

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**

June 2016  
Volume XXXIX, No. 2



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# **Washington State Economic and Revenue Forecast**

Prepared by the  
Economic and Revenue Forecast Council

June 2016  
Volume XXXIX, No. 2

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# Preface

## **ERFC forecasting structure and schedule**

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

## **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 July 1, 2016.

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## Executive Summary

- **Although the national economy continued its weak pace of growth in the first quarter, we believe the economic recovery will continue at a moderate pace.**
- **The labor market recovery has slowed. Job growth has weakened, but unemployment continues to trend lower and wages are starting to improve.**
- **The Federal Reserve is normalizing monetary policy, but recent weakness in the economy has caused them to delay raising interest rates.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 1.8% in 2016, down from 2.1% in the previous forecast. After increasing to 2.3% in 2017, we expect growth to moderate as the recovery matures.**
- **The forecasts for Washington employment growth, income growth, and inflation are slightly higher than in the February forecast.**
- **Washington's unemployment rate has flattened due to strong labor force growth.**
- **Seattle home prices and Washington single-family housing construction continue to improve.**
- **Revenue collections since the February 2016 forecast have come in \$218 million over the forecasted amount. Most of the surplus came from Revenue Act receipts from the most recent two months of collections.**
- **Real estate excise tax collections were \$70 million higher than forecasted and are expected to remain strong in the near future.**
- **The forecast of General Fund-State (GF-S) revenue for the 2015-17 biennium was increased by \$294 million, the forecast for the 2017-19 biennium was increased by \$126 million, and the forecast for the 2019-21 biennium was increased by \$134 million.**
- **Most of the forecast increase stemmed from higher forecasted housing activity, but slightly higher forecasted inflation also played a role.**

## U.S. Economic Forecast

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

The national economy continued its weak pace of growth in the first quarter of 2016. 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 now at pre-recession levels. The housing

market continues to improve at a slow pace. Oil prices have remained low, freeing up resources for 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 approaches the seven-year mark, the duration alone has caused doubts as to whether the recovery will continue.

*GDP growth is slightly lower than anticipated in February*

U.S. real GDP rose 1.1% (SAAR) in the first quarter of 2016 after growing 1.4% (SAAR) in the fourth quarter of 2015. The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, calls for real GDP growth of 1.8% in 2016, down from 2.1% in the February forecast. Real GDP growth is expected to be 2.3% in 2017, down slightly from the 2.4% growth expected in the previous forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth to remain in the 2.1% to 2.2% range for 2018 through 2021, down slightly from the February forecast.

*The outlook for employment is only minimally changed*

The forecast for employment is only minimally changed since the February 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 1.3% in 2017, up from the 1.0% growth forecasted in February. The forecast then calls for job growth to average 0.7% through 2021 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 4.6% for the rest of the forecast.

*The Fed has delayed raising rates*

The Federal Reserve is now moving to normalize monetary policy after years of measures aimed at supporting the economy. Recent weakness in the economy has caused the Federal Reserve to keep this process slow. We are now assuming the Federal Reserve will raise the Federal funds rate only once this year, rather than twice as assumed in the previous 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%. While the forecast 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.

## **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 February forecast but historical estimates were revised slightly lower. Washington exports continue to decline and manufacturing activity is struggling. Home prices are rising rapidly in the Seattle area and single-family housing construction continues to improve. Seattle area consumer price inflation is

well above the national average due largely to shelter cost inflation.

*The forecasts for Washington employment growth, income growth, and inflation are higher than in the February forecast*

Overall, our forecast for Washington State is stronger than we expected in February mainly as a result of higher job growth and higher inflation. Washington employment growth in 2015 was 2.8% which was the highest rate since 2006. Washington employment is expected to grow 2.4% this year, better than the 2.0% growth rate in the February forecast. We expect employment growth to average 1.3% per year in 2017 through 2021 which is slightly higher than the 1.2% rate assumed in February. Our June forecast for nominal personal income growth this year is 4.1%, down slightly from 4.2% in the February forecast. Our new forecast for nominal personal income growth in 2017 through 2021 averages 5.0% per year, up from 4.8% in the February forecast. The higher nominal personal income growth expected in 2017 through 2021 is due to higher inflation. We expect total housing units authorized by building permits to rise 0.6% this year to 40,600 units compare to 38,300 units expected in the February forecast. We expect permits to average 43,900 during the remainder of the forecast, up very slightly from the 43,600 expected in February. The forecast for Seattle area inflation is also higher than expected in February. We now expect the all-items Seattle CPI to rise 2.2% this year compared to 1.6% in the February forecast and we expect Seattle area inflation to average 2.3% per year in 2017 through 2021 compared to 2.2% in February.

## **Revenue Forecast**

*Forecasted increases in revenue from housing activity outweighed a decrease in forecasted personal income*

Revenue collections since the February 2016 forecast have been higher than expected, with much of the variance occurring in the most recent two months. A great deal of the strength in collections stemmed from the housing market. Taxable sales of real estate and permits for new housing construction were both stronger than forecasted. While the June economic forecast projected slightly lower state personal income than the February forecast, the forecast of housing construction was increased, with most of the increase occurring in the current biennium. Since both construction materials and construction labor are subject to the retail sales tax, the increase in forecasted revenue from construction outweighed the reduction in forecasted revenue stemming from the reduced forecast of personal income. The recent strength in the real estate market also prompted a near-term increase in projected real estate excise tax collections. As the forecast is based on nominal dollars, expected revenue was also bolstered slightly by higher forecasted inflation. New legislation from the 2016 regular and special sessions had a very small effect on expected revenue, reducing expected revenue by less than \$10 million per biennium.

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

*15-17: +\$294*

*17-19: +\$126*

*19-21: +\$134*

Since the February forecast, revenue sources that are tracked monthly came in \$217.9 million higher than forecasted. Non-economic changes subtracted \$4.6 million in expected revenue. Changes to the economic forecast resulted in a \$80.2 million increase to projected collections for the rest of the biennium. The total of these components was a \$293.5 million increase in projected revenue for the current 2015-17 biennium. The forecast for the 2017-19 biennium has been increased by a net of \$126.4 million, with a \$134.2 million increase due to economic factors partially offset by a \$7.8 million reduction due to non-economic factors. The forecast for the 2019-21 biennium has been increased by \$133.9 million, with \$141.1 million in forecast changes partially offset by \$7.2 million reduction from non-economic factors. GF-S revenue is now forecasted to total \$37,430.8 million in the 2015-17 biennium, \$40,251.6 million in the 2017-19 biennium, and \$43,574.9 million in the 2019-21 biennium.



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

- **Although the national economy continued its weak pace of growth in the first quarter, we believe the economic recovery will continue at a moderate pace.**
- **The labor market recovery has slowed. Job growth has weakened, but unemployment continues to trend lower and wages are starting to improve.**
- **Construction remains weak, but continues to improve slowly.**
- **The manufacturing sector has returned to growth, although measures are mixed.**
- **Consumer and business confidence indices continue to express uncertainty.**
- **Weak foreign GDP growth and an appreciating U.S. dollar have hurt U.S. exports.**
- **Oil prices have increased since the February forecast but remain low.**
- **The Federal Reserve is normalizing monetary policy, but recent weakness in the economy has caused them to delay raising interest rates.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 1.8% in 2016, down from 2.1% in the previous forecast. After increasing to 2.3% 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 continued its weak pace of growth in the first quarter of 2016. 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 now at pre-recession levels. The housing market continues to improve at a slow pace. Oil prices have remained low, freeing up resources for 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 approaches the seven-year mark, the duration alone has caused doubts as to whether the recovery will continue.

*U.S. real GDP rose 1.1% (SAAR) in the first quarter*

U.S. real GDP rose 1.1% (SAAR) in the first quarter of 2016 after growing 1.4% (SAAR) in the fourth quarter of 2015. Business investment was particularly weak in the first quarter, declining 4.5% (SAAR) and subtracting 0.58 percentage points from overall growth. This was the weakest quarter of nonresidential fixed investment since the tail end of the 2007-09 recession. Inventories brought growth down by 0.23 percentage points. Consumer spending accounted for the largest positive contribution to growth in the quarter, increasing 1.5% (SAAR) and adding 1.0 percentage points to overall GDP growth. Spending was much stronger on the services side, increasing 2.1% (SAAR) compared to 0.1% (SAAR) growth for goods. A strong quarter for the housing market helped boost the economy to start the year. Residential investment grew 15.6% (SAAR) and added 0.52 points to GDP growth. A decline in national defense spending was more than offset by increased spending by state and local governments. Overall government spending increased 1.3% (SAAR) and added 0.23 percentage points to GDP growth. Both the strong U.S. dollar and weak economic growth abroad continue to weigh on exports. Export growth turned positive in the first quarter, growing 0.3% (SAAR) as imports fell 0.5% (SAAR). Net exports added 0.12 points to overall growth.

*Spending growth has picked up recently*

Rising personal income is essential for consumer spending to continue improving. Personal income growth improved to 5.4% (SAAR) in April after growing 4.4% (SAAR) the month before. Personal income is now up 4.4% from a year ago. Personal income growth was led by growth in proprietors' income, which grew 6.9% (SAAR). Growth in wages and salaries was also strong with 5.9% (SAAR) growth. The strength in wages came from the private sector, with wages growing 6.8% (SAAR) compared to just 1.3% (SAAR) growth in government wages. Transfer payment growth was also strong, increasing 5.6% (SAAR), with increases to social security payments and veterans' benefits outweighing a decline in unemployment insurance benefits. Rental income growth slowed to 4.4% (SAAR) but remains up 7.1% since last year. Dividend income grew 8.2% (SAAR) but was offset by just 1.4% (SAAR) growth in interest income. Real disposable personal income growth (income after taxes and adjusted for inflation) in April slowed to 1.9% (SAAR) from 3.7% (SAAR) the month before. Real disposable income is now up 3.3% over the year. Spending growth has been erratic the past couple of months due to changing energy prices. Consumption increased 12.0% (SAAR) in April following a 0.3% (SAAR) increase in March. This was due to a large swing in spending on energy related goods and services. The personal saving rate fell to 5.4% in April from 5.9% the month before.

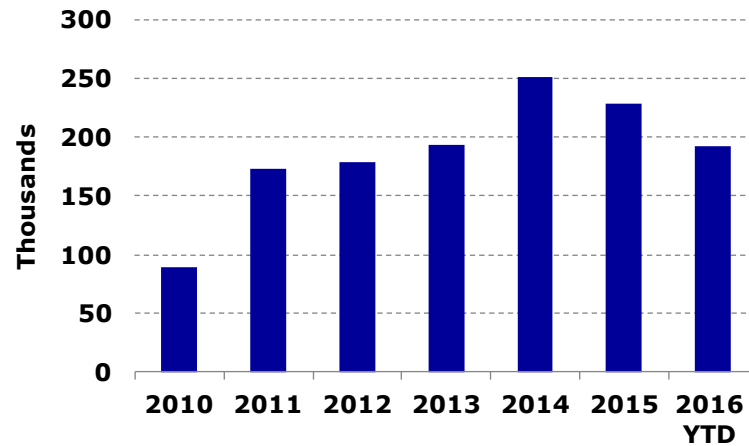
*Employment growth has slowed*

Employment growth has been weak this year, particularly in the past few months. Nonfarm payrolls increased by only 38,000 in May while gains in the previous two months were revised down to 186,000 in March and 160,000 in April. Part of the weakness in May was due to a since resolved strike in the information



sector that reduced the jobs figure by 34,000. Monthly employment gains now average 150,000 per month so far this year, the weakest growth since 2010 (see Figure 1.1). Aside from the impact of the striking workers, the May employment situation showed other weakness in payrolls. The goods-producing sector declined 36,000 jobs. Mining employment fell 10,200, construction was down 15,000, and manufacturing declined 10,000. There was weakness in the services sectors as well. Trade was flat with a 10,300 job decline in wholesale trade largely offsetting a 11,400 gain in retail trade. Health care employment was a bright spot in May, adding 46,000 jobs. Government employment increased 13,000 in May, mostly due to a 9,700 job increase in the U.S. Postal Service.

**Figure 1.1: Average Monthly Employment Change**

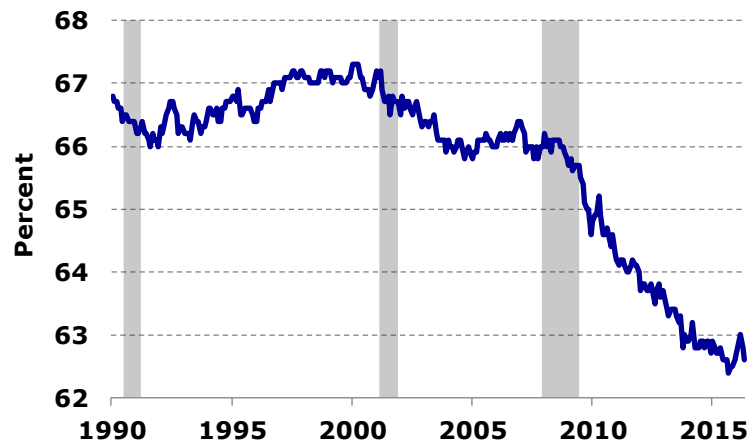


Source: U.S. Bureau of Labor Statistics; data through May 2016

*The labor market recovery is slowing*

The labor market recovery is beginning to slow as the economy moves closer to full employment. The unemployment rate has fallen from 5.5% in May 2015 to 4.7% in May 2016. The unemployment rate is now lower than the average rate of the decade preceding the 2007-09 recession. Not all of the decline in the unemployment rate has come from people getting jobs, however. While joblessness has dropped by 1.2 million people since last year, the number of people no longer in the labor force has increased by 1.6 million. Over the past year the labor force participation rate has continued to trend slowly downward. Labor force participation for January was 62.6%, down from 62.8% a year ago (see Figure 1.2). 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 10.4% to 9.7% since last year.

**Figure 1.2: Labor Force Participation Rate**



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

*Improvement in consumer attitudes has been sporadic*

Improvement in consumer attitudes has been sporadic over the past few years and reflects continued uncertainty over the economy. The University of Michigan Consumer Sentiment Index fell 1.2 points to 93.5 in June and is now 2.6 points below the June 2015 reading. The current conditions component improved, but expectations regarding the jobs market worsened. The Conference Board Consumer Confidence measure jumped 5.6 points in June although it remains 1.8 points below its year ago level. This measure also reflected relatively strong feelings about current conditions but also an improvement regarding the future. People indicated they expect their income to improve given less slack in the labor market. Overall, the general trend of confidence over the past year has been flat.

*Small business confidence continues to worsen*

Small business confidence has continued to trend down over the past year and a half. After reaching a post-recession high of 100.3 in December 2014, the National Federation of Independent Business (NFIB) Index of Small Business Optimism has declined. In May the index improved 0.2 points to 93.8. The level of the index is still consistent with a slowly expanding economy, but it is nearing recessionary territory. Of the ten index components, four improved, four declined, and two were unchanged. Expected business conditions accounted for the entire gain in the index, gaining five points. However, the business conditions reading remains nine points below last year. Weak sales and the political climate continue to be the most frequently cited reasons for why the current period is a bad time to expand.

*Oil prices have risen but remain low*

Oil prices have risen since reaching a trough in January. Both West Texas Intermediate (WTI) and Brent oil prices were \$47 per barrel in May. In January, prices were \$32 per barrel for WTI and \$31 per barrel for Brent. With weak global demand and strong supply, prices are still below year ago levels. U.S. crude

production has fallen as prices have remained low. In April, U.S. field production of crude oil was 8.933 million barrels per day, down from the record set last April of 9.694 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. U.S. shale has become more economical to produce, with costs coming down to below \$40 per barrel in some cases, but remains more expensive than the under \$10 per barrel it costs to extract oil in Middle Eastern countries. Energy markets have been able to digest the geopolitical turmoil. Disruptions related to unrest have been viewed as temporary and are no longer causing large price swings.

*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) increased 0.2% over the month, although the year-over-year change in the Consumer Price Index (CPI) declined from 1.1% to 1.0%. Energy prices increased 1.2% but still remain 10.1% lower than a year ago. Gasoline prices increased 2.3% in May but remain 16.9% lower than last year. Food price inflation remains tame, down 0.2% over the month and up just 0.7% over the year. Shelter costs increased 0.4% in May and are now up 3.4% year over year. Core inflation, which excludes food and energy, increased 0.2% in May. On an annual basis, core inflation remains modest at 2.2%.

*New construction continues to limp along*

New home construction has continued to limp along at about the same pace for the past year. Housing starts declined in May to 1.164 million units (SAAR) from 1.167 million units (SAAR) in April. Starts are now up 9.5% since last May, but up just 0.7% over the average of the past twelve months. Both the single-family and the multi-family segments were little changed in May. Single family starts were up 0.3% while multi-family starts were down 1.2%. Housing permits show a similar but slightly worse trend than starts. Total permits were up 0.5% in May although they are down 10.3% from a year ago. Single-family permits are up 5.5% while multi-family permits are down 29.3%. 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, increased 2 points to 60 in June, but remains at the same level as a year ago (readings above 50 indicate a positive view of conditions). New home sales appear to be slowly improving. While the number of new home sales dropped 6.0% over-the-month in January to 551,000 units (SAAR), this was still the second highest rate of the past twelve months. New home sales are now 8.7% higher than a year ago.

*Home values are once again increasing*

Home prices are increasing at a solid pace. The seasonally adjusted Case-Shiller 20-city Home Price Index increased 0.7% over-the-month in March, the seventh consecutive increase.

Home prices are now 5.4% higher than a year ago. Home prices appear to be settling into a consistent growth pattern, averaging 5.0% annual growth over the past 18 months. Prices have increased 33.7% since the trough of the recession, and are now only 8.9% 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. Mortgage rates have remained low and credit standards are beginning to ease leading to increased mortgage demand. Continued positive wage growth should also help going forward.

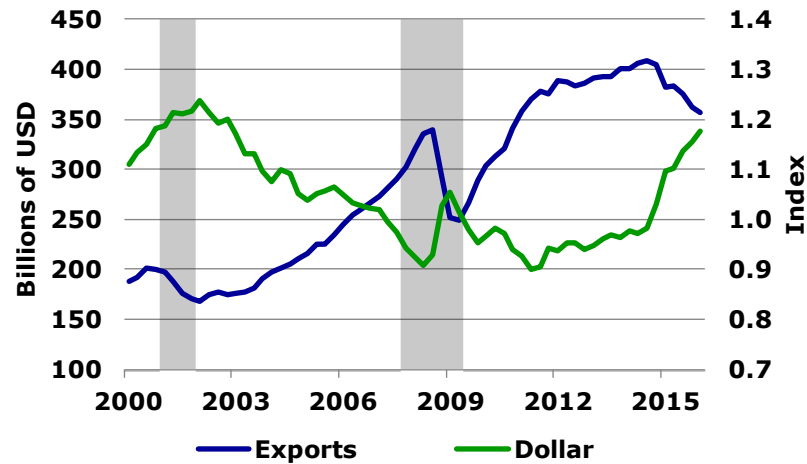
*The manufacturing sector is once again improving*

The manufacturing sector is once again expanding, although measures of strength are mixed. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector improved in June to 53.2 from 51.3 (index levels above 50 indicate expansion). This is the fourth consecutive month where the index has indicated expansion in the manufacturing sector. Both the new orders and production components improved. The employment component increased 1.2 points and is now above 50 at 50.4. The latest G-17 report from the Federal Reserve, which measures manufacturing output, indicated a decline in May of 0.4%, more than reversing the previous month's 0.2% gain. The decline in output was led by a 4.2% drop in motor vehicles and parts. Manufacturing output is now 0.1% lower than last year. New orders for core capital goods (nondefense capital goods excluding aircraft) fell 0.7% in May after declining 0.4% the month before. New orders are now down 3.5% 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 (see Figure 1.3). Global growth remains sluggish and many of our largest trading partners are hovering near 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 has dipped since the beginning of the year but remains near the strongest level it has been in a decade. In May, the dollar strengthened by 0.9% and remains 4.5% 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. The recent vote by the United Kingdom to exit the European Union will only add to this trend. U.S. exports have declined in each of the past four quarters on an annual basis. In the first quarter of 2016, exports were down 15.6% year over year. The total value of U.S. exports is the lowest since 2010. Declines were present in almost all sectors, with each of the eight largest sectors posting annual declines.

**Figure 1.3: U.S. Exports and Dollar Index**



Source: IHS Global Insight, Wiser Trade; data through 2016Q1

## Forecast

*Our forecast is based on the May Blue Chip Consensus forecast*

The economic forecast was based on a modified version of Global Insight's June 2016 Control forecast for the U.S. economy. The June Blue Chip forecast of real GDP growth was unavailable for our final economic forecast, so we used the May Blue Chip forecast. We also incorporated the latest long-term Blue Chip GDP forecast for 2018 through 2021. Our oil price forecast was adjusted to match the latest 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 February forecast. The Blue Chip Consensus GDP forecast, our starting point each forecast cycle, calls for real GDP growth of 1.8% in 2016, down from 2.1% in the February forecast. Real GDP growth is expected to be 2.3% in 2017, down slightly from the 2.4% growth expected in the previous forecast. We expect growth to moderate as the recovery matures. The forecast calls for growth to remain in the 2.1% to 2.2% range for 2018 through 2021, down slightly from the February forecast.

*This recovery will be the longest on record*

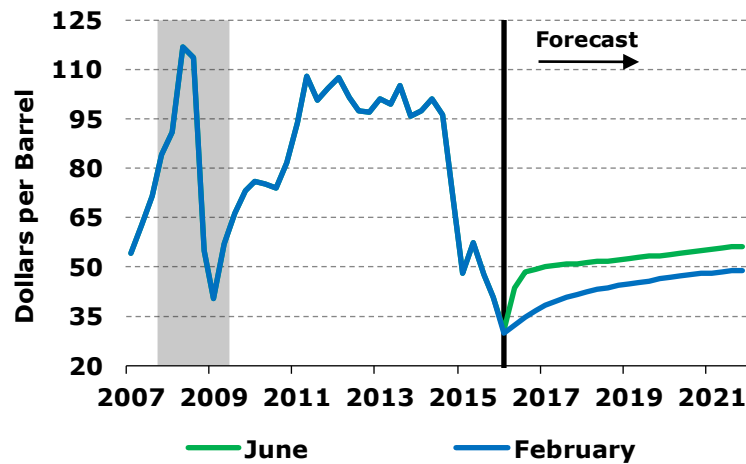
The positive GDP growth throughout the forecast will make the recovery from the 2007-09 recession the longest on record. From the second quarter of 2009 through the end of our forecast in 2021, the recovery is forecasted to be at least 150 months. Prior to this, the longest recovery was from the 1990-91 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 the duration of recoveries from the point at which the

previous employment peak was reached, 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 through the end of the forecast in 2021, which would result in 92 months of employment gains after reaching the previous peak.

*Oil prices will remain low*

The forecast for oil prices has increased since the February forecast (see Figure 1.4). The refiner acquisition cost of crude oil fell to \$31 per barrel in the first quarter of this year. The forecast expects this to be the trough for oil prices. We expect prices to increase to \$43 per barrels in the second quarter before gradually increasing throughout the forecast. By the end of 2021, oil prices are expected to reach \$56 per barrel. In February we expected prices to reach \$49 by the end of the forecast. While oil prices are expected to rise starting in 2016, they will remain well below the levels seen earlier in the recovery. Low oil prices continue to affect U.S. oil production. Oil production is down 927,000 barrels per day since last year, although 2015 was a historic peak in production. There are indications that the decline in output may be nearing an end. The Baker Hughes rig count hit a modern low of 404 at the end of May and has since climbed by 10. This indicates that output could increase in the coming months. Weak economic growth in China and Europe has lowered the demand for oil. The strong dollar has also kept downward pressure on oil prices recently. With low oil prices, inflation (as measured by the implicit price deflator) was just 0.3% in 2015. We expect low inflation throughout the forecast. Inflation is expected to be 1.2% this year followed by 1.9% per year from 2017 through 2021.

**Figure 1.4: Average Price of Crude Oil**



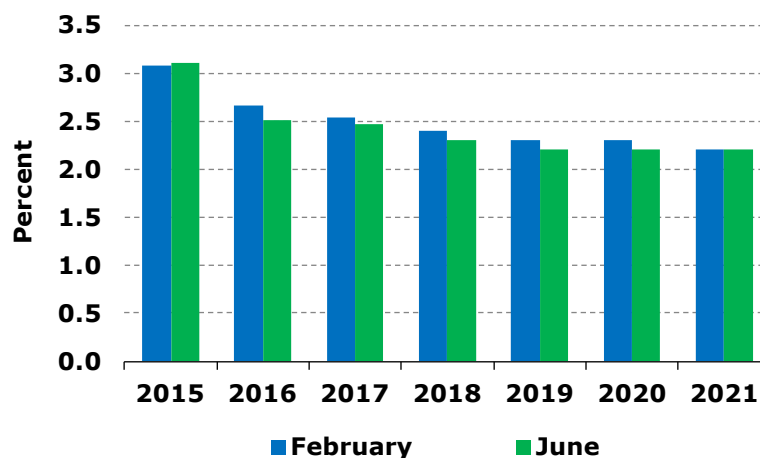
Source: DOE, June 2016 forecast; historical data through 2016Q1

*Spending growth has been revised slightly lower*

Real consumer spending was weaker than expected in the first quarter of 2016, growing just 1.9% (SAAR) compared to 2.6%

(SAAR) expected in the previous forecast. We now expect real consumer spending to grow 2.5% this year compared to 2.7% in the February 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 slightly outpace overall real GDP growth next year. The forecast calls for real consumption growth of 2.5% again in 2017 before slowing to 2.3% in 2018 to 2.2% in 2019 through 2021. This is down slightly from the previous forecast (see Figure 1.5). We expect consumer spending to contribute 1.7 percentage points to real GDP growth on average for each year of the forecast through 2021.

**Figure 1.5: Real Consumer Spending Growth,**



Source: BEA, June 2016 forecast; historical data through 2015

*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 solid at 2.8% this year. Growth is expected to remain moderate through 2019, averaging 2.6% per year. We then expect growth to slow in 2020 and 2021 to 2.3% per year. Nominal disposable income is expected to grow 4.0% this year, led by strong growth in private sector wages and salaries of 5.1%. Total wages and salaries are expected to grow 4.7% this year after increasing 4.8% in 2015. The forecast then calls for growth in wages and salaries to moderate, reaching 3.9% in 2019 through 2021. Growth in government transfer payments is expected to increase throughout the forecast. We expect growth of 4.6% this year, then an average growth of 5.2% in 2018 through 2021 as demographics shift to an older population. Income will also be boosted in the latter part of the

forecast by rising interest income as interest rates return to pre-recession levels.

*The outlook for employment is only minimally changed*

The forecast for employment is only minimally changed since the February 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 1.3% in 2017, up from the 1.0% growth forecasted in February. The forecast then calls for job growth to average 0.7% through 2021 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 4.6% 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. The labor force participation rate will grow as the economy reaches full employment, reaching a peak of 61.7% in 2018. Going forward, the participation rate will resume its long term secular decline, and trend down for the remainder of the forecast.

*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 second 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 0.4% this year after growing 0.6% in 2015. 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 1.9% this year, after growing 2.4% in 2015. The forecast calls for private sector job growth of 1.4% in 2017 and then an average growth of 0.7% through 2021.

*Business investment will be slower this year*

Real business investment is expected to fall 0.1% this year, the first decline 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 16.2% in the first quarter, from 16.3% for the fourth quarter of last year. In spite of this, we expect real nonresidential construction to contract this year by 3.6%, 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 2.9% as the drag of low oil prices diminishes. The forecast then calls for growth to average 3.4% per year through 2021. Equipment investment is expected to have positive 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 after this year. Real investment in equipment and software is expected to grow 0.3% this year. The forecast then calls for growth to reach 4.9% in 2019 before averaging 3.9% through the remainder of the forecast. We expect overall real nonresidential fixed investment to grow 2.7% next year and accelerate to 1.2% in 2018 and 4.6% in 2019. We then expect growth to average 3.9% through 2021.

*The housing recovery will continue*

The forecast calls for growth in housing starts of 10.3% for this year, reaching 1.197 million units, its best full year of the recovery. 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 expects the robust growth in housing starts to continue in 2017 at 15.1%. Growth in single-family starts is expected to be 15.5% this year, up from 10.2% in 2015. Growth will accelerate to 17.7% in 2017 before moderating throughout the forecast. The forecast calls for a decline in the multi-family housing segment this year after growing at double-digit rates in each of the past five years. We expect a decline of 5.5% this year. We then expect multi-family housing units to return to growth and average 7.6% through 2021. The forecast calls for total housing starts to continue to grow throughout the forecast and reach 1.659 million in 2021, still 20% below the peak in 2005.

*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 and GDP is likely to remain constrained due to low oil and other commodity prices. The recovery in the Eurozone is improving with real GDP growth increasing 0.6% in the first quarter compared to the previous quarter. The latest Blue Chip forecast calls for 1.6% growth this year for the Eurozone followed by 1.7% 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%, well below the 2005-11 average of 11%. The most recent Blue Chip forecast calls for Chinese growth to slow further, with growth of 6.5% this year and 6.2% in 2017. Japan continues to experience inconsistent growth. Japan's economy expanded 1.9% (SAAR) in the first quarter after contracting the quarter before. The most recent Blue Chip forecast expects slow growth in the near term of 0.5% 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 and strong dollar, 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 2.2% 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 0.9% 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 2.6% through 2021. Export growth is more than offset by increased imports in the forecast. Net exports are expected to reduce GDP growth by 0.1 percentage points on average through 2021.

*Fiscal policy uncertainty remains low*

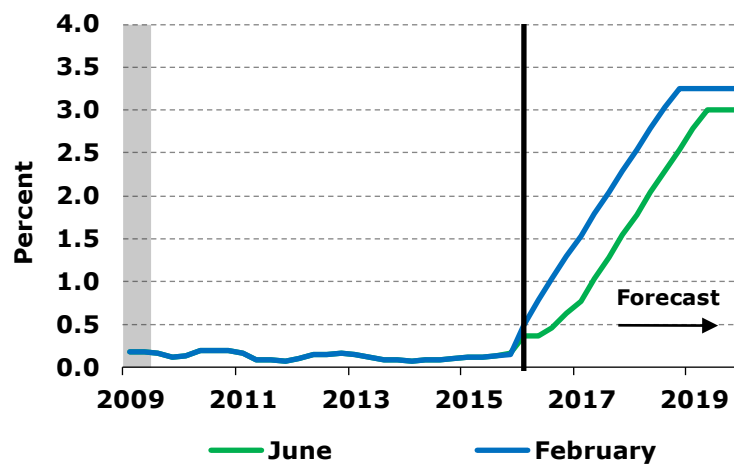
Uncertainty surrounding fiscal policy remains low without any real push for dramatic deficit reduction or significant spending increases in the near term. After peaking at \$1,329 billion in 2010, the federal budget deficit has shrunk each year. The forecast calls for 2015 to be the trough in the deficit at \$588 billion. We believe the sharp cuts in real defense spending that started in 2011 ended with an \$8.4 billion reduction in 2015. The forecast calls for real defense spending to remain relatively stable through 2021. Real nondefense purchases are expected to grow the next two years before declining slowly through 2021. Combined federal government spending will peak in 2017 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 in spending at the federal level. The forecast assumes 2014 was the trough in total real government purchases. We expect total real government spending to grow 1.3% this year and 1.2% 2017. We then expect growth to average 0.3% per year from 2018 through 2021.

*The Fed has delayed raising rates*

The Federal Reserve is now moving to normalize monetary policy after years of measures aimed at supporting the economy. Recent weakness in the economy has caused the Federal Reserve to keep this process slow. We are now assuming the Federal Reserve will raise the Federal funds rate only once this year, rather than twice as assumed in the previous forecast (see Figure 1.6). 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. At their most recent meeting they excluded “in the coming months” when referring to the next rate hike. While they believe the weak May jobs report to be an outlier, they are still proceeding with caution. While the forecast 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.

**Figure 1.6: Federal Funds Rate**



Source: Federal Reserve, ERFC June 2016 forecast; historical data through 2016Q1

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 February forecast. The recovery is forecasted to be the longest on record, creating some concern. 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
- Slowdown in economic growth and negative effects to financial markets due to Brexit
- 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
<b>Real National Income Accounts (Billions of Chained 2009 Dollars)</b>								
Real Gross Domestic Product	15,750.6	16,182.8	16,494.4	16,832.2	17,209.5	17,575.9	17,956.6	18,343.7
% Ch	2.1	2.7	1.9	2.0	2.2	2.1	2.2	2.2
Real Consumption	10,710.1	11,053.0	11,359.0	11,640.6	11,914.7	12,182.1	12,449.4	12,724.0
% Ch	2.1	3.2	2.8	2.5	2.4	2.2	2.2	2.2
Real Nonresidential Fixed Investment	2,081.3	2,188.9	2,201.4	2,245.2	2,312.8	2,424.8	2,527.5	2,626.6
% Ch	4.7	5.2	0.6	2.0	3.0	4.8	4.2	3.9
Real Residential Fixed Investment	479.7	506.3	556.6	598.4	639.0	655.1	671.7	691.8
% Ch	3.9	5.5	9.9	7.5	6.8	2.5	2.5	3.0
Real Personal Income	13,241.5	13,751.7	14,244.4	14,568.5	14,946.5	15,339.4	15,751.7	16,162.8
% Ch	0.9	3.9	3.6	2.3	2.6	2.6	2.7	2.6
Real Per Capita Income (\$/Person)	41,601	42,886	44,075	44,714	45,507	46,332	47,203	48,059
% Ch	0.2	3.1	2.8	1.5	1.8	1.8	1.9	1.8
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.092	1.100	1.118	1.139	1.160	1.183	1.205
% Ch	1.4	0.8	0.7	1.7	1.8	1.9	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.350	2.367	2.383	2.433	2.489	2.544	2.602	2.661
% Ch	1.6	0.7	0.7	2.1	2.3	2.2	2.3	2.3
Employment Cost Index (Dec. 2005=1.0)	1.193	1.221	1.248	1.282	1.322	1.363	1.407	1.452
% Ch	1.9	2.3	2.2	2.8	3.1	3.2	3.2	3.2
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	16,984.9	17,675.3	18,220.5	18,933.7	19,793.5	20,648.9	21,548.3	22,469.9
% Ch	3.7	4.1	3.1	3.9	4.5	4.3	4.4	4.3
Personal Income	14,350.8	15,021.8	15,670.7	16,292.4	17,018.4	17,799.7	18,629.6	19,478.6
% Ch	2.3	4.7	4.3	4.0	4.5	4.6	4.7	4.6
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	155.5	156.6	158.0	160.2	162.2	163.9	165.5	166.8
Total U.S. Employment	145.0	147.7	150.2	152.7	154.7	156.4	157.8	158.9
Unemployment Rate (%)	6.77	5.70	4.96	4.63	4.52	4.52	4.59	4.66
Nonfarm Payroll Employment	137.56	140.43	143.13	145.23	146.60	147.70	148.80	149.80
% Ch	1.7	2.1	1.9	1.5	0.9	0.8	0.7	0.7
Manufacturing	12.09	12.28	12.32	12.37	12.41	12.45	12.56	12.66
% Ch	0.9	1.6	0.3	0.5	0.3	0.3	0.9	0.8
Durable Manufacturing	7.60	7.74	7.73	7.75	7.80	7.85	7.95	8.07
% Ch	1.1	1.9	-0.1	0.3	0.6	0.5	1.4	1.5
Nondurable Manufacturing	4.49	4.54	4.58	4.62	4.60	4.60	4.60	4.59
% Ch	0.5	1.0	1.1	0.8	-0.3	0.0	0.0	-0.3
Construction	5.99	6.31	6.57	6.84	7.05	7.22	7.39	7.58
% Ch	4.4	5.4	4.1	4.1	3.1	2.4	2.4	2.6
Service-Providing	118.61	120.97	123.49	125.36	126.44	127.30	128.10	128.80
% Ch	1.7	2.0	2.1	1.5	0.9	0.7	0.6	0.5
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	101.2	69.2	42.0	52.1	53.2	54.0	54.9	56.0
Personal Saving/Disposable Income (%)	4.8	4.9	5.3	5.2	5.6	6.1	6.4	6.4
Auto Sales (Millions)	7.6	7.6	7.3	7.5	7.7	7.6	7.5	7.6
% Ch	2.2	0.7	-4.3	2.7	2.3	-0.8	-1.4	1.4
Housing Starts (Millions)	0.955	1.055	1.153	1.282	1.457	1.525	1.604	1.649
% Ch	8.9	10.5	9.2	11.2	13.6	4.7	5.2	2.8
Federal Budget Surplus (Billions)	-624.1	-607.6	-603.2	-668.1	-742.1	-848.3	-879.5	-867.0
Net Exports (Billions)	-509.3	-532.7	-508.2	-499.5	-507.8	-529.6	-524.4	-515.7
3-Month Treasury Bill Rate (%)	0.04	0.02	0.19	0.67	1.62	2.55	2.81	2.81
10-Year Treasury Note Yield (%)	2.71	2.23	2.04	2.23	2.56	3.44	3.58	3.54
Bond Index of 20 G.O. Munis. (%)	4.54	3.83	3.53	3.82	4.39	5.02	5.17	5.14
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.80	4.02	4.49	5.45	5.69	5.65

Table 1.2  
**Forecast Analysis**  
 Comparison of Forecasts for 2015-17

<b>U.S.</b>	Average Annual Rate of Growth (Percent) 2015:2-2017:2		Average Rate (Percent) 2015:3 to 2017:2	
	<b>Real GDP</b>	<b>Implicit Price Deflator</b>	<b>3 Month T-Bill Rate</b>	<b>Mortgage Rate</b>
<b>2012</b>				
September	2.9	1.9	2.17	5.92
November	2.9	1.6	2.56	6.08
<b>2013</b>				
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
<b>2014</b>				
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
<b>2015</b>				
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
<b>2016</b>				
February	2.2	1.1	0.56	4.09
June	2.0	1.5	0.43	3.91

Table 1.3

**Forecast Analysis**

Comparison of Forecasts for 2017-19

<b>U.S.</b>	Average Annual Rate of Growth (Percent) 2017:2-2019:2		Average Rate (Percent) 2017:3 to 2019:2	
	<b>Real GDP</b>	<b>Implicit Price Deflator</b>	<b>3 Month T-Bill Rate</b>	<b>Mortgage Rate</b>
<b>2014</b>				
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
<b>2015</b>				
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
<b>2016</b>				
February	2.3	1.8	2.28	5.02
June	2.1	1.9	2.09	4.97

Table 1.4

Fiscal Years

**Forecast Comparison**

Forecast 2016 to 2021

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>U.S.</b>							
<b>Real GDP</b>							
June Baseline	16182.8	16494.4	16832.2	17209.5	17575.9	17956.6	18343.7
% Ch	2.7	1.9	2.0	2.2	2.1	2.2	2.2
February Baseline	16182.8	16506.8	16897.3	17297.0	17696.5	18085.3	18478.8
% Ch	2.7	2.0	2.4	2.4	2.3	2.2	2.2
<b>Implicit Price Deflator</b>							
June Baseline	1.092	1.100	1.118	1.139	1.160	1.183	1.205
% Ch	0.8	0.7	1.7	1.8	1.9	1.9	1.9
February Baseline	1.092	1.098	1.110	1.130	1.151	1.171	1.192
% Ch	0.8	0.5	1.1	1.8	1.8	1.8	1.7
<b>Unemployment Rate</b>							
June Baseline	5.70	4.96	4.63	4.52	4.52	4.59	4.66
February Baseline	5.70	4.96	4.79	4.74	4.72	4.78	4.84
<b>Mortgage Rate</b>							
June Baseline	3.92	3.80	4.02	4.49	5.45	5.69	5.65
February Baseline	3.92	3.94	4.23	4.58	5.45	5.61	5.59
<b>3 Month T-Bill Rate</b>							
June Baseline	0.02	0.19	0.67	1.62	2.55	2.81	2.81
February Baseline	0.02	0.24	0.88	1.86	2.69	2.79	2.78





## Chapter 2: Washington Economy – Current Conditions and Forecast

- **The forecasts for Washington employment growth, income growth, and inflation are slightly higher than in the February forecast.**
- **Washington employment growth has been stronger than expected in February but historical estimates were revised lower.**
- **Washington’s unemployment rate has flattened due to strong labor force growth.**
- **Washington exports continue to decline and manufacturing activity is struggling.**
- **Seattle home prices and Washington single-family housing construction continue to improve.**
- **Seattle area consumer price inflation is well above the national average due largely to shelter cost inflation.**
- **As in February, 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 February forecast but historical estimates were revised slightly lower. Washington exports continue to decline and manufacturing activity is struggling. Home prices are rising rapidly in the Seattle area and single-family housing construction continues to improve. Seattle area consumer price inflation is well above the national average due largely to shelter cost inflation.

