	-2.2	-1.1	-2.4	-2.5	-2.2	-2.0	-0.8	0.0
Nondurable Manufacturing	78.7	79.3	80.8	81.5	81.5	82.1	82.8	83.4
% Ch	2.1	0.8	2.0	0.8	0.0	0.8	0.7	0.7
Construction	159.3	172.5	177.0	181.6	189.4	195.2	200.4	203.5
% Ch	6.9	8.3	2.6	2.6	4.3	3.1	2.6	1.6
Service-Providing	2,620.0	2,690.6	2,751.9	2,786.3	2,817.1	2,848.0	2,881.0	2,910.7
% Ch	2.7	2.7	2.3	1.2	1.1	1.1	1.2	1.0
Software Publishers	55.6	55.5	56.7	57.2	57.7	58.4	59.0	59.7
% Ch	3.2	-0.1	2.3	0.9	0.9	1.2	1.1	1.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	33.898	39.963	38.344	41.934	43.555	43.748	44.420	44.406
% Ch	2.8	17.9	-4.1	9.4	3.9	0.4	1.5	0.0
Single-Family	17.905	19.596	21.581	25.477	27.311	27.278	27.904	27.977
% Ch	-2.7	9.4	10.1	18.1	7.2	-0.1	2.3	0.3
Multi-Family	15.993	20.367	16.763	16.457	16.243	16.470	16.515	16.429
% Ch	9.8	27.3	-17.7	-1.8	-1.3	1.4	0.3	-0.5
30-Year Fixed Mortgage Rate (%)	4.17	3.85	4.05	4.39	4.99	5.62	5.60	5.57

Table A1.4
Washington Economic Forecast Summary
Forecast 2016 to 2021

	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	347.391	348.367	350.152	351.065	356.395	358.734	360.343	362.236
% Ch, Annual Rate	7.2	1.1	2.1	1.0	6.2	2.7	1.8	2.1
Real Wage and Salary Disb.	182.193	182.765	183.846	183.833	187.300	188.085	188.354	188.797
% Ch, Annual Rate	10.5	1.3	2.4	0.0	7.8	1.7	0.6	0.9
Real Nonwage Income	165.198	165.602	166.305	167.232	169.094	170.649	171.989	173.439
% Ch, Annual Rate	3.6	1.0	1.7	2.2	4.5	3.7	3.2	3.4
Real Per Capita Income (\$/Person)	48,166	48,142	48,232	48,204	48,782	48,951	49,021	49,131
% Ch, Annual Rate	5.6	-0.2	0.7	-0.2	4.9	1.4	0.6	0.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.098	1.100	1.103	1.108	1.113	1.118	1.123	1.128
% Ch, Annual Rate	0.0	0.7	1.2	2.0	1.6	1.7	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.518	2.525	2.538	2.554	2.567	2.581	2.595	2.610
% Ch, Annual Rate	0.6	1.2	2.0	2.6	2.0	2.1	2.3	2.4
Average Nonfarm Annual Wage	60,189	60,243	60,616	60,718	61,897	62,300	62,508	62,735
% Ch, Annual Rate	7.7	0.4	2.5	0.7	8.0	2.6	1.3	1.5
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.81	25.93	26.04	26.15	26.28	26.42	26.57	26.74
% Ch, Annual Rate	1.1	1.9	1.6	1.7	2.0	2.2	2.3	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	381.369	383.071	386.222	389.144	396.605	400.942	404.548	408.568
% Ch, Annual Rate	7.2	1.8	3.3	3.1	7.9	4.4	3.6	4.0
Disposable Personal Income	332.807	334.345	337.357	340.164	346.776	350.906	354.433	358.202
% Ch, Annual Rate	7.2	1.9	3.7	3.4	8.0	4.8	4.1	4.3
Per Capita Income (\$/Person)	52,877	52,938	53,200	53,432	54,286	54,711	55,035	55,415
% Ch, Annual Rate	5.7	0.5	2.0	1.8	6.5	3.2	2.4	2.8
Employment (Thousands)								
Washington Civilian Labor Force	3,559.8	3,577.2	3,594.1	3,610.4	3,625.6	3,640.1	3,654.3	3,669.1
Total Washington Employment	3,368.7	3,385.2	3,402.1	3,419.0	3,434.9	3,449.5	3,463.6	3,478.6
Unemployment Rate (%)	5.37	5.37	5.34	5.30	5.26	5.24	5.22	5.19
Nonfarm Payroll Employment	3,205.2	3,217.9	3,227.4	3,237.9	3,249.1	3,256.1	3,264.7	3,276.1
% Ch, Annual Rate	2.7	1.6	1.2	1.3	1.4	0.9	1.1	1.4
Manufacturing	288.2	287.5	286.5	287.1	287.6	287.7	287.7	288.0
% Ch, Annual Rate	0.6	-0.9	-1.4	0.8	0.7	0.2	-0.1	0.4
Durable Manufacturing	207.7	206.9	205.7	205.7	206.0	206.2	206.2	206.6
% Ch, Annual Rate	-1.7	-1.5	-2.3	0.1	0.6	0.3	0.1	0.7
Aerospace	91.6	91.0	90.4	89.8	89.3	88.7	88.2	87.6
% Ch, Annual Rate	-0.8	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Nondurable Manufacturing	80.5	80.7	80.9	81.4	81.6	81.5	81.5	81.4
% Ch, Annual Rate	6.8	0.9	1.0	2.5	1.1	-0.2	-0.4	-0.4
Construction	177.0	176.5	176.8	177.6	178.7	180.2	182.3	185.2
% Ch, Annual Rate	8.4	-1.2	0.8	1.8	2.4	3.5	4.7	6.4
Service-Providing	2,734.1	2,748.0	2,758.2	2,767.4	2,777.0	2,782.3	2,788.8	2,797.1
% Ch, Annual Rate	2.6	2.1	1.5	1.3	1.4	0.8	0.9	1.2
Software Publishers	56.4	56.7	56.9	57.0	57.2	57.1	57.3	57.4
% Ch, Annual Rate	1.7	2.0	1.2	0.5	1.4	-0.2	0.9	0.9
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	37,401	38,021	38,318	39,634	40,903	41,826	42,205	42,804
% Ch, Annual Rate	8.7	6.8	3.2	14.5	13.4	9.3	3.7	5.8
Single-Family	20,399	21,077	21,705	23,143	24,262	25,196	25,903	26,547
% Ch, Annual Rate	-18.3	14.0	12.5	29.2	20.8	16.3	11.7	10.3
Multi-Family	17,002	16,944	16,613	16,491	16,641	16,630	16,301	16,257
% Ch, Annual Rate	57.7	-1.4	-7.6	-2.9	3.7	-0.3	-7.7	-1.1
30-Year Fixed Mortgage Rate (%)	3.91	4.02	4.08	4.19	4.29	4.35	4.42	4.50

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2016 to 2021

	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	367.812	370.041	371.479	373.765	379.181	381.813	382.973	385.336
% Ch, Annual Rate	6.3	2.4	1.6	2.5	5.9	2.8	1.2	2.5
Real Wage and Salary Disb.	192.231	193.108	193.205	193.878	197.169	198.221	198.133	199.198
% Ch, Annual Rate	7.5	1.8	0.2	1.4	7.0	2.2	-0.2	2.2
Real Nonwage Income	175.581	176.933	178.274	179.887	182.012	183.592	184.840	186.138
% Ch, Annual Rate	5.0	3.1	3.1	3.7	4.8	3.5	2.7	2.8
Real Per Capita Income (\$/Person)	49,737	49,888	49,932	50,089	50,663	50,863	50,866	51,028
% Ch, Annual Rate	5.0	1.2	0.4	1.3	4.7	1.6	0.0	1.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.133	1.138	1.144	1.149	1.154	1.159	1.164	1.169
% Ch, Annual Rate	1.8	1.9	1.9	1.8	1.7	1.7	1.8	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.625	2.640	2.656	2.671	2.685	2.700	2.715	2.730
% Ch, Annual Rate	2.3	2.3	2.3	2.3	2.2	2.2	2.3	2.2
Average Nonfarm Annual Wage	63,952	64,370	64,516	64,868	66,050	66,501	66,575	67,047
% Ch, Annual Rate	8.0	2.6	0.9	2.2	7.5	2.8	0.4	2.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	26.91	27.08	27.24	27.41	27.58	27.76	27.93	28.11
% Ch, Annual Rate	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Current Dollar Income (Billions of Dollars)								
Personal Income	416.756	421.224	424.848	429.399	437.486	442.404	445.724	450.403
% Ch, Annual Rate	8.3	4.4	3.5	4.4	7.7	4.6	3.0	4.3
Disposable Personal Income	366.058	370.062	373.357	377.460	384.816	389.080	391.805	395.705
% Ch, Annual Rate	9.1	4.4	3.6	4.5	8.0	4.5	2.8	4.0
Per Capita Income (\$/Person)	56,355	56,789	57,106	57,545	58,453	58,935	59,200	59,644
% Ch, Annual Rate	7.0	3.1	2.3	3.1	6.5	3.3	1.8	3.0
Employment (Thousands)								
Washington Civilian Labor Force	3,684.0	3,698.0	3,712.1	3,726.3	3,739.7	3,753.5	3,767.4	3,780.9
Total Washington Employment	3,494.9	3,509.3	3,523.6	3,536.9	3,549.8	3,563.0	3,576.3	3,588.9
Unemployment Rate (%)	5.13	5.10	5.08	5.08	5.08	5.08	5.07	5.08
Nonfarm Payroll Employment	3,287.6	3,296.7	3,306.3	3,315.3	3,325.6	3,335.2	3,344.6	3,354.0
% Ch, Annual Rate	1.4	1.1	1.2	1.1	1.2	1.2	1.1	1.1
Manufacturing	288.2	288.8	289.1	289.6	290.1	290.2	290.6	290.9
% Ch, Annual Rate	0.4	0.8	0.4	0.7	0.7	0.2	0.5	0.4
Durable Manufacturing	206.9	207.4	207.6	208.0	208.3	208.2	208.3	208.4
% Ch, Annual Rate	0.6	1.0	0.4	0.7	0.5	-0.1	0.3	0.2
Aerospace	87.2	86.7	86.3	85.8	85.4	85.0	84.6	84.1
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Nondurable Manufacturing	81.3	81.4	81.5	81.7	81.8	82.0	82.3	82.5
% Ch, Annual Rate	-0.2	0.3	0.4	0.8	0.9	0.9	1.1	1.0
Construction	187.8	188.5	189.9	191.3	192.9	194.4	196.0	197.6
% Ch, Annual Rate	5.7	1.6	2.9	3.1	3.3	3.3	3.3	3.2
Service-Providing	2,805.6	2,813.4	2,821.3	2,828.2	2,836.5	2,844.4	2,851.8	2,859.3
% Ch, Annual Rate	1.2	1.1	1.1	1.0	1.2	1.1	1.0	1.1
Software Publishers	57.5	57.6	57.8	58.0	58.2	58.3	58.5	58.6
% Ch, Annual Rate	0.8	1.0	1.2	1.3	1.2	1.1	1.1	1.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	43.361	43.601	43.713	43.544	43.630	43.636	43.827	43.900
% Ch, Annual Rate	5.3	2.2	1.0	-1.5	0.8	0.1	1.8	0.7
Single-Family	27.091	27.313	27.471	27.371	27.136	27.166	27.362	27.450
% Ch, Annual Rate	8.5	3.3	2.3	-1.4	-3.4	0.5	2.9	1.3
Multi-Family	16.270	16.288	16.243	16.172	16.494	16.470	16.465	16.450
% Ch, Annual Rate	0.3	0.4	-1.1	-1.7	8.2	-0.6	-0.1	-0.4
30-Year Fixed Mortgage Rate (%)	4.61	4.79	5.12	5.46	5.61	5.63	5.62	5.61

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real Income (Billions of Chained 2009 Dollars)								
Real Personal Income	390.505	393.166	394.448	397.014	402.135	404.704	405.974	408.601
% Ch, Annual Rate	5.5	2.8	1.3	2.6	5.3	2.6	1.3	2.6
Real Wage and Salary Disb.	202.456	203.651	203.533	204.686	208.090	209.240	209.207	210.462
% Ch, Annual Rate	6.7	2.4	-0.2	2.3	6.8	2.2	-0.1	2.4
Real Nonwage Income	188.049	189.515	190.915	192.328	194.045	195.464	196.767	198.139
% Ch, Annual Rate	4.2	3.2	3.0	3.0	3.6	3.0	2.7	2.8
Real Per Capita Income (\$/Person)	51,559	51,757	51,772	51,955	52,471	52,651	52,661	52,847
% Ch, Annual Rate	4.2	1.5	0.1	1.4	4.0	1.4	0.1	1.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.174	1.179	1.184	1.189	1.194	1.199	1.204	1.209
% Ch, Annual Rate	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.744	2.759	2.774	2.788	2.803	2.818	2.833	2.848
% Ch, Annual Rate	2.2	2.2	2.1	2.1	2.2	2.1	2.2	2.1
Average Nonfarm Annual Wage	68,243	68,636	68,779	69,328	70,593	71,096	71,186	71,713
% Ch, Annual Rate	7.3	2.3	0.8	3.2	7.5	2.9	0.5	3.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.28	28.45	28.62	28.79	28.96	29.13	29.29	29.46
% Ch, Annual Rate	2.4	2.5	2.4	2.4	2.4	2.3	2.3	2.3
Current Dollar Income (Billions of Dollars)								
Personal Income	458.431	463.539	467.018	472.063	480.206	485.327	488.954	494.194
% Ch, Annual Rate	7.3	4.5	3.0	4.4	7.1	4.3	3.0	4.4
Disposable Personal Income	402.495	406.616	409.215	413.309	420.363	424.416	427.333	431.664
% Ch, Annual Rate	7.0	4.2	2.6	4.1	7.0	3.9	2.8	4.1
Per Capita Income (\$/Person)	60,528	61,021	61,297	61,776	62,657	63,140	63,425	63,918
% Ch, Annual Rate	6.1	3.3	1.8	3.2	5.8	3.1	1.8	3.1
Employment (Thousands)								
Washington Civilian Labor Force	3,794.5	3,808.4	3,820.9	3,832.6	3,844.1	3,855.2	3,866.5	3,878.1
Total Washington Employment	3,601.9	3,615.5	3,627.1	3,638.1	3,649.0	3,659.5	3,670.5	3,682.0
Unemployment Rate (%)	5.08	5.07	5.07	5.08	5.08	5.08	5.07	5.06
Nonfarm Payroll Employment	3,363.8	3,379.3	3,384.2	3,391.6	3,400.9	3,410.4	3,420.0	3,430.4
% Ch, Annual Rate	1.2	1.9	0.6	0.9	1.1	1.1	1.1	1.2
Manufacturing	291.4	291.7	292.4	293.1	293.9	294.6	295.3	296.0
% Ch, Annual Rate	0.7	0.4	1.0	1.0	1.1	1.0	1.0	0.9
Durable Manufacturing	208.8	209.1	209.5	210.1	210.7	211.3	211.9	212.5
% Ch, Annual Rate	0.8	0.4	1.0	1.0	1.2	1.1	1.2	1.0
Aerospace	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nondurable Manufacturing	82.6	82.6	82.8	83.0	83.2	83.3	83.4	83.5
% Ch, Annual Rate	0.5	0.3	1.0	0.8	0.8	0.7	0.5	0.4
Construction	198.8	200.0	200.9	201.8	202.5	203.1	203.8	204.6
% Ch, Annual Rate	2.5	2.3	2.0	1.7	1.4	1.3	1.4	1.5
Service-Providing	2,867.4	2,881.4	2,884.7	2,890.5	2,898.3	2,906.4	2,914.6	2,923.7
% Ch, Annual Rate	1.1	2.0	0.5	0.8	1.1	1.1	1.1	1.2
Software Publishers	58.8	58.9	59.1	59.3	59.4	59.6	59.8	60.0
% Ch, Annual Rate	1.0	0.9	1.2	1.2	1.2	1.2	1.2	1.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	44.315	44.453	44.471	44.440	44.392	44.333	44.438	44.460
% Ch, Annual Rate	3.8	1.3	0.2	-0.3	-0.4	-0.5	0.9	0.2
Single-Family	27.801	27.941	27.950	27.925	27.899	27.892	28.021	28.095
% Ch, Annual Rate	5.2	2.0	0.1	-0.4	-0.4	-0.1	1.9	1.1
Multi-Family	16.514	16.512	16.521	16.515	16.493	16.441	16.417	16.365
% Ch, Annual Rate	1.6	0.0	0.2	-0.1	-0.5	-1.3	-0.6	-1.3
30-Year Fixed Mortgage Rate (%)	5.60	5.60	5.60	5.59	5.58	5.57	5.56	5.56

