

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 flowers and green leaves visible in the foreground and around the building. The sky is a clear, light blue.

# **Washington State Economic and Revenue Forecast**

September 2017  
Volume XL, No. 3



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# **Washington State Economic and Revenue Forecast**

Prepared by the  
Economic and Revenue Forecast Council

September 2017  
Volume XL, No. 3

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# Preface

## **ERFC forecasting structure and schedule**

The Economic and Revenue Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year. The Washington State GF-S revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Council consists of six members, two appointed by the Governor and four appointed by the Legislature – one from each caucus of the Senate and House of Representatives. Current members of the Economic and Revenue Forecast Council are listed inside the front cover of this publication. The GF-S revenue forecast is updated four times per year: March (February in even-numbered years), June, September, and November. The staff of the Economic and Revenue Forecast Council is responsible for the preparation of the state's economic forecast and the forecast of the Department of Revenue's GF-S revenue sources as well as GF-S revenue from fines and forfeitures collected by the Administrative Office of the Courts. The staff is also responsible for review and coordination of the revenue forecasts of other agencies that collect relatively large amounts of GF-S revenue. These are the Department of Licensing, the Office of the Insurance Commissioner, the Lottery Commission, the State Treasurer, the Liquor and Cannabis 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, this state economic forecast (updated for newly released data) is used to prepare a baseline revenue forecast for GF-S and the related funds. The forecasts are based on current law and administrative practices and do not reflect pending legal challenges to GF-S receipts until they are resolved. Additionally, at least two alternative forecasts are prepared for all GF-S and related fund sources and presented to the Forecast Council for approval. Once the Council approves the forecast, it becomes the official forecast of GF-S and related fund revenues.

Data in this publication are accurate through September 29, 2017.

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## Executive Summary

- **The national economy continues to expand at a moderate pace. Real GDP rose 3.1% (SAAR) in the second quarter after growing 1.2% (SAAR) in the first quarter.**
- **Employment growth has remained solid even as the economy has approached full employment.**
- **Consumer and business confidence remains high.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.2% in 2017 and then increases to 2.4% in 2018. The forecast calls for growth of 2.1%, 2.0%, and 2.0% from 2019 through 2021.**
- **Since the November presidential election, no major policy changes have been enacted although the forecast includes an increase in infrastructure spending and tax changes.**
- **Recent Washington employment and income have been revised higher since the June forecast.**
- **Seattle home prices continue to rise very rapidly and housing construction remains strong.**
- **The September forecast for Washington State features higher employment and personal income than in June.**
- **Revenue collections since the June 2017 forecast have come in \$94 million over the forecasted amount.**
- **The September forecast includes large increases in expected General Fund-State (GF-S) revenue from legislative changes. These new laws, intended to provide full state funding of basic education as required by the State Supreme Court's McCleary decision, add \$2.1 billion to forecasted revenue in the 2017-19 biennium and \$3.3 billion in the 2019-21 biennium.**
- **Forecast increases from changes to the economic forecast were relatively small. Projected higher employment and personal income brought increases of \$279 million in the 2017-19 biennium and \$243 million in the 2019-21 biennium.**
- **The preliminary estimate of GF-S revenue for the 2015-17 biennium is \$3 million higher than forecasted in June.**
- **The total forecast increase for the 2017-19 biennium was \$2.4 billion and the increase for the 2019-21 biennium was \$3.5 billion.**

## U.S. Economic Forecast

*The national economy continues to expand at a moderate pace*

The national economy continues to expand at a moderate pace. Real GDP rose 3.1% (SAAR) in the second quarter after growing 1.2% in the first quarter of the year. Job gains have remained solid even as the economy approaches full employment. The unemployment rate has dipped below pre-recession levels. Consumer and business confidence have improved and are now at cyclical highs. The housing market continues to improve at a slow pace. Oil prices have remained low, freeing up resources for consumers. The global economy has improved but the outlook remains relatively weak. Geopolitical risks, while elevated, have had little impact on the U.S. economy. As the current recovery approaches the seven-year mark, the duration alone has caused concerns as to whether the recovery will continue.

*The economic outlook is largely unchanged*

The economic outlook is largely unchanged from the June forecast. Our September forecast for real GDP growth is unchanged from June. The forecast calls for real GDP growth of 2.2% in 2017 and 2.4% in 2018. The forecast calls for growth of 2.1%, 2.0%, and 2.0% from 2019 through 2021. Our final economic forecast incorporates the impacts of Hurricane Harvey but was completed prior to Hurricane Irma striking Florida. The effects of Irma will be included in the November.

*The fiscal policy outlook includes potential policy changes*

Since the November 2016 presidential election, no major policy changes have been enacted. Potential fiscal policy changes are still included in the outlook. While several proposals for healthcare reform are being discussed, no legislation has passed, so we have not incorporated any related changes to the forecast. The forecast does include a \$22 billion annual increase in infrastructure spending beginning in 2018. The forecast includes personal and corporate tax cuts as well as a boost from receipts on overseas profits repatriated to face a 10% tax. Also included in the forecast is \$15 billion of additional spending for Hurricane Harvey relief efforts.

## Washington Economic Forecast

*The Washington economy is expanding at a rapid pace*

The Washington economy is expanding at a rapid pace. Recent Washington employment and income have been revised higher since the June forecast. Seattle home prices continue to rise very rapidly and housing construction remains strong. Washington exports continue to decline due to transportation equipment and manufacturing continues to struggle. Seattle area consumer price inflation is well above the national average due to higher shelter cost inflation.

*Our September forecast for...*

The September forecast for Washington State features higher employment and income than in June. Washington employment is expected to grow 2.9% this year, up from 2.4% in the June

*... Washington State features higher employment and income than in June*

forecast. We expect employment growth to average 1.6% per year in 2018 through 2021, which is slightly higher than the 1.4% rate assumed in June. Our forecast for nominal personal income growth this year is 5.8%, up from 4.7% in the June forecast. Our new forecast for nominal personal income growth in 2018 through 2021 averages 5.1% per year which is the same rate as expected in the June forecast. The September housing construction forecast is very close to the forecast adopted in June. We expect total housing units authorized by building permits to decline 2.4% this year to 43,000 units compared to 43,300 in the June forecast. We expect permits to average 42,300 during the next four years compared to 42,100 in June. We expect the all-items Seattle CPI to rise 2.9% this year, down from 3.0% in the June forecast. As in June, we expect Seattle area inflation to average 2.2% per year in 2018 through 2021.

## Revenue Forecast

*The revenue forecast includes large increases due to legislative changes*

Due to a surplus in revenue collections since the June forecast and a slightly stronger state economic forecast, collections excluding non-economic forecast changes are expected to increase slightly. These changes, however, are greatly outweighed by changes stemming from legislation passed in the special legislative sessions subsequent to the June forecast. These changes, enacted in response to a State Supreme Court decision that found the state was inadequately funding basic education, are expected to add over \$5 billion in new revenue over current and following biennia.

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

15-17: +\$3  
17-19: +\$2,359  
19-21: +\$3,521

The preliminary tally of total GF-S revenue for the 2015-17 biennium, which ended on June 30, 2017, was \$38,311.3 million, \$2.9 million more than forecasted in June. In the current biennium, revenue sources that are tracked monthly came in \$87.0 million higher than forecasted in June. Legislative changes added \$2,079.1 million to the forecast. Changes to the economic forecast resulted in a \$192.5 million increase to projected collections for the rest of the biennium. The total of these components was a \$2,358.6 million increase in projected revenue for the current 2017-19 biennium. The forecast for the 2019-21 biennium has been increased by \$3,521.3 million, with a \$3,278.4 million increase in forecasted revenue from legislative changes and \$242.8 million increase from economic factors. GF-S revenue is now forecasted to total \$38,311.3 million in the 2015-17 biennium, \$43,261.7 million in the 2017-19 biennium, and \$47,396.4 million in the 2019-21 biennium.

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

- **The national economy continues to expand at a moderate pace. Real GDP rose 3.1% (SAAR) in the second quarter after growing 1.2% (SAAR) in the first quarter.**
- **Employment growth has remained solid even as the economy has approached full employment.**
- **Consumer and business confidence remains high.**
- **The manufacturing sector has strengthened while construction has hit a soft patch.**
- **Oil prices remain low and inflation is moderate.**
- **Exports are once again improving. Foreign growth has stabilized and the dollar is depreciating.**
- **The Blue Chip Consensus GDP forecast calls for real GDP growth of 2.2% in 2017 and then increases to 2.4% in 2018. The forecast calls for growth of 2.1%, 2.0%, and 2.0% from 2019 through 2021.**
- **Since the November presidential election, no major policy changes have been enacted although the forecast includes an increase in infrastructure spending and tax changes.**
- **Higher business and consumer confidence leading to more hiring and spending is the most significant upside risk. A slowdown in global growth is the major downside risk.**

### Current Conditions

*The national economy continues to expand at a moderate pace*

The national economy continues to expand at a moderate pace. Real GDP rose 3.1% (SAAR) in the second quarter after growing 1.2% in the first quarter of the year. Job gains have remained solid even as the economy approaches full employment. The unemployment rate has dipped below pre-recession levels. Consumer and business confidence have improved and are now at cyclical highs. The housing market continues to improve at a slow pace. Oil prices have remained low, freeing up resources for consumers. The global economy has improved but the outlook remains relatively weak. Geopolitical risks, while elevated, have had little impact on the U.S. economy. As the current recovery

approaches the seven-year mark, the duration alone has caused concerns as to whether the recovery will continue.

*U.S. real GDP rose 3.1% (SAAR) in the second quarter*

U.S. real GDP rose 3.1% (SAAR) in the second quarter of 2017 after growing 1.2% (SAAR) in the first quarter. Growth in consumer spending accelerated from the previous quarter, increasing 3.3% (SAAR) and adding 2.2 points to GDP growth. Fixed investment was again a major contributor to growth, increasing 3.2% (SAAR) and adding 0.5 points to GDP growth. The gains came from the nonresidential sector while the residential sector declined. Nonresidential fixed investment increased 6.7% with gains in structures, equipment, and intellectual property. Residential investment declined 7.3% in the second quarter. Inventory investment added 0.1 points to overall growth. Final sales, which exclude the impact from inventories, increased 2.9% (SAAR). Government spending was slightly negative with declines from state and local governments offsetting increases in national defense spending. Net exports added 0.2 points to growth. Real disposable income increased 3.3% (SAAR) after a 2.9% increase in the first quarter.

*Personal income growth slowed to 3.0% in the second quarter*

Personal income growth slowed to 3.0% (SAAR) in the second quarter from 5.6% (SAAR) the quarter before. Personal income is now up 2.9% from a year ago. Rental income was again strong, increasing 5.3% (SAAR) in the second quarter. The tight rental market has enabled landlords to increase rent, boosting their income. Wage and salary growth was strong at 4.4% (SAAR). Wage growth in the private sector improved to 4.9% (SAAR) while public sector wages grew just 1.9% (SAAR). Over the past few years, private sector wages have increased faster than wages in the public sector. Transfer payment growth slowed to 0.7% (SAAR), due to declines in Medicaid payments, unemployment insurance benefits, and other transfers. Proprietors' income fell 0.5% (SAAR) due to a sharp drop in farm income. Interest income fell 3.1% (SAAR). Dividend income increased 11.4% (SAAR) but is up just 0.7% since last year.

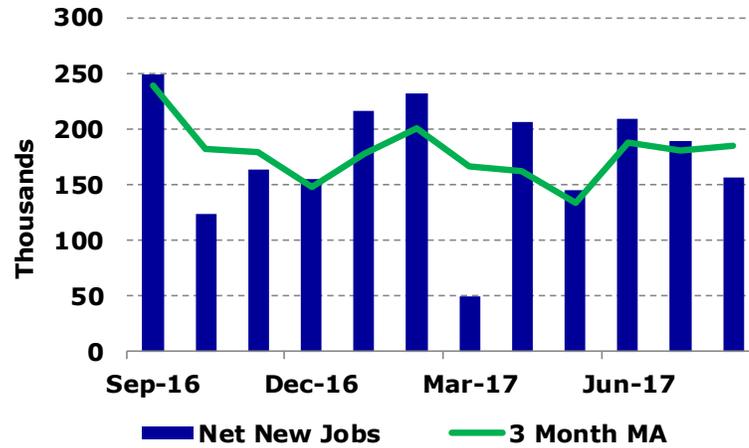
*Employment growth has remained solid*

Employment growth has remained solid. Nonfarm payrolls increased by 156,000 in August following a 189,000 increase in July. The three-month moving average of employment gains dipped to 175,000, but remains consistent with gains earlier in the year (see Figure 1.1). The goods-producing sector increased 70,000 with gains in construction (+28,000), manufacturing (+36,000), and mining and logging (+6,000). Private service-providing industries slowed, increasing 95,000 jobs over the month. In July, private service jobs increased by 179,000. August gains were led by professional and business services (+40,000) and education and health (+25,000). Both retail trade (+800) and temporary help services (+100) remain weak. Government employment declined 9,000 in June, with losses in federal (-1,000), state (-5,000), and local (-3,000) government employment. Continued job gains have fueled a steady decline in

unemployment. The unemployment rate rose slightly to 4.4% in August but remains below pre-recession levels.

**Figure 1.1: Net Change in U.S. Total Nonfarm Employment**

*The trend in employment growth remains solid*



Source: U.S. Bureau of Labor Statistics; data through August 2017

*Consumer attitudes have declined but remain high*

Consumer attitudes have declined slightly in recent months but remain high. The two primary measures of confidence have both come down from their recent highs earlier in the year. In September, the Conference Board measure of consumer confidence declined 0.6 points to 119.8. Confidence is down slightly from the peak of 124.9 reached in March, but still higher than 103.5 from a year ago. Respondents to the survey indicated they are less confident about present conditions while future expectations improved. The University of Michigan Consumer Sentiment Index fell by 1.7 points to 95.1 in September. The University of Michigan measure is down from the peak of 98.5 reached in January, but still above the year-ago reading of 91.2. Current conditions improved modestly while future expectations declined in September.

*Small business confidence remains high*

Small business confidence remains high. After averaging below 94 for the first ten months of 2016, the National Federation of Independent Business (NFIB) Index of Small Business Optimism has been above 103 in each of the past nine months. In August, the index was little changed at 105.3 and remains near its 10-year high of 105.9 in January. The level of the index is just below the all-time high of 107.4 reached in November 2004 (data back to 1986). Small business expectations of general business conditions, expansion, sales, and earnings have all remained high. Actual earnings and sales of small businesses have improved as well, but to a much smaller degree. Actual employment changes have also turned positive. Taxes remain the most cited concern for small businesses. Quality of labor is now the second most cited concern, surpassing government regulation.

*Oil prices  
remain low*

Oil prices have moved up recently but remain low. West Texas Intermediate (WTI) reached \$48 per barrel in August, up from \$47 last month. Brent crude oil was \$52 per barrel in August, up from \$48 last month. Both prices are up slightly from last year. U.S. crude production has bounced around 9 million barrels per day as prices have hovered in the \$50 range. Production has temporarily dropped due to the impact of Hurricane Harvey. The U.S. Energy Information Administration (EIA) estimates that U.S. crude oil production fell 7.8% to 8.8 million barrels per day due to the hurricane. Internationally, the impact of Organization of Petroleum Exporting Countries' (OPEC) attempt to reduce supply appears limited. Previously, OPEC had hoped that some of the more expensive drilling techniques deployed in the U.S. would no longer be profitable and would be shut down. Even if OPEC members can maintain the discipline of supply quotas, U.S. production is likely to ramp up, keeping prices in check. The Kurdish referendum on independence from Iraq has the potential to disrupt global supply. Turkey has threatened to shut the only route to market for the nearly 600,000 barrels per day going through the region.

*Inflation  
remains  
tame*

Headline inflation remains tame. Energy prices increased in each month this year after declining for much of the past two years. The Consumer Price Index (CPI) increased 0.4% over the month in August, resulting in an increase of 1.9% since last year. Food price inflation is starting to pick up with prices rising 0.1% over the month and 1.1% since last year. Shelter costs have been the primary driver of higher overall prices. Shelter costs increased 0.5% in August and are now up 3.3% year over year. Core inflation, which excludes food and energy, increased 0.2% in August. Year-over-year, core inflation remains modest at 1.7%.

*The housing  
market is  
stuck in a  
soft patch*

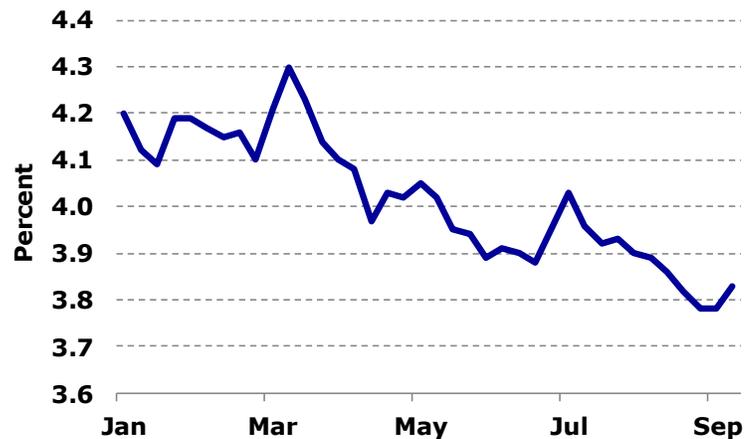
The housing market is stuck in a soft patch. Housing starts declined in August for the second consecutive month. While the drop is not likely the start of a downward turn in construction, the trend remains flat. Housing starts declined in August to 1.180 million units (SAAR) from 1.190 million units (SAAR) in July. Starts still remain up 1.4% since last year, however. Single-family starts increased 1.6% while multi-family starts fell 6.5%. The multi-family segment, while somewhat sporadic, appears to have fully recovered from the housing downturn. Housing permits appear stronger than starts. Total permits increased 5.7% in August and are up 8.3% from a year ago. Single-family permits are up 7.7% while multi-family permits are up 9.4% since last year. Homebuilder confidence declined in September but remains healthy. The National Association of Homebuilders (NAHB) Housing Market Index, which measures confidence of homebuilders, declined 3 points from last month to 64 (readings above 50 indicate a positive view of conditions). While builders are confident, the recent hurricanes weighed on the index.

*Home price appreciation remains solid*

Home price appreciation remains solid. The seasonally adjusted Case-Shiller 20-city Home Price Index increased 0.3% over the month in July. Home prices are now 5.9% higher than a year ago. Home prices appear to be settling into a consistent growth pattern, averaging 5.4% annual growth over the past two years. Prices have increased 41.6% since the trough of the recession, and are now only 3.5% below their previous peak. Rising prices encourage new construction and are contributing to the high level of homebuilder confidence. Home price appreciation also enables previously underwater homeowners to sell their homes and trade up for more expensive houses. Despite the Federal Reserve tightening monetary policy, mortgage rates for a fixed 30-year mortgage have declined to just above 3.8% (see Figure 1.2). Lending standards eased again in the third quarter, making it easier for consumers to obtain a mortgage. Continued positive wage growth should also help keep homes affordable.

**Figure 1.2: 30-Year Fixed Mortgage Rate**

*Mortgage rates continue to decline*



Source: Freddie Mac; data through September 2017

*The manufacturing sector has picked up strength*

The manufacturing sector has picked up strength. The Institute of Supply Management (ISM) Report on Business indicated that activity in the manufacturing sector improved in August to 58.8 from 56.3 (index levels above 50 indicate expansion). This was the best reading since 2011 (see Figure 1.3). The new orders component decreased slightly by 0.1 points but remains strong at 60.3. Production increased 0.4 points to 61.0. The employment component increased 4.7 points to 59.9. The latest G-17 report from the Federal Reserve, which measures manufacturing output, declined 0.3 percent after six consecutive monthly gains. Hurricane Harvey is estimated to have lowered output by 0.75 percentage points. The production of durable goods increased 0.3% but was more than offset by declines in nondurable goods and other manufacturing. Manufacturing output is now 1.5% higher than last year. New orders for core capital goods (nondefense capital goods excluding aircraft)

increased 0.9% in August after increasing by 1.1% the month before. New orders are now 3.3% above year-ago levels.

**Figure 1.3: Institute for Supply Management Index**

*Manufacturing activity is improving*



Source: Institute for Supply Management; data through August 2017

*U.S. exports have returned to growth*

U.S. exports increased in the second quarter by 5.9% year-over-year. Transportation equipment exports remain weak, declining 0.3% from last year. Oil and gas exports again increased dramatically, up 61.5% from a year ago. Global economic growth has picked up, increasing demand for U.S. products. The U.S. dollar continues to weaken making U.S. exports more affordable. Exports to the rest of North America are growing again. Exports to Canada increased 3.0% while exports to Mexico were up 4.2%. Exports to China and Japan, our third and fourth largest trading partners, increased 14.2% and 11.0% respectively.

**Forecast**

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

The economic forecast was based on a modified version of the September IHS Markit (formerly Global Insight) Control forecast for the U.S. economy. Consistent with our standard practice, the U.S. real GDP forecast was adjusted to match the September Blue Chip Consensus GDP forecasts for 2017 and 2018. We also matched the latest long-term Blue Chip GDP forecast for 2019 through 2021. Our oil price forecast was adjusted to reflect futures prices for both Brent crude oil and for West Texas Intermediate crude.

*The economic outlook is largely unchanged*

The economic outlook is largely unchanged from the June forecast. Our September forecast for real GDP growth is unchanged from June. The forecast calls for real GDP growth of 2.2% in 2017 and 2.4% in 2018. The forecast calls for growth of 2.1%, 2.0%, and 2.0% from 2019 through 2021. Our final economic forecast incorporates the impacts of Hurricane Harvey

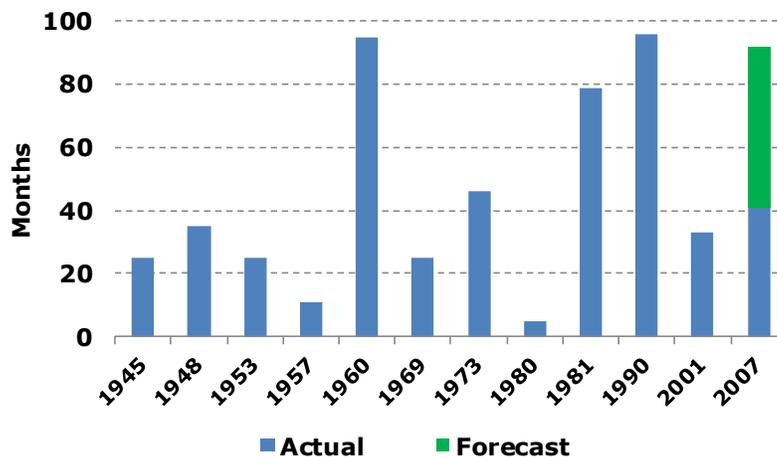
but was completed prior to Hurricane Irma striking Florida. The effects of Irma will be included in the November forecast.

*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. Through August, this recovery has already lasted 98 months. Prior to this, the longest recovery was from the 1990-91 recession and lasted 120 months. The primary reason for the exceptional length of the current recovery was the depth of the recession. Despite positive GDP growth, the labor market remained weak for an extended period. It took 58 months of recovery just to reach the previous peak in employment. When comparing recoveries in the duration since reaching the previous employment peak, this expansion appears more in line with other post-war expansionary periods (see Figure 1.4). 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 employment peak.

*The jobs recovery will be one of the longest on record*

**Figure 1.4: U.S. Months of Recovery after Reaching Previous Peak in Employment**



Source: NBER, ERFC September 2017 forecast; historical data through August 2017

*Oil prices will remain low*

The oil price forecast was changed by only a small amount since the June forecast. Prices are slightly higher compared to the previous forecast. The refiner acquisition price of crude oil fell to \$48 per barrel in the second quarter of this year from \$50 per barrel in the first quarter. The forecast calls for \$47 to be the trough in the second half of this year before gradually increasing throughout the forecast. We expect prices to increase to \$50 per barrel in the first quarter of next year and then slowly reach \$51 per barrel in 2021. Oil prices will remain well below the levels

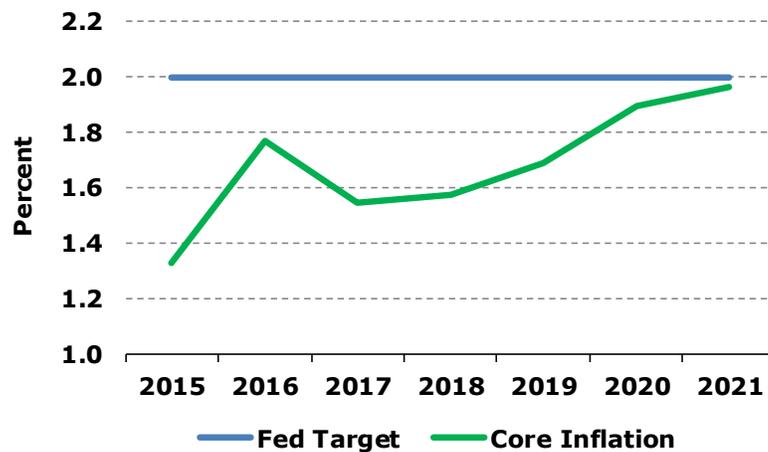
seen earlier in the recovery. Hurricane Harvey is going to distort oil price data temporarily, but will not have a lasting impact. The hurricane caused only moderate damage to Gulf of Mexico oil production. Oil production in the U.S. has hovered around 9 million barrels per day this year. Production is just below the previous peak reached in the summer of 2015 when production hit 9.6 million barrels per day. The number of drilling structures has been increasing lately. The Baker Hughes rig count was at 935 at the end of September, an increase of 424 since last year.

*Inflation will remain low*

Inflation (as measured by the price index for personal consumption expenditures) was just 1.2% in 2016, helped by a decline in energy prices. While energy prices will remain low, they are no longer declining and pulling inflation down. Rising housing costs have put upward pressure on inflation. Absent the downward pressure from energy prices, we expect low to moderate inflation throughout the forecast. Core inflation (minus food and energy) will move towards the Federal Reserve’s goal of 2% (see Figure 1.5). We expect inflation to be 1.7% this year and then range from 1.5% to 2.0% per year from 2018 through 2021.

*Core inflation will approach the Fed’s target*

**Figure 1.5: Core Personal Consumption Expenditure (PCE) Price Index, Year-Over-Year Percent Change**



Source: Bureau of Economic Analysis forecast; historical data through 2016

*Spending growth will outperform overall GDP growth in the near term*

Real consumer spending was stronger than expected in the second quarter of 2017, growing 3.3% (SAAR) compared to 2.8% (SAAR) expected in the previous forecast. Hurricane Harvey will affect consumer spending in the short term. Third quarter growth will slow as consumers curtail purchases, although fourth quarter growth will be boosted due to rebuilding. We now expect real consumer spending to grow 2.7% this year compared to 2.4% in the June forecast. Consumer optimism remains high. Rising home prices and a stronger stock market make consumers feel more confident in their financial situation. Wages are also 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% in 2018. The forecast assumes a federal tax cut that boosts disposable personal income in 2018. Consumer spending growth is then expected to slow to 2.3% in 2019, 2.2% in 2020, and 2.1% in 2021, unchanged from the previous forecast. We expect consumer spending to contribute 1.6 percentage points to real GDP growth on average for each year of the forecast through 2021.

*Disposable personal income growth is expected to increase next year*

Real disposable personal income growth is expected to slow this year to 1.3% from 2.4% in 2016. The boost to real incomes from falling energy prices has ended. Growth is expected to increase to 2.7% in 2018 and 2.9% in 2019 due to the assumption of modest tax cuts. We expect growth to moderate to 2.3% in 2020 and 2.1% in 2021. Nominal disposable income is projected to grow 3.1% this year, led by strong growth in rental income of 5.2%. Interest income is expected to grow 4.2% in 2017 as the Federal Reserve slowly tightens monetary policy. Private sector wages and salaries are forecasted to grow 3.3%. Wage growth in the public sector will again lag, with growth of 2.6% in 2017. Total wages and salaries are expected to grow 3.2% this year after increasing 2.9% in 2016. The forecast then calls for growth in wages and salaries to average 4.0% in 2018 through 2021. Dividend payments are expected to grow 0.7% in 2017. Growth in government transfer payments is expected to be 3.0% this year. We expect growth to pick up an average of 5.3% per year in 2018 through 2021 as an increasingly older population results in rising Medicare and Social Security payments. Income will be boosted in the latter part of the forecast by rising interest income, as interest rates return to pre-recession levels, as well as by dividend income.

*The outlook for employment is only minimally changed*

The forecast for employment is only minimally changed from the June forecast. Growth in payrolls is anticipated to be 1.5% this year after growing 1.8% in 2016. The June forecast had expected 1.4% growth for 2017. We expect employment growth to slowly trend down to 0.6% by 2021 as the economy nears full employment. By 2021, the forecast expects 800,000 more jobs than in June, a difference of only 0.5%. Due to the steady job growth, we expect the unemployment rate to average 4.4% in 2017, down from 4.9% the year before. We expect the unemployment rate to hold at 4.3% in from 2018 through 2021. 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 labor force participation rate to be 61.5% in 2017. The labor force participation rate will grow as the economy reaches full employment, reaching a peak of 61.6% in 2019 and 2020. Going forward, the participation rate will resume its long-term secular decline.

*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 pace of hiring has been slow. Federal government employment is expected to peak this year and then decline throughout the forecast except for the temporary hiring of census workers in 2020. The declines in federal government jobs will be offset by modest gains in state and local government employment, keeping total government employment growth mostly flat throughout the forecast. We expect private sector job growth of 1.7% this year, after growing by 1.9% in 2016. The forecast calls for private sector job growth of 1.4% in 2018 and then slowly declining to 0.7% in 2021.

*Business investment is expected to rebound this year*

Real nonresidential fixed investment is expected to grow 4.7% this year after falling 0.6% in 2016. The drop in oil prices, which is good for overall growth, lowered the incentive for additional investment by energy companies. The capital-intensive manufacturing sector is beginning to firm up after the strong U.S. dollar resulted in a drop in exports. Construction of new office space slowed in the second quarter as office vacancy rates remain elevated at 16.0%. We expect real nonresidential construction to grow 5.6% this year before slowing to 1.3% in 2018. We then expect growth to average 3.3% per year through 2021. Real equipment investment is expected to grow 4.3% this year after declining 3.4% in 2016. We expect 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. The forecast calls for growth to average 3.5% through 2021. We expect overall real nonresidential fixed investment to grow 2.7% next year and slowly trend up to 4.1% by 2021.

*The housing recovery will continue*

The forecast for housing starts is only minimally changed. The near-term forecast for housing starts is slightly lower, although by 2021 the forecast is slightly higher. We expect housing starts to grow 3.0% this year, compared to 6.6% in June, due to lower starts in the first half of the year. The forecast incorporates an additional 15,000 housing starts from rebuilding after Hurricane Harvey. The September forecast calls for growth of 9.7% in 2018 before tapering to 3.4% in 2021. The housing market stalled to start the third quarter. Existing home sales dropped and inventories continue to tighten. However, homebuilder confidence remains high and home prices continue to climb. Mortgage rates remain low by historical standards. The forecast calls for growth in single-family housing starts of 7.8% this year after growing by 10.1% in 2016. The forecast expects the growth in single-family housing starts to improve to 9.1% in 2018 before trending down through 2021, reaching 2.8%. We expect the multi-family segment to decline 6.6% this year. The forecast calls for the multi-family housing segment to rebound in 2018

with 11.1% growth then average 6.0% growth through the remainder of the forecast.