*Employment growth has been stronger than expected*

We have four months of new Washington employment data since the February forecast was released. Total nonfarm payroll employment rose 20,200 (seasonally adjusted) in February, March, April, and May which was 2,800 more than the 17,400 expected in the February forecast. The construction sector more than accounted for the variance in job growth, adding 2,400 jobs in the four-month period; the February forecast expected a reduction of 1,300 jobs. Manufacturing employment declined

2,400 of which 1,700 were in the aerospace sector. As is usually the case, the bulk of the job growth was in private, service-providing sectors which added 15,300 jobs in the last four months. Government payrolls also expanded by 5,000 jobs in February, March, April, and May.

*Historical employment estimates were revised lower*

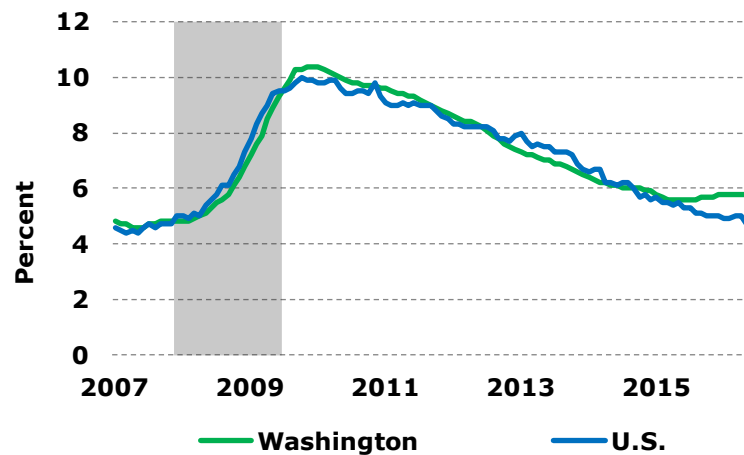
We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions lowered the estimated level of total employment in January 2016 by 5,900 jobs. As a result of the downward revision to history but stronger-than-expected growth, the net effect is 3,100 (0.1%) fewer jobs in May 2016 than expected in the February forecast.

*Labor force growth surged in Washington*

Washington's unemployment rate held steady at 5.8% in May. The rate is up 0.2 percentage points since May 2015 unlike the U.S. unemployment rate, which has continued to decline (see Figure 2.1). This is in spite of significantly stronger employment growth in Washington. The explanation for this apparent contradiction is that while employment growth in Washington has been strong at 2.5% over the year, labor force growth has been even stronger at 2.7%. Last year Washington's labor force grew only 1.6% over the year. The rapid labor force growth in the most recent year is due to a combination of migration into Washington State and rising labor force participation.

*Washington's unemployment rate has stopped declining*

**Figure 2.1: Unemployment Rates**



Source: Bureau of Labor Statistics; data through May, 2016

*Initial claims remain near post-recession lows*

Washington initial claims for unemployment insurance edged up in the most recent four-week period but remain near the post-recession low. The four-week moving average of seasonally adjusted claims increased to 6,913 in the week ending June 25<sup>th</sup> from 6,901 in the previous week. The current level of claims is still within 2% of the post-recession low and remains below the minimum level reached during the last expansion. Claims have fallen 58% since the peak in early 2009.

*Average weekly hours growth turns positive*

Recent average weekly earnings growth for Washington private sector employees is improving thanks to rising average weekly hours. Private sector average hourly earnings in the twelve months ending in May 2016 were up 3.5% over the previous twelve month period which is slightly less than the 3.8% increase in the previous twelve month period. However, average weekly hours were up 0.6% in the most recent twelve month period. A year ago average weekly hours declined 0.3%. As a result of the improvement in average weekly hours growth, and despite the slower average hourly earnings growth, average weekly earnings growth rose to 4.2% compared to 3.5% a year ago.

*Exports are down on a strong dollar and weak global growth*

First quarter 2016 exports were down 15.6% from the first quarter of 2015. Transportation equipment exports (mostly Boeing planes) declined 17.4% over the year. Exports other than transportation equipment were 12.8% lower than a year ago. As of the first quarter of 2016, seasonally adjusted Washington exports were down 17.9% from the fourth quarter 2014 peak. The drop likely reflects the negative influence of a stronger dollar and weak economic growth abroad.

*Washington housing permits declined slightly in the first quarter*

Washington housing permits declined slightly to 37,600 units (SAAR) in the first quarter of 2016 from a revised 38,000 units in the fourth quarter of 2015. The February forecast projected 37,400 units in the first quarter. The number of single-family units averaged 22,300 in the first quarter of 2016, the highest rate since the fourth quarter of 2007 and 1,900 higher than the 20,400 expected in the forecast. However, the number of multi-family units averaged 15,300 in the first quarter which was 1,700 below the 17,000 expected in the forecast. The estimates for all four quarters of 2015 have been adjusted to reflect the final annual estimate from the Census Bureau. The second quarter of 2016 got off to a very strong start with an average of 44,100 units (SAAR) permitted in April and May of which 22,800 were single family and 21,300 were multi-family.

*Seattle area home prices are up 10.6% over the year*

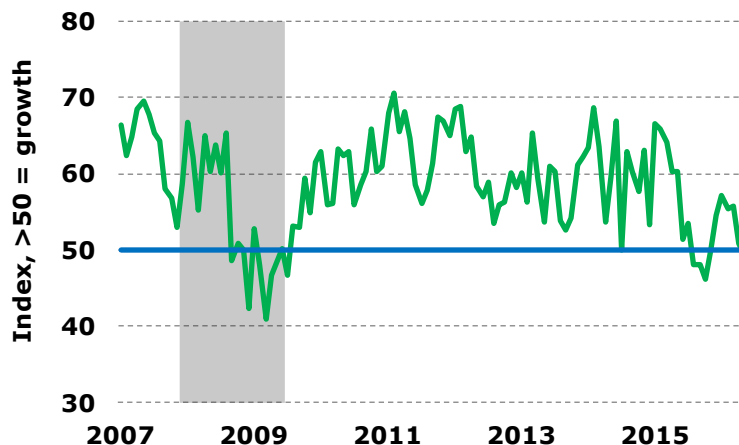
Seattle home prices continue to rise rapidly and now exceed the 2007 peak. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices rose 0.9% in April and are up 10.6% over the previous April. Seattle home prices are up 49.5% since the November 2011 trough and now exceed the May 2007 peak by 3.9%.

*Manufacturing dipped into negative territory in May*

The Institute of Supply Management - Western Washington Index (ISM-WW) dipped into negative territory in May for the first time since October 2015. The index, which measures conditions in the manufacturing sector, declined to 49.2 in May from 50.8 in April (index values above 50 indicate positive growth while values below 50 indicate contraction). The production, orders, and deliveries components all declined in May, the employment component was unchanged, and the inventory component increased.

**Figure 2.2: ISM-WW Index**

*Washington manufacturing is struggling*



Source: The Institute of Supply Management; data through May 2015

*Vehicle sales increased in May*

Washington car and truck sales increased in May after three consecutive monthly declines but remain below their recent peak. Seasonally adjusted new vehicle registrations rose 3.2% in May but are still 10.6% below the January peak. May 2016 registrations are 3.8% higher than in May 2015, however.

*Washington personal income growth was overstated in first quarter of 2016*

In June, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the first quarter of 2016. According to these estimates, Washington personal income rose to \$378.9 billion (SAAR) in the first quarter of 2016 from \$373.3 billion in the fourth quarter of 2015. The 6.2% growth rate (SAAR) in Washington personal income was the largest among the states and District of Columbia and greatly exceeded the 3.9% growth rate for the U.S. as a whole. The above average growth in the first quarter was due to stronger growth of earnings; property income (dividends, interest, and rent) growth was about average in the quarter and transfer payments were slightly less. However, the reported first quarter earnings growth was distorted by a change in the way Microsoft stock awards vest during the year. The result of the change is higher reported earnings in each first quarter and lower reported earnings in each third quarter. Excluding earnings from the information sector, Washington personal income grew at a 4.0% rate in the first quarter which puts it at 26<sup>th</sup> among the states and District of Columbia and barely above the national average rate of 3.8%.

*Washington GDP growth ranks eighth in the nation thanks to electronic shopping*

Also in June the Bureau of Economic Analysis (BEA) released estimates of annual gross domestic product by state through 2015. Washington's real GDP grew 2.9% in 2015 which ranked eighth among the states and District of Columbia and was well above the U.S. rate of 2.4%. The above average growth in Washington GDP in 2015 can be explained almost entirely by the

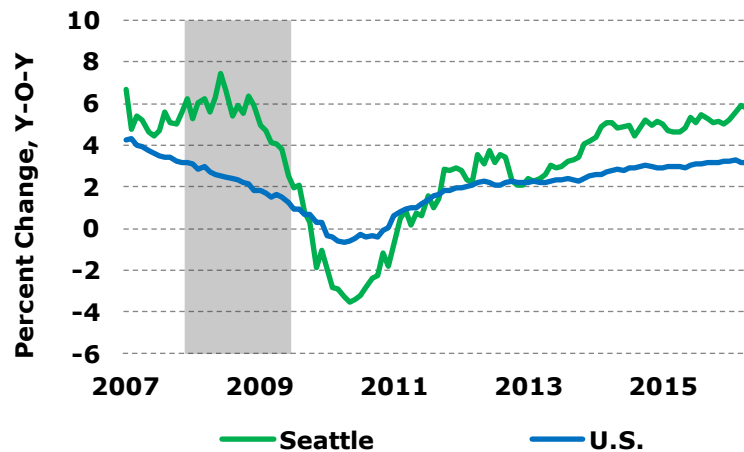
retail trade sector which grew 9.4% in Washington compared to 3.6% for the nation as a whole. Washington retail trade output was supported by very strong growth in electronic shopping.

*Seattle area consumer price inflation is well above the national average*

Seattle area consumer price inflation is well above the national average. Over the last year, from April 2015 to April 2016, consumer prices in the Seattle area rose 2.5% compared to 1.1% for the U.S. city average. Core prices, which exclude food and energy, were up 3.3% 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 5.8% compared to 3.2% for the nation (see Figure 2.3). However, even with shelter excluded, Seattle inflation was higher at 0.7% compared to 0.1% for the nation.

*Seattle area shelter cost inflation is higher than the U.S. City Average.*

**Figure 2.3: Shelter Cost Inflation**



Source: Bureau of Labor Statistics; data through April, 2016

## Washington State Forecast

*The new national forecast features weaker real growth but higher inflation*

The June Washington State forecast is based on a new national forecast that features weaker real growth but higher inflation than the forecast adopted in February. The new forecast for GDP growth is slightly weaker in every year except 2020 when it is the same as assumed in February. By the end of 2021 real GDP is lower by 0.9 percent. Offsetting the slower real growth, however, is higher inflation. The implicit price deflator for personal consumption expenditures is 1.3% higher by the end of 2021 in the June forecast than in the February forecast. As a result of the higher inflation, nominal personal income ends up 0.7% higher by the end of 2021 even though real personal income is 0.5% lower. The employment growth forecast is essentially unchanged. These revisions in the national forecast feed through to the state economic forecast.

*The forecasts for Washington employment growth, income growth, and inflation are higher than in the February forecast*

Overall, our forecast for Washington State is stronger than we expected in February mainly as a result of higher job growth and higher inflation. Washington employment growth in 2015 was 2.8% which was the highest rate since 2006. Washington employment is expected to grow 2.4% this year, better than the 2.0% growth rate in the February forecast. We expect employment growth to average 1.3% per year in 2017 through 2021 which is slightly higher than the 1.2% rate assumed in February. Our June forecast for nominal personal income growth this year is 4.1%, down slightly from 4.2% in the February forecast. Our new forecast for nominal personal income growth in 2017 through 2021 averages 5.0% per year, up from 4.8% in the February forecast. The higher nominal personal income growth expected in 2017 through 2021 is due to higher inflation. We expect total housing units authorized by building permits to rise 0.6% this year to 40,600 units compare to 38,300 units expected in the February forecast. We expect permits to average 43,900 during the remainder of the forecast, up very slightly from the 43,600 expected in February. The forecast for Seattle area inflation is also higher than expected in February. We now expect the all-items Seattle CPI to rise 2.2% this year compared to 1.6% in the February forecast and we expect Seattle area inflation to average 2.3% per year in 2017 through 2021 compared to 2.2% in February.

## **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 2.4% this year, better than the 2.0% growth rate in the February forecast. The higher projected growth this year is based on stronger actual employment growth through May 2016. We expect employment growth to average 1.3% per year in 2017 through 2021 which is slightly higher than the 1.2% rate assumed in February. We expect the employment growth rate to slow in the coming years as the economy approaches full employment. Employment growth will also be constrained by baby boomers leaving the work force, further reducing labor force growth. We expect 1.6% employment growth in 2017, 1.3% growth in 2018, 1.2% growth in 2019 and 2020, and 1.0% growth in 2021.

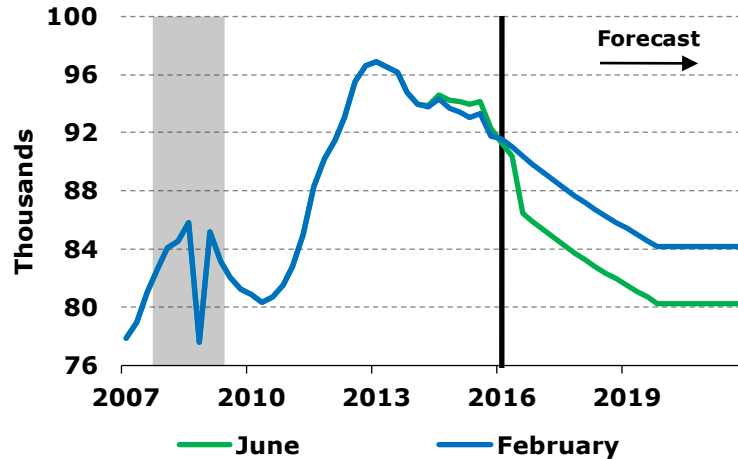
*Boeing has announced employment reductions for mid-2016*

Aerospace employment has been gradually declining since a cyclical peak in 2013. Our forecast in February had assumed a continuation of this gradual decline through 2019. In our June forecast, however, we have revised the aerospace employment forecast to reflect Boeing's stated intention to reduce its commercial airplane division employment by 4,000 by the middle of the year (see Figure 2.4). We expect the vast majority of the job cuts will be in the Puget Sound region. This implies a steeper decline in the near term than assumed in February. In the second half of 2016 through 2019 we expect a gradual decline in

aerospace employment similar to the assumption made in February. We continue to 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 5.5% in 2016, 4.6% in 2017, 2.3% in 2018, 2.1% in 2019, and 0.8% in 2020 with no change in 2021.

*The aerospace forecast is lower*

**Figure 2.4: Aerospace Employment Forecast**



Source: Bureau of Labor Statistics, ERFC June 2016 Forecast; historical data through 2016Q1

*The software employment forecast is higher*

Software employment grew only 0.5% in 2015 after absorbing a series of Microsoft layoffs during the latter part of 2014. We expect growth to rebound to 3.0% in 2016 on strong monthly hiring through May 2016. We expect more moderate growth through the remainder of the forecast. Software employment is expected to grow 1.5% in 2017, 0.9% in 2018, 1.0% in 2019 and 2020, and 1.1% in 2021.

*Construction employment growth surged in the first quarter of 2016*

Construction employment growth surged in the first quarter of 2016. As a result, we have increased our construction growth forecast for 2016 to 5.6% from the 2.6% expected in February. We expect slower growth during the remainder of this year and next year, particularly in nonresidential construction. Construction employment is expected to grow 2.7% per year in 2017 before picking up to 3.8% in 2018, 2.9% in 2019, 2.1% in 2020, and 1.2% in 2021. Even after ten years of growth, construction employment will still be 1,800 below its previous peak at the end of 2021.

*Retail trade employment is benefitting from strong growth in...*

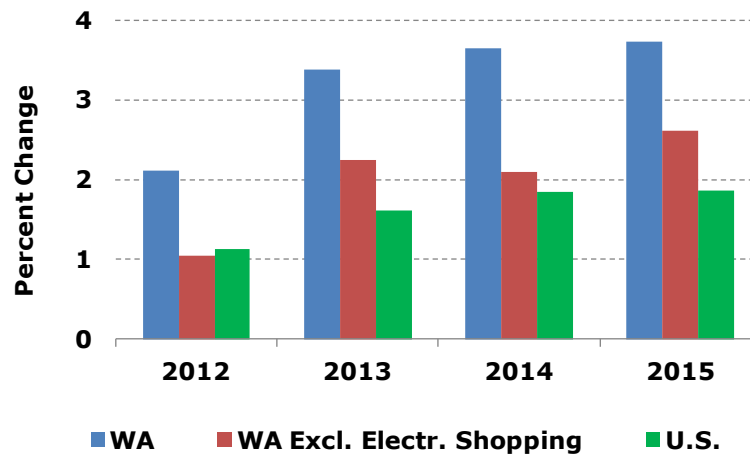
Washington retail trade employment growth has been much stronger than the national average during the last four years thanks largely to our outsized and rapidly growing electronic shopping sector. Retail trade employment grew at an average

*... electronic shopping*

rate of 3.2% per year in between 2011 and 2015 compared to 1.6% for the U.S. as a whole. Without the electronic shopping sector, which added an estimated 17,400 jobs in the four-year period, Washington retail trade employment would have grown at a 2.0% average annual rate. (see Figure 2.5). Retail trade employment growth is expected to slow to 2.0% this year and 0.9% in 2017 before turning slightly negative for the last four years of the forecast. We expect growth rates of -0.2%, -0.2%, -0.4%, and -0.2% in 2018, 2019, 2020, and 2021.

**Figure 2.5: Retail Trade Employment Growth**

*Without electronic shopping, growth would have been closer to the national average*



Source: Bureau of Labor Statistics, ERFC

*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 57% since the recession ended. IT employment growth has also been very strong during the recovery. Computer systems design and related services employment has grown 59% 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 3.6% in 2016, 4.4% in 2017, and 3.3% in 2018. We expect professional and business services employment growth to slow to 2.5%, 2.6%, 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, 1.6% 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 1.8% in 2016, 1.2% in 2017, 1.5% in 2018 and 2019, and 1.3% per year in 2020 and 2021.

## Washington Personal Income

*Washington personal income is currently lower than believed in February*

In March, the Bureau of Economic Analysis released estimates for state personal income through the fourth 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 fourth quarter. Our current estimate of Washington personal income in the fourth quarter of 2015 is \$372.0 billion which is \$2.9 billion (0.8%) lower than assumed in the February forecast. Of the \$2.9 billion variance, \$1.8 billion is due to lower than previously expected transfer payments as the BEA reduced its estimates of Medicaid benefits in the state. Most of the rest (\$0.8 billion) was due to lower than expected wages and salaries.

*After 2016, income growth is higher than expected in February*

Our forecast for personal income growth this year is 4.1%, down slightly from 4.2% in the February forecast. Our new forecast for nominal personal income growth in 2017 through 2021 averages 5.0% per year, up from 4.8% in the February forecast. The higher nominal personal income growth expected in 2017 through 2021 is due to higher inflation. On an annual basis, we expect personal income to grow 4.5% in 2017, 5.0% in 2018, 5.2% in 2019, 5.1% in 2020, and 4.9% in 2021.

## 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 20,600 in 2015. Construction activity in 2015 was boosted by a huge spike in the first quarter. We expect multi-family permits will decline to 17,800 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 19,800 in 2015. We expect single-family construction to continue to strengthen with the number of units rising to 22,800 this year and 28,100 by 2021. We expect total housing units authorized by building permits to rise just 0.6% this year to 40,600 units, coming off the 2015 spike in multi-family permits. We expect growth of 4.6% to 42,500 units in 2017, 3.5% to 44,000 units in 2018, 0.4% to 44,100 units in 2019, 0.5% to 44,400 units in 2020, and a 0.1% decline to 44,300 in 2021.

## Seattle Consumer Price Index

*Seattle area inflation has increased...*

Seattle area inflation has increased since the February forecast was released. We now expect the Seattle CPI to rise 2.2% this

*... since the February forecast was released*

year compared to the 1.6% expected in the February forecast. While oil prices have risen since the February forecast was released, they are still down over the year. While the over-the-year decline in energy costs will reduce inflation in 2016, rising energy costs will add to inflation in 2017 through 2021. We expect all-items Seattle area inflation rates of 2.5% in 2017 and 2.3% per year in 2018 through 2021.

*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. Inflation data so far this year indicate core inflation will rise this year to 2.2% nationally and 3.0% in the Seattle area. We expect core inflation in Seattle will moderate as shelter costs stabilize. Our forecast for core Seattle inflation is 2.4% in 2017, 2.1% in 2018, and 2.2% per year in 2019, 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**

*Alternative 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 explosion in new technologies encourages more investment, leading to stronger productivity growth. Structural oversupply conditions keep Brent oil prices low. Meanwhile, despite the improvements in the labor market, wage pressures remain muted. Growth in the rest of the world begins to improve with the help of structural reforms implemented by some struggling economies and the European Central Bank's quantitative easing. A weaker dollar and better growth prospects across the rest of the world reduce the drag from net exports. The new president and new Congress make good progress on long-term fiscal priorities. With a stronger outlook and less fiscal uncertainty, both consumer and business confidence improve, and the stock market sees strong gains. Housing remains an engine of growth, thanks to healthy income gains, a favorable financing environment, and increased household formation. The unemployment rate declines to a low of 3.9% by the end of 2018 before returning to 4.3% at the end of 2021.

*The optimistic scenario also assumes a much stronger Washington economy*

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast assumes that aerospace employment flattens in the second half of 2016 and 2017 then 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 third quarter of 2018. By the end of 2021, Washington nonfarm payroll employment is higher by 178,400 jobs than in the baseline forecast and Washington personal income is \$54.2 billion higher.

### **Pessimistic**

*In the pessimistic scenario, the U.S. economy suffers a two-quarter recession in the middle of 2017*

In the pessimistic scenario, productivity decreases at an even faster pace as 2016 progresses. With the supply side of the economy growing very slowly, modest demand-side growth causes upward pressure on both wage and price inflation. In addition, the oil market tightens faster than expected as US production declines. Core inflation climbs well above the Federal Reserve's 2.0% target by the end of 2016, prompting the central bank to raise interest rates more aggressively. In Europe, growth winds down as the United Kingdom's EU referendum amplifies uncertainty. The problems in emerging markets become more pervasive, and the dollar soars, worsening the trade deficit. Both consumer and business confidence sour, and the stock market plunges during 2017. Rising inflation, oil prices, and interest rates combine to sharply impact consumer spending, capital expenditures, and the housing market. The US economy contracts in the second and third quarters of 2017. Unemployment climbs through 2018, reaching an eventual peak of 6.2%.

*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 also 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 relatively weak local economy puts downward pressure on Washington wages and the Seattle CPI; offsetting this is the higher national inflation assumed in the pessimistic U.S. forecast. The net effect is that nominal Washington wages

are about the same in the pessimistic alternative as they are in the baseline forecast and the Seattle CPI is actually a little higher. By the end of 2021, Washington nonfarm payroll employment is 172,800 lower than in the baseline forecast and Washington personal income is \$16.8 billion lower.

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

### Governor’s Council of Economic Advisors (GCEA)

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

*The Governor’s Council of Economic Advisors’ national forecast is slightly weaker than the baseline*

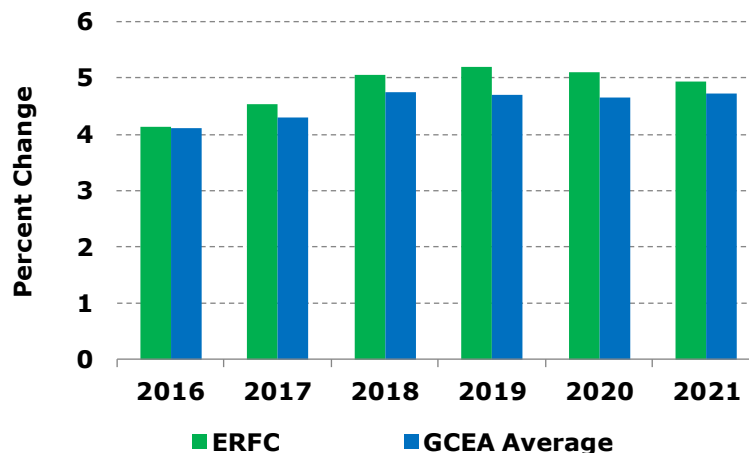
At the national level, the GCEA outlook for real GDP growth is the same as the baseline forecast this year but slightly lower in 2017 through 2021. The GCEA forecast of real consumer spending growth is also lower or the same in each year. The lower real growth in the GCEA scenario is compounded by lower inflation. Compared to the baseline, the Governor’s Council members expect lower inflation in 2016 through 2018, the same inflation in 2019 and 2020, and higher inflation only in 2021. Consistent with their weaker real growth and lower inflation, the Council members’ mortgage rate forecast is lower than the baseline forecast except in 2016. 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 3.0%. Because their inflation forecast is similar to ours, their nominal personal income forecast is also lower at 4.5% per year versus 4.8% in the baseline forecast (see

**Figure 2.6: Washington Personal Income Growth**

*The Governor’s Council of Economic Advisors expect slower income growth than does the baseline forecast*



Source: ERFC June 2016 Forecast and GCEA worksheet

Figure 2.6). At an average rate of 1.4% 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 41,500 units per year through 2021 compared to 43,300 in the baseline forecast. At the end of 2021, the GCEA forecast for Washington nonfarm payroll employment is 12,800 lower than in the baseline forecast and Washington personal income is \$8.1 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
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	313.475	328.844	340.720	349.164	359.536	370.939	382.726	394.536
% Ch	1.6	4.9	3.6	2.5	3.0	3.2	3.2	3.1
Real Wage and Salary Disb.	162.331	171.280	178.162	183.074	187.928	192.516	197.060	201.896
% Ch	3.8	5.5	4.0	2.8	2.7	2.4	2.4	2.5
Real Nonwage Income	151.144	157.564	162.558	166.090	171.608	178.423	185.666	192.640
% Ch	-0.6	4.2	3.2	2.2	3.3	4.0	4.1	3.8
Real Per Capita Income (\$/Person)	44,663	46,220	47,157	47,672	48,460	49,372	50,316	51,249
% Ch	0.4	3.5	2.0	1.1	1.7	1.9	1.9	1.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.092	1.100	1.118	1.139	1.160	1.183	1.205
% Ch	1.4	0.8	0.7	1.7	1.8	1.9	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.437	2.473	2.521	2.582	2.642	2.703	2.766	2.830
% Ch	1.4	1.5	1.9	2.4	2.3	2.3	2.3	2.3
Average Nonfarm Annual Wage	55,943	58,085	59,334	60,869	62,772	64,736	66,757	68,976
% Ch	3.1	3.8	2.2	2.6	3.1	3.1	3.1	3.3
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.75	25.28	25.99	26.78	27.52	28.30	29.12	29.95
% Ch	2.3	2.1	2.8	3.1	2.8	2.8	2.9	2.9
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	339.735	359.205	374.830	390.484	409.381	430.440	452.658	475.483
% Ch	3.0	5.7	4.3	4.2	4.8	5.1	5.2	5.0
Disposable Personal Income	299.138	314.549	327.276	340.954	357.757	376.865	395.727	414.305
% Ch	2.4	5.2	4.0	4.2	4.9	5.3	5.0	4.7
Per Capita Income (\$/Person)	48,403	50,487	51,877	53,312	55,177	57,291	59,509	61,763
% Ch	1.8	4.3	2.8	2.8	3.5	3.8	3.9	3.8
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,468.1	3,517.0	3,585.8	3,673.6	3,737.6	3,798.5	3,856.0	3,907.3
Total Washington Employment	3,243.3	3,312.8	3,380.2	3,469.3	3,539.7	3,603.1	3,659.2	3,708.1
Unemployment Rate (%)	6.48	5.81	5.73	5.56	5.29	5.14	5.10	5.10
Nonfarm Payroll Employment	3,021.3	3,102.9	3,185.7	3,245.1	3,290.3	3,331.8	3,371.7	3,407.7
% Ch	2.4	2.7	2.7	1.9	1.4	1.3	1.2	1.1
Manufacturing	287.5	290.1	288.6	284.0	284.6	285.1	286.5	289.4
% Ch	0.9	0.9	-0.5	-1.6	0.2	0.2	0.5	1.0
Durable Manufacturing	209.4	210.8	208.9	203.2	203.6	203.8	204.6	207.1
% Ch	0.4	0.6	-0.9	-2.7	0.2	0.1	0.4	1.2
Aerospace	94.7	94.2	92.1	85.6	83.5	81.7	80.3	80.2
% Ch	-1.7	-0.5	-2.3	-7.0	-2.5	-2.1	-1.7	-0.1
Nondurable Manufacturing	78.1	79.3	79.6	80.8	81.0	81.4	81.9	82.4
% Ch	2.3	1.6	0.4	1.5	0.2	0.5	0.7	0.5
Construction	153.8	168.1	177.8	185.0	191.8	197.8	203.1	206.2
% Ch	6.8	9.3	5.8	4.0	3.7	3.1	2.7	1.6
Service-Providing	2,573.8	2,638.5	2,713.1	2,769.9	2,807.6	2,842.6	2,875.7	2,905.6
% Ch	2.3	2.5	2.8	2.1	1.4	1.2	1.2	1.0
Software Publishers	55.0	55.5	56.9	58.0	58.7	59.2	59.8	60.4
% Ch	3.9	1.0	2.4	2.0	1.1	1.0	1.0	1.1
Nonfarm Payroll Employment, EOP*	3,041.1	3,135.9	3,215.0	3,265.4	3,306.4	3,347.3	3,390.3	3,421.3
% Ch*	2.2	3.1	2.5	1.6	1.3	1.2	1.3	0.9
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	33.305	38.642	39.139	41.560	43.425	44.030	44.272	44.367
% Ch	7.0	16.0	1.3	6.2	4.5	1.4	0.6	0.2
Single-Family	17.408	18.691	21.522	23.943	26.522	27.534	27.780	27.942
% Ch	-6.3	7.4	15.2	11.2	10.8	3.8	0.9	0.6
Multi-Family	15.897	19.951	17.617	17.617	16.903	16.496	16.493	16.425
% Ch	26.7	25.5	-11.7	0.0	-4.1	-2.4	0.0	-0.4
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.80	4.02	4.49	5.45	5.69	5.65

\*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
<b>U.S.</b>						
<b>Real GDP, Percent Change</b>						
Optimistic	2.0	2.9	3.4	2.9	2.5	2.4
Baseline	1.9	2.0	2.2	2.1	2.2	2.2
Pessimistic	1.9	1.0	-0.2	2.5	3.1	2.5
<b>Implicit Price Deflator, Percent Change</b>						
Optimistic	0.7	1.9	1.7	1.5	2.0	2.2
Baseline	0.7	1.7	1.8	1.9	1.9	1.9
Pessimistic	0.7	2.4	3.1	2.8	2.7	2.4
<b>Mortgage Rate, Percent</b>						
Optimistic	3.80	4.03	4.30	4.85	5.18	5.33
Baseline	3.80	4.02	4.49	5.45	5.69	5.65
Pessimistic	3.81	4.03	4.01	3.75	3.76	4.45
<b>3 Month T-Bill Rate, Percent</b>						
Optimistic	0.18	0.68	1.36	1.87	2.18	2.36
Baseline	0.19	0.67	1.62	2.55	2.81	2.81
Pessimistic	0.18	0.93	1.25	0.51	0.67	1.46
<b>Washington</b>						
<b>Real Personal Income, Percent Change</b>						
Optimistic	4.0	4.6	5.4	5.5	4.6	4.0
Baseline	3.6	2.5	3.0	3.2	3.2	3.1
Pessimistic	3.3	0.7	0.1	1.4	3.1	2.5
<b>Personal Income, Percent Change</b>						
Optimistic	4.7	6.6	7.1	7.1	6.7	6.3
Baseline	4.3	4.2	4.8	5.1	5.2	5.0
Pessimistic	4.1	3.1	3.2	4.3	5.9	4.9
<b>Employment, Percent Change</b>						
Optimistic	2.7	2.6	2.5	2.4	2.0	1.7
Baseline	2.7	1.9	1.4	1.3	1.2	1.1
Pessimistic	2.6	1.0	-0.5	0.1	0.8	0.7
<b>Housing Permits, Thousands of Authorized Units</b>						
Optimistic	39.2	43.1	46.5	49.0	49.0	49.5
Baseline	39.1	41.6	43.4	44.0	44.3	44.4
Pessimistic	39.1	40.1	36.9	36.6	36.6	36.1

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

Calendar Years

	2016	2017	2018	2019	2020	2021
<b>U.S.</b>						
<b>Real GDP</b>						
<i>Growth</i>						
ERFC	1.8	2.3	2.2	2.1	2.2	2.1
GCEA Average	1.8	2.1	2.0	2.0	2.0	2.0
<b>Real Consumption</b>						
<i>Growth</i>						
ERFC	2.5	2.5	2.3	2.2	2.2	2.2
GCEA Average	2.4	2.2	2.1	2.1	2.1	2.2
<b>Implicit Price Deflator, PCE</b>						
<i>Growth</i>						
ERFC	1.2	1.9	1.9	1.9	1.9	1.9
GCEA Average	1.1	1.6	1.8	1.9	1.9	2.0
<b>Mortgage Rate</b>						
<i>Percent</i>						
ERFC	3.8	4.2	4.9	5.7	5.7	5.6
GCEA Average	3.9	4.1	4.3	4.4	4.6	4.8
<b>Oil Price (Brent)</b>						
<i>Dollars per barrel</i>						
ERFC	46.4	53.9	55.4	57.0	58.7	60.4
GCEA Average	44.3	49.6	52.1	53.9	55.8	57.0
<b>Washington State</b>						
<b>Real Personal Income</b>						
<i>Growth</i>						
ERFC	2.9	2.6	3.1	3.2	3.1	3.0
GCEA Average	2.9	2.7	2.8	2.8	2.7	2.7
<b>Wage and Salary Employment</b>						
<i>Growth</i>						
ERFC	2.4	1.6	1.3	1.2	1.2	1.0
GCEA Average	2.3	1.5	1.2	1.1	1.1	1.1
<b>Manufacturing Employment</b>						
<i>Growth</i>						
ERFC	-1.7	-0.3	-0.1	0.4	0.8	1.0
GCEA Average	-1.2	-0.5	-0.2	0.1	0.1	0.1
<b>Construction Employment</b>						
<i>Growth</i>						
ERFC	5.6	2.7	3.8	2.9	2.1	1.2
GCEA Average	5.1	1.8	1.3	1.4	1.4	1.5
<b>Housing Permits</b>						
<i>Thousands of authorized units</i>						
ERFC	40.6	42.5	44.0	44.1	44.4	44.3
GCEA Average	39.6	41.3	41.2	42.1	42.4	42.6
<b>Washington Average Annual Wage</b>						
<i>Growth</i>						
ERFC	2.3	2.9	3.2	3.1	3.2	3.4
GCEA Average	2.1	2.9	3.2	3.2	3.2	3.2