Table A2.1

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Payroll Employment	138.94	141.83	144.27	145.76	147.05	148.22	149.35	150.27
% Ch	1.9	2.1	1.7	1.0	0.9	0.8	0.8	0.6
Manufacturing	12.18	12.32	12.36	12.47	12.55	12.65	12.67	12.72
% Ch	1.4	1.1	0.4	0.9	0.7	0.7	0.2	0.4
Durable Manufacturing	7.67	7.76	7.75	7.86	7.96	8.04	8.07	8.12
% Ch	1.7	1.1	-0.1	1.4	1.3	1.0	0.3	0.7
Wood Products	0.37	0.38	0.39	0.42	0.45	0.46	0.47	0.49
% Ch	5.2	2.1	2.2	7.2	7.1	3.1	2.9	2.7
Primary and Fabricated Metals	1.85	1.85	1.83	1.84	1.86	1.89	1.91	1.94
% Ch	1.4	0.0	-1.0	0.2	1.0	1.8	0.9	1.4
Computer and Electronic Products	1.05	1.05	1.05	1.09	1.11	1.12	1.12	1.13
% Ch	-1.5	0.1	-0.3	3.7	2.6	0.6	0.1	0.4
Machinery and Electrical Equipment	1.50	1.51	1.48	1.48	1.50	1.52	1.53	1.55
% Ch	1.8	0.1	-1.7	-0.1	1.2	1.6	0.7	1.3
Transportation Equipment	1.56	1.60	1.61	1.63	1.63	1.63	1.62	1.61
% Ch	3.3	2.6	0.5	1.6	-0.1	-0.1	-0.3	-0.6
Other Durables	1.34	1.37	1.39	1.41	1.42	1.42	1.41	1.41
% Ch	1.7	2.5	1.9	0.9	0.8	0.1	-0.7	0.2
Nondurable Manufacturing	4.51	4.56	4.61	4.61	4.59	4.61	4.60	4.59
% Ch	0.9	1.1	1.1	0.0	-0.4	0.3	0.0	-0.2
Food Manufacturing	1.48	1.51	1.54	1.57	1.58	1.59	1.61	1.63
% Ch	0.7	1.4	2.1	1.8	0.7	1.1	1.1	1.0
Paper and Paper Products	0.37	0.37	0.37	0.37	0.36	0.36	0.36	0.36
% Ch	-1.2	-0.2	-0.2	-1.4	-1.7	-0.4	-0.2	0.0
Other Nondurables	2.65	2.68	2.70	2.68	2.66	2.65	2.64	2.61
% Ch	1.2	1.2	0.7	-0.9	-0.9	-0.1	-0.7	-1.0
Natural Resources and Mining	0.89	0.82	0.72	0.71	0.74	0.76	0.78	0.79
% Ch	3.2	-7.9	-12.5	-0.9	3.7	2.9	2.2	2.0
Construction	6.15	6.44	6.76	7.09	7.39	7.64	7.85	8.03
% Ch	5.0	4.8	5.0	4.8	4.2	3.4	2.7	2.3
Trade, Transportation, and Utilities	26.38	26.91	27.31	27.49	27.49	27.50	27.48	27.43
% Ch	2.0	2.0	1.5	0.7	0.0	0.0	-0.1	-0.2
Wholesale Trade	5.81	5.87	5.94	6.01	6.06	6.12	6.17	6.22
% Ch	1.4	1.1	1.1	1.1	0.9	1.0	0.8	0.8
Retail Trade	15.35	15.64	15.90	15.90	15.76	15.68	15.59	15.49
% Ch	1.9	1.9	1.6	0.0	-0.9	-0.5	-0.5	-0.7
Trans., Warehousing, and Utilities	5.21	5.40	5.48	5.59	5.67	5.71	5.72	5.73
% Ch	3.2	3.7	1.4	2.1	1.5	0.6	0.2	0.2
Information	2.73	2.75	2.79	2.79	2.80	2.86	2.88	2.94
% Ch	0.8	0.9	1.3	0.0	0.5	2.0	0.9	1.9
Publishing Industries	0.73	0.73	0.72	0.71	0.69	0.68	0.66	0.66
% Ch	-0.8	-0.2	-0.2	-2.5	-2.5	-1.5	-1.9	-1.4
Other Information	2.00	2.03	2.06	2.08	2.11	2.18	2.22	2.28
% Ch	1.3	1.3	1.9	0.9	1.5	3.2	1.7	2.8
Financial Activities	7.98	8.12	8.22	8.08	7.92	7.83	7.84	7.85
% Ch	1.1	1.9	1.2	-1.8	-2.0	-1.0	0.1	0.2
Professional and Business Services	19.06	19.66	20.23	20.90	21.46	21.81	22.20	22.70
% Ch	2.9	3.1	2.9	3.3	2.7	1.6	1.8	2.3
Education and Health Services	21.44	22.05	22.61	22.80	22.92	23.11	23.27	23.42
% Ch	1.7	2.9	2.5	0.8	0.5	0.9	0.7	0.6
Leisure and Hospitality	14.69	15.12	15.57	15.72	15.88	15.97	16.00	16.05
% Ch	3.1	2.9	2.9	1.0	1.0	0.5	0.2	0.3
Other Services	5.57	5.62	5.63	5.53	5.48	5.44	5.42	5.39
% Ch	1.5	1.0	0.1	-1.8	-0.9	-0.7	-0.5	-0.5
Federal Government	2.73	2.75	2.75	2.72	2.68	2.65	2.77	2.61
% Ch	-1.3	0.7	0.0	-1.1	-1.5	-1.3	4.8	-6.0
State and Local Government	19.14	19.25	19.31	19.45	19.73	20.00	20.18	20.34
% Ch	0.3	0.6	0.3	0.8	1.4	1.3	0.9	0.8

Table A2.2

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2016 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	143.49	144.11	144.53	144.94	145.35	145.59	145.88	146.22
% Ch, Annual Rate	1.8	1.7	1.2	1.1	1.1	0.7	0.8	0.9
Manufacturing	12.37	12.35	12.34	12.39	12.45	12.47	12.47	12.49
% Ch, Annual Rate	1.6	-0.4	-0.4	1.7	1.8	0.7	-0.2	0.9
Durable Manufacturing	7.76	7.74	7.73	7.77	7.82	7.86	7.86	7.90
% Ch, Annual Rate	1.2	-0.8	-0.8	2.2	2.7	1.6	0.2	1.8
Wood Products	0.38	0.39	0.39	0.39	0.40	0.41	0.42	0.43
% Ch, Annual Rate	1.3	2.0	0.5	5.7	9.0	11.9	7.8	7.3
Primary and Fabricated Metals	1.84	1.84	1.83	1.84	1.84	1.84	1.84	1.84
% Ch, Annual Rate	1.4	-0.3	-1.1	1.6	0.2	0.5	-1.0	0.9
Computer and Electronic Products	1.04	1.04	1.05	1.06	1.07	1.08	1.09	1.10
% Ch, Annual Rate	0.1	-1.4	2.4	4.2	4.7	4.6	4.0	3.1
Machinery and Electrical Equipment	1.48	1.49	1.48	1.47	1.48	1.48	1.48	1.48
% Ch, Annual Rate	-1.2	0.5	-2.7	-0.6	1.0	0.3	-0.3	1.1
Transportation Equipment	1.61	1.60	1.60	1.61	1.64	1.63	1.63	1.63
% Ch, Annual Rate	1.8	-3.2	-1.2	4.6	5.4	-0.6	-2.0	2.0
Other Durables	1.40	1.39	1.39	1.40	1.40	1.41	1.41	1.41
% Ch, Annual Rate	3.7	-0.5	-0.7	0.9	1.6	2.1	-0.1	1.0
Nondurable Manufacturing	4.61	4.61	4.61	4.62	4.62	4.62	4.61	4.60
% Ch, Annual Rate	2.2	0.3	0.2	1.0	0.2	-0.8	-0.8	-0.7
Food Manufacturing	1.53	1.53	1.54	1.55	1.56	1.56	1.57	1.57
% Ch, Annual Rate	4.4	1.5	2.1	3.9	1.9	0.9	0.7	0.4
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.36
% Ch, Annual Rate	0.3	-1.7	-0.6	-0.9	-0.9	-2.5	-2.3	-2.0
Other Nondurables	2.71	2.71	2.70	2.70	2.69	2.68	2.67	2.67
% Ch, Annual Rate	1.3	-0.1	-0.7	-0.4	-0.6	-1.5	-1.6	-1.1
Natural Resources and Mining	0.75	0.71	0.71	0.70	0.70	0.71	0.71	0.72
% Ch, Annual Rate	-12.6	-16.9	-5.0	-1.4	-0.4	2.7	4.2	3.8
Construction	6.64	6.71	6.82	6.89	6.97	7.05	7.13	7.21
% Ch, Annual Rate	5.9	4.5	6.3	4.5	4.6	4.9	4.6	4.2
Trade, Transportation, and Utilities	27.18	27.28	27.36	27.43	27.48	27.48	27.51	27.51
% Ch, Annual Rate	1.7	1.4	1.2	1.1	0.7	0.1	0.4	-0.1
Wholesale Trade	5.91	5.93	5.95	5.97	5.99	6.00	6.02	6.03
% Ch, Annual Rate	1.2	0.9	1.9	1.1	1.3	0.6	1.1	0.8
Retail Trade	15.84	15.89	15.91	15.94	15.93	15.91	15.89	15.85
% Ch, Annual Rate	2.6	1.4	0.4	0.6	-0.1	-0.7	-0.4	-1.0
Trans., Warehousing, and Utilities	5.43	5.46	5.49	5.52	5.55	5.58	5.61	5.63
% Ch, Annual Rate	-0.2	1.7	2.5	2.2	2.3	1.7	2.1	1.7
Information	2.76	2.77	2.81	2.81	2.86	2.80	2.73	2.75
% Ch, Annual Rate	0.2	1.2	5.0	0.5	7.2	-7.3	-9.6	2.5
Publishing Industries	0.73	0.73	0.72	0.72	0.72	0.71	0.70	0.70
% Ch, Annual Rate	0.3	1.3	-1.4	-3.7	-0.7	-5.9	-2.3	-2.4
Other Information	2.04	2.04	2.08	2.09	2.14	2.10	2.03	2.05
% Ch, Annual Rate	0.2	1.2	7.3	2.1	10.1	-7.8	-11.9	4.3
Financial Activities	8.22	8.26	8.23	8.20	8.14	8.09	8.06	8.02
% Ch, Annual Rate	1.9	2.0	-1.3	-1.6	-2.6	-2.4	-1.8	-2.0
Professional and Business Services	20.02	20.15	20.27	20.48	20.69	20.82	20.97	21.12
% Ch, Annual Rate	2.0	2.5	2.6	4.2	4.1	2.6	2.9	2.8
Education and Health Services	22.44	22.60	22.69	22.72	22.75	22.80	22.81	22.85
% Ch, Annual Rate	2.1	2.9	1.7	0.5	0.5	0.8	0.3	0.5
Leisure and Hospitality	15.43	15.58	15.62	15.63	15.64	15.68	15.76	15.79
% Ch, Annual Rate	3.3	4.0	1.1	0.3	0.1	1.1	2.1	0.9
Other Services	5.65	5.65	5.63	5.59	5.56	5.54	5.52	5.51
% Ch, Annual Rate	0.3	0.1	-1.9	-2.3	-2.4	-1.9	-1.2	-0.9
Federal Government	2.76	2.76	2.75	2.75	2.74	2.73	2.72	2.71
% Ch, Annual Rate	-0.2	-0.2	-0.5	-0.8	-1.2	-1.4	-1.6	-1.8
State and Local Government	19.28	19.29	19.31	19.34	19.37	19.41	19.48	19.55
% Ch, Annual Rate	0.1	0.3	0.5	0.5	0.6	0.9	1.4	1.5