*Foreign growth is improving*

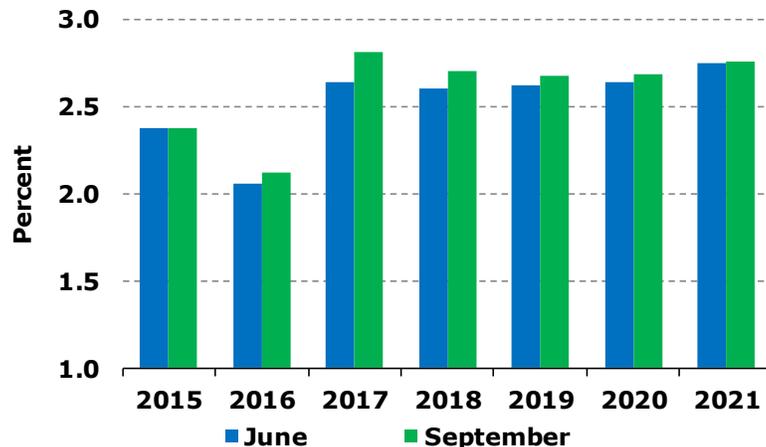
Major foreign economies are improving. The Canadian economy grew 4.5% (SAAR) in the second quarter, the fastest since 2011. Exports and household spending were the main contributors to growth. The latest Blue Chip forecast expects growth of 2.7% in Canada for 2017 and 2.1% in 2018. The Mexican economy slowed in the second quarter to 2.5% (SAAR) from 2.7% (SAAR) in the first quarter. The Blue Chip forecast called for 2.1% growth this year followed by 2.3% growth in 2018. The recent earthquake in Mexico City may hamper growth somewhat in the near term. The recovery in the Eurozone is improving with real GDP increasing 2.3% in the second quarter on an annual basis. The latest Blue Chip forecast calls for 2.0% growth this year and 1.8% in 2018. 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 2016 was 6.7%, well below the 2005-11 average of 11%. The most recent Blue Chip forecast calls for Chinese growth to slow further, with growth of 6.6% this year and 6.1% in 2018. Japan's economy expanded by 2.5% (SAAR) in the second quarter, although this spike is not expected to last. Japan's long run potential GDP growth is roughly 0.7% due primarily to demographics. The most recent Blue Chip forecast expects slow growth of 1.7% this year followed by 1.1% in 2018.

*Economic growth of U.S. trading partners is expected to improve*

Economic growth of major U.S. trading partners is expected to accelerate this year. GDP growth of U.S. trading partners was the weakest since the recession in 2016, growing just 2.1%. The forecast calls for GDP of U.S. trading partners to grow 2.8% this year, up from 2.6% in the June forecast (see Figure 1.6). The September forecast now calls for GDP of U.S. trading partners to

**Figure 1.6: GDP Growth of Major U.S. Trading Partners**

*GDP growth of U.S. trading partners is expected to be higher*



Source: IHS Markit, September 2017 ERFC forecast; historical data through 2016

grow 2.7% in 2018 through 2020 and 2.8% in 2021. The dollar has declined recently and the drag on exports has diminished. Real U.S. exports are forecasted to grow 3.6% this year after declining 0.3% in 2016. Export growth is forecasted to slowly pick up throughout the forecast, reaching 3.8% in 2020 and 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.

*The fiscal policy outlook includes potential policy changes from the new administration*

Since the November 2016 presidential election, no major policy changes have been enacted. Potential fiscal policy changes are still included in the outlook. While several proposals for healthcare reform are being discussed, no legislation has passed, so we have not incorporated any related changes to the forecast. The forecast does include a \$22 billion annual increase in infrastructure spending beginning in 2018. The forecast includes personal and corporate tax cuts as well as a boost from receipts on overseas profits repatriated to face a 10% tax. Also included in the forecast is \$15 billion of additional spending for Hurricane Harvey relief efforts.

*The federal budget deficit will increase after this year*

The federal budget deficit is expected to decline this year to \$634 billion from \$687 billion in 2016. However, we expect the federal budget deficit to grow starting in 2018 and reach \$900 billion in 2021. The forecast assumes the cuts in real defense spending that started in 2011 will pause in 2017 and 2018 consistent with the administration's policy preferences. The forecast calls for real defense spending to grow 0.3% this year and 1.6% in 2019. We then expect real defense spending to decline through 2021. Real nondefense spending is expected to decline throughout the forecast. State and local governments, having worked through the majority of their budget difficulties, will largely offset the decline in spending at the federal level. We expect total real government spending to contract 0.1% this year before averaging 0.4% growth through 2021.

*The Fed is gradually tightening monetary policy*

The Federal Reserve is gradually tightening monetary policy after years of measures aimed at supporting the economy. The Federal Reserve is facing a more upbeat economic outlook but also a more uncertain policy environment. As expected, the Federal Open Market Committee announced they will start a process to shrink its balance sheet. The forecast assumes one more 25 basis point rate hike in mid-December. The Federal Reserve is likely to focus more on strong jobs gains than relatively weak wage gains and inflation.

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

## Risks to the Forecast

*Downside  
risks  
outweigh  
upside risks*

Our view of the risks to the forecast is unchanged since the June forecast. The recovery is forecasted to be the longest on record. The outlook for U.S. trading partners, although improving, remains somewhat weak. The level of uncertainty in the baseline remains elevated, and downside risks once again outweigh upside risks.

### Downside Risks

- A breakdown in trade relations
- Infrastructure spending assumed in the baseline fails to materialize
- Chinese economy experiences a “hard landing” (annual growth under 5%); growth is weaker in emerging market economies
- Too aggressive tightening of monetary policy
- Weaker than expected employment growth
- Real wage growth stagnates, leading to slower consumer spending
- Slower household formation
- Slowdown in economic growth and negative effects to financial markets due to Brexit
- Increasing geopolitical tensions negatively impact consumer confidence
- U.S. dollar appreciates against other currencies, limiting exports
- Weak global growth persists, further impacting exports
- Failure to raise the debt ceiling and/or government shut down

### Upside Risks

- Increased business confidence leads to more hiring
- Increased consumer confidence gives a boost to consumer spending
- The housing sector improves faster than anticipated
- Oil prices decline as OPEC fails to impact prices
- Labor productivity growth returns to the higher rates 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
- The U.S. dollar declines, making U.S. exports cheaper abroad
- Wage growth picks up faster than expected.

Table 1.1  
**U.S. Economic Forecast Summary**  
 Forecast 2018 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	15,782.2	16,292.7	16,577.6	16,890.7	17,292.9	17,684.9	18,033.1	18,400.7
% Ch	2.2	3.2	1.7	1.9	2.4	2.3	2.0	2.0
Real Consumption	10,688.5	11,082.1	11,413.0	11,733.2	12,029.7	12,313.7	12,589.4	12,861.9
% Ch	2.0	3.7	3.0	2.8	2.5	2.4	2.2	2.2
Real Nonresidential Fixed Investment	2,094.8	2,215.7	2,210.4	2,253.6	2,350.6	2,413.4	2,493.7	2,598.8
% Ch	5.1	5.8	-0.2	2.0	4.3	2.7	3.3	4.2
Real Residential Fixed Investment	494.6	529.4	580.2	592.6	611.4	632.2	644.4	673.7
% Ch	6.2	7.0	9.6	2.1	3.2	3.4	1.9	4.5
Real Personal Income	13,280.1	13,927.6	14,327.2	14,462.9	14,724.9	15,145.6	15,599.8	16,010.4
% Ch	1.2	4.9	2.9	0.9	1.8	2.9	3.0	2.6
Real Per Capita Income (\$/Person)	41,760	43,478	44,417	44,532	45,002	45,918	46,922	47,782
% Ch	0.5	4.1	2.2	0.3	1.1	2.0	2.2	1.8
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.093	1.100	1.118	1.135	1.153	1.174	1.197
% Ch	1.4	0.9	0.7	1.6	1.6	1.6	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.350	2.367	2.383	2.427	2.473	2.523	2.578	2.635
% Ch	1.6	0.7	0.7	1.9	1.9	2.0	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.193	1.221	1.248	1.278	1.314	1.355	1.400	1.448
% Ch	1.9	2.3	2.2	2.4	2.9	3.1	3.3	3.4
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	17,025.4	17,831.5	18,344.5	18,984.8	19,806.0	20,706.7	21,573.9	22,483.2
% Ch	3.9	4.7	2.9	3.5	4.3	4.5	4.2	4.2
Personal Income	14,393.2	15,222.7	15,764.0	16,165.7	16,713.1	17,468.4	18,320.1	19,163.1
% Ch	2.6	5.8	3.6	2.5	3.4	4.5	4.9	4.6
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	155.5	156.6	158.0	159.8	161.1	162.7	164.4	165.7
Total U.S. Employment	145.0	147.7	150.1	152.3	154.2	155.8	157.3	158.6
Unemployment Rate (%)	6.77	5.68	4.98	4.66	4.29	4.27	4.28	4.28
Nonfarm Payroll Employment	137.56	140.42	143.09	145.43	147.41	149.05	150.31	151.34
% Ch	1.7	2.1	1.9	1.6	1.4	1.1	0.8	0.7
Manufacturing	12.09	12.28	12.35	12.36	12.54	12.75	12.99	13.17
% Ch	0.9	1.6	0.6	0.1	1.4	1.6	1.9	1.5
Durable Manufacturing	7.60	7.74	7.75	7.72	7.86	8.02	8.21	8.38
% Ch	1.1	1.9	0.1	-0.4	1.8	2.1	2.3	2.1
Nondurable Manufacturing	4.49	4.54	4.61	4.65	4.68	4.73	4.78	4.80
% Ch	0.5	1.0	1.5	0.9	0.8	0.9	1.2	0.3
Construction	5.99	6.31	6.61	6.80	6.97	7.15	7.41	7.65
% Ch	4.3	5.4	4.7	3.0	2.5	2.5	3.7	3.2
Service-Providing	118.61	120.96	123.40	125.59	127.17	128.39	129.15	129.74
% Ch	1.7	2.0	2.0	1.8	1.3	1.0	0.6	0.5
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	101.3	69.3	41.7	48.6	49.7	50.8	50.8	51.0
Personal Saving/Disposable Income (%)	5.3	6.0	5.8	4.0	3.5	4.2	4.7	4.7
Auto Sales (Millions)	7.6	7.7	7.2	6.5	5.9	5.7	5.8	5.8
% Ch	2.3	0.8	-5.9	-10.5	-8.7	-3.7	1.8	0.7
Housing Starts (Millions)	0.955	1.056	1.149	1.200	1.271	1.352	1.413	1.478
% Ch	8.9	10.5	8.9	4.5	5.9	6.3	4.5	4.6
Federal Budget Surplus (Billions)	-612.4	-597.2	-649.4	-669.6	-694.2	-828.7	-883.7	-912.0
Net Exports (Billions)	-490.7	-513.6	-519.7	-551.7	-515.0	-442.6	-418.6	-414.0
3-Month Treasury Bill Rate (%)	0.04	0.02	0.18	0.55	1.27	2.06	2.80	2.85
10-Year Treasury Note Yield (%)	2.71	2.23	2.02	2.10	2.68	3.54	4.04	3.97
Bond Index of 20 G.O. Munis. (%)	4.55	3.83	3.51	3.51	4.11	4.82	4.98	4.93
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.80	3.85	4.38	5.45	6.03	5.96

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
September	1.8	1.4	0.36	3.76
November	1.8	1.3	0.32	3.72
<b>2017</b>				
March	1.9	1.3	0.35	3.89
June	1.8	1.3	0.37	3.84
September	1.7	1.3	0.36	3.83

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
September	2.1	1.7	1.63	4.85
November	2.1	1.8	1.39	4.63
<b>2017</b>				
March	2.3	1.6	1.66	5.07
June	2.3	1.6	1.67	4.98
September	2.3	1.7	1.67	4.91

Table 1.4  
**Forecast Comparison**  
 Forecast 2018 to 2021

Fiscal Years

	2015	2016	2017	2018	2019	2020	2021
<b>U.S.</b>							
<b>Real GDP</b>							
September Baseline	16292.7	16577.6	16890.7	17292.9	17684.9	18033.1	18400.7
% Ch	3.2	1.7	1.9	2.4	2.3	2.0	2.0
June Baseline	16231.1	16513.4	16846.3	17234.8	17629.4	17975.7	18343.7
% Ch	2.9	1.7	2.0	2.3	2.3	2.0	2.0
<b>Implicit Price Deflator</b>							
September Baseline	1.093	1.100	1.118	1.135	1.153	1.174	1.197
% Ch	0.9	0.7	1.6	1.6	1.6	1.8	1.9
June Baseline	1.093	1.100	1.117	1.135	1.152	1.173	1.196
% Ch	0.9	0.7	1.5	1.5	1.5	1.8	2.0
<b>Unemployment Rate</b>							
September Baseline	5.68	4.98	4.66	4.29	4.27	4.28	4.28
June Baseline	5.68	4.98	4.66	4.28	4.19	4.22	4.26
<b>Mortgage Rate</b>							
September Baseline	3.92	3.80	3.85	4.38	5.45	6.03	5.96
June Baseline	3.92	3.80	3.87	4.57	5.39	5.99	5.94
<b>3 Month T-Bill Rate</b>							
September Baseline	0.02	0.18	0.55	1.27	2.06	2.80	2.85
June Baseline	0.02	0.18	0.56	1.27	2.07	2.79	2.83

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

- **Washington employment has grown about as expected in the June forecast but historical employment was revised higher.**
- **Historical Washington personal income was revised higher after the September forecast. We will reflect the personal income revision in the November forecast.**
- **Seattle home prices continue to rise very rapidly and housing construction remains strong.**
- **Exports are down because of transportation equipment and manufacturing continues to struggle.**
- **Seattle area consumer price inflation is well above the national average due to higher shelter cost inflation.**
- **The September forecast for Washington State features higher employment and personal income than in June.**
- **As in June, we expect the Washington economy to continue to outperform the U.S. economy.**

### Current Conditions

*The Washington economy is expanding at a rapid pace*

The Washington economy is expanding at a rapid pace. Recent Washington employment and income have been revised higher since the June forecast. Seattle home prices continue to rise very rapidly and housing construction remains strong. Washington exports continue to decline due to transportation equipment and manufacturing continues to struggle. Seattle area consumer price inflation is well above the national average due to higher shelter cost inflation.

*Employment growth has been on target*

We have three months of new Washington employment data since the June forecast was released. Total nonfarm payroll employment rose 16,000 (seasonally adjusted) in June, July, and August, which was the number expected in the June forecast. Manufacturing lost only 400 jobs in the three-month period in spite of the loss of 1,600 aerospace jobs. Construction employment increased 900 in June, July, and August and

government employment expanded by 3,000 jobs. As usual, the bulk of the net new jobs occurred in private, service-providing sectors, which added 12,500 jobs.

*Historical employment estimates were revised higher*

We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions raised the estimated level of total employment in May 2017 by 16,700 jobs (0.5%). As a result of the upward revision to history (and spot on growth), the total effect is 16,600 (0.5%), more jobs in August 2017 than expected in the June forecast.

*Washington unemployment ticked up in August*

Washington's unemployment rate inched up to 4.6% in August from 4.5% in July. The August increase was not statistically significant. July's 4.5% unemployment rate was the lowest in the series that extends back to 1976. A year ago, in August 2016, the Washington unemployment rate stood at 5.4%.

*Washington UI claims remain near the post-recession low*

Washington initial claims for unemployment insurance remain near the post-recession low. The four-week moving average of seasonally adjusted claims increased to 6,600 in the week ending September 23, 2017 from 6,500 in the previous week. While the current level of claims is slightly above the post-recession low of 6,000 reached in January, it is below the previous trough of 7,200 reached during the last expansion (see Figure 2.1). Claims have fallen 60% since the peak in early 2009.

**Figure 2.1: Washington Initial Claims**

*Claims are below the previous cyclical trough*



Source: Employment Security Department; data through September 23, 2017

*Exports are down because of transportation equipment*

Second quarter 2017 Washington exports were down 3.4% from the second quarter of 2016 because of a 10.1% decline in transportation equipment exports (mostly Boeing planes). Exports of agricultural products increased 28.9% over the year and exports of all other commodities rose 1.9% over the year. This "other" category, which consists mainly of manufactured

goods, has shown positive over-the-year growth for the last three quarters.

*Washington housing permits fell short of the forecast in the second quarter*

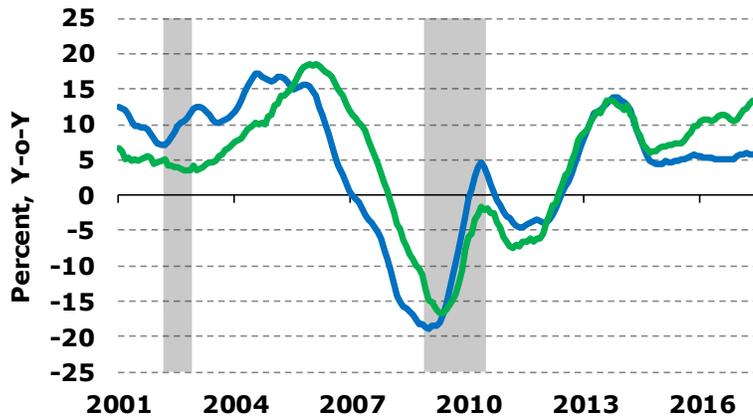
Washington housing construction increased in the second quarter of 2017 but fell slightly short of the forecast. The number of housing units authorized by building permits increased to 43,900 units (SAAR) in the second quarter of 2017 from 40,800 units in the first quarter. Second quarter permits were made up of 22,500 single-family units and 21,400 multi-family units. The June forecast assumed 45,300 units (SAAR) in the second quarter, consisting of 22,600 single-family units and 22,700 multi-family units. Washington housing construction in the third quarter to date has been stronger than expected in the June forecast. In July and August, 46,400 units (SAAR) were permitted of which 23,700 were single family and 22,700 were multi-family. The June forecast assumed an average rate of 43,800 units for the third quarter as a whole (SAAR) consisting of 24,200 single-family units and 19,600 multi-family units.

*Seattle home prices continue to rise very rapidly*

Seattle area home prices continue to rise very rapidly. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices rose 0.7% in July compared to a 0.3% increase in the Composite-20 index. However, the over-the-month changes are problematic due to seasonal adjustment issues. A more reliable measure is the over-the-year growth, which shows a 13.5% increase in prices since the previous July, more than double the 5.9% increase in the Composite-20 index. Not only are prices rising faster in Seattle than in other major metropolitan areas but also the rate of price appreciation in Seattle has been increasing in recent years (see Figure 2.2). Seattle home prices are now up 71% since the December 2011 trough and now exceed the May 2007 peak by 19%.

*Seattle home price appreciation is accelerating*

**Figure 2.2: Case-Shiller Home Price Indices**



Source: S&P CoreLogic Case-Shiller Home Price Indices; data through July, 2017

*Manufacturing continues to struggle*

The Institute of Supply Management - Western Washington Index (ISM-WW) moved back into positive territory in August. The index, which measures conditions in the manufacturing sector, increased from 47.0 in July to 58.2 in August (index values above 50 indicate growth while values below 50 indicate contraction). The index had been less than or equal to 50 in each of the three previous months. The production, orders, and inventory components indicated expansion in August but the employment component indicated contraction. The vendor deliveries component was neutral at 50. Manufacturing has fluctuated around the 50 mark since mid-2015.

*Washington car and truck sales increased in July and August*

Washington car and truck sales increased in July and August after sinking to the lowest level in more than three years in June. Seasonally adjusted new vehicle registrations increased 3.5% in July and 8.6% in August to 308,100 units (SAAR). Car and truck sales are up 0.4% over the year but down 8.0% since the post-recession peak in January 2016.

*Washington personal income grew moderately in the second quarter of 2017*

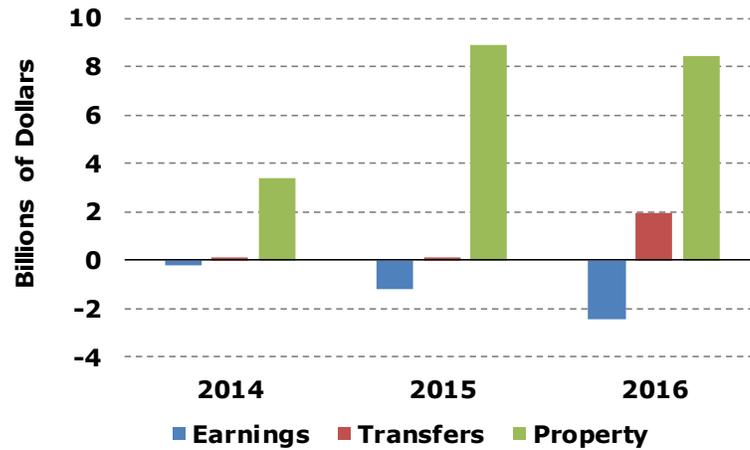
After the September forecast was released, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the second quarter of 2017. According to these estimates, Washington personal income rose to \$412.3 billion (SAAR) in the second quarter of 2017 from \$409.1 billion in the first quarter. The reported 3.2% growth rate (SAAR) in Washington personal income was the 18<sup>th</sup> largest among the states and District of Columbia and slightly exceeded the 2.9% growth rate for the U.S. as a whole. Over the last year, from the second quarter of 2016 to the second quarter of 2017, Washington personal income grew 4.1% which was well above the 2.9% for the nation and 3<sup>rd</sup> highest among the states and the District of Columbia.

*The September personal income release incorporated the annual revision to the national income and product accounts*

The September personal income release also incorporated the impact of the annual revision to the national income and product accounts. The revisions covered the period from 2014 through the first quarter of 2017. The estimate for 2016 annual personal income was revised up \$7.9 billion (2.0%) compared to the June BEA release. The increase in 2016 was mainly due to the estimate for property income (dividends, interest, and rent), which was revised up by \$8.4 billion (see Figure 2.3). The revision to property income was the result of newly available IRS tabulations for 2015 and revised tabulations for 2014. We will reflect the revised personal income data in the November 2017 forecast.

*Historical Washington personal income was revised higher*

**Figure 2.3: Washington Personal Income Revision**



Source: Bureau of Economic Analysis; data through 2016

*Seattle area consumer price inflation remains above the national average*

Seattle area consumer price inflation remains above the national average. Over the last year, from August 2016 to August 2017, consumer prices in the Seattle area rose 2.5% compared to 1.9% for the U.S. city average. Core prices, which exclude food and energy, were up 2.2% in Seattle compared to 1.7% for the nation. The higher Seattle inflation is due to more rapid growth in shelter costs. During the year, shelter costs in Seattle rose 6.1% compared to 3.3% for the nation. Excluding shelter, Seattle inflation was below the national average at 0.5% compared to 1.2%.

## Washington State Forecast

*Our September forecast for Washington State features higher employment and income than in June*

The September forecast for Washington State features higher employment and income than in June. Washington employment is expected to grow 2.9% this year, up from 2.4% in the June forecast. We expect employment growth to average 1.6% per year in 2018 through 2021, which is slightly higher than the 1.4% rate assumed in June. Our forecast for nominal personal income growth this year is 5.8%, up from 4.7% in the June forecast. Our new forecast for nominal personal income growth in 2018 through 2021 averages 5.1% per year which is the same rate as expected in the June forecast. The September housing construction forecast is very close to the forecast adopted in June. We expect total housing units authorized by building permits to decline 2.4% this year to 43,000 units compared to 43,300 in the June forecast. We expect permits to average 42,300 during the next four years compared to 42,100 in June. We expect the all-items Seattle CPI to rise 2.9% this year, down from 3.0% in the June forecast. As in June, we expect Seattle area inflation to average 2.2% per year in 2018 through 2021.

## Washington Payroll Employment

*Washington employment growth will slow*

Washington employment growth in 2016 was 3.1%, which was the highest rate since 1998. 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. Washington employment is expected to grow 2.9% this year, up from 2.4% in the June forecast. As in June, we expect growth to decelerate gradually as the recovery matures. We expect employment growth to average 1.6% per year in 2018 through 2021, which is slightly higher than the 1.4% rate assumed in June. On a calendar year basis, we expect 2.1% employment growth in 2018, 1.6% in 2019, 1.4% growth in 2020, and 1.1% growth in 2021.

*The aerospace forecast is virtually unchanged*

Boeing has indicated that their 2017 job cuts will be similar to those experienced in 2016. In the current forecast, we assume a decline of 6,700 aerospace jobs from December 2016 through December 2017, which is slightly larger than the 6,100 decline experienced during 2016. The September aerospace employment forecast is about 200 higher than the June assumption from the end of this year through 2021. On an annual average basis, we expect aerospace employment to decline 7.9% in 2017, 4.4% in 2018, 2.0% in 2019, and 0.8% in 2020 with no change in 2021.

*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. Growth rebounded to 5.2% in 2016. The September software employment forecast is higher than in June because actual employment in recent months has been higher than expected. We now expect 4.4% growth this year on an annual average basis compared to 3.3% in the June forecast. As in June, we expect slower growth through the remainder of the forecast. Software employment is expected to grow 0.9% in 2018, 0.7% in 2019, 0.8% in 2020, and 1.0% in 2021.

*Electronic shopping employment continues to exceed expectations*

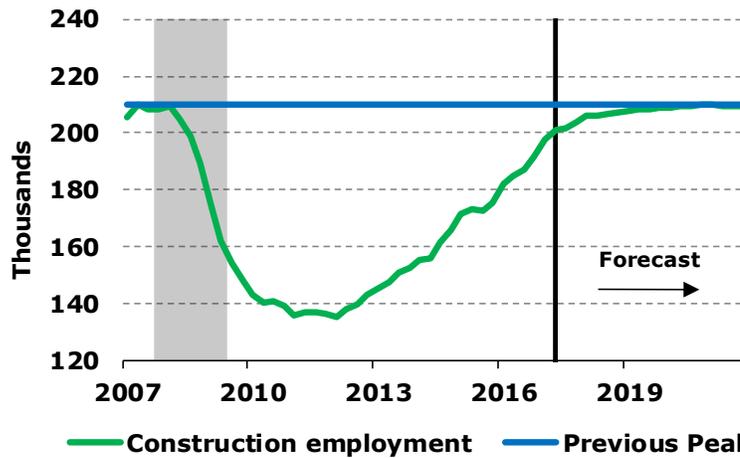
Washington electronic shopping and mail order employment continues to exceed expectations. In Washington, this sector consists almost entirely of electronic shopping employment. As of August, year-over year-electronic shopping and mail order employment grew by 11,700 jobs, a phenomenal 29.2% rate of increase. The June forecast assumed 10,200 net new jobs over the year. We continue to expect employment growth to slow in this sector. The recent announcement by Amazon of a second headquarters lends support to this view. Still, the forecast expects employment growth of 28,900 jobs in the sector in calendar 2017 through 2021. On an annual basis, electronic shopping and mail order employment is expected to grow 30.4% this year, 14.4% in 2018, 7.8% in 2019, 5.2% in 2020, and 3.8% in 2021.

*Construction employment has nearly reached its previous peak*

As of the second quarter of 2017, construction employment was 200,900, just 9,100 (4.3%) below the 210,000 reached in the second quarter of 2007. Put another way, the sector has now recovered nearly 90% of the 74,900 jobs lost in the recession. The forecast expects construction employment to peak at 210,000 in the fourth quarter of 2020 (see Figure 2.4). On an annual average basis, construction employment is expected to grow 7.8% this year, up from slightly from 7.6% in 2016. Growth will slow to 2.7% in 2018, 0.9% in 2019, 0.5% in 2020, and 0.1% in 2021.

**Figure 2.4: Washington Construction Employment**

*The forecast expects construction employment to peak in the fourth quarter of 2020*



Source: Source: Washington State Employment Security Department, ERFC; historical data through 2017 Q2

## Washington Personal Income

*Washington personal income is higher than believed in June*

In June, the Bureau of Economic Analysis released estimates for state personal income through the first quarter of 2017. We have incorporated the new BEA estimates as well as additional Washington QCEW and other wage data. Our current estimate of Washington personal income in the first quarter of 2017 is \$406.6 billion, which is \$5.0 billion (1.3%) higher than assumed in the June forecast. The variance was mostly in wages and salaries which were \$4.5 billion higher than believed in June.

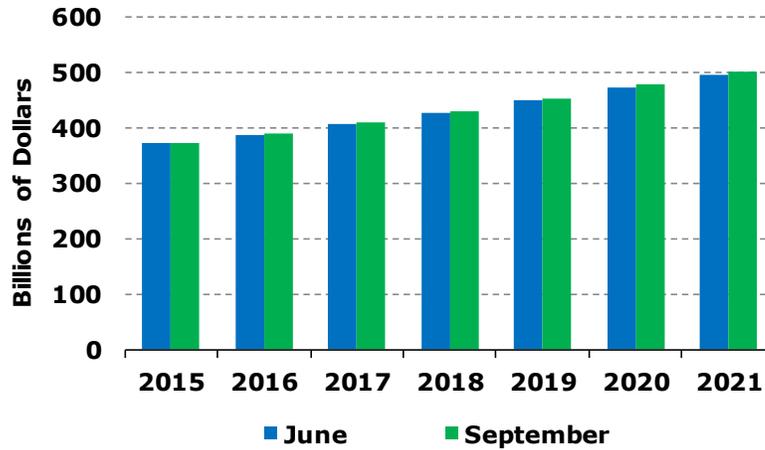
*After this year, our forecast for nominal personal income growth is unchanged since June*

Our forecast for nominal personal income growth this year is 5.8%, up from 4.7% in the June forecast. The higher growth in 2017 is mostly a result of the upward revision in the estimate for the first quarter of 2017. Our new forecast for nominal personal income growth in 2018 through 2021 averages 5.1% per year which is the same rate as expected in the June forecast. While our forecast for personal income growth is similar to the June forecast, the level is higher throughout the forecast due to the higher growth this year. On an annual basis, we expect personal

income to grow 4.5% in 2018, 5.5% in 2019, 5.4% in 2020, and 5.0% in 2021.

**Figure 2.5: Washington Personal Income**

*The Washington personal income forecast is higher than in June*



Source: Bureau of Economic Analysis, ERFC; historical data through 2016

## Washington Building Permits

*The housing recovery in Washington is essentially complete*

The housing recovery in Washington is essentially complete although the composition of new housing will change in coming years. Multi-family housing has recovered from a low of only 4,000 units in 2009 to 21,600 in 2016. We believe 2016 was the peak in multi-family construction in this cycle and that permits will decline to 15,700 by 2021. The recovery in single-family construction has been less robust, from 13,000 units in 2009 to 22,500 in 2016. We expect single-family construction to continue to strengthen with the number of units rising to 26,300 by 2021. The September housing construction forecast is very close to the forecast adopted in June. We expect total housing units authorized by building permits to decline 2.4% this year to 43,000 units, rising 0.8% next year to 43,400 then declining 3.4% in 2019 to 41,900. We expect little change in the final two year of the forecast with the number of units rising 0.5% in 2020 to 42,100 and declining 0.2% in 2021 to 42,000.