Table 2.4

**Forecast Analysis**

Comparison of Forecasts for 2015-17

<b>Washington</b>	Average Annual Rate of Growth (Percent) 2015:2-2017:2			Average Annual Rate (Thousands) 2015:3 to 2017:2
	<b>Employment</b>	<b>Personal Income</b>	<b>Real Personal Income</b>	<b>Housing Units Authorized</b>
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
June	2.0	4.2	2.7	40.3

Table 2.5

**Forecast Analysis**

Comparison of Forecasts for 2017-19

<b>Washington</b>	Average Annual Rate of Growth (Percent) 2017:2-2019:2			Average Annual Rate (Thousands) 2017:3 to 2019:2
	<b>Employment</b>	<b>Personal Income</b>	<b>Real Personal Income</b>	<b>Housing Units Authorized</b>
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
June	1.2	5.1	3.2	43.7

Table 2.6  
**Forecast Comparison**  
 Forecast 2016 to 2021

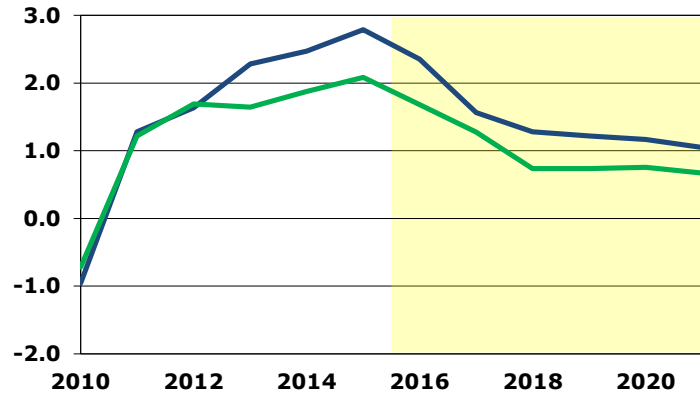
Fiscal Years

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Washington</b>							
<b>Real Personal Income</b>							
June Baseline	328.844	340.720	349.164	359.536	370.939	382.726	394.536
% Ch	4.9	3.6	2.5	3.0	3.2	3.2	3.1
February Baseline	329.809	344.174	354.086	365.108	376.559	387.995	399.575
% Ch	5.2	4.4	2.9	3.1	3.1	3.0	3.0
<b>Personal Income</b>							
June Baseline	359.205	374.830	390.484	409.381	430.440	452.658	475.483
% Ch	5.7	4.3	4.2	4.8	5.1	5.2	5.0
February Baseline	360.258	377.950	393.228	412.774	433.534	454.524	476.153
% Ch	6.0	4.9	4.0	5.0	5.0	4.8	4.8
<b>Employment</b>							
June Baseline	3102.9	3185.7	3245.1	3290.3	3331.8	3371.7	3407.7
% Ch	2.7	2.7	1.9	1.4	1.3	1.2	1.1
February Baseline	3119.2	3193.6	3242.6	3281.3	3320.6	3360.4	3396.8
% Ch	2.9	2.4	1.5	1.2	1.2	1.2	1.1
<b>Housing Permits</b>							
June Baseline	38.642	39.139	41.560	43.425	44.030	44.272	44.367
% Ch	16.0	1.3	6.2	4.5	1.4	0.6	0.2
February Baseline	38.934	37.071	40.170	42.993	43.631	44.124	44.409
% Ch	17.8	-4.8	8.4	7.0	1.5	1.1	0.6

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

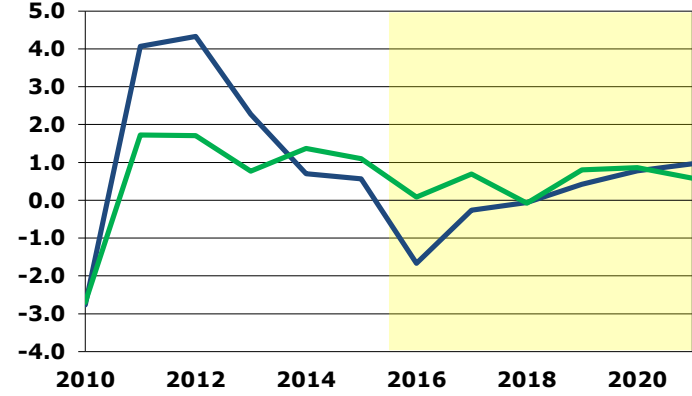
Forecast

Total nonfarm payroll employment



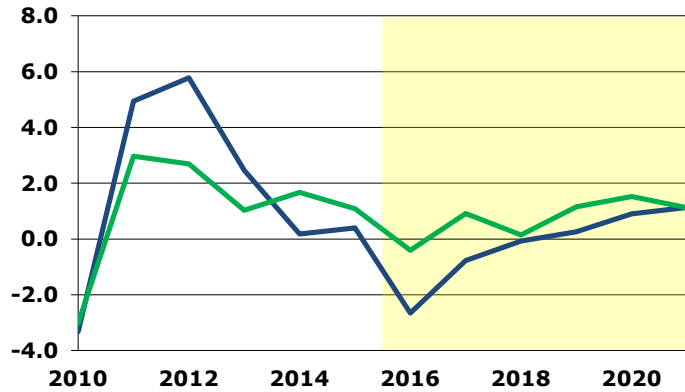
Source: WA State Employment Security Dept. 2015, ERFC 2021

Manufacturing employment



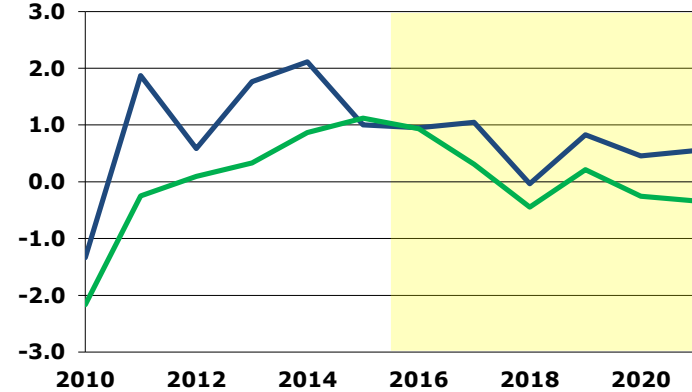
Source: WA State Employment Security Dept. 2015, ERFC 2021

Durable manufacturing employment



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

Nondurable manufacturing employment



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

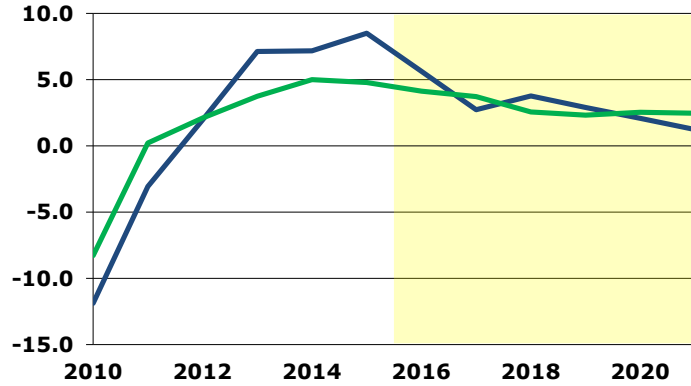
Washington

U.S.

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

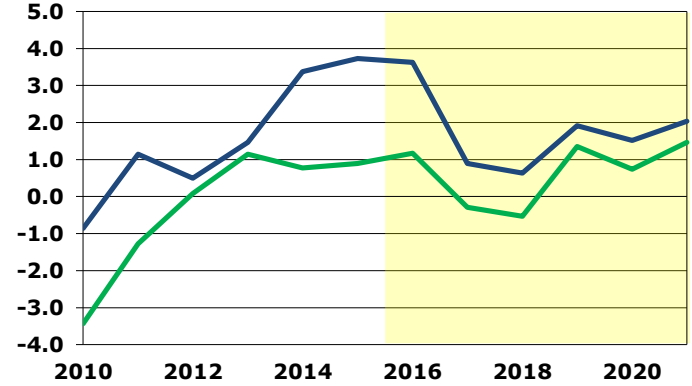
Forecast

Construction employment



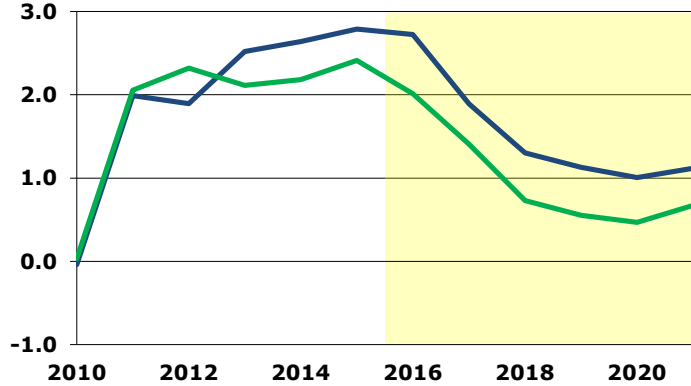
Source: WA State Employment Security Dept. 2015, ERFC 2021

Information employment



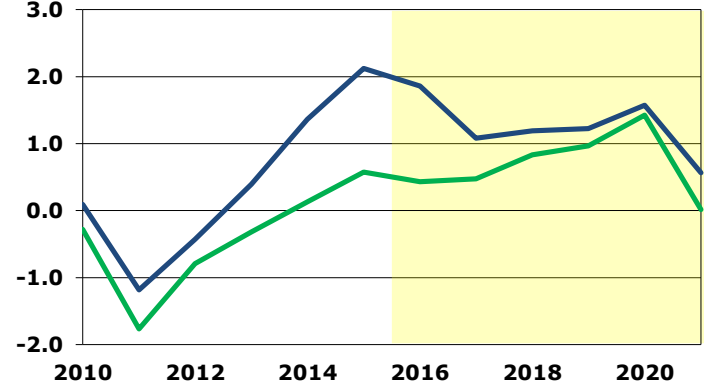
Source: WA State Employment Security Dept. 2015, ERFC 2021

Other private employment



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

Government employment



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

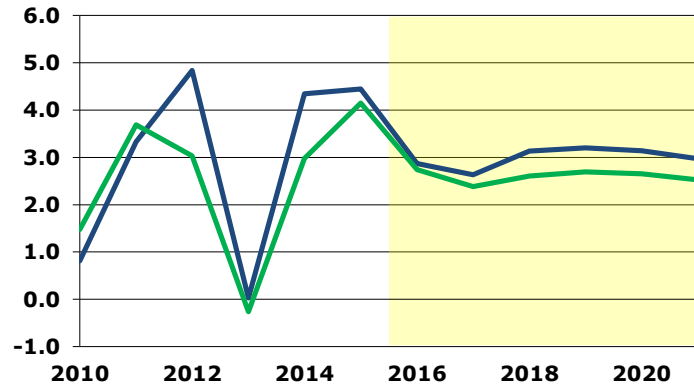
Washington

U.S.

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

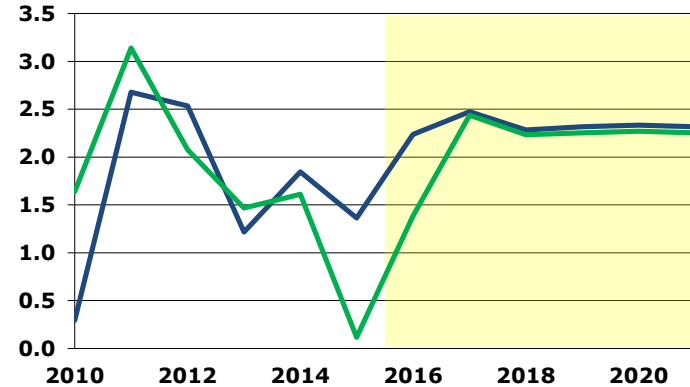
Forecast

Real personal income



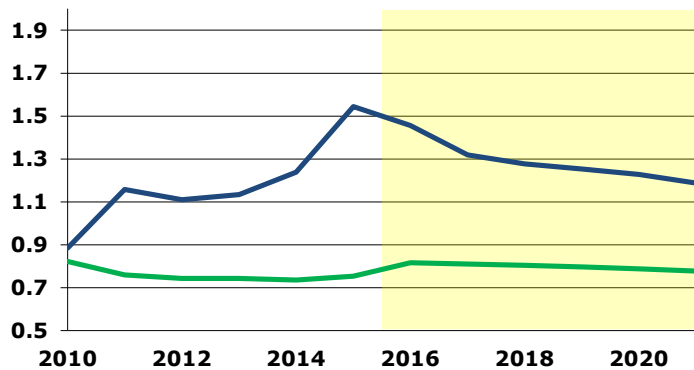
Source: Bureau of Economic Analysis 2014, ERFC 2021

Consumer price indices



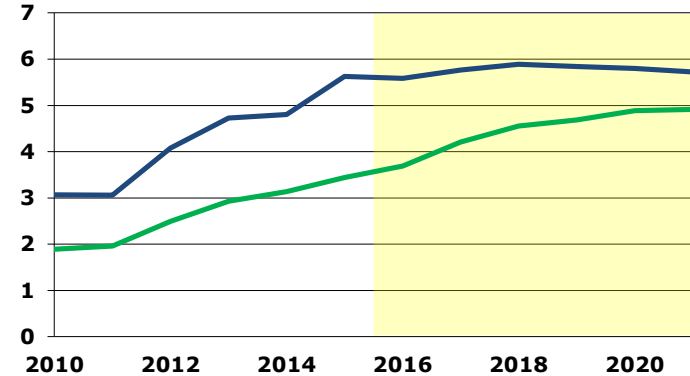
Source: Bureau of Labor Statistics 2015, ERFC 2021

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

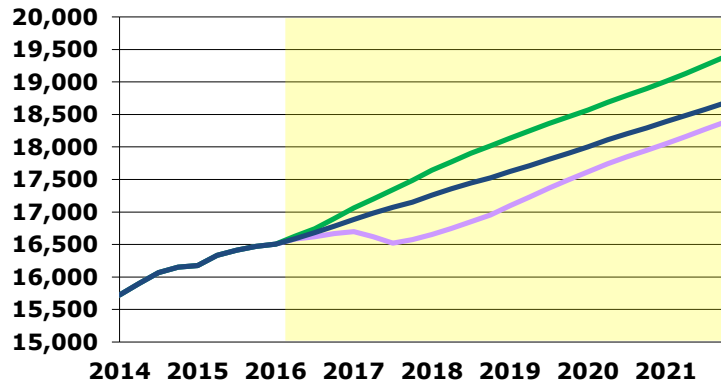
Washington

U.S.

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

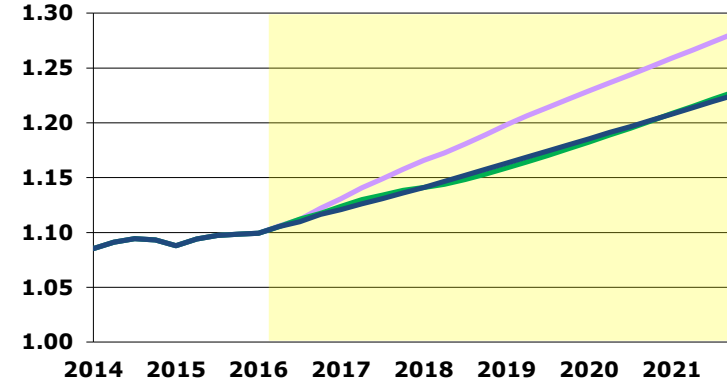
Forecast

Real GDP, billions of chained 2009 dollars



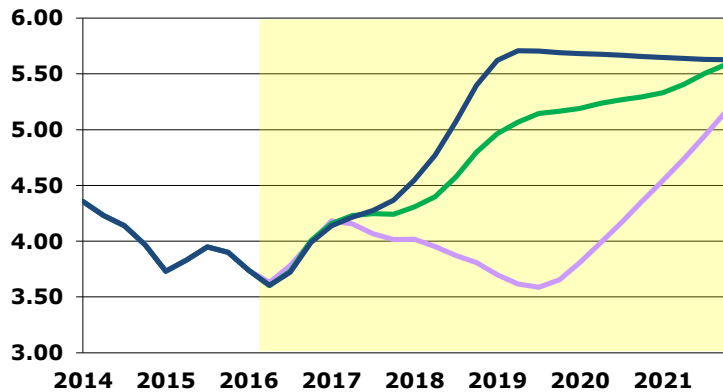
Source: Bureau of Economic Analysis 2016 Q1, ERFC 2021

Implicit price deflator, index 2009 = 1.0



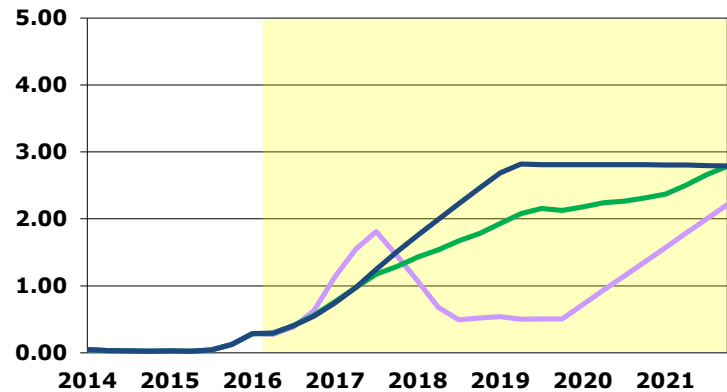
Source: Bureau of Economic Analysis 2016 Q1, ERFC 2021

Mortgage rate, percent



Source: Freddie Mac 2016 Q1, ERFC 2021

Three month T-bill rate, percent



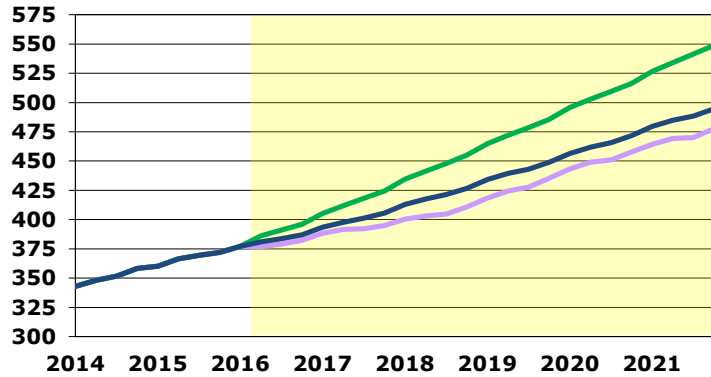
Source: Federal Reserve Board 2016 Q1, ERFC 2021

■ Baseline      ■ Optimistic      ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

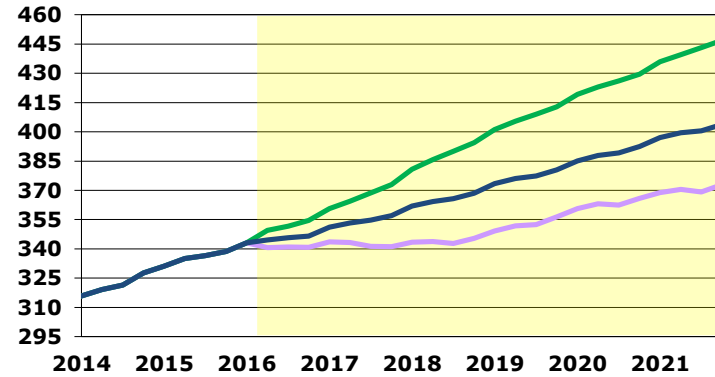
Forecast

Personal income, billions of dollars



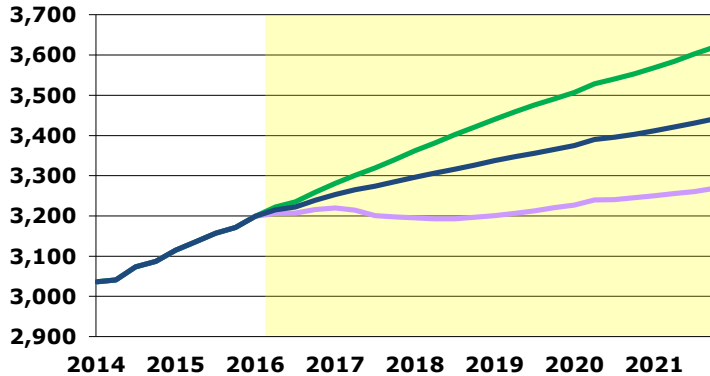
Source: Bureau of Economic Analysis 2014 Q4, ERFC 2021

Real personal income, billions of chained 2009 dollars



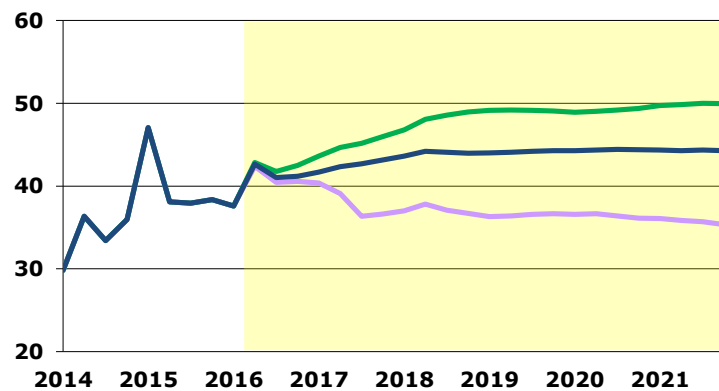
Source: Bureau of Economic Analysis 2014 Q4, ERFC 2021

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2016 Q1, ERFC 2021

Housing permits, thousands



Source: Census Bureau 2016 Q1, ERFC 2021

■ Baseline      ■ Optimistic      ■ Pessimistic





## Chapter 3: Washington State Revenue Forecast Summary

- **Revenue collections since the February 2016 forecast have come in \$218 million over the forecasted amount.**
- **Most of the surplus Revenue Act collections occurred in the most recent two months of collections.**
- **Real estate excise tax collections were \$70 million higher than forecasted and are expected to remain strong in the near future.**
- **The forecast of General Fund-State (GF-S) revenue for the 2015-17 biennium was increased by \$294 million, the forecast for the 2017-19 biennium was increased by \$126 million, and the forecast for the 2019-21 biennium was increased by \$134 million.**
- **Most of the forecast increase stemmed from higher forecasted housing activity, but slightly higher forecasted inflation also played a role.**
- **New legislation from the 2016 regular and special sessions had a very small effect on expected revenue.**

### Overview

*Forecasted increases in revenue from housing activity outweighed a decrease in forecasted personal income*

Revenue collections since the February 2016 forecast have been higher than expected, with much of the variance occurring in the most recent two months. A great deal of the strength in collections stemmed from the housing market. Taxable sales of real estate and permits for new housing construction were both stronger than forecasted. While the June economic forecast projected slightly lower state personal income than the February forecast, the forecast of housing construction was increased, with most of the increase occurring in the current biennium. Since both construction materials and construction labor are subject to the retail sales tax, the increase in forecasted revenue from construction outweighed the reduction in forecasted revenue stemming from the reduced forecast of personal income. The recent strength in the real estate market also prompted a near-term increase in projected real estate excise tax collections. As the forecast is based on nominal dollars, expected revenue was also bolstered slightly by higher forecasted inflation. New legislation from the 2016 regular and special sessions had a very

small effect on expected revenue, reducing expected revenue by less than \$10 million per biennium.

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

15-17: +\$294  
17-19: +\$126  
19-21: +\$134

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2015-17 through 2019-21 biennia. Since the February forecast, revenue sources that are tracked monthly came in \$217.9 million higher than forecasted. Non-economic changes subtracted \$4.6 million in expected revenue. Changes to the economic forecast resulted in an \$80.2 million increase to projected collections for the rest of the biennium. The total of these components was a \$293.5 million increase in projected revenue for the current 2015-17 biennium. The forecast for the 2017-19 biennium has been increased by a net of \$126.4 million, with a \$134.2 million increase due to economic factors partially offset by a \$7.8 million reduction due to non-economic factors. The forecast for the 2019-21 biennium has been increased by \$133.9 million, with \$141.1 million in forecast changes partially offset by \$7.2 million reduction from non-economic factors. GF-S revenue is now forecasted to total \$37,430.8 million in the 2015-17 biennium, \$40,251.6 million in the 2017-19 biennium, and \$43,574.9 million in the 2019-21 biennium.

*GF-S forecast (\$millions):*

2015-17:  
\$37,431

2017-19:  
\$40,252

2019-21:  
\$43,575

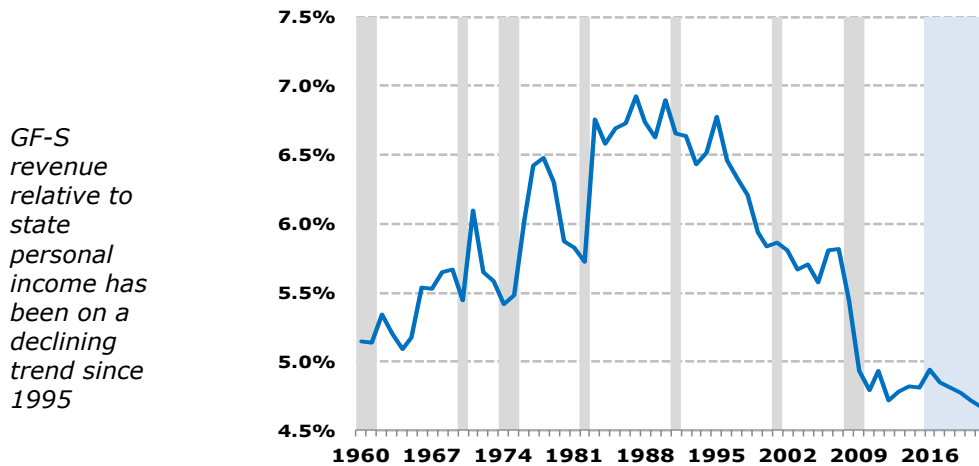
**Table 3.1: Revisions to the General Fund-State Forecast (cash basis, millions of dollars)**

	<b>2015-17 Biennium</b>	<b>2017-19 Biennium</b>	<b>2019-21 Biennium</b>
Collection Experience	\$217.9	NA	NA
Non-Economic Change	(\$4.6)	(\$7.8)	(\$7.2)
Forecast Change	\$80.2	\$134.2	\$141.1
<b>Total Change</b>	<b>\$293.5</b>	<b>\$126.4</b>	<b>\$133.9</b>

*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 4.67% of personal income.

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



Source: ERFC, data through fiscal year 2015

*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

*Collections were \$218 million (3.8%) more than the February 2016 forecast*

Revenue collections from the Department of Revenue (DOR), Department of Licensing, and Administrative Office of the Courts are tracked monthly. In the period since the February forecast, total revenue from the above sources came in \$217.9 million (3.8%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$111.4 million (2.6%) above the forecast. Revenue from other DOR tax sources was \$105.2 million (7.5%) above the forecast.

*Real estate excise taxes once again came in higher than forecasted*

Most of the positive variance in non-Revenue Act DOR taxes came from real estate excise taxes (REET), which came in \$70.3 million (33.2%) higher than forecasted. Property tax receipts came in \$9.4 million (1.0%) higher than forecasted. Cigarette tax receipts came in \$4.8 million (4.2%) higher than forecasted and liquor sales and liter tax receipts came in \$4.0 million (5.7%) higher than forecasted. Transfers of unclaimed property into the GF-S were \$1.7 million higher than forecasted. All other DOR revenue sources came in \$15.0 million (23.3%) higher than forecasted. Revenue from the Department of Licensing was \$0.3 million (4.1%) higher than forecasted and revenue from the

Administrative Office of the Courts was \$1.0 million (3.7%) higher than forecasted.

**Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the February 2016 forecast, cash basis, millions of dollars)**

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$111.4	2.6%
Non Revenue Act	\$105.2	7.5%
Subtotal	\$216.7	3.8%
Department of Licensing		
Administrative Office of the Courts	\$0.3	4.1%
	\$1.0	3.7%
<b>Total*</b>	<b>\$217.9</b>	<b>3.8%</b>

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

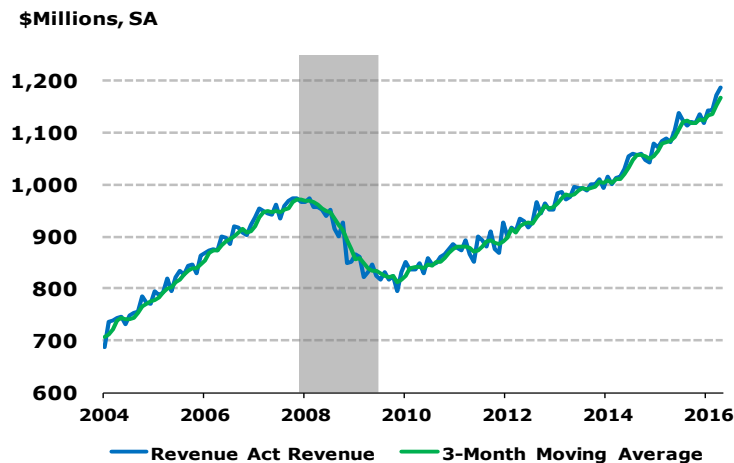
Source: ERFC; Period: February 11 - June 10, 2016

*Adjusted Revenue Act collections were up 9.5% year over year in the most recent collection period and up 9.4% 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 figure, collections have been very strong for the last two collection periods. Adjusted for large one-time audit payments and refunds, year-over-year growth was 9.5% in the

**Figure 3.2: Revenue Act Collections\***

*Growth in seasonally adjusted Revenue Act collections accelerated in the first quarter*



Source: ERFC; Data through June 10, 2016 preliminary allocation

\*Adjusted for large payments/refunds and payment pattern change

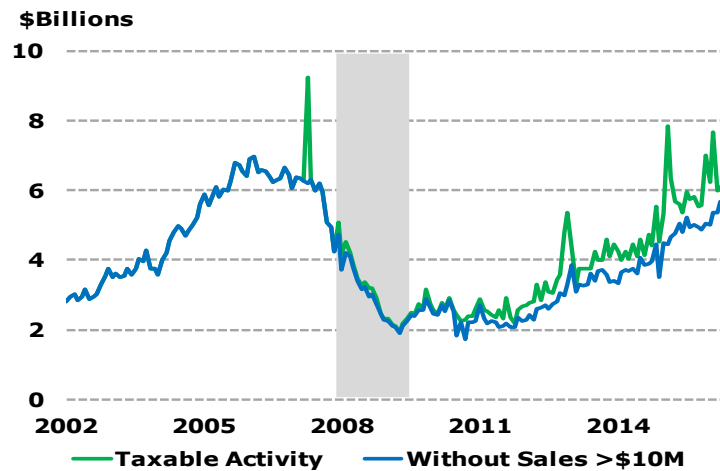
May 11 – June 10, 2016 collection period and 9.4% in the previous period. The increased collections in the April 11 – May 10 period boosted adjusted year-over-year growth in collections representing first quarter 2016 activity (February 11 – May 10<sup>th</sup> collections) to 7.6%. Collections growth for adjusted fourth quarter 2015 activity (November 11, 2015 – February 10, 2016 collections) was 6.7%. Collections growth for third quarter 2015 activity (August 11 - November 10 collections) was 5.5%.

*Sales of large commercial properties spiked after the February forecast*

Much 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 \$3.3 billion in the four months since the last forecast. Large commercial sales have been responsible for much of the increase in taxable activity since November 2012, creating many spikes in activity, many representing transfers of controlling interest during corporate mergers (see Figure 3.3). As can be seen in the figure, however, residential sales and smaller commercial sales also accelerated unexpectedly after the February forecast. The increase in taxable activity stemmed mostly from increased sale prices rather than an increased number of sales.

**Figure 3.3: Taxable Real Estate Excise Activity, SA**

*Large commercial sales have caused spikes in activity since November 2012*



Source: ERFC; data through January 2016

### Non-economic Changes to the Forecast

*Non-economic forecast changes were slight*

A small number of bills passed in the 2016 regular and special sessions had impacts on expected revenue. This legislation is enumerated in Table 3.19. The total impact of the legislation was relatively small, amounting to forecasted reductions of less than \$10 million per biennium. In addition to the legislative changes, a \$3.3 million legal settlement awarded to the state, which was channeled through the Attorney General’s office, was also classified as a non-economic forecast change for FY 2016.

## Revenue Forecasts by Source

### Department of Revenue

*Taxes collected by DOR are most of GF-S taxes*

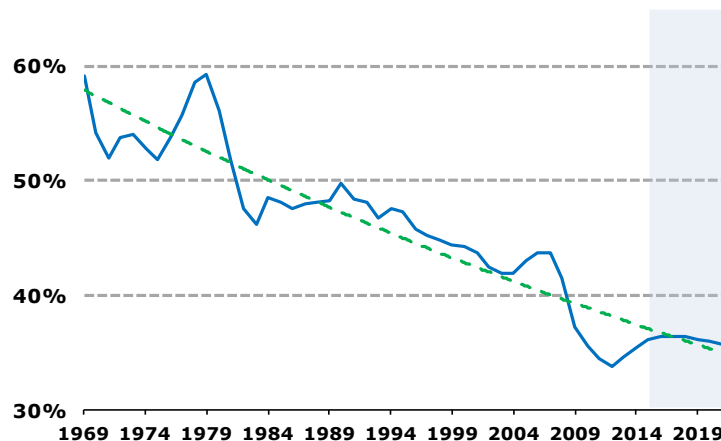
The Department of Revenue (DOR) collects and administers the majority of Washington’s GF-S revenue, accounting for 95% of total GF-S revenue in FY 2015. The largest tax sources administered by the DOR are the retail sales tax, business and occupation tax, property tax, use tax, cigarette tax and real 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 36.3% 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 37.2% in FY 2016. The share is then expected to continuously decline through FY 2021, reaching 35.9% 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: 7.9%  
FY17: 3.9%  
FY18: 4.5%  
FY19: 4.5%*

The growth rate of taxable retail activity improved from 4.1% in FY 2012 to 6.7% in FY 2013, due mainly to increasing construction activity. Continued growth in construction, along with the newly-revoked sales tax exemption on wired home phone lines, brought growth in taxable activity of 6.4% in FY 2014. 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 7.1% due to slower growth in construction and auto sales. Growth dips to 3.4% in FY 2017 due to the relatively elevated level of FY 2016 activity. Growth then returns to 4.6% 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 7.9%. Growth is forecasted at 3.9% in FY 2017, 4.5% in FY 2018 and 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: 7.1%  
FY17: 3.7%  
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 4.1%. Growth in FY 2016 is forecasted at 7.1%, due largely to legislative changes from the 2015 session. Growth is then forecasted to decrease to 3.7% in FY 2017, 5.3% in FY 2018 and FY 2019, 4.4% in FY 2020 and 4.1% 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: 2.2%  
FY17: 2.3%  
FY18: 2.6%  
FY19: 2.6%*

Property tax collections grew by 2.3% in FY 2015. Second quarter 2015 year-over-year inflation of less than 1% restrained the growth rate of the calendar year 2016 levy, keeping forecasted collections growth at 2.2% in FY 2016. Forecasted inflation of over 1% in the second quarter of 2016 plus forecasted increases in the level of new construction boosts growth to 2.3% in FY 2017 and 2.6% in FY 2018. Growth is expected to remain at 2.6% in FY 2019 and FY 2020 with growth of 2.5% in 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.