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2016 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	146.53	146.89	147.24	147.52	147.82	148.08	148.35	148.61
% Ch, Annual Rate	0.9	1.0	1.0	0.7	0.8	0.7	0.7	0.7
Manufacturing	12.51	12.54	12.56	12.60	12.63	12.63	12.65	12.67
% Ch, Annual Rate	0.5	1.1	0.6	1.0	1.1	0.1	0.6	0.4
Durable Manufacturing	7.92	7.95	7.97	8.00	8.03	8.03	8.04	8.06
% Ch, Annual Rate	1.2	1.8	1.0	1.4	1.4	0.0	0.7	0.5
Wood Products	0.44	0.44	0.45	0.45	0.46	0.46	0.46	0.46
% Ch, Annual Rate	7.1	7.0	5.5	4.0	2.5	0.6	2.4	3.5
Primary and Fabricated Metals	1.85	1.85	1.86	1.87	1.88	1.89	1.89	1.90
% Ch, Annual Rate	1.2	1.7	1.1	2.0	2.9	1.2	1.5	1.2
Computer and Electronic Products	1.11	1.11	1.12	1.12	1.12	1.12	1.12	1.12
% Ch, Annual Rate	2.5	2.0	1.5	1.4	-0.2	-0.1	0.4	0.3
Machinery and Electrical Equipment	1.49	1.50	1.50	1.51	1.51	1.52	1.52	1.53
% Ch, Annual Rate	1.5	2.1	1.2	1.8	2.0	1.1	1.6	1.1
Transportation Equipment	1.63	1.63	1.63	1.63	1.63	1.63	1.63	1.63
% Ch, Annual Rate	-0.8	0.4	0.0	-0.1	0.4	-1.1	0.1	-0.1
Other Durables	1.41	1.42	1.42	1.42	1.43	1.42	1.42	1.41
% Ch, Annual Rate	0.7	1.3	0.0	1.0	1.1	-1.4	-1.0	-1.1
Nondurable Manufacturing	4.59	4.59	4.59	4.60	4.60	4.60	4.61	4.61
% Ch, Annual Rate	-0.7	-0.1	0.1	0.4	0.4	0.3	0.4	0.3
Food Manufacturing	1.57	1.57	1.58	1.58	1.59	1.59	1.60	1.60
% Ch, Annual Rate	0.4	0.8	0.9	1.2	1.1	1.1	1.4	1.4
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	-2.1	-1.1	-0.8	-0.3	-0.5	-0.3	0.0	-0.1
Other Nondurables	2.66	2.66	2.65	2.65	2.65	2.65	2.65	2.65
% Ch, Annual Rate	-1.1	-0.5	-0.3	0.1	0.1	-0.1	-0.1	-0.3
Natural Resources and Mining	0.73	0.73	0.74	0.75	0.75	0.76	0.76	0.76
% Ch, Annual Rate	3.0	4.0	4.3	3.4	2.8	2.0	2.4	2.3
Construction	7.28	7.35	7.43	7.50	7.55	7.61	7.67	7.73
% Ch, Annual Rate	4.1	4.1	4.4	3.6	3.1	2.9	3.4	3.0
Trade, Transportation, and Utilities	27.49	27.49	27.49	27.50	27.49	27.50	27.51	27.51
% Ch, Annual Rate	-0.2	0.0	0.1	0.1	-0.1	0.1	0.1	0.1
Wholesale Trade	6.04	6.05	6.07	6.08	6.10	6.11	6.13	6.14
% Ch, Annual Rate	0.7	1.0	1.1	0.9	1.2	0.9	0.8	0.7
Retail Trade	15.81	15.76	15.74	15.72	15.69	15.68	15.67	15.66
% Ch, Annual Rate	-1.2	-1.1	-0.6	-0.4	-0.8	-0.3	-0.3	-0.2
Trans., Warehousing, and Utilities	5.65	5.67	5.68	5.69	5.70	5.70	5.71	5.71
% Ch, Annual Rate	1.3	1.9	0.7	0.6	0.5	0.4	0.3	0.3
Information	2.78	2.79	2.81	2.82	2.84	2.86	2.86	2.87
% Ch, Annual Rate	4.1	1.8	2.3	2.4	2.4	2.2	0.8	0.6
Publishing Industries	0.69	0.69	0.69	0.68	0.68	0.68	0.68	0.67
% Ch, Annual Rate	-2.8	-2.2	-1.4	-1.0	-1.5	-1.6	-1.7	-1.8
Other Information	2.09	2.10	2.12	2.14	2.16	2.18	2.19	2.19
% Ch, Annual Rate	6.5	3.1	3.6	3.5	3.7	3.4	1.6	1.4
Financial Activities	7.98	7.93	7.90	7.86	7.84	7.83	7.83	7.83
% Ch, Annual Rate	-1.8	-2.2	-1.9	-1.9	-0.9	-0.3	-0.1	0.0
Professional and Business Services	21.28	21.44	21.54	21.58	21.66	21.76	21.86	21.96
% Ch, Annual Rate	3.2	3.0	2.0	0.7	1.5	1.8	2.0	1.7
Education and Health Services	22.88	22.89	22.92	22.97	23.07	23.10	23.12	23.16
% Ch, Annual Rate	0.6	0.2	0.5	0.8	1.7	0.6	0.4	0.7
Leisure and Hospitality	15.80	15.85	15.91	15.96	15.94	15.96	15.97	15.99
% Ch, Annual Rate	0.2	1.2	1.6	1.2	-0.4	0.4	0.3	0.3
Other Services	5.50	5.49	5.48	5.47	5.46	5.45	5.44	5.42
% Ch, Annual Rate	-0.6	-0.9	-0.5	-0.7	-0.5	-0.9	-0.9	-0.9
Federal Government	2.69	2.68	2.68	2.67	2.66	2.65	2.64	2.63
% Ch, Annual Rate	-1.5	-1.5	-1.3	-1.4	-1.2	-1.3	-1.3	-1.3
State and Local Government	19.61	19.70	19.77	19.85	19.92	19.98	20.03	20.07
% Ch, Annual Rate	1.3	1.7	1.6	1.5	1.4	1.2	1.0	0.9

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	148.91	149.39	149.47	149.61	149.86	150.13	150.40	150.69
% Ch, Annual Rate	0.8	1.3	0.2	0.4	0.7	0.7	0.7	0.8
Manufacturing	12.67	12.66	12.67	12.69	12.70	12.72	12.73	12.73
% Ch, Annual Rate	0.1	-0.3	0.4	0.5	0.5	0.4	0.3	0.0
Durable Manufacturing	8.06	8.06	8.07	8.09	8.10	8.12	8.13	8.14
% Ch, Annual Rate	0.3	-0.2	0.6	0.8	0.9	0.8	0.8	0.3
Wood Products	0.47	0.47	0.47	0.48	0.48	0.48	0.49	0.49
% Ch, Annual Rate	3.5	2.4	3.2	3.2	2.9	2.2	2.2	2.0
Primary and Fabricated Metals	1.90	1.90	1.91	1.92	1.92	1.93	1.94	1.95
% Ch, Annual Rate	0.6	0.2	1.1	1.5	1.6	1.6	1.8	1.5
Computer and Electronic Products	1.12	1.12	1.12	1.12	1.12	1.13	1.13	1.13
% Ch, Annual Rate	0.4	-0.6	-0.2	0.2	0.5	0.6	0.7	0.7
Machinery and Electrical Equipment	1.53	1.53	1.53	1.54	1.54	1.55	1.55	1.56
% Ch, Annual Rate	0.2	0.1	1.1	1.1	1.6	1.4	1.6	0.9
Transportation Equipment	1.63	1.62	1.62	1.62	1.62	1.62	1.61	1.61
% Ch, Annual Rate	-0.1	-1.0	-0.3	-0.2	-0.4	-0.4	-1.2	-2.1
Other Durables	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
% Ch, Annual Rate	-0.9	-0.7	0.4	0.4	0.2	0.1	0.4	0.0
Nondurable Manufacturing	4.61	4.60	4.60	4.60	4.60	4.60	4.59	4.58
% Ch, Annual Rate	-0.3	-0.4	0.1	-0.1	-0.2	-0.3	-0.5	-0.6
Food Manufacturing	1.60	1.61	1.61	1.62	1.62	1.63	1.63	1.63
% Ch, Annual Rate	1.0	0.7	1.4	1.0	1.1	0.8	0.7	0.6
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	-0.5	0.1	0.1	0.0	0.1	-0.1	-0.2
Other Nondurables	2.64	2.64	2.63	2.63	2.62	2.61	2.61	2.60
% Ch, Annual Rate	-1.0	-1.1	-0.7	-0.8	-1.0	-1.0	-1.2	-1.4
Natural Resources and Mining	0.77	0.77	0.78	0.78	0.78	0.79	0.79	0.80
% Ch, Annual Rate	2.0	2.1	2.3	1.9	1.9	2.0	2.1	2.2
Construction	7.78	7.83	7.88	7.92	7.96	8.00	8.05	8.10
% Ch, Annual Rate	2.5	2.5	2.7	2.2	1.9	2.2	2.5	2.3
Trade, Transportation, and Utilities	27.51	27.48	27.47	27.47	27.45	27.44	27.42	27.41
% Ch, Annual Rate	-0.1	-0.5	-0.1	-0.1	-0.3	-0.1	-0.2	-0.1
Wholesale Trade	6.16	6.16	6.18	6.19	6.20	6.21	6.22	6.23
% Ch, Annual Rate	1.2	0.4	0.9	0.8	0.9	0.8	0.6	0.7
Retail Trade	15.63	15.60	15.58	15.56	15.52	15.50	15.47	15.45
% Ch, Annual Rate	-0.7	-0.9	-0.6	-0.5	-0.9	-0.6	-0.7	-0.5
Trans., Warehousing, and Utilities	5.72	5.72	5.72	5.72	5.73	5.73	5.73	5.73
% Ch, Annual Rate	0.4	-0.1	0.2	0.2	0.2	0.2	0.0	0.0
Information	2.87	2.87	2.89	2.90	2.91	2.93	2.94	2.96
% Ch, Annual Rate	0.6	0.4	1.7	1.9	1.9	2.1	2.1	2.1
Publishing Industries	0.67	0.67	0.66	0.66	0.66	0.66	0.65	0.65
% Ch, Annual Rate	-1.9	-2.4	-1.5	-1.4	-1.4	-1.2	-1.2	-1.2
Other Information	2.20	2.21	2.22	2.24	2.25	2.27	2.29	2.31
% Ch, Annual Rate	1.3	1.2	2.7	2.9	2.9	3.1	3.1	3.1
Financial Activities	7.84	7.83	7.84	7.84	7.84	7.85	7.86	7.86
% Ch, Annual Rate	0.5	-0.4	0.2	0.1	0.1	0.4	0.4	0.3
Professional and Business Services	22.05	22.13	22.25	22.37	22.49	22.63	22.77	22.93
% Ch, Annual Rate	1.7	1.6	2.1	2.1	2.3	2.4	2.5	2.8
Education and Health Services	23.25	23.24	23.28	23.33	23.39	23.40	23.42	23.46
% Ch, Annual Rate	1.5	-0.2	0.8	0.9	0.9	0.3	0.4	0.7
Leisure and Hospitality	15.98	15.99	16.02	16.03	16.04	16.05	16.06	16.07
% Ch, Annual Rate	-0.2	0.2	0.7	0.4	0.2	0.4	0.3	0.1
Other Services	5.43	5.42	5.41	5.41	5.40	5.39	5.38	5.38
% Ch, Annual Rate	0.1	-0.5	-0.3	-0.5	-0.6	-0.5	-0.6	-0.6
Federal Government	2.65	3.01	2.79	2.64	2.61	2.61	2.60	2.60
% Ch, Annual Rate	3.1	66.3	-26.8	-19.5	-3.7	-1.0	-0.9	-0.8
State and Local Government	20.11	20.16	20.20	20.24	20.28	20.32	20.36	20.40
% Ch, Annual Rate	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8

Table A2.3

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Payroll Employment	3,073.7	3,158.4	3,222.1	3,261.5	3,301.5	3,339.9	3,379.7	3,415.4
% Ch	2.7	2.8	2.0	1.2	1.2	1.2	1.2	1.1
Manufacturing	288.2	289.1	287.3	287.7	288.9	290.5	292.1	295.0
% Ch	0.5	0.3	-0.6	0.1	0.4	0.5	0.6	1.0
Durable Manufacturing	209.5	209.8	206.5	206.2	207.5	208.3	209.4	211.6
% Ch	0.0	0.1	-1.6	-0.1	0.6	0.4	0.5	1.1
Wood Products	13.4	13.4	13.4	14.0	14.6	14.7	14.8	14.9
% Ch	2.7	0.0	-0.2	4.4	4.4	0.9	0.8	0.6
Primary and Fabricated Metals	25.5	25.6	25.0	24.6	24.9	25.6	25.9	26.4
% Ch	2.1	0.5	-2.3	-1.8	1.3	2.7	1.2	1.8
Computer and Electronic Products	20.0	20.1	20.4	21.7	22.7	23.1	23.4	23.7
% Ch	-1.0	0.4	1.6	6.3	4.8	1.8	1.1	1.5
Machinery and Electrical Equipment	20.8	20.8	20.5	21.2	22.3	23.6	24.6	26.0
% Ch	4.8	0.1	-1.5	3.2	5.1	5.8	4.6	5.4
Aerospace	93.9	92.9	90.7	88.4	86.5	84.8	84.1	84.1
% Ch	-2.2	-1.1	-2.4	-2.5	-2.2	-2.0	-0.8	0.0
Other Transportation Equip.	9.6	10.0	9.9	9.6	9.2	8.9	8.8	8.6
% Ch	-1.4	4.4	-0.8	-3.6	-4.2	-2.7	-2.2	-1.8
Other Durables	26.3	26.9	26.5	26.8	27.3	27.6	27.8	27.9
% Ch	2.2	2.6	-1.8	1.2	1.9	1.2	0.6	0.5
Nondurable Manufacturing	78.7	79.3	80.8	81.5	81.5	82.1	82.8	83.4
% Ch	2.1	0.8	2.0	0.8	0.0	0.8	0.7	0.7
Food Manufacturing	36.4	36.2	37.1	37.6	37.5	37.7	37.8	37.9
% Ch	2.1	-0.7	2.5	1.4	-0.2	0.4	0.4	0.2
Paper and Paper Products	8.1	8.0	7.6	7.4	7.2	7.1	7.0	6.9
% Ch	-0.8	-1.0	-4.8	-2.7	-3.0	-1.5	-1.4	-1.1
Other Nondurables	34.2	35.1	36.2	36.5	36.8	37.4	37.9	38.5
% Ch	2.7	2.8	3.0	0.9	0.8	1.7	1.4	1.5
Natural Resources and Mining	6.2	6.2	5.9	5.9	6.0	6.1	6.2	6.2
% Ch	1.7	0.4	-6.1	0.0	2.8	1.9	0.9	0.7
Construction	159.3	172.5	177.0	181.6	189.4	195.2	200.4	203.5
% Ch	6.9	8.3	2.6	2.6	4.3	3.1	2.6	1.6
Trade, Transportation, and Utilities	569.4	588.4	600.6	605.6	607.6	610.0	612.1	613.4
% Ch	3.3	3.3	2.1	0.8	0.3	0.4	0.3	0.2
Wholesale Trade	130.5	133.5	135.7	137.3	139.0	140.7	142.4	143.8
% Ch	2.8	2.3	1.7	1.1	1.2	1.3	1.2	1.0
Retail Trade	341.2	354.7	365.9	367.7	366.5	366.5	366.4	365.9
% Ch	3.4	4.0	3.1	0.5	-0.3	0.0	0.0	-0.1
Trans., Warehousing, and Utilities	97.8	100.2	99.0	100.7	102.1	102.8	103.3	103.7
% Ch	4.0	2.5	-1.1	1.7	1.4	0.7	0.5	0.4
Information	109.6	112.6	116.8	117.9	119.5	122.4	124.4	127.2
% Ch	3.2	2.7	3.7	1.0	1.3	2.4	1.6	2.3
Software Publishers	55.6	55.5	56.7	57.2	57.7	58.4	59.0	59.7
% Ch	3.2	-0.1	2.3	0.9	0.9	1.2	1.1	1.2
Other Publishing Industries	6.6	6.3	6.2	5.8	5.4	5.1	4.7	4.4
% Ch	-4.8	-5.1	-0.5	-6.9	-7.2	-5.9	-6.9	-6.4
Other Information	47.5	50.8	53.8	54.9	56.4	58.9	60.6	63.1
% Ch	4.5	7.1	5.8	2.0	2.7	4.5	2.9	4.1
Financial Activities	153.0	155.5	157.7	153.9	150.3	148.3	148.2	148.2
% Ch	1.6	1.6	1.4	-2.4	-2.3	-1.3	-0.1	0.0
Professional and Business Services	372.8	390.8	403.6	418.5	431.5	440.9	451.1	463.5
% Ch	3.3	4.8	3.3	3.7	3.1	2.2	2.3	2.7
Education and Health Services	453.2	457.2	468.6	475.8	481.4	488.6	495.3	501.6
% Ch	3.0	0.9	2.5	1.5	1.2	1.5	1.4	1.3
Leisure and Hospitality	297.0	307.6	316.0	320.0	324.1	327.3	329.9	332.7
% Ch	3.4	3.6	2.7	1.3	1.3	1.0	0.8	0.9
Other Services	113.9	115.7	117.2	117.4	118.0	118.7	119.4	120.2
% Ch	2.4	1.5	1.3	0.2	0.5	0.5	0.6	0.6
Federal Government	71.3	73.1	73.9	73.5	72.8	72.3	75.0	71.8
% Ch	-0.5	2.5	1.1	-0.5	-0.9	-0.8	3.7	-4.2
State and Local Government	479.7	489.9	497.6	503.6	511.8	519.6	525.7	532.0
% Ch	1.7	2.1	1.6	1.2	1.6	1.5	1.2	1.2