## Seattle Consumer Price Index

*Rents are driving Seattle core inflation higher*

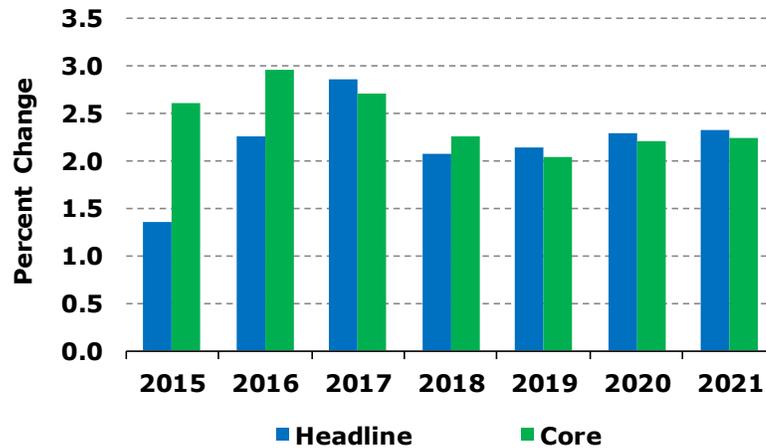
Core inflation (excluding food and energy) in Seattle was 3.0% in 2016 while national core inflation was 2.2%. The reason for the difference was shelter costs, which were rising much faster in Seattle. Recent data show that shelter costs continue to rise faster in Seattle than in the U.S. city average. We expect core inflation in Seattle to moderate as shelter costs stabilize. Our forecast for core Seattle inflation is 2.7% in 2017, 2.3% in 2018, 2.0% in 2019, and 2.2% per year in 2020 and 2021.

*Declining energy costs lowered inflation in 2015 and 2016*

After working to reduce overall inflation considerably in 2015 and 2016, energy costs are leveling off in the forecast. As a result, they will not significantly affect headline inflation in the next few years (see Figure 2.6). We expect the Seattle CPI to rise 2.9% this year, 2.1% in 2018, 2.1% in 2019, and 2.3% in 2020 and 2021.

*Energy costs will not significantly affect inflation in the forecast*

**Figure 2.6: Seattle Consumer Price Inflation**



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

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 required by law*

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

### Optimistic

*In the optimistic scenario, lower taxes and fewer regulations boost growth*

In the optimistic scenario, the federal government provides a boost to both the supply and demand sides of the economy. On the supply side, a rollback of regulations and lower corporate taxes result in greater capital spending. Stronger growth in business fixed investment and an explosion of new technologies lead to stronger productivity gains, bringing economic growth above the baseline rate throughout the forecast period. Given the strengthening outlook, both consumer and business confidence improve and the stock market sees strong gains. On the demand side, higher incomes combine with lower oil prices, inflation, and interest rates to support robust consumer spending. Thanks to increased household formation, solid income growth, and a favorable financing environment, housing remains an engine of growth. Meanwhile, economic conditions in the rest of the world

improve with the help of structural reforms and quantitative-easing programs.

*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 declines less in 2017 then gradually rises 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 the strong local economy attracts migrants from other states. The recovery in construction employment is much stronger than in the baseline forecast with employment in the sector exceeding the previous peak in the second quarter of 2018. By the end of 2021, Washington nonfarm payroll employment is higher by 140,500 jobs (3.9%) than in the baseline forecast and Washington personal income is \$56.2 billion (11.0%) higher.

### **Pessimistic**

*In the pessimistic scenario, a crisis of confidence damages economic growth*

In the pessimistic scenario, the U.S. economy suffers from a crisis of confidence, managing only feeble growth during the final quarter of 2018 and first quarter of 2019, as consumers and businesses react to an uncertain fiscal and monetary policy environment with guarded and more risk-averse behavior. In this scenario, the political and fiscal policy turmoil in Washington, D.C. escalates. Congress and the president make no progress on any major policy initiatives this year. There is no tax or healthcare reform, and no fiscal stimulus. Even more routine action, including the omnibus budget bill and increase in the debt limit, is contentious and accomplished only at the last minute, provoking anxiety and a wait-and-see attitude. Uncertainty regarding future tax and healthcare policies causes business confidence to deteriorate, affecting capital spending and hiring plans. Consumers feel the pinch as well. With fewer job prospects and weaker wage gains, they pull back on spending. The U.S. economy manages growth of just 0.8% (annual rate) in the fourth quarter of 2018 and the first quarter of 2019. Unemployment climbs through 2019, reaching an eventual peak of nearly 5.0%

*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 peaks in early 2018 then declines through 2021 rather than rising as in the baseline. The relatively

weak local economy puts downward pressure on Washington wages and the Seattle CPI. By the end of 2021, Washington nonfarm payroll employment is 107,100 (3.0%) lower than in the baseline forecast and Washington personal income is \$27.2 billion (5.3%) 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 forecast for real GDP growth is the same as the baseline forecast this year but slightly lower in 2018, 2019, 2020, and 2021. The GCEA forecast is 2.0% per year over the five-year interval compared to 2.1% per year in the baseline forecast. The GCEA forecast of real consumer spending growth is similarly slightly lower than the baseline forecast. However, the GCEA inflation forecast is a higher than the baseline forecast at 1.9% compared to 1.8%, offsetting the lower real growth. Consistent with their weaker real growth forecast, the Council members’ mortgage rate forecast is generally lower than the baseline forecast at 4.7% compared to 5.4% on average. The GCEA oil price forecast is slightly lower than the baseline forecast, averaging \$54 in 2017 through 2021 compared to \$55 in the baseline forecast.

*The GCEA members expect weaker Washington growth*

The GCEA scenario for Washington real personal income growth averages 3.0% per year in 2017 through 2021 compared to the baseline forecast of 3.4%. Their inflation forecast is higher, however, so their nominal personal income forecast is closer to ours at 5.0% versus 5.2%. At an average rate of 1.5% per year, the Council members’ forecast for total employment growth over the five-year period is also lower than the baseline forecast of 1.8% per year. The GCEA forecasts for manufacturing employment and construction employment are both weaker than in the baseline forecast. The Council members’ housing permit forecast is slightly higher than ours is, averaging 43,200 units per year through 2021 compared to 42,500 in the baseline forecast. At the end of 2021, the GCEA forecast for Washington nonfarm payroll employment is 50,900 (1.4%) lower than in the baseline forecast and Washington personal income is \$5.7 billion (1.1%) lower.

Table 2.3 compares the GCEA forecast with the baseline forecast.

Table 2.1  
**Washington Economic Forecast Summary**  
 Forecast 2018 to 2021

Fiscal Years

	2014	2015	2016	2017	2018	2019	2020	2021
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	316.623	333.926	345.403	358.784	369.825	382.883	396.898	409.677
% Ch	2.3	5.5	3.4	3.9	3.1	3.5	3.7	3.2
Real Wage and Salary Disb.	162.178	170.842	180.055	189.545	196.388	202.582	208.513	214.390
% Ch	3.5	5.3	5.4	5.3	3.6	3.2	2.9	2.8
Real Nonwage Income	154.446	163.084	165.349	169.238	173.437	180.301	188.385	195.287
% Ch	1.1	5.6	1.4	2.4	2.5	4.0	4.5	3.7
Real Per Capita Income (\$/Person)	45,153	46,973	47,806	48,791	49,472	50,445	51,551	52,501
% Ch	1.2	4.0	1.8	2.1	1.4	2.0	2.2	1.8
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.084	1.093	1.100	1.118	1.135	1.153	1.174	1.197
% Ch	1.4	0.9	0.7	1.6	1.6	1.6	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.437	2.473	2.521	2.589	2.648	2.705	2.766	2.830
% Ch	1.4	1.5	1.9	2.7	2.3	2.2	2.2	2.3
Average Nonfarm Annual Wage	55,988	57,971	59,790	62,179	63,892	65,750	67,942	70,354
% Ch	3.0	3.5	3.1	4.0	2.8	2.9	3.3	3.5
Avg. Hourly Earnings-Mfg. (\$/Hour)	24.76	25.28	26.00	26.80	27.82	28.61	29.47	30.39
% Ch	2.3	2.1	2.8	3.1	3.8	2.8	3.0	3.1
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	343.162	364.967	380.035	401.024	419.762	441.609	466.113	490.352
% Ch	3.8	6.4	4.1	5.5	4.7	5.2	5.5	5.2
Disposable Personal Income	302.066	320.192	333.065	351.442	368.631	388.405	408.397	427.621
% Ch	3.1	6.0	4.0	5.5	4.9	5.4	5.1	4.7
Per Capita Income (\$/Person)	48,936	51,340	52,599	54,534	56,152	58,182	60,540	62,838
% Ch	2.6	4.9	2.5	3.7	3.0	3.6	4.1	3.8
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,465.7	3,517.0	3,589.6	3,677.0	3,750.4	3,823.4	3,892.5	3,953.2
Total Washington Employment	3,240.7	3,313.2	3,388.8	3,492.6	3,583.3	3,656.1	3,722.9	3,782.2
Unemployment Rate (%)	6.49	5.80	5.59	5.02	4.46	4.37	4.36	4.33
Nonfarm Payroll Employment	3,017.1	3,102.5	3,193.2	3,290.0	3,371.6	3,435.5	3,485.6	3,528.5
% Ch	2.3	2.8	2.9	3.0	2.5	1.9	1.5	1.2
Manufacturing	287.5	290.5	292.3	286.4	284.5	288.5	292.8	296.8
% Ch	0.9	1.0	0.6	-2.0	-0.7	1.4	1.5	1.4
Durable Manufacturing	209.4	210.7	210.5	203.5	200.2	202.7	205.2	208.1
% Ch	0.4	0.6	-0.1	-3.3	-1.6	1.2	1.2	1.5
Aerospace	94.7	94.3	93.2	87.5	81.2	79.3	78.0	77.9
% Ch	-1.7	-0.5	-1.2	-6.1	-7.2	-2.4	-1.6	-0.1
Nondurable Manufacturing	78.0	79.8	81.8	82.9	84.3	85.8	87.6	88.7
% Ch	2.3	2.2	2.6	1.4	1.7	1.8	2.1	1.2
Construction	153.7	168.0	178.8	194.4	204.4	207.4	208.7	209.8
% Ch	6.8	9.3	6.4	8.7	5.2	1.5	0.6	0.5
Service-Providing	2,569.7	2,637.7	2,715.8	2,803.1	2,876.6	2,933.3	2,977.7	3,015.5
% Ch	2.2	2.6	3.0	3.2	2.6	2.0	1.5	1.3
Software Publishers	55.0	55.5	57.2	60.3	61.9	62.1	62.6	63.2
% Ch	3.9	1.0	3.1	5.3	2.7	0.3	0.8	0.9
Nonfarm Payroll Employment, EOP*	3,037.8	3,137.3	3,234.2	3,327.1	3,398.0	3,456.2	3,507.6	3,542.8
% Ch*	2.2	3.3	3.1	2.9	2.1	1.7	1.5	1.0
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	33.222	38.703	40.103	44.154	43.856	42.378	41.834	42.198
% Ch	6.5	16.5	3.6	10.1	-0.7	-3.4	-1.3	0.9
Single-Family	17.383	18.652	21.822	22.155	24.461	25.468	25.792	26.267
% Ch	-6.3	7.3	17.0	1.5	10.4	4.1	1.3	1.8
Multi-Family	15.839	20.051	18.281	21.999	19.395	16.911	16.042	15.931
% Ch	25.2	26.6	-8.8	20.3	-11.8	-12.8	-5.1	-0.7
30-Year Fixed Mortgage Rate (%)	4.33	3.92	3.80	3.85	4.38	5.45	6.03	5.96

\*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	1.7	1.9	3.1	3.5	2.6	2.7
Baseline	1.7	1.9	2.4	2.3	2.0	2.0
Pessimistic	1.7	1.9	2.1	1.4	1.8	2.5
<b>Implicit Price Deflator, Percent Change</b>						
Optimistic	0.7	1.6	1.3	1.5	2.0	2.2
Baseline	0.7	1.6	1.6	1.6	1.8	1.9
Pessimistic	0.7	1.6	1.3	1.5	2.0	2.2
<b>Mortgage Rate, Percent</b>						
Optimistic	3.80	3.85	4.31	5.67	6.48	6.48
Baseline	3.80	3.85	4.38	5.45	6.03	5.96
Pessimistic	3.80	3.85	4.32	4.82	4.91	5.41
<b>3 Month T-Bill Rate, Percent</b>						
Optimistic	0.18	0.55	1.15	2.06	2.94	3.12
Baseline	0.18	0.55	1.27	2.06	2.80	2.85
Pessimistic	0.18	0.55	1.18	1.00	1.09	1.97
<b>Washington</b>						
<b>Real Personal Income, Percent Change</b>						
Optimistic	3.4	3.9	5.6	6.4	6.1	4.9
Baseline	3.4	3.9	3.1	3.5	3.7	3.2
Pessimistic	3.4	3.9	1.8	2.1	1.9	2.6
<b>Personal Income, Percent Change</b>						
Optimistic	4.1	5.5	7.0	8.1	8.2	7.1
Baseline	4.1	5.5	4.7	5.2	5.5	5.2
Pessimistic	4.1	5.5	3.1	3.6	3.9	4.8
<b>Employment, Percent Change</b>						
Optimistic	2.9	3.0	3.1	2.8	2.3	2.1
Baseline	2.9	3.0	2.5	1.9	1.5	1.2
Pessimistic	2.9	3.0	2.0	1.0	0.5	0.8
<b>Housing Permits, Thousands of Authorized Units</b>						
Optimistic	40.1	44.2	45.9	46.6	47.2	48.4
Baseline	40.1	44.2	43.9	42.4	41.8	42.2
Pessimistic	40.1	44.2	42.9	38.8	36.6	37.0

Table 2.3

Calendar Years

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

	2017	2018	2019	2020	2021
<b>U.S.</b>					
<b>Real GDP</b>					
<i>Growth</i>					
ERFC	2.2	2.4	2.1	2.0	2.0
GCEA Average	2.2	2.2	2.0	1.9	1.9
<b>Real Consumption</b>					
<i>Growth</i>					
ERFC	2.7	2.5	2.3	2.2	2.1
GCEA Average	2.6	2.2	2.0	2.1	2.0
<b>Implicit Price Deflator, PCE</b>					
<i>Growth</i>					
ERFC	1.7	1.6	1.7	1.9	2.0
GCEA Average	1.8	1.9	2.0	2.0	2.0
<b>Mortgage Rate</b>					
<i>Percent</i>					
ERFC	4.1	5.0	5.8	6.0	6.0
GCEA Average	4.0	4.4	4.7	5.0	5.4
<b>Oil Price (Brent)</b>					
<i>Dollars per barrel</i>					
ERFC	53.1	54.7	54.8	55.1	55.5
GCEA Average	51.7	52.5	53.4	54.3	55.8
<b>Washington State</b>					
<b>Real Personal Income</b>					
<i>Growth</i>					
ERFC	4.1	2.9	3.7	3.5	3.0
GCEA Average	3.7	2.9	3.0	2.7	2.7
<b>Wage and Salary Employment</b>					
<i>Growth</i>					
ERFC	2.9	2.1	1.6	1.4	1.1
GCEA Average	2.6	1.7	1.2	1.0	1.1
<b>Manufacturing Employment</b>					
<i>Growth</i>					
ERFC	-1.8	0.6	1.5	1.4	1.2
GCEA Average	-1.9	-0.8	0.0	0.3	0.6
<b>Construction Employment</b>					
<i>Growth</i>					
ERFC	7.8	2.7	0.9	0.5	0.1
GCEA Average	5.1	2.0	1.1	0.5	-0.2
<b>Housing Permits</b>					
<i>Thousands of authorized units</i>					
ERFC	43.0	43.4	41.9	42.1	42.0
GCEA Average	43.1	43.2	42.8	43.7	43.5
<b>Washington Average Annual Wage</b>					
<i>Growth</i>					
ERFC	4.4	2.1	3.2	3.4	3.7
GCEA Average	3.8	2.9	3.3	3.3	3.4

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>
<b>2012</b>				
September	1.7	5.1	3.1	38.5
November	1.7	4.9	3.2	38.4
<b>2013</b>				
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
<b>2014</b>				
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
<b>2015</b>				
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
<b>2016</b>				
February	1.6	4.3	3.1	38.6
June	2.0	4.2	2.7	40.3
September	2.3	4.4	3.0	40.4
November	2.5	4.4	3.1	39.5
<b>2017</b>				
March	2.7	4.7	3.3	41.4
June	2.7	4.3	3.0	42.3
September	3.0	5.1	3.7	42.1

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>
<b>2014</b>				
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
<b>2015</b>				
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
<b>2016</b>				
February	1.2	5.0	3.2	43.3
June	1.2	5.1	3.2	43.7
September	1.4	5.1	3.3	43.8
November	1.5	5.1	3.2	41.0
<b>2017</b>				
March	1.7	5.3	3.6	41.0
June	1.6	5.2	3.6	42.7
September	1.9	4.8	3.1	43.1

Table 2.6  
**Forecast Comparison**  
 Forecast 2018 to 2021

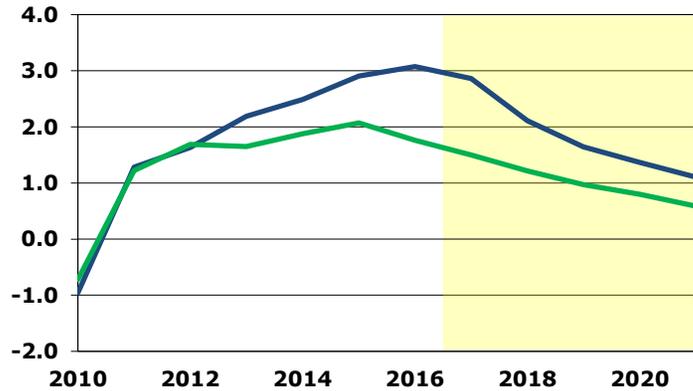
Fiscal Years

	2015	2016	2017	2018	2019	2020	2021
<b>Washington</b>							
<b>Real Personal Income</b>							
September Baseline	333.926	345.403	358.784	369.825	382.883	396.898	409.677
% Ch	5.5	3.4	3.9	3.1	3.5	3.7	3.2
June Baseline	333.849	345.727	355.999	367.967	381.078	394.023	405.581
% Ch	5.4	3.6	3.0	3.4	3.6	3.4	2.9
<b>Personal Income</b>							
September Baseline	364.967	380.035	401.024	419.762	441.609	466.113	490.352
% Ch	6.4	4.1	5.5	4.7	5.2	5.5	5.2
June Baseline	364.967	380.443	397.772	417.495	439.057	462.220	485.297
% Ch	6.4	4.2	4.6	5.0	5.2	5.3	5.0
<b>Employment</b>							
September Baseline	3102.5	3193.2	3290.0	3371.6	3435.5	3485.6	3528.5
% Ch	2.8	2.9	3.0	2.5	1.9	1.5	1.2
June Baseline	3102.5	3193.2	3283.2	3348.6	3402.2	3450.5	3492.5
% Ch	2.8	2.9	2.8	2.0	1.6	1.4	1.2
<b>Housing Permits</b>							
September Baseline	38.703	40.103	44.154	43.856	42.378	41.834	42.198
% Ch	16.5	3.6	10.1	-0.7	-3.4	-1.3	0.9
June Baseline	38.703	40.103	44.511	43.338	42.020	41.950	42.021
% Ch	16.5	3.6	11.0	-2.6	-3.0	-0.2	0.2

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

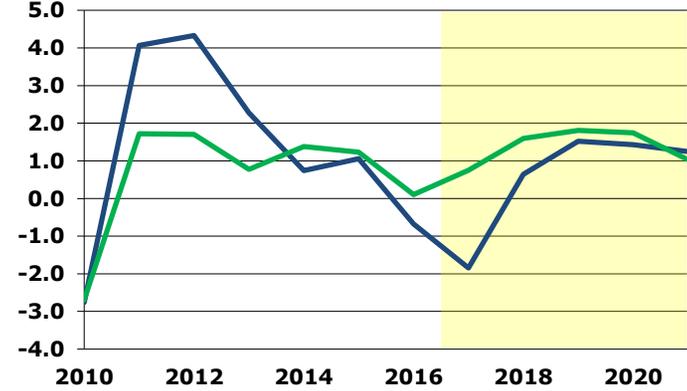
Forecast

Total nonfarm payroll employment



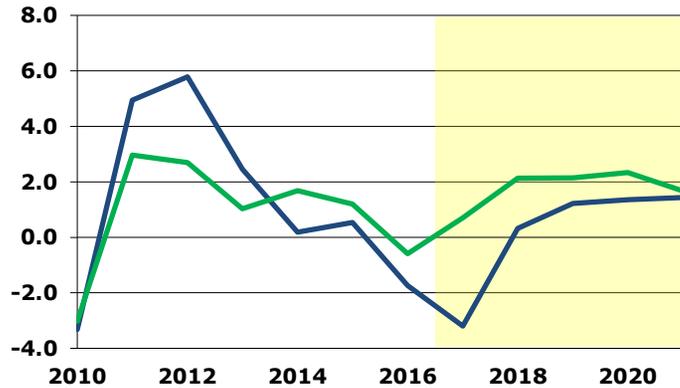
Source: WA State Employment Security Dept. 2016, ERFC 2021

Manufacturing employment



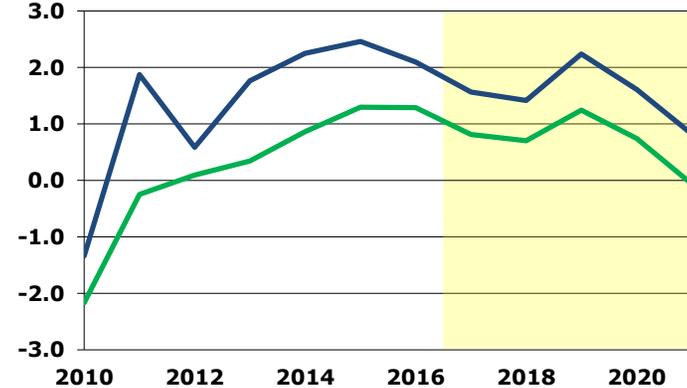
Source: WA State Employment Security Dept. 2016, ERFC 2021

Durable manufacturing employment



Source: WA State Employment Security Dept. 2016, ERFC 2021

Nondurable manufacturing employment



Source: WA State Employment Security Dept. 2016, ERFC 2021

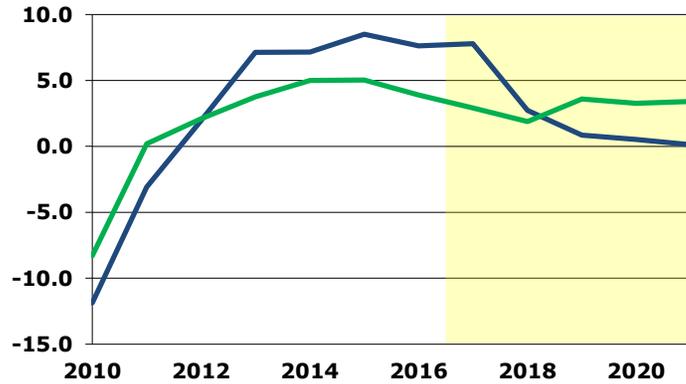
Washington

U.S.

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

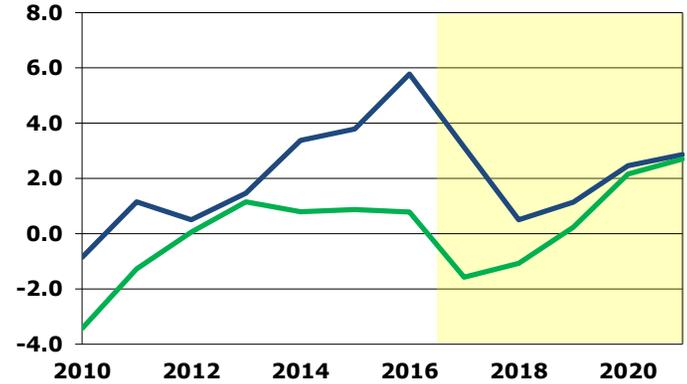
Forecast

Construction employment



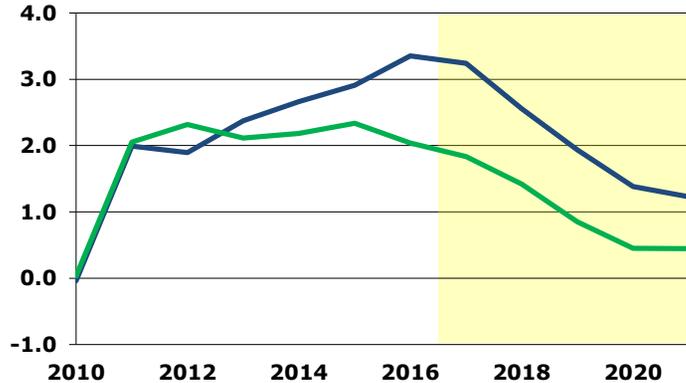
Source: WA State Employment Security Dept. 2016, ERFC 2021

Information employment



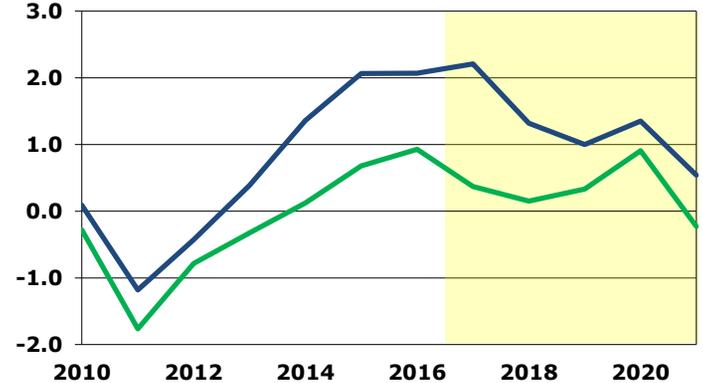
Source: WA State Employment Security Dept. 2016, ERFC 2021

Other private employment



Source: WA State Employment Security Dept. 2016, ERFC 2021

Government employment



Source: WA State Employment Security Dept. 2016, ERFC 2021

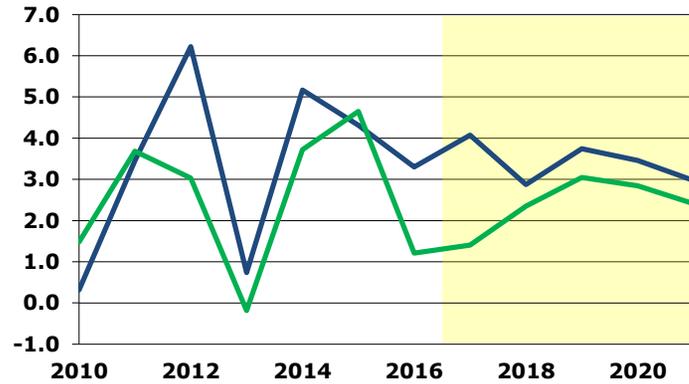
Washington

U.S.

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

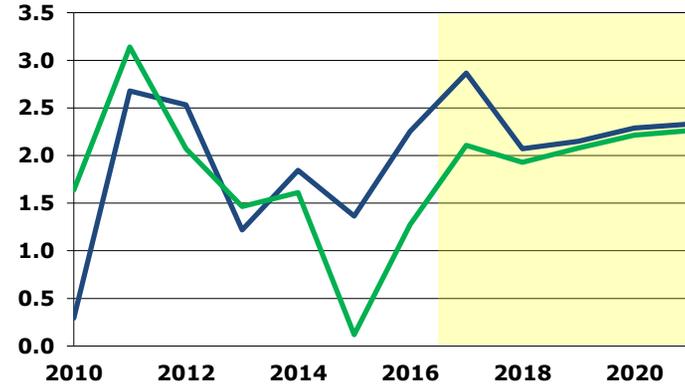
Forecast

Real personal income



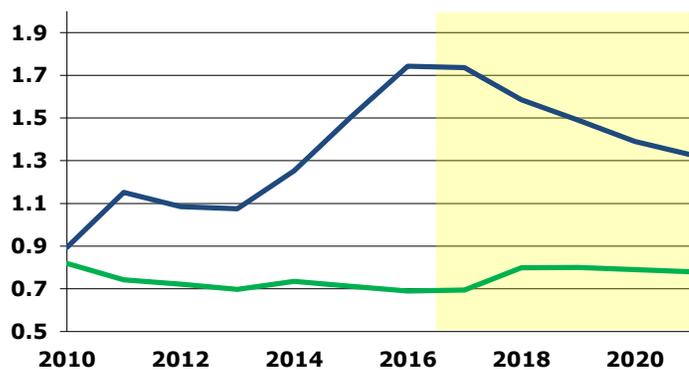
Source: Bureau of Economic Analysis 2015, ERFC 2021

Consumer price indices



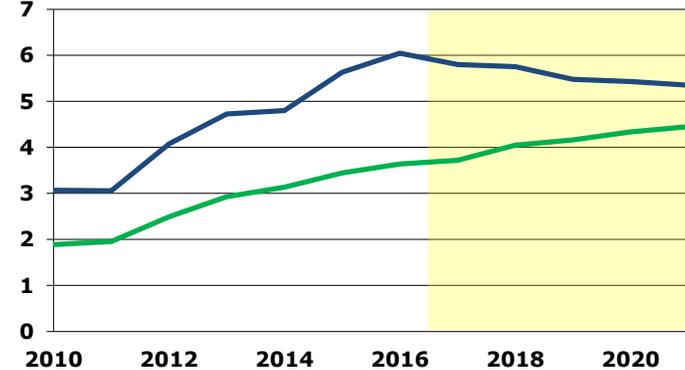
Source: Bureau of Labor Statistics 2016, ERFC 2021

Population



Source: Office of Financial Management/Census Bureau 2016, ERFC 2021

New Housing Units Per 1,000 population (level)



Source: Census Bureau 2016, ERFC 2021

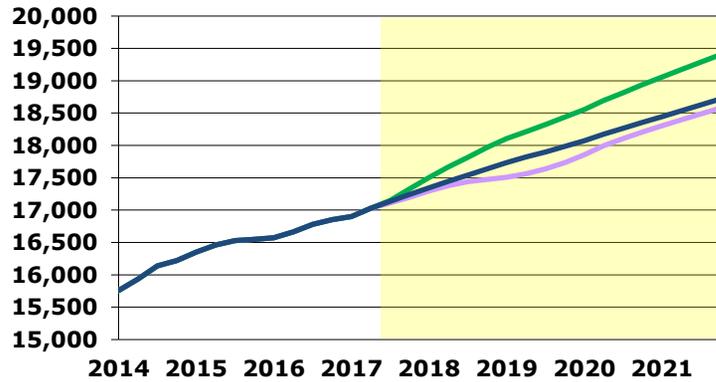
Washington

U.S.