*REET growth forecast:*

*FY16: 18.1%  
FY17: -13.5%  
FY18: 1.7%  
FY19: 3.2%*

Due to a high number of large sales of commercial property, REET receipts grew by 34.0% in FY 2013. FY 2014 receipts were also boosted by large commercial sales, resulting in growth of 15.2%. Even higher commercial sales coupled with strengthening residential sales boosted FY 2015 growth to 20.4%. Further strengthening in residential sales along with continued strength in commercial sales is expected to allow FY 2016 sales to grow another 18.1%. Commercial sales are expected to decline to more normal levels in FY 2017, resulting in a 13.5% decrease in collections despite continued but slowing residential sales growth. Growth is forecasted at 1.7% in FY 2018, 3.2% in FY 2019 and 3.3% 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 4<sup>th</sup> quarter of 2013. Despite a reduction in collections from the manufacturing sector,



increases in construction and used vehicle sales brought growth to 6.4% in FY 2015. An expected large audit payment plus the legislated elimination of certain tax exemptions is expected to boost growth to 8.9% 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 5.1% in FY 2018, 4.7% in FY 2019, 4.0% 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: -1.6%  
FY17: -2.8%  
FY18: -3.1%  
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 2015 legislative session, collections are expected to decrease by 1.6% in FY 2016 and 2.8% in FY 2017. Collections are then forecasted to decline by 3.1% in FY 2018, 2.6% in FY 2019, 2.9% in FY 2020 and 2.3% 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: 5.0%  
FY17: 3.6%  
FY18: 5.4%  
FY19: 4.6%*

Public utility tax receipts decreased by 3.2% 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 5.0% in FY 2016. FY 2017 growth then slows to 3.6% from FY 2016's elevated level. Other increases in projected utility prices bring expected growth of 5.4% in FY 2018, slowing to 4.6% in FY 2019, 3.8% in FY 2020 and 4.0% 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 2015 forecast publication. Subsequent to the June 2015 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: \$3.1  
17-19: \$0.4  
19-21: -\$0.2

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 \$136.2 million, \$3.1 million more than forecasted in February. GF-S distributions are forecasted at \$224.3 million in the 2017-19 biennium, an increase of \$0.4 million from the February forecast, and \$263.5 million in the 2019-21 biennium, a decrease of \$0.2 million. 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: -\$0.6  
17-19: -\$0.1  
19-21: -\$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 decreased \$0.6 million to \$36.3 million and the forecast of revenue for the 2017-19 biennium has been decreased \$0.1 million to \$37.0 million. The department's forecast of revenue for the 2019-21 biennium has been decreased \$0.1 million to \$36.9 million.

## The Office of Financial Management (Other Agencies)

*Forecast change by biennium (millions):*

15-17: \$6.9  
17-19: \$5.1  
19-21: \$3.1

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 \$6.9 million to \$221.3 million; \$3.3 million of the

forecast increase stemmed from a settlement payment from a consumer protection lawsuit which was transferred to the GF-S via the Attorney General's office. The forecast for the 2017-19 biennium was increased \$5.1 million to \$209.0 million and the forecast for the 2019-21 biennium was increased \$3.1 million to \$198.3 million. The bulk of the forecast increases came from increased payments from public facilities districts and decreased distributions of Public Utility District taxes.

## State Treasurer

*Forecast  
change by  
biennium  
(millions):*

15-17: \$0.1  
17-19: -\$23.5  
19-21: -\$5.5

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 \$0.1 million to \$12.8 million. The forecast for the 2017-19 biennium has been decreased \$23.5 million to \$30.8 million and the forecast for the 2019-21 biennium was decreased \$5.5 million to \$62.0 million. Forecast decreases in the 2017-19 and 2019-21 biennia were due to lower expected interest rates.

## Insurance Commissioner

*Forecast  
change by  
biennium  
(millions):*

15-17: -\$43.5  
17-19: -\$29.3  
19-21: -\$22.1

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 decreased \$43.5 million to \$1,054.2 million due mainly to forecasted reductions in taxes paid on health insurance. The forecast for the 2017-19 biennium has been decreased \$29.3 million to \$1,154.8 million and the forecast for the 2019-21 biennium has been decreased \$22.1 million to \$1,256.3 million, also mainly due to reduced health insurance tax payments.

## Liquor and Cannabis Board

*Forecast  
change by  
biennium  
(millions):*

15-17: \$7.5  
17-19: \$0.8  
19-21: -\$1.0

The 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 sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis discussed previously. The forecast of LCB GF-S revenue for the 2015-17 biennium has been increased \$7.5 million to \$353.6 million. The forecast included a reduction of expected transfers to the GF-S by \$2.3 million due to changes in the LCB budget enacted in the first 2016 special legislative session. The forecast of revenue for the 2017-19 biennium has been increased \$0.8 million to \$463.0 million and the forecast for the 2019-21 biennium has been reduced \$1.0 million to \$517.2 million.

## Lottery Commission

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

15-17: *-\$3.1*  
17-19: *-\$2.3*  
19-21: *-\$0.3*

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. The forecast of transfers into the GF-S for the 2015-17 biennium has been decreased \$3.1 million to \$28.9 million. Forecasted transfers for the 2017-19 biennium have been decreased \$2.3 million to \$34.1 million and forecasted transfers to the GF-S for the 2019-21 biennium have been reduced \$0.3 million to \$44.1 million.

*OPA forecast  
change by  
biennium  
(millions):*

15-17: *-\$2.5*  
17-19: *-\$1.9*  
19-21: *-\$3.8*

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The forecast of OPA revenue for the 2015-17 biennium has been increased \$2.0 million to \$264.8 million. The forecast for the 2017-19 biennium has been increased \$1.0 million to \$254.0 million and the forecast for the 2019-21 biennium has been decreased \$3.8 million to \$251.9 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 of transfers to the GF-S for the 2015-17 biennium has been decreased \$1.1 million to \$158.6 million and the forecast for the 2017-19 biennium has been decreased \$5.0 million to \$161.2 million. The forecast of transfers for the 2019-21 biennium has been decreased \$5.4 million to \$168.2 million.

## Track Record for the 2015-17 Biennium

*The June 2016  
forecast is \$1.9  
billion (5.4%)  
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 June 2016 forecast for the biennium is \$1.91 billion (5.4%) higher than the initial forecast. Non-economic changes have increased the forecast by \$499 million (1.4%). Excluding non-economic changes, the current forecast is \$1.41 billion (4.0%) 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 June 2016 forecast is \$479 million (1.3%) higher than that sum.

## Track Record for the 2017-19 Biennium

*The June 2016 forecast is \$1.5 billion (4.0%) 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 June 2016 forecast is \$1.54 billion (4.0%) higher than the initial forecast. Non-economic changes have increased the forecast by \$399 million (1.0%). Excluding non-economic changes, the current forecast is \$1.14 billion (3.0%) 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 \$1.45 billion at the end of the 2015-17 biennium and \$1.49 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 June 2016 revenue forecast and currently enacted budgets, unrestricted GF-S reserves are projected to be \$750.4 million at the end of the 2015-17 biennium and GF-S, ELTA and OPA reserves are

projected to be \$786.5 million. In addition, the Budget Stabilization Account is projected to have a balance of \$700.7 million, bringing total projected GF-S reserves to \$1,451.1 million. Projected combined reserves for the ELTA and OPA are \$36.1 million, for total projected reserves of \$1,487.2 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: +\$1.3  
17-19: +\$3.5

*Pessimistic scenario:*

15-17: -\$1.2  
17-19: -\$3.4

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 \$38,703.4 million in GF-S revenue, \$1,272.7 million (3.4%) more than the baseline scenario, while the pessimistic forecast produces \$36,202.1 million in revenue, \$1,228.6 million (3.3%) less than the baseline. For the 2017-19 biennium, the optimistic forecast generates \$43,733.1 million in GF-S revenue, \$3,481.4 million (8.6%) more than the baseline scenario, while the pessimistic forecast produces \$36,879.3 million in revenue, \$3,372.4 million (8.4%) less than the baseline.

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

*Near General Fund Forecast (millions):*

2015-17:  
\$37,880.9

2017-19:  
\$40,764.4

2019-21:  
\$43,927.7

“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 Near General Fund forecast for the 2015-17 biennium is \$37,880.9 million, \$306.2 million more than the February 2016 forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$40,764.4 million, \$125.6 million more than the February forecast, and the forecast for the 2019-21 biennium is \$43,927.7 million, \$131.2 million more than the February forecast. The Near General Fund forecast and recent history by fiscal year are presented in Table 3.17. The table also includes projected revenue for the OPA and the sum of Near General Fund plus OPA revenues by fiscal year.

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

<b>Biennium</b>	<b>Current Dollars</b>	<b>Percent Change</b>	<b>2009 Chained Dollars</b>	<b>Percent Change</b>
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 <sup>F</sup>	37,137.3	10.3%	33,629.4	8.7%
2017-19 <sup>F</sup>	40,125.3	8.0%	35,170.8	4.6%
2019-21 <sup>F</sup>	43,441.0	8.3%	36,767.6	4.5%

<sup>F</sup> June 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 June 2016 forecast.

Table 3.4  
**Taxable Retail Sales\***  
(millions of dollars)

<b>Fiscal Year</b>	<b>Amount</b>	<b>Percent Change</b>
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 <sup>F</sup>	139,400	7.1%
2017 <sup>F</sup>	144,077	3.4%
2018 <sup>F</sup>	150,717	4.6%
2019 <sup>F</sup>	157,403	4.4%
2020 <sup>F</sup>	164,156	4.3%
2021 <sup>F</sup>	170,726	4.0%

<sup>F</sup> June 2016 forecast  
Source: ERFIC

\* 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)

<b>Forecast by Agency</b>	<b>Feb. 2016 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>June 2016 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$17,893.2	(\$0.3)	\$168.4	\$18,061.3	\$168.1
Business & Occupation	7,371.6	(2.2)	8.0	7,377.3	5.8
Use	1,278.5	0.0	3.5	1,282.0	3.5
Public Utility	826.0	0.0	(6.8)	819.2	(6.8)
Liquor Sales/Liter	506.5	0.0	3.2	509.7	3.2
Cigarette	764.8	0.0	9.1	774.0	9.1
Property (State Levy)	4,136.2	0.0	7.0	4,143.2	7.0
Real Estate Excise	1,515.1	(0.0)	117.7	1,632.8	117.7
Timber Excise	4.2	0.0	0.9	5.1	0.9
Other	941.4	0.1	18.9	960.4	19.0
Subtotal	35,237.6	(2.5)	329.9	35,565.0	327.5
<b>Department of Licensing</b>					
Boat excise, licenses, fees & other	37.0	0.00	(0.6)	36.3	(0.6)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,097.7	0.0	(43.5)	1,054.2	(43.5)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	290.3	(2.3)	9.5	297.5	7.2
Beer & Wine Surtax	55.8	0.0	0.3	56.1	0.3
<b>Lottery Commission</b>					
Lottery Revenue	32.0	0.0	(3.1)	28.9	(3.1)
<b>State Treasurer</b>					
Interest Earnings	12.7	0.0	0.1	12.8	0.1
<b>Office of Financial Management</b>					
Other Agencies	214.4	0.2	6.7	221.3	6.9
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	159.7	0.0	(1.1)	158.6	(1.1)
<b>Total General Fund-State *</b>	<b>\$37,137.3</b>	<b>(\$4.6)</b>	<b>\$298.1</b>	<b>\$37,430.8</b>	<b>\$293.5</b>

<sup>1</sup> Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council February 17, 2016<sup>2</sup> Forecast for the 2015-17 biennium, adopted June 15, 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)

<b>Forecast by Agency</b>	<b>Feb. 2016 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>June 2016 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$17,893.2	(\$0.3)	\$168.4	\$18,061.3	\$168.1
Business & Occupation Use	7,371.6	(2.2)	8.0	7,377.3	5.8
Public Utility	1,278.5	0.0	3.5	1,282.0	3.5
Liquor Sales/Liter	826.0	0.0	(6.8)	819.2	(6.8)
Cigarette	507.7	0.0	2.1	509.7	2.1
Property (State Levy)	764.8	0.0	9.1	774.0	9.1
Real Estate Excise	4,136.2	0.0	7.0	4,143.2	7.0
Timber Excise	1,515.1	(0.0)	117.7	1,632.8	117.7
Other	4.1	0.0	1.0	5.1	1.0
Subtotal	946.1	0.1	18.2	964.4	18.3
	35,243.4	(2.5)	328.1	35,569.1	325.7
<b>Department of Licensing</b>					
Boat excise, licenses, fees & other	37.0	0.0	(0.6)	36.3	(0.6)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,097.7	0.0	(43.5)	1,054.2	(43.5)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	290.3	(2.3)	9.5	297.5	7.2
Beer & Wine Surtax	55.8	0.0	0.3	56.1	0.3
<b>Lottery Commission</b>					
Lottery Revenue	42.0	0.0	0.3	42.3	0.3
<b>State Treasurer</b>					
Interest Earnings	12.6	0.0	0.3	12.9	0.3
<b>Office of Financial Management</b>					
Other	214.4	0.2	6.7	221.3	6.9
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	159.7	0.0	(1.1)	158.6	(1.1)
<b>Total General Fund-State *</b>	<b>\$37,153.0</b>	<b>(\$4.6)</b>	<b>\$299.9</b>	<b>\$37,448.4</b>	<b>\$295.3</b>

<sup>1</sup> Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council February 17, 2016<sup>2</sup> Forecast for the 2015-17 biennium, adopted June 15, 2016

\*Detail may not add to totals because of rounding.

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

Table 3.7

**Comparison of the General Fund-State forecast by agency**

2017-19 biennium; cash basis

(millions of dollars)

<b>Forecast by Agency</b>	<b>Feb. 2016 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>June 2016 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$19,560.2	(\$1.9)	\$112.0	\$19,670.2	\$110.1
Business & Occupation	8,125.2	(4.9)	(1.4)	8,118.8	(6.4)
Use	1,370.6	0.0	(3.4)	1,367.2	(3.4)
Public Utility	896.5	0.0	2.6	899.1	2.6
Liquor Sales/Liter	527.2	0.0	2.5	529.7	2.5
Cigarette	724.2	0.0	5.3	729.5	5.3
Property (State Levy)	4,327.9	0.0	23.7	4,351.6	23.7
Real Estate Excise	1,516.5	0.0	48.4	1,564.9	48.4
Timber Excise	4.6	0.0	0.3	4.9	0.3
Other	928.4	0.2	(2.7)	925.9	(2.5)
Subtotal	37,981.2	(6.6)	187.1	38,161.7	180.5
<b>Department of Licensing</b>					
Boat excise, licenses, fees & other	37.1	0.0	(0.1)	37.0	(0.1)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,184.1	0.0	(29.3)	1,154.8	(29.3)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	406.4	0.0	0.8	407.2	0.8
Beer & Wine Surtax	55.8	0.0	0.1	55.8	0.1
<b>Lottery Commission</b>					
Lottery Revenue	36.3	0.0	(2.3)	34.1	(2.3)
<b>State Treasurer</b>					
Interest Earnings	54.2	0.0	(23.5)	30.8	(23.5)
<b>Office of Financial Management</b>					
Other	203.9	(1.2)	6.3	209.0	5.1
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	166.2	0.0	(5.0)	161.2	(5.0)
<b>Total General Fund-State *</b>	<b>\$40,125.3</b>	<b>(\$7.8)</b>	<b>\$134.1</b>	<b>\$40,251.6</b>	<b>\$126.4</b>

<sup>1</sup> Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council February 17, 2016<sup>2</sup> Forecast for the 2017-19 biennium, adopted June 15, 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)

<b>Forecast by Agency</b>	<b>Feb. 2016 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>June 2016 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$19,560.2	(\$1.9)	\$112.0	\$19,670.2	\$110.1
Business & Occupation	8,125.2	(4.9)	(1.4)	8,118.8	(6.4)
Use	1,370.6	0.0	(3.4)	1,367.2	(3.4)
Public Utility	896.5	0.0	2.6	899.1	2.6
Liquor Sales/Liter	527.2	0.0	2.5	529.7	2.5
Cigarette	724.2	0.0	5.3	729.5	5.3
Property (State Levy)	4,327.9	0.0	23.7	4,351.6	23.7
Real Estate Excise	1,516.5	0.0	48.4	1,564.9	48.4
Timber Excise	4.5	0.0	0.4	5.0	0.4
Other	928.4	0.2	(2.7)	925.9	(2.5)
Subtotal	37,981.1	(6.6)	187.3	38,161.8	180.7
<b>Department of Licensing</b>					
Boat excise, licenses, fees & other	37.1	0.0	(0.1)	37.0	(0.1)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,184.1	0.0	(29.3)	1,154.8	(29.3)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	406.4	0.0	0.8	407.2	0.8
Beer & Wine Surtax	55.8	0.0	0.1	55.8	0.1
<b>Lottery Commission</b>					
Lottery Revenue	37.3	0.0	(0.7)	36.7	(0.7)
<b>State Treasurer</b>					
Interest Earnings	56.3	0.0	(24.1)	32.3	(24.1)
<b>Office of Financial Management</b>					
Other	203.9	(1.2)	6.3	209.0	5.1
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	166.2	0.0	(5.0)	161.2	(5.0)
<b>Total General Fund-State *</b>	<b>\$40,128.3</b>	<b>(\$7.8)</b>	<b>\$135.3</b>	<b>\$40,255.8</b>	<b>\$127.5</b>

<sup>1</sup> Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council February 17, 2016<sup>2</sup> Forecast for the 2017-19 biennium, adopted June 15, 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

**June 2016 General Fund-State History and Forecast  
2015-17 to 2019-21 biennia; cash basis**  
(Millions of Dollars)

<b>Forecast by Source</b>	<b>Fiscal 2016</b>	<b>Fiscal 2017</b>	<b>2015-17 Biennium</b>	<b>Fiscal 2018</b>	<b>Fiscal 2019</b>	<b>2017-19 Biennium</b>	<b>Fiscal 2020</b>	<b>Fiscal 2021</b>	<b>2019-21 Biennium</b>
<b>State Taxes</b>									
Retail sales**	\$8,859.4	\$9,201.9	\$18,061.3	\$9,619.4	\$10,050.8	\$19,670.2	\$10,490.7	\$10,920.6	\$21,411.4
Business & occupation	3,622.5	3,754.9	7,377.3	3,954.6	4,164.3	8,118.8	4,382.7	4,598.2	8,980.9
Use**	646.3	635.7	1,282.0	668.0	699.1	1,367.2	727.3	755.7	1,482.9
Public Utility	402.3	416.9	819.2	439.3	459.7	899.1	477.0	496.3	973.4
Liquor sales/liter	252.6	257.1	509.7	262.0	267.7	529.7	273.4	278.8	552.2
Beer & wine surtax	28.3	27.8	56.1	27.9	27.9	55.8	28.0	28.0	56.0
Cigarette	401.3	389.7	791.1	377.8	368.3	746.1	357.9	349.7	707.6
Tobacco products	50.4	48.1	98.5	48.6	49.0	97.6	49.4	49.8	99.2
Cannabis Excise Taxes	50.6	80.5	131.1	102.6	117.3	219.8	126.3	132.7	259.0
Property (state school levy)	2,048.3	2,094.9	4,143.2	2,148.4	2,203.2	4,351.6	2,260.3	2,317.3	4,577.7
Leasehold Excise Tax	32.5	30.0	62.5	30.2	30.6	60.8	31.0	31.4	62.4
Public utility district	45.6	49.8	95.4	51.3	52.6	103.9	53.8	54.9	108.7
Brokered Natural Gas	21.7	20.8	42.5	20.9	21.3	42.2	21.8	22.4	44.2
Real estate excise***	875.3	757.5	1,632.8	770.3	794.6	1,564.9	821.2	848.0	1,669.1
Timber excise	2.8	2.2	5.1	2.4	2.5	4.9	2.5	2.6	5.1
Estate/inheritance	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Boat excise	12.8	13.2	26.1	13.2	13.2	26.4	13.2	13.2	26.4
Insurance premiums	512.8	541.3	1,054.2	564.0	590.8	1,154.8	616.2	640.1	1,256.3
Penalties and interest on past due taxes	177.8	144.3	322.1	149.8	155.6	305.4	161.6	167.9	329.5
Other	57.4	57.2	114.6	58.4	37.6	96.0	38.3	39.0	77.3
<b>Total Taxes</b>	<b>18,101.1</b>	<b>18,523.9</b>	<b>36,625.1</b>	<b>19,309.1</b>	<b>20,106.1</b>	<b>39,415.2</b>	<b>20,932.6</b>	<b>21,746.7</b>	<b>42,679.4</b>
<b>State Non-Tax Sources</b>									
Licenses, permits, fees	142.5	142.1	284.6	144.4	147.7	292.1	149.4	150.6	300.0
Liquor & Cannabis fees	77.9	88.6	166.4	91.7	95.7	187.3	99.3	103.0	202.2
Earnings on investments	7.6	5.2	12.8	8.6	22.2	30.8	30.9	31.1	62.0
Administrative Office of the Courts	80.8	77.8	158.6	79.5	81.7	161.2	83.3	84.9	168.2
Transfers of unclaimed property	75.1	64.1	139.1	65.3	66.4	131.7	67.3	68.2	135.5
Other revenue & transfers	28.8	15.2	44.1	13.3	20.0	33.4	14.6	13.1	27.7
<b>Total Non-Tax</b>	<b>412.7</b>	<b>393.1</b>	<b>805.7</b>	<b>402.9</b>	<b>433.6</b>	<b>836.4</b>	<b>444.7</b>	<b>450.9</b>	<b>895.6</b>
<b>Total General Fund-State *</b>	<b>\$18,513.8</b>	<b>\$18,917.0</b>	<b>\$37,430.8</b>	<b>\$19,712.0</b>	<b>\$20,539.7</b>	<b>\$40,251.6</b>	<b>\$21,377.3</b>	<b>\$22,197.6</b>	<b>\$43,574.9</b>

\* 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 June 2016

Cash Basis - Millions of Dollars

<b><u>Date of Forecast</u></b>	<b><u>Department of Revenue*</u></b>	<b><u>Other Agencies</u></b>	<b><u>Subtotal*</u></b>	<b><u>Non-Economic Changes**</u></b>	<b><u>Total Change</u></b>	<b><u>Total General Fund-State Cash Basis</u></b>
<b>September 2012<sup>#</sup></b>	\$34,102	\$1,416				\$35,518
<b>Changes to Forecast</b>						
November 2012	(196)	33	(163)	0	(163)	35,355
March 2013	(92)	44	(49)	0	(49)	35,306
June 2013	56	2	58	(7) <sup>#1</sup>	51	35,357
September 2013	95	(2)	93	249 <sup>#2</sup>	342	35,699
November 2013	(47)	3	(44)	(41) <sup>#3</sup>	(85)	35,615
February 2014	5	26	31	51 <sup>#4</sup>	82	35,697
June 2014	194	40	233	5 <sup>#5</sup>	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 <sup>#6</sup>	309	36,758
September 2015	80	60	139	193 <sup>#7</sup>	333	37,091
November 2015	107	(8)	99	15 <sup>#8</sup>	113	37,204
February 2016	(101)	33	(67)	0	(67)	37,137
June 2016	330	(32)	298	(5) <sup>#9</sup>	294	37,431
<b>Total change***:</b>						
From September 2012	1,146	267	1,413	499	1,912	
Percent change	3.4	18.9	4.0	1.4	5.4	

\* 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.

<sup>#</sup> 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&amp;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

#9 Legislative and budget-driven revenue changes from the 2016 regular and first special legislative sessions plus \$3.3 million AG settlement

Table 3.11

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

February 2014 through June 2016

Cash Basis - Millions of Dollars

<b><u>Date of Forecast</u></b>	<b><u>Department of Revenue*</u></b>	<b><u>Other Agencies</u></b>	<b><u>Subtotal*</u></b>	<b><u>Non-Economic Changes**</u></b>	<b><u>Total Change</u></b>	<b><u>Total General Fund-State Cash Basis#</u></b>
<b>February 2014<sup>##</sup></b>	\$36,887	\$1,823				\$38,710
<b>Changes to Forecast</b>						
June 2014	265	50	315	(1) <sup>#1</sup>	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 <sup>#2</sup>	443	40,200
September 2015	4	47	52	286 <sup>#3</sup>	338	40,538
November 2015	35	(5)	30	0	30	40,567
February 2016	(449)	7	(442)	0	(442)	40,125
June 2016	188	(53)	135	(9) <sup>#4</sup>	126	40,252
<b>Total change***:</b>						
From February 2014	1,043	101	1,144	398	1,542	
Percent change	2.8	5.5	3.0	1.0	4.0	

\* 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

#4 Legislative revenue changes from the 2016 regular and first 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
<b>RESOURCES</b>			
<b>Beginning Fund Balance</b>	<b>990.9</b>	<b>20.3</b>	<b>1,011.2</b>
February 2016 Revenue Forecast	37,137.3	700.2	37,837.4
June 2016 Change	298.1	14.7	312.7
<b>Current Revenue Totals</b>	<b>37,435.3</b>	<b>714.8</b>	<b>38,150.168</b>
Transfer to Budget Stabilization Account (BSA)	(372.3)	-	(372.3)
Extraordinary Revenue Growth transfer to BSA	(63.5)	-	(63.5)
Extraordinary Revenue Transfer back from BSA	63.5	-	63.5
Previously Enacted Fund Transfers	178.0	-	178.0
Prior Period Adjustments	40.8	-	40.8
<b>2016 Legislative Session</b>			
Fund transfers	29.4	-	29.4
AG Lawsuit Settlements-Consumer protection	3.3	-	3.3
Legislation	(2.5)	-	(2.5)
Budget driven revenue	40.7	0.1	40.8
Impact of Governor's Vetoes and Lapses	(46.1)	-	(46.1)
<b>Total Resources (including beginning fund balance)</b>	<b>38,297.6</b>	<b>735.2</b>	<b>39,032.8</b>
<b>EXPENDITURES</b>			
Enacted 2015-17 Budget	37,507.3	711.9	38,219.2
2016 Supplemental Budget	203.7	(12.8)	190.9
Governor Vetoes	43.5	-	43.5
Assumed Reversions	(207.2)	-	(207.2)
<b>Total Expenditures</b>	<b>37,547.2</b>	<b>699.1</b>	<b>38,246.310</b>
<b>RESERVES</b>			
<b>Projected Ending GFS, ELTA &amp; OPA Balances</b>	<b>750.4</b>	<b>36.1</b>	<b>786.5</b>
<b>Budget Stabilization Account</b>			
Budget Stabilization Account Beginning Balance	513.1	-	513.1
Transfer from General Fund and Interest Earnings	440.7	-	440.7
Appropriation for fires	(189.5)	-	(189.5)
Transfer to General Fund (Extraordinary Revenue)	(63.5)	-	(63.5)
<b>Projected Budget Stabilization Account Ending Balance</b>	<b>700.7</b>	<b>-</b>	<b>700.7</b>
<b>Total Reserves (Including Budget Stabilization)</b>	<b>1,451.1</b>	<b>36.1</b>	<b>1,487.2</b>



Table 3.13

**Alternative Forecasts Compared to the Baseline Forecast  
2015-17 biennium**

(cash basis, millions of dollars)

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$18,815.3	\$18,061.3	\$17,340.5
Business & Occupation Use	7,677.7	7,377.3	7,096.1
Public Utility	1,336.9	1,282.0	1,224.5
Property (school levy)	850.8	819.2	787.9
Real Estate Excise	4,146.2	4,143.2	4,140.2
Other	1,668.6	1,632.8	1,571.7
Subtotal	2,282.8	2,249.2	2,231.7
	36,778.4	35,565.0	34,392.7
<b>Department of Licensing</b>			
	37.1	36.3	35.6
<b>Insurance Commissioner<sup>1</sup></b>			
	1,081.2	1,054.2	1,027.1
<b>Lottery Commission</b>			
	30.3	28.9	27.5
<b>State Treasurer - Interest earnings</b>			
	20.8	12.8	5.6
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>			
	366.9	353.6	341.5
<b>Office of Financial Management</b>			
Other agencies	227.8	221.3	214.8
<b>Administrative Office of the Courts</b>			
Fines and Forfeitures	161.0	158.6	157.4
<b>Total General Fund - State*</b>	<b>\$38,703.4</b>	<b>\$37,430.8</b>	<b>\$36,202.1</b>
<b>Difference from June 2016 Baseline</b>	<b>\$1,272.7</b>		<b>(\$1,228.6)</b>

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)

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$21,704.7	\$19,670.2	\$17,763.5
Business & Occupation Use	8,895.5	8,118.8	7,395.5
Public Utility	1,492.0	1,367.2	1,236.7
Property (school levy)	967.7	899.1	847.8
Real Estate Excise	4,369.3	4,351.6	4,333.5
Other	1,833.5	1,564.9	1,212.5
Subtotal	2,243.9	2,190.0	2,118.2
	41,506.6	38,161.7	34,907.8
<b>Department of Licensing</b>			
	37.8	37.0	36.3
<b>Insurance Commissioner<sup>1</sup></b>			
	1,213.1	1,154.8	1,096.5
<b>Lottery Commission</b>			
	35.8	34.1	32.4
<b>State Treasurer - Interest earnings</b>			
	61.3	30.8	8.2
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>			
	488.3	463.0	443.7
<b>Office of Financial Management</b>			
Other agencies	219.4	209.0	198.5
<b>Administrative Office of the Courts</b>			
Fines and Forfeitures	170.7	161.2	155.9
<b>Total General Fund - State*</b>	<b>\$43,733.1</b>	<b>\$40,251.6</b>	<b>\$36,879.3</b>
<b>Difference from June 2016 Baseline</b>	<b>\$3,481.4</b>		<b>(\$3,372.4)</b>

1 Insurance premiums, General Fund-State portion.

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

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

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

Table 3.15

**Lottery Transfers by Fund**

June 2016 Forecast

(cash basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>General Fund</b>	<b>Mariners Stadium</b>	<b>Exhibition Center &amp; Stadium</b>	<b>Student Achievement Account</b>	<b>School Construction Account</b>	<b>Problem Gambling Account</b>	<b>Economic Development Account</b>	<b>Opportunity Pathways Account</b>	<b>Veteran's VIP Account</b>	<b>Education Legacy Trust Account</b>
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	171.7	17.8	0.0	11.7	0.0	0.0	0.4	3.9	137.9	0.0	0.0
2017	154.8	11.1	0.0	12.2	0.0	0.0	0.3	3.8	126.9	0.0	0.0
2015-17 Biennium	326.5	28.9	0.0	23.8	0.0	0.0	0.7	7.7	264.8	0.0	0.0
2018	160.1	14.7	0.0	12.6	0.0	0.0	0.3	3.8	128.1	0.0	0.0
2019	163.0	19.3	0.0	13.1	0.0	0.0	0.3	3.8	125.9	0.0	0.0
2017-19 Biennium	323.1	34.1	0.0	25.8	0.0	0.0	0.7	7.6	254.0	0.0	0.0
2020	165.6	21.4	0.0	13.7	0.0	0.0	0.3	3.8	125.9	0.0	0.0
2021	167.5	22.7	0.0	14.2	0.0	0.0	0.3	3.8	125.9	0.0	0.0
2019-21 Biennium	333.1	44.1	0.0	27.9	0.0	0.0	0.7	7.6	251.9	0.0	0.0

Table 3.16

**Lottery Transfers by Fund**

June 2016 Forecast

(GAAP basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>General Fund</b>	<b>Mariners Stadium</b>	<b>Exhibition Center &amp; Stadium</b>	<b>Student Achievement Account</b>	<b>School Construction Account</b>	<b>Problem Gambling Account</b>	<b>Economic Development Account</b>	<b>Opportunity Pathways Account</b>	<b>Veteran's VIP Account</b>	<b>Education Legacy Trust Account</b>
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	172.5	28.6	0.0	11.7	0.0	0.0	0.3	3.0	128.4	0.0	0.0
2017	157.0	13.8	0.0	12.2	0.0	0.0	0.3	3.8	126.4	0.0	0.0
2015-17 Biennium	329.5	42.3	0.0	23.8	0.0	0.0	0.7	6.8	254.8	0.0	0.0
2018	160.4	17.3	0.0	12.6	0.0	0.0	0.3	3.8	125.8	0.0	0.0
2019	163.0	19.3	0.0	13.1	0.0	0.0	0.3	3.8	125.9	0.0	0.0
2017-19 Biennium	323.4	36.7	0.0	25.8	0.0	0.0	0.7	7.6	251.7	0.0	0.0
2020	165.6	21.4	0.0	13.7	0.0	0.0	0.3	3.8	125.9	0.0	0.0
2021	167.8	22.7	0.0	14.2	0.0	0.0	0.3	3.8	126.2	0.0	0.0
2019-21 Biennium	333.4	44.1	0.0	27.9	0.0	0.0	0.7	7.6	252.1	0.0	0.0

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

Source: Lottery Commission, ERFC

Table 3.17

**General Fund-State, Education Legacy Trust Account and Opportunity Pathways Account**

History and Forecast by Fiscal Year (Cash basis)

June 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	\$18,514	7.1%	\$213	2.7%	\$18,727	7.1%	\$138	14.7%	\$18,865	7.1%
FY 2017	\$18,917	2.2%	\$237	11.5%	\$19,154	2.3%	\$127	-8.0%	\$19,281	2.2%
FY 2018	\$19,712	4.2%	\$243	2.2%	\$19,955	4.2%	\$128	1.0%	\$20,083	4.2%
FY 2019	\$20,540	4.2%	\$270	11.4%	\$20,810	4.3%	\$126	-1.7%	\$20,936	4.2%
FY 2020	\$21,377	4.1%	\$175	-35.4%	\$21,552	3.6%	\$126	0.0%	\$21,678	3.5%
FY 2021	\$22,198	3.8%	\$178	2.1%	\$22,376	3.8%	\$126	0.0%	\$22,502	3.8%
<b>Biennial Totals</b>										
<b>05-07 Biennium</b>	<b>\$29,785</b>	<b>17.3%</b>	<b>\$381</b>	<b>NA</b>	<b>\$30,166</b>	<b>18.8%</b>	<b>\$0</b>	<b>NA</b>	<b>\$30,166</b>	<b>18.8%</b>
<b>07-09 Biennium</b>	<b>\$29,817</b>	<b>0.1%</b>	<b>\$437</b>	<b>14.8%</b>	<b>\$30,254</b>	<b>0.3%</b>	<b>\$0</b>	<b>NA</b>	<b>\$30,254</b>	<b>0.3%</b>
<b>09-11 Biennium</b>	<b>\$28,218</b>	<b>-5.4%</b>	<b>\$269</b>	<b>-38.5%</b>	<b>\$28,487</b>	<b>-5.8%</b>	<b>\$99</b>	<b>NA</b>	<b>\$28,586</b>	<b>-5.5%</b>
<b>11-13 Biennium</b>	<b>\$30,657</b>	<b>8.6%</b>	<b>\$215</b>	<b>-19.9%</b>	<b>\$30,872</b>	<b>8.4%</b>	<b>\$244</b>	<b>145.2%</b>	<b>\$31,116</b>	<b>8.8%</b>
<b>13-15 Biennium</b>	<b>\$33,666</b>	<b>9.8%</b>	<b>\$405</b>	<b>88.0%</b>	<b>\$34,071</b>	<b>10.4%</b>	<b>\$234</b>	<b>-4.1%</b>	<b>\$34,305</b>	<b>10.2%</b>
<b>15-17 Biennium</b>	<b>\$37,431</b>	<b>11.2%</b>	<b>\$450</b>	<b>11.2%</b>	<b>\$37,881</b>	<b>11.2%</b>	<b>\$265</b>	<b>13.2%</b>	<b>\$38,146</b>	<b>11.2%</b>
<b>17-19 Biennium</b>	<b>\$40,252</b>	<b>7.5%</b>	<b>\$513</b>	<b>13.9%</b>	<b>\$40,764</b>	<b>7.6%</b>	<b>\$254</b>	<b>-4.1%</b>	<b>\$41,018</b>	<b>7.5%</b>
<b>19-21 Biennium</b>	<b>\$43,575</b>	<b>8.3%</b>	<b>\$353</b>	<b>-31.2%</b>	<b>\$43,928</b>	<b>7.8%</b>	<b>\$252</b>	<b>-0.8%</b>	<b>\$44,180</b>	<b>7.7%</b>

\*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**  
 June 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							General Fund-State
				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		
2015	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269	
2016	\$168,051	\$8,551	\$159,500	\$12,814	\$7,500	\$345	\$79,750	\$5,351	\$251	\$53,489	
2017	\$272,004	\$9,201	\$262,803	\$27,786	\$7,500	\$345	\$131,401	\$12,520	\$511	\$82,739	
2018	\$330,427	\$9,201	\$321,226	\$27,786	\$9,750	\$1,702	\$160,613	\$16,061	\$511	\$104,803	
2019	\$363,119	\$9,201	\$353,918	\$27,786	\$9,750	\$1,702	\$176,959	\$17,696	\$511	\$119,514	
2020	\$383,254	\$9,201	\$374,053	\$27,786	\$9,750	\$1,702	\$187,026	\$18,703	\$511	\$128,575	
2021	\$397,432	\$9,201	\$388,231	\$27,786	\$9,750	\$1,702	\$194,116	\$19,412	\$511	\$134,955	
<b>Biennial totals</b>											
2013-15	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269	
2015-17	\$440,055	\$17,752	\$422,303	\$40,600	\$15,000	\$690	\$211,151	\$17,871	\$762	\$136,228	
2017-19	\$693,545	\$18,402	\$675,143	\$55,572	\$19,500	\$3,404	\$337,572	\$33,757	\$1,022	\$224,317	
2019-21	\$780,686	\$18,402	\$762,284	\$55,572	\$19,500	\$3,404	\$381,142	\$38,114	\$1,022	\$263,530	

Table 3.19

**Legislation from 2016 regular and first special sessions with General Fund-State and Opportunity Pathways Account revenue impacts**

Millions of dollars

Bill ID	Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	2015-17 Biennium	2017-19 Biennium	2019-21 Biennium
E3SHB 1713	Mental health, chem dependency	-	(1.900)	(2.294)	(2.294)	(1.200)	-	(1.900)	(4.588)	(1.200)
SHB 2539	Real estate tax/inheritance	-	(0.033)	(0.037)	(0.038)	(0.038)	(0.039)	(0.033)	(0.075)	(0.077)
ESHB 2540	Annual tax surveys & reports	-	(0.602)	(0.330)	(0.330)	(0.330)	(0.330)	(0.602)	(0.660)	(0.660)
SSB 5864	Annexed areas/sales & use tax	-	-	-	(2.725)	(2.725)	(2.725)	-	(2.725)	(5.450)
ESSB 6328	Vapor products	-	0.078	0.104	0.104	0.104	0.104	0.078	0.209	0.209
HB 2376	Supplemental Budget - LCB revolving fund changes	(2.852)	(2.548)	-	-	-	-	(5.400)	-	-
<b>Total GF-S Revenue Impact</b>		<b>(2.852)</b>	<b>(5.005)</b>	<b>(2.557)</b>	<b>(5.283)</b>	<b>(4.189)</b>	<b>(2.990)</b>	<b>(7.857)</b>	<b>(7.839)</b>	<b>(7.178)</b>