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2016 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	3,205.2	3,217.9	3,227.4	3,237.9	3,249.1	3,256.1	3,264.7	3,276.1
% Ch, Annual Rate	2.7	1.6	1.2	1.3	1.4	0.9	1.1	1.4
Manufacturing	288.2	287.5	286.5	287.1	287.6	287.7	287.7	288.0
% Ch, Annual Rate	0.6	-0.9	-1.4	0.8	0.7	0.2	-0.1	0.4
Durable Manufacturing	207.7	206.9	205.7	205.7	206.0	206.2	206.2	206.6
% Ch, Annual Rate	-1.7	-1.5	-2.3	0.1	0.6	0.3	0.1	0.7
Wood Products	13.4	13.4	13.3	13.4	13.6	13.9	14.1	14.2
% Ch, Annual Rate	-0.3	-0.1	-1.4	3.1	6.1	8.6	5.0	4.6
Primary and Fabricated Metals	25.5	25.4	24.7	24.7	24.6	24.6	24.5	24.6
% Ch, Annual Rate	-2.1	-1.9	-10.5	0.4	-0.8	-0.3	-1.7	1.5
Computer and Electronic Products	20.3	20.2	20.4	20.8	21.1	21.5	21.9	22.2
% Ch, Annual Rate	2.0	-1.3	4.3	7.0	7.8	7.7	6.8	5.5
Machinery and Electrical Equipment	20.4	20.6	20.5	20.7	20.9	21.1	21.2	21.5
% Ch, Annual Rate	-5.9	4.0	-0.6	2.5	4.8	3.7	2.9	4.9
Aerospace	91.6	91.0	90.4	89.8	89.3	88.7	88.2	87.6
% Ch, Annual Rate	-0.8	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5	-2.5
Other Transportation Equip.	10.2	9.9	9.9	9.8	9.8	9.6	9.5	9.5
% Ch, Annual Rate	-1.8	-11.1	-2.1	-0.5	-0.1	-10.0	-3.6	-0.5
Other Durables	26.4	26.5	26.5	26.5	26.6	26.7	26.8	27.0
% Ch, Annual Rate	-4.1	1.0	-0.4	0.6	1.3	2.1	1.5	2.1
Nondurable Manufacturing	80.5	80.7	80.9	81.4	81.6	81.5	81.5	81.4
% Ch, Annual Rate	6.8	0.9	1.0	2.5	1.1	-0.2	-0.4	-0.4
Food Manufacturing	36.8	36.9	37.1	37.5	37.6	37.6	37.6	37.6
% Ch, Annual Rate	13.6	0.9	1.7	4.4	1.6	0.1	-0.1	-0.6
Paper and Paper Products	7.7	7.6	7.6	7.6	7.5	7.4	7.4	7.3
% Ch, Annual Rate	-7.2	-2.9	-1.7	-2.0	-2.0	-3.9	-3.6	-3.3
Other Nondurables	36.0	36.1	36.2	36.3	36.5	36.5	36.5	36.5
% Ch, Annual Rate	3.4	1.6	0.8	1.5	1.3	0.2	0.0	0.5
Natural Resources and Mining	5.9	5.9	5.8	5.8	5.8	5.8	5.9	5.9
% Ch, Annual Rate	-6.0	-3.0	-2.7	0.9	-1.9	2.0	2.8	3.0
Construction	177.0	176.5	176.8	177.6	178.7	180.2	182.3	185.2
% Ch, Annual Rate	8.4	-1.2	0.8	1.8	2.4	3.5	4.7	6.4
Trade, Transportation, and Utilities	597.8	599.8	601.5	603.3	604.7	605.1	606.1	606.6
% Ch, Annual Rate	2.3	1.4	1.1	1.2	0.9	0.3	0.6	0.4
Wholesale Trade	135.3	135.4	135.9	136.2	136.7	137.0	137.4	137.9
% Ch, Annual Rate	3.3	0.4	1.3	1.0	1.3	0.8	1.4	1.5
Retail Trade	364.0	365.7	366.4	367.4	367.9	367.7	367.7	367.4
% Ch, Annual Rate	4.9	1.8	0.9	1.1	0.5	-0.2	0.1	-0.4
Trans., Warehousing, and Utilities	98.5	98.8	99.2	99.6	100.1	100.5	100.9	101.3
% Ch, Annual Rate	-7.8	1.1	1.9	1.7	2.0	1.4	1.7	1.7
Information	115.6	116.2	117.5	117.8	119.5	118.3	116.6	117.4
% Ch, Annual Rate	3.0	2.0	4.3	1.3	5.9	-4.2	-5.5	2.6
Software Publishers	56.4	56.7	56.9	57.0	57.2	57.1	57.3	57.4
% Ch, Annual Rate	1.7	2.0	1.2	0.5	1.4	-0.2	0.9	0.9
Other Publishing Industries	6.3	6.3	6.2	6.1	6.0	5.8	5.7	5.6
% Ch, Annual Rate	9.3	-0.6	-5.0	-8.7	-3.9	-12.4	-6.7	-7.0
Other Information	52.9	53.2	54.3	54.8	56.3	55.3	53.6	54.4
% Ch, Annual Rate	3.7	2.3	8.9	3.3	11.9	-7.3	-11.6	5.6
Financial Activities	158.0	158.5	157.6	156.7	155.4	154.2	153.4	152.6
% Ch, Annual Rate	3.1	1.2	-2.4	-2.3	-3.3	-3.0	-2.1	-2.0
Professional and Business Services	398.7	401.7	404.7	409.2	413.7	416.8	420.1	423.5
% Ch, Annual Rate	2.0	3.0	3.1	4.5	4.4	3.0	3.2	3.2
Education and Health Services	463.9	467.8	470.5	472.0	473.6	475.3	476.5	477.9
% Ch, Annual Rate	3.7	3.4	2.3	1.3	1.3	1.4	1.0	1.2
Leisure and Hospitality	313.5	315.9	316.9	317.6	318.2	319.3	320.7	321.7
% Ch, Annual Rate	3.4	3.0	1.3	0.9	0.8	1.3	1.8	1.2
Other Services	116.9	117.3	117.3	117.3	117.3	117.4	117.5	117.6
% Ch, Annual Rate	3.6	1.1	0.3	0.1	0.0	0.1	0.4	0.5
Federal Government	73.9	73.9	73.9	73.9	73.8	73.6	73.4	73.2
% Ch, Annual Rate	1.1	0.3	0.0	-0.3	-0.6	-0.8	-1.0	-1.1
State and Local Government	495.7	496.9	498.2	499.5	500.8	502.4	504.5	506.6
% Ch, Annual Rate	1.9	1.0	1.0	1.0	1.1	1.3	1.6	1.7

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2016 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	3,287.6	3,296.7	3,306.3	3,315.3	3,325.6	3,335.2	3,344.6	3,354.0
% Ch, Annual Rate	1.4	1.1	1.2	1.1	1.2	1.2	1.1	1.1
Manufacturing	288.2	288.8	289.1	289.6	290.1	290.2	290.6	290.9
% Ch, Annual Rate	0.4	0.8	0.4	0.7	0.7	0.2	0.5	0.4
Durable Manufacturing	206.9	207.4	207.6	208.0	208.3	208.2	208.3	208.4
% Ch, Annual Rate	0.6	1.0	0.4	0.7	0.5	-0.1	0.3	0.2
Wood Products	14.4	14.5	14.7	14.7	14.7	14.7	14.7	14.7
% Ch, Annual Rate	4.4	4.3	3.0	1.7	0.4	-1.3	0.3	1.3
Primary and Fabricated Metals	24.7	24.9	24.9	25.1	25.4	25.5	25.7	25.8
% Ch, Annual Rate	1.9	2.3	1.4	3.2	4.3	1.8	2.2	1.7
Computer and Electronic Products	22.4	22.7	22.8	23.0	23.0	23.1	23.2	23.2
% Ch, Annual Rate	4.6	3.9	3.1	3.0	0.7	0.7	1.5	1.4
Machinery and Electrical Equipment	21.8	22.1	22.4	22.7	23.1	23.4	23.7	24.0
% Ch, Annual Rate	5.5	6.4	5.1	6.1	6.4	5.1	5.9	5.1
Aerospace	87.2	86.7	86.3	85.8	85.4	85.0	84.6	84.1
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Other Transportation Equip.	9.3	9.2	9.2	9.1	9.0	9.0	8.9	8.9
% Ch, Annual Rate	-8.4	-1.6	-3.0	-2.5	-2.6	-3.1	-2.8	-2.7
Other Durables	27.1	27.3	27.3	27.4	27.5	27.6	27.6	27.7
% Ch, Annual Rate	2.3	2.0	1.2	1.5	1.5	0.7	0.8	0.7
Nondurable Manufacturing	81.3	81.4	81.5	81.7	81.8	82.0	82.3	82.5
% Ch, Annual Rate	-0.2	0.3	0.4	0.8	0.9	0.9	1.1	1.0
Food Manufacturing	37.5	37.5	37.5	37.6	37.6	37.6	37.7	37.8
% Ch, Annual Rate	-0.6	-0.1	0.2	0.5	0.4	0.4	0.9	0.8
Paper and Paper Products	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.0
% Ch, Annual Rate	-3.4	-2.4	-1.9	-1.4	-1.6	-1.4	-1.1	-1.2
Other Nondurables	36.6	36.7	36.8	37.0	37.1	37.3	37.5	37.6
% Ch, Annual Rate	0.8	1.1	1.2	1.6	2.0	1.8	1.8	1.6
Natural Resources and Mining	6.0	6.0	6.1	6.1	6.1	6.1	6.2	6.2
% Ch, Annual Rate	2.6	2.7	3.5	1.8	1.7	1.2	1.3	1.5
Construction	187.8	188.5	189.9	191.3	192.9	194.4	196.0	197.6
% Ch, Annual Rate	5.7	1.6	2.9	3.1	3.3	3.3	3.3	3.2
Trade, Transportation, and Utilities	607.0	607.2	607.7	608.4	608.9	609.6	610.4	611.2
% Ch, Annual Rate	0.2	0.1	0.4	0.4	0.3	0.5	0.5	0.5
Wholesale Trade	138.4	138.7	139.2	139.6	140.1	140.5	140.9	141.3
% Ch, Annual Rate	1.4	0.9	1.2	1.2	1.5	1.3	1.1	1.1
Retail Trade	366.9	366.4	366.3	366.4	366.2	366.3	366.6	366.8
% Ch, Annual Rate	-0.5	-0.5	-0.1	0.1	-0.2	0.2	0.2	0.3
Trans., Warehousing, and Utilities	101.7	102.1	102.3	102.4	102.6	102.8	102.9	103.0
% Ch, Annual Rate	1.4	1.5	0.7	0.7	0.6	0.6	0.5	0.5
Information	118.4	119.1	119.8	120.6	121.4	122.2	122.7	123.1
% Ch, Annual Rate	3.6	2.2	2.6	2.7	2.7	2.5	1.6	1.5
Software Publishers	57.5	57.6	57.8	58.0	58.2	58.3	58.5	58.6
% Ch, Annual Rate	0.8	1.0	1.2	1.3	1.2	1.1	1.1	1.1
Other Publishing Industries	5.5	5.4	5.3	5.3	5.2	5.1	5.0	4.9
% Ch, Annual Rate	-7.8	-6.9	-5.6	-4.9	-5.9	-6.1	-6.4	-6.7
Other Information	55.4	56.0	56.7	57.4	58.1	58.8	59.2	59.5
% Ch, Annual Rate	8.0	4.4	4.9	4.9	5.1	4.7	2.7	2.6
Financial Activities	151.9	150.8	149.8	148.9	148.5	148.4	148.3	148.2
% Ch, Annual Rate	-1.9	-2.9	-2.5	-2.3	-1.1	-0.4	-0.2	0.0
Professional and Business Services	427.2	430.7	433.4	434.8	437.0	439.6	442.2	444.7
% Ch, Annual Rate	3.6	3.4	2.5	1.4	2.0	2.3	2.5	2.3
Education and Health Services	479.4	480.6	482.0	483.7	486.4	487.9	489.3	490.9
% Ch, Annual Rate	1.3	0.9	1.2	1.5	2.3	1.3	1.1	1.4
Leisure and Hospitality	322.3	323.4	324.7	325.8	326.2	326.9	327.6	328.3
% Ch, Annual Rate	0.8	1.4	1.6	1.3	0.4	0.9	0.9	0.9
Other Services	117.8	117.9	118.1	118.3	118.5	118.6	118.7	118.9
% Ch, Annual Rate	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.5
Federal Government	73.0	72.9	72.7	72.6	72.5	72.3	72.2	72.1
% Ch, Annual Rate	-1.0	-0.9	-0.7	-0.8	-0.7	-0.8	-0.8	-0.7
State and Local Government	508.5	510.8	513.0	515.1	517.1	518.9	520.5	521.9
% Ch, Annual Rate	1.5	1.8	1.7	1.7	1.6	1.4	1.2	1.1