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

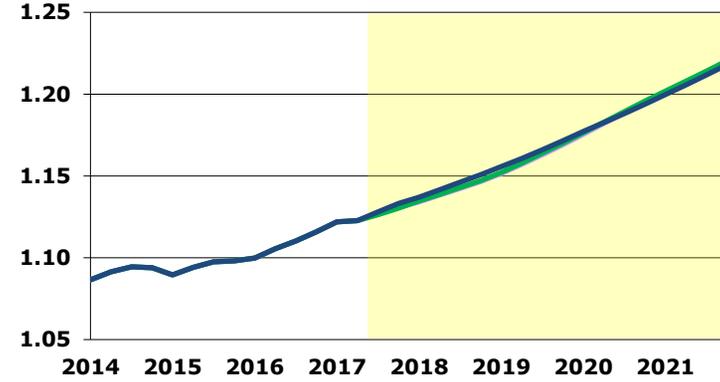
Forecast

Real GDP, billions of chained 2009 dollars



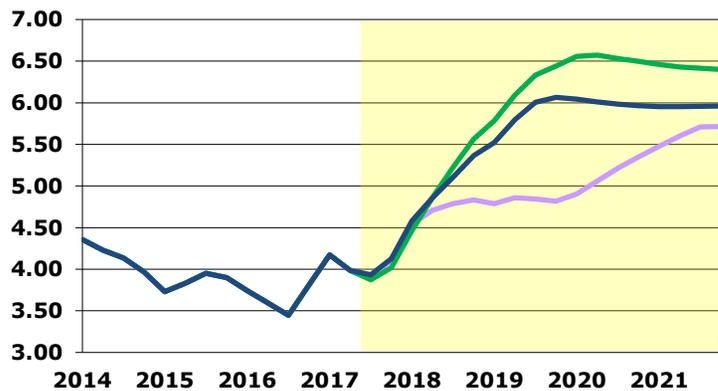
Source: Bureau of Economic Analysis 2017 Q2, ERFC 2021

Implicit price deflator, index 2009 = 1.0



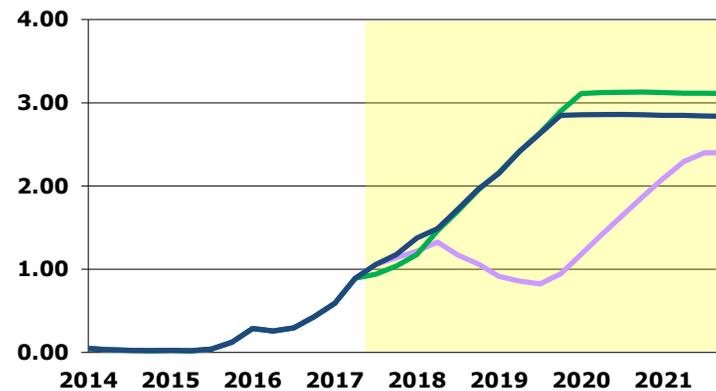
Source: Bureau of Economic Analysis 2017 Q2, ERFC 2021

Mortgage rate, percent



Source: Freddie Mac 2017 Q2, ERFC 2021

Three month T-bill rate, percent



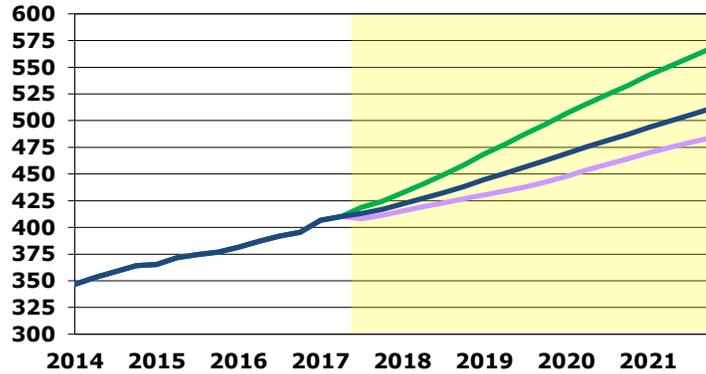
Source: Federal Reserve Board 2017 Q2, ERFC 2021

■ Baseline      ■ Optimistic      ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

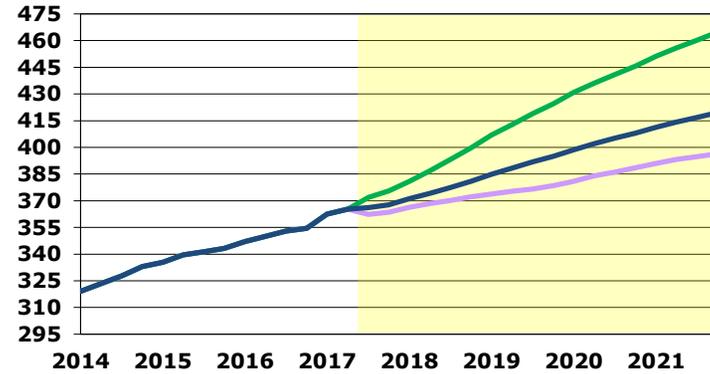
Forecast

Personal income, billions of dollars



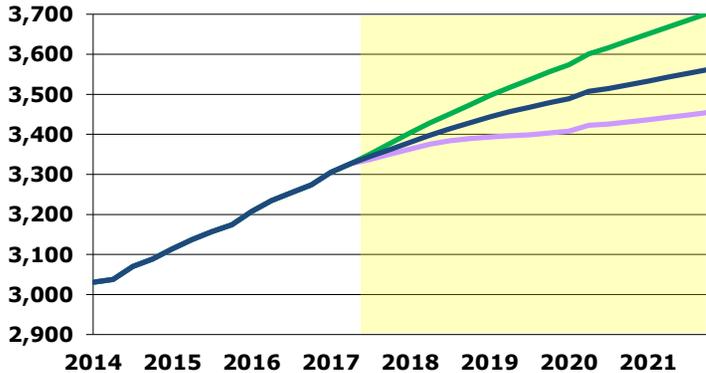
Source: Bureau of Economic Analysis 2015 Q4, ERFC 2021

Real personal income, billions of chained 2009 dollars



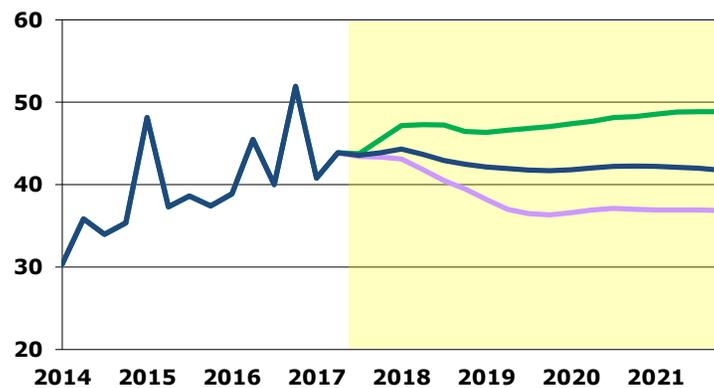
Source: Bureau of Economic Analysis 2015 Q4, ERFC 2021

Total nonfarm payroll employment, thousands



Source: WA State Employment Security 2017 Q2, ERFC 2021

Housing permits, thousands



Source: Census Bureau 2017 Q2, ERFC 2021

■ Baseline      ■ Optimistic      ■ Pessimistic



## Chapter 3: Washington State Revenue Forecast Summary

- **Revenue collections since the June 2017 forecast have come in \$94 million over the forecasted amount.**
- **The September forecast includes large increases in expected General Fund-State (GF-S) revenue from legislative changes. These new laws, intended to provide full state funding of basic education as required by the State Supreme Court's McCleary decision, add \$2.1 billion to forecasted revenue in the 2017-19 biennium and \$3.3 billion in the 2019-21 biennium.**
- **Forecast increases from changes to the economic forecast were relatively small. Projected higher employment and personal income brought increases of \$279 million in the 2017-19 biennium and \$243 million in the 2019-21 biennium.**
- **The preliminary estimate of GF-S revenue for the 2015-17 biennium is \$3 million higher than forecasted in June.**
- **The total forecast increase for the 2017-19 biennium was \$2.4 billion and the increase for the 2019-21 biennium was \$3.5 billion.**

### Overview

*The revenue forecast includes large increases due to legislative changes*

Due to a surplus in revenue collections since the June forecast and a slightly stronger state economic forecast, collections excluding non-economic forecast changes are expected to increase moderately. These increases, however, are greatly outweighed by changes stemming from legislation passed in the special legislative sessions subsequent to the June forecast. These changes, enacted in response to a State Supreme Court decision that found the state was inadequately funding basic education, are expected to add over \$5 billion in new revenue over current and following biennia.

*GF-S forecast change by biennium (millions):*  
15-17: +\$3  
17-19: +\$2,359  
19-21: +\$3,521

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2015-17 through 2019-21 biennia. For the 2015-17 biennium, which ended on June 30, 2017, collections from revenue sources that are tracked monthly came in \$7.3 million higher than forecasted in June. A legislative change (an increase in one transfer of funds out of the GF-S) subtracted \$0.4 million. The preliminary estimate of total revenue from other sources was \$4.0 million lower than forecasted, leading to a \$2.9 million

total change in estimated revenue for the biennium. For the current biennium, revenue sources that are tracked monthly came in \$87.0 million higher than forecasted in June. Legislative changes added \$2,079.1 million. Changes to the economic forecast resulted in a \$192.5 million increase to projected collections for the rest of the biennium. The total of these components was a \$2,358.6 million increase in projected revenue for the current 2017-19 biennium. The forecast for the 2019-21 biennium has been increased by \$3,521.3 million, with a \$3,278.4 million increase in forecasted revenue from legislative changes and \$242.8 million increase from economic factors. GF-S revenue is now forecasted to total \$38,311.3 million in the 2015-17 biennium, \$43,261.7 million in the 2017-19 biennium, and \$47,396.4 million in the 2019-21 biennium.

GF-S forecast  
(\$millions):

2015-17:  
\$38,311

2017-19:  
\$43,262

2019-21:  
\$47,396

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

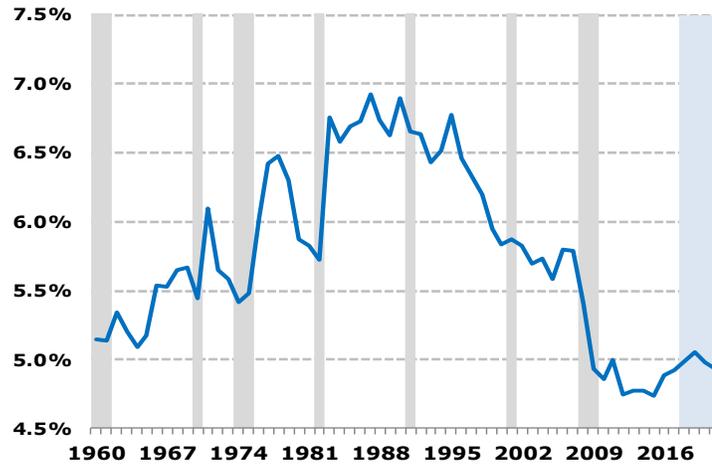
	<b>2015-17 Biennium</b>	<b>2017-19 Biennium</b>	<b>2019-21 Biennium</b>
Collection Experience	\$7.3	\$87.0	NA
Non-Economic Change	(\$0.4)	\$2,079.1	\$3,278.4
Forecast Change	(\$4.0)	\$192.5	\$242.8
<b>Total Change</b>	<b>\$2.9</b>	<b>\$2,358.6</b>	<b>\$3,521.3</b>

*Though the ratio of collections to income is expected to increase for several years, it will still be near historical lows*

As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income has been increasing for two years and is forecasted to increase for two more years. 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 increased slightly in FY 2014 due to low income growth and then decreased slightly in FY 2015. The ratio then increased in FY 2016 and 2017, largely due to revenue increases stemming from legislative changes. The newest legislative changes are expected to further boost the ratio through FY 2019, after which it is expected to continue its downward trend. Despite the increases, the ratio of revenue to income in FY 2019 will still be below that of any fiscal year on record prior to FY 2008.

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

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



Source: ERFC, data through fiscal year 2017

*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 \$94 million (2.1%) more than the June 2017 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 June 2017 forecast, total revenue from the above sources came in \$94.3 million (2.1%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$66.2 million (1.7%) above the forecast. Revenue from other DOR tax sources was \$26.6 million (3.8%) above the forecast.

*Much of the forecast variance was due to real estate excise taxes*

Most of the positive variance in non-Revenue Act collections was due to real estate excise taxes (REET) which came in \$23.3 million (8.2%) higher than forecasted. Cigarette tax receipts came in \$6.0 million (5.9%) higher than forecasted and liquor sales and liter tax receipts came in \$0.3 million (0.4%) higher than forecasted. Property tax receipts came in \$1.4 million (0.7%) higher than forecasted. Net refunds of unclaimed property out of the GF-S were \$4.5 million higher than forecasted. All other DOR revenue sources came in \$0.1 million (0.2%) higher than forecasted. Revenue from the Administrative Office of the Courts was \$1.6 million (9.1%) higher than forecasted.

**Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the June 2017 forecast, cash basis, millions of dollars)**

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$66.2	1.7%
Non-Revenue Act	\$26.6	3.8%
<b>Subtotal</b>	<b>\$92.8</b>	<b>2.1%</b>
Administrative Office of the Courts	\$1.6	9.1%
<b>Total*</b>	<b>\$94.3</b>	<b>2.1%</b>

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

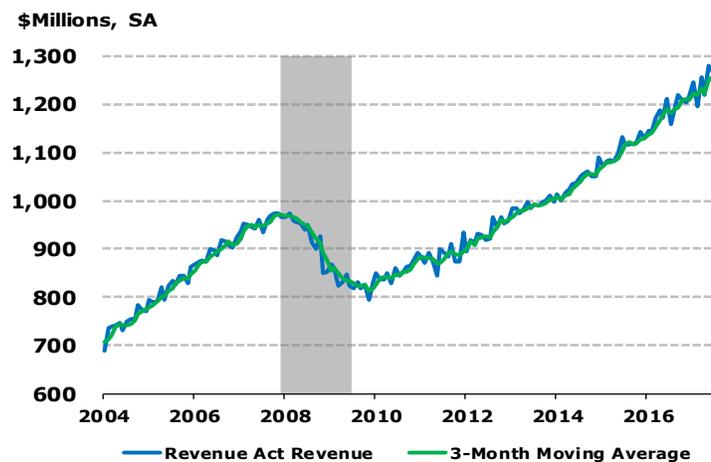
Source: ERFC; Period: June 11 - September 10, 2017

*Adjusted Revenue Act collections were up 5.8% year over year in the most recent collection period and up 5.6% 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, despite large swings in monthly collections the three-month moving average continues on an upward trend. Collections grew 5.8% year over year in the August 11 – September 10 collections period after 5.6% growth in the previous period. Growth on a quarterly basis shows

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

*Year-over-year growth in adjusted Revenue Act collections has slowed in recent months*



Source: ERFC; Data through September 10, 2017 preliminary allocation

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

gradual slowing over the past year. Adjusted year-over-year growth in collections representing second quarter 2017 activity (May 11 – August 10, 2017 collections) was 5.6%. Collections growth for first quarter 2017 activity (February 11-May 10, 2017 collections) was 6.3%. Collections growth for fourth quarter 2016 activity was 6.4% and growth for adjusted third quarter 2016 activity was 7.2%.

*Sales of large commercial properties were stronger than expected*

Much of the large positive variance in REET collections was once again due to stronger-than-expected sales of large commercial property. Sales of property worth \$10 million or more totaled \$2.7 billion in the three months since the last forecast. These sales had slowed from \$5.2 billion in the fourth quarter of 2016 to \$1.8 billion in the first quarter of 2017, but rebounded to \$2.9 billion in the second quarter. 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). Residential sales and smaller commercial sales have also been stronger than expected since the June 2017 forecast. The increases in taxable activity have 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 August 2017

## Legislative Changes to the Forecast

*Legislative forecast changes were slight*

Subsequent to the release of the June forecast, the state legislature passed a budget bill and several other bills that created large increases in forecasted revenue. The increases came in response to the McCleary decision from the State Supreme Court, which found that the state government had inadequately funded basic education. The chief revenue increase

from these bills was an increase in the state's property tax levy, which will replace some revenue from local levies. The increased levy, which will be in effect on January 1, 2018, is expected to raise \$1.6 billion in the current biennium and \$2.5 billion in the 2019-21 biennium. The second largest source of expected revenue is an expansion of the number of online sellers that are expected to collect retail sales tax. This change is estimated to bring in \$341 million in the current biennium and \$696 million in the 2019-21 biennium. The third largest legislative revenue increase is a repeal of the exemption of most sales of bottled water from retail sales tax, which is expected to bring in \$54.6 million in the current biennium and \$62.3 million in the 2019-21 biennium. A summary of the legislative and budget-driven revenue changes to the forecast can be found in Table 3.19.

## Revenue Forecasts by Source

### Department of Revenue

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

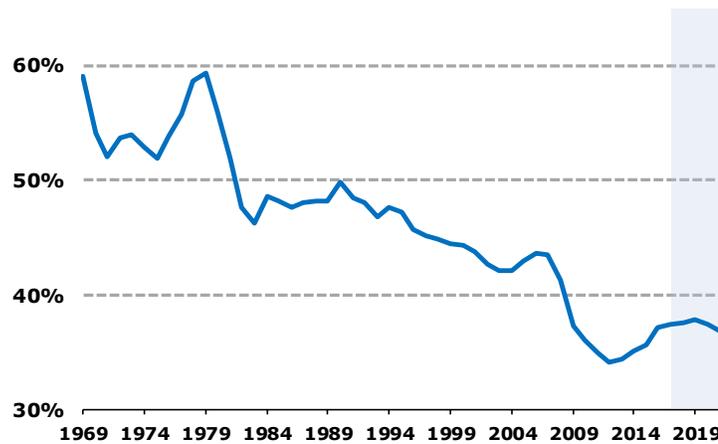
The Department of Revenue (DOR) collects and administers the majority of Washington's GF-S revenue, accounting for 95% of total GF-S revenue in FY 2016. The largest tax sources administered by the DOR are the retail sales tax, business and occupation tax, property tax, use tax, cigarette tax and real 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 47.9% of GF-S revenue in FY 2017. The state's share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other services are taxed, the tax does not apply to most services. Taxable sales as a share of personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 34.1% of personal income was spent on taxable items and services, the lowest percentage on record. Increased spending on construction and autos, along with legislative changes to services and companies deemed taxable, caused the share to grow through FY 2017, reaching 37.4% of personal income. Legislation passed since the June 2017 forecast that extends the tax to bottled water and certain online sales is forecasted to cause the share to continue to increase through FY 2019. From FY 2019 on, however, the additional revenue will not grow as quickly as personal income, causing the ratio of sales to income to continue its downward trend. 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 2016, forecast through FY 2021

*Retail sales tax receipt growth forecast:*

- FY17: 6.0%
- FY18: 6.0%
- FY19: 5.9%
- FY20: 4.6%
- FY21: 4.0%

Strong growth in construction and auto sales brought taxable retail sales growth of 8.1% in FY 2015. Legislative changes coupled with continued growth in construction and auto sales boosted growth in FY 2016 taxable activity to 8.4%. Slowing construction growth and flat auto sales lowered growth in FY 2017 activity to 6.3%. Forecasted growth then slows to 5.0% in FY 2018 due to a large slowdown in auto sales growth. Growth then increases to 5.9% in FY 2019 as auto sales growth increases slightly and the legislative extension of the tax onto online sales nears its full reach. Growth then declines to 4.3% in FY 2020 and 3.9% in FY 2021 (see Table 3.4) as auto sales, construction and online sales growth settles down to lower levels. 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 2016 was 8.8%. Collections growth is forecasted at 6.0% in FY 2017 and FY 2018, 5.9% in FY 2019, 4.6% in FY 2020 and 4.0% 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 19.4% of GF-S revenue in FY 2017. 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 2016, 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 45% 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 20% of taxes due.

*B&O tax growth forecast:  
FY17: 5.3 %  
FY18: 4.6%  
FY19: 5.2%  
FY20: 5.0%  
FY21: 5.0%*

In FY 2016, B&O tax receipts grew by 7.3%, due largely to legislative changes from the 2015 session. Growth decreased to 5.3% in FY 2017. Growth is forecasted to slow to 4.6% in FY 2018, despite some legislative increases, due to the elevation of FY 2017 receipts from one-time remittance payments. Forecasted growth then increases to 5.2% in FY 2019. Growth is forecasted at 5.0% in FY 2020 and 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 10.6% of total revenue in FY 2017. Although the tax goes into the GF-S, it is dedicated to the funding of basic education. As discussed above, the total amount of the state levy has been increased by new legislation. This legislation will increase state property taxes by \$538 million in FY 2018, \$1.04 billion in FY 2019, \$1.10 billion in FY 2020 and \$1.16 billion in FY 2021.

*Property tax growth forecast:  
FY17: 1.9%  
FY18: 28.4%  
FY19: 21.7%  
FY20: 5.3%  
FY21: 5.4%*

Constrained by prior law to a levy growth rate of one percent (or the rate of inflation if less than one percent), property tax collections grew by 2.1% in FY 2016 and 1.9% in FY 2017. The additional state levy will increase growth to 28.4% in FY 2018 and 21.7% in FY 2019. Growth is then expected to slow to 5.3% in FY 2020 and 5.4% in FY 2021.

*REET was the fourth largest GF-S source in FY 2016*

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2017, accounting for 5.1% 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:  
FY17: 13.6%  
FY18: -9.4 %  
FY19: -5.2%  
FY20: -0.9%  
FY21: 3.1%*

Due to a high number of large sales of commercial property, REET receipts grew by 34.0% in FY 2013 and 15.2% in FY 2014. Even higher commercial sales coupled with strengthening residential sales boosted FY 2015 collections growth to 20.4% and FY 2016 growth to 19.4%. While large commercial sales slowed somewhat in FY 2017, the residential market accelerated, resulting in a further 13.6% increase. Large commercial sales are expected to decline in FY 2018 as residential sales grow more slowly, resulting in a 9.4% decrease in collections. Price moderation in residential sales coupled with continuing declines in commercial sales is forecasted to cause collections to continue to decrease by 5.2% in FY 2019 and 0.9% in FY 2020, with growth resuming at 3.1% in FY 2021.

*Use tax was the fifth largest GF-S source in FY 2016*

The state use tax was the fifth largest GF-S revenue source in FY 2017 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:*

FY17: 6.0%  
FY18: -0.9%  
FY19: 1.8%  
FY20: 4.4%  
FY21: 4.8%

The legislated elimination of certain tax exemptions, along with several large one-time remittance payments, boosted use tax growth to 7.1% in FY 2016. Growth decreased to 6.0% in FY 2017. Lower used car sales and declines in expected used car prices are expected to cause collections to shrink by 0.9% in FY 2018 and grow at only 1.8% in FY 2019. Growth is then expected to resume at more normal levels of 4.4% in FY 2020 and 4.8% in FY 2021.

*Public utility taxes were the sixth largest GF-S source in FY 2016*

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2017, bringing in 2.1% 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:*

FY17: 1.4%  
FY18: 8.0%  
FY19: 4.6%  
FY20: 3.0%  
FY21: 3.4%

Public utility tax receipts grew by 4.5% in FY 2016. Lower natural gas prices brought growth in receipts to 1.4% in FY 2017. A recovery in projected natural gas prices and increased electricity prices bring expected growth of 8.0% in FY 2018. Growth then slows to 4.6% in FY 2019, 3.0% in FY 2020 and 3.4% in FY 2021.

*The cigarette tax was the seventh largest GF-S source in FY 2016*

The state tax on cigarettes was the seventh largest DOR GF-S revenue source in FY 2016 at 1.9% 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:*

FY17: -3.5%  
FY18: -2.1%  
FY19: -2.2%  
FY20: -2.1%  
FY21: -1.5%

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. Despite an increase in tax enforcement established in the 2015 legislative session, collections decreased by 1.8% in FY 2016. Collections are forecasted to decrease by 3.5% in FY 2017, 2.1% in FY 2018, 2.2% in FY 2019, 2.1% in FY 2020 and 1.5% 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 with annual appropriations to various other accounts including the GF-S.

*Change in GF-S forecast of total cannabis-related revenue by biennium (millions):*  
15-17: \$0.0  
17-19: \$25.2  
19-21: \$22.8

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 totaled \$147.6 million. GF-S distributions are forecasted at \$245.6 million in the 2017-19 biennium, an increase of \$25.2 million from the June forecast, and \$267.6 million in the 2019-21 biennium, an increase of \$22.8 million. Details of the forecasted distributions from the account can be found in Table 3.18.

## The Office of Financial Management (Other Agencies)

*Forecast change by biennium (millions):*

15-17:  $-\$0.7$   
17-19: \$68.1  
19-21: \$21.1

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 Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. Starting with the current forecast cycle, the office has also added the Department of Licensing to its list of covered agencies. The office's preliminary tally of final revenue for the 2015-17 biennium was \$265.7 million, \$0.7 less than expected in June. \$0.4 million of the shortfall was due to new legislation that increased an existing transfer of funds out of the GF-S. The office's forecast for the 2017-19 biennium was increased \$68.1 million to \$325.9 million, due mainly to \$67.0 million in legislative changes. These changes included a delay of PUD privilege tax distributions and decreases in outward transfers to several sources. The forecast for the 2019-21 biennium was increased \$21.1 million to \$163.9 million, due mainly to \$21.8

million in legislative changes mainly involving decreased outward transfers.

## State Treasurer

*Forecast  
change by  
biennium  
(millions):*

15-17: \$1.2  
17-19: -\$15.1  
19-21: -\$21.0

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's preliminary tally of total revenue for the 2015-17 biennium is \$22.0 million, \$1.2 million more than forecasted in June. The office's forecast for the 2017-19 biennium has been decreased \$15.1 million to \$25.4 million and the forecast for the 2019-21 biennium has been decreased \$21.0 million to \$48.7 million. The forecast reductions were due to a decrease in expected balances that contribute earnings to the GF-S due to a large outward transfer in FY 2017 that was previously expected to be reversed.

## Insurance Commissioner

*Forecast  
change by  
biennium  
(millions):*

15-17: -\$0.3  
17-19: \$1.0  
19-21: \$2.3

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 preliminary tally of total revenue for the 2015-17 biennium is \$1,087.0 million, \$0.3 million less than forecasted in June. The forecast for the 2017-19 biennium has been increased \$1.0 million to \$1,169.9 million and the forecast for the 2019-21 biennium has been increased \$2.3 million to \$1,278.6 million.

## Liquor and Cannabis Board

*Forecast  
change by  
biennium  
(millions):*

15-17: -\$4.7  
17-19: \$21.4  
19-21: \$22.2

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 initial tally of LCB GF-S revenue for the 2015-17 biennium is \$366.2 million, \$4.7 million less than forecasted in June. The forecast of revenue for the 2017-19 biennium has been increased \$21.4 million to \$496.1 million and the forecast for the 2019-21 biennium has been increased \$22.2 million to \$537.1 million. The forecast changes were a combination of changes to expected fees and taxes associated with beer, wine, and liquor distribution and the changes in expected distributions of cannabis excise taxes to the GF-S discussed above.

## Lottery Commission

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

15-17: \$0.0  
17-19: \$5.4  
19-21: \$1.0

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 is transferred to the GF-S. The preliminary tally of transfers into the GF-S for the 2015-17 biennium is unchanged at \$31.9 million. Forecasted transfers for the 2017-19 biennium have been increased \$5.4 million to \$34.8 million and forecasted transfers to the GF-S for the 2019-21 biennium have been increased \$1.0 million to \$43.1 million.

*OPA forecast  
change by  
biennium  
(millions):*

15-17: -\$2.8  
17-19: \$2.9  
19-21: \$0.8

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The preliminary tally of OPA revenue for the 2015-17 biennium is \$263.5 million, \$2.8 million less than forecasted in June. The forecast for the 2017-19 biennium has been increased \$2.9 million to \$259.1 million and the forecast for the 2019-21 biennium has been increased \$0.8 million to \$257.4 million.

## Administrative Office of the Courts

*Forecast  
change by  
biennium  
(millions):*

15-17: \$0.8  
17-19: -\$0.6  
19-21: -\$1.7

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 preliminary tally of transfers to the GF-S for the 2015-17 biennium is \$155.3 million, \$0.8 million more than forecasted in June. The forecast for the 2017-19 biennium has been decreased \$0.6 million to \$138.8 million and the forecast of transfers for the 2019-21 biennium has been decreased \$1.7 million to \$140.7 million.

## Track Record for the 2015-17 Biennium

*The September  
2017 estimate  
is \$1.36 billion  
(3.7%) higher  
than the  
forecast when  
the initial  
biennial budget  
in 2015 was  
adopted*

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 September 2017 preliminary estimate of total revenue for the biennium is \$2.79 billion (7.9%) 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 \$2.29 billion (6.5%) 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 September 2017 forecast is \$1.36 billion (3.7%) higher than that sum.

## Track Record for the 2017-19 Biennium

*The September 2017 forecast is \$4.55 billion (11.8%) higher than the initial February 2014 forecast, due mainly to legislative changes*

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 September 2017 forecast is \$4.55 billion (11.8%) higher than the initial forecast. Non-economic changes have increased the forecast by \$2.48 billion (6.4%). Excluding non-economic changes, the current forecast is \$2.07 billion (5.4%) 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 total GF-S reserves of \$2.31 billion at the end of the 2017-19 biennium and \$2.35 billion in reserves for GF-S, ELTA and OPA*

Table 3.12 shows the budgetary balance sheets for the 2015-17 and 2017-19 biennia 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 preliminary GF-S ending fund balance for the

2015-17 biennium is 664.9 million and the total preliminary ending balance for GF-S, ELTA and OPA is \$719.2 million. Based on the September 2017 revenue forecast and currently enacted budgets, unrestricted GF-S reserves are projected to be \$1,148.3 million at the end of the 2017-19 biennium and GF-S, ELTA and OPA reserves are projected to be \$1,185.4 million. In addition, the Budget Stabilization Account is projected to have a balance of \$1,161.8 million, bringing total projected GF-S reserves to \$2,310.1 million. Projected combined reserves for the ELTA and OPA are \$37.1 million, for total projected reserves of \$2,347.2 million for GF-S, ELTA and OPA at the end of the 2017-19 biennium.

### Alternative Forecasts for the 2017-19 and 2019-21 Biennia

*Optimistic scenario (billions):*  
 17-19: +\$1.7  
 19-21: +\$3.8

*Pessimistic scenario:*  
 17-19: -\$2.0  
 19-21: -\$4.0

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 60% to the baseline forecast, 15% to a scenario based on the upside risks and 25% to a scenario based on the downside risks. The revenue implications of these alternative scenarios for the 2017-19 biennium are shown in Table 3.13 and those of the 2019-21 biennium are shown in Table 3.14. For the 2017-19 biennium, the optimistic forecast generates \$44,915.0 million in GF-S revenue, \$1,653.3 million (3.8%) more than the baseline scenario, while the pessimistic forecast produces \$41,307.9 million in revenue, \$1,953.8 million (4.5%) less than the baseline. For the 2019-21 biennium, the optimistic forecast generates \$51,217.3 million in GF-S revenue, \$3,820.9 million (8.1%) more than the baseline scenario, while the pessimistic forecast produces \$43,318.4 million in revenue, \$4,078.0 million (8.6%) less than the baseline.