Bill ID	Description	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	2015-17 Biennium	2017-19 Biennium	2019-21 Biennium
HB 2376	Supplemental Budget - Lottery appropriations	0.043	0.048	-	-	-	-	0.091	-	-
<b>Total Opportunity Pathways Account Revenue Impact</b>		<b>0.043</b>	<b>0.048</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.091</b>	<b>0.000</b>	<b>0.000</b>

Source: Office of Financial Management, June 2016



## 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
<b>Real National Income Accounts (Billions of Chained 2009 Dollars)</b>								
Real Gross Domestic Product	15,961.7	16,348.9	16,639.0	17,022.0	17,396.5	17,761.8	18,152.6	18,533.8
% Ch	2.4	2.4	1.8	2.3	2.2	2.1	2.2	2.1
Real Consumption	10,875.7	11,213.3	11,495.2	11,778.7	12,049.6	12,314.7	12,585.6	12,862.4
% Ch	2.7	3.1	2.5	2.5	2.3	2.2	2.2	2.2
Real Nonresidential Fixed Investment	2,148.3	2,209.3	2,207.7	2,272.8	2,368.0	2,477.5	2,578.3	2,673.3
% Ch	6.2	2.8	-0.1	2.9	4.2	4.6	4.1	3.7
Real Residential Fixed Investment	486.4	529.6	580.0	619.6	652.0	659.6	684.2	697.2
% Ch	1.8	8.9	9.5	6.8	5.2	1.2	3.7	1.9
Real Personal Income	13,467.6	14,026.1	14,410.6	14,754.2	15,139.1	15,546.5	15,958.9	16,361.5
% Ch	3.0	4.1	2.7	2.4	2.6	2.7	2.7	2.5
Real Per Capita Income (\$/Person)	42,156	43,576	44,409	45,102	45,909	46,772	47,638	48,463
% Ch	2.2	3.4	1.9	1.6	1.8	1.9	1.9	1.7
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.091	1.094	1.108	1.128	1.149	1.171	1.194	1.217
% Ch	1.4	0.3	1.2	1.9	1.9	1.9	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.367	2.370	2.403	2.461	2.516	2.573	2.631	2.691
% Ch	1.6	0.1	1.4	2.4	2.2	2.3	2.3	2.3
Employment Cost Index (Dec. 2005=1.0)	1.206	1.233	1.264	1.302	1.342	1.385	1.429	1.474
% Ch	2.0	2.3	2.5	2.9	3.1	3.2	3.2	3.1
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	17,348.1	17,947.0	18,521.7	19,360.7	20,226.0	21,088.2	22,011.0	22,930.8
% Ch	4.1	3.5	3.2	4.5	4.5	4.3	4.4	4.2
Personal Income	14,694.2	15,350.7	15,963.9	16,649.1	17,399.7	18,212.8	19,052.7	19,904.8
% Ch	4.4	4.5	4.0	4.3	4.5	4.7	4.6	4.5
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	155.9	157.1	159.3	161.2	163.1	164.7	166.2	167.2
Total U.S. Employment	146.3	148.8	151.6	153.8	155.6	157.1	158.4	159.3
Unemployment Rate (%)	6.17	5.28	4.76	4.55	4.51	4.55	4.62	4.69
Nonfarm Payroll Employment	138.94	141.83	144.22	146.06	147.14	148.22	149.34	150.34
% Ch	1.9	2.1	1.7	1.3	0.7	0.7	0.8	0.7
Manufacturing	12.18	12.32	12.33	12.41	12.40	12.50	12.61	12.69
% Ch	1.4	1.1	0.1	0.7	-0.1	0.8	0.9	0.6
Durable Manufacturing	7.67	7.76	7.72	7.80	7.81	7.90	8.02	8.11
% Ch	1.7	1.1	-0.4	0.9	0.1	1.2	1.5	1.1
Nondurable Manufacturing	4.51	4.56	4.60	4.62	4.60	4.61	4.60	4.58
% Ch	0.9	1.1	0.9	0.3	-0.4	0.2	-0.3	-0.3
Construction	6.15	6.44	6.71	6.96	7.14	7.30	7.49	7.67
% Ch	5.0	4.8	4.1	3.7	2.6	2.3	2.5	2.5
Service-Providing	119.71	122.25	124.50	126.01	126.88	127.68	128.49	129.22
% Ch	1.8	2.1	1.8	1.2	0.7	0.6	0.6	0.6
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	93.0	48.8	45.6	52.9	53.5	54.4	55.5	56.5
Personal Saving/Disposable Income (%)	4.8	5.1	5.3	5.3	5.8	6.3	6.4	6.4
Auto Sales (Millions)	7.7	7.5	7.3	7.6	7.6	7.6	7.5	7.6
% Ch	1.4	-2.4	-3.1	4.6	0.4	-0.9	-0.4	1.3
Housing Starts (Millions)	1.001	1.108	1.197	1.377	1.502	1.558	1.636	1.659
% Ch	7.8	10.7	8.0	15.1	9.0	3.7	5.0	1.4
Federal Budget Surplus (Billions)	-631.5	-588.3	-624.3	-699.7	-798.0	-875.7	-870.5	-878.8
Net Exports (Billions)	-530.0	-528.9	-497.9	-497.8	-523.2	-528.0	-519.2	-516.7
3-Month Treasury Bill Rate (%)	0.03	0.05	0.38	1.12	2.11	2.78	2.81	2.80
10-Year Treasury Note Yield (%)	2.54	2.14	1.99	2.41	2.95	3.61	3.56	3.52
Bond Index of 20 G.O. Munis. (%)	4.25	3.64	3.46	4.19	4.66	5.17	5.15	5.12
30-Year Fixed Mortgage Rate (%)	4.17	3.85	3.76	4.25	4.95	5.68	5.67	5.64

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
<b>Real National Income Accounts (Billions of Chained 2009 Dollars)</b>								
Real Gross Domestic Product	16,505.1	16,587.9	16,681.4	16,781.5	16,884.1	16,982.0	17,071.0	17,151.1
% Ch , Annual Rate	0.8	2.0	2.3	2.4	2.5	2.3	2.1	1.9
Real Consumption	11,384.2	11,458.8	11,532.5	11,605.3	11,677.2	11,747.4	11,813.1	11,877.0
% Ch , Annual Rate	1.9	2.6	2.6	2.5	2.5	2.4	2.3	2.2
Real Nonresidential Fixed Investment	2,177.8	2,189.9	2,224.9	2,238.1	2,251.4	2,266.5	2,277.7	2,295.5
% Ch , Annual Rate	-6.2	2.2	6.5	2.4	2.4	2.7	2.0	3.2
Real Residential Fixed Investment	569.5	575.0	582.5	592.9	602.6	615.4	626.1	634.5
% Ch , Annual Rate	17.2	3.9	5.3	7.4	6.7	8.7	7.2	5.5
Real Personal Income	14,324.3	14,375.2	14,442.4	14,500.4	14,617.5	14,713.8	14,801.3	14,884.4
% Ch , Annual Rate	3.4	1.4	1.9	1.6	3.3	2.7	2.4	2.3
Real Per Capita Income (\$/Person)	44,278	44,345	44,462	44,550	44,819	45,024	45,201	45,363
% Ch , Annual Rate	2.6	0.6	1.1	0.8	2.4	1.8	1.6	1.4
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.099	1.105	1.110	1.117	1.121	1.126	1.131	1.136
% Ch , Annual Rate	0.3	2.3	1.6	2.5	1.5	1.9	1.7	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.379	2.396	2.407	2.429	2.441	2.455	2.468	2.482
% Ch , Annual Rate	-0.3	2.9	1.8	3.6	2.0	2.3	2.1	2.2
Employment Cost Index (Dec. 2005=1.0)	1.252	1.260	1.268	1.277	1.287	1.296	1.306	1.317
% Ch , Annual Rate	2.9	2.5	2.7	2.9	3.0	3.1	3.1	3.1
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	18,229.5	18,427.3	18,597.0	18,833.0	19,043.9	19,261.0	19,468.1	19,669.9
% Ch , Annual Rate	1.4	4.4	3.7	5.2	4.6	4.6	4.4	4.2
Personal Income	15,746.0	15,891.0	16,027.6	16,191.1	16,383.3	16,567.8	16,737.6	16,907.8
% Ch , Annual Rate	3.7	3.7	3.5	4.1	4.8	4.6	4.2	4.1
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	158.8	158.8	159.4	160.0	160.5	161.0	161.5	161.9
Total U.S. Employment	151.0	151.2	151.8	152.4	153.0	153.6	154.1	154.5
Unemployment Rate (%)	4.93	4.76	4.71	4.65	4.59	4.55	4.53	4.54
Nonfarm Payroll Employment	143.53	143.97	144.35	145.03	145.56	145.99	146.22	146.47
% Ch , Annual Rate	1.9	1.2	1.1	1.9	1.5	1.2	0.6	0.7
Manufacturing	12.32	12.31	12.30	12.38	12.39	12.41	12.43	12.42
% Ch , Annual Rate	0.1	-0.1	-0.4	2.7	0.3	0.7	0.5	-0.2
Durable Manufacturing	7.72	7.71	7.70	7.76	7.76	7.79	7.81	7.82
% Ch , Annual Rate	-0.6	-0.6	-0.7	3.3	0.1	1.2	1.4	0.0
Nondurable Manufacturing	4.59	4.60	4.60	4.62	4.63	4.63	4.61	4.61
% Ch , Annual Rate	1.3	0.7	0.2	1.5	0.6	-0.2	-1.0	-0.7
Construction	6.64	6.66	6.73	6.81	6.88	6.94	6.99	7.03
% Ch , Annual Rate	5.8	1.2	4.7	4.9	3.8	3.7	2.7	2.5
Service-Providing	123.85	124.30	124.66	125.18	125.64	125.96	126.12	126.32
% Ch , Annual Rate	2.0	1.5	1.2	1.7	1.5	1.0	0.5	0.6
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	33.5	45.9	50.9	52.0	52.6	52.8	52.9	53.1
Personal Saving/Disposable Income (%)	5.7	5.4	5.2	5.0	5.2	5.3	5.3	5.4
Auto Sales (Millions)	7.0	7.1	7.4	7.5	7.5	7.6	7.7	7.7
% Ch , Annual Rate	-22.0	5.2	18.9	3.7	-1.2	6.2	3.7	1.5
Housing Starts (Millions)	1.147	1.173	1.204	1.263	1.301	1.359	1.402	1.447
% Ch , Annual Rate	4.3	9.7	11.0	20.8	12.8	19.0	13.3	13.3
Federal Budget Surplus (Billions)	-610.0	-603.4	-626.8	-657.1	-687.4	-701.2	-696.3	-713.8
Net Exports (Billions)	-506.8	-481.2	-506.2	-497.4	-493.4	-500.9	-494.6	-502.4
3-Month Treasury Bill Rate (%)	0.29	0.30	0.40	0.55	0.74	0.97	1.25	1.51
10-Year Treasury Note Yield (%)	1.92	1.85	1.97	2.23	2.35	2.39	2.44	2.47
Bond Index of 20 G.O. Munis. (%)	3.36	3.32	3.43	3.72	3.97	4.16	4.30	4.34
30-Year Fixed Mortgage Rate (%)	3.74	3.60	3.72	3.99	4.14	4.22	4.28	4.37

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
<b>Real National Income Accounts (Billions of Chained 2009 Dollars)</b>								
Real Gross Domestic Product	17,259.6	17,356.2	17,446.0	17,524.2	17,621.4	17,712.0	17,810.2	17,903.8
% Ch , Annual Rate	2.6	2.3	2.1	1.8	2.2	2.1	2.2	2.1
Real Consumption	11,952.0	12,016.6	12,083.8	12,146.0	12,218.2	12,280.5	12,346.6	12,413.6
% Ch , Annual Rate	2.5	2.2	2.3	2.1	2.4	2.1	2.2	2.2
Real Nonresidential Fixed Investment	2,323.9	2,354.2	2,383.5	2,410.3	2,439.0	2,466.5	2,490.4	2,514.0
% Ch , Annual Rate	5.0	5.3	5.1	4.6	4.8	4.6	3.9	3.8
Real Residential Fixed Investment	644.0	651.4	656.5	655.9	653.3	654.5	661.7	669.1
% Ch , Annual Rate	6.1	4.7	3.2	-0.3	-1.6	0.7	4.5	4.5
Real Personal Income	15,007.0	15,093.4	15,180.7	15,275.4	15,400.4	15,501.3	15,595.5	15,688.6
% Ch , Annual Rate	3.3	2.3	2.3	2.5	3.3	2.6	2.5	2.4
Real Per Capita Income (\$/Person)	45,646	45,817	45,990	46,185	46,471	46,683	46,874	47,061
% Ch , Annual Rate	2.5	1.5	1.5	1.7	2.5	1.8	1.6	1.6
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.141	1.146	1.152	1.158	1.163	1.169	1.174	1.180
% Ch , Annual Rate	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.495	2.509	2.523	2.537	2.551	2.566	2.580	2.595
% Ch , Annual Rate	2.3	2.3	2.2	2.3	2.2	2.2	2.3	2.3
Employment Cost Index (Dec. 2005=1.0)	1.327	1.337	1.347	1.358	1.369	1.380	1.391	1.401
% Ch , Annual Rate	3.1	3.1	3.1	3.1	3.3	3.3	3.2	3.2
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	19,908.1	20,128.0	20,336.3	20,531.4	20,756.7	20,971.0	21,200.4	21,424.9
% Ch , Annual Rate	4.9	4.5	4.2	3.9	4.5	4.2	4.4	4.3
Personal Income	17,124.1	17,304.3	17,488.0	17,682.3	17,912.6	18,115.8	18,313.4	18,509.5
% Ch , Annual Rate	5.2	4.3	4.3	4.5	5.3	4.6	4.4	4.4
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	162.4	162.9	163.3	163.8	164.1	164.5	164.9	165.3
Total U.S. Employment	155.0	155.4	155.9	156.3	156.6	157.0	157.3	157.6
Unemployment Rate (%)	4.52	4.50	4.50	4.52	4.53	4.53	4.56	4.58
Nonfarm Payroll Employment	146.70	147.01	147.29	147.55	147.85	148.10	148.35	148.59
% Ch , Annual Rate	0.6	0.8	0.8	0.7	0.8	0.7	0.7	0.7
Manufacturing	12.40	12.38	12.40	12.44	12.47	12.49	12.52	12.54
% Ch , Annual Rate	-0.8	-0.4	0.7	1.0	1.0	0.8	0.9	0.7
Durable Manufacturing	7.80	7.79	7.81	7.83	7.86	7.88	7.91	7.93
% Ch , Annual Rate	-0.9	-0.5	1.0	1.4	1.3	1.1	1.4	1.2
Nondurable Manufacturing	4.60	4.60	4.60	4.60	4.61	4.61	4.61	4.61
% Ch , Annual Rate	-0.7	-0.3	0.1	0.4	0.4	0.3	0.1	0.0
Construction	7.07	7.11	7.16	7.20	7.24	7.28	7.33	7.37
% Ch , Annual Rate	2.4	2.4	2.7	2.2	2.2	2.2	2.6	2.4
Service-Providing	126.53	126.80	127.00	127.19	127.41	127.60	127.77	127.94
% Ch , Annual Rate	0.7	0.9	0.6	0.6	0.7	0.6	0.5	0.5
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	53.2	53.4	53.6	53.9	54.1	54.3	54.5	54.8
Personal Saving/Disposable Income (%)	5.7	5.8	5.8	6.0	6.2	6.4	6.4	6.4
Auto Sales (Millions)	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.5
% Ch , Annual Rate	-0.7	-1.0	-2.4	-0.7	1.5	-0.7	-2.8	-3.8
Housing Starts (Millions)	1.480	1.498	1.516	1.515	1.525	1.544	1.569	1.595
% Ch , Annual Rate	9.5	4.9	5.0	-0.2	2.7	5.0	6.8	6.7
Federal Budget Surplus (Billions)	-772.1	-786.1	-803.4	-830.6	-873.7	-885.6	-875.3	-868.3
Net Exports (Billions)	-513.5	-520.9	-528.2	-530.3	-529.1	-530.8	-527.1	-524.8
3-Month Treasury Bill Rate (%)	1.75	1.99	2.23	2.46	2.69	2.82	2.81	2.81
10-Year Treasury Note Yield (%)	2.56	2.76	3.07	3.42	3.63	3.64	3.60	3.58
Bond Index of 20 G.O. Munis. (%)	4.38	4.52	4.75	4.99	5.16	5.19	5.18	5.17
30-Year Fixed Mortgage Rate (%)	4.55	4.77	5.07	5.40	5.62	5.71	5.71	5.69

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
<b>Real National Income Accounts (Billions of Chained 2009 Dollars)</b>								
Real Gross Domestic Product	18,003.6	18,109.0	18,202.8	18,294.9	18,392.5	18,484.8	18,580.3	18,677.6
% Ch , Annual Rate	2.3	2.4	2.1	2.0	2.1	2.0	2.1	2.1
Real Consumption	12,485.4	12,552.0	12,617.8	12,687.0	12,761.9	12,829.3	12,894.5	12,964.0
% Ch , Annual Rate	2.3	2.1	2.1	2.2	2.4	2.1	2.0	2.2
Real Nonresidential Fixed Investment	2,539.3	2,566.4	2,592.3	2,615.1	2,637.5	2,661.5	2,685.3	2,708.8
% Ch , Annual Rate	4.1	4.3	4.1	3.6	3.5	3.7	3.6	3.5
Real Residential Fixed Investment	674.5	681.5	688.9	692.1	692.1	694.1	699.7	702.9
% Ch , Annual Rate	3.3	4.2	4.5	1.8	0.0	1.2	3.3	1.8
Real Personal Income	15,811.0	15,911.8	16,009.6	16,103.2	16,221.0	16,317.4	16,407.6	16,499.9
% Ch , Annual Rate	3.2	2.6	2.5	2.4	3.0	2.4	2.2	2.3
Real Per Capita Income (\$/Person)	47,335	47,544	47,743	47,929	48,186	48,379	48,553	48,733
% Ch , Annual Rate	2.4	1.8	1.7	1.6	2.2	1.6	1.4	1.5
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.185	1.191	1.197	1.202	1.208	1.214	1.219	1.225
% Ch , Annual Rate	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.610	2.624	2.638	2.653	2.668	2.683	2.698	2.713
% Ch , Annual Rate	2.3	2.3	2.2	2.2	2.3	2.3	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.412	1.423	1.435	1.446	1.457	1.468	1.480	1.491
% Ch , Annual Rate	3.1	3.2	3.2	3.2	3.1	3.1	3.1	3.0
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	21,664.7	21,903.2	22,125.8	22,350.2	22,589.4	22,814.3	23,043.4	23,276.0
% Ch , Annual Rate	4.6	4.5	4.1	4.1	4.4	4.0	4.1	4.1
Personal Income	18,743.3	18,952.2	19,156.3	19,359.2	19,594.6	19,804.5	20,007.2	20,212.9
% Ch , Annual Rate	5.1	4.5	4.4	4.3	5.0	4.4	4.2	4.2
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	165.7	166.1	166.4	166.7	166.9	167.1	167.3	167.6
Total U.S. Employment	158.0	158.3	158.6	158.8	159.0	159.2	159.4	159.6
Unemployment Rate (%)	4.60	4.61	4.63	4.66	4.68	4.69	4.69	4.69
Nonfarm Payroll Employment	148.87	149.37	149.48	149.64	149.89	150.19	150.49	150.80
% Ch, Annual Rate	0.8	1.3	0.3	0.4	0.7	0.8	0.8	0.8
Manufacturing	12.57	12.59	12.63	12.66	12.67	12.68	12.70	12.70
% Ch, Annual Rate	1.1	0.5	1.2	0.9	0.4	0.5	0.3	0.0
Durable Manufacturing	7.97	8.00	8.03	8.06	8.08	8.10	8.12	8.12
% Ch, Annual Rate	2.0	1.2	1.9	1.5	0.9	1.0	0.8	0.3
Nondurable Manufacturing	4.60	4.60	4.59	4.59	4.59	4.58	4.58	4.57
% Ch, Annual Rate	-0.5	-0.7	-0.1	-0.2	-0.4	-0.4	-0.4	-0.6
Construction	7.41	7.46	7.52	7.56	7.60	7.65	7.70	7.74
% Ch, Annual Rate	2.4	2.7	3.0	2.5	2.1	2.3	2.7	2.5
Service-Providing	128.14	128.57	128.58	128.66	128.86	129.09	129.33	129.59
% Ch, Annual Rate	0.6	1.4	0.0	0.2	0.6	0.7	0.7	0.8
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	55.1	55.4	55.6	55.8	56.1	56.4	56.6	56.9
Personal Saving/Disposable Income (%)	6.5	6.5	6.4	6.4	6.5	6.5	6.4	6.4
Auto Sales (Millions)	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6
% Ch, Annual Rate	-0.3	1.8	2.7	2.8	1.8	-0.4	-0.3	0.5
Housing Starts (Millions)	1.620	1.632	1.643	1.647	1.651	1.653	1.665	1.666
% Ch, Annual Rate	6.5	3.0	2.6	1.0	1.0	0.5	2.8	0.2
Federal Budget Surplus (Billions)	-886.5	-888.1	-858.7	-848.8	-876.8	-883.7	-877.5	-877.3
Net Exports (Billions)	-522.0	-523.7	-518.2	-512.9	-514.3	-517.2	-517.7	-517.5
3-Month Treasury Bill Rate (%)	2.81	2.81	2.81	2.81	2.81	2.80	2.80	2.79
10-Year Treasury Note Yield (%)	3.57	3.57	3.56	3.55	3.54	3.53	3.51	3.50
Bond Index of 20 G.O. Munis. (%)	5.17	5.16	5.15	5.14	5.13	5.13	5.12	5.11
30-Year Fixed Mortgage Rate (%)	5.68	5.68	5.67	5.66	5.65	5.64	5.63	5.63

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

	2014	2015	2016	2017	2018	2019	2020	2021
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	321.086	335.350	344.982	354.058	365.151	376.827	388.666	400.218
% Ch	4.3	4.4	2.9	2.6	3.1	3.2	3.1	3.0
Real Wage and Salary Disb.	166.791	174.862	180.771	185.460	190.245	194.749	199.435	204.377
% Ch	5.2	4.8	3.4	2.6	2.6	2.4	2.4	2.5
Real Nonwage Income	154.295	160.488	164.211	168.598	174.906	182.077	189.231	195.841
% Ch	3.5	4.0	2.3	2.7	3.7	4.1	3.9	3.5
Real Per Capita Income (\$/Person)	45,463	46,761	47,415	48,028	48,908	49,847	50,789	51,685
% Ch	3.1	2.9	1.4	1.3	1.8	1.9	1.9	1.8
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.091	1.094	1.108	1.128	1.149	1.171	1.194	1.217
% Ch	1.4	0.3	1.2	1.9	1.9	1.9	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.460	2.494	2.549	2.612	2.672	2.734	2.798	2.863
% Ch	1.8	1.4	2.2	2.5	2.3	2.3	2.3	2.3
Average Nonfarm Annual Wage	57,229	58,661	60,009	61,771	63,747	65,733	67,825	70,113
% Ch	4.4	2.5	2.3	2.9	3.2	3.1	3.2	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.16	25.52	26.40	27.15	27.90	28.71	29.53	30.36
% Ch	3.4	1.4	3.4	2.8	2.8	2.9	2.9	2.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	350.322	367.008	382.164	399.527	419.674	441.456	464.014	486.890
% Ch	5.8	4.8	4.1	4.5	5.0	5.2	5.1	4.9
Disposable Personal Income	307.877	320.448	333.791	348.834	367.162	386.472	404.848	423.866
% Ch	5.6	4.1	4.2	4.5	5.3	5.3	4.8	4.7
Per Capita Income (\$/Person)	49,602	51,175	52,524	54,195	56,209	58,395	60,634	62,877
% Ch	4.5	3.2	2.6	3.2	3.7	3.9	3.8	3.7
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,489.6	3,540.3	3,638.1	3,705.6	3,768.7	3,827.6	3,883.0	3,929.7
Total Washington Employment	3,276.8	3,339.9	3,430.1	3,505.1	3,572.7	3,631.8	3,685.1	3,729.6
Unemployment Rate (%)	6.10	5.66	5.72	5.41	5.20	5.11	5.10	5.09
Nonfarm Payroll Employment	3,059.5	3,144.9	3,219.0	3,269.4	3,311.3	3,351.6	3,390.7	3,426.2
% Ch	2.5	2.8	2.4	1.6	1.3	1.2	1.2	1.0
Manufacturing	288.7	290.3	285.5	284.7	284.5	285.7	287.9	290.7
% Ch	0.7	0.6	-1.7	-0.3	-0.1	0.4	0.8	1.0
Durable Manufacturing	210.0	210.8	205.2	203.6	203.5	204.0	205.8	208.2
% Ch	0.2	0.4	-2.7	-0.8	-0.1	0.3	0.9	1.1
Aerospace	94.2	93.7	88.5	84.5	82.6	80.9	80.2	80.2
% Ch	-1.9	-0.6	-5.5	-4.6	-2.3	-2.1	-0.8	0.0
Nondurable Manufacturing	78.7	79.5	80.3	81.1	81.1	81.7	82.1	82.6
% Ch	2.1	1.0	1.0	1.0	0.0	0.8	0.5	0.6
Construction	159.6	173.2	183.0	188.0	195.0	200.7	204.8	207.4
% Ch	7.2	8.5	5.6	2.7	3.8	2.9	2.1	1.2
Service-Providing	2,605.0	2,675.1	2,744.4	2,790.5	2,825.4	2,858.8	2,891.5	2,921.6
% Ch	2.4	2.7	2.6	1.7	1.3	1.2	1.1	1.0
Software Publishers	55.6	55.9	57.6	58.4	58.9	59.5	60.1	60.8
% Ch	3.3	0.5	3.0	1.5	0.9	1.0	1.0	1.1
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	33.898	40.374	40.611	42.472	43.970	44.136	44.363	44.321
% Ch	2.8	19.1	0.6	4.6	3.5	0.4	0.5	-0.1
Single-Family	17.905	19.797	22.839	25.268	27.326	27.625	27.895	28.061
% Ch	-2.7	10.6	15.4	10.6	8.1	1.1	1.0	0.6
Multi-Family	15.993	20.577	17.772	17.204	16.644	16.511	16.468	16.261
% Ch	9.8	28.7	-13.6	-3.2	-3.3	-0.8	-0.3	-1.3
30-Year Fixed Mortgage Rate (%)	4.17	3.85	3.76	4.25	4.95	5.68	5.67	5.64

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
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	343.040	344.591	345.748	346.550	351.124	353.234	354.809	357.064
% Ch, Annual Rate	5.3	1.8	1.4	0.9	5.4	2.4	1.8	2.6
Real Wage and Salary Disb.	179.988	180.462	181.213	181.422	184.435	185.227	185.605	186.572
% Ch, Annual Rate	7.1	1.1	1.7	0.5	6.8	1.7	0.8	2.1
Real Nonwage Income	163.052	164.129	164.535	165.128	166.688	168.008	169.204	170.491
% Ch, Annual Rate	3.3	2.7	1.0	1.4	3.8	3.2	2.9	3.1
Real Per Capita Income (\$/Person)	47,392	47,435	47,438	47,393	47,862	47,994	48,052	48,204
% Ch, Annual Rate	3.8	0.4	0.0	-0.4	4.0	1.1	0.5	1.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.099	1.105	1.110	1.117	1.121	1.126	1.131	1.136
% Ch, Annual Rate	0.3	2.3	1.6	2.5	1.5	1.9	1.7	1.8
Seattle Cons. Price Index (1982-84=1.0)	2.527	2.541	2.554	2.576	2.590	2.606	2.620	2.634
% Ch, Annual Rate	2.3	2.2	2.2	3.4	2.3	2.4	2.2	2.3
Average Nonfarm Annual Wage	59,646	59,852	60,197	60,341	61,303	61,636	61,867	62,280
% Ch, Annual Rate	3.7	1.4	2.3	1.0	6.5	2.2	1.5	2.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	26.02	26.38	26.52	26.69	26.87	27.05	27.24	27.43
% Ch, Annual Rate	3.7	5.6	2.3	2.6	2.7	2.8	2.8	2.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	377.077	380.926	383.696	386.957	393.539	397.744	401.225	405.602
% Ch, Annual Rate	5.6	4.1	2.9	3.4	7.0	4.3	3.5	4.4
Disposable Personal Income	329.379	332.751	335.127	337.905	343.575	347.208	350.285	354.267
% Ch, Annual Rate	6.2	4.2	2.9	3.4	6.9	4.3	3.6	4.6
Per Capita Income (\$/Person)	52,094	52,437	52,645	52,918	53,643	54,041	54,339	54,757
% Ch, Annual Rate	4.1	2.7	1.6	2.1	5.6	3.0	2.2	3.1
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,604.1	3,633.4	3,649.2	3,665.8	3,681.7	3,697.8	3,713.6	3,729.4
Total Washington Employment	3,395.2	3,423.8	3,441.2	3,460.3	3,478.9	3,496.9	3,513.9	3,530.6
Unemployment Rate (%)	5.80	5.77	5.70	5.61	5.51	5.43	5.38	5.33
Nonfarm Payroll Employment	3,199.4	3,215.0	3,222.6	3,239.0	3,253.5	3,265.4	3,273.9	3,284.7
% Ch, Annual Rate	3.6	2.0	1.0	2.0	1.8	1.5	1.0	1.3
Manufacturing	288.0	286.8	282.9	284.1	284.4	284.7	285.0	284.7
% Ch, Annual Rate	-0.5	-1.7	-5.4	1.8	0.3	0.6	0.3	-0.3
Durable Manufacturing	208.0	206.8	202.7	203.4	203.2	203.5	203.9	203.8
% Ch, Annual Rate	-2.6	-2.2	-7.6	1.3	-0.2	0.6	0.7	-0.3
Aerospace	91.3	90.4	86.5	85.9	85.3	84.8	84.2	83.7
% Ch, Annual Rate	-4.2	-4.0	-16.4	-2.6	-2.6	-2.6	-2.6	-2.6
Nondurable Manufacturing	80.1	80.0	80.1	80.8	81.1	81.2	81.1	81.0
% Ch, Annual Rate	5.2	-0.2	0.6	3.2	1.7	0.4	-0.7	-0.4
Construction	181.7	182.5	183.4	184.4	185.4	186.9	188.6	191.0
% Ch, Annual Rate	16.9	1.9	1.9	2.2	2.2	3.2	3.7	5.4
Service-Providing	2,723.5	2,739.5	2,750.3	2,764.3	2,777.6	2,787.6	2,794.1	2,802.7
% Ch, Annual Rate	3.2	2.4	1.6	2.1	1.9	1.4	0.9	1.2
Software Publishers	57.1	57.6	57.7	57.9	58.2	58.4	58.5	58.6
% Ch, Annual Rate	4.1	3.8	0.5	1.2	2.3	1.1	0.8	0.8
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	37.584	42.645	41.030	41.186	41.696	42.330	42.703	43.159
% Ch, Annual Rate	-8.0	65.8	-14.3	1.5	5.0	6.2	3.6	4.3
Single-Family	22.287	22.546	23.014	23.509	24.311	24.939	25.540	26.282
% Ch, Annual Rate	18.3	4.7	8.6	8.9	14.4	10.7	10.0	12.1
Multi-Family	15.298	20.099	18.016	17.677	17.385	17.391	17.163	16.877
% Ch, Annual Rate	-34.5	198.0	-35.4	-7.3	-6.4	0.1	-5.1	-6.5
30-Year Fixed Mortgage Rate (%)	3.74	3.60	3.72	3.99	4.14	4.22	4.28	4.37

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
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	362.011	364.260	365.727	368.607	373.375	376.049	377.371	380.513
% Ch, Annual Rate	5.7	2.5	1.6	3.2	5.3	2.9	1.4	3.4
Real Wage and Salary Disb.	189.369	190.166	190.156	191.290	193.866	194.752	194.432	195.948
% Ch, Annual Rate	6.1	1.7	0.0	2.4	5.5	1.8	-0.7	3.2
Real Nonwage Income	172.643	174.093	175.570	177.317	179.509	181.296	182.939	184.565
% Ch, Annual Rate	5.1	3.4	3.4	4.0	5.0	4.0	3.7	3.6
Real Per Capita Income (\$/Person)	48,717	48,866	48,908	49,139	49,620	49,821	49,842	50,103
% Ch, Annual Rate	4.3	1.2	0.4	1.9	4.0	1.6	0.2	2.1
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.141	1.146	1.152	1.158	1.163	1.169	1.174	1.180
% Ch, Annual Rate	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.649	2.664	2.680	2.695	2.710	2.726	2.742	2.758
% Ch, Annual Rate	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Average Nonfarm Annual Wage	63,283	63,657	63,766	64,280	65,239	65,660	65,684	66,348
% Ch, Annual Rate	6.6	2.4	0.7	3.3	6.1	2.6	0.1	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.61	27.80	28.00	28.19	28.40	28.61	28.81	29.02
% Ch, Annual Rate	2.8	2.8	2.8	2.8	3.0	3.0	2.9	2.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	413.079	417.616	421.314	426.688	434.282	439.474	443.137	448.931
% Ch, Annual Rate	7.6	4.5	3.6	5.2	7.3	4.9	3.4	5.3
Disposable Personal Income	361.232	365.245	368.658	373.513	380.398	384.891	387.906	392.693
% Ch, Annual Rate	8.1	4.5	3.8	5.4	7.6	4.8	3.2	5.0
Per Capita Income (\$/Person)	55,590	56,023	56,342	56,882	57,715	58,224	58,528	59,112
% Ch, Annual Rate	6.2	3.2	2.3	3.9	6.0	3.6	2.1	4.0
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,746.0	3,761.2	3,776.1	3,791.5	3,805.8	3,820.5	3,835.0	3,849.0
Total Washington Employment	3,549.0	3,565.2	3,580.7	3,595.8	3,610.4	3,625.4	3,639.1	3,652.4
Unemployment Rate (%)	5.26	5.21	5.17	5.16	5.13	5.11	5.11	5.11
Nonfarm Payroll Employment	3,296.0	3,306.4	3,316.3	3,326.3	3,337.3	3,347.3	3,356.3	3,365.4
% Ch, Annual Rate	1.4	1.3	1.2	1.2	1.3	1.2	1.1	1.1
Manufacturing	284.4	284.2	284.5	285.0	285.4	285.6	285.8	286.1
% Ch, Annual Rate	-0.5	-0.3	0.5	0.7	0.5	0.3	0.3	0.3
Durable Manufacturing	203.5	203.2	203.4	203.8	203.9	203.9	204.0	204.1
% Ch, Annual Rate	-0.6	-0.5	0.5	0.6	0.3	0.1	0.2	0.2
Aerospace	83.2	82.8	82.4	81.9	81.5	81.1	80.6	80.2
% Ch, Annual Rate	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1
Nondurable Manufacturing	81.0	81.0	81.1	81.3	81.5	81.7	81.8	82.0
% Ch, Annual Rate	-0.1	0.0	0.6	0.9	1.1	1.0	0.7	0.6
Construction	193.4	194.3	195.5	196.9	198.5	200.1	201.4	202.7
% Ch, Annual Rate	4.9	2.0	2.5	2.8	3.2	3.4	2.6	2.6
Service-Providing	2,812.0	2,821.6	2,830.0	2,838.1	2,847.1	2,855.3	2,862.7	2,870.3
% Ch, Annual Rate	1.3	1.4	1.2	1.1	1.3	1.2	1.0	1.1
Software Publishers	58.7	58.8	59.0	59.2	59.3	59.4	59.6	59.7
% Ch, Annual Rate	0.6	0.8	1.1	1.2	1.0	0.9	0.9	0.9
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	43.634	44.203	44.070	43.974	43.992	44.083	44.191	44.280
% Ch, Annual Rate	4.5	5.3	-1.2	-0.9	0.2	0.8	1.0	0.8
Single-Family	26.925	27.341	27.521	27.517	27.518	27.579	27.643	27.758
% Ch, Annual Rate	10.2	6.3	2.7	0.0	0.0	0.9	0.9	1.7
Multi-Family	16.709	16.862	16.549	16.457	16.473	16.504	16.547	16.522
% Ch, Annual Rate	-3.9	3.7	-7.2	-2.2	0.4	0.7	1.1	-0.6
30-Year Fixed Mortgage Rate (%)	4.55	4.77	5.07	5.40	5.62	5.71	5.71	5.69