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	3,363.8	3,379.3	3,384.2	3,391.6	3,400.9	3,410.4	3,420.0	3,430.4
% Ch, Annual Rate	1.2	1.9	0.6	0.9	1.1	1.1	1.1	1.2
Manufacturing	291.4	291.7	292.4	293.1	293.9	294.6	295.3	296.0
% Ch, Annual Rate	0.7	0.4	1.0	1.0	1.1	1.0	1.0	0.9
Durable Manufacturing	208.8	209.1	209.5	210.1	210.7	211.3	211.9	212.5
% Ch, Annual Rate	0.8	0.4	1.0	1.0	1.2	1.1	1.2	1.0
Wood Products	14.8	14.8	14.8	14.9	14.9	14.9	14.9	14.9
% Ch, Annual Rate	1.3	0.3	1.0	1.0	0.8	0.1	0.1	-0.1
Primary and Fabricated Metals	25.8	25.8	25.9	26.0	26.2	26.3	26.4	26.6
% Ch, Annual Rate	0.7	0.1	1.3	1.9	2.0	2.0	2.3	2.0
Computer and Electronic Products	23.3	23.3	23.4	23.5	23.5	23.7	23.8	23.9
% Ch, Annual Rate	1.6	0.0	0.7	1.2	1.7	1.9	2.1	2.0
Machinery and Electrical Equipment	24.2	24.5	24.8	25.1	25.4	25.8	26.1	26.5
% Ch, Annual Rate	3.7	3.6	5.1	5.1	5.9	5.6	5.8	4.8
Aerospace	84.1	84.1	84.1	84.1	84.1	84.1	84.1	84.1
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Transportation Equip.	8.8	8.8	8.7	8.7	8.7	8.6	8.6	8.5
% Ch, Annual Rate	-2.1	-1.9	-1.0	-1.9	-1.9	-1.8	-2.0	-1.7
Other Durables	27.7	27.8	27.8	27.9	27.9	27.9	28.0	28.0
% Ch, Annual Rate	0.4	0.3	0.8	0.7	0.5	0.4	0.5	0.3
Nondurable Manufacturing	82.6	82.6	82.8	83.0	83.2	83.3	83.4	83.5
% Ch, Annual Rate	0.5	0.3	1.0	0.8	0.8	0.7	0.5	0.4
Food Manufacturing	37.8	37.8	37.9	37.9	37.9	38.0	37.9	37.9
% Ch, Annual Rate	0.2	-0.1	0.9	0.4	0.4	0.1	-0.2	-0.4
Paper and Paper Products	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.9
% Ch, Annual Rate	-1.7	-1.6	-1.0	-1.0	-1.1	-1.0	-1.2	-1.3
Other Nondurables	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7
% Ch, Annual Rate	1.2	1.2	1.6	1.6	1.6	1.6	1.4	1.4
Natural Resources and Mining	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
% Ch, Annual Rate	0.6	0.2	0.9	1.1	0.9	0.5	0.4	0.2
Construction	198.8	200.0	200.9	201.8	202.5	203.1	203.8	204.6
% Ch, Annual Rate	2.5	2.3	2.0	1.7	1.4	1.3	1.4	1.5
Trade, Transportation, and Utilities	611.7	611.7	612.2	612.7	612.9	613.3	613.5	613.9
% Ch, Annual Rate	0.3	0.0	0.3	0.3	0.1	0.3	0.2	0.3
Wholesale Trade	141.9	142.1	142.5	142.9	143.3	143.7	144.0	144.3
% Ch, Annual Rate	1.5	0.8	1.1	1.1	1.1	1.0	0.9	0.9
Retail Trade	366.7	366.4	366.3	366.3	366.0	365.9	365.8	365.8
% Ch, Annual Rate	-0.2	-0.3	-0.1	0.0	-0.3	-0.1	-0.2	0.0
Trans., Warehousing, and Utilities	103.2	103.2	103.3	103.5	103.6	103.7	103.8	103.8
% Ch, Annual Rate	0.6	0.3	0.4	0.5	0.4	0.4	0.3	0.3
Information	123.5	123.9	124.6	125.3	126.1	126.8	127.6	128.4
% Ch, Annual Rate	1.4	1.3	2.2	2.3	2.4	2.5	2.5	2.5
Software Publishers	58.8	58.9	59.1	59.3	59.4	59.6	59.8	60.0
% Ch, Annual Rate	1.0	0.9	1.2	1.2	1.2	1.2	1.2	1.2
Other Publishing Industries	4.9	4.8	4.7	4.6	4.5	4.5	4.4	4.3
% Ch, Annual Rate	-7.0	-7.9	-6.4	-6.4	-6.4	-6.0	-6.2	-6.4
Other Information	59.9	60.3	60.8	61.5	62.1	62.8	63.4	64.1
% Ch, Annual Rate	2.5	2.4	4.0	4.1	4.2	4.4	4.3	4.4
Financial Activities	148.4	148.2	148.2	148.1	148.1	148.1	148.2	148.2
% Ch, Annual Rate	0.4	-0.6	0.0	-0.1	-0.1	0.2	0.2	0.1
Professional and Business Services	447.2	449.6	452.4	455.4	458.5	461.7	465.1	468.8
% Ch, Annual Rate	2.2	2.1	2.6	2.6	2.8	2.8	3.0	3.2
Education and Health Services	493.4	494.1	495.9	497.7	499.6	500.8	502.2	503.9
% Ch, Annual Rate	2.0	0.6	1.4	1.5	1.6	1.0	1.1	1.4
Leisure and Hospitality	328.8	329.4	330.3	331.0	331.7	332.4	333.1	333.7
% Ch, Annual Rate	0.5	0.8	1.1	0.9	0.8	0.9	0.8	0.7
Other Services	119.1	119.3	119.5	119.7	119.9	120.1	120.3	120.5
% Ch, Annual Rate	0.9	0.6	0.7	0.6	0.6	0.6	0.6	0.6
Federal Government	71.9	80.3	75.2	72.4	71.9	71.9	71.8	71.7
% Ch, Annual Rate	-0.6	55.0	-23.2	-13.6	-2.8	-0.5	-0.4	-0.3
State and Local Government	523.3	524.9	526.5	528.1	529.6	531.2	532.8	534.5
% Ch, Annual Rate	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3

Table A3.1

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

Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	14,694.2	15,357.4	15,927.2	16,618.6	17,392.6	18,180.7	18,968.2	19,768.0
% Ch	4.4	4.5	3.7	4.3	4.7	4.5	4.3	4.2
Total Wage and Salary Disbursements	7,477.8	7,838.7	8,187.7	8,538.9	8,900.1	9,265.8	9,638.6	10,022.0
% Ch	5.1	4.8	4.5	4.3	4.2	4.1	4.0	4.0
Nonwage Personal Income	7,216.5	7,518.7	7,739.6	8,079.7	8,492.4	8,914.9	9,329.6	9,746.0
% Ch	3.8	4.2	2.9	4.4	5.1	5.0	4.7	4.5
Supplements to Wages and Salaries	1,771.2	1,832.0	1,907.9	1,998.6	2,075.9	2,154.9	2,232.1	2,307.0
% Ch	2.7	3.4	4.1	4.8	3.9	3.8	3.6	3.4
Proprietor's Income	1,346.7	1,389.8	1,434.5	1,497.2	1,551.9	1,603.2	1,670.5	1,744.1
% Ch	4.8	3.2	3.2	4.4	3.7	3.3	4.2	4.4
Farm	78.1	62.5	57.4	51.3	51.9	52.6	53.8	56.5
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,268.5	1,327.4	1,377.1	1,445.9	1,500.0	1,550.6	1,616.7	1,687.6
% Ch	6.0	4.6	3.8	5.0	3.7	3.4	4.3	4.4
Less: Contribution For Govt. Soc. Ins.	1,159.0	1,204.6	1,254.1	1,310.4	1,371.2	1,440.0	1,507.1	1,576.5
% Ch	4.7	3.9	4.1	4.5	4.6	5.0	4.7	4.6
Dividends/Int./Rent	2,728.4	2,837.1	2,868.9	2,987.5	3,192.4	3,401.9	3,578.1	3,749.0
% Ch	4.0	4.0	1.1	4.1	6.9	6.6	5.2	4.8
Transfer Payments	2,529.2	2,664.3	2,782.4	2,906.8	3,043.4	3,195.0	3,356.0	3,522.4
% Ch	4.2	5.3	4.4	4.5	4.7	5.0	5.0	5.0

Table A3.2

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

Forecast 2016 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	15,748.5	15,838.4	15,979.1	16,142.9	16,343.2	16,532.1	16,708.5	16,890.7
% Ch, Annual Rate	3.7	2.3	3.6	4.2	5.1	4.7	4.3	4.4
Total Wage and Salary Disbursements	8,072.5	8,136.4	8,226.8	8,315.0	8,407.8	8,497.2	8,582.7	8,667.9
% Ch, Annual Rate	4.5	3.2	4.5	4.4	4.5	4.3	4.1	4.0
Nonwage Personal Income	7,676.0	7,702.0	7,752.3	7,827.9	7,935.4	8,034.9	8,125.8	8,222.8
% Ch, Annual Rate	3.0	1.4	2.6	4.0	5.6	5.1	4.6	4.9
Supplements to Wages and Salaries	1,876.7	1,894.3	1,918.8	1,941.7	1,967.0	1,989.2	2,009.7	2,028.6
% Ch, Annual Rate	4.1	3.8	5.3	4.9	5.3	4.6	4.2	3.8
Proprietor's Income	1,416.4	1,425.1	1,437.8	1,458.7	1,473.1	1,492.2	1,504.6	1,518.9
% Ch, Annual Rate	1.0	2.5	3.6	5.9	4.0	5.3	3.4	3.8
Farm	65.3	58.5	53.8	51.9	51.7	50.3	50.7	52.7
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,351.0	1,366.6	1,384.1	1,406.8	1,421.5	1,441.9	1,454.0	1,466.2
% Ch, Annual Rate	1.7	4.7	5.2	6.7	4.2	5.9	3.4	3.4
Less: Contribution For Govt. Soc. Ins.	1,236.4	1,246.2	1,260.1	1,273.6	1,292.0	1,305.7	1,316.0	1,327.8
% Ch, Annual Rate	4.8	3.2	4.5	4.4	5.9	4.3	3.2	3.7
Dividends/Int./Rent	2,880.0	2,861.4	2,859.2	2,874.8	2,926.0	2,964.3	3,005.1	3,054.5
% Ch, Annual Rate	1.8	-2.6	-0.3	2.2	7.3	5.3	5.6	6.7
Transfer Payments	2,739.4	2,767.5	2,796.5	2,826.2	2,861.2	2,895.0	2,922.3	2,948.6
% Ch, Annual Rate	5.3	4.2	4.3	4.3	5.0	4.8	3.8	3.6

Table A3.2 (continued)

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

Forecast 2016 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	17,114.5	17,298.7	17,482.2	17,675.0	17,900.4	18,092.3	18,273.4	18,456.6
% Ch, Annual Rate	5.4	4.4	4.3	4.5	5.2	4.4	4.1	4.1
Total Wage and Salary Disbursements	8,763.5	8,855.6	8,946.6	9,034.9	9,129.5	9,219.7	9,311.2	9,402.6
% Ch, Annual Rate	4.5	4.3	4.2	4.0	4.3	4.0	4.0	4.0
Nonwage Personal Income	8,351.0	8,443.1	8,535.6	8,640.1	8,770.9	8,872.6	8,962.2	9,054.0
% Ch, Annual Rate	6.4	4.5	4.5	5.0	6.2	4.7	4.1	4.2
Supplements to Wages and Salaries	2,051.4	2,067.4	2,083.5	2,101.3	2,129.8	2,146.7	2,162.7	2,180.3
% Ch, Annual Rate	4.6	3.2	3.2	3.5	5.5	3.2	3.0	3.3
Proprietor's Income	1,531.7	1,546.9	1,558.6	1,570.5	1,583.8	1,596.3	1,609.1	1,623.6
% Ch, Annual Rate	3.4	4.0	3.1	3.1	3.4	3.2	3.2	3.6
Farm	52.6	51.5	51.2	52.4	52.9	52.7	52.3	52.4
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,479.1	1,495.3	1,507.4	1,518.1	1,530.9	1,543.7	1,556.8	1,571.1
% Ch, Annual Rate	3.6	4.5	3.3	2.9	3.4	3.4	3.4	3.7
Less: Contribution For Govt. Soc. Ins.	1,353.9	1,365.5	1,376.5	1,388.9	1,422.8	1,434.1	1,445.2	1,458.1
% Ch, Annual Rate	8.1	3.5	3.3	3.6	10.1	3.2	3.1	3.6
Dividends/Int./Rent	3,114.4	3,163.9	3,215.0	3,276.2	3,329.9	3,384.2	3,425.7	3,467.8
% Ch, Annual Rate	8.1	6.5	6.6	7.8	6.7	6.7	5.0	5.0
Transfer Payments	3,007.3	3,030.5	3,055.0	3,080.9	3,150.1	3,179.5	3,209.9	3,240.4
% Ch, Annual Rate	8.2	3.1	3.3	3.4	9.3	3.8	3.9	3.9

Table A3.2 (continued)

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

Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	18,680.0	18,873.6	19,063.2	19,256.1	19,474.1	19,671.1	19,864.4	20,062.5
% Ch, Annual Rate	4.9	4.2	4.1	4.1	4.6	4.1	4.0	4.0
Total Wage and Salary Disbursements	9,499.9	9,592.8	9,684.5	9,777.2	9,877.1	9,972.8	10,069.8	10,168.4
% Ch, Annual Rate	4.2	4.0	3.9	3.9	4.2	3.9	3.9	4.0
Nonwage Personal Income	9,180.0	9,280.8	9,378.7	9,478.9	9,597.0	9,698.3	9,794.6	9,894.1
% Ch, Annual Rate	5.7	4.5	4.3	4.3	5.1	4.3	4.0	4.1
Supplements to Wages and Salaries	2,206.9	2,223.6	2,240.5	2,257.6	2,283.4	2,299.3	2,314.3	2,331.1
% Ch, Annual Rate	5.0	3.1	3.1	3.1	4.7	2.8	2.6	2.9
Proprietor's Income	1,643.3	1,663.4	1,678.9	1,696.5	1,716.0	1,736.6	1,753.6	1,770.3
% Ch, Annual Rate	5.0	5.0	3.8	4.3	4.7	4.9	4.0	3.9
Farm	52.9	53.3	54.0	55.2	56.3	56.6	56.5	56.8
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,590.4	1,610.2	1,624.9	1,641.3	1,659.7	1,680.0	1,697.1	1,713.5
% Ch, Annual Rate	5.0	5.1	3.7	4.1	4.6	5.0	4.1	3.9
Less: Contribution For Govt. Soc. Ins.	1,489.5	1,501.2	1,512.3	1,525.4	1,558.0	1,570.1	1,582.0	1,596.1
% Ch, Annual Rate	8.9	3.2	3.0	3.5	8.8	3.2	3.1	3.6
Dividends/Int./Rent	3,509.9	3,555.8	3,601.7	3,644.9	3,686.7	3,729.0	3,769.4	3,811.0
% Ch, Annual Rate	4.9	5.3	5.3	4.9	4.7	4.7	4.4	4.5
Transfer Payments	3,309.5	3,339.1	3,369.9	3,405.4	3,468.8	3,503.5	3,539.4	3,577.8
% Ch, Annual Rate	8.8	3.6	3.7	4.3	7.7	4.1	4.2	4.4