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

*Near General Fund Forecast (millions):*

2015-17:  
 \$38,778.4

2017-19:  
 \$43,784.7

2019-21:  
 \$47,963.4

“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 preliminary tally of Near General Fund revenue for the 2015-17 biennium is \$38,778.4 million, \$3.6 million more than the June 2017 forecast. The forecast of Near General Fund revenue for the 2017-19 biennium is \$43,784.7 million, \$2,363.8 million more than the June forecast, and the forecast for the 2019-21 biennium is \$47,963.4 million, \$3,738.5 million more than the June 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%	28,906.9	4.3%
2013-15	33,666.0	9.8%	30,933.1	7.0%
2015-17 <sup>P</sup>	38,311.3	13.8%	34,547.4	11.7%
2017-19 <sup>F</sup>	43,261.7	12.9%	37,811.1	9.4%
2019-21 <sup>F</sup>	47,396.4	9.6%	39,976.8	5.7%

<sup>P</sup> September 2017 preliminary estimate

<sup>F</sup> September 2017 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 2017 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	141,103	8.4%
2017 <sup>P</sup>	149,999	6.3%
2018 <sup>F</sup>	157,549	5.0%
2019 <sup>F</sup>	166,822	5.9%
2020 <sup>F</sup>	174,043	4.3%
2021 <sup>F</sup>	180,809	3.9%

<sup>P</sup> September 2017 preliminary estimate

<sup>F</sup> September 2017 forecast

Source: ERFRC

\* Actual Base. Includes statutory and administrative changes to the tax base. Historical fiscal year data are from quarterly taxable sales reported by taxpayers on the state's Combined Excise tax return. Reported totals affected by enacted legislation. Major base changes include: exemption of off-premises food, beginning 1978:3 (fiscal 1979); extension of the sales tax base to off premises food (1982:2 to 1983:2); food again exempt 1983:3 (fiscal 1984); extension of the sales tax base to candy, gum and bottled water (June 1 - December 2, 2010); elimination of sales tax exemption for residential phone service (July 1, 2013); elimination of sales tax exemption for bottled water (July 1, 2017); extension of economic nexus to certain remote sellers (January 1, 2018).

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>Jun. 2017 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>Sep. 2017 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$18,425.4	\$0.0	(\$39.5)	\$18,385.9	(\$39.5)
Business & Occupation Use	7,428.8	0.0	20.8	7,449.7	20.8
Public Utility	1,296.2	0.0	13.7	1,310.0	13.7
Liquor Sales/Liter	804.0	0.0	2.8	806.8	2.8
Cigarette	514.3	0.0	0.9	515.2	0.9
Property (State Levy)	766.3	0.0	3.0	769.3	3.0
Real Estate Excise	4,132.4	0.0	0.4	4,132.8	0.4
Timber Excise	1,884.6	0.0	6.5	1,891.0	6.5
Other	3.8	0.0	0.0	3.8	0.0
Subtotal	1,120.7	0.0	(2.0)	1,118.6	(2.0)
<b>Insurance Commissioner</b>					
Insurance Premiums	36,376.5	0.0	6.6	36,383.1	6.6
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	1,087.3	0.0	(0.3)	1,087.0	(0.3)
Beer & Wine Surtax	313.3	0.0	(3.8)	309.5	(3.8)
<b>Lottery Commission</b>					
Lottery Revenue	57.6	0.0	(0.9)	56.7	(0.9)
<b>State Treasurer</b>					
Interest Earnings	31.9	0.0	0.0	31.9	0.0
<b>Office of Financial Management**</b>					
Other Agencies	20.8	0.0	1.2	22.0	1.2
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	154.6	0.0	0.8	155.3	0.8
<b>Total General Fund-State *</b>	<b>\$38,308.3</b>	<b>(\$0.4)</b>	<b>\$3.3</b>	<b>\$38,311.3</b>	<b>\$2.9</b>

<sup>1</sup> Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council June 20, 2017<sup>2</sup> Forecast for the 2015-17 biennium, adopted September 20, 2017

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

\*\*OFM forecast now includes revenue from the Department of Licensing.

Source: ERFC, Insurance Commissioner, Lottery Commission, Office of the State Treasurer, Liquor and Cannabis 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>Jun. 2017 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>Sep. 2017 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$18,470.9	\$0.0	(\$90.3)	\$18,380.6	(\$90.3)
Business & Occupation	7,450.0	0.0	0.6	7,450.6	0.6
Use	1,288.9	0.0	10.2	1,299.1	10.2
Public Utility	800.8	0.0	1.0	801.8	1.0
Liquor Sales/Liter	516.0	0.0	0.4	516.4	0.4
Cigarette	766.5	0.0	(35.3)	731.2	(35.3)
Property (State Levy)	4,133.3	0.0	(19.5)	4,113.8	(19.5)
Real Estate Excise	1,886.4	0.0	5.9	1,892.4	5.9
Timber Excise	3.5	0.0	0.5	4.0	0.5
Other	1,124.5	0.0	(4.4)	1,120.1	(4.4)
Subtotal	36,440.8	0.0	(130.9)	36,309.9	(130.9)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,087.3	0.0	(0.3)	1,087.0	(0.3)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	313.3	0.0	(3.8)	309.5	(3.8)
Beer & Wine Surtax	57.6	0.0	(0.9)	56.7	(0.9)
<b>Lottery Commission</b>					
Lottery Revenue	43.9	0.0	4.8	48.7	4.8
<b>State Treasurer</b>					
Interest Earnings	21.4	0.0	0.4	21.8	0.4
<b>Office of Financial Management**</b>					
Other Agencies	266.4	(0.4)	(0.3)	265.7	(0.7)
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	154.6	0.0	0.8	155.3	0.8
<b>Total General Fund-State *</b>	<b>\$38,385.2</b>	<b>(\$0.4)</b>	<b>(\$130.1)</b>	<b>\$38,254.7</b>	<b>(\$130.5)</b>

<sup>1</sup> Forecast for the 2015-17 biennium adopted by the Economic and Revenue Forecast Council June 20, 2017<sup>2</sup> Forecast for the 2015-17 biennium, adopted September 20, 2017

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

\*\*OFM forecast now includes revenue from the C \*\*OFM forecast no \*\*OFM forecast r \*\*OFM forecast r \*\*OFM forecast nc \*\*OFM forecast i

Source: ERFC, Insurance Commissioner, Lottery Commission, Office of the

State Treasurer, Liquor and Cannabis 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>Jun. 2017 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>Sep. 2017 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$20,123.2	395.9	\$132.4	\$20,651.5	\$528.3
Business & Occupation Use	8,130.3	0.5	71.0	8,201.8	71.5
Public Utility	1,324.0	6.7	17.6	1,348.3	24.3
Liquor Sales/Liter	905.3	(7.8)	0.2	897.8	(7.5)
Cigarette	540.0	0.0	4.2	544.2	4.2
Property (State Levy)	730.5	0.0	1.7	732.2	1.7
Real Estate Excise	4,338.6	1,614.2	(13.7)	5,939.0	1,600.5
Timber Excise	1,734.3	0.0	39.8	1,774.2	39.8
Other	3.8	0.0	0.4	4.2	0.4
Subtotal	962.6	0.0	15.0	977.7	15.0
<b>Insurance Commissioner</b>	38,792.6	2,009.5	268.7	41,070.8	2,278.2
Insurance Premiums	1,168.9	0.0	1.0	1,169.9	1.0
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	417.2	1.7	21.0	440.0	22.7
Beer & Wine Surtax	57.5	0.0	(1.3)	56.2	(1.3)
<b>Lottery Commission</b>					
Lottery Revenue	29.4	0.8	4.6	34.8	5.4
<b>State Treasurer</b>					
Interest Earnings	40.5	0.0	(15.1)	25.4	(15.1)
<b>Office of Financial Management**</b>					
Other Agencies	257.8	67.0	1.1	325.9	68.1
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	139.3	0.0	(0.6)	138.8	(0.6)
<b>Total General Fund-State *</b>	<b>\$40,903.2</b>	<b>\$2,079.1</b>	<b>\$279.5</b>	<b>\$43,261.7</b>	<b>\$2,358.6</b>

<sup>1</sup> Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council June 20, 2017<sup>2</sup> Forecast for the 2017-19 biennium, adopted September 20, 2017

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

\*\*OFM forecast now includes revenue from the Department of Licensing.

Source: ERFC, 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>Jun. 2017 Forecast<sup>1</sup></b>	<b>Non- Economic Changes</b>	<b>Forecast Revision</b>	<b>Sep. 2017 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$20,123.2	\$395.9	\$132.4	\$20,651.5	\$528.3
Business & Occupation Use	8,130.3	0.5	71.0	8,201.8	71.5
Public Utility	1,324.0	6.7	17.6	1,348.3	24.3
Liquor Sales/Liter	905.3	(7.8)	0.2	897.8	(7.5)
Cigarette	540.0	0.0	4.2	544.2	4.2
Property (State Levy)	730.5	0.0	1.7	732.2	1.7
Real Estate Excise	4,338.6	1,614.2	(15.1)	5,937.6	1,599.0
Timber Excise	1,734.3	0.0	29.8	1,764.2	29.8
Other	3.9	0.0	(0.1)	3.7	(0.1)
Subtotal	962.6	0.0	15.0	977.6	15.0
<b>Insurance Commissioner</b>	38,792.7	2,009.5	256.7	41,058.9	2,266.2
Insurance Premiums	1,168.9	0.0	1.0	1,169.9	1.0
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	417.2	1.7	21.0	440.0	22.7
Beer & Wine Surtax	57.5	0.0	(1.3)	56.2	(1.3)
<b>Lottery Commission</b>					
Lottery Revenue	33.5	0.8	(0.2)	34.2	0.6
<b>State Treasurer</b>					
Interest Earnings	41.6	0.0	(16.8)	24.9	(16.8)
<b>Office of Financial Management**</b>					
Other Agencies	257.8	67.0	1.1	325.9	68.1
<b>Administrative Office of the Courts</b>					
Fines and Forfeitures	139.3	0.0	(0.6)	138.8	(0.6)
<b>Total General Fund-State *</b>	<b>\$40,908.5</b>	<b>\$2,079.1</b>	<b>\$261.0</b>	<b>\$43,248.6</b>	<b>\$2,340.1</b>

<sup>1</sup> Forecast for the 2017-19 biennium adopted by the Economic and Revenue Forecast Council June 20, 2017<sup>2</sup> Forecast for the 2017-19 biennium, adopted September 20, 2017

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

\*\*OFM forecast now includes revenue from the Department of Licensing.

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

Table 3.9

**September 2017 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**	\$8,927.3	\$9,458.6	\$18,385.9	\$10,029.2	\$10,622.3	\$20,651.5	\$11,106.7	\$11,549.8	\$22,656.4
Business & occupation	3,628.4	3,821.2	7,449.7	3,996.4	4,205.4	8,201.8	4,417.6	4,639.4	9,057.0
Use**	635.8	674.2	1,310.0	668.0	680.3	1,348.3	710.3	744.5	1,454.8
Public Utility	400.5	406.3	806.8	438.8	459.0	897.8	472.9	488.7	961.6
Liquor sales/liter	252.9	262.4	515.2	269.4	274.8	544.2	280.3	285.5	565.8
Beer & wine surtax	29.1	27.6	56.7	28.0	28.2	56.2	28.3	28.4	56.7
Cigarette	400.6	387.1	787.7	379.3	371.2	750.5	363.6	358.3	721.9
Tobacco products	51.6	52.4	104.1	54.1	54.7	108.7	55.3	56.0	111.3
Cannabis Excise Taxes	48.1	92.9	141.1	116.4	122.9	239.3	127.6	133.6	261.1
Property (state school levy)	2,047.1	2,085.7	4,132.8	2,678.4	3,260.6	5,939.0	3,435.0	3,619.0	7,053.9
Leasehold Excise Tax	32.9	33.0	65.9	31.5	31.8	63.3	32.0	32.3	64.4
Public utility district	51.2	53.9	105.1	54.8	55.6	110.4	56.3	57.1	113.4
Brokered Natural Gas	21.4	21.3	42.7	20.5	20.7	41.3	21.0	21.3	42.3
Real estate excise***	885.1	1,005.9	1,891.0	910.9	863.3	1,774.2	855.5	882.2	1,737.7
Timber excise	2.8	0.9	3.8	2.2	2.0	4.2	2.1	2.2	4.2
Estate/inheritance	0.3	2.2	2.6	0.0	0.0	0.0	0.0	0.0	0.0
Boat excise	13.8	14.6	28.4	14.0	13.5	27.5	13.5	13.5	27.0
Insurance premiums	510.1	576.9	1,087.0	570.1	599.8	1,169.9	626.1	652.5	1,278.6
Penalties and interest on past due taxes	178.9	283.8	462.7	170.2	166.3	336.6	172.8	179.5	352.3
Other	56.6	56.5	113.1	56.1	34.2	90.3	34.8	35.4	70.2
<b>Total Taxes</b>	<b>18,174.7</b>	<b>19,317.5</b>	<b>37,492.2</b>	<b>20,488.5</b>	<b>21,866.4</b>	<b>42,354.9</b>	<b>22,811.6</b>	<b>23,779.1</b>	<b>46,590.7</b>
<b>State Non-Tax Sources</b>									
Licenses, permits, fees	141.9	131.2	273.1	122.8	125.0	247.8	128.2	131.7	259.9
Liquor & Cannabis fees	81.7	86.8	168.5	96.8	103.9	200.6	107.6	111.7	219.3
Earnings on investments	7.3	14.7	22.0	9.5	15.9	25.4	22.7	26.0	48.7
Administrative Office of the Courts	80.8	74.5	155.3	69.7	69.1	138.8	69.8	70.9	140.7
Transfers of unclaimed property	70.7	63.2	133.9	65.5	66.4	131.8	67.7	69.1	136.8
Other revenue & transfers	21.7	44.6	66.3	84.5	77.8	162.3	(0.0)	0.4	0.4
<b>Total Non-Tax</b>	<b>404.0</b>	<b>415.1</b>	<b>819.1</b>	<b>448.8</b>	<b>458.0</b>	<b>906.8</b>	<b>395.9</b>	<b>409.9</b>	<b>805.7</b>
<b>Total General Fund-State *</b>	<b>\$18,578.7</b>	<b>\$19,732.6</b>	<b>\$38,311.3</b>	<b>\$20,937.3</b>	<b>\$22,324.4</b>	<b>\$43,261.7</b>	<b>\$23,207.5</b>	<b>\$24,189.0</b>	<b>\$47,396.4</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 September 2017

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
September 2016	327	8	334	0	334	37,765
November 2016	205	9	215	0	215	37,980
March 2017	210	38	247	0	247	38,227
June 2017	70	12	81	0	81	38,308
September 2017	7	(4)	3	0 <sup>#10</sup>	3	38,311
<b>Total change***:</b>						
From September 2012	1,964	330	2,293	499	2,793	
Percent change	5.8	23.3	6.5	1.4	7.9	

\* 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.<sup>#1</sup> Transfer of GF-S funds to Child and Family Reinvestment Account<sup>#2</sup> Legislative and budget-driven revenue changes from 2013 second special session<sup>#3</sup> Re-classification of prior period adjustments as non-revenue resources<sup>#4</sup> Cannabis excise taxes and fees plus retail sales and B&O taxes on cannabis production and sales resulting from Initiative 502<sup>#5</sup> Sum of legislative and budget-driven revenue changes from the 2014 regular legislative session<sup>#6</sup> Legislative revenue changes from 2015 regular legislative session<sup>#7</sup> Legislative and budget driven revenue changes from 2015 special legislative sessions<sup>#8</sup> Sum of large expected audit payments<sup>#9</sup> Legislative and budget-driven revenue changes from the 2016 regular and first special legislative sessions plus \$3.3 million AG settlement<sup>#10</sup> Legislative revenue changes from 2017 special legislative sessions since the June 2017 forecast

Table 3.11

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

February 2014 through September 2017

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##</b>	\$36,887	\$1,823				\$38,710
<b>Changes to Forecast</b>						
June 2014	265	50	315	(1) #1	313	39,023
September 2014	227	(63)	164	0	164	39,188
November 2014	388	26	415	0	415	39,602
February 2015	126	28	154	0	154	39,757
June 2015	257	64	321	122 #2	443	40,200
September 2015	4	47	52	286 #3	338	40,538
November 2015	35	(5)	30	0	30	40,567
February 2016	(449)	7	(442)	0	(442)	40,125
June 2016	187	(53)	134	(8) #4	126	40,252
September 2016	135	(10)	125	0	125	40,377
November 2016	131	6	137	0	137	40,514
March 2017	281	22	303	0	303	40,817
June 2017	84	3	87	(1) #5	87	40,903
September 2017	269	11	279	2079 #6	2,359	43,262
<b>Total change***:</b>						
From February 2014	1,942	132	2,074	2,478	4,552	
Percent change	5.3	7.2	5.4	6.4	11.8	

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

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

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

# First official forecast for the 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

#5 Sum of legislative revenue changes from 2017 legislative sessions through June 20, 2017

#6 Sum of legislative and budget driven revenue changes from 2017 special legislative sessions since the June 2017 forecast

Table 3.12

**2015-17 with Enacted Supplementals and 2017-19 Budget Balance Sheet**  
**General Fund-State (GFS), Education Legacy Trust Account (ELTA), Washington Opportunity Pathways Account (OPA)**  
**and Budget Stabilization Account (BSA)**  
Dollars in Millions

	2015-17			2017-19		
	GFS	ELTA and OPA	TOTAL	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>	<b>669.4</b>	<b>49.8</b>	<b>719.2</b>
June 2017 Revenue Forecast	38,308.3	732.8	39,041.1	40,903.2	773.9	41,677.1
September 2017 Revenue Forecast change	2.9	(2.1)	0.8	279.5	8.1	287.6
<b>Current Revenue Totals</b>	<b>38,311.3</b>	<b>730.7</b>	<b>39,041.9</b>	<b>41,182.6</b>	<b>782.1</b>	<b>41,964.7</b>
Transfer to Budget Stabilization Account (1% of GSR)	(383.2)		(383.2)	(409.0)		(409.0)
Transfer to Budget Stabilization Account (EORG)	(925.2)		(925.2)	-		-
CAFR Adjustment	(8.3)	(10.0)	(18.3)	-	-	-
Other Enacted Fund Transfers	209.7		209.7	-		-
Actual/Assumed Prior Period Adjustments	87.6		87.6	40.8		40.8
<b>2017 Legislative session</b>						
Revenue legislation and budget driven revenue				2,083.7		2,083.7
Additional 1% Transfer to BSA for increased revenue				(20.7)		(20.7)
Transfer to BSA (EORG) for increased revenue				(898.3)		(898.3)
Transfer from BSA (EORG) for increased revenue				898.3		898.3
Fund Transfers - FY 17 and 17-19 biennium	(43.4)		(43.4)	74.1	254.0	328.1
Governor's vetoes				(4.6)		(4.6)
<b>Total Resources (including beginning fund balance)</b>	<b>38,239.4</b>	<b>741.0</b>	<b>38,980.3</b>	<b>43,616.2</b>	<b>1,085.9</b>	<b>44,702.1</b>
<b>EXPENDITURES</b>						
<b>Enacted Budgets</b>						
2015-17 Biennium	37,754.4	699.1	38,453.5			
2017 Supplemental	(28.0)	-	(28.0)			
2017-19 Budget	-	-	-	42,659.6	1,048.8	43,708.4
Governor's vetoes	62.4		62.4			
Actual/Assumed Reversions	(218.8)	(7.9)	(226.7)	(216.9)	-	(216.9)
<b>Total Expenditures</b>	<b>37,570.0</b>	<b>691.1</b>	<b>38,261.1</b>	<b>42,442.8</b>	<b>1,048.8</b>	<b>43,491.5</b>
<b>RESERVES</b>						
<b>Projected Ending Balance (GFS + ELTA + OPA)</b>	<b>669.4</b>	<b>49.8</b>	<b>719.2</b>	<b>1,173.5</b>	<b>37.1</b>	<b>1,210.6</b>
<b>Budget Stabilization Account</b>						
Budget Stabilization Account Beginning Balance	513.1		513.1	1,637.9		1,637.9
Plus Transfers from General Fund, Interest Earnings and Adjust	1,315.4		1,315.4	1,366.5		1,366.5
Less 2016 Appropriations and Reversions From BSA: Fires	(152.5)		(152.5)	-		-
Less 2017 Supplemental Appropriations	(38.1)		(38.1)	-		-
Less 17-19 Appropriations				(944.2)		(944.2)
Less Transfers out to GFS (EORG) for increased revenue	-		-	(898.3)		(898.3)
<b>Projected Budget Stabilization Account Ending Balance</b>	<b>1,637.9</b>		<b>1,637.9</b>	<b>1,161.8</b>		<b>1,161.8</b>
<b>Total Reserves (Near General Fund plus Budget Stabilization)</b>	<b>2,307.2</b>	<b>49.8</b>	<b>2,357.0</b>	<b>2,335.3</b>	<b>37.1</b>	<b>2,372.5</b>

Acronyms

GSR- General State Revenues

EORG- Extraordinary General State Revenues

CAFR- Comprehensive Annual Financial Report

Table 3.13

**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	\$21,461.5	\$20,651.5	\$19,572.8
Business & Occupation	8,509.2	8,201.8	7,770.9
Use	1,409.2	1,348.3	1,277.3
Public Utility	920.8	897.8	856.1
Property (school levy)	6,026.8	5,939.0	5,878.5
Real Estate Excise	2,009.9	1,774.2	1,663.6
Other	2,263.9	2,258.3	2,208.5
Subtotal	42,601.3	41,070.8	39,227.7
<b>Insurance Commissioner<sup>1</sup></b>	1,228.4	1,169.9	1,111.4
<b>Lottery Commission</b>	36.5	34.8	33.0
<b>State Treasurer - Interest earnings</b>	51.8	25.4	5.8
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>	517.6	496.1	478.1
<b>Office of Financial Management</b>			
Other agencies	335.7	325.9	316.1
<b>Administrative Office of the Courts</b>			
Fines and Forfeitures	143.7	138.8	135.7
<b>Total General Fund - State*</b>	<b>\$44,915.0</b>	<b>\$43,261.7</b>	<b>\$41,307.9</b>
<b>Difference from June 2017 Baseline</b>	<b>\$1,653.3</b>		<b>(\$1,953.8)</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, 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  
2019-21 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	\$24,642.7	\$22,656.4	\$20,274.4
Business & Occupation Use	9,781.5	9,057.0	8,179.4
Public Utility	1,549.5	1,454.8	1,316.5
Property (school levy)	1,010.1	961.6	878.1
Real Estate Excise	7,309.6	7,053.9	6,902.4
Other	2,165.3	1,737.7	1,536.3
Subtotal	2,383.3	2,262.9	2,158.8
	48,842.0	45,184.4	41,246.0
<b>Insurance Commissioner<sup>1</sup></b>	1,342.5	1,278.6	1,214.7
<b>Lottery Commission</b>	45.2	43.1	40.9
<b>State Treasurer - Interest earnings</b>	92.2	48.7	12.4
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>	573.7	537.1	517.6
<b>Office of Financial Management</b>			
Other agencies	168.8	163.9	159.0
<b>Administrative Office of the Courts</b>			
Fines and Forfeitures	152.9	140.7	134.2
<b>Total General Fund - State*</b>	<b>\$51,217.3</b>	<b>\$47,396.4</b>	<b>\$43,324.8</b>
<b>Difference from June 2017 Baseline</b>	<b>\$3,820.9</b>		<b>(\$4,071.6)</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, Insurance Commissioner, Lottery Commission, Office of the  
State Treasurer, Liquor Control Board, Office of Financial Management

Table 3.15

**Lottery transfers by fund**

September 2017 Forecast

(cash basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>Mariners 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	171.6	17.1	0.0	11.7	0.0	0.0	0.3	3.3	139.1	0.0	0.0
2017	157.2	14.8	0.0	12.2	0.0	0.0	0.3	4.6	124.3	0.0	0.0
2015-17 Biennium	328.8	31.9	0.0	23.8	0.0	0.0	0.7	7.9	263.5	0.0	0.0
2018	164.2	16.2	0.0	12.6	0.0	0.0	0.3	4.0	131.0	0.0	0.0
2019	164.2	18.5	0.0	13.1	0.0	0.0	0.3	4.0	128.1	0.0	0.0
2017-19 Biennium	328.4	34.8	0.0	25.8	0.0	0.0	0.7	8.0	259.1	0.0	0.0
2020	167.0	20.7	0.0	13.2	0.0	0.0	0.3	4.0	128.7	0.0	0.0
2021	169.6	22.3	0.0	14.2	0.0	0.0	0.4	4.0	128.7	0.0	0.0
2019-21 Biennium	336.6	43.1	0.0	27.4	0.0	0.0	0.7	8.0	257.4	0.0	0.0

Table 3.16

**Lottery transfers by fund**

September 2017 Forecast

(GAAP basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>Mariners 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	175.5	31.9	0.0	11.7	0.0	0.0	0.3	2.8	128.7	0.0	0.0
2017	161.9	16.8	0.0	12.2	0.0	0.0	0.3	4.9	126.8	0.0	0.0
2015-17 Biennium	337.4	48.7	0.0	23.8	0.0	0.0	0.7	7.7	255.5	0.0	0.0
2018	159.5	15.7	0.0	12.6	0.0	0.0	0.3	4.0	126.9	0.0	0.0
2019	164.6	18.5	0.0	13.1	0.0	0.0	0.3	4.0	128.6	0.0	0.0
2017-19 Biennium	324.1	34.2	0.0	25.8	0.0	0.0	0.7	8.0	255.5	0.0	0.0
2020	167.7	21.0	0.0	13.7	0.0	0.0	0.3	4.0	128.7	0.0	0.0
2021	169.8	22.5	0.0	14.2	0.0	0.0	0.4	4.0	128.7	0.0	0.0
2019-21 Biennium	337.5	43.5	0.0	27.9	0.0	0.0	0.7	8.0	257.4	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)

September 2017 - 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%
FY 2016	\$18,579	7.5%	\$215	3.6%	\$18,793	7.4%	\$139	15.7%	\$18,933	7.5%
Forecast:										
FY 2017	\$19,733	6.2%	\$252	17.5%	\$19,985	6.3%	\$124	-10.6%	\$20,109	6.2%
FY 2018	\$20,937	6.1%	\$248	-1.9%	\$21,185	6.0%	\$131	5.3%	\$21,316	6.0%
FY 2019	\$22,324	6.6%	\$275	11.2%	\$22,600	6.7%	\$128	-2.2%	\$22,728	6.6%
FY 2020	\$23,207	4.0%	\$280	1.7%	\$23,488	3.9%	\$129	0.4%	\$23,616	3.9%
FY 2021	\$24,189	4.2%	\$287	2.4%	\$24,476	4.2%	\$129	0.0%	\$24,605	4.2%
<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>\$38,311</b>	<b>13.8%</b>	<b>\$467</b>	<b>15.4%</b>	<b>\$38,778</b>	<b>13.8%</b>	<b>\$263</b>	<b>12.6%</b>	<b>\$39,042</b>	<b>13.8%</b>
<b>17-19 Biennium</b>	<b>\$43,262</b>	<b>12.9%</b>	<b>\$523</b>	<b>11.9%</b>	<b>\$43,785</b>	<b>12.9%</b>	<b>\$259</b>	<b>-1.7%</b>	<b>\$44,044</b>	<b>12.8%</b>
<b>19-21 Biennium</b>	<b>\$47,396</b>	<b>9.6%</b>	<b>\$567</b>	<b>8.4%</b>	<b>\$47,963</b>	<b>9.5%</b>	<b>\$257</b>	<b>-0.7%</b>	<b>\$48,221</b>	<b>9.5%</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**  
 September 2017  
 Thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	Administrative expenses and pre-distribution allotments	Total to distribute	Distribution of remaining funds						
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention	General Fund-State*
2015	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2016	\$168,051	\$8,551	\$159,500	\$12,814	\$7,500	\$345	\$79,750	\$7,791	\$251	\$51,049
2017	\$300,635	\$9,201	\$291,434	\$27,786	\$7,500	\$345	\$145,717	\$12,979	\$511	\$96,596
2018	\$361,731	\$11,472	\$350,259	\$27,786	\$9,761	\$365	\$175,130	\$17,513	\$513	\$119,192
2019	\$376,925	\$10,668	\$366,257	\$27,786	\$9,766	\$365	\$183,128	\$18,313	\$516	\$126,383
2020	\$386,724	\$10,668	\$376,056	\$27,786	\$9,766	\$365	\$188,028	\$18,803	\$516	\$130,792
2021	\$400,052	\$10,668	\$389,384	\$27,786	\$9,766	\$365	\$194,692	\$19,469	\$516	\$136,790
<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	\$468,686	\$17,752	\$450,934	\$40,600	\$15,000	\$690	\$225,467	\$20,770	\$762	\$147,645
2017-19	\$738,656	\$22,140	\$716,516	\$55,572	\$19,527	\$730	\$358,258	\$35,826	\$1,029	\$245,574
2019-21	\$786,776	\$21,336	\$765,440	\$55,572	\$19,532	\$730	\$382,720	\$38,272	\$1,032	\$267,582

\*Before distributions to local governments

Table 3.19  
**Revenue Legislation and Budget Driven Revenues**  
**Passed in 2017 Special Legislative Sessions After the June 2017 Forecast**  
(Millions of dollars)

**General Fund-State**

Bill ID and Description	FY 18	FY 19	2017-19	FY 20	FY 21	2019-21	FY 22	FY 23	2021-23
<b>Budget Driven Revenue less Governor's vetoes</b>									
Liquor control board-liquor	0.133	-0.427	-0.294	0.442	1.344	1.786			0.000
Liquor control board-marijuana	0.949	1.070	2.019	1.070	1.070	2.140			0.000
Lottery	0.315	0.512	0.827	0.139	0.512	0.651			0.000
Habitat conservation	-0.485	-0.892	-1.377	-0.892	-0.892	-1.784			0.000
Marijuana distribution change	9.000	9.000	18.000	0.000	0.000	0.000			0.000
Vessel renewal notices	0.023	0.023	0.046	0.023	0.023	0.046			0.000
Tobacco arbitration settlement		15.000	15.000			0.000			0.000
<b>Total budget driven revenue</b>	<b>9.935</b>	<b>24.286</b>	<b>34.221</b>	<b>0.782</b>	<b>2.057</b>	<b>2.839</b>			<b>0.000</b>