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
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	385.129	387.893	389.204	392.438	396.997	399.505	400.584	403.786
% Ch, Annual Rate	4.9	2.9	1.4	3.4	4.7	2.6	1.1	3.2
Real Wage and Salary Disb.	198.427	199.433	199.099	200.780	203.380	204.324	204.018	205.787
% Ch, Annual Rate	5.2	2.0	-0.7	3.4	5.3	1.9	-0.6	3.5
Real Nonwage Income	186.702	188.459	190.104	191.658	193.616	195.181	196.566	197.999
% Ch, Annual Rate	4.7	3.8	3.5	3.3	4.2	3.3	2.9	2.9
Real Per Capita Income (\$/Person)	50,556	50,764	50,783	51,053	51,494	51,668	51,657	51,921
% Ch, Annual Rate	3.7	1.7	0.1	2.1	3.5	1.4	-0.1	2.1
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.185	1.191	1.197	1.202	1.208	1.214	1.219	1.225
% Ch, Annual Rate	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.774	2.790	2.806	2.822	2.838	2.855	2.871	2.887
% Ch, Annual Rate	2.4	2.3	2.3	2.3	2.4	2.3	2.3	2.2
Average Nonfarm Annual Wage	67,319	67,678	67,767	68,536	69,568	70,033	70,051	70,801
% Ch, Annual Rate	6.0	2.2	0.5	4.6	6.2	2.7	0.1	4.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	29.22	29.43	29.63	29.85	30.05	30.26	30.47	30.67
% Ch, Annual Rate	2.8	2.9	2.9	2.9	2.8	2.8	2.7	2.7
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	456.554	462.011	465.703	471.789	479.562	484.880	488.466	494.652
% Ch, Annual Rate	7.0	4.9	3.2	5.3	6.8	4.5	3.0	5.2
Disposable Personal Income	398.994	403.314	406.013	411.072	417.899	422.236	425.091	430.240
% Ch, Annual Rate	6.6	4.4	2.7	5.1	6.8	4.2	2.7	4.9
Per Capita Income (\$/Person)	59,932	60,465	60,764	61,375	62,203	62,709	62,990	63,604
% Ch, Annual Rate	5.7	3.6	2.0	4.1	5.5	3.3	1.8	4.0
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,862.9	3,877.1	3,890.2	3,901.9	3,913.3	3,924.1	3,935.1	3,946.3
Total Washington Employment	3,665.6	3,679.7	3,692.0	3,702.9	3,713.4	3,724.1	3,735.0	3,746.1
Unemployment Rate (%)	5.11	5.09	5.09	5.10	5.11	5.09	5.09	5.07
Nonfarm Payroll Employment	3,374.7	3,390.3	3,395.3	3,402.6	3,411.7	3,421.3	3,431.0	3,441.0
% Ch, Annual Rate	1.1	1.9	0.6	0.9	1.1	1.1	1.1	1.2
Manufacturing	286.9	287.4	288.3	289.2	289.8	290.4	291.1	291.6
% Ch, Annual Rate	1.1	0.7	1.3	1.2	0.9	0.9	0.8	0.7
Durable Manufacturing	204.9	205.4	206.2	206.9	207.4	207.9	208.4	208.9
% Ch, Annual Rate	1.5	1.0	1.5	1.4	1.1	1.0	1.0	0.8
Aerospace	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nondurable Manufacturing	82.0	82.0	82.2	82.3	82.4	82.5	82.6	82.7
% Ch, Annual Rate	0.2	-0.1	0.8	0.7	0.5	0.5	0.5	0.4
Construction	203.6	204.5	205.3	206.0	206.6	207.1	207.7	208.2
% Ch, Annual Rate	1.9	1.7	1.5	1.4	1.2	1.1	1.0	1.1
Service-Providing	2,877.8	2,892.0	2,895.3	2,901.0	2,908.8	2,917.2	2,925.7	2,934.7
% Ch, Annual Rate	1.1	2.0	0.5	0.8	1.1	1.2	1.2	1.2
Software Publishers	59.9	60.0	60.2	60.3	60.5	60.7	60.9	61.0
% Ch, Annual Rate	1.1	0.9	1.1	1.1	1.1	1.2	1.1	1.1
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	44.276	44.343	44.424	44.407	44.356	44.280	44.366	44.285
% Ch, Annual Rate	0.0	0.6	0.7	-0.2	-0.5	-0.7	0.8	-0.7
Single-Family	27.826	27.892	27.929	27.931	27.939	27.969	28.126	28.209
% Ch, Annual Rate	1.0	0.9	0.5	0.0	0.1	0.4	2.3	1.2
Multi-Family	16.450	16.451	16.495	16.476	16.417	16.311	16.239	16.076
% Ch, Annual Rate	-1.7	0.0	1.1	-0.5	-1.4	-2.6	-1.7	-4.0
30-Year Fixed Mortgage Rate (%)	5.68	5.68	5.67	5.66	5.65	5.64	5.63	5.63



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	144.22	146.06	147.14	148.22	149.34	150.34
% Ch	1.9	2.1	1.7	1.3	0.7	0.7	0.8	0.7
Manufacturing	12.18	12.32	12.33	12.41	12.40	12.50	12.61	12.69
% Ch	1.4	1.1	0.1	0.7	-0.1	0.8	0.9	0.6
Durable Manufacturing	7.67	7.76	7.72	7.80	7.81	7.90	8.02	8.11
% Ch	1.7	1.1	-0.4	0.9	0.1	1.2	1.5	1.1
Wood Products	0.37	0.38	0.39	0.41	0.43	0.44	0.46	0.48
% Ch	5.2	2.1	1.8	6.9	4.7	2.4	4.8	3.6
Primary and Fabricated Metals	1.85	1.85	1.82	1.84	1.83	1.86	1.89	1.93
% Ch	1.4	0.0	-1.8	1.2	-0.5	1.3	2.1	1.9
Computer and Electronic Products	1.05	1.05	1.05	1.08	1.11	1.11	1.11	1.11
% Ch	-1.5	0.1	-0.3	3.2	2.4	0.7	-0.2	-0.3
Machinery and Electrical Equipment	1.50	1.51	1.47	1.46	1.47	1.49	1.51	1.54
% Ch	1.8	0.1	-2.3	-0.5	0.1	1.9	1.3	1.4
Transportation Equipment	1.56	1.60	1.61	1.58	1.54	1.56	1.60	1.61
% Ch	3.3	2.6	0.5	-1.8	-2.5	1.2	2.6	0.7
Other Durables	1.34	1.37	1.39	1.42	1.43	1.43	1.43	1.44
% Ch	1.7	2.5	1.8	1.7	0.9	0.0	0.2	0.6
Nondurable Manufacturing	4.51	4.56	4.60	4.62	4.60	4.61	4.60	4.58
% Ch	0.9	1.1	0.9	0.3	-0.4	0.2	-0.3	-0.3
Food Manufacturing	1.48	1.51	1.53	1.56	1.57	1.59	1.60	1.61
% Ch	0.7	1.4	1.5	2.1	0.7	1.1	0.7	0.8
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.36	0.36	0.36
% Ch	-1.2	-0.2	0.2	-0.6	-1.6	-0.6	-0.5	-0.1
Other Nondurables	2.65	2.68	2.70	2.69	2.66	2.66	2.64	2.61
% Ch	1.2	1.2	0.7	-0.6	-1.0	-0.2	-0.8	-1.0
Natural Resources and Mining	0.89	0.82	0.68	0.68	0.71	0.74	0.75	0.77
% Ch	3.2	-7.9	-16.7	-0.8	5.5	3.1	2.2	1.8
Construction	6.15	6.44	6.71	6.96	7.14	7.30	7.49	7.67
% Ch	5.0	4.8	4.1	3.7	2.6	2.3	2.5	2.5
Trade, Transportation, and Utilities	26.38	26.91	27.32	27.48	27.44	27.37	27.25	27.19
% Ch	2.0	2.0	1.5	0.6	-0.2	-0.2	-0.5	-0.2
Wholesale Trade	5.81	5.87	5.91	5.94	5.97	6.02	6.05	6.10
% Ch	1.4	1.1	0.6	0.4	0.5	0.8	0.6	0.8
Retail Trade	15.35	15.64	15.96	16.03	15.90	15.76	15.60	15.49
% Ch	1.9	1.9	2.1	0.4	-0.8	-0.9	-1.0	-0.7
Trans., Warehousing, and Utilities	5.21	5.40	5.44	5.51	5.57	5.59	5.60	5.60
% Ch	3.2	3.7	0.8	1.3	1.1	0.4	0.1	0.1
Information	2.73	2.75	2.78	2.78	2.76	2.80	2.82	2.86
% Ch	0.8	0.9	1.2	-0.3	-0.5	1.3	0.7	1.5
Publishing Industries	0.73	0.73	0.72	0.72	0.70	0.69	0.67	0.66
% Ch	-0.8	-0.2	-0.3	-0.8	-2.5	-2.0	-2.0	-1.5
Other Information	2.00	2.03	2.06	2.06	2.06	2.11	2.15	2.20
% Ch	1.3	1.3	1.7	-0.1	0.1	2.5	1.6	2.4
Financial Activities	7.98	8.12	8.25	8.25	8.22	8.17	8.15	8.17
% Ch	1.1	1.9	1.6	0.0	-0.4	-0.6	-0.2	0.2
Professional and Business Services	19.06	19.66	20.22	21.01	21.59	21.99	22.44	22.94
% Ch	2.9	3.1	2.8	3.9	2.8	1.9	2.0	2.2
Education and Health Services	21.44	22.05	22.70	23.10	23.28	23.52	23.65	23.80
% Ch	1.7	2.9	2.9	1.8	0.8	1.0	0.5	0.6
Leisure and Hospitality	14.69	15.12	15.46	15.62	15.70	15.77	15.82	15.92
% Ch	3.1	2.9	2.2	1.1	0.5	0.4	0.3	0.6
Other Services	5.57	5.62	5.66	5.57	5.50	5.46	5.43	5.40
% Ch	1.5	1.0	0.7	-1.7	-1.1	-0.8	-0.6	-0.5
Federal Government	2.73	2.75	2.77	2.77	2.73	2.69	2.82	2.65
% Ch	-1.3	0.7	0.8	-0.2	-1.3	-1.5	4.6	-6.0
State and Local Government	19.14	19.25	19.32	19.43	19.66	19.91	20.11	20.28
% Ch	0.3	0.6	0.4	0.6	1.1	1.3	1.0	0.9

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	143.53	143.97	144.35	145.03	145.56	145.99	146.22	146.47
% Ch, Annual Rate	1.9	1.2	1.1	1.9	1.5	1.2	0.6	0.7
Manufacturing	12.32	12.31	12.30	12.38	12.39	12.41	12.43	12.42
% Ch, Annual Rate	0.1	-0.1	-0.4	2.7	0.3	0.7	0.5	-0.2
Durable Manufacturing	7.72	7.71	7.70	7.76	7.76	7.79	7.81	7.82
% Ch, Annual Rate	-0.6	-0.6	-0.7	3.3	0.1	1.2	1.4	0.0
Wood Products	0.38	0.38	0.38	0.39	0.40	0.41	0.42	0.42
% Ch, Annual Rate	-0.9	1.2	0.4	10.0	7.7	8.9	8.3	5.4
Primary and Fabricated Metals	1.82	1.81	1.81	1.83	1.84	1.84	1.84	1.84
% Ch, Annual Rate	-1.9	-1.8	-0.3	5.5	0.4	0.8	0.6	-0.6
Computer and Electronic Products	1.04	1.04	1.04	1.06	1.06	1.08	1.09	1.10
% Ch, Annual Rate	0.3	0.0	-0.1	4.6	3.2	4.1	5.0	3.3
Machinery and Electrical Equipment	1.48	1.47	1.47	1.47	1.47	1.47	1.47	1.46
% Ch, Annual Rate	-2.2	-3.4	-0.5	1.1	-1.1	0.0	0.0	-1.8
Transportation Equipment	1.61	1.62	1.60	1.61	1.59	1.58	1.58	1.57
% Ch, Annual Rate	-0.1	2.1	-3.3	1.0	-4.0	-2.1	-1.0	-2.0
Other Durables	1.39	1.39	1.39	1.40	1.41	1.41	1.42	1.43
% Ch, Annual Rate	1.8	-0.3	0.9	2.9	1.2	2.4	2.1	1.0
Nondurable Manufacturing	4.59	4.60	4.60	4.62	4.63	4.63	4.61	4.61
% Ch, Annual Rate	1.3	0.7	0.2	1.5	0.6	-0.2	-1.0	-0.7
Food Manufacturing	1.52	1.52	1.53	1.54	1.55	1.56	1.56	1.56
% Ch, Annual Rate	3.0	1.0	0.7	4.3	3.0	1.4	0.4	0.5
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-0.2	-0.7	1.9	-0.2	-0.5	-1.1	-2.1	-1.8
Other Nondurables	2.70	2.71	2.70	2.70	2.70	2.69	2.68	2.67
% Ch, Annual Rate	0.6	0.6	-0.4	0.2	-0.6	-0.9	-1.6	-1.2
Natural Resources and Mining	0.73	0.70	0.65	0.65	0.66	0.67	0.68	0.70
% Ch, Annual Rate	-19.2	-18.6	-21.7	-4.3	6.1	9.3	7.2	7.4
Construction	6.64	6.66	6.73	6.81	6.88	6.94	6.99	7.03
% Ch, Annual Rate	5.8	1.2	4.7	4.9	3.8	3.7	2.7	2.5
Trade, Transportation, and Utilities	27.23	27.32	27.31	27.42	27.46	27.49	27.49	27.48
% Ch, Annual Rate	2.3	1.4	-0.1	1.6	0.6	0.4	0.0	-0.2
Wholesale Trade	5.92	5.91	5.90	5.92	5.93	5.94	5.94	5.94
% Ch, Annual Rate	1.4	-0.5	-0.5	1.4	0.6	0.7	0.1	-0.1
Retail Trade	15.88	15.97	15.98	16.04	16.04	16.04	16.03	16.00
% Ch, Annual Rate	3.5	2.3	0.2	1.6	0.1	-0.1	-0.3	-0.6
Trans., Warehousing, and Utilities	5.43	5.44	5.44	5.46	5.49	5.51	5.52	5.53
% Ch, Annual Rate	-0.1	0.7	-0.7	2.1	1.7	1.6	1.0	1.0
Information	2.77	2.78	2.79	2.79	2.84	2.80	2.73	2.73
% Ch, Annual Rate	1.6	1.0	1.6	-0.3	6.9	-4.8	-9.2	-0.6
Publishing Industries	0.73	0.73	0.72	0.72	0.72	0.72	0.72	0.71
% Ch, Annual Rate	1.0	0.9	-3.6	-1.2	2.6	-1.7	-2.6	-2.6
Other Information	2.05	2.05	2.07	2.07	2.11	2.08	2.02	2.02
% Ch, Annual Rate	1.8	1.0	3.5	0.0	8.4	-5.9	-11.4	0.2
Financial Activities	8.22	8.25	8.26	8.28	8.27	8.25	8.24	8.23
% Ch, Annual Rate	1.9	1.4	0.9	0.5	-0.1	-1.2	-0.6	-0.2
Professional and Business Services	20.01	20.12	20.27	20.48	20.73	20.94	21.11	21.26
% Ch, Annual Rate	1.8	2.1	3.1	4.2	4.9	4.1	3.3	2.9
Education and Health Services	22.47	22.61	22.77	22.96	23.04	23.12	23.12	23.14
% Ch, Annual Rate	2.7	2.5	2.8	3.4	1.5	1.4	-0.1	0.4
Leisure and Hospitality	15.41	15.46	15.48	15.48	15.54	15.59	15.67	15.70
% Ch, Annual Rate	2.7	1.5	0.4	0.2	1.3	1.4	2.0	0.9
Other Services	5.67	5.68	5.67	5.64	5.61	5.58	5.55	5.53
% Ch, Annual Rate	1.6	0.6	-0.8	-1.9	-2.0	-2.5	-2.0	-1.3
Federal Government	2.77	2.78	2.78	2.78	2.77	2.77	2.77	2.76
% Ch, Annual Rate	1.0	1.3	0.3	0.0	-0.4	-0.2	-0.6	-1.1
State and Local Government	19.30	19.31	19.33	19.35	19.38	19.42	19.45	19.49
% Ch, Annual Rate	0.6	0.2	0.4	0.5	0.5	0.9	0.6	0.8

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	146.70	147.01	147.29	147.55	147.85	148.10	148.35	148.59
% Ch, Annual Rate	0.6	0.8	0.8	0.7	0.8	0.7	0.7	0.7
Manufacturing	12.40	12.38	12.40	12.44	12.47	12.49	12.52	12.54
% Ch, Annual Rate	-0.8	-0.4	0.7	1.0	1.0	0.8	0.9	0.7
Durable Manufacturing	7.80	7.79	7.81	7.83	7.86	7.88	7.91	7.93
% Ch, Annual Rate	-0.9	-0.5	1.0	1.4	1.3	1.1	1.4	1.2
Wood Products	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.45
% Ch, Annual Rate	2.5	3.1	5.9	3.3	1.1	0.4	2.2	3.9
Primary and Fabricated Metals	1.83	1.83	1.83	1.83	1.84	1.85	1.86	1.87
% Ch, Annual Rate	-1.8	-1.2	0.8	1.1	1.9	1.6	1.8	1.8
Computer and Electronic Products	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11
% Ch, Annual Rate	1.6	0.9	1.6	1.8	0.3	0.0	0.1	-0.3
Machinery and Electrical Equipment	1.46	1.46	1.47	1.48	1.49	1.49	1.50	1.50
% Ch, Annual Rate	-0.6	0.4	2.7	3.3	2.3	1.3	0.9	0.8
Transportation Equipment	1.55	1.54	1.53	1.53	1.54	1.55	1.57	1.58
% Ch, Annual Rate	-3.7	-3.3	-2.5	-0.2	1.9	3.6	3.9	2.5
Other Durables	1.43	1.43	1.43	1.44	1.43	1.43	1.43	1.43
% Ch, Annual Rate	0.0	0.4	1.4	1.0	-0.1	-1.2	-0.5	-0.4
Nondurable Manufacturing	4.60	4.60	4.60	4.60	4.61	4.61	4.61	4.61
% Ch, Annual Rate	-0.7	-0.3	0.1	0.4	0.4	0.3	0.1	0.0
Food Manufacturing	1.57	1.57	1.57	1.58	1.58	1.59	1.59	1.59
% Ch, Annual Rate	0.8	0.5	1.1	1.3	1.1	1.1	1.0	0.9
Paper and Paper Products	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	-2.1	-1.5	-0.9	-0.5	-0.4	-0.4	-0.5	-0.5
Other Nondurables	2.67	2.66	2.66	2.66	2.66	2.66	2.66	2.65
% Ch, Annual Rate	-1.3	-0.6	-0.3	-0.1	0.1	-0.1	-0.4	-0.5
Natural Resources and Mining	0.70	0.71	0.72	0.73	0.73	0.73	0.74	0.74
% Ch, Annual Rate	4.4	4.6	4.2	3.8	2.9	1.9	2.5	2.4
Construction	7.07	7.11	7.16	7.20	7.24	7.28	7.33	7.37
% Ch, Annual Rate	2.4	2.4	2.7	2.2	2.2	2.2	2.6	2.4
Trade, Transportation, and Utilities	27.46	27.45	27.42	27.41	27.41	27.39	27.36	27.32
% Ch, Annual Rate	-0.3	-0.2	-0.4	-0.2	0.0	-0.3	-0.5	-0.5
Wholesale Trade	5.95	5.96	5.97	5.98	6.00	6.01	6.02	6.03
% Ch, Annual Rate	0.6	0.8	0.7	0.8	1.2	0.8	0.6	0.3
Retail Trade	15.96	15.91	15.87	15.84	15.82	15.79	15.74	15.70
% Ch, Annual Rate	-1.1	-1.2	-1.0	-0.7	-0.6	-0.9	-1.1	-1.0
Trans., Warehousing, and Utilities	5.55	5.57	5.58	5.58	5.59	5.59	5.59	5.59
% Ch, Annual Rate	1.2	1.7	0.3	0.4	0.4	0.3	0.0	0.0
Information	2.74	2.75	2.77	2.78	2.79	2.80	2.80	2.81
% Ch, Annual Rate	1.9	1.3	2.0	2.1	1.1	1.2	0.8	0.5
Publishing Industries	0.71	0.70	0.70	0.70	0.69	0.69	0.68	0.68
% Ch, Annual Rate	-3.2	-2.5	-1.7	-1.1	-2.0	-2.3	-2.5	-2.2
Other Information	2.04	2.05	2.07	2.08	2.10	2.11	2.12	2.12
% Ch, Annual Rate	3.8	2.6	3.2	3.3	2.1	2.3	1.9	1.3
Financial Activities	8.23	8.23	8.22	8.20	8.18	8.17	8.16	8.16
% Ch, Annual Rate	-0.1	-0.2	-0.4	-1.0	-0.8	-0.5	-0.5	-0.1
Professional and Business Services	21.42	21.57	21.67	21.72	21.81	21.93	22.06	22.17
% Ch, Annual Rate	3.0	2.9	1.8	0.9	1.8	2.1	2.3	2.1
Education and Health Services	23.19	23.25	23.31	23.37	23.47	23.50	23.53	23.57
% Ch, Annual Rate	0.9	1.1	1.0	1.1	1.6	0.6	0.4	0.8
Leisure and Hospitality	15.68	15.68	15.70	15.75	15.73	15.76	15.79	15.80
% Ch, Annual Rate	-0.5	0.0	0.5	1.1	-0.3	0.6	0.7	0.4
Other Services	5.52	5.51	5.50	5.49	5.48	5.46	5.45	5.44
% Ch, Annual Rate	-0.6	-0.9	-0.7	-0.9	-0.7	-1.0	-0.9	-0.9
Federal Government	2.75	2.74	2.73	2.72	2.71	2.70	2.69	2.68
% Ch, Annual Rate	-1.7	-1.6	-1.5	-1.6	-1.4	-1.5	-1.5	-1.4
State and Local Government	19.54	19.62	19.69	19.77	19.83	19.89	19.94	19.99
% Ch, Annual Rate	1.1	1.8	1.4	1.5	1.3	1.2	1.0	1.0

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	148.87	149.37	149.48	149.64	149.89	150.19	150.49	150.80
% Ch, Annual Rate	0.8	1.3	0.3	0.4	0.7	0.8	0.8	0.8
Manufacturing	12.57	12.59	12.63	12.66	12.67	12.68	12.70	12.70
% Ch, Annual Rate	1.1	0.5	1.2	0.9	0.4	0.5	0.3	0.0
Durable Manufacturing	7.97	8.00	8.03	8.06	8.08	8.10	8.12	8.12
% Ch, Annual Rate	2.0	1.2	1.9	1.5	0.9	1.0	0.8	0.3
Wood Products	0.45	0.46	0.47	0.47	0.48	0.48	0.48	0.48
% Ch, Annual Rate	6.3	6.0	6.1	4.7	3.0	2.2	2.2	2.0
Primary and Fabricated Metals	1.88	1.89	1.90	1.91	1.92	1.93	1.93	1.94
% Ch, Annual Rate	2.6	1.9	2.3	2.3	1.7	1.8	1.7	1.3
Computer and Electronic Products	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
% Ch, Annual Rate	0.1	-0.8	-0.2	-0.2	-0.4	-0.3	-0.2	-0.1
Machinery and Electrical Equipment	1.51	1.51	1.52	1.52	1.53	1.53	1.54	1.54
% Ch, Annual Rate	1.6	1.2	2.0	1.7	1.3	1.1	1.2	1.0
Transportation Equipment	1.59	1.59	1.60	1.61	1.61	1.61	1.61	1.60
% Ch, Annual Rate	2.6	1.7	2.5	1.4	0.1	0.6	-0.3	-1.7
Other Durables	1.43	1.43	1.43	1.44	1.44	1.44	1.44	1.44
% Ch, Annual Rate	0.9	0.1	0.9	0.8	0.5	0.7	0.7	0.3
Nondurable Manufacturing	4.60	4.60	4.59	4.59	4.59	4.58	4.58	4.57
% Ch, Annual Rate	-0.5	-0.7	-0.1	-0.2	-0.4	-0.4	-0.4	-0.6
Food Manufacturing	1.60	1.60	1.60	1.60	1.61	1.61	1.61	1.62
% Ch, Annual Rate	0.5	0.1	1.0	0.9	0.8	0.7	0.8	0.8
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	-0.8	-0.7	0.0	0.1	-0.2	-0.1	-0.2	-0.3
Other Nondurables	2.65	2.64	2.63	2.63	2.62	2.61	2.61	2.60
% Ch, Annual Rate	-1.0	-1.2	-0.8	-0.8	-1.1	-1.1	-1.2	-1.5
Natural Resources and Mining	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77
% Ch, Annual Rate	2.4	1.9	1.8	2.0	2.0	1.7	1.4	1.7
Construction	7.41	7.46	7.52	7.56	7.60	7.65	7.70	7.74
% Ch, Annual Rate	2.4	2.7	3.0	2.5	2.1	2.3	2.7	2.5
Trade, Transportation, and Utilities	27.29	27.24	27.23	27.23	27.20	27.20	27.19	27.18
% Ch, Annual Rate	-0.5	-0.7	-0.2	-0.1	-0.3	0.0	-0.2	-0.2
Wholesale Trade	6.04	6.04	6.06	6.07	6.08	6.09	6.10	6.11
% Ch, Annual Rate	0.8	0.2	0.8	0.8	0.8	0.8	0.7	0.6
Retail Trade	15.65	15.61	15.58	15.56	15.52	15.51	15.48	15.46
% Ch, Annual Rate	-1.2	-1.2	-0.7	-0.6	-1.0	-0.4	-0.6	-0.5
Trans., Warehousing, and Utilities	5.60	5.59	5.60	5.60	5.60	5.60	5.61	5.61
% Ch, Annual Rate	0.2	-0.3	0.2	0.2	0.2	0.2	0.1	0.0
Information	2.81	2.81	2.82	2.83	2.84	2.85	2.87	2.88
% Ch, Annual Rate	0.5	0.3	1.4	1.5	1.3	1.7	1.8	1.8
Publishing Industries	0.68	0.67	0.67	0.67	0.67	0.66	0.66	0.66
% Ch, Annual Rate	-1.7	-2.2	-1.4	-1.5	-1.6	-1.3	-1.4	-1.5
Other Information	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.22
% Ch, Annual Rate	1.3	1.1	2.3	2.5	2.2	2.6	2.8	2.8
Financial Activities	8.16	8.15	8.15	8.15	8.15	8.16	8.17	8.18
% Ch, Annual Rate	0.2	-0.4	0.0	0.0	0.1	0.5	0.5	0.3
Professional and Business Services	22.27	22.37	22.50	22.63	22.75	22.87	23.00	23.16
% Ch, Annual Rate	1.8	1.7	2.4	2.3	2.1	2.1	2.3	2.7
Education and Health Services	23.63	23.62	23.65	23.68	23.74	23.77	23.81	23.86
% Ch, Annual Rate	1.0	-0.2	0.6	0.5	1.0	0.5	0.7	0.8
Leisure and Hospitality	15.80	15.80	15.83	15.86	15.88	15.91	15.94	15.96
% Ch, Annual Rate	-0.1	0.1	0.8	0.7	0.5	0.8	0.6	0.4
Other Services	5.44	5.43	5.42	5.42	5.41	5.41	5.40	5.39
% Ch, Annual Rate	0.0	-0.6	-0.5	-0.5	-0.4	-0.4	-0.4	-0.5
Federal Government	2.70	3.06	2.83	2.68	2.66	2.65	2.64	2.64
% Ch, Annual Rate	3.0	64.8	-26.5	-19.3	-3.9	-1.0	-0.9	-0.8
State and Local Government	20.04	20.09	20.13	20.18	20.22	20.26	20.30	20.35
% Ch, Annual Rate	1.0	1.0	0.9	0.9	0.8	0.9	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	3,059.5	3,144.9	3,219.0	3,269.4	3,311.3	3,351.6	3,390.7	3,426.2
% Ch	2.5	2.8	2.4	1.6	1.3	1.2	1.2	1.0
Manufacturing	288.7	290.3	285.5	284.7	284.5	285.7	287.9	290.7
% Ch	0.7	0.6	-1.7	-0.3	-0.1	0.4	0.8	1.0
Durable Manufacturing	210.0	210.8	205.2	203.6	203.5	204.0	205.8	208.2
% Ch	0.2	0.4	-2.7	-0.8	-0.1	0.3	0.9	1.1
Wood Products	13.4	13.3	13.1	13.7	14.0	14.0	14.3	14.5
% Ch	3.0	-1.0	-1.3	3.9	2.3	0.3	2.4	1.3
Primary and Fabricated Metals	25.6	25.7	25.2	25.4	25.2	25.6	26.4	27.0
% Ch	2.5	0.2	-1.9	0.8	-0.9	1.8	2.9	2.5
Computer and Electronic Products	20.0	20.0	20.3	21.5	22.4	22.8	23.0	23.1
% Ch	-1.0	0.0	1.8	5.6	4.4	1.9	0.6	0.4
Machinery and Electrical Equipment	20.8	20.9	20.4	20.9	21.7	23.0	24.3	25.7
% Ch	4.9	0.5	-2.8	2.7	3.6	6.3	5.5	5.6
Aerospace	94.2	93.7	88.5	84.5	82.6	80.9	80.2	80.2
% Ch	-1.9	-0.6	-5.5	-4.6	-2.3	-2.1	-0.8	0.0
Other Transportation Equip.	9.7	10.1	10.0	9.6	9.2	9.0	8.8	8.6
% Ch	-0.7	4.8	-1.7	-3.9	-3.7	-2.4	-2.4	-1.9
Other Durables	26.2	27.1	27.7	28.1	28.5	28.7	28.9	29.1
% Ch	2.1	3.4	2.2	1.5	1.3	0.7	0.7	0.7
Nondurable Manufacturing	78.7	79.5	80.3	81.1	81.1	81.7	82.1	82.6
% Ch	2.1	1.0	1.0	1.0	0.0	0.8	0.5	0.6
Food Manufacturing	36.4	36.3	36.1	36.5	36.5	36.7	36.6	36.6
% Ch	1.9	-0.2	-0.5	1.2	-0.1	0.4	-0.2	0.0
Paper and Paper Products	8.0	8.0	7.6	7.4	7.2	7.1	7.0	6.9
% Ch	-1.2	-0.5	-5.4	-1.7	-2.9	-1.7	-1.7	-1.2
Other Nondurables	34.3	35.2	36.6	37.1	37.3	38.0	38.5	39.1
% Ch	3.2	2.6	3.9	1.4	0.6	1.7	1.5	1.4
Natural Resources and Mining	6.2	6.3	6.2	6.2	6.3	6.4	6.4	6.5
% Ch	1.7	1.5	-2.3	0.9	1.4	1.0	1.1	1.1
Construction	159.6	173.2	183.0	188.0	195.0	200.7	204.8	207.4
% Ch	7.2	8.5	5.6	2.7	3.8	2.9	2.1	1.2
Trade, Transportation, and Utilities	569.9	588.9	601.0	606.4	608.5	610.1	610.2	611.3
% Ch	3.4	3.3	2.1	0.9	0.3	0.3	0.0	0.2
Wholesale Trade	130.0	132.9	135.7	136.7	138.3	140.2	141.6	142.9
% Ch	2.4	2.3	2.1	0.7	1.2	1.4	1.0	0.9
Retail Trade	342.1	354.9	362.0	365.2	364.5	363.6	362.0	361.4
% Ch	3.6	3.7	2.0	0.9	-0.2	-0.2	-0.4	-0.2
Trans., Warehousing, and Utilities	97.8	101.0	103.2	104.5	105.7	106.3	106.6	107.0
% Ch	4.0	3.3	2.2	1.2	1.1	0.6	0.3	0.3
Information	109.8	113.9	118.0	119.1	119.9	122.1	124.0	126.5
% Ch	3.4	3.7	3.6	0.9	0.6	1.9	1.5	2.0
Software Publishers	55.6	55.9	57.6	58.4	58.9	59.5	60.1	60.8
% Ch	3.3	0.5	3.0	1.5	0.9	1.0	1.0	1.1
Other Publishing Industries	6.6	6.2	6.1	5.8	5.4	5.0	4.6	4.3
% Ch	-4.9	-6.5	-1.8	-4.4	-7.3	-6.8	-7.3	-6.8
Other Information	47.6	51.9	54.4	54.9	55.6	57.6	59.2	61.4
% Ch	4.8	8.9	4.9	0.9	1.2	3.7	2.8	3.6
Financial Activities	145.1	147.6	150.3	149.9	149.5	148.5	147.9	147.7
% Ch	1.0	1.7	1.8	-0.3	-0.3	-0.7	-0.3	-0.2
Professional and Business Services	372.0	388.3	402.4	419.9	434.0	444.8	456.5	468.9
% Ch	3.0	4.4	3.6	4.4	3.3	2.5	2.6	2.7
Education and Health Services	446.7	449.0	462.8	474.2	481.7	490.2	496.6	503.2
% Ch	1.5	0.5	3.1	2.5	1.6	1.8	1.3	1.3
Leisure and Hospitality	296.9	309.1	317.3	321.5	325.0	328.3	331.3	334.7
% Ch	3.4	4.1	2.7	1.3	1.1	1.0	0.9	1.0
Other Services	113.8	115.9	119.8	120.4	121.0	121.7	122.5	123.3
% Ch	2.3	1.8	3.4	0.5	0.5	0.6	0.7	0.7
Federal Government	71.3	73.2	75.0	75.3	74.8	74.1	76.8	73.6
% Ch	-0.5	2.6	2.5	0.4	-0.7	-0.9	3.6	-4.2
State and Local Government	479.4	489.2	497.8	503.7	511.1	519.0	525.6	532.2
% Ch	1.6	2.1	1.8	1.2	1.5	1.5	1.3	1.3

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	3,199.4	3,215.0	3,222.6	3,239.0	3,253.5	3,265.4	3,273.9	3,284.7
% Ch, Annual Rate	3.6	2.0	1.0	2.0	1.8	1.5	1.0	1.3
Manufacturing	288.0	286.8	282.9	284.1	284.4	284.7	285.0	284.7
% Ch, Annual Rate	-0.5	-1.7	-5.4	1.8	0.3	0.6	0.3	-0.3
Durable Manufacturing	208.0	206.8	202.7	203.4	203.2	203.5	203.9	203.8
% Ch, Annual Rate	-2.6	-2.2	-7.6	1.3	-0.2	0.6	0.7	-0.3
Wood Products	13.2	13.1	13.0	13.2	13.4	13.6	13.8	13.9
% Ch, Annual Rate	-2.7	-4.7	-1.6	6.9	4.9	5.9	5.4	2.9
Primary and Fabricated Metals	25.4	25.0	25.0	25.4	25.4	25.4	25.4	25.4
% Ch, Annual Rate	-0.9	-5.6	-0.7	6.3	-0.1	0.8	0.4	-0.9
Computer and Electronic Products	20.2	20.2	20.3	20.6	20.9	21.3	21.7	22.0
% Ch, Annual Rate	3.3	-0.2	0.7	7.6	5.6	6.9	8.3	5.8
Machinery and Electrical Equipment	20.3	20.2	20.4	20.6	20.7	20.9	21.0	21.1
% Ch, Annual Rate	-7.4	-0.7	2.6	4.9	1.8	3.4	3.3	0.8
Aerospace	91.3	90.4	86.5	85.9	85.3	84.8	84.2	83.7
% Ch, Annual Rate	-4.2	-4.0	-16.4	-2.6	-2.6	-2.6	-2.6	-2.6
Other Transportation Equip.	10.0	10.1	9.9	9.8	9.6	9.6	9.6	9.5
% Ch, Annual Rate	-5.3	3.1	-8.2	-5.2	-6.7	-0.2	-0.7	-3.3
Other Durables	27.5	27.7	27.8	27.9	28.0	28.1	28.2	28.3
% Ch, Annual Rate	2.0	3.5	0.7	1.6	1.2	1.4	1.7	1.4
Nondurable Manufacturing	80.1	80.0	80.1	80.8	81.1	81.2	81.1	81.0
% Ch, Annual Rate	5.2	-0.2	0.6	3.2	1.7	0.4	-0.7	-0.4
Food Manufacturing	36.6	35.8	35.8	36.2	36.5	36.6	36.6	36.5
% Ch, Annual Rate	10.4	-8.6	-0.2	5.2	3.3	0.9	-0.6	-0.5
Paper and Paper Products	7.6	7.5	7.6	7.5	7.5	7.5	7.4	7.4
% Ch, Annual Rate	-12.8	-3.0	1.1	-1.2	-1.6	-2.3	-3.4	-3.1
Other Nondurables	35.9	36.7	36.8	37.0	37.1	37.1	37.1	37.1
% Ch, Annual Rate	4.2	9.6	1.3	2.2	0.8	0.6	-0.3	0.3
Natural Resources and Mining	6.2	6.1	6.1	6.2	6.2	6.2	6.2	6.3
% Ch, Annual Rate	-4.5	-3.4	0.2	3.7	-1.2	1.8	2.0	1.6
Construction	181.7	182.5	183.4	184.4	185.4	186.9	188.6	191.0
% Ch, Annual Rate	16.9	1.9	1.9	2.2	2.2	3.2	3.7	5.4
Trade, Transportation, and Utilities	598.1	600.9	601.2	603.8	605.1	606.2	606.9	607.5
% Ch, Annual Rate	3.1	1.9	0.2	1.7	0.9	0.7	0.5	0.4
Wholesale Trade	135.9	135.6	135.5	135.9	136.2	136.6	136.9	137.2
% Ch, Annual Rate	4.5	-1.0	-0.2	1.3	0.9	1.1	0.8	0.9
Retail Trade	359.7	361.8	362.4	364.2	364.8	365.2	365.4	365.4
% Ch, Annual Rate	3.4	2.4	0.7	2.0	0.7	0.4	0.2	0.0
Trans., Warehousing, and Utilities	102.4	103.5	103.3	103.7	104.1	104.4	104.6	104.9
% Ch, Annual Rate	0.3	4.1	-0.7	1.5	1.4	1.3	1.0	1.1
Information	117.2	117.8	118.4	118.7	120.4	119.7	118.1	118.3
% Ch, Annual Rate	6.8	2.1	2.0	0.8	5.8	-2.2	-5.2	0.6
Software Publishers	57.1	57.6	57.7	57.9	58.2	58.4	58.5	58.6
% Ch, Annual Rate	4.1	3.8	0.5	1.2	2.3	1.1	0.8	0.8
Other Publishing Industries	6.2	6.1	6.0	5.9	5.9	5.9	5.7	5.6
% Ch, Annual Rate	6.6	-5.3	-8.6	-4.8	1.5	-5.7	-7.2	-7.4
Other Information	53.9	54.1	54.7	54.9	56.2	55.5	53.9	54.0
% Ch, Annual Rate	9.7	1.2	4.8	1.1	10.1	-5.2	-11.1	1.3
Financial Activities	149.7	150.3	150.5	150.6	150.4	149.9	149.7	149.7
% Ch, Annual Rate	2.2	1.7	0.6	0.1	-0.4	-1.4	-0.6	0.1
Professional and Business Services	396.8	400.4	403.9	408.4	413.6	418.2	422.1	425.7
% Ch, Annual Rate	3.1	3.6	3.6	4.5	5.2	4.5	3.7	3.5
Education and Health Services	457.5	460.5	464.3	468.9	471.5	474.1	475.0	476.4
% Ch, Annual Rate	4.2	2.6	3.4	4.0	2.2	2.2	0.7	1.2
Leisure and Hospitality	316.1	317.1	317.7	318.3	319.6	320.8	322.3	323.4
% Ch, Annual Rate	2.8	1.3	0.9	0.8	1.6	1.6	1.9	1.3
Other Services	118.9	119.9	120.2	120.2	120.3	120.3	120.4	120.5
% Ch, Annual Rate	4.7	3.5	0.7	0.3	0.2	0.0	0.2	0.4
Federal Government	74.4	75.1	75.2	75.3	75.3	75.3	75.3	75.2
% Ch, Annual Rate	2.0	3.8	0.7	0.5	0.1	0.2	-0.1	-0.6
State and Local Government	494.8	497.6	498.8	500.1	501.4	503.0	504.4	505.9
% Ch, Annual Rate	2.1	2.3	0.9	1.1	1.0	1.3	1.1	1.2