Table A3.3
Washington Personal Income by Component (Billions of Dollars)
Forecast 2016 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	350.322	369.572	384.951	402.665	423.057	444.004	465.263	487.170
% Ch	5.8	5.5	4.2	4.6	5.1	5.0	4.8	4.7
Total Wage and Salary Disbursements	181.978	192.609	201.886	210.763	220.332	230.149	240.533	251.483
% Ch	6.7	5.8	4.8	4.4	4.5	4.5	4.5	4.6
Manufacturing	21.781	21.904	22.131	22.784	23.560	24.373	25.283	26.342
% Ch	6.0	0.6	1.0	3.0	3.4	3.5	3.7	4.2
Durable Manufacturing	17.664	17.715	17.729	18.200	18.821	19.434	20.140	20.988
% Ch	6.4	0.3	0.1	2.7	3.4	3.3	3.6	4.2
Nondurable Manufacturing	4.117	4.189	4.402	4.584	4.739	4.939	5.144	5.353
% Ch	4.0	1.8	5.1	4.1	3.4	4.2	4.1	4.1
Nonmanufacturing	153.326	163.777	172.620	180.608	189.146	197.876	207.065	216.661
% Ch	7.2	6.8	5.4	4.6	4.7	4.6	4.6	4.6
Other Private Wages	1.116	1.203	1.221	1.258	1.298	1.337	1.378	1.421
% Ch	3.2	7.8	1.5	3.0	3.2	3.0	3.1	3.1
Farm Wages	1.624	1.681	1.748	1.825	1.908	1.993	2.082	2.176
% Ch	3.1	3.5	4.0	4.4	4.6	4.5	4.5	4.5
Military Wages	4.131	4.043	4.166	4.289	4.420	4.570	4.724	4.884
% Ch	-4.1	-2.1	3.0	2.9	3.1	3.4	3.4	3.4
Nonwage Personal Income	168.343	176.964	183.066	191.902	202.725	213.855	224.729	235.688
% Ch	4.9	5.1	3.4	4.8	5.6	5.5	5.1	4.9
Supplements to Wages and Salaries	41.754	43.487	45.489	47.678	49.692	51.791	53.910	56.027
% Ch	2.8	4.2	4.6	4.8	4.2	4.2	4.1	3.9
Proprietor's Income	25.979	27.514	28.725	30.113	31.252	32.316	33.708	35.209
% Ch	3.5	5.9	4.4	4.8	3.8	3.4	4.3	4.5
Farm	1.253	0.964	1.037	1.022	1.038	1.048	1.058	1.077
% Ch	...	...	...	...	...	...	...	...
Nonfarm	24.726	26.550	27.688	29.090	30.214	31.268	32.650	34.132
% Ch	5.3	7.4	4.3	5.1	3.9	3.5	4.4	4.5
Less: Contribution For Govt. Soc. Ins.	30.320	31.654	33.098	34.597	36.278	38.190	40.097	42.085
% Ch	4.7	4.4	4.6	4.5	4.9	5.3	5.0	5.0
Plus: Residence Adjustment	3.353	3.548	3.723	3.908	4.096	4.284	4.475	4.669
% Ch	-1.1	5.8	4.9	5.0	4.8	4.6	4.4	4.3
Dividends/Int./Rent	72.149	75.203	76.610	80.140	85.986	92.002	97.163	102.225
% Ch	4.0	4.2	1.9	4.6	7.3	7.0	5.6	5.2
Transfer Payments	55.427	58.866	61.616	64.660	67.977	71.652	75.570	79.643
% Ch	8.8	6.2	4.7	4.9	5.1	5.4	5.5	5.4
State U.I. Benefits	1.062	0.994	0.954	0.885	0.807	0.791	0.786	0.782
% Ch	-38.4	-6.4	-4.0	-7.2	-8.8	-2.1	-0.6	-0.5
Other Transfers	54.365	57.871	60.662	63.775	67.169	70.861	74.784	78.861
% Ch	10.4	6.4	4.8	5.1	5.3	5.5	5.5	5.5

Table A3.4

Washington Personal Income by Component (Billions of Dollars)

Forecast 2016 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	381.369	383.071	386.222	389.144	396.605	400.942	404.548	408.568
% Ch, Annual Rate	7.2	1.8	3.3	3.1	7.9	4.4	3.6	4.0
Total Wage and Salary Disbursements	200.013	200.972	202.785	203.773	208.433	210.215	211.460	212.945
% Ch, Annual Rate	10.5	1.9	3.7	2.0	9.5	3.5	2.4	2.8
Manufacturing	22.029	22.040	22.133	22.322	22.511	22.706	22.870	23.047
% Ch, Annual Rate	2.7	0.2	1.7	3.5	3.4	3.5	2.9	3.1
Durable Manufacturing	17.686	17.672	17.717	17.842	17.982	18.138	18.267	18.413
% Ch, Annual Rate	1.1	-0.3	1.0	2.9	3.2	3.5	2.9	3.2
Nondurable Manufacturing	4.343	4.368	4.416	4.480	4.529	4.569	4.603	4.635
% Ch, Annual Rate	9.6	2.3	4.5	5.9	4.5	3.6	3.0	2.8
Nonmanufacturing	170.890	171.816	173.497	174.276	178.600	180.151	181.197	182.482
% Ch, Annual Rate	11.7	2.2	4.0	1.8	10.3	3.5	2.3	2.9
Other Private Wages	1.211	1.215	1.225	1.234	1.245	1.254	1.262	1.272
% Ch, Annual Rate	3.9	1.5	3.1	3.1	3.6	2.9	2.7	3.1
Farm Wages	1.725	1.737	1.756	1.775	1.797	1.816	1.834	1.854
% Ch, Annual Rate	5.3	2.7	4.5	4.4	5.1	4.3	4.0	4.5
Military Wages	4.158	4.164	4.174	4.166	4.279	4.288	4.297	4.290
% Ch, Annual Rate	9.3	0.6	0.9	-0.7	11.3	0.8	0.8	-0.7
Nonwage Personal Income	181.356	182.099	183.437	185.371	188.172	190.727	193.088	195.623
% Ch, Annual Rate	3.7	1.6	3.0	4.3	6.2	5.5	5.0	5.4
Supplements to Wages and Salaries	44.799	45.162	45.725	46.271	46.934	47.450	47.918	48.412
% Ch, Annual Rate	5.1	3.3	5.1	4.9	5.9	4.5	4.0	4.2
Proprietor's Income	28.244	28.514	28.842	29.302	29.606	30.020	30.274	30.550
% Ch, Annual Rate	2.2	3.9	4.7	6.5	4.2	5.7	3.4	3.7
Farm	1.075	1.041	1.019	1.014	1.018	1.014	1.020	1.036
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	27.168	27.473	27.823	28.288	28.588	29.006	29.254	29.514
% Ch, Annual Rate	2.3	4.6	5.2	6.9	4.3	6.0	3.5	3.6
Less: Contribution For Govt. Soc. Ins.	32.662	32.888	33.243	33.600	34.117	34.470	34.730	35.070
% Ch, Annual Rate	5.8	2.8	4.4	4.4	6.3	4.2	3.0	4.0
Plus: Residence Adjustment	3.660	3.696	3.744	3.791	3.839	3.886	3.932	3.976
% Ch, Annual Rate	4.9	4.0	5.3	5.1	5.1	5.1	4.8	4.5
Dividends/Int./Rent	76.765	76.366	76.401	76.909	78.365	79.477	80.653	82.063
% Ch, Annual Rate	2.5	-2.1	0.2	2.7	7.8	5.8	6.1	7.2
Transfer Payments	60.550	61.249	61.967	62.699	63.545	64.364	65.040	65.691
% Ch, Annual Rate	5.9	4.7	4.8	4.8	5.5	5.3	4.3	4.1
State U.I. Benefits	0.968	0.967	0.953	0.930	0.905	0.891	0.880	0.865
% Ch, Annual Rate	0.0	-0.5	-5.4	-9.5	-10.2	-6.0	-4.8	-6.6
Other Transfers	59.582	60.282	61.014	61.769	62.640	63.473	64.160	64.826
% Ch, Annual Rate	6.0	4.8	4.9	5.0	5.8	5.4	4.4	4.2

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2016 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	416.756	421.224	424.848	429.399	437.486	442.404	445.724	450.403
% Ch, Annual Rate	8.3	4.4	3.5	4.4	7.7	4.6	3.0	4.3
Total Wage and Salary Disbursements	217.811	219.818	220.962	222.736	227.487	229.677	230.597	232.835
% Ch, Annual Rate	9.5	3.7	2.1	3.3	8.8	3.9	1.6	3.9
Manufacturing	23.248	23.463	23.657	23.870	24.077	24.265	24.472	24.676
% Ch, Annual Rate	3.5	3.7	3.4	3.6	3.5	3.2	3.5	3.4
Durable Manufacturing	18.576	18.748	18.898	19.061	19.218	19.354	19.506	19.656
% Ch, Annual Rate	3.6	3.8	3.2	3.5	3.3	2.9	3.2	3.1
Nondurable Manufacturing	4.673	4.715	4.759	4.809	4.859	4.911	4.966	5.020
% Ch, Annual Rate	3.3	3.7	3.8	4.2	4.3	4.3	4.5	4.4
Nonmanufacturing	186.998	188.747	189.652	191.187	195.575	197.531	198.197	200.200
% Ch, Annual Rate	10.3	3.8	1.9	3.3	9.5	4.1	1.4	4.1
Other Private Wages	1.284	1.293	1.303	1.312	1.323	1.333	1.342	1.352
% Ch, Annual Rate	3.8	3.0	2.9	2.8	3.4	3.0	3.0	2.9
Farm Wages	1.878	1.898	1.918	1.938	1.961	1.982	2.004	2.025
% Ch, Annual Rate	5.3	4.4	4.3	4.2	4.8	4.5	4.4	4.3
Military Wages	4.403	4.417	4.431	4.429	4.551	4.566	4.582	4.581
% Ch, Annual Rate	11.0	1.2	1.3	-0.2	11.4	1.3	1.4	-0.1
Nonwage Personal Income	198.945	201.405	203.885	206.662	209.999	212.727	215.127	217.569
% Ch, Annual Rate	7.0	5.0	5.0	5.6	6.6	5.3	4.6	4.6
Supplements to Wages and Salaries	49.082	49.478	49.880	50.326	51.123	51.577	52.002	52.463
% Ch, Annual Rate	5.7	3.3	3.3	3.6	6.5	3.6	3.3	3.6
Proprietor's Income	30.828	31.153	31.399	31.629	31.903	32.171	32.443	32.746
% Ch, Annual Rate	3.7	4.3	3.2	3.0	3.5	3.4	3.4	3.8
Farm	1.039	1.034	1.034	1.044	1.048	1.048	1.046	1.048
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	29.789	30.118	30.365	30.586	30.855	31.123	31.397	31.698
% Ch, Annual Rate	3.8	4.5	3.3	2.9	3.6	3.5	3.6	3.9
Less: Contribution For Govt. Soc. Ins.	35.812	36.123	36.420	36.756	37.694	38.024	38.340	38.702
% Ch, Annual Rate	8.7	3.5	3.3	3.7	10.6	3.5	3.4	3.8
Plus: Residence Adjustment	4.024	4.072	4.120	4.166	4.214	4.261	4.308	4.355
% Ch, Annual Rate	4.9	4.9	4.8	4.6	4.7	4.5	4.5	4.5
Dividends/Int./Rent	83.756	85.173	86.638	88.378	89.916	91.475	92.692	93.927
% Ch, Annual Rate	8.5	6.9	7.1	8.3	7.1	7.1	5.4	5.4
Transfer Payments	67.067	67.653	68.268	68.919	70.538	71.267	72.021	72.781
% Ch, Annual Rate	8.6	3.5	3.7	3.9	9.7	4.2	4.3	4.3
State U.I. Benefits	0.828	0.809	0.795	0.796	0.792	0.790	0.789	0.790
% Ch, Annual Rate	-16.0	-8.9	-7.0	0.8	-2.0	-1.0	-0.8	0.8
Other Transfers	66.239	66.843	67.473	68.122	69.745	70.477	71.232	71.990
% Ch, Annual Rate	9.0	3.7	3.8	3.9	9.9	4.3	4.4	4.3

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2016 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	458.431	463.539	467.018	472.063	480.206	485.327	488.954	494.194
% Ch, Annual Rate	7.3	4.5	3.0	4.4	7.1	4.3	3.0	4.4
Total Wage and Salary Disbursements	237.672	240.103	240.979	243.378	248.489	250.924	251.968	254.550
% Ch, Annual Rate	8.6	4.2	1.5	4.0	8.7	4.0	1.7	4.2
Manufacturing	24.915	25.144	25.406	25.668	25.938	26.206	26.478	26.743
% Ch, Annual Rate	3.9	3.7	4.2	4.2	4.3	4.2	4.2	4.1
Durable Manufacturing	19.848	20.030	20.236	20.445	20.661	20.877	21.099	21.315
% Ch, Annual Rate	4.0	3.7	4.2	4.2	4.3	4.2	4.3	4.2
Nondurable Manufacturing	5.067	5.114	5.170	5.223	5.277	5.329	5.379	5.428
% Ch, Annual Rate	3.8	3.7	4.5	4.2	4.2	4.0	3.8	3.7
Nonmanufacturing	204.641	206.795	207.360	209.464	214.143	216.259	216.980	219.261
% Ch, Annual Rate	9.2	4.3	1.1	4.1	9.2	4.0	1.3	4.3
Other Private Wages	1.363	1.374	1.383	1.393	1.405	1.415	1.426	1.437
% Ch, Annual Rate	3.3	3.2	2.8	3.0	3.4	3.0	3.0	3.0
Farm Wages	2.049	2.072	2.093	2.116	2.141	2.164	2.188	2.212
% Ch, Annual Rate	4.7	4.6	4.2	4.4	4.8	4.4	4.5	4.5
Military Wages	4.704	4.719	4.736	4.737	4.863	4.879	4.896	4.897
% Ch, Annual Rate	11.2	1.3	1.5	0.0	11.1	1.4	1.4	0.0
Nonwage Personal Income	220.759	223.436	226.039	228.684	231.717	234.403	236.986	239.645
% Ch, Annual Rate	6.0	4.9	4.7	4.8	5.4	4.7	4.5	4.6
Supplements to Wages and Salaries	53.210	53.690	54.133	54.606	55.362	55.807	56.233	56.704
% Ch, Annual Rate	5.8	3.7	3.3	3.5	5.7	3.3	3.1	3.4
Proprietor's Income	33.149	33.569	33.881	34.234	34.627	35.051	35.407	35.752
% Ch, Annual Rate	5.0	5.2	3.8	4.2	4.7	5.0	4.1	4.0
Farm	1.052	1.054	1.059	1.067	1.075	1.077	1.077	1.079
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	32.097	32.515	32.821	33.166	33.552	33.974	34.330	34.674
% Ch, Annual Rate	5.1	5.3	3.8	4.3	4.7	5.1	4.3	4.1
Less: Contribution For Govt. Soc. Ins.	39.575	39.934	40.249	40.629	41.546	41.900	42.246	42.648
% Ch, Annual Rate	9.3	3.7	3.2	3.8	9.3	3.4	3.3	3.9
Plus: Residence Adjustment	4.404	4.451	4.498	4.545	4.595	4.644	4.693	4.743
% Ch, Annual Rate	4.6	4.3	4.3	4.2	4.5	4.3	4.3	4.3
Dividends/Int./Rent	95.163	96.509	97.854	99.129	100.370	101.626	102.830	104.074
% Ch, Annual Rate	5.4	5.8	5.7	5.3	5.1	5.1	4.8	4.9
Transfer Payments	74.408	75.151	75.921	76.800	78.310	79.176	80.068	81.020
% Ch, Annual Rate	9.2	4.1	4.2	4.7	8.1	4.5	4.6	4.8
State U.I. Benefits	0.789	0.781	0.786	0.787	0.787	0.786	0.783	0.774
% Ch, Annual Rate	-0.6	-4.0	2.4	0.8	-0.3	-0.2	-1.8	-4.7
Other Transfers	73.619	74.370	75.135	76.013	77.523	78.389	79.285	80.246
% Ch, Annual Rate	9.4	4.1	4.2	4.8	8.2	4.5	4.7	4.9