<b>HB 2163 Revenue</b>									
Extend economic nexus online RST	83.700	256.800	340.500	327.9	367.600	695.5	400.6	436.7	837.3
Extend economic nexus to online B&O	4.400	7.700	12.100	10.9	11.600	22.5	12.4	13.2	25.6
Repeal bottled water sales tax exemption	24.500	30.100	54.600	30.8	31.500	62.3	32.2	33	65.2
Self produced fuel exemption	1.500	5.200	6.700	8.7	12.200	20.9	13.9	13.9	27.8
Streamlined sales tax payments	9.554	14.451	24.005	20.139	21.814	41.953			0
Public utility districts	30.100	0.435	30.535	0.414	0.397	0.811			0
<b>Total HB 2163</b>	<b>153.754</b>	<b>314.686</b>	<b>468.440</b>	<b>398.853</b>	<b>445.111</b>	<b>843.964</b>	<b>459.1</b>	<b>496.8</b>	<b>955.9</b>

<b>HB 2242 Basic Education</b>									
<b>Property tax</b>	<b>541.000</b>	<b>1,073.200</b>	<b>1,614.200</b>	1,184.800	1,308.900	<b>2,493.700</b>	<b>1,384.700</b>	<b>1,420.200</b>	<b>2804.900</b>

<b>SB 5977 Revenue less Governor's vetoes</b>									
5135-Main street		-0.500	-0.500	-1.000	-1.000	-2.000	-1.000	-1.000	-2.000
5188-Natural disasters	-0.021	-0.021	-0.042	-0.020	-0.020	-0.040	-0.020	-0.020	-0.040
5260-Solar silicon manuf tax	-0.397	-1.400	-1.797	-2.400	-2.500	-4.900	-2.600	-2.700	-5.300
5409-Historic auto museums tax	-0.139	-0.139	-0.278	-0.140	-0.140	-0.280	-0.140	-0.140	-0.140
5642-Job creation and econ dev pilot	-0.542	-1.300	-1.842	-1.300	-1.300	-2.600	-1.300	-1.300	-2.600
5786-B&O exemption certain fertilizers	-0.263	-0.288	-0.551	-0.300	-0.300	-0.600	-0.300	-0.300	-0.600
5205-Martial arts	-0.084	-0.151	-0.235	-0.160	-0.160	-0.320	-0.160	-0.160	-0.320
5916-Semiconductor tax preferences		-1.703	-1.703	-3.500	-3.500	-7.000	-3.500	-3.500	-7.000
1527-Motion picture competitiveness	-3.500	-3.500	-7.000	-3.500	-3.500	-7.000	-3.500	-3.500	-7.000
5768-LET credit for universities	0.000	0.000	0.000			0.000			0.000
<b>Total SB 5977</b>	<b>-4.946</b>	<b>-9.002</b>	<b>-13.948</b>	<b>-12.320</b>	<b>-12.420</b>	<b>-24.740</b>	<b>-12.520</b>	<b>-12.480</b>	<b>-25.000</b>

<b>HB 1716 Labor &amp; Industries</b>									
<b>L&amp; I Construction registration acct</b>	<b>-9.589</b>	<b>-9.589</b>	<b>-19.178</b>	-9.589	-9.589	<b>-19.178</b>	<b>-9.589</b>	<b>-9.589</b>	<b>-19.178</b>

<b>SB 5939 Solar</b>									
<b>Renewable Energy Incentives</b>	<b>0.604</b>	<b>-5.245</b>	<b>-4.641</b>	<b>-7.659</b>	<b>-10.507</b>	<b>-18.166</b>	<b>-15.178</b>	<b>-16.804</b>	<b>-31.982</b>

<b>Summary (GF-S)</b>						
	FY 18	FY 19	2017-19	FY 20	FY 21	2019-21
<b>Legislation less vetoes</b>	680.823	1,364.050	2,044.873	1,554.085	1,721.495	3,275.580
<b>Budget Driven less vetoes</b>	9.935	24.286	34.221	0.782	2.057	2.839
<b>Total</b>	<b>690.758</b>	<b>1388.336</b>	<b>2079.094</b>	<b>1554.867</b>	<b>1723.552</b>	<b>3278.419</b>

**Education Legacy Trust Account**

Bill ID and Description	FY 18	FY 19	2017-19	FY 20	FY 21	2019-21
<b>HB 1677 local infrastructure funding</b>				105.676	108.600	214.276
<b>2453-extend PWWA redirection to ELTA</b>						

**Governor's Vetoes**

	FY 18	FY 19	2017-19	FY 20	FY 21	2019-21
<b>RTA Fee</b>	-2.229	-5.512	-7.741	-5.698	-5.891	-11.589
<b>B&amp;O Manufacturing Tax Rate</b>		2.900	2.900	22.100	38.900	61.000
<b>Budget-Driven Revenue - LCB</b>	0.250		0.250			0.000
<b>Total Governor's vetoes</b>	<b>-1.979</b>	<b>-2.612</b>	<b>-4.591</b>	<b>16.402</b>	<b>33.009</b>	<b>49.411</b>

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## Detail Components of the Washington State Economic and Revenue Forecast

Calendar Years

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

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Table A1.1  
**U.S. Economic Forecast Summary**  
 Forecast 2017 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	16,013.3	16,471.5	16,716.2	17,078.9	17,492.9	17,860.3	18,217.5	18,581.8
% Ch	2.6	2.9	1.5	2.2	2.4	2.1	2.0	2.0
Real Consumption	10,868.4	11,264.3	11,572.1	11,880.9	12,172.9	12,453.0	12,726.9	12,994.1
% Ch	2.9	3.6	2.7	2.7	2.5	2.3	2.2	2.1
Real Nonresidential Fixed Investment	2,172.7	2,223.5	2,210.4	2,313.3	2,375.1	2,451.8	2,544.4	2,649.0
% Ch	6.9	2.3	-0.6	4.7	2.7	3.2	3.8	4.1
Real Residential Fixed Investment	505.2	556.9	587.5	602.5	624.6	636.2	658.6	686.0
% Ch	3.5	10.2	5.5	2.6	3.7	1.9	3.5	4.2
Real Personal Income	13,574.6	14,205.7	14,377.4	14,579.0	14,921.1	15,375.8	15,813.7	16,194.2
% Ch	3.7	4.6	1.2	1.4	2.3	3.0	2.8	2.4
Real Per Capita Income (\$/Person)	42,529	44,192	44,420	44,732	45,419	46,432	47,380	48,144
% Ch	3.0	3.9	0.5	0.7	1.5	2.2	2.0	1.6
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.092	1.095	1.108	1.126	1.144	1.163	1.185	1.209
% Ch	1.5	0.3	1.2	1.7	1.6	1.7	1.9	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.367	2.370	2.400	2.451	2.498	2.550	2.606	2.665
% Ch	1.6	0.1	1.3	2.1	1.9	2.1	2.2	2.3
Employment Cost Index (Dec. 2005=1.0)	1.206	1.233	1.262	1.296	1.334	1.378	1.424	1.474
% Ch	2.0	2.3	2.4	2.6	3.0	3.3	3.4	3.5
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	17,427.6	18,120.7	18,624.5	19,365.0	20,260.7	21,134.7	22,031.3	22,931.7
% Ch	4.4	4.0	2.8	4.0	4.6	4.3	4.2	4.1
Personal Income	14,818.2	15,553.0	15,928.7	16,423.2	17,069.3	17,889.8	18,747.4	19,575.6
% Ch	5.3	5.0	2.4	3.1	3.9	4.8	4.8	4.4
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	155.9	157.1	159.2	160.4	161.9	163.6	165.1	166.2
Total U.S. Employment	146.3	148.8	151.4	153.3	155.0	156.6	158.1	159.0
Unemployment Rate (%)	6.17	5.26	4.85	4.41	4.27	4.27	4.28	4.30
Nonfarm Payroll Employment	138.94	141.81	144.31	146.47	148.25	149.69	150.89	151.78
% Ch	1.9	2.1	1.8	1.5	1.2	1.0	0.8	0.6
Manufacturing	12.19	12.34	12.35	12.44	12.64	12.87	13.09	13.23
% Ch	1.4	1.2	0.1	0.7	1.6	1.8	1.7	1.0
Durable Manufacturing	7.67	7.77	7.72	7.77	7.94	8.11	8.30	8.44
% Ch	1.7	1.2	-0.6	0.7	2.1	2.1	2.3	1.7
Nondurable Manufacturing	4.51	4.57	4.63	4.67	4.70	4.76	4.79	4.79
% Ch	0.9	1.3	1.3	0.8	0.7	1.2	0.7	-0.1
Construction	6.15	6.46	6.71	6.91	7.04	7.29	7.53	7.78
% Ch	5.0	5.0	3.9	2.9	1.9	3.6	3.3	3.4
Service-Providing	119.71	122.21	124.57	126.42	127.83	128.77	129.50	129.99
% Ch	1.8	2.1	1.9	1.5	1.1	0.7	0.6	0.4
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	93.3	48.7	43.2	49.5	50.7	50.8	50.9	51.2
Personal Saving/Disposable Income (%)	5.7	6.1	4.9	3.5	3.8	4.6	4.7	4.7
Auto Sales (Millions)	7.7	7.5	6.9	6.0	5.8	5.7	5.8	5.7
% Ch	1.6	-2.5	-8.6	-12.5	-3.7	-1.7	2.5	-1.9
Housing Starts (Millions)	1.001	1.107	1.177	1.212	1.330	1.379	1.448	1.497
% Ch	7.8	10.6	6.3	3.0	9.7	3.6	5.0	3.4
Federal Budget Surplus (Billions)	-610.2	-586.7	-697.3	-633.8	-781.9	-859.8	-895.1	-947.6
Net Exports (Billions)	-509.5	-524.1	-521.2	-552.7	-475.5	-428.4	-413.5	-410.8
3-Month Treasury Bill Rate (%)	0.03	0.05	0.32	0.93	1.64	2.51	2.86	2.84
10-Year Treasury Note Yield (%)	2.54	2.14	1.84	2.36	3.18	3.87	4.00	3.95
Bond Index of 20 G.O. Munis. (%)	4.24	3.66	3.27	3.77	4.62	4.94	4.96	4.91
30-Year Fixed Mortgage Rate (%)	4.17	3.85	3.65	4.05	4.98	5.85	6.00	5.96

Table A1.2  
**U.S. Economic Forecast Summary**  
 Forecast 2017 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	16,571.6	16,663.5	16,778.1	16,851.4	16,903.2	17,030.0	17,138.9	17,243.3
% Ch , Annual Rate	0.6	2.2	2.8	1.8	1.2	3.0	2.6	2.5
Real Consumption	11,430.5	11,537.7	11,618.1	11,702.1	11,758.0	11,854.4	11,919.1	11,992.0
% Ch , Annual Rate	1.8	3.8	2.8	2.9	1.9	3.3	2.2	2.5
Real Nonresidential Fixed Investment	2,187.5	2,205.3	2,224.0	2,224.9	2,263.6	2,301.7	2,334.1	2,353.9
% Ch , Annual Rate	-4.0	3.3	3.4	0.2	7.1	6.9	5.8	3.4
Real Residential Fixed Investment	593.7	586.5	579.8	589.8	605.5	595.4	600.1	608.9
% Ch , Annual Rate	13.4	-4.8	-4.5	7.1	11.1	-6.5	3.2	5.9
Real Personal Income	14,321.0	14,391.1	14,435.2	14,362.1	14,479.0	14,575.1	14,604.5	14,657.4
% Ch , Annual Rate	-1.1	2.0	1.2	-2.0	3.3	2.7	0.8	1.5
Real Per Capita Income (\$/Person)	44,366	44,506	44,553	44,255	44,550	44,769	44,769	44,841
% Ch , Annual Rate	-1.7	1.3	0.4	-2.7	2.7	2.0	0.0	0.6
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.100	1.106	1.110	1.116	1.122	1.123	1.128	1.133
% Ch , Annual Rate	0.6	2.1	1.7	2.0	2.2	0.3	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.380	2.394	2.404	2.422	2.441	2.439	2.453	2.469
% Ch , Annual Rate	0.1	2.3	1.8	3.0	3.1	-0.3	2.3	2.5
Employment Cost Index (Dec. 2005=1.0)	1.251	1.260	1.266	1.272	1.283	1.290	1.300	1.309
% Ch , Annual Rate	2.6	2.9	1.9	1.9	3.5	2.2	3.1	3.0
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	18,325.2	18,538.0	18,729.1	18,905.5	19,057.7	19,246.7	19,468.2	19,687.2
% Ch , Annual Rate	0.8	4.7	4.2	3.8	3.3	4.0	4.7	4.6
Personal Income	15,751.0	15,910.1	16,028.0	16,025.7	16,245.2	16,363.9	16,473.5	16,610.2
% Ch , Annual Rate	-0.5	4.1	3.0	-0.1	5.6	3.0	2.7	3.4
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	158.8	158.8	159.5	159.6	160.0	160.0	160.5	160.9
Total U.S. Employment	151.0	151.1	151.7	152.0	152.5	153.1	153.5	154.0
Unemployment Rate (%)	4.93	4.87	4.90	4.70	4.67	4.37	4.35	4.27
Nonfarm Payroll Employment	143.44	143.95	144.66	145.17	145.71	146.20	146.77	147.20
% Ch , Annual Rate	1.7	1.4	2.0	1.4	1.5	1.3	1.6	1.2
Manufacturing	12.37	12.35	12.34	12.33	12.37	12.40	12.47	12.52
% Ch , Annual Rate	0.6	-0.8	-0.1	-0.4	1.4	1.0	2.1	1.6
Durable Manufacturing	7.75	7.72	7.71	7.70	7.72	7.74	7.80	7.83
% Ch , Annual Rate	-0.1	-1.6	-0.7	-0.4	1.3	1.0	3.0	1.7
Nondurable Manufacturing	4.62	4.63	4.64	4.63	4.65	4.66	4.67	4.68
% Ch , Annual Rate	1.9	0.4	1.0	-0.4	1.6	1.0	0.6	1.3
Construction	6.67	6.69	6.71	6.77	6.85	6.88	6.92	6.97
% Ch , Annual Rate	5.3	1.6	1.1	3.2	5.3	1.6	2.5	2.7
Service-Providing	123.69	124.24	124.94	125.41	125.80	126.21	126.66	126.99
% Ch , Annual Rate	1.8	1.8	2.3	1.5	1.3	1.3	1.4	1.1
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	33.2	45.4	44.9	49.3	51.9	48.3	47.9	49.7
Personal Saving/Disposable Income (%)	5.7	5.3	4.8	3.6	3.9	3.7	3.3	3.2
Auto Sales (Millions)	7.1	6.8	6.8	6.8	6.2	6.0	5.8	6.0
% Ch , Annual Rate	-16.0	-14.2	0.5	-1.5	-28.6	-14.7	-11.0	12.3
Housing Starts (Millions)	1.153	1.158	1.150	1.248	1.238	1.165	1.198	1.249
% Ch , Annual Rate	10.7	1.5	-2.7	39.0	-3.4	-21.4	11.6	18.3
Federal Budget Surplus (Billions)	-707.5	-688.5	-679.1	-714.0	-652.8	-632.5	-627.2	-622.8
Net Exports (Billions)	-526.2	-501.6	-492.8	-564.3	-582.8	-566.8	-529.8	-531.4
3-Month Treasury Bill Rate (%)	0.29	0.26	0.30	0.43	0.59	0.89	1.06	1.18
10-Year Treasury Note Yield (%)	1.92	1.75	1.56	2.13	2.44	2.26	2.26	2.49
Bond Index of 20 G.O. Munis. (%)	3.36	3.26	2.90	3.57	3.88	3.70	3.56	3.92
30-Year Fixed Mortgage Rate (%)	3.74	3.59	3.45	3.81	4.17	3.99	3.93	4.13

Table A1.2 (continued)  
**U.S. Economic Forecast Summary**  
 Forecast 2017 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	17,343.1	17,446.4	17,544.6	17,637.7	17,736.8	17,820.6	17,898.6	17,985.1
% Ch , Annual Rate	2.3	2.4	2.3	2.1	2.3	1.9	1.8	1.9
Real Consumption	12,067.3	12,140.6	12,208.9	12,275.1	12,350.5	12,420.4	12,487.4	12,553.6
% Ch , Annual Rate	2.5	2.5	2.3	2.2	2.5	2.3	2.2	2.1
Real Nonresidential Fixed Investment	2,351.3	2,362.9	2,382.3	2,403.9	2,424.0	2,443.3	2,459.5	2,480.2
% Ch , Annual Rate	-0.4	2.0	3.3	3.7	3.4	3.2	2.7	3.4
Real Residential Fixed Investment	615.6	620.9	629.4	632.5	632.8	633.9	637.1	641.0
% Ch , Annual Rate	4.5	3.5	5.6	2.0	0.2	0.7	2.1	2.4
Real Personal Income	14,774.0	14,863.7	14,965.3	15,081.4	15,213.7	15,321.8	15,433.3	15,534.5
% Ch , Annual Rate	3.2	2.5	2.8	3.1	3.6	2.9	2.9	2.6
Real Per Capita Income (\$/Person)	45,107	45,290	45,509	45,770	46,080	46,315	46,560	46,773
% Ch , Annual Rate	2.4	1.6	1.9	2.3	2.7	2.1	2.1	1.8
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.137	1.142	1.146	1.151	1.156	1.161	1.166	1.172
% Ch , Annual Rate	1.4	1.6	1.6	1.6	1.7	1.7	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.479	2.492	2.504	2.517	2.530	2.543	2.556	2.571
% Ch , Annual Rate	1.7	2.1	2.0	2.0	2.1	2.1	2.2	2.3
Employment Cost Index (Dec. 2005=1.0)	1.319	1.329	1.339	1.350	1.361	1.372	1.383	1.395
% Ch , Annual Rate	3.0	3.0	3.2	3.2	3.3	3.3	3.3	3.3
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	19,915.3	20,153.4	20,378.5	20,595.4	20,824.1	21,028.5	21,232.6	21,453.6
% Ch , Annual Rate	4.7	4.9	4.5	4.3	4.5	4.0	3.9	4.2
Personal Income	16,799.2	16,969.4	17,153.1	17,355.5	17,581.6	17,783.4	17,994.7	18,199.4
% Ch , Annual Rate	4.6	4.1	4.4	4.8	5.3	4.7	4.8	4.6
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	161.3	161.6	162.1	162.5	162.9	163.4	163.8	164.2
Total U.S. Employment	154.4	154.8	155.1	155.6	156.0	156.4	156.8	157.1
Unemployment Rate (%)	4.28	4.26	4.28	4.27	4.26	4.26	4.28	4.29
Nonfarm Payroll Employment	147.60	148.06	148.49	148.86	149.25	149.58	149.84	150.10
% Ch , Annual Rate	1.1	1.2	1.2	1.0	1.1	0.9	0.7	0.7
Manufacturing	12.55	12.63	12.67	12.71	12.78	12.83	12.90	12.97
% Ch , Annual Rate	1.0	2.5	1.4	1.4	2.0	1.7	2.2	2.1
Durable Manufacturing	7.87	7.93	7.96	8.00	8.04	8.08	8.13	8.19
% Ch , Annual Rate	1.8	3.1	1.8	1.8	2.1	1.9	2.6	2.7
Nondurable Manufacturing	4.68	4.70	4.71	4.71	4.73	4.75	4.77	4.78
% Ch , Annual Rate	-0.3	1.5	0.6	0.7	1.8	1.4	1.4	1.1
Construction	6.99	7.01	7.04	7.11	7.19	7.26	7.32	7.39
% Ch , Annual Rate	1.2	1.0	2.1	3.6	4.7	4.0	3.7	3.4
Service-Providing	127.33	127.68	128.03	128.28	128.53	128.73	128.85	128.98
% Ch , Annual Rate	1.1	1.1	1.1	0.8	0.8	0.6	0.4	0.4
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	50.5	50.8	50.8	50.8	50.8	50.8	50.8	50.8
Personal Saving/Disposable Income (%)	3.7	3.7	3.9	4.1	4.4	4.5	4.6	4.7
Auto Sales (Millions)	6.0	5.8	5.7	5.7	5.7	5.7	5.7	5.8
% Ch , Annual Rate	-0.9	-12.2	-5.1	-2.2	-1.8	-0.3	3.5	4.9
Housing Starts (Millions)	1.316	1.322	1.331	1.352	1.353	1.370	1.387	1.403
% Ch , Annual Rate	23.2	1.8	2.8	6.3	0.5	5.1	5.0	4.7
Federal Budget Surplus (Billions)	-752.0	-774.9	-794.4	-806.3	-849.6	-864.5	-860.4	-864.9
Net Exports (Billions)	-513.0	-485.7	-459.1	-444.0	-434.7	-432.5	-427.3	-419.2
3-Month Treasury Bill Rate (%)	1.37	1.49	1.73	1.97	2.15	2.41	2.63	2.85
10-Year Treasury Note Yield (%)	2.88	3.08	3.30	3.45	3.60	3.79	4.03	4.07
Bond Index of 20 G.O. Munis. (%)	4.35	4.60	4.73	4.79	4.86	4.91	4.98	5.00
30-Year Fixed Mortgage Rate (%)	4.58	4.86	5.11	5.37	5.52	5.80	6.01	6.06

Table A1.2 (continued)  
**U.S. Economic Forecast Summary**  
 Forecast 2017 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	18,072.8	18,175.8	18,265.7	18,355.7	18,445.1	18,536.4	18,627.9	18,718.1
% Ch , Annual Rate	2.0	2.3	2.0	2.0	2.0	2.0	2.0	2.0
Real Consumption	12,621.8	12,694.9	12,762.5	12,828.4	12,894.9	12,961.8	13,026.2	13,093.5
% Ch , Annual Rate	2.2	2.3	2.1	2.1	2.1	2.1	2.0	2.1
Real Nonresidential Fixed Investment	2,505.2	2,529.9	2,557.0	2,585.4	2,613.8	2,639.0	2,661.5	2,681.8
% Ch , Annual Rate	4.1	4.0	4.4	4.5	4.5	3.9	3.5	3.1
Real Residential Fixed Investment	646.0	653.3	662.9	672.0	677.1	682.6	690.0	694.5
% Ch , Annual Rate	3.2	4.6	6.0	5.6	3.1	3.3	4.4	2.6
Real Personal Income	15,660.9	15,770.4	15,867.9	15,955.7	16,063.4	16,154.7	16,237.3	16,321.5
% Ch , Annual Rate	3.3	2.8	2.5	2.2	2.7	2.3	2.1	2.1
Real Per Capita Income (\$/Person)	47,060	47,297	47,496	47,666	47,894	48,074	48,226	48,383
% Ch , Annual Rate	2.5	2.0	1.7	1.4	1.9	1.5	1.3	1.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.177	1.183	1.188	1.194	1.200	1.206	1.212	1.218
% Ch , Annual Rate	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1
U.S. Consumer Price Index (1982-84=1.0)	2.585	2.599	2.613	2.628	2.643	2.658	2.673	2.688
% Ch , Annual Rate	2.3	2.2	2.2	2.3	2.3	2.2	2.3	2.3
Employment Cost Index (Dec. 2005=1.0)	1.406	1.418	1.430	1.442	1.454	1.467	1.481	1.494
% Ch , Annual Rate	3.3	3.4	3.4	3.4	3.5	3.6	3.7	3.7
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	21,685.0	21,924.2	22,146.4	22,369.4	22,598.3	22,818.9	23,042.0	23,267.7
% Ch , Annual Rate	4.4	4.5	4.1	4.1	4.2	4.0	4.0	4.0
Personal Income	18,435.6	18,650.6	18,853.8	19,049.4	19,272.6	19,476.5	19,674.2	19,878.8
% Ch , Annual Rate	5.3	4.7	4.4	4.2	4.8	4.3	4.1	4.2
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	164.6	165.0	165.3	165.6	165.8	166.0	166.3	166.5
Total U.S. Employment	157.5	157.9	158.3	158.5	158.7	158.9	159.1	159.3
Unemployment Rate (%)	4.29	4.28	4.27	4.27	4.28	4.29	4.30	4.32
Nonfarm Payroll Employment	150.37	150.94	151.05	151.21	151.43	151.67	151.90	152.11
% Ch, Annual Rate	0.7	1.5	0.3	0.4	0.6	0.6	0.6	0.6
Manufacturing	13.02	13.06	13.12	13.17	13.19	13.22	13.24	13.26
% Ch, Annual Rate	1.7	1.3	1.8	1.5	0.8	0.7	0.7	0.6
Durable Manufacturing	8.23	8.27	8.32	8.37	8.40	8.42	8.45	8.48
% Ch, Annual Rate	2.3	1.9	2.5	2.2	1.4	1.2	1.4	1.2
Nondurable Manufacturing	4.79	4.79	4.80	4.80	4.80	4.79	4.79	4.78
% Ch, Annual Rate	0.6	0.3	0.6	0.3	-0.2	-0.4	-0.4	-0.5
Construction	7.44	7.50	7.56	7.62	7.68	7.75	7.82	7.89
% Ch, Annual Rate	3.0	3.0	3.3	3.4	3.3	3.5	3.9	3.4
Service-Providing	129.14	129.61	129.60	129.65	129.77	129.93	130.06	130.19
% Ch, Annual Rate	0.5	1.5	0.0	0.1	0.4	0.5	0.4	0.4
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	50.8	50.8	50.9	51.0	51.1	51.2	51.3	51.5
Personal Saving/Disposable Income (%)	4.8	4.8	4.7	4.6	4.8	4.7	4.7	4.7
Auto Sales (Millions)	5.8	5.8	5.9	5.9	5.8	5.8	5.7	5.7
% Ch, Annual Rate	2.3	2.7	1.3	-0.7	-2.9	-3.5	-3.5	-4.0
Housing Starts (Millions)	1.421	1.439	1.460	1.470	1.486	1.496	1.504	1.504
% Ch, Annual Rate	5.0	5.3	6.0	2.6	4.4	2.6	2.2	0.1
Federal Budget Surplus (Billions)	-901.7	-907.7	-887.4	-883.8	-932.7	-944.3	-951.1	-962.4
Net Exports (Billions)	-415.1	-412.9	-412.4	-413.5	-415.9	-414.1	-409.8	-403.5
3-Month Treasury Bill Rate (%)	2.86	2.86	2.86	2.85	2.85	2.85	2.84	2.84
10-Year Treasury Note Yield (%)	4.03	4.01	3.99	3.97	3.96	3.95	3.95	3.95
Bond Index of 20 G.O. Munis. (%)	4.99	4.97	4.95	4.94	4.92	4.91	4.90	4.90
30-Year Fixed Mortgage Rate (%)	6.04	6.01	5.98	5.97	5.95	5.95	5.96	5.96

Table A1.3  
**Washington Economic Forecast Summary**  
Forecast 2017 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
<b>Real Income (Billions of Chained 2009 Dollars)</b>								
Real Personal Income	325.834	339.898	351.108	365.409	375.922	389.999	403.496	415.482
% Ch	5.2	4.3	3.3	4.1	2.9	3.7	3.5	3.0
Real Wage and Salary Disb.	166.465	175.191	184.223	194.240	199.378	205.645	211.418	217.357
% Ch	4.9	5.2	5.2	5.4	2.6	3.1	2.8	2.8
Real Nonwage Income	159.369	164.707	166.884	171.169	176.544	184.354	192.078	198.124
% Ch	5.5	3.3	1.3	2.6	3.1	4.4	4.2	3.1
Real Per Capita Income (\$/Person)	46,164	47,444	48,169	49,277	49,902	51,011	52,053	52,898
% Ch	3.9	2.8	1.5	2.3	1.3	2.2	2.0	1.6
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.092	1.095	1.108	1.126	1.144	1.163	1.185	1.209
% Ch	1.5	0.3	1.2	1.7	1.6	1.7	1.9	2.0
Seattle Cons. Price Index (1982-84=1.0)	2.460	2.494	2.550	2.623	2.677	2.735	2.797	2.863
% Ch	1.8	1.4	2.3	2.9	2.1	2.1	2.3	2.3
Average Nonfarm Annual Wage	57,225	58,747	60,704	63,402	64,739	66,841	69,096	71,664
% Ch	4.2	2.7	3.3	4.4	2.1	3.2	3.4	3.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	25.16	25.52	26.42	27.32	28.20	29.03	29.92	30.90
% Ch	3.4	1.4	3.5	3.4	3.2	3.0	3.1	3.3
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	355.677	372.125	388.989	411.623	430.047	453.767	478.354	502.238
% Ch	6.8	4.6	4.5	5.8	4.5	5.5	5.4	5.0
Disposable Personal Income	312.818	325.758	341.120	360.782	378.299	398.602	417.899	437.633
% Ch	6.6	4.1	4.7	5.8	4.9	5.4	4.8	4.7
Per Capita Income (\$/Person)	50,391	51,942	53,365	55,508	57,086	59,351	61,709	63,943
% Ch	5.4	3.1	2.7	4.0	2.8	4.0	4.0	3.6
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,487.9	3,544.8	3,641.6	3,710.5	3,787.1	3,858.7	3,924.3	3,979.9
Total Washington Employment	3,275.3	3,345.5	3,443.4	3,539.4	3,620.4	3,690.5	3,754.0	3,807.3
Unemployment Rate (%)	6.10	5.62	5.44	4.61	4.40	4.36	4.34	4.34
Nonfarm Payroll Employment	3,056.8	3,145.7	3,242.3	3,335.0	3,405.4	3,461.3	3,508.7	3,547.4
% Ch	2.5	2.9	3.1	2.9	2.1	1.6	1.4	1.1
Manufacturing	288.8	291.8	289.9	284.5	286.3	290.7	294.9	298.5
% Ch	0.7	1.1	-0.7	-1.8	0.6	1.5	1.4	1.2
Durable Manufacturing	210.0	211.1	207.4	200.8	201.4	203.9	206.6	209.6
% Ch	0.2	0.5	-1.7	-3.2	0.3	1.2	1.4	1.4
Aerospace	94.2	94.0	90.9	83.8	80.1	78.5	77.9	77.9
% Ch	-1.9	-0.2	-3.3	-7.9	-4.4	-2.0	-0.8	0.0
Nondurable Manufacturing	78.8	80.8	82.4	83.7	84.9	86.8	88.2	88.9
% Ch	2.3	2.5	2.1	1.6	1.4	2.2	1.6	0.8
Construction	159.7	173.3	186.5	201.0	206.5	208.3	209.4	209.6
% Ch	7.2	8.5	7.6	7.8	2.7	0.9	0.5	0.1
Service-Providing	2,602.1	2,674.2	2,759.7	2,843.4	2,906.3	2,956.0	2,998.1	3,032.8
% Ch	2.4	2.8	3.2	3.0	2.2	1.7	1.4	1.2
Software Publishers	55.6	55.9	58.8	61.4	61.9	62.4	62.9	63.5
% Ch	3.3	0.5	5.2	4.4	0.9	0.7	0.8	1.0
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	33.898	40.374	44.077	43.026	43.357	41.893	42.083	42.020
% Ch	2.8	19.1	9.2	-2.4	0.8	-3.4	0.5	-0.2
Single-Family	17.905	19.797	22.463	23.070	25.209	25.599	26.050	26.344
% Ch	-2.7	10.6	13.5	2.7	9.3	1.5	1.8	1.1
Multi-Family	15.993	20.577	21.614	19.956	18.148	16.294	16.033	15.676
% Ch	9.8	28.7	5.0	-7.7	-9.1	-10.2	-1.6	-2.2
30-Year Fixed Mortgage Rate (%)	4.17	3.85	3.65	4.05	4.98	5.85	6.00	5.96