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	3,296.0	3,306.4	3,316.3	3,326.3	3,337.3	3,347.3	3,356.3	3,365.4
% Ch, Annual Rate	1.4	1.3	1.2	1.2	1.3	1.2	1.1	1.1
Manufacturing	284.4	284.2	284.5	285.0	285.4	285.6	285.8	286.1
% Ch, Annual Rate	-0.5	-0.3	0.5	0.7	0.5	0.3	0.3	0.3
Durable Manufacturing	203.5	203.2	203.4	203.8	203.9	203.9	204.0	204.1
% Ch, Annual Rate	-0.6	-0.5	0.5	0.6	0.3	0.1	0.2	0.2
Wood Products	13.9	13.9	14.0	14.1	14.0	14.0	14.0	14.0
% Ch, Annual Rate	0.3	0.9	3.3	1.1	-0.8	-1.5	0.1	1.6
Primary and Fabricated Metals	25.2	25.1	25.1	25.2	25.4	25.5	25.7	25.8
% Ch, Annual Rate	-2.6	-2.1	0.9	1.4	2.5	2.3	2.5	2.6
Computer and Electronic Products	22.2	22.3	22.5	22.7	22.8	22.8	22.9	22.9
% Ch, Annual Rate	3.2	2.3	3.3	3.6	1.3	0.9	1.0	0.5
Machinery and Electrical Equipment	21.2	21.4	21.8	22.2	22.6	22.9	23.2	23.4
% Ch, Annual Rate	2.5	3.9	7.4	8.2	6.8	5.3	4.8	4.7
Aerospace	83.2	82.8	82.4	81.9	81.5	81.1	80.6	80.2
% Ch, Annual Rate	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1
Other Transportation Equip.	9.4	9.3	9.1	9.1	9.0	9.0	9.0	8.9
% Ch, Annual Rate	-4.2	-4.4	-6.8	-3.1	-1.6	0.2	-1.4	-2.4
Other Durables	28.4	28.4	28.5	28.6	28.6	28.6	28.7	28.7
% Ch, Annual Rate	1.2	1.0	1.3	0.8	0.5	0.3	0.6	0.7
Nondurable Manufacturing	81.0	81.0	81.1	81.3	81.5	81.7	81.8	82.0
% Ch, Annual Rate	-0.1	0.0	0.6	0.9	1.1	1.0	0.7	0.6
Food Manufacturing	36.5	36.5	36.5	36.6	36.6	36.6	36.7	36.7
% Ch, Annual Rate	0.0	-0.5	0.5	0.7	0.4	0.5	0.3	0.2
Paper and Paper Products	7.3	7.2	7.2	7.2	7.1	7.1	7.1	7.1
% Ch, Annual Rate	-3.5	-2.8	-2.1	-1.7	-1.6	-1.5	-1.7	-1.6
Other Nondurables	37.2	37.3	37.4	37.5	37.7	37.9	38.1	38.2
% Ch, Annual Rate	0.4	1.0	1.3	1.6	2.2	2.0	1.7	1.5
Natural Resources and Mining	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4
% Ch, Annual Rate	0.7	1.2	1.9	1.1	0.8	0.3	0.8	1.2
Construction	193.4	194.3	195.5	196.9	198.5	200.1	201.4	202.7
% Ch, Annual Rate	4.9	2.0	2.5	2.8	3.2	3.4	2.6	2.6
Trade, Transportation, and Utilities	608.1	608.4	608.5	609.0	609.8	610.2	610.2	610.2
% Ch, Annual Rate	0.3	0.2	0.1	0.3	0.5	0.3	0.0	0.0
Wholesale Trade	137.7	138.1	138.5	139.0	139.6	140.1	140.4	140.7
% Ch, Annual Rate	1.5	1.2	1.2	1.4	1.7	1.4	1.0	0.9
Retail Trade	365.1	364.6	364.2	364.1	364.1	363.9	363.4	363.0
% Ch, Annual Rate	-0.4	-0.5	-0.4	-0.1	0.0	-0.3	-0.5	-0.4
Trans., Warehousing, and Utilities	105.3	105.7	105.8	106.0	106.1	106.3	106.4	106.4
% Ch, Annual Rate	1.4	1.5	0.5	0.6	0.6	0.6	0.3	0.3
Information	118.9	119.5	120.2	120.9	121.4	121.9	122.4	122.8
% Ch, Annual Rate	2.2	1.8	2.3	2.5	1.7	1.8	1.5	1.3
Software Publishers	58.7	58.8	59.0	59.2	59.3	59.4	59.6	59.7
% Ch, Annual Rate	0.6	0.8	1.1	1.2	1.0	0.9	0.9	0.9
Other Publishing Industries	5.5	5.4	5.3	5.3	5.2	5.1	5.0	4.9
% Ch, Annual Rate	-8.5	-7.5	-6.1	-5.2	-6.8	-7.5	-8.0	-7.6
Other Information	54.7	55.2	55.8	56.5	56.9	57.4	57.9	58.2
% Ch, Annual Rate	5.1	3.9	4.5	4.6	3.4	3.6	3.1	2.5
Financial Activities	149.8	149.7	149.4	149.0	148.7	148.5	148.3	148.2
% Ch, Annual Rate	0.2	-0.4	-0.6	-1.1	-0.8	-0.5	-0.6	-0.2
Professional and Business Services	429.5	433.1	435.8	437.6	440.2	443.2	446.4	449.4
% Ch, Annual Rate	3.6	3.4	2.5	1.7	2.5	2.8	2.9	2.7
Education and Health Services	478.4	480.6	482.7	484.9	487.7	489.4	490.9	492.8
% Ch, Annual Rate	1.7	1.8	1.8	1.9	2.3	1.4	1.2	1.5
Leisure and Hospitality	323.8	324.5	325.3	326.5	326.9	327.9	328.8	329.6
% Ch, Annual Rate	0.5	0.8	1.1	1.4	0.6	1.1	1.1	1.0
Other Services	120.7	120.9	121.1	121.3	121.5	121.6	121.8	122.0
% Ch, Annual Rate	0.7	0.6	0.7	0.6	0.7	0.5	0.5	0.6
Federal Government	75.0	74.8	74.7	74.5	74.4	74.2	74.0	73.9
% Ch, Annual Rate	-1.0	-1.0	-0.8	-0.9	-0.8	-0.9	-0.9	-0.8
State and Local Government	507.7	510.2	512.3	514.4	516.4	518.2	519.8	521.4
% Ch, Annual Rate	1.4	1.9	1.6	1.7	1.6	1.4	1.3	1.2

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	3,374.7	3,390.3	3,395.3	3,402.6	3,411.7	3,421.3	3,431.0	3,441.0
% Ch, Annual Rate	1.1	1.9	0.6	0.9	1.1	1.1	1.1	1.2
Manufacturing	286.9	287.4	288.3	289.2	289.8	290.4	291.1	291.6
% Ch, Annual Rate	1.1	0.7	1.3	1.2	0.9	0.9	0.8	0.7
Durable Manufacturing	204.9	205.4	206.2	206.9	207.4	207.9	208.4	208.9
% Ch, Annual Rate	1.5	1.0	1.5	1.4	1.1	1.0	1.0	0.8
Wood Products	14.2	14.3	14.4	14.5	14.5	14.5	14.5	14.5
% Ch, Annual Rate	3.7	3.4	3.6	2.3	0.9	0.1	0.1	-0.1
Primary and Fabricated Metals	26.1	26.2	26.5	26.7	26.8	27.0	27.1	27.2
% Ch, Annual Rate	3.7	2.6	3.2	3.1	2.2	2.2	2.1	1.6
Computer and Electronic Products	23.0	22.9	23.0	23.0	23.0	23.0	23.1	23.1
% Ch, Annual Rate	1.1	-0.3	0.6	0.6	0.3	0.4	0.6	0.8
Machinery and Electrical Equipment	23.8	24.1	24.5	24.8	25.2	25.5	25.8	26.1
% Ch, Annual Rate	5.9	5.2	6.5	6.1	5.5	5.3	5.4	5.0
Aerospace	80.2	80.2	80.2	80.2	80.2	80.2	80.2	80.2
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Transportation Equip.	8.9	8.8	8.7	8.7	8.7	8.6	8.6	8.5
% Ch, Annual Rate	-3.0	-3.3	-2.5	-1.7	-1.3	-1.6	-2.2	-3.2
Other Durables	28.8	28.8	28.9	29.0	29.0	29.0	29.1	29.1
% Ch, Annual Rate	1.0	0.5	0.8	0.8	0.6	0.7	0.7	0.4
Nondurable Manufacturing	82.0	82.0	82.2	82.3	82.4	82.5	82.6	82.7
% Ch, Annual Rate	0.2	-0.1	0.8	0.7	0.5	0.5	0.5	0.4
Food Manufacturing	36.6	36.5	36.6	36.6	36.6	36.6	36.6	36.6
% Ch, Annual Rate	-0.4	-1.1	0.3	0.1	0.0	-0.1	0.0	0.0
Paper and Paper Products	7.0	7.0	7.0	6.9	6.9	6.9	6.9	6.9
% Ch, Annual Rate	-2.0	-2.0	-1.0	-1.0	-1.3	-1.2	-1.3	-1.5
Other Nondurables	38.3	38.5	38.6	38.8	38.9	39.0	39.2	39.3
% Ch, Annual Rate	1.2	1.2	1.7	1.6	1.4	1.4	1.2	1.2
Natural Resources and Mining	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.5
% Ch, Annual Rate	1.2	1.2	1.2	1.4	1.2	1.0	0.9	0.5
Construction	203.6	204.5	205.3	206.0	206.6	207.1	207.7	208.2
% Ch, Annual Rate	1.9	1.7	1.5	1.4	1.2	1.1	1.0	1.1
Trade, Transportation, and Utilities	610.1	609.9	610.2	610.7	610.8	611.3	611.5	611.8
% Ch, Annual Rate	0.0	-0.2	0.2	0.3	0.1	0.3	0.2	0.2
Wholesale Trade	141.1	141.4	141.7	142.1	142.4	142.8	143.1	143.3
% Ch, Annual Rate	1.2	0.6	1.0	1.0	1.1	1.0	0.8	0.8
Retail Trade	362.5	362.0	361.9	361.8	361.4	361.5	361.4	361.4
% Ch, Annual Rate	-0.6	-0.5	-0.1	0.0	-0.4	0.1	-0.1	0.0
Trans., Warehousing, and Utilities	106.5	106.6	106.7	106.8	106.9	107.0	107.0	107.1
% Ch, Annual Rate	0.4	0.1	0.3	0.5	0.4	0.4	0.2	0.2
Information	123.2	123.6	124.2	124.9	125.5	126.2	126.9	127.6
% Ch, Annual Rate	1.4	1.2	2.0	2.1	1.9	2.2	2.3	2.3
Software Publishers	59.9	60.0	60.2	60.3	60.5	60.7	60.9	61.0
% Ch, Annual Rate	1.1	0.9	1.1	1.1	1.1	1.2	1.1	1.1
Other Publishing Industries	4.8	4.7	4.6	4.5	4.4	4.4	4.3	4.2
% Ch, Annual Rate	-6.8	-7.8	-6.4	-6.6	-7.0	-6.4	-6.7	-7.0
Other Information	58.6	58.9	59.5	60.0	60.5	61.1	61.7	62.3
% Ch, Annual Rate	2.4	2.3	3.6	3.8	3.4	3.9	4.1	4.1
Financial Activities	148.2	148.0	147.8	147.7	147.6	147.7	147.8	147.7
% Ch, Annual Rate	0.0	-0.7	-0.4	-0.3	-0.2	0.2	0.2	-0.1
Professional and Business Services	452.1	454.7	458.0	461.2	464.1	467.2	470.4	474.0
% Ch, Annual Rate	2.4	2.3	2.9	2.8	2.6	2.6	2.8	3.1
Education and Health Services	494.9	495.6	497.2	498.8	500.9	502.3	504.0	505.8
% Ch, Annual Rate	1.7	0.6	1.3	1.2	1.7	1.2	1.3	1.5
Leisure and Hospitality	330.1	330.8	331.8	332.6	333.4	334.4	335.2	335.9
% Ch, Annual Rate	0.7	0.8	1.2	1.1	1.0	1.1	1.0	0.9
Other Services	122.2	122.4	122.6	122.8	123.0	123.2	123.4	123.6
% Ch, Annual Rate	0.9	0.6	0.7	0.6	0.7	0.7	0.6	0.6
Federal Government	73.8	82.2	77.0	74.3	73.7	73.6	73.5	73.5
% Ch, Annual Rate	-0.5	53.6	-22.9	-13.4	-2.9	-0.5	-0.4	-0.3
State and Local Government	523.1	524.8	526.5	528.1	529.7	531.4	533.0	534.7
% Ch, Annual Rate	1.3	1.3	1.3	1.3	1.2	1.3	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	15,350.7	15,963.9	16,649.1	17,399.7	18,212.8	19,052.7	19,904.8
% Ch	4.4	4.5	4.0	4.3	4.5	4.7	4.6	4.5
Total Wage and Salary Disbursements	7,477.8	7,834.9	8,202.7	8,554.8	8,893.6	9,239.2	9,598.1	9,976.8
% Ch	5.1	4.8	4.7	4.3	4.0	3.9	3.9	3.9
Nonwage Personal Income	7,216.5	7,515.8	7,761.2	8,094.2	8,506.1	8,973.6	9,454.7	9,928.0
% Ch	3.8	4.1	3.3	4.3	5.1	5.5	5.4	5.0
Supplements to Wages and Salaries	1,771.2	1,831.7	1,897.5	1,969.8	2,032.8	2,099.4	2,165.4	2,228.2
% Ch	2.7	3.4	3.6	3.8	3.2	3.3	3.1	2.9
Proprietor's Income	1,346.7	1,388.3	1,430.8	1,506.3	1,567.8	1,620.5	1,688.6	1,767.6
% Ch	4.8	3.1	3.1	5.3	4.1	3.4	4.2	4.7
Farm	78.1	59.9	47.9	51.8	53.0	54.2	55.9	60.6
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,268.5	1,328.4	1,382.9	1,454.5	1,514.8	1,566.4	1,632.7	1,707.1
% Ch	6.0	4.7	4.1	5.2	4.1	3.4	4.2	4.6
Less: Contribution For Govt. Soc. Ins.	1,159.0	1,204.0	1,252.3	1,305.6	1,358.1	1,409.6	1,464.6	1,523.9
% Ch	4.7	3.9	4.0	4.3	4.0	3.8	3.9	4.0
Dividends/Int./Rent	2,728.4	2,837.1	2,900.9	2,979.8	3,171.5	3,410.0	3,647.9	3,867.7
% Ch	4.0	4.0	2.3	2.7	6.4	7.5	7.0	6.0
Transfer Payments	2,529.2	2,662.7	2,784.2	2,943.9	3,092.0	3,253.2	3,417.4	3,588.4
% Ch	4.2	5.3	4.6	5.7	5.0	5.2	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	15,746.0	15,891.0	16,027.6	16,191.1	16,383.3	16,567.8	16,737.6	16,907.8
% Ch, Annual Rate	3.7	3.7	3.5	4.1	4.8	4.6	4.2	4.1
Total Wage and Salary Disbursements	8,087.9	8,151.7	8,241.5	8,329.8	8,424.1	8,514.5	8,600.1	8,680.7
% Ch, Annual Rate	4.7	3.2	4.5	4.4	4.6	4.4	4.1	3.8
Nonwage Personal Income	7,658.1	7,739.3	7,786.1	7,861.3	7,959.2	8,053.3	8,137.5	8,227.0
% Ch, Annual Rate	2.7	4.3	2.4	3.9	5.1	4.8	4.2	4.5
Supplements to Wages and Salaries	1,874.6	1,889.6	1,905.1	1,920.9	1,943.6	1,962.2	1,979.2	1,994.3
% Ch, Annual Rate	3.6	3.2	3.3	3.4	4.8	3.9	3.5	3.1
Proprietor's Income	1,412.2	1,421.6	1,434.3	1,455.2	1,476.1	1,499.3	1,516.5	1,533.3
% Ch, Annual Rate	1.5	2.7	3.6	6.0	5.9	6.4	4.7	4.5
Farm	48.5	47.0	47.0	49.0	49.5	50.4	52.3	54.8
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,363.7	1,374.6	1,387.3	1,406.3	1,426.6	1,448.9	1,464.2	1,478.5
% Ch, Annual Rate	4.2	3.2	3.7	5.6	5.9	6.4	4.3	4.0
Less: Contribution For Govt. Soc. Ins.	1,237.7	1,246.0	1,258.0	1,267.3	1,290.1	1,300.5	1,311.0	1,320.7
% Ch, Annual Rate	4.8	2.7	3.9	3.0	7.4	3.3	3.3	3.0
Dividends/Int./Rent	2,880.7	2,910.2	2,906.0	2,906.7	2,934.1	2,960.7	2,992.3	3,032.2
% Ch, Annual Rate	1.9	4.2	-0.6	0.1	3.8	3.7	4.3	5.5
Transfer Payments	2,728.4	2,763.9	2,798.7	2,845.8	2,895.5	2,931.6	2,960.6	2,987.9
% Ch, Annual Rate	4.6	5.3	5.1	6.9	7.2	5.1	4.0	3.7

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	17,124.1	17,304.3	17,488.0	17,682.3	17,912.6	18,115.8	18,313.4	18,509.5
% Ch, Annual Rate	5.2	4.3	4.3	4.5	5.3	4.6	4.4	4.4
Total Wage and Salary Disbursements	8,767.7	8,852.3	8,936.3	9,018.0	9,108.5	9,196.2	9,283.0	9,369.3
% Ch, Annual Rate	4.1	3.9	3.9	3.7	4.1	3.9	3.8	3.8
Nonwage Personal Income	8,356.4	8,452.0	8,551.7	8,664.3	8,804.1	8,919.7	9,030.4	9,140.2
% Ch, Annual Rate	6.4	4.7	4.8	5.4	6.6	5.4	5.1	5.0
Supplements to Wages and Salaries	2,011.2	2,024.8	2,039.8	2,055.4	2,076.2	2,091.9	2,107.2	2,122.4
% Ch, Annual Rate	3.4	2.7	3.0	3.1	4.1	3.1	3.0	2.9
Proprietor's Income	1,547.7	1,562.5	1,574.8	1,586.3	1,600.9	1,614.1	1,626.6	1,640.7
% Ch, Annual Rate	3.8	3.9	3.2	3.0	3.7	3.3	3.1	3.5
Farm	55.0	52.0	52.1	52.9	54.1	54.1	54.4	54.1
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,492.7	1,510.5	1,522.7	1,533.4	1,546.8	1,560.0	1,572.2	1,586.5
% Ch, Annual Rate	3.9	4.9	3.3	2.8	3.5	3.4	3.2	3.7
Less: Contribution For Govt. Soc. Ins.	1,342.7	1,353.5	1,363.2	1,373.0	1,394.9	1,404.7	1,414.3	1,424.6
% Ch, Annual Rate	6.8	3.2	2.9	2.9	6.6	2.8	2.8	3.0
Dividends/Int./Rent	3,089.9	3,140.8	3,194.2	3,261.3	3,317.1	3,381.6	3,441.4	3,500.1
% Ch, Annual Rate	7.8	6.8	7.0	8.7	7.0	8.0	7.3	7.0
Transfer Payments	3,050.3	3,077.3	3,106.3	3,134.3	3,205.0	3,236.8	3,269.4	3,301.7
% Ch, Annual Rate	8.6	3.6	3.8	3.7	9.3	4.0	4.1	4.0

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	18,743.3	18,952.2	19,156.3	19,359.2	19,594.6	19,804.5	20,007.2	20,212.9
% Ch, Annual Rate	5.1	4.5	4.4	4.3	5.0	4.4	4.2	4.2
Total Wage and Salary Disbursements	9,461.9	9,552.4	9,643.1	9,734.8	9,833.1	9,928.2	10,024.6	10,121.4
% Ch, Annual Rate	4.0	3.9	3.8	3.9	4.1	3.9	3.9	3.9
Nonwage Personal Income	9,281.4	9,399.8	9,513.2	9,624.4	9,761.5	9,876.3	9,982.6	10,091.6
% Ch, Annual Rate	6.3	5.2	4.9	4.8	5.8	4.8	4.4	4.4
Supplements to Wages and Salaries	2,143.6	2,158.3	2,172.6	2,187.1	2,208.2	2,221.2	2,234.6	2,248.7
% Ch, Annual Rate	4.1	2.8	2.7	2.7	3.9	2.4	2.4	2.5
Proprietor's Income	1,660.1	1,680.8	1,697.6	1,716.1	1,737.4	1,759.6	1,778.1	1,795.5
% Ch, Annual Rate	4.8	5.1	4.1	4.4	5.1	5.2	4.3	4.0
Farm	54.8	55.1	56.3	57.4	59.2	60.2	61.2	61.7
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,605.3	1,625.7	1,641.3	1,658.7	1,678.1	1,699.4	1,716.9	1,733.8
% Ch, Annual Rate	4.8	5.2	3.9	4.3	4.8	5.2	4.2	4.0
Less: Contribution For Govt. Soc. Ins.	1,449.1	1,459.1	1,469.1	1,481.2	1,507.9	1,518.5	1,529.3	1,540.0
% Ch, Annual Rate	7.1	2.8	2.8	3.3	7.4	2.8	2.9	2.8
Dividends/Int./Rent	3,557.1	3,619.0	3,679.3	3,736.2	3,790.7	3,844.9	3,893.3	3,941.8
% Ch, Annual Rate	6.7	7.1	6.8	6.3	6.0	5.8	5.1	5.1
Transfer Payments	3,369.7	3,400.8	3,432.9	3,466.2	3,533.1	3,569.1	3,605.8	3,645.5
% Ch, Annual Rate	8.5	3.7	3.8	3.9	7.9	4.1	4.2	4.5

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	367.008	382.164	399.527	419.674	441.456	464.014	486.890
% Ch	5.8	4.8	4.1	4.5	5.0	5.2	5.1	4.9
Total Wage and Salary Disbursements	181.978	191.371	200.254	209.275	218.648	228.147	238.095	248.635
% Ch	6.7	5.2	4.6	4.5	4.5	4.3	4.4	4.4
Manufacturing	21.781	21.736	21.338	21.946	22.568	23.281	24.162	25.154
% Ch	6.0	-0.2	-1.8	2.8	2.8	3.2	3.8	4.1
Durable Manufacturing	17.664	17.586	17.070	17.500	17.976	18.502	19.205	20.007
% Ch	6.4	-0.4	-2.9	2.5	2.7	2.9	3.8	4.2
Nondurable Manufacturing	4.117	4.150	4.268	4.446	4.592	4.779	4.957	5.146
% Ch	4.0	0.8	2.8	4.2	3.3	4.1	3.7	3.8
Nonmanufacturing	153.326	162.757	171.834	180.013	188.518	197.032	205.819	215.076
% Ch	7.2	6.2	5.6	4.8	4.7	4.5	4.5	4.5
Other Private Wages	1.116	1.149	1.128	1.167	1.205	1.244	1.282	1.323
% Ch	3.2	2.9	-1.8	3.4	3.3	3.2	3.1	3.1
Farm Wages	1.624	1.679	1.745	1.824	1.906	1.988	2.074	2.164
% Ch	3.1	3.4	3.9	4.5	4.5	4.3	4.3	4.4
Military Wages	4.131	4.050	4.208	4.326	4.451	4.602	4.757	4.919
% Ch	-4.1	-2.0	3.9	2.8	2.9	3.4	3.4	3.4
Nonwage Personal Income	168.343	175.637	181.910	190.252	201.026	213.309	225.920	238.255
% Ch	4.9	4.3	3.6	4.6	5.7	6.1	5.9	5.5
Supplements to Wages and Salaries	41.754	43.331	45.091	46.898	48.662	50.482	52.303	54.069
% Ch	2.8	3.8	4.1	4.0	3.8	3.7	3.6	3.4
Proprietor's Income	25.979	27.489	28.656	30.173	31.465	32.564	33.960	35.536
% Ch	3.5	5.8	4.2	5.3	4.3	3.5	4.3	4.6
Farm	1.253	0.996	0.996	1.035	1.049	1.060	1.073	1.103
% Ch	...	...	...	...	...	...	...	...
Nonfarm	24.726	26.493	27.659	29.138	30.416	31.504	32.888	34.433
% Ch	5.3	7.1	4.4	5.3	4.4	3.6	4.4	4.7
Less: Contribution For Govt. Soc. Ins.	30.320	31.495	32.810	34.237	35.748	37.225	38.798	40.479
% Ch	4.7	3.9	4.2	4.4	4.4	4.1	4.2	4.3
Plus: Residence Adjustment	3.353	3.582	3.757	3.941	4.114	4.291	4.474	4.668
% Ch	-1.1	6.8	4.9	4.9	4.4	4.3	4.3	4.3
Dividends/Int./Rent	72.149	75.168	77.303	79.807	85.344	92.183	99.049	105.453
% Ch	4.0	4.2	2.8	3.2	6.9	8.0	7.4	6.5
Transfer Payments	55.427	57.562	59.913	63.669	67.189	71.016	74.931	79.008
% Ch	8.8	3.9	4.1	6.3	5.5	5.7	5.5	5.4
State U.I. Benefits	1.062	0.995	1.021	0.849	0.721	0.665	0.651	0.643
% Ch	-38.4	-6.3	2.6	-16.8	-15.1	-7.8	-2.1	-1.2
Other Transfers	54.365	56.566	58.892	62.820	66.468	70.351	74.280	78.365
% Ch	10.4	4.0	4.1	6.7	5.8	5.8	5.6	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	377.077	380.926	383.696	386.957	393.539	397.744	401.225	405.602
% Ch, Annual Rate	5.6	4.1	2.9	3.4	7.0	4.3	3.5	4.4
Total Wage and Salary Disbursements	197.847	199.491	201.102	202.576	206.715	208.566	209.886	211.934
% Ch, Annual Rate	7.4	3.4	3.3	3.0	8.4	3.6	2.6	4.0
Manufacturing	20.850	21.604	21.358	21.540	21.687	21.864	22.048	22.185
% Ch, Annual Rate	-12.4	15.3	-4.5	3.5	2.8	3.3	3.4	2.5
Durable Manufacturing	16.633	17.368	17.078	17.200	17.295	17.431	17.583	17.689
% Ch, Annual Rate	-16.8	18.9	-6.5	2.9	2.2	3.2	3.5	2.4
Nondurable Manufacturing	4.217	4.236	4.280	4.341	4.392	4.433	4.464	4.496
% Ch, Annual Rate	8.1	1.8	4.2	5.8	4.8	3.8	2.9	2.9
Nonmanufacturing	169.978	170.818	172.636	173.905	177.764	179.399	180.499	182.389
% Ch, Annual Rate	10.3	2.0	4.3	3.0	9.2	3.7	2.5	4.3
Other Private Wages	1.113	1.125	1.133	1.142	1.153	1.162	1.171	1.180
% Ch, Annual Rate	3.5	4.3	2.8	3.2	4.0	3.3	3.1	3.2
Farm Wages	1.715	1.738	1.754	1.773	1.795	1.815	1.834	1.853
% Ch, Annual Rate	4.6	5.4	3.9	4.3	5.1	4.5	4.2	4.3
Military Wages	4.190	4.205	4.221	4.216	4.316	4.326	4.335	4.327
% Ch, Annual Rate	9.5	1.4	1.5	-0.4	9.8	0.8	0.8	-0.7
Nonwage Personal Income	179.230	181.435	182.594	184.381	186.824	189.178	191.339	193.668
% Ch, Annual Rate	3.7	5.0	2.6	4.0	5.4	5.1	4.6	5.0
Supplements to Wages and Salaries	44.513	44.951	45.267	45.633	46.250	46.698	47.115	47.530
% Ch, Annual Rate	5.3	4.0	2.8	3.3	5.5	3.9	3.6	3.6
Proprietor's Income	28.236	28.493	28.745	29.148	29.575	30.041	30.375	30.700
% Ch, Annual Rate	3.9	3.7	3.6	5.7	6.0	6.5	4.5	4.4
Farm	0.993	0.989	0.993	1.010	1.017	1.025	1.039	1.057
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	27.243	27.504	27.752	28.138	28.558	29.016	29.336	29.643
% Ch, Annual Rate	4.8	3.9	3.7	5.7	6.1	6.6	4.5	4.3
Less: Contribution For Govt. Soc. Ins.	32.407	32.684	32.956	33.192	33.818	34.094	34.374	34.662
% Ch, Annual Rate	6.5	3.5	3.4	2.9	7.8	3.3	3.3	3.4
Plus: Residence Adjustment	3.701	3.727	3.777	3.824	3.873	3.921	3.966	4.007
% Ch, Annual Rate	5.6	2.9	5.5	5.1	5.2	5.0	4.7	4.2
Dividends/Int./Rent	76.601	77.506	77.494	77.610	78.438	79.246	80.189	81.356
% Ch, Annual Rate	2.5	4.8	-0.1	0.6	4.3	4.2	4.8	5.9
Transfer Payments	58.586	59.441	60.267	61.358	62.507	63.365	64.069	64.737
% Ch, Annual Rate	5.2	6.0	5.7	7.4	7.7	5.6	4.5	4.2
State U.I. Benefits	1.054	1.054	1.015	0.962	0.906	0.862	0.828	0.802
% Ch, Annual Rate	38.1	0.0	-14.0	-19.2	-21.5	-18.0	-14.7	-12.3
Other Transfers	57.532	58.387	59.252	60.396	61.601	62.503	63.241	63.935
% Ch, Annual Rate	4.7	6.1	6.1	8.0	8.2	6.0	4.8	4.5

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	413.079	417.616	421.314	426.688	434.282	439.474	443.137	448.931
% Ch, Annual Rate	7.6	4.5	3.6	5.2	7.3	4.9	3.4	5.3
Total Wage and Salary Disbursements	216.082	218.022	219.059	221.431	225.490	227.600	228.316	231.180
% Ch, Annual Rate	8.1	3.6	1.9	4.4	7.5	3.8	1.3	5.1
Manufacturing	22.327	22.466	22.647	22.831	23.010	23.191	23.372	23.551
% Ch, Annual Rate	2.6	2.5	3.3	3.3	3.2	3.2	3.1	3.1
Durable Manufacturing	17.795	17.898	18.036	18.174	18.304	18.435	18.568	18.702
% Ch, Annual Rate	2.4	2.3	3.1	3.1	2.9	2.9	2.9	2.9
Nondurable Manufacturing	4.532	4.568	4.611	4.657	4.706	4.756	4.804	4.849
% Ch, Annual Rate	3.2	3.2	3.9	4.0	4.3	4.3	4.0	3.9
Nonmanufacturing	186.254	188.010	188.823	190.985	194.712	196.594	197.083	199.740
% Ch, Annual Rate	8.7	3.8	1.7	4.7	8.0	3.9	1.0	5.5
Other Private Wages	1.192	1.201	1.210	1.219	1.229	1.239	1.248	1.257
% Ch, Annual Rate	3.9	3.2	3.1	2.9	3.5	3.2	3.0	2.9
Farm Wages	1.876	1.896	1.916	1.935	1.957	1.978	1.999	2.019
% Ch, Annual Rate	5.0	4.3	4.3	4.0	4.7	4.4	4.2	4.1
Military Wages	4.434	4.448	4.463	4.460	4.582	4.597	4.614	4.613
% Ch, Annual Rate	10.3	1.2	1.3	-0.2	11.4	1.3	1.4	-0.1
Nonwage Personal Income	196.997	199.595	202.256	205.257	208.792	211.874	214.821	217.751
% Ch, Annual Rate	7.1	5.4	5.4	6.1	7.1	6.0	5.7	5.6
Supplements to Wages and Salaries	48.077	48.453	48.855	49.262	49.856	50.284	50.691	51.095
% Ch, Annual Rate	4.7	3.2	3.4	3.4	4.9	3.5	3.3	3.2
Proprietor's Income	31.013	31.367	31.624	31.857	32.150	32.430	32.688	32.987
% Ch, Annual Rate	4.1	4.6	3.3	3.0	3.7	3.5	3.2	3.7
Farm	1.060	1.042	1.044	1.050	1.058	1.059	1.062	1.060
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	29.952	30.324	30.579	30.807	31.091	31.370	31.626	31.927
% Ch, Annual Rate	4.2	5.1	3.4	3.0	3.7	3.6	3.3	3.9
Less: Contribution For Govt. Soc. Ins.	35.306	35.615	35.896	36.174	36.796	37.085	37.362	37.657
% Ch, Annual Rate	7.6	3.6	3.2	3.1	7.1	3.2	3.0	3.2
Plus: Residence Adjustment	4.049	4.093	4.136	4.178	4.224	4.268	4.313	4.357
% Ch, Annual Rate	4.3	4.3	4.3	4.1	4.5	4.3	4.3	4.2
Dividends/Int./Rent	82.999	84.467	86.001	87.908	89.516	91.359	93.082	94.774
% Ch, Annual Rate	8.3	7.3	7.5	9.2	7.5	8.5	7.8	7.5
Transfer Payments	66.165	66.830	67.536	68.225	69.843	70.617	71.409	72.194
% Ch, Annual Rate	9.1	4.1	4.3	4.1	9.8	4.5	4.6	4.5
State U.I. Benefits	0.758	0.726	0.704	0.695	0.678	0.661	0.660	0.659
% Ch, Annual Rate	-20.2	-15.5	-12.0	-4.7	-9.4	-9.7	-0.6	-1.0
Other Transfers	65.407	66.104	66.833	67.529	69.165	69.956	70.749	71.536
% Ch, Annual Rate	9.5	4.3	4.5	4.2	10.0	4.7	4.6	4.5