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	1.9	2.296	2.1	2.387	2.5
2013	1.076	1.4	2.330	1.5	2.416	1.2
2014	1.091	1.4	2.367	1.6	2.460	1.8
2015	1.094	0.3	2.370	0.1	2.494	1.4
Forecast						
2016	1.102	0.7	2.387	0.7	2.534	1.6
2017	1.120	1.6	2.438	2.1	2.588	2.1
2018	1.141	1.8	2.495	2.3	2.648	2.3
2019	1.161	1.8	2.550	2.2	2.707	2.2
2020	1.181	1.7	2.604	2.1	2.766	2.2
2021	1.202	1.7	2.658	2.1	2.826	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	105.8	2.2	106.7	2.3	150.7	1.3	154.7	3.6
2013	108.3	2.3	107.8	1.0	149.0	-1.2	150.4	-2.7
2014	110.8	2.3	109.8	1.9	148.9	-0.1	144.7	-3.8
2015	112.9	1.9	111.0	1.1	106.5	-28.5	106.7	-26.3

Forecast

2016	115.1	1.9	111.6	0.6	89.5	-16.0	88.4	-17.2
2017	117.5	2.1	114.6	2.7	97.3	8.7	94.7	7.1
2018	120.4	2.4	117.3	2.4	102.5	5.4	98.5	4.0
2019	123.3	2.4	119.5	1.9	106.8	4.2	101.4	2.9
2020	126.1	2.3	121.6	1.8	111.3	4.2	104.3	2.9
2021	129.0	2.3	123.6	1.6	115.6	3.9	106.9	2.5

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	5970.5	76.4	1.3	80.7	43.9	39.6
2002	6059.7	89.2	1.5	79.3	44.9	54.8
2003	6126.9	67.2	1.1	79.1	44.7	32.9
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	83.6
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	87.0	50.7	49.5
2015	7061.4	93.2	1.3	88.5	52.8	57.6
Forecast						
2016	7155.3	93.9	1.3	89.0	53.3	58.3
2017	7247.6	92.2	1.3	90.6	53.9	55.5
2018	7334.5	86.9	1.2	91.5	54.7	50.2
2019	7417.7	83.1	1.1	92.2	55.6	46.5
2020	7498.5	80.8	1.1	92.9	56.5	44.5
2021	7577.2	78.7	1.0	93.3	57.6	43.0

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	Actual									
	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Total Population	6817.8	6882.4	6968.2	7061.4	7155.3	7247.6	7334.5	7417.7	7498.5	7577.2
Percent Change	0.7	0.9	1.2	1.3	1.3	1.3	1.2	1.1	1.1	1.0
Age 17 and Under	1572.6	1577.2	1588.4	1602.7	1616.9	1631.2	1643.7	1655.9	1670.2	1684.0
Percent of Total	23.1	22.9	22.8	22.7	22.6	22.5	22.4	22.3	22.3	22.2
Age 6-18	1137.5	1141.1	1151.0	1162.2	1173.2	1182.8	1192.1	1200.1	1207.5	1217.7
Percent of Total	16.7	16.6	16.5	16.5	16.4	16.3	16.3	16.2	16.1	16.1
Age 18 and Over	5245.2	5305.2	5379.8	5458.7	5538.4	5616.4	5690.9	5761.7	5828.3	5893.2
Percent of Total	76.9	77.1	77.2	77.3	77.4	77.5	77.6	77.7	77.7	77.8
Age 21 and Over	4965.3	5029.2	5107.4	5187.1	5266.0	5342.0	5414.1	5483.5	5551.2	5617.8
Percent of Total	72.8	73.1	73.3	73.5	73.6	73.7	73.8	73.9	74.0	74.1
Age 20-34	1413.1	1426.9	1445.8	1458.8	1471.4	1481.5	1489.3	1497.5	1503.5	1509.0
Percent of Total	20.7	20.7	20.7	20.7	20.6	20.4	20.3	20.2	20.1	19.9
Age 18-64	4349.5	4365.7	4396.9	4431.0	4465.8	4496.6	4520.1	4540.2	4553.7	4566.8
Percent of Total	63.8	63.4	63.1	62.7	62.4	62.0	61.6	61.2	60.7	60.3
Age 65 and Over	895.6	939.5	982.8	1027.7	1072.6	1119.8	1170.7	1221.5	1274.6	1326.4
Percent of Total	13.1	13.7	14.1	14.6	15.0	15.5	16.0	16.5	17.0	17.5

* 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	January 2016	-
U.S. Real GDP Growth	4th quarter 2015	-
U.S. ISM Index	February 2016	+
U.S. Employment YoY%Δ	January 2016	unchanged
U.S. Unemployment Rate	January 2016	+
U.S. Fed Funds Target	January 2016	unchanged
U.S. Consumer Confidence	February 2016	-
U.S. Consumer Sentiment	February 2016	-
U.S. Light Vehicle Sales	January 2016	+
U.S. CPI YoY%Δ	January 2016	-
U.S. Home Prices	December 2015	unchanged
S&P 500 Index	February 2016	-
WA Leading Index	December 2015	-
WA ISM-WW Index	January 2016	+
WA Employment YoY%Δ	January 2016	+
WA Aerospace Empl. YoY%Δ	January 2016	-
WA Unemployment Rate	December 2015	-
WA Help Wanted Index	January 2016	-
WA Business Cycle Indicator	December 2015	+
WA Initial Unemploy. Claims	January 2016	+
WA Housing Permits	January 2016	+
WA Weekly Hours in Mfg.	December 2015	-
WA New Vehicle Registration	January 2016	+
WA In-Migration	January 2016	+
WA Exports-Total YoY%Δ	4th quarter 2015	-
WA Exports- w/o Trans. Equip. YoY%Δ	4th quarter 2015	-
Seattle CPI YoY%Δ	December 2015	-
Seattle Home Prices	December 2015	+
WA Construction Activity Index	December 2015	-

*Change from the previous reading

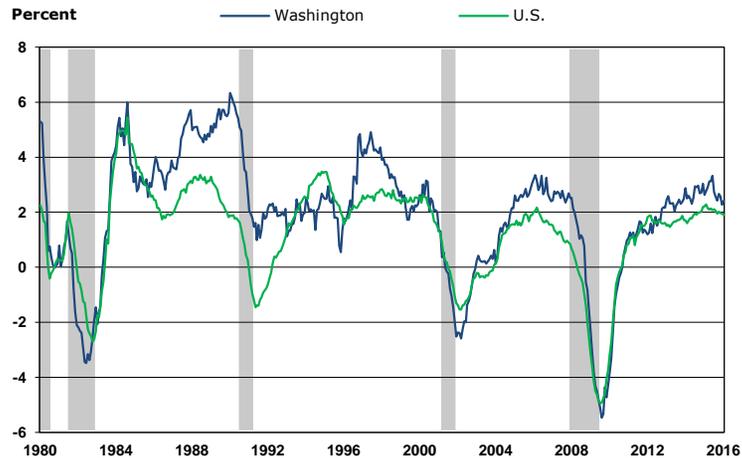
Table A6.2
Washington Business Indicators
 Historical Data

	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
2013:01	114.6	109.1	39.9	93.2	128.7	60.2	52.3
2013:02	114.7	109.5	39.0	95.7	127.2	56.3	53.1
2013:03	114.1	109.2	39.2	95.6	118.8	65.4	51.5
2013:04	114.2	110.0	38.2	93.2	120.2	59.5	50.0
2013:05	114.3	110.2	39.5	93.2	120.0	53.7	50.0
2013:06	114.3	110.4	40.0	92.7	121.0	61.0	52.5
2013:07	114.5	110.8	41.7	96.4	118.6	60.3	54.9
2013:08	115.0	111.6	42.3	94.6	118.7	53.8	56.3
2013:09	115.1	112.5	41.6	92.5	116.6	52.7	56.0
2013:10	114.5	112.8	42.4	94.5	112.7	54.2	56.6
2013:11	116.2	113.8	42.0	93.7	118.2	61.1	57.0
2013:12	116.3	113.8	42.9	97.4	118.2	62.3	56.5
2014:01	116.0	113.7	44.1	94.8	118.2	63.5	51.8
2014:02	115.5	114.3	43.3	93.3	118.5	68.7	54.3
2014:03	116.5	115.4	43.8	94.6	118.6	63.6	54.4
2014:04	117.1	115.8	46.6	97.3	120.6	53.7	55.3
2014:05	117.3	116.5	47.5	95.9	118.7	59.6	55.6
2014:06	118.5	117.2	48.0	97.3	121.0	67.0	55.7
2014:07	118.7	118.4	49.6	97.7	121.3	50.1	56.4
2014:08	118.7	118.5	49.7	97.5	121.6	62.9	58.1
2014:09	118.4	119.2	49.6	98.2	114.3	60.3	56.1
2014:10	119.1	119.9	48.4	100.3	119.0	57.6	57.9
2014:11	120.0	120.5	49.3	102.5	128.0	63.1	57.6
2014:12	119.5	121.0	49.8	102.2	122.0	53.3	55.1
2015:01	119.4	121.2	51.9	96.6	127.6	66.6	53.5
2015:02	120.2	120.9	57.0	108.2	137.2	65.9	52.9
2015:03	119.9	121.5	57.1	100.8	138.8	64.1	51.5
2015:04	120.1	122.2	57.1	99.6	135.7	60.4	51.5
2015:05	120.5	122.8	57.7	98.9	139.0	60.3	52.8
2015:06	120.7	122.9	57.8	98.6	136.0	51.4	53.5
2015:07	120.3	122.8	59.6	98.7	141.0	53.6	52.7
2015:08	119.8	122.8	59.0	97.8	139.1	48.0	51.1
2015:09	118.5	122.6	58.7	92.3	126.6	48.0	50.2
2015:10	119.6	123.2	59.4	97.9	132.4	46.1	50.1
2015:11	120.3	123.8	58.5	101.4	134.3	50.0	48.6
2015:12	119.5	123.4	60.6	97.1	130.7	54.5	48.0
2016:01		123.2			128.7	57.2	48.2
2016:02							49.5

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

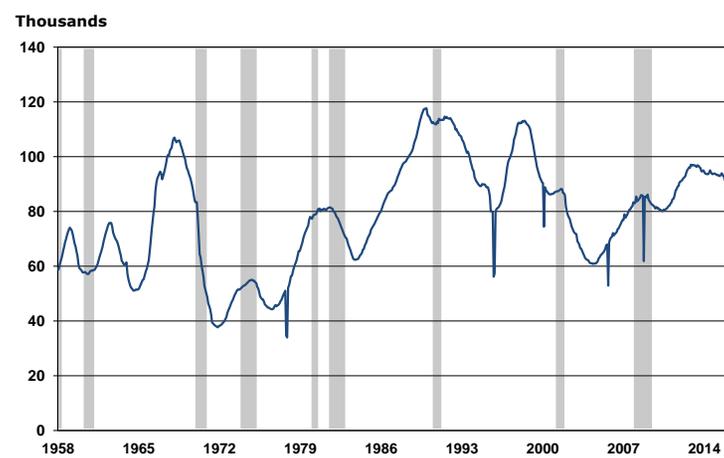
January 1980 to January 2016



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

Washington Aircraft and Parts Employment

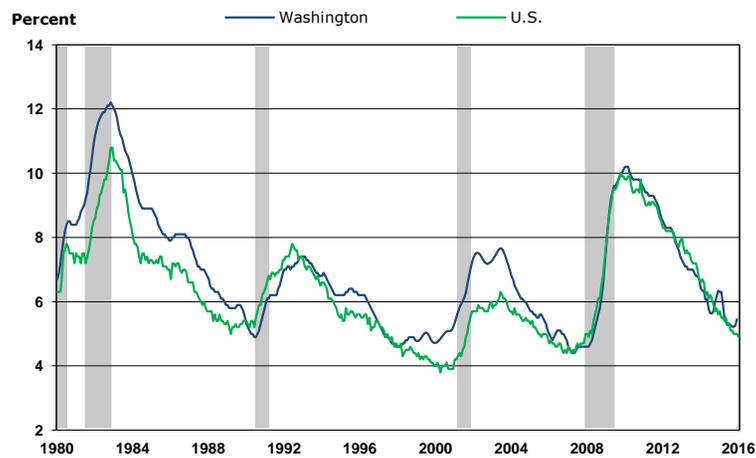
January 1958 to January 2016



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

January 1980 to January 2016



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to December 2015



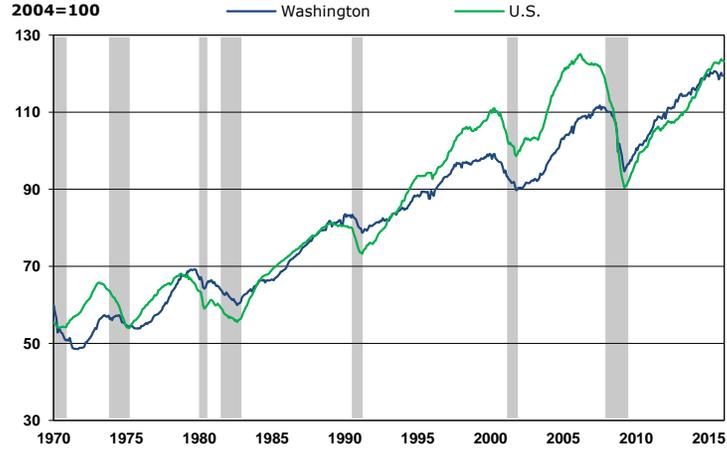
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

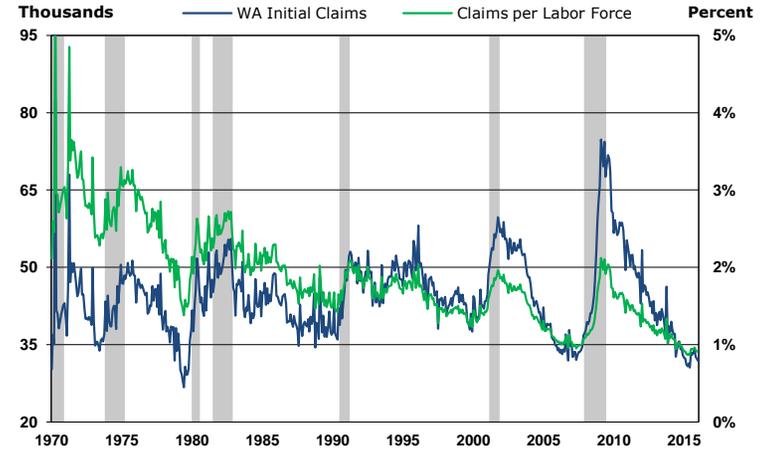
January 1970 to January 2016



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

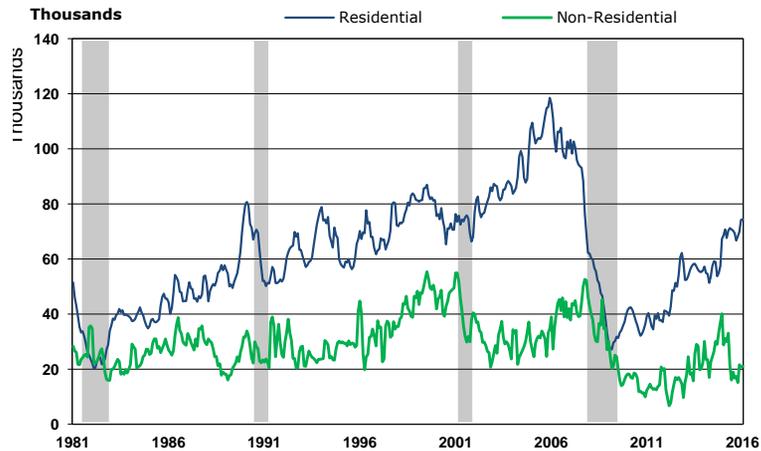
January 1970 to January 2016, S.A.