Table A1.4  
**Washington Economic Forecast Summary**  
Forecast 2017 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	347.026	349.981	352.904	354.519	362.421	365.291	366.169	367.755
% Ch, Annual Rate	4.5	3.4	3.4	1.8	9.2	3.2	1.0	1.7
Real Wage and Salary Disb.	181.906	183.847	185.723	185.417	192.602	194.439	194.570	195.347
% Ch, Annual Rate	7.9	4.3	4.1	-0.7	16.4	3.9	0.3	1.6
Real Nonwage Income	165.120	166.134	167.181	169.102	169.819	170.852	171.599	172.408
% Ch, Annual Rate	0.9	2.5	2.5	4.7	1.7	2.5	1.8	1.9
Real Per Capita Income (\$/Person)	47,929	48,129	48,309	48,310	49,181	49,363	49,271	49,292
% Ch, Annual Rate	2.8	1.7	1.5	0.0	7.4	1.5	-0.7	0.2
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.100	1.106	1.110	1.116	1.122	1.123	1.128	1.133
% Ch, Annual Rate	0.6	2.1	1.7	2.0	2.2	0.3	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.527	2.541	2.557	2.575	2.608	2.617	2.624	2.642
% Ch, Annual Rate	2.3	2.3	2.5	3.0	5.1	1.5	1.0	2.8
Average Nonfarm Annual Wage	60,080	60,593	61,139	61,004	63,172	63,402	63,404	63,632
% Ch, Annual Rate	3.8	3.5	3.7	-0.9	15.0	1.5	0.0	1.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	26.06	26.39	26.71	26.53	26.93	27.05	27.55	27.73
% Ch, Annual Rate	3.4	5.1	5.0	-2.7	6.2	1.8	7.7	2.6
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	381.664	386.905	391.825	395.563	406.607	410.103	413.031	416.750
% Ch, Annual Rate	5.2	5.6	5.2	3.9	11.6	3.5	2.9	3.7
Disposable Personal Income	334.925	339.467	343.331	346.759	356.078	359.599	362.100	365.351
% Ch, Annual Rate	6.6	5.5	4.6	4.1	11.2	4.0	2.8	3.6
Per Capita Income (\$/Person)	52,713	53,207	53,637	53,903	55,177	55,419	55,576	55,859
% Ch, Annual Rate	3.4	3.8	3.3	2.0	9.8	1.8	1.1	2.1
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,605.2	3,631.1	3,656.5	3,673.8	3,685.9	3,692.0	3,722.9	3,741.2
Total Washington Employment	3,403.1	3,429.6	3,458.6	3,482.5	3,505.4	3,523.8	3,553.5	3,574.7
Unemployment Rate (%)	5.61	5.55	5.41	5.21	4.90	4.56	4.55	4.45
Nonfarm Payroll Employment	3,207.3	3,234.2	3,254.3	3,273.5	3,305.1	3,327.1	3,345.2	3,362.7
% Ch, Annual Rate	4.2	3.4	2.5	2.4	3.9	2.7	2.2	2.1
Manufacturing	292.5	291.8	289.1	286.0	286.0	284.5	284.0	283.6
% Ch, Annual Rate	0.5	-0.9	-3.6	-4.3	0.0	-2.0	-0.8	-0.6
Durable Manufacturing	210.3	209.0	206.9	203.4	202.4	201.2	200.2	199.3
% Ch, Annual Rate	-1.0	-2.4	-4.0	-6.7	-1.9	-2.4	-2.0	-1.8
Aerospace	93.0	92.0	90.7	88.0	86.6	84.6	82.8	81.1
% Ch, Annual Rate	-2.0	-4.1	-5.5	-11.5	-6.1	-9.0	-8.3	-7.8
Nondurable Manufacturing	82.2	82.8	82.2	82.6	83.5	83.3	83.8	84.3
% Ch, Annual Rate	4.4	2.7	-2.7	1.8	4.7	-1.0	2.2	2.5
Construction	182.3	184.9	187.3	191.5	197.7	200.9	201.4	204.0
% Ch, Annual Rate	16.5	5.9	5.4	9.2	13.6	6.6	0.9	5.3
Service-Providing	2,726.2	2,751.2	2,771.6	2,789.9	2,815.3	2,835.5	2,853.8	2,869.0
% Ch, Annual Rate	3.8	3.7	3.0	2.7	3.7	2.9	2.6	2.2
Software Publishers	57.5	58.4	59.3	60.0	60.8	61.0	61.9	61.9
% Ch, Annual Rate	4.8	6.4	6.6	4.2	5.4	1.8	5.8	0.3
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	38.878	45.489	40.012	51.930	40.797	43.879	43.557	43.869
% Ch, Annual Rate	16.4	87.4	-40.1	183.7	-61.9	33.8	-2.9	2.9
Single-Family	22.671	23.001	21.495	22.685	21.976	22.467	23.650	24.186
% Ch, Annual Rate	25.5	5.9	-23.7	24.1	-11.9	9.2	22.8	9.4
Multi-Family	16.206	22.488	18.517	29.245	18.821	21.413	19.907	19.683
% Ch, Annual Rate	5.0	270.7	-54.0	522.1	-82.8	67.5	-25.3	-4.4
30-Year Fixed Mortgage Rate (%)	3.74	3.59	3.45	3.81	4.17	3.99	3.93	4.13

Table A1.4 (continued)  
**Washington Economic Forecast Summary**  
Forecast 2017 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	371.248	374.127	377.390	380.922	384.897	388.324	391.775	394.999
% Ch, Annual Rate	3.9	3.1	3.5	3.8	4.2	3.6	3.6	3.3
Real Wage and Salary Disb.	197.048	198.587	200.169	201.707	203.460	204.991	206.367	207.760
% Ch, Annual Rate	3.5	3.2	3.2	3.1	3.5	3.0	2.7	2.7
Real Nonwage Income	174.200	175.541	177.221	179.215	181.436	183.333	185.408	187.239
% Ch, Annual Rate	4.2	3.1	3.9	4.6	5.1	4.2	4.6	4.0
Real Per Capita Income (\$/Person)	49,568	49,759	50,002	50,280	50,617	50,883	51,152	51,393
% Ch, Annual Rate	2.3	1.6	2.0	2.2	2.7	2.1	2.1	1.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.137	1.142	1.146	1.151	1.156	1.161	1.166	1.172
% Ch, Annual Rate	1.4	1.6	1.6	1.6	1.7	1.7	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.656	2.671	2.684	2.698	2.712	2.727	2.742	2.758
% Ch, Annual Rate	2.1	2.2	2.1	2.1	2.1	2.1	2.2	2.3
Average Nonfarm Annual Wage	64,047	64,486	64,959	65,465	66,014	66,560	67,113	67,676
% Ch, Annual Rate	2.6	2.8	3.0	3.2	3.4	3.3	3.4	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.92	28.10	28.29	28.50	28.71	28.93	29.14	29.36
% Ch, Annual Rate	2.7	2.6	2.8	2.9	3.0	3.0	3.0	3.0
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	422.138	427.129	432.560	438.362	444.802	450.711	456.796	462.759
% Ch, Annual Rate	5.3	4.8	5.2	5.5	6.0	5.4	5.5	5.3
Disposable Personal Income	371.247	375.825	380.683	385.440	391.304	396.195	401.058	405.851
% Ch, Annual Rate	6.6	5.0	5.3	5.1	6.2	5.1	5.0	4.9
Per Capita Income (\$/Person)	56,362	56,809	57,312	57,862	58,495	59,057	59,642	60,209
% Ch, Annual Rate	3.7	3.2	3.6	3.9	4.4	3.9	4.0	3.9
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,759.8	3,777.6	3,796.0	3,814.9	3,832.5	3,850.2	3,867.6	3,884.5
Total Washington Employment	3,593.3	3,611.6	3,629.0	3,647.7	3,665.4	3,682.5	3,698.9	3,715.1
Unemployment Rate (%)	4.43	4.39	4.40	4.38	4.36	4.36	4.36	4.36
Nonfarm Payroll Employment	3,380.6	3,398.0	3,414.3	3,428.5	3,443.1	3,456.2	3,467.1	3,478.9
% Ch, Annual Rate	2.1	2.1	1.9	1.7	1.7	1.5	1.3	1.4
Manufacturing	284.4	286.1	287.0	287.8	289.1	290.1	291.3	292.3
% Ch, Annual Rate	1.2	2.4	1.2	1.2	1.8	1.4	1.6	1.3
Durable Manufacturing	200.1	201.3	201.9	202.4	203.0	203.5	204.2	204.8
% Ch, Annual Rate	1.7	2.3	1.2	1.1	1.2	1.0	1.3	1.1
Aerospace	80.7	80.3	79.9	79.5	79.1	78.7	78.3	77.9
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Nondurable Manufacturing	84.3	84.8	85.1	85.4	86.1	86.6	87.1	87.5
% Ch, Annual Rate	0.0	2.6	1.4	1.4	3.2	2.4	2.2	1.9
Construction	206.0	206.3	206.7	207.0	207.7	208.2	208.2	208.9
% Ch, Annual Rate	4.1	0.5	0.7	0.6	1.4	1.0	0.0	1.2
Service-Providing	2,883.9	2,899.5	2,914.4	2,927.4	2,940.0	2,951.5	2,961.3	2,971.4
% Ch, Annual Rate	2.1	2.2	2.1	1.8	1.7	1.6	1.3	1.4
Software Publishers	61.9	61.9	61.9	62.1	62.2	62.3	62.4	62.5
% Ch, Annual Rate	-0.3	-0.1	0.2	1.0	0.7	0.7	0.9	0.8
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	44.325	43.674	42.930	42.499	42.134	41.951	41.784	41.703
% Ch, Annual Rate	4.2	-5.7	-6.6	-4.0	-3.4	-1.7	-1.6	-0.8
Single-Family	24.879	25.131	25.346	25.479	25.511	25.535	25.612	25.737
% Ch, Annual Rate	12.0	4.1	3.5	2.1	0.5	0.4	1.2	2.0
Multi-Family	19.446	18.543	17.584	17.020	16.622	16.415	16.173	15.966
% Ch, Annual Rate	-4.7	-17.3	-19.1	-12.2	-9.0	-4.9	-5.8	-5.0
30-Year Fixed Mortgage Rate (%)	4.58	4.86	5.11	5.37	5.52	5.80	6.01	6.06

Table A1.4 (continued)  
**Washington Economic Forecast Summary**  
Forecast 2017 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	398.682	402.135	405.152	408.016	411.334	414.206	416.856	419.530
% Ch, Annual Rate	3.8	3.5	3.0	2.9	3.3	2.8	2.6	2.6
Real Wage and Salary Disb.	209.162	210.764	212.157	213.587	215.178	216.637	218.098	219.517
% Ch, Annual Rate	2.7	3.1	2.7	2.7	3.0	2.7	2.7	2.6
Real Nonwage Income	189.520	191.371	192.995	194.429	196.157	197.569	198.758	200.013
% Ch, Annual Rate	5.0	4.0	3.4	3.0	3.6	2.9	2.4	2.6
Real Per Capita Income (\$/Person)	51,694	51,965	52,180	52,374	52,627	52,822	52,988	53,157
% Ch, Annual Rate	2.4	2.1	1.7	1.5	1.9	1.5	1.3	1.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2009=1.0)	1.177	1.183	1.188	1.194	1.200	1.206	1.212	1.218
% Ch, Annual Rate	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1
Seattle Cons. Price Index (1982-84=1.0)	2.774	2.789	2.805	2.821	2.838	2.854	2.871	2.888
% Ch, Annual Rate	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.4
Average Nonfarm Annual Wage	68,248	68,732	69,381	70,024	70,685	71,326	71,989	72,657
% Ch, Annual Rate	3.4	2.9	3.8	3.8	3.8	3.7	3.8	3.8
Avg. Hourly Earnings-Mfg. (\$/Hour)	29.58	29.81	30.04	30.27	30.51	30.76	31.02	31.29
% Ch, Annual Rate	3.0	3.1	3.1	3.1	3.3	3.3	3.4	3.5
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	469.318	475.580	481.389	487.127	493.513	499.378	505.093	510.969
% Ch, Annual Rate	5.8	5.4	5.0	4.9	5.3	4.8	4.7	4.7
Disposable Personal Income	410.940	415.738	420.158	424.762	430.395	435.170	440.012	444.955
% Ch, Annual Rate	5.1	4.8	4.3	4.5	5.4	4.5	4.5	4.6
Per Capita Income (\$/Person)	60,853	61,456	61,999	62,529	63,141	63,683	64,204	64,743
% Ch, Annual Rate	4.3	4.0	3.6	3.5	4.0	3.5	3.3	3.4
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,900.7	3,917.2	3,932.7	3,946.7	3,960.2	3,973.2	3,986.4	3,999.7
Total Washington Employment	3,730.4	3,747.1	3,762.3	3,776.2	3,789.1	3,801.2	3,813.3	3,825.4
Unemployment Rate (%)	4.37	4.34	4.33	4.32	4.32	4.33	4.34	4.36
Nonfarm Payroll Employment	3,488.8	3,507.6	3,514.7	3,523.6	3,533.1	3,542.8	3,552.2	3,561.6
% Ch, Annual Rate	1.1	2.2	0.8	1.0	1.1	1.1	1.1	1.1
Manufacturing	293.3	294.2	295.4	296.5	297.3	298.1	298.9	299.8
% Ch, Annual Rate	1.5	1.2	1.6	1.5	1.1	1.0	1.1	1.2
Durable Manufacturing	205.5	206.2	207.0	207.9	208.5	209.2	210.0	210.7
% Ch, Annual Rate	1.5	1.2	1.6	1.7	1.3	1.3	1.5	1.5
Aerospace	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nondurable Manufacturing	87.8	88.0	88.4	88.6	88.8	88.9	89.0	89.1
% Ch, Annual Rate	1.4	1.1	1.6	1.2	0.7	0.5	0.4	0.4
Construction	208.6	209.2	209.6	210.0	209.8	209.7	209.5	209.4
% Ch, Annual Rate	-0.5	1.1	0.8	0.7	-0.3	-0.3	-0.2	-0.2
Service-Providing	2,980.4	2,997.8	3,003.3	3,010.7	3,019.5	3,028.7	3,037.3	3,045.9
% Ch, Annual Rate	1.2	2.4	0.7	1.0	1.2	1.2	1.1	1.1
Software Publishers	62.7	62.8	63.0	63.1	63.3	63.4	63.6	63.7
% Ch, Annual Rate	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	41.824	42.027	42.234	42.247	42.207	42.104	41.992	41.776
% Ch, Annual Rate	1.2	2.0	2.0	0.1	-0.4	-1.0	-1.1	-2.0
Single-Family	25.823	25.996	26.150	26.231	26.307	26.381	26.379	26.307
% Ch, Annual Rate	1.3	2.7	2.4	1.2	1.2	1.1	0.0	-1.1
Multi-Family	16.001	16.031	16.084	16.016	15.900	15.723	15.613	15.468
% Ch, Annual Rate	0.9	0.7	1.3	-1.7	-2.9	-4.4	-2.8	-3.7
30-Year Fixed Mortgage Rate (%)	6.04	6.01	5.98	5.97	5.95	5.95	5.96	5.96

Table A2.1

**U.S. Nonagricultural Employment by Industry (Millions)**

Forecast 2017 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Payroll Employment	138.94	141.81	144.31	146.47	148.25	149.69	150.89	151.78
% Ch	1.9	2.1	1.8	1.5	1.2	1.0	0.8	0.6
Manufacturing	12.19	12.34	12.35	12.44	12.64	12.87	13.09	13.23
% Ch	1.4	1.2	0.1	0.7	1.6	1.8	1.7	1.0
Durable Manufacturing	7.67	7.77	7.72	7.77	7.94	8.11	8.30	8.44
% Ch	1.7	1.2	-0.6	0.7	2.1	2.1	2.3	1.7
Wood Products	0.37	0.38	0.39	0.40	0.42	0.43	0.45	0.48
% Ch	5.2	2.9	2.5	1.2	4.8	4.4	4.4	6.1
Primary and Fabricated Metals	1.85	1.85	1.80	1.83	1.87	1.92	1.99	2.04
% Ch	1.4	0.0	-2.7	1.2	2.2	3.0	3.7	2.2
Computer and Electronic Products	1.05	1.05	1.05	1.04	1.09	1.11	1.11	1.11
% Ch	-1.5	0.4	-0.5	-0.6	4.6	2.4	-0.1	-0.1
Machinery and Electrical Equipment	1.50	1.50	1.46	1.48	1.52	1.57	1.60	1.62
% Ch	1.8	0.0	-2.7	1.2	2.7	3.0	1.8	1.5
Transportation Equipment	1.56	1.60	1.62	1.62	1.61	1.61	1.67	1.71
% Ch	3.3	2.9	1.3	0.0	-0.8	-0.1	3.9	2.0
Other Durables	1.34	1.37	1.39	1.40	1.44	1.46	1.47	1.48
% Ch	1.7	2.4	1.4	1.2	2.2	1.8	0.7	0.6
Nondurable Manufacturing	4.51	4.57	4.63	4.67	4.70	4.76	4.79	4.79
% Ch	0.9	1.3	1.3	0.8	0.7	1.2	0.7	-0.1
Food Manufacturing	1.48	1.51	1.55	1.59	1.62	1.67	1.69	1.71
% Ch	0.7	1.8	2.8	2.5	1.9	2.6	1.4	1.0
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch	-1.2	-0.2	-0.5	-0.1	0.2	0.3	0.6	0.0
Other Nondurables	2.65	2.69	2.70	2.70	2.71	2.72	2.73	2.71
% Ch	1.3	1.2	0.7	0.0	0.1	0.5	0.3	-0.7
Natural Resources and Mining	0.89	0.81	0.68	0.71	0.75	0.77	0.77	0.78
% Ch	3.2	-8.7	-16.6	4.5	5.5	2.5	0.9	0.6
Construction	6.15	6.46	6.71	6.91	7.04	7.29	7.53	7.78
% Ch	5.0	5.0	3.9	2.9	1.9	3.6	3.3	3.4
Trade, Transportation, and Utilities	26.38	26.88	27.24	27.38	27.36	27.36	27.27	27.10
% Ch	2.0	1.9	1.3	0.5	-0.1	0.0	-0.3	-0.6
Wholesale Trade	5.81	5.85	5.87	5.92	5.95	5.99	6.01	6.02
% Ch	1.4	0.7	0.2	0.9	0.4	0.7	0.2	0.3
Retail Trade	15.35	15.60	15.83	15.84	15.75	15.70	15.62	15.46
% Ch	1.9	1.6	1.4	0.1	-0.6	-0.3	-0.5	-1.0
Trans., Warehousing, and Utilities	5.21	5.43	5.54	5.62	5.66	5.67	5.65	5.63
% Ch	3.2	4.1	2.2	1.3	0.7	0.2	-0.4	-0.3
Information	2.73	2.75	2.77	2.73	2.70	2.71	2.76	2.84
% Ch	0.8	0.9	0.8	-1.6	-1.1	0.2	2.2	2.7
Publishing Industries	0.73	0.73	0.73	0.72	0.69	0.67	0.65	0.64
% Ch	-0.8	0.0	0.5	-1.3	-4.7	-3.0	-2.5	-1.9
Other Information	2.00	2.02	2.04	2.01	2.01	2.04	2.11	2.20
% Ch	1.4	1.2	0.9	-1.7	0.2	1.4	3.7	4.1
Financial Activities	7.98	8.12	8.28	8.44	8.53	8.55	8.56	8.59
% Ch	1.1	1.8	2.0	1.9	1.1	0.2	0.1	0.4
Professional and Business Services	19.06	19.63	20.13	20.74	21.50	22.36	22.94	23.45
% Ch	2.9	3.0	2.6	3.0	3.7	4.0	2.6	2.2
Education and Health Services	21.44	22.02	22.62	23.13	23.48	23.54	23.56	23.67
% Ch	1.7	2.7	2.7	2.3	1.5	0.2	0.1	0.5
Leisure and Hospitality	14.69	15.15	15.61	15.93	16.16	16.15	16.19	16.22
% Ch	3.1	3.1	3.0	2.0	1.4	-0.1	0.2	0.2
Other Services	5.57	5.62	5.69	5.76	5.76	5.68	5.60	5.55
% Ch	1.5	1.0	1.1	1.3	0.0	-1.3	-1.5	-1.0
Federal Government	2.73	2.76	2.80	2.81	2.76	2.72	2.82	2.65
% Ch	-1.4	0.8	1.5	0.4	-1.7	-1.7	3.8	-5.8
State and Local Government	19.14	19.27	19.43	19.50	19.58	19.70	19.80	19.91
% Ch	0.3	0.7	0.8	0.4	0.4	0.6	0.5	0.6

Table A2.2

**U.S. Nonagricultural Employment by Industry (Millions)**

Forecast 2017 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	143.44	143.95	144.66	145.17	145.71	146.20	146.77	147.20
% Ch, Annual Rate	1.7	1.4	2.0	1.4	1.5	1.3	1.6	1.2
Manufacturing	12.37	12.35	12.34	12.33	12.37	12.40	12.47	12.52
% Ch, Annual Rate	0.6	-0.8	-0.1	-0.4	1.4	1.0	2.1	1.6
Durable Manufacturing	7.75	7.72	7.71	7.70	7.72	7.74	7.80	7.83
% Ch, Annual Rate	-0.1	-1.6	-0.7	-0.4	1.3	1.0	3.0	1.7
Wood Products	0.39	0.39	0.39	0.39	0.40	0.39	0.40	0.40
% Ch, Annual Rate	1.6	0.6	0.3	2.2	2.8	-2.0	1.1	3.2
Primary and Fabricated Metals	1.82	1.80	1.80	1.80	1.80	1.82	1.83	1.85
% Ch, Annual Rate	-2.7	-2.8	-1.7	-0.3	1.8	3.2	3.9	2.8
Computer and Electronic Products	1.05	1.05	1.05	1.04	1.04	1.04	1.04	1.05
% Ch, Annual Rate	1.6	-1.0	-2.3	-1.7	-1.6	0.4	2.4	2.5
Machinery and Electrical Equipment	1.48	1.46	1.46	1.46	1.47	1.48	1.49	1.49
% Ch, Annual Rate	-2.3	-3.7	-1.4	-0.6	2.7	2.8	4.6	0.0
Transportation Equipment	1.62	1.63	1.63	1.62	1.62	1.62	1.63	1.63
% Ch, Annual Rate	1.7	0.4	0.7	-2.0	-0.2	-0.6	3.7	-1.2
Other Durables	1.39	1.38	1.39	1.39	1.40	1.40	1.40	1.42
% Ch, Annual Rate	2.1	-1.3	0.6	1.9	2.5	-0.4	0.3	4.7
Nondurable Manufacturing	4.62	4.63	4.64	4.63	4.65	4.66	4.67	4.68
% Ch, Annual Rate	1.9	0.4	1.0	-0.4	1.6	1.0	0.6	1.3
Food Manufacturing	1.54	1.55	1.56	1.57	1.58	1.59	1.60	1.60
% Ch, Annual Rate	4.2	2.3	3.7	0.4	4.1	2.8	1.5	1.7
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-0.1	-1.5	-2.0	-1.8	1.6	-0.8	0.9	3.0
Other Nondurables	2.71	2.70	2.70	2.70	2.70	2.70	2.70	2.71
% Ch, Annual Rate	0.9	-0.3	-0.1	-0.6	0.1	0.2	0.1	0.9
Natural Resources and Mining	0.71	0.68	0.66	0.66	0.68	0.71	0.72	0.73
% Ch, Annual Rate	-21.8	-18.3	-7.5	1.4	11.7	14.8	5.9	5.1
Construction	6.67	6.69	6.71	6.77	6.85	6.88	6.92	6.97
% Ch, Annual Rate	5.3	1.6	1.1	3.2	5.3	1.6	2.5	2.7
Trade, Transportation, and Utilities	27.12	27.19	27.28	27.35	27.38	27.37	27.38	27.39
% Ch, Annual Rate	1.6	1.0	1.4	1.0	0.5	-0.2	0.2	0.0
Wholesale Trade	5.86	5.86	5.87	5.89	5.90	5.91	5.94	5.94
% Ch, Annual Rate	0.3	0.2	0.6	1.2	1.1	0.8	1.8	-0.3
Retail Trade	15.76	15.81	15.86	15.88	15.88	15.84	15.81	15.83
% Ch, Annual Rate	2.3	1.1	1.5	0.3	0.2	-1.2	-0.6	0.4
Trans., Warehousing, and Utilities	5.50	5.53	5.55	5.59	5.60	5.62	5.63	5.62
% Ch, Annual Rate	1.0	1.6	1.8	2.7	0.6	1.5	1.0	-0.8
Information	2.77	2.77	2.78	2.77	2.75	2.73	2.72	2.72
% Ch, Annual Rate	1.4	-0.7	2.0	-1.5	-3.2	-3.2	-1.1	0.8
Publishing Industries	0.73	0.73	0.73	0.73	0.73	0.72	0.72	0.71
% Ch, Annual Rate	1.8	-0.2	1.1	-1.2	-0.1	-3.1	-2.4	-4.4
Other Information	2.04	2.04	2.05	2.04	2.02	2.00	2.00	2.01
% Ch, Annual Rate	1.3	-0.9	2.4	-1.6	-4.3	-3.2	-0.6	2.7
Financial Activities	8.22	8.26	8.31	8.35	8.40	8.43	8.45	8.47
% Ch, Annual Rate	2.0	2.3	2.4	1.6	2.6	1.5	1.1	0.8
Professional and Business Services	19.90	20.03	20.21	20.38	20.52	20.66	20.83	20.93
% Ch, Annual Rate	1.4	2.6	3.7	3.3	2.8	2.8	3.4	1.9
Education and Health Services	22.40	22.55	22.70	22.83	22.94	23.06	23.19	23.32
% Ch, Annual Rate	2.3	2.7	2.7	2.3	2.0	2.0	2.4	2.3
Leisure and Hospitality	15.49	15.57	15.67	15.73	15.78	15.90	15.99	16.06
% Ch, Annual Rate	3.1	2.2	2.5	1.4	1.5	2.9	2.4	1.7
Other Services	5.66	5.67	5.70	5.71	5.72	5.75	5.78	5.79
% Ch, Annual Rate	1.4	1.0	1.5	1.0	0.7	1.9	2.5	0.9
Federal Government	2.78	2.79	2.81	2.82	2.82	2.81	2.81	2.80
% Ch, Annual Rate	1.5	1.4	2.9	1.4	-0.1	-0.8	-0.2	-1.2
State and Local Government	19.36	19.40	19.48	19.48	19.50	19.51	19.49	19.50
% Ch, Annual Rate	1.0	0.9	1.7	0.1	0.3	0.2	-0.4	0.2

Table A2.2 (continued)

**U.S. Nonagricultural Employment by Industry (Millions)**

Forecast 2017 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	147.60	148.06	148.49	148.86	149.25	149.58	149.84	150.10
% Ch, Annual Rate	1.1	1.2	1.2	1.0	1.1	0.9	0.7	0.7
Manufacturing	12.55	12.63	12.67	12.71	12.78	12.83	12.90	12.97
% Ch, Annual Rate	1.0	2.5	1.4	1.4	2.0	1.7	2.2	2.1
Durable Manufacturing	7.87	7.93	7.96	8.00	8.04	8.08	8.13	8.19
% Ch, Annual Rate	1.8	3.1	1.8	1.8	2.1	1.9	2.6	2.7
Wood Products	0.41	0.41	0.42	0.42	0.43	0.43	0.44	0.44
% Ch, Annual Rate	6.9	8.6	4.8	4.7	4.4	3.1	3.8	3.5
Primary and Fabricated Metals	1.85	1.86	1.87	1.88	1.89	1.91	1.93	1.95
% Ch, Annual Rate	1.6	2.2	0.9	1.6	3.8	3.6	4.5	4.2
Computer and Electronic Products	1.07	1.09	1.10	1.11	1.11	1.11	1.12	1.12
% Ch, Annual Rate	7.2	6.8	4.2	3.6	1.7	1.2	0.8	0.4
Machinery and Electrical Equipment	1.50	1.52	1.53	1.54	1.55	1.56	1.57	1.58
% Ch, Annual Rate	2.1	4.6	3.7	2.6	3.4	2.4	2.8	2.5
Transportation Equipment	1.62	1.62	1.61	1.60	1.60	1.60	1.61	1.63
% Ch, Annual Rate	-2.4	-0.5	-1.7	-1.2	-1.2	0.0	3.0	4.6
Other Durables	1.42	1.43	1.44	1.45	1.46	1.46	1.46	1.47
% Ch, Annual Rate	1.6	2.4	2.4	2.6	2.1	1.2	0.8	0.4
Nondurable Manufacturing	4.68	4.70	4.71	4.71	4.73	4.75	4.77	4.78
% Ch, Annual Rate	-0.3	1.5	0.6	0.7	1.8	1.4	1.4	1.1
Food Manufacturing	1.61	1.62	1.63	1.64	1.65	1.66	1.67	1.68
% Ch, Annual Rate	0.8	3.3	1.9	2.1	3.9	2.4	2.0	1.6
Paper and Paper Products	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	-2.2	0.5	0.1	-0.5	0.3	0.7	1.0	0.8
Other Nondurables	2.70	2.71	2.71	2.71	2.71	2.72	2.72	2.73
% Ch, Annual Rate	-0.8	0.6	-0.1	0.0	0.7	0.8	1.1	0.8
Natural Resources and Mining	0.73	0.75	0.75	0.76	0.76	0.76	0.77	0.77
% Ch, Annual Rate	4.6	6.6	3.2	2.8	2.5	1.4	1.3	1.2
Construction	6.99	7.01	7.04	7.11	7.19	7.26	7.32	7.39
% Ch, Annual Rate	1.2	1.0	2.1	3.6	4.7	4.0	3.7	3.4
Trade, Transportation, and Utilities	27.37	27.35	27.35	27.36	27.39	27.38	27.36	27.33
% Ch, Annual Rate	-0.2	-0.3	0.0	0.2	0.4	-0.2	-0.2	-0.5
Wholesale Trade	5.93	5.94	5.96	5.97	5.99	5.99	5.99	6.00
% Ch, Annual Rate	-0.5	0.5	1.4	1.2	0.8	0.5	0.1	0.1
Retail Trade	15.80	15.76	15.73	15.72	15.73	15.71	15.70	15.67
% Ch, Annual Rate	-0.7	-1.1	-0.8	-0.2	0.3	-0.5	-0.3	-0.8
Trans., Warehousing, and Utilities	5.64	5.66	5.66	5.67	5.67	5.67	5.67	5.66
% Ch, Annual Rate	1.3	1.2	0.5	0.5	0.1	0.0	-0.4	-0.5
Information	2.68	2.70	2.71	2.71	2.70	2.69	2.70	2.72
% Ch, Annual Rate	-6.1	2.5	1.5	0.6	-1.1	-1.3	0.7	3.5
Publishing Industries	0.70	0.69	0.68	0.68	0.67	0.67	0.66	0.66
% Ch, Annual Rate	-6.3	-6.0	-4.7	-1.7	-2.9	-3.0	-2.3	-2.6
Other Information	1.98	2.01	2.03	2.03	2.03	2.03	2.04	2.06
% Ch, Annual Rate	-6.1	5.7	3.7	1.4	-0.5	-0.8	1.7	5.6
Financial Activities	8.51	8.53	8.53	8.55	8.55	8.55	8.55	8.54
% Ch, Annual Rate	1.9	0.7	0.3	0.7	0.4	-0.1	-0.2	-0.1
Professional and Business Services	21.13	21.39	21.63	21.85	22.10	22.30	22.46	22.60
% Ch, Annual Rate	3.9	4.9	4.7	4.0	4.6	3.8	2.9	2.6
Education and Health Services	23.40	23.48	23.51	23.52	23.51	23.54	23.54	23.56
% Ch, Annual Rate	1.3	1.4	0.5	0.2	-0.2	0.5	0.0	0.3
Leisure and Hospitality	16.13	16.14	16.19	16.20	16.18	16.16	16.14	16.14
% Ch, Annual Rate	1.6	0.5	1.1	0.2	-0.4	-0.5	-0.5	-0.1
Other Services	5.79	5.76	5.75	5.73	5.72	5.70	5.67	5.64
% Ch, Annual Rate	-0.5	-1.6	-1.0	-1.0	-1.1	-1.5	-1.8	-2.2
Federal Government	2.79	2.77	2.75	2.73	2.73	2.72	2.71	2.70
% Ch, Annual Rate	-1.2	-2.9	-3.1	-2.2	-1.1	-1.1	-1.1	-1.1
State and Local Government	19.53	19.56	19.61	19.63	19.65	19.69	19.72	19.75
% Ch, Annual Rate	0.6	0.6	1.0	0.4	0.4	0.9	0.6	0.6