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	456.554	462.011	465.703	471.789	479.562	484.880	488.466	494.652
% Ch, Annual Rate	7.0	4.9	3.2	5.3	6.8	4.5	3.0	5.2
Total Wage and Salary Disbursements	235.227	237.541	238.233	241.378	245.678	247.989	248.776	252.097
% Ch, Annual Rate	7.2	4.0	1.2	5.4	7.3	3.8	1.3	5.4
Manufacturing	23.794	24.024	24.286	24.544	24.789	25.032	25.277	25.516
% Ch, Annual Rate	4.2	3.9	4.4	4.3	4.1	4.0	4.0	3.8
Durable Manufacturing	18.904	19.095	19.307	19.515	19.713	19.909	20.107	20.299
% Ch, Annual Rate	4.4	4.1	4.5	4.4	4.1	4.0	4.0	3.9
Nondurable Manufacturing	4.890	4.928	4.979	5.029	5.076	5.123	5.170	5.216
% Ch, Annual Rate	3.4	3.2	4.2	4.0	3.8	3.8	3.7	3.6
Nonmanufacturing	203.388	205.424	205.806	208.661	212.554	214.572	215.064	218.112
% Ch, Annual Rate	7.5	4.1	0.7	5.7	7.7	3.9	0.9	5.8
Other Private Wages	1.268	1.278	1.287	1.297	1.308	1.318	1.328	1.338
% Ch, Annual Rate	3.3	3.3	2.9	3.1	3.4	3.1	3.1	3.0
Farm Wages	2.041	2.063	2.084	2.106	2.130	2.153	2.175	2.198
% Ch, Annual Rate	4.5	4.5	4.1	4.3	4.6	4.3	4.3	4.3
Military Wages	4.737	4.752	4.770	4.771	4.897	4.914	4.932	4.933
% Ch, Annual Rate	11.1	1.3	1.5	0.1	11.0	1.4	1.5	0.1
Nonwage Personal Income	221.327	224.470	227.470	230.411	233.884	236.892	239.689	242.556
% Ch, Annual Rate	6.7	5.8	5.5	5.3	6.2	5.2	4.8	4.9
Supplements to Wages and Salaries	51.695	52.121	52.496	52.900	53.517	53.879	54.248	54.632
% Ch, Annual Rate	4.8	3.3	2.9	3.1	4.7	2.7	2.8	2.9
Proprietor's Income	33.381	33.811	34.139	34.511	34.928	35.375	35.744	36.098
% Ch, Annual Rate	4.9	5.3	3.9	4.4	4.9	5.2	4.2	4.0
Farm	1.065	1.067	1.076	1.083	1.094	1.101	1.107	1.111
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	32.316	32.743	33.064	33.428	33.834	34.274	34.637	34.987
% Ch, Annual Rate	5.0	5.4	4.0	4.5	4.9	5.3	4.3	4.1
Less: Contribution For Govt. Soc. Ins.	38.341	38.649	38.929	39.275	40.025	40.327	40.630	40.933
% Ch, Annual Rate	7.5	3.3	2.9	3.6	7.9	3.1	3.0	3.0
Plus: Residence Adjustment	4.405	4.450	4.497	4.544	4.594	4.643	4.692	4.742
% Ch, Annual Rate	4.4	4.2	4.3	4.2	4.5	4.3	4.3	4.3
Dividends/Int./Rent	96.424	98.211	99.955	101.608	103.196	104.778	106.204	107.633
% Ch, Annual Rate	7.1	7.6	7.3	6.8	6.4	6.3	5.6	5.5
Transfer Payments	73.763	74.526	75.311	76.123	77.673	78.543	79.431	80.385
% Ch, Annual Rate	9.0	4.2	4.3	4.4	8.4	4.6	4.6	4.9
State U.I. Benefits	0.658	0.647	0.648	0.651	0.656	0.647	0.639	0.630
% Ch, Annual Rate	-0.3	-6.6	0.7	1.6	3.1	-5.4	-4.4	-5.6
Other Transfers	73.105	73.879	74.663	75.473	77.017	77.896	78.791	79.755
% Ch, Annual Rate	9.1	4.3	4.3	4.4	8.4	4.6	4.7	5.0



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

	Price Deflator*		U.S. CPI#		Seattle CPI+	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	0.233	4.2	0.405	4.2	0.382	2.1
1972	0.241	3.4	0.418	3.3	0.393	2.9
1973	0.254	5.4	0.444	6.3	0.418	6.4
1974	0.280	10.4	0.493	11.0	0.464	11.0
1975	0.303	8.3	0.538	9.1	0.511	10.2
1976	0.320	5.5	0.569	5.8	0.540	5.5
1977	0.341	6.5	0.606	6.5	0.583	8.0
1978	0.365	7.0	0.652	7.6	0.640	9.9
1979	0.397	8.9	0.726	11.3	0.709	10.8
1980	0.440	10.7	0.824	13.5	0.827	16.7
1981	0.478	8.8	0.909	10.4	0.916	10.8
1982	0.505	5.5	0.965	6.2	0.978	6.7
1983	0.526	4.3	0.996	3.2	0.993	1.5
1984	0.546	3.8	1.039	4.4	1.030	3.8
1985	0.566	3.5	1.076	3.5	1.056	2.5
1986	0.578	2.2	1.097	1.9	1.066	1.0
1987	0.596	3.2	1.136	3.6	1.092	2.4
1988	0.620	3.9	1.183	4.1	1.128	3.3
1989	0.646	4.3	1.239	4.8	1.181	4.7
1990	0.674	4.3	1.307	5.4	1.268	7.3
1991	0.696	3.3	1.362	4.2	1.341	5.8
1992	0.715	2.6	1.403	3.0	1.390	3.7
1993	0.733	2.5	1.445	3.0	1.429	2.8
1994	0.748	2.1	1.482	2.6	1.478	3.4
1995	0.764	2.1	1.524	2.8	1.522	3.0
1996	0.780	2.1	1.569	2.9	1.575	3.4
1997	0.793	1.7	1.605	2.3	1.630	3.5
1998	0.799	0.8	1.630	1.5	1.677	2.9
1999	0.811	1.5	1.666	2.2	1.728	3.0
2000	0.831	2.5	1.722	3.4	1.792	3.7
2001	0.847	1.9	1.770	2.8	1.857	3.6
2002	0.859	1.3	1.799	1.6	1.893	2.0
2003	0.876	2.0	1.840	2.3	1.924	1.6
2004	0.897	2.4	1.889	2.7	1.947	1.2
2005	0.923	2.9	1.953	3.4	2.002	2.8
2006	0.947	2.7	2.016	3.2	2.076	3.7
2007	0.971	2.5	2.073	2.9	2.157	3.9
2008	1.001	3.1	2.153	3.8	2.247	4.2
2009	1.000	-0.1	2.146	-0.3	2.260	0.6
2010	1.016	1.7	2.181	1.6	2.267	0.3
2011	1.041	2.5	2.249	3.1	2.327	2.7
2012	1.061	1.9	2.296	2.1	2.386	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	1.108	1.2	2.403	1.4	2.549	2.2
2017	1.128	1.9	2.461	2.4	2.612	2.5
2018	1.149	1.9	2.516	2.2	2.672	2.3
2019	1.171	1.9	2.573	2.3	2.734	2.3
2020	1.194	1.9	2.631	2.3	2.798	2.3
2021	1.217	1.9	2.691	2.3	2.863	2.3

\* 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	110.9	1.1	106.4	-28.5	107.3	-25.9

Forecast

2016	115.4	2.2	110.8	-0.1	90.9	-14.6	99.2	-7.6
2017	118.1	2.3	113.4	2.3	98.0	7.8	105.6	6.5
2018	121.1	2.5	115.9	2.2	101.6	3.6	107.3	1.6
2019	124.2	2.6	118.2	2.0	105.3	3.6	109.3	1.9
2020	127.3	2.5	120.4	1.8	109.5	4.0	112.0	2.5
2021	130.4	2.5	122.6	1.8	113.9	4.0	114.9	2.6

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
<b>Forecast</b>						
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)

	<b>Actual</b>									
	<b><u>2012</u></b>	<b><u>2013</u></b>	<b><u>2014</u></b>	<b><u>2015</u></b>	<b><u>2016</u></b>	<b><u>2017</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
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**

<b>Indicator</b>	<b>Latest Data</b>	<b>Indication*</b>
U.S. Leading Index	May 2016	-
U.S. Real GDP Growth	1st quarter 2016	-
U.S. ISM Index	June 2016	+
U.S. Employment YoY%Δ	May 2016	-
U.S. Unemployment Rate	May 2016	+
U.S. Fed Funds Target	June 2016	unchanged
U.S. Consumer Confidence	June 2016	+
U.S. Consumer Sentiment	June 2016	-
U.S. Light Vehicle Sales	May 2016	unchanged
U.S. CPI YoY%Δ	May 2016	unchanged
U.S. Home Prices	March 2016	+
S&P 500 Index	June 2016	+
WA Leading Index	May 2016	+
WA ISM-WW Index	May 2016	-
WA Employment YoY%Δ	May 2016	unchanged
WA Aerospace Empl. YoY%Δ	May 2016	-
WA Unemployment Rate	December 2015	unchanged
WA Help Wanted Index	May 2016	+
WA Business Cycle Indicator	May 2016	+
WA Initial Unemploy. Claims	May 2016	-
WA Housing Permits	May 2016	-
WA Weekly Hours in Mfg.	May 2016	+
WA New Vehicle Registration	May 2016	+
WA In-Migration	May 2016	-
WA Exports-Total YoY%Δ	1st quarter 2016	-
WA Exports- w/o Trans. Equip. YoY%Δ	1st quarter 2016	+
Seattle CPI YoY%Δ	April 2016	-
Seattle Home Prices	March 2016	+
WA Construction Activity Index	May 2016	-

\*Change from the previous reading

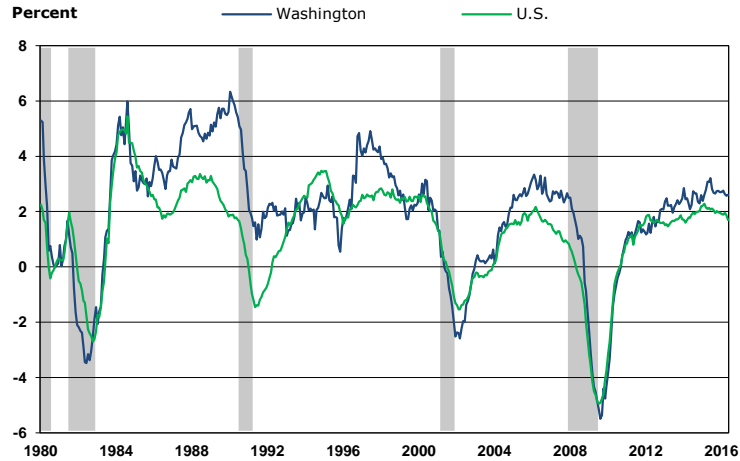
Table A6.2  
**Washington Business Indicators**  
 Historical Data

	<b>WA Index of Leading Indicators</b>	<b>U.S. Index of Leading Indicators</b>	<b>WA State Business Cycle Indicator</b>	<b>WA State Construction Index</b>	<b>WA State Help Wanted Index</b>	<b>WA Purchasing Management Index</b>	<b>U.S. Purchasing Management Index</b>
<b>2013:01</b>	114.5	109.1	40.7	93.3	128.7	60.2	52.3
<b>2013:02</b>	114.8	109.5	39.2	95.0	127.2	56.3	53.1
<b>2013:03</b>	114.0	109.2	39.3	95.5	118.8	65.4	51.5
<b>2013:04</b>	114.3	110.0	38.1	93.4	120.2	59.5	50.0
<b>2013:05</b>	114.3	110.2	38.9	93.0	120.0	53.7	50.0
<b>2013:06</b>	114.3	110.4	39.6	92.9	121.0	61.0	52.5
<b>2013:07</b>	114.5	110.8	41.5	96.4	118.6	60.3	54.9
<b>2013:08</b>	115.1	111.6	41.8	95.0	118.7	53.8	56.3
<b>2013:09</b>	115.2	112.5	41.4	93.0	116.6	52.7	56.0
<b>2013:10</b>	114.6	112.8	42.6	94.9	112.7	54.2	56.6
<b>2013:11</b>	116.1	113.8	43.1	93.2	118.2	61.1	57.0
<b>2013:12</b>	116.3	113.8	43.9	97.9	118.2	62.3	56.5
<b>2014:01</b>	115.8	113.7	45.1	94.6	118.2	63.5	51.8
<b>2014:02</b>	115.6	114.3	43.5	92.1	118.5	68.7	54.3
<b>2014:03</b>	116.4	115.4	44.1	94.3	118.6	63.6	54.4
<b>2014:04</b>	117.2	115.8	46.1	97.6	120.6	53.7	55.3
<b>2014:05</b>	117.4	116.5	46.7	95.7	118.7	59.6	55.6
<b>2014:06</b>	118.5	117.2	46.9	97.4	121.0	67.0	55.7
<b>2014:07</b>	118.8	118.4	48.6	97.7	121.3	50.1	56.4
<b>2014:08</b>	118.8	118.5	48.5	97.9	121.6	62.9	58.1
<b>2014:09</b>	118.5	119.2	48.8	98.9	114.3	60.3	56.1
<b>2014:10</b>	119.2	119.9	48.7	100.6	119.0	57.6	57.9
<b>2014:11</b>	119.9	120.5	51.0	101.6	128.0	63.1	57.6
<b>2014:12</b>	119.6	121.0	51.8	102.7	122.0	53.3	55.1
<b>2015:01</b>	119.3	121.2	53.8	98.2	127.6	66.6	53.5
<b>2015:02</b>	120.4	120.9	58.4	107.3	137.2	65.9	52.9
<b>2015:03</b>	120.0	121.5	58.2	101.1	138.8	64.1	51.5
<b>2015:04</b>	120.3	122.2	58.6	100.2	135.7	60.4	51.5
<b>2015:05</b>	120.6	122.8	58.6	98.2	139.0	60.3	52.8
<b>2015:06</b>	120.7	122.9	58.6	99.2	136.0	51.4	53.5
<b>2015:07</b>	120.4	122.8	60.0	98.9	141.0	53.6	52.7
<b>2015:08</b>	120.0	122.8	58.5	98.5	139.1	48.0	51.1
<b>2015:09</b>	118.6	122.6	57.6	93.3	126.6	48.0	50.2
<b>2015:10</b>	119.8	123.2	57.7	98.7	132.4	46.1	50.1
<b>2015:11</b>	120.2	123.7	57.8	100.4	134.3	50.0	48.6
<b>2015:12</b>	119.5	123.3	60.3	97.3	130.7	54.5	48.0
<b>2016:01</b>	119.2	123.1	61.4	98.0	128.7	57.2	48.2
<b>2016:02</b>	119.6	123.1	62.5	100.1	124.9	55.4	49.5
<b>2016:03</b>	120.3	123.2	60.8	101.2	128.8	55.7	51.8
<b>2016:04</b>	121.4	123.9	61.0	103.0	130.8	50.8	50.8
<b>2016:05</b>	122.1	123.7	65.1	102.2	148.1	49.2	51.3

# Figure A7.1: Washington State Economic Indicators

## Year-over-Year Employment Growth

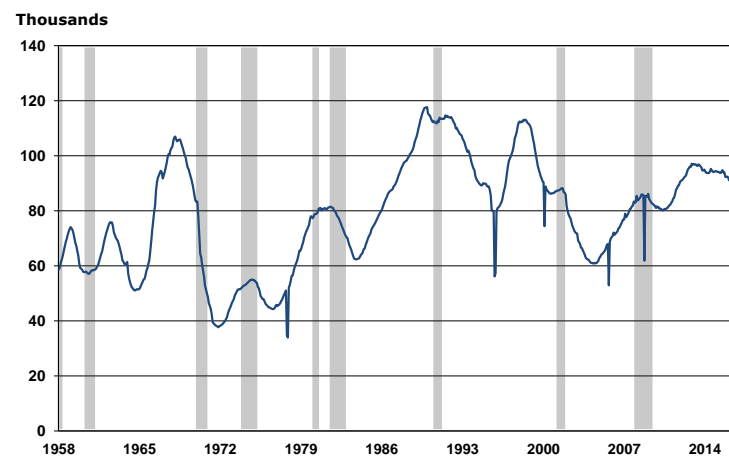
January 1980 to May 2016



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

## Washington Aircraft and Parts Employment

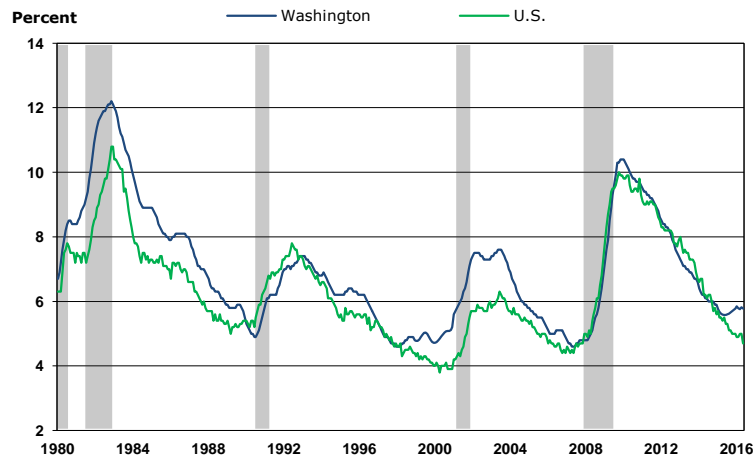
January 1958 to May 2016



\* Source: Bureau of Labor Statistics, ERFC

## Unemployment Rate, S.A.

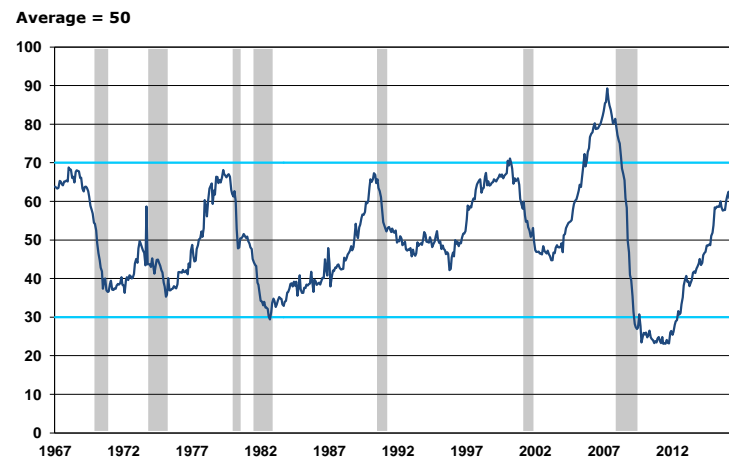
January 1980 to May 2016



\* Source: Bureau of Labor Statistics

## Washington Business Cycle Indicator

January 1968 to May 2016



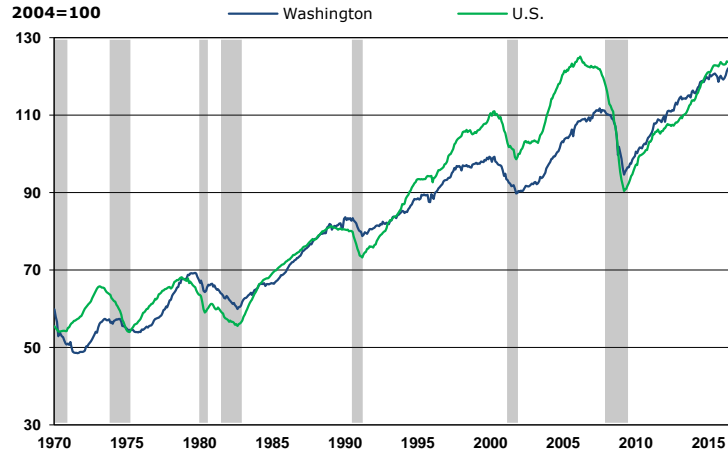
\* Source: ERFC

\* Shaded areas correspond with national recessions.  
Appendix

# Figure A7.2: Washington State Leading Indicators

## The Washington and U.S. Indexes of Leading Indicators

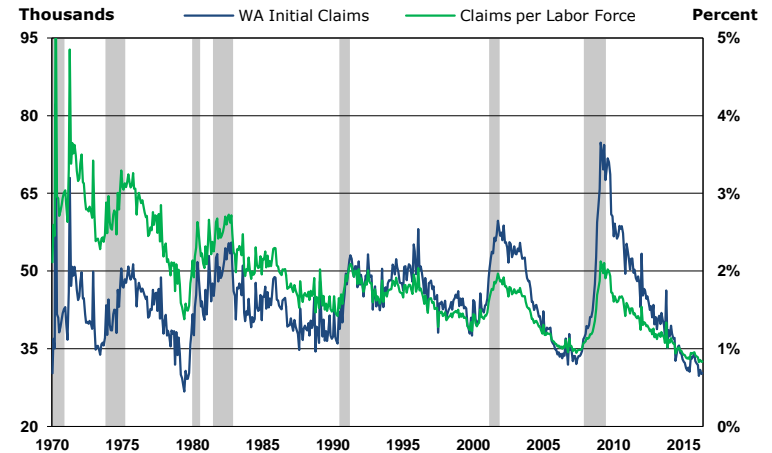
January 1970 to May 2016



\* The Conference Board, ERFC

## Washington Initial Claims for Unemployment Insurance

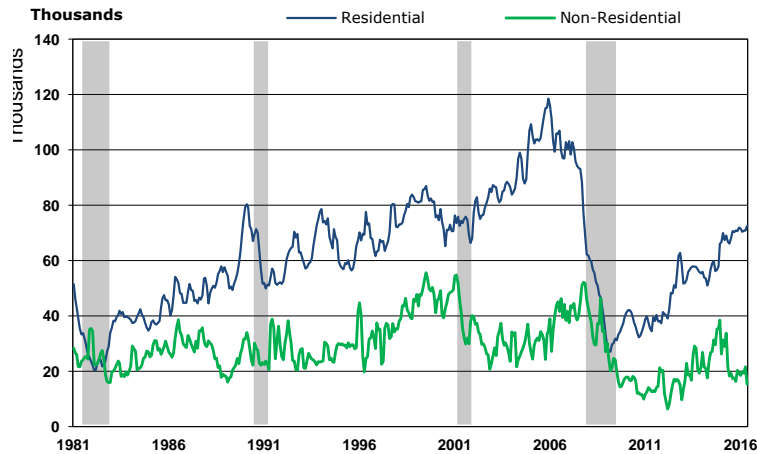
January 1970 to May 2016, S.A.



\* Source: WA State Employment Security, ERFC

## Square Footage of Construction Projects in WA State

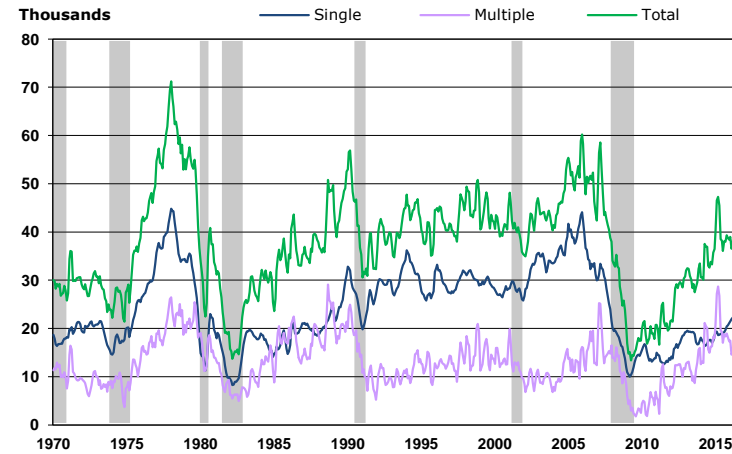
January 1981 to May 2016, 3mma, SAAR



\* Source: McGraw-Hill Construction, ERFC

## Housing Units Authorized in Washington State

January 1970 to May 2016, 3mma, SAAR



\* Source: Census Bureau, ERFC

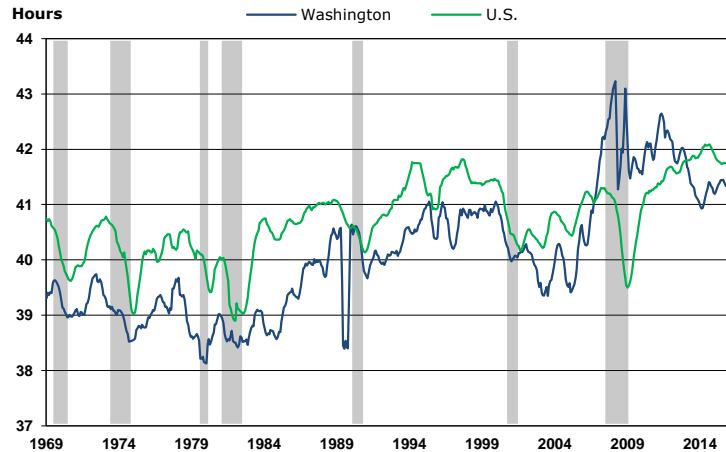
\* Shaded areas correspond with national recessions.  
Appendix



# Figure A7.3: Other State Economic Indicators

## Average Weekly Hours in Manufacturing

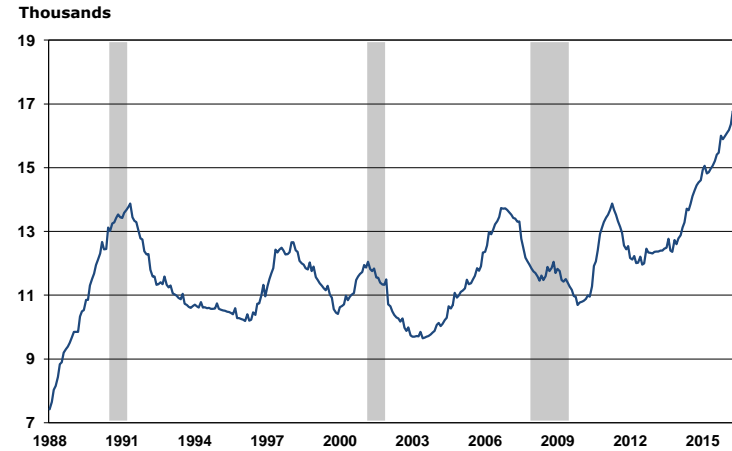
June 1969 to May 2016, 6-Mo. Moving Average, S.A.



\* Bureau of Labor Statistics, ERFC

## Washington Driver's License In-Migration

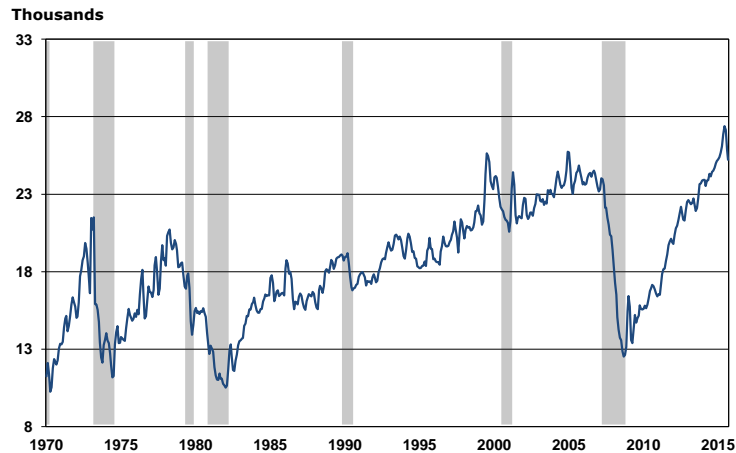
January 1988 to May 2016, 12-Month Moving Average



\* Source: WA State Department of Licensing, ERFC

## New Car and Truck Registrations in Washington

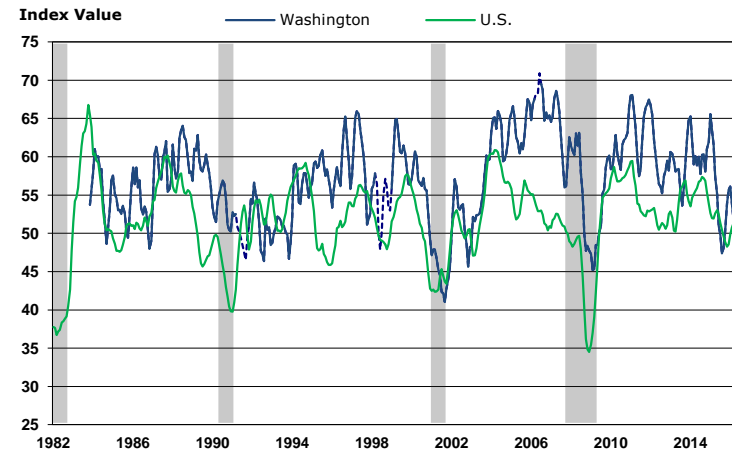
September 1970 to May 2016, 3-Month Moving Average, S.A.



\* Source: WA State Department of Licensing, ERFC

## Institute for Supply Management Index

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



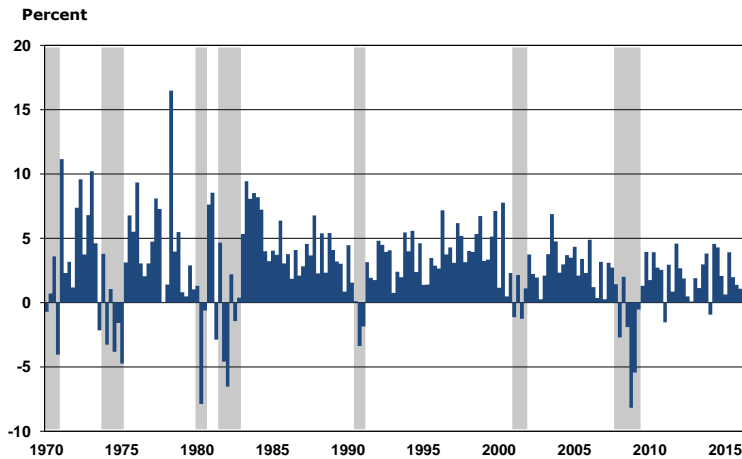
\* Source: Institute for Supply Management, ISM-WW, ERFC

\* Shaded areas correspond with national recessions.  
Appendix

# Figure A7.4: Other Economic Indicators

## Quarterly U.S. Real GDP Growth

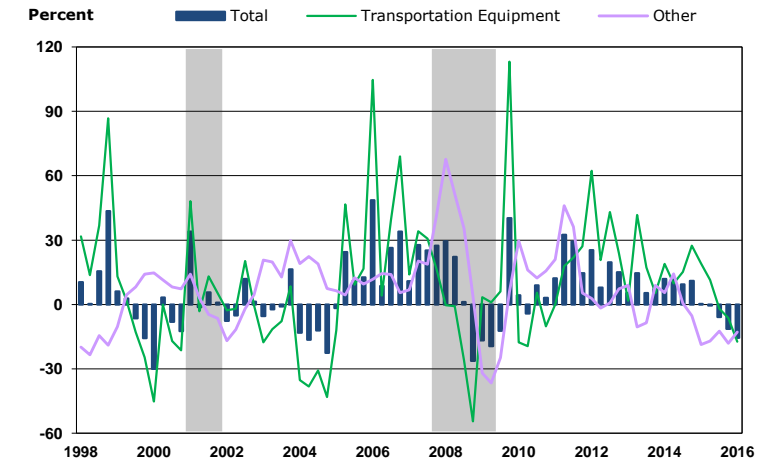
1970Q1 to 2016Q1, SAAR



\* Source: Bureau of Economic Analysis

## Washington State Export Composition

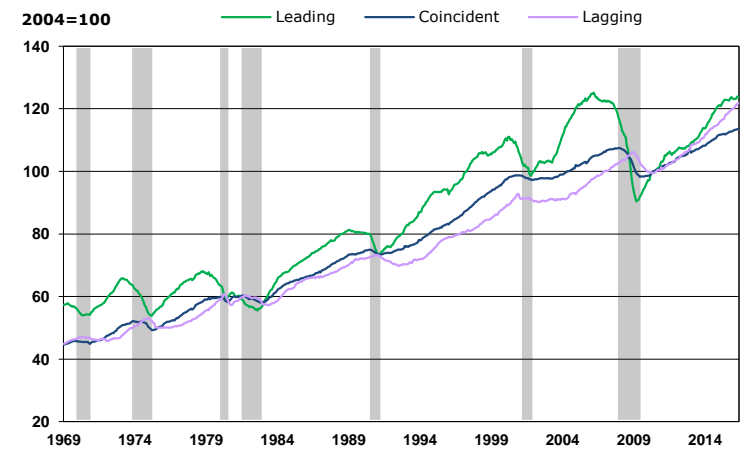
1998Q1 to 2016Q1, Year-over-year percent change



\* Source: WISER

## U.S. Economic Indicators

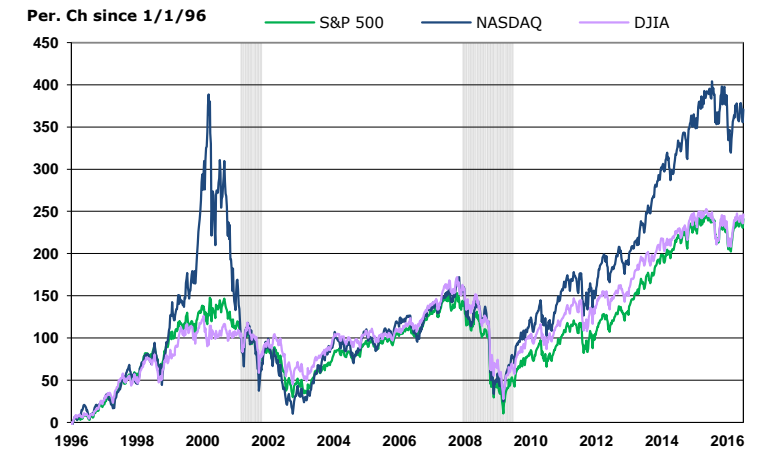
January 1969 to May 2016



\* Source: The Conference Board

## National Stock Indexes

January 1, 1996 to July 1, 2016



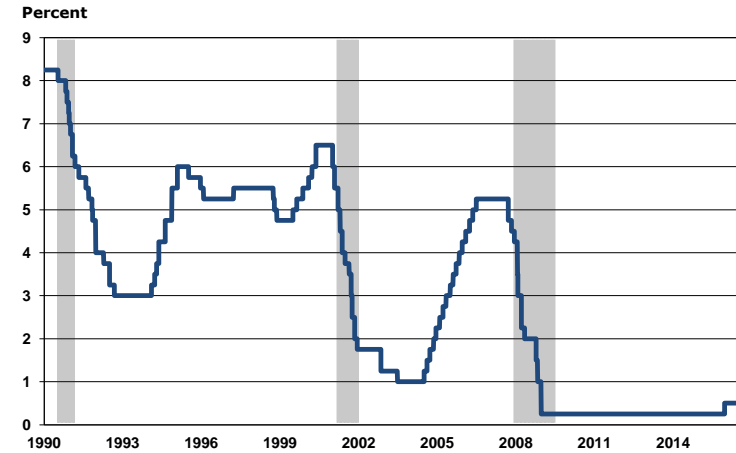
\* Source: ERFC

\* Shaded areas correspond with national recessions.  
Appendix

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

**Federal Funds Target Rate**

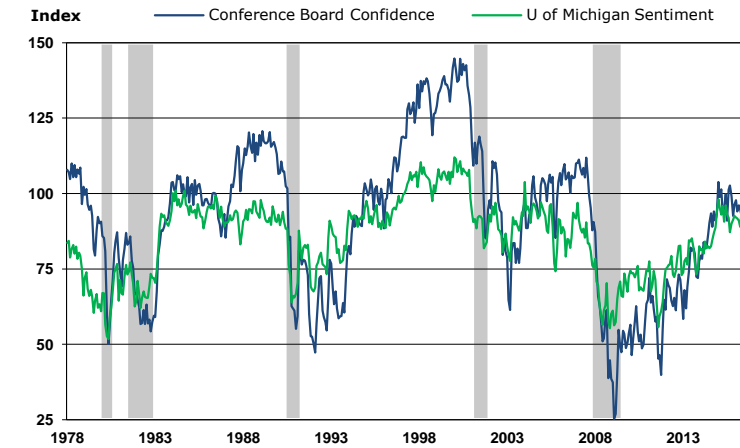
January 1, 1990 to July 1, 2016



\* Federal Reserve

**Consumer Confidence**

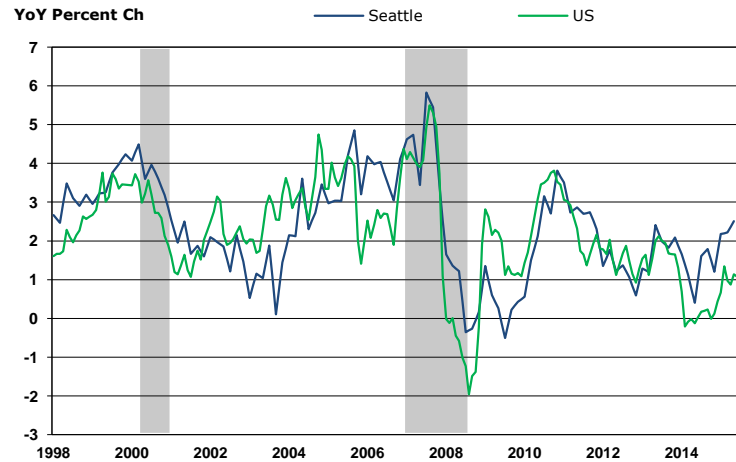
March 1978 to June 2016



\* Source: The Conference Board, University of Michigan

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

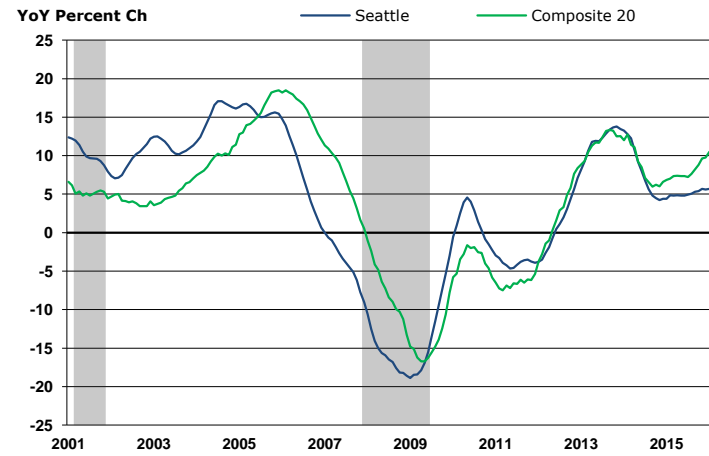
December 1998 to May 2016



\* Source: Bureau of Labor Statistics

**Case Shiller Home Price Index**

January 2001 to March 2016, 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.