* Source: WA State Employment Security, ERFC

Square Footage of Construction Projects in WA State

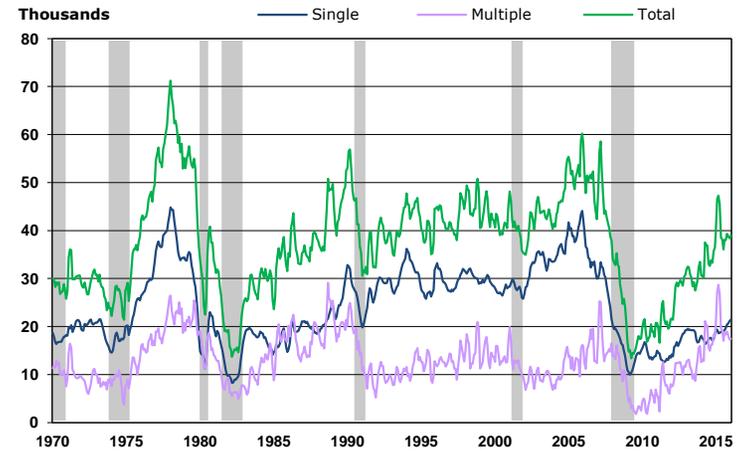
January 1981 to January 2016, 3mma, SAAR



* Source: McGraw-Hill Construction, ERFC

Housing Units Authorized in Washington State

January 1970 to January 2016, 3mma, SAAR



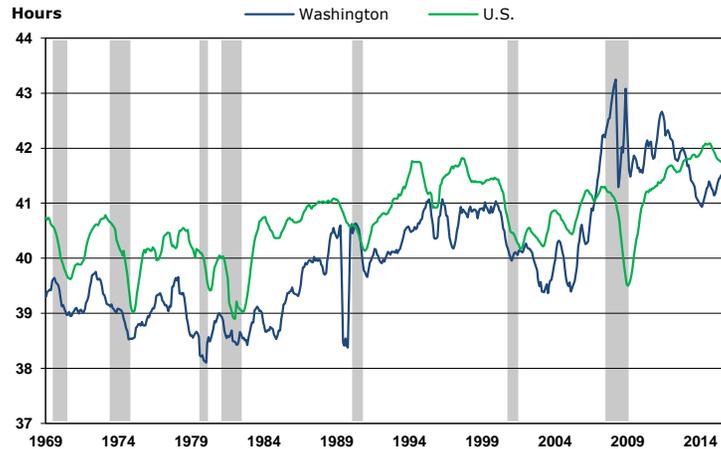
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

June 1969 to January 2016, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

January 1988 to January 2016, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

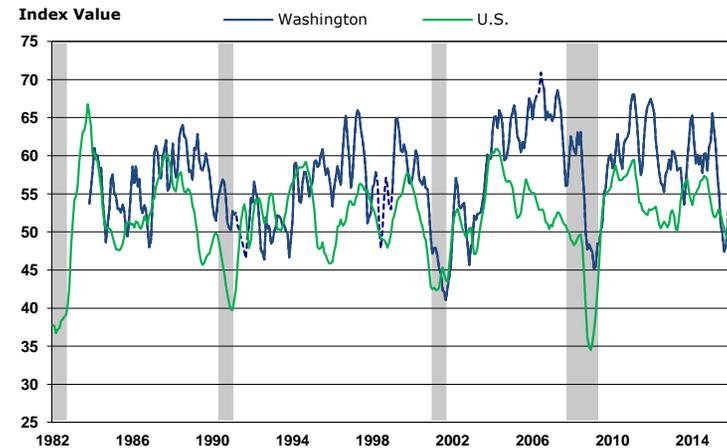
September 1970 to January 2016, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

March 1982 to February 2016, 3-Month Moving Average, S.A.



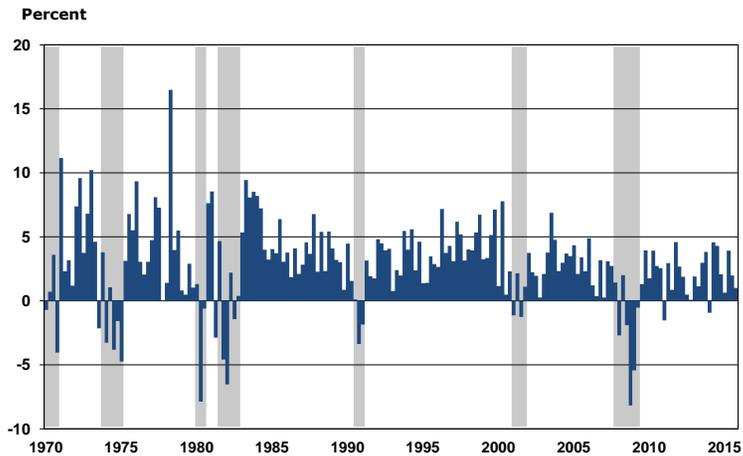
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

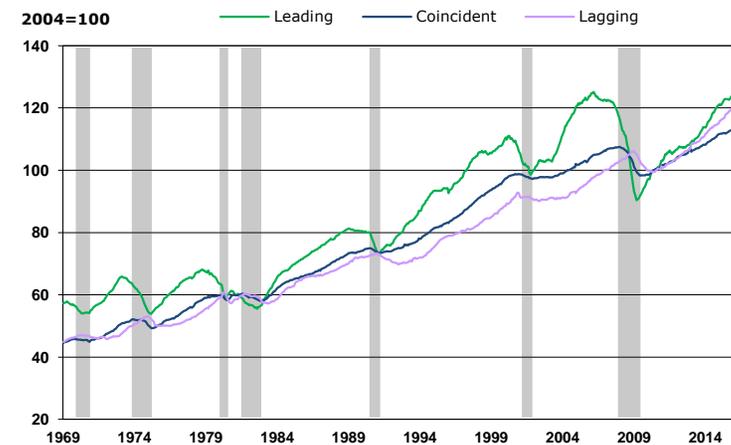
1970Q1 to 2015Q4, SAAR



* Source: Bureau of Economic Analysis

U.S. Economic Indicators

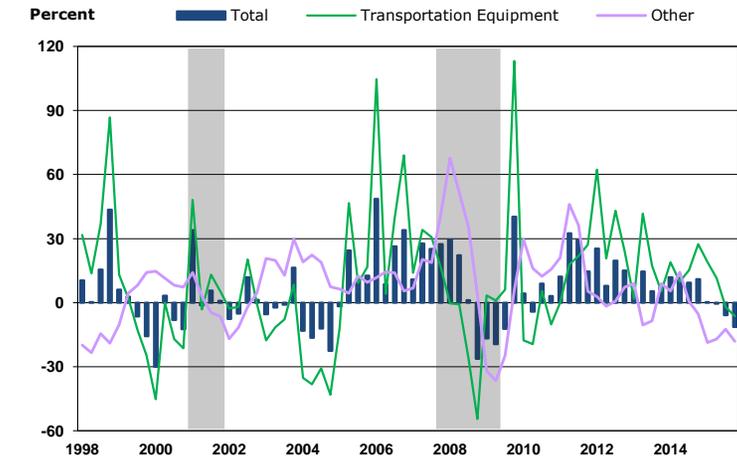
January 1969 to January 2016



* Source: The Conference Board

Washington State Export Composition

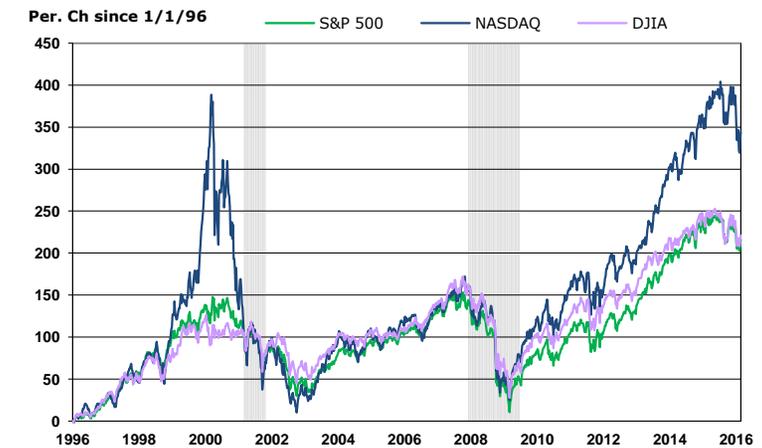
1998Q1 to 2015Q4, Year-over-year percent change



* Source: WISER

National Stock Indexes

January 1, 1996 to February 26, 2015



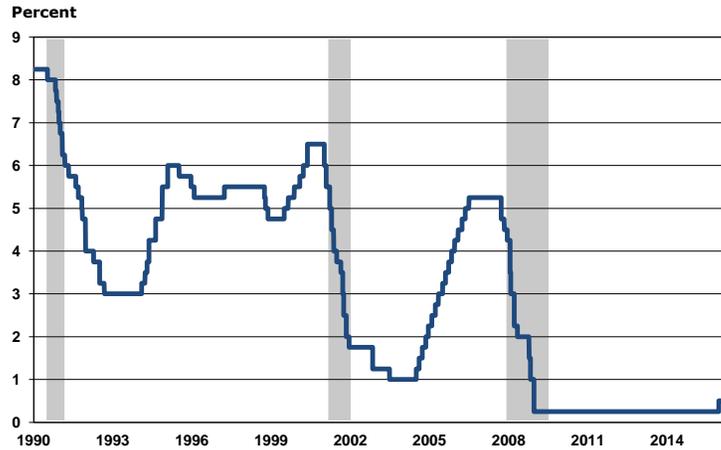
* Source: ERFC

* Shaded areas correspond with national recessions.

Figure A7.4: Other Economic Indicators (continued...)

Federal Funds Target Rate

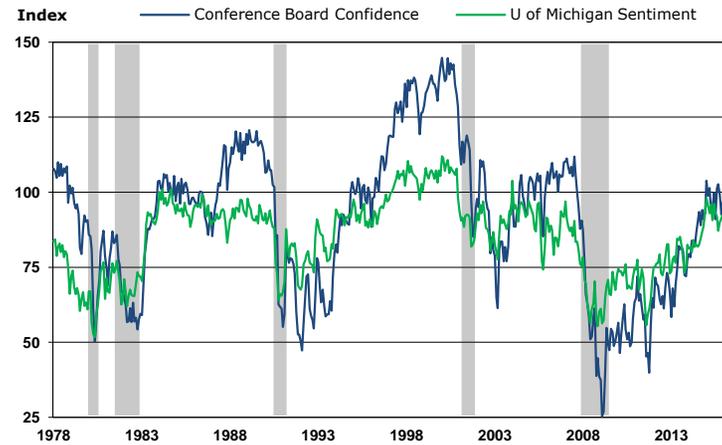
January 1, 1990 to March 1, 2016



* Federal Reserve

Consumer Confidence

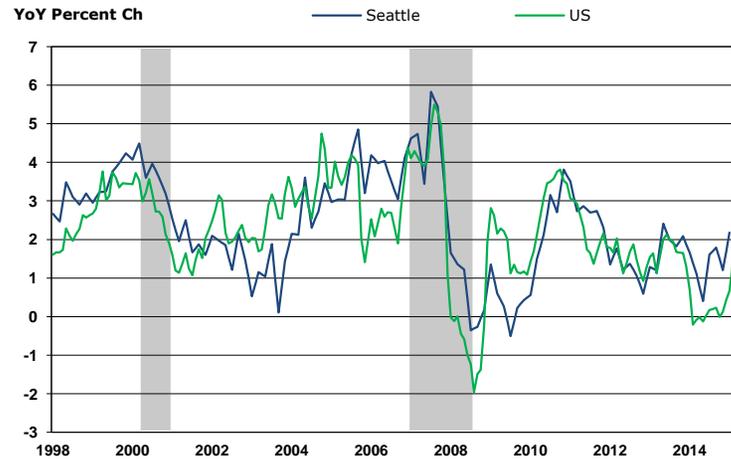
March 1978 to February 2016



* Source: The Conference Board, University of Michigan

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

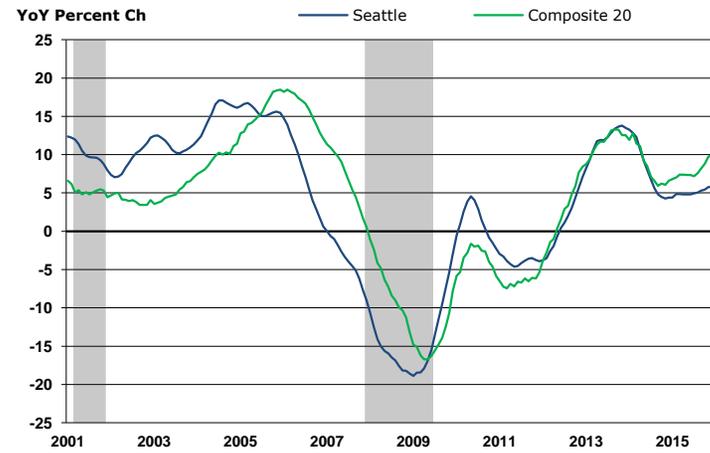
December 1998 to January 2016



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to December 2015, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.
Appendix

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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.