Table A2.2 (continued)

**U.S. Nonagricultural Employment by Industry (Millions)**

Forecast 2017 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	150.37	150.94	151.05	151.21	151.43	151.67	151.90	152.11
% Ch, Annual Rate	0.7	1.5	0.3	0.4	0.6	0.6	0.6	0.6
Manufacturing	13.02	13.06	13.12	13.17	13.19	13.22	13.24	13.26
% Ch, Annual Rate	1.7	1.3	1.8	1.5	0.8	0.7	0.7	0.6
Durable Manufacturing	8.23	8.27	8.32	8.37	8.40	8.42	8.45	8.48
% Ch, Annual Rate	2.3	1.9	2.5	2.2	1.4	1.2	1.4	1.2
Wood Products	0.44	0.45	0.46	0.46	0.47	0.48	0.48	0.49
% Ch, Annual Rate	3.4	5.0	6.6	7.1	6.2	5.6	5.7	5.7
Primary and Fabricated Metals	1.97	1.98	2.00	2.02	2.02	2.03	2.04	2.05
% Ch, Annual Rate	3.7	3.0	3.5	3.0	1.6	1.5	2.0	2.2
Computer and Electronic Products	1.12	1.11	1.11	1.11	1.11	1.11	1.11	1.11
% Ch, Annual Rate	-0.2	-1.2	-0.8	-0.3	-0.2	0.3	0.6	0.6
Machinery and Electrical Equipment	1.59	1.59	1.60	1.60	1.61	1.62	1.62	1.63
% Ch, Annual Rate	1.7	0.7	1.4	1.6	1.5	1.6	1.8	1.8
Transportation Equipment	1.65	1.66	1.68	1.70	1.70	1.71	1.71	1.70
% Ch, Annual Rate	4.3	4.2	5.0	3.3	1.6	1.0	0.1	-1.1
Other Durables	1.47	1.47	1.47	1.48	1.48	1.48	1.48	1.48
% Ch, Annual Rate	0.7	0.4	1.0	0.9	0.5	0.2	0.7	0.8
Nondurable Manufacturing	4.79	4.79	4.80	4.80	4.80	4.79	4.79	4.78
% Ch, Annual Rate	0.6	0.3	0.6	0.3	-0.2	-0.4	-0.4	-0.5
Food Manufacturing	1.68	1.69	1.69	1.70	1.70	1.70	1.71	1.71
% Ch, Annual Rate	1.2	0.9	1.4	1.2	0.9	0.8	0.8	0.7
Paper and Paper Products	0.37	0.37	0.37	0.38	0.37	0.37	0.37	0.37
% Ch, Annual Rate	0.5	0.4	0.7	0.4	-0.3	-0.4	-0.4	-0.2
Other Nondurables	2.73	2.73	2.73	2.73	2.72	2.71	2.71	2.70
% Ch, Annual Rate	0.2	-0.1	0.0	-0.3	-0.9	-1.1	-1.2	-1.2
Natural Resources and Mining	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78
% Ch, Annual Rate	0.8	0.4	0.4	0.7	0.7	0.6	0.6	0.8
Construction	7.44	7.50	7.56	7.62	7.68	7.75	7.82	7.89
% Ch, Annual Rate	3.0	3.0	3.3	3.4	3.3	3.5	3.9	3.4
Trade, Transportation, and Utilities	27.31	27.28	27.27	27.23	27.18	27.13	27.08	27.03
% Ch, Annual Rate	-0.3	-0.4	-0.2	-0.5	-0.8	-0.6	-0.8	-0.8
Wholesale Trade	6.00	6.00	6.01	6.01	6.02	6.02	6.02	6.02
% Ch, Annual Rate	0.3	0.1	0.4	0.2	0.4	0.2	0.1	0.1
Retail Trade	15.66	15.63	15.61	15.58	15.52	15.48	15.44	15.39
% Ch, Annual Rate	-0.4	-0.6	-0.5	-0.9	-1.5	-1.0	-1.2	-1.1
Trans., Warehousing, and Utilities	5.65	5.65	5.64	5.64	5.64	5.63	5.62	5.61
% Ch, Annual Rate	-0.5	-0.6	-0.2	-0.3	-0.1	-0.4	-0.6	-0.6
Information	2.74	2.75	2.77	2.79	2.81	2.83	2.85	2.86
% Ch, Annual Rate	2.8	1.7	2.5	2.6	3.1	3.0	2.6	2.2
Publishing Industries	0.65	0.65	0.65	0.64	0.64	0.64	0.64	0.63
% Ch, Annual Rate	-2.6	-2.5	-2.1	-2.1	-1.7	-1.8	-1.8	-1.8
Other Information	2.09	2.10	2.12	2.15	2.17	2.19	2.21	2.23
% Ch, Annual Rate	4.6	3.0	3.9	4.1	4.6	4.4	3.9	3.3
Financial Activities	8.55	8.55	8.56	8.57	8.59	8.59	8.59	8.58
% Ch, Annual Rate	0.1	0.0	0.5	0.7	0.6	0.2	0.0	-0.3
Professional and Business Services	22.73	22.87	23.01	23.15	23.27	23.39	23.52	23.65
% Ch, Annual Rate	2.3	2.5	2.6	2.3	2.1	2.0	2.3	2.2
Education and Health Services	23.56	23.54	23.56	23.58	23.63	23.66	23.67	23.71
% Ch, Annual Rate	0.0	-0.2	0.2	0.4	0.8	0.4	0.3	0.6
Leisure and Hospitality	16.16	16.18	16.20	16.22	16.21	16.22	16.23	16.22
% Ch, Annual Rate	0.5	0.4	0.7	0.5	-0.4	0.4	0.1	0.0
Other Services	5.62	5.60	5.59	5.58	5.57	5.56	5.54	5.52
% Ch, Annual Rate	-1.4	-1.2	-1.0	-0.9	-0.6	-0.9	-1.3	-1.4
Federal Government	2.70	3.05	2.83	2.69	2.66	2.66	2.65	2.65
% Ch, Annual Rate	-0.1	61.6	-25.6	-18.6	-3.7	-1.0	-0.8	-0.8
State and Local Government	19.77	19.79	19.81	19.84	19.87	19.90	19.93	19.96
% Ch, Annual Rate	0.5	0.4	0.5	0.5	0.6	0.7	0.7	0.6

Table A2.3

**Washington Nonagricultural Employment by Industry (Thousands)**

Forecast 2017 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Payroll Employment	3,056.8	3,145.7	3,242.3	3,335.0	3,405.4	3,461.3	3,508.7	3,547.4
% Ch	2.5	2.9	3.1	2.9	2.1	1.6	1.4	1.1
Manufacturing	288.8	291.8	289.9	284.5	286.3	290.7	294.9	298.5
% Ch	0.7	1.1	-0.7	-1.8	0.6	1.5	1.4	1.2
Durable Manufacturing	210.0	211.1	207.4	200.8	201.4	203.9	206.6	209.6
% Ch	0.2	0.5	-1.7	-3.2	0.3	1.2	1.4	1.4
Wood Products	13.4	13.3	13.1	12.9	13.1	13.4	13.7	14.1
% Ch	3.0	-1.0	-1.5	-1.7	2.0	2.0	2.0	3.6
Primary and Fabricated Metals	25.6	25.7	25.2	25.8	26.7	27.6	29.0	29.8
% Ch	2.5	0.5	-2.1	2.2	3.6	3.5	4.9	2.7
Computer and Electronic Products	20.0	19.9	20.1	20.0	21.6	22.6	22.8	23.0
% Ch	-1.0	-0.3	0.7	-0.5	8.4	4.5	0.7	0.8
Machinery and Electrical Equipment	20.8	20.8	20.4	20.7	22.1	23.9	25.4	27.0
% Ch	4.9	-0.3	-1.5	1.3	6.8	8.1	6.4	6.0
Aerospace	94.2	94.0	90.9	83.8	80.1	78.5	77.9	77.9
% Ch	-1.9	-0.2	-3.3	-7.9	-4.4	-2.0	-0.8	0.0
Other Transportation Equip.	9.7	10.1	10.1	9.8	9.4	9.2	9.1	8.9
% Ch	-0.7	4.7	-0.8	-2.1	-4.1	-2.6	-1.3	-2.4
Other Durables	26.2	27.3	27.6	27.8	28.3	28.6	28.8	29.0
% Ch	2.1	3.9	1.4	0.7	1.7	1.2	0.6	0.7
Nondurable Manufacturing	78.8	80.8	82.4	83.7	84.9	86.8	88.2	88.9
% Ch	2.3	2.5	2.1	1.6	1.4	2.2	1.6	0.8
Food Manufacturing	36.4	36.8	37.5	37.7	38.0	39.0	39.4	39.5
% Ch	2.0	1.2	1.9	0.5	0.7	2.7	1.0	0.3
Paper and Paper Products	8.0	8.0	7.8	7.9	7.8	7.8	7.7	7.7
% Ch	-1.2	0.0	-3.5	1.4	-0.8	-0.6	-0.3	-1.0
Other Nondurables	34.4	35.9	37.2	38.1	39.1	40.0	41.1	41.8
% Ch	3.4	4.4	3.6	2.6	2.6	2.3	2.6	1.6
Natural Resources and Mining	6.2	6.3	6.3	6.1	6.2	6.3	6.4	6.4
% Ch	1.7	1.8	-1.1	-1.8	1.4	1.9	0.7	0.7
Construction	159.7	173.3	186.5	201.0	206.5	208.3	209.4	209.6
% Ch	7.2	8.5	7.6	7.8	2.7	0.9	0.5	0.1
Trade, Transportation, and Utilities	569.3	587.9	607.2	628.8	639.9	648.7	653.5	655.3
% Ch	3.4	3.3	3.3	3.6	1.8	1.4	0.7	0.3
Wholesale Trade	129.9	132.0	133.1	136.2	138.8	140.9	142.0	142.9
% Ch	2.4	1.6	0.9	2.3	1.9	1.5	0.8	0.6
Retail Trade	342.1	355.0	369.8	385.8	393.3	399.4	403.1	403.9
% Ch	3.6	3.8	4.2	4.3	2.0	1.5	0.9	0.2
Trans., Warehousing, and Utilities	97.3	100.9	104.3	106.8	107.8	108.4	108.4	108.5
% Ch	4.0	3.8	3.3	2.4	0.9	0.6	0.0	0.1
Information	109.8	114.0	120.6	124.4	125.0	126.4	129.5	133.2
% Ch	3.4	3.8	5.8	3.1	0.5	1.1	2.5	2.9
Software Publishers	55.6	55.9	58.8	61.4	61.9	62.4	62.9	63.5
% Ch	3.3	0.5	5.2	4.4	0.9	0.7	0.8	1.0
Other Publishing Industries	6.6	6.2	5.9	5.5	4.8	4.4	3.9	3.6
% Ch	-4.9	-6.6	-4.0	-6.9	-12.7	-9.6	-9.3	-8.8
Other Information	47.6	51.9	55.9	57.4	58.2	59.7	62.7	66.1
% Ch	4.8	9.1	7.5	2.8	1.4	2.5	5.0	5.5
Financial Activities	145.3	147.6	150.6	155.8	158.5	158.4	157.9	157.6
% Ch	1.1	1.6	2.0	3.5	1.7	-0.1	-0.3	-0.1
Professional and Business Services	372.3	389.2	403.1	416.6	435.5	457.1	472.9	487.3
% Ch	3.0	4.5	3.6	3.4	4.5	5.0	3.5	3.1
Education and Health Services	444.0	448.5	463.6	475.7	488.4	495.8	501.9	509.1
% Ch	1.6	1.0	3.4	2.6	2.7	1.5	1.2	1.4
Leisure and Hospitality	297.0	309.9	323.4	334.7	341.9	345.6	349.4	352.9
% Ch	3.4	4.4	4.4	3.5	2.1	1.1	1.1	1.0
Other Services	113.9	115.1	117.7	121.3	123.1	124.2	125.0	126.0
% Ch	2.3	1.1	2.3	3.0	1.5	0.9	0.6	0.8
Federal Government	71.3	73.2	74.5	75.5	74.9	74.3	76.6	73.6
% Ch	-0.5	2.6	1.9	1.2	-0.7	-0.8	3.1	-3.9
State and Local Government	479.3	488.8	499.1	510.8	519.1	525.6	531.4	537.7
% Ch	1.6	2.0	2.1	2.4	1.6	1.3	1.1	1.2

Table A2.4

**Washington Nonagricultural Employment by Industry (Thousands)**

Forecast 2017 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Nonfarm Payroll Employment	3,207.3	3,234.2	3,254.3	3,273.5	3,305.1	3,327.1	3,345.2	3,362.7
% Ch, Annual Rate	4.2	3.4	2.5	2.4	3.9	2.7	2.2	2.1
Manufacturing	292.5	291.8	289.1	286.0	286.0	284.5	284.0	283.6
% Ch, Annual Rate	0.5	-0.9	-3.6	-4.3	0.0	-2.0	-0.8	-0.6
Durable Manufacturing	210.3	209.0	206.9	203.4	202.4	201.2	200.2	199.3
% Ch, Annual Rate	-1.0	-2.4	-4.0	-6.7	-1.9	-2.4	-2.0	-1.8
Wood Products	13.2	13.1	13.2	13.0	13.0	12.9	12.8	12.8
% Ch, Annual Rate	-1.6	-0.9	0.5	-5.4	1.3	-3.4	-3.5	0.9
Primary and Fabricated Metals	25.5	25.3	25.1	24.9	25.2	25.5	26.1	26.3
% Ch, Annual Rate	-2.8	-4.5	-2.6	-2.3	4.8	3.5	10.0	4.0
Computer and Electronic Products	20.1	20.1	20.2	19.9	19.5	19.9	20.1	20.4
% Ch, Annual Rate	1.3	0.8	0.7	-5.3	-7.1	6.9	6.1	4.5
Machinery and Electrical Equipment	20.5	20.5	20.4	20.4	20.4	20.6	20.9	21.0
% Ch, Annual Rate	-1.1	-0.6	-1.8	-0.8	0.6	3.7	5.5	3.5
Aerospace	93.0	92.0	90.7	88.0	86.6	84.6	82.8	81.1
% Ch, Annual Rate	-2.0	-4.1	-5.5	-11.5	-6.1	-9.0	-8.3	-7.8
Other Transportation Equip.	10.2	10.2	9.9	9.9	9.9	9.9	9.8	9.7
% Ch, Annual Rate	-3.2	-1.6	-8.1	-2.4	1.5	-1.0	-2.1	-5.8
Other Durables	27.8	27.9	27.5	27.4	27.7	27.9	27.7	27.9
% Ch, Annual Rate	3.6	1.0	-5.6	-1.7	5.4	3.2	-3.0	2.9
Nondurable Manufacturing	82.2	82.8	82.2	82.6	83.5	83.3	83.8	84.3
% Ch, Annual Rate	4.4	2.7	-2.7	1.8	4.7	-1.0	2.2	2.5
Food Manufacturing	37.7	37.9	37.0	37.5	38.1	37.7	37.5	37.6
% Ch, Annual Rate	7.7	2.3	-9.2	6.0	6.6	-4.8	-2.1	1.3
Paper and Paper Products	7.8	7.8	7.8	7.7	7.8	7.9	7.9	7.9
% Ch, Annual Rate	-8.4	1.2	-1.5	-1.8	5.5	3.7	-2.2	2.3
Other Nondurables	36.8	37.1	37.5	37.3	37.6	37.8	38.4	38.8
% Ch, Annual Rate	3.9	3.5	4.1	-1.5	2.7	1.9	7.5	3.8
Natural Resources and Mining	6.3	6.3	6.3	6.1	6.1	6.2	6.1	6.2
% Ch, Annual Rate	1.1	2.0	-5.2	-10.4	1.4	5.2	-5.7	4.0
Construction	182.3	184.9	187.3	191.5	197.7	200.9	201.4	204.0
% Ch, Annual Rate	16.5	5.9	5.4	9.2	13.6	6.6	0.9	5.3
Trade, Transportation, and Utilities	598.0	605.6	610.7	614.5	623.5	627.4	630.4	633.8
% Ch, Annual Rate	3.7	5.2	3.5	2.5	6.0	2.5	1.9	2.1
Wholesale Trade	132.5	133.1	133.2	133.7	135.3	135.9	136.6	137.2
% Ch, Annual Rate	0.8	1.6	0.5	1.4	4.8	1.8	2.3	1.8
Retail Trade	363.0	368.6	372.5	375.1	381.9	384.7	386.9	389.6
% Ch, Annual Rate	6.1	6.3	4.3	2.9	7.4	2.9	2.3	2.9
Trans., Warehousing, and Utilities	102.5	103.9	105.1	105.7	106.4	106.9	106.9	106.9
% Ch, Annual Rate	-0.9	5.8	4.3	2.4	2.6	2.0	0.1	-0.1
Information	118.0	119.8	121.6	123.0	123.6	124.2	124.6	125.0
% Ch, Annual Rate	3.6	6.4	6.1	4.6	1.9	2.2	1.2	1.4
Software Publishers	57.5	58.4	59.3	60.0	60.8	61.0	61.9	61.9
% Ch, Annual Rate	4.8	6.4	6.6	4.2	5.4	1.8	5.8	0.3
Other Publishing Industries	6.0	6.0	5.9	5.8	5.8	5.6	5.4	5.3
% Ch, Annual Rate	-2.5	-4.3	-3.9	-3.3	-3.1	-14.2	-10.4	-11.1
Other Information	54.4	55.5	56.4	57.2	57.0	57.6	57.3	57.8
% Ch, Annual Rate	3.1	7.8	6.7	6.0	-1.2	4.4	-2.4	4.0
Financial Activities	148.9	150.0	151.5	151.9	154.2	155.3	156.6	157.1
% Ch, Annual Rate	2.3	2.8	4.1	1.0	6.2	3.0	3.2	1.4
Professional and Business Services	399.2	402.9	404.5	405.6	411.3	415.3	418.3	421.4
% Ch, Annual Rate	4.3	3.7	1.6	1.2	5.6	3.9	3.0	3.0
Education and Health Services	458.6	462.0	465.5	468.3	471.2	473.1	477.1	481.2
% Ch, Annual Rate	5.1	2.9	3.1	2.5	2.4	1.6	3.5	3.5
Leisure and Hospitality	319.4	322.3	324.6	327.4	330.5	333.9	336.4	338.1
% Ch, Annual Rate	4.8	3.6	2.9	3.5	3.8	4.1	3.0	2.1
Other Services	116.6	117.8	117.6	118.7	120.1	121.1	121.6	122.2
% Ch, Annual Rate	4.4	4.2	-0.9	4.0	4.7	3.4	1.8	1.9
Federal Government	74.2	74.5	74.5	75.0	75.2	75.6	75.5	75.5
% Ch, Annual Rate	1.4	1.6	0.3	2.5	1.2	2.3	-0.5	-0.3
State and Local Government	493.3	496.5	501.0	505.4	505.8	509.5	513.2	514.6
% Ch, Annual Rate	2.7	2.6	3.7	3.6	0.3	3.0	2.9	1.1

Table A2.4 (continued)

**Washington Nonagricultural Employment by Industry (Thousands)**

Forecast 2017 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Nonfarm Payroll Employment	3,380.6	3,398.0	3,414.3	3,428.5	3,443.1	3,456.2	3,467.1	3,478.9
% Ch, Annual Rate	2.1	2.1	1.9	1.7	1.7	1.5	1.3	1.4
Manufacturing	284.4	286.1	287.0	287.8	289.1	290.1	291.3	292.3
% Ch, Annual Rate	1.2	2.4	1.2	1.2	1.8	1.4	1.6	1.3
Durable Manufacturing	200.1	201.3	201.9	202.4	203.0	203.5	204.2	204.8
% Ch, Annual Rate	1.7	2.3	1.2	1.1	1.2	1.0	1.3	1.1
Wood Products	12.9	13.1	13.2	13.3	13.3	13.4	13.4	13.5
% Ch, Annual Rate	4.2	5.7	2.3	2.3	2.0	0.9	1.5	1.2
Primary and Fabricated Metals	26.5	26.7	26.7	26.8	27.1	27.4	27.8	28.2
% Ch, Annual Rate	2.8	3.1	0.5	1.5	4.4	4.4	5.8	5.8
Computer and Electronic Products	20.9	21.5	21.9	22.2	22.4	22.6	22.7	22.8
% Ch, Annual Rate	11.9	11.3	7.3	6.4	3.5	2.7	2.2	1.5
Machinery and Electrical Equipment	21.4	21.9	22.4	22.8	23.3	23.7	24.1	24.6
% Ch, Annual Rate	6.6	10.5	9.0	7.5	8.7	7.2	7.9	7.4
Aerospace	80.7	80.3	79.9	79.5	79.1	78.7	78.3	77.9
% Ch, Annual Rate	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Other Transportation Equip.	9.6	9.5	9.4	9.3	9.2	9.2	9.2	9.2
% Ch, Annual Rate	-5.0	-3.9	-3.5	-3.8	-3.9	-0.6	0.0	-1.4
Other Durables	28.1	28.3	28.4	28.5	28.6	28.6	28.7	28.7
% Ch, Annual Rate	2.3	2.3	1.6	1.4	1.2	0.8	0.6	0.5
Nondurable Manufacturing	84.3	84.8	85.1	85.4	86.1	86.6	87.1	87.5
% Ch, Annual Rate	0.0	2.6	1.4	1.4	3.2	2.4	2.2	1.9
Food Manufacturing	37.6	37.9	38.1	38.3	38.7	39.0	39.1	39.2
% Ch, Annual Rate	0.0	3.7	1.6	1.9	4.7	2.5	1.8	1.3
Paper and Paper Products	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
% Ch, Annual Rate	-3.3	-0.4	-0.8	-1.6	-0.6	-0.2	0.1	-0.2
Other Nondurables	38.9	39.1	39.2	39.4	39.6	39.9	40.2	40.5
% Ch, Annual Rate	0.7	2.0	1.6	1.6	2.5	2.8	3.1	2.9
Natural Resources and Mining	6.2	6.2	6.2	6.3	6.3	6.3	6.4	6.4
% Ch, Annual Rate	2.5	0.0	1.8	3.4	2.4	1.4	1.3	1.1
Construction	206.0	206.3	206.7	207.0	207.7	208.2	208.2	208.9
% Ch, Annual Rate	4.1	0.5	0.7	0.6	1.4	1.0	0.0	1.2
Trade, Transportation, and Utilities	636.4	638.6	641.0	643.6	646.3	648.0	649.6	650.7
% Ch, Annual Rate	1.7	1.4	1.5	1.6	1.7	1.1	1.0	0.7
Wholesale Trade	137.8	138.4	139.2	139.9	140.4	140.8	141.0	141.3
% Ch, Annual Rate	1.6	1.8	2.4	1.9	1.4	1.2	0.6	0.9
Retail Trade	391.3	392.5	393.9	395.6	397.6	398.9	400.2	401.0
% Ch, Annual Rate	1.8	1.2	1.4	1.7	2.1	1.2	1.3	0.8
Trans., Warehousing, and Utilities	107.3	107.7	107.9	108.1	108.3	108.4	108.4	108.4
% Ch, Annual Rate	1.6	1.4	0.9	0.8	0.5	0.4	0.1	0.0
Information	124.0	124.8	125.4	125.8	125.9	125.9	126.4	127.5
% Ch, Annual Rate	-3.3	2.5	1.9	1.4	0.3	0.1	1.5	3.4
Software Publishers	61.9	61.9	61.9	62.1	62.2	62.3	62.4	62.5
% Ch, Annual Rate	-0.3	-0.1	0.2	1.0	0.7	0.7	0.9	0.8
Other Publishing Industries	5.1	4.9	4.7	4.6	4.5	4.4	4.3	4.2
% Ch, Annual Rate	-14.7	-14.4	-12.5	-6.9	-9.3	-9.7	-8.7	-9.4
Other Information	57.0	58.0	58.8	59.1	59.2	59.2	59.7	60.7
% Ch, Annual Rate	-5.4	7.1	5.1	2.5	0.6	0.2	2.9	7.1
Financial Activities	158.2	158.5	158.6	158.7	158.7	158.5	158.2	158.0
% Ch, Annual Rate	2.7	0.8	0.2	0.4	0.0	-0.5	-0.8	-0.4
Professional and Business Services	426.6	432.7	438.7	444.1	450.1	455.2	459.5	463.5
% Ch, Annual Rate	4.9	5.9	5.7	5.0	5.5	4.7	3.8	3.5
Education and Health Services	484.4	487.6	489.9	491.8	493.1	495.2	496.6	498.4
% Ch, Annual Rate	2.7	2.7	1.9	1.5	1.1	1.7	1.2	1.4
Leisure and Hospitality	339.9	341.1	342.7	343.8	344.5	345.2	345.8	346.7
% Ch, Annual Rate	2.1	1.5	1.8	1.3	0.9	0.8	0.8	1.0
Other Services	122.6	122.9	123.3	123.6	123.9	124.2	124.3	124.5
% Ch, Annual Rate	1.4	0.9	1.1	1.1	1.0	0.8	0.6	0.4
Federal Government	75.4	75.1	74.7	74.4	74.4	74.3	74.2	74.2
% Ch, Annual Rate	-0.3	-1.9	-2.0	-1.2	-0.3	-0.4	-0.4	-0.4
State and Local Government	516.4	518.1	520.2	521.7	523.1	525.0	526.5	528.0
% Ch, Annual Rate	1.4	1.4	1.6	1.1	1.1	1.4	1.2	1.1

Table A2.4 (continued)

**Washington Nonagricultural Employment by Industry (Thousands)**

Forecast 2017 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	3,488.8	3,507.6	3,514.7	3,523.6	3,533.1	3,542.8	3,552.2	3,561.6
% Ch, Annual Rate	1.1	2.2	0.8	1.0	1.1	1.1	1.1	1.1
Manufacturing	293.3	294.2	295.4	296.5	297.3	298.1	298.9	299.8
% Ch, Annual Rate	1.5	1.2	1.6	1.5	1.1	1.0	1.1	1.2
Durable Manufacturing	205.5	206.2	207.0	207.9	208.5	209.2	210.0	210.7
% Ch, Annual Rate	1.5	1.2	1.6	1.7	1.3	1.3	1.5	1.5
Wood Products	13.5	13.6	13.7	13.9	14.0	14.1	14.2	14.3
% Ch, Annual Rate	1.1	2.5	4.0	4.4	3.6	3.1	3.2	3.2
Primary and Fabricated Metals	28.5	28.8	29.2	29.4	29.6	29.7	29.8	30.0
% Ch, Annual Rate	4.9	4.2	4.7	4.0	1.7	1.6	2.2	2.5
Computer and Electronic Products	22.8	22.8	22.8	22.8	22.8	22.9	23.0	23.1
% Ch, Annual Rate	0.6	-0.9	-0.2	0.5	0.7	1.4	1.9	2.0
Machinery and Electrical Equipment	24.9	25.2	25.6	26.0	26.4	26.7	27.2	27.6
% Ch, Annual Rate	6.2	4.8	5.8	6.1	5.9	6.1	6.4	6.5
Aerospace	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Transportation Equip.	9.1	9.1	9.1	9.0	9.0	8.9	8.8	8.7
% Ch, Annual Rate	-1.6	-1.3	-1.5	-2.0	-2.4	-2.9	-3.3	-3.4
Other Durables	28.7	28.8	28.8	28.9	28.9	29.0	29.0	29.0
% Ch, Annual Rate	0.5	0.4	1.0	1.0	0.7	0.5	0.5	0.4
Nondurable Manufacturing	87.8	88.0	88.4	88.6	88.8	88.9	89.0	89.1
% Ch, Annual Rate	1.4	1.1	1.6	1.2	0.7	0.5	0.4	0.4
Food Manufacturing	39.3	39.3	39.4	39.5	39.5	39.5	39.5	39.5
% Ch, Annual Rate	0.6	0.2	1.0	0.7	0.3	0.1	0.0	-0.1
Paper and Paper Products	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.6
% Ch, Annual Rate	-0.4	-0.6	-0.2	-0.5	-1.4	-1.4	-1.5	-1.2
Other Nondurables	40.7	41.0	41.2	41.4	41.6	41.7	41.8	42.0
% Ch, Annual Rate	2.6	2.4	2.4	2.0	1.4	1.2	1.1	1.3
Natural Resources and Mining	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4
% Ch, Annual Rate	0.7	0.0	0.4	0.6	1.1	0.7	0.7	0.7
Construction	208.6	209.2	209.6	210.0	209.8	209.7	209.5	209.4
% Ch, Annual Rate	-0.5	1.1	0.8	0.7	-0.3	-0.3	-0.2	-0.2
Trade, Transportation, and Utilities	651.9	653.0	654.2	654.9	655.0	655.4	655.4	655.5
% Ch, Annual Rate	0.8	0.7	0.7	0.4	0.1	0.2	0.0	0.1
Wholesale Trade	141.6	141.9	142.2	142.4	142.7	142.9	143.0	143.1
% Ch, Annual Rate	0.7	0.8	0.9	0.7	0.7	0.5	0.3	0.4
Retail Trade	402.0	402.8	403.6	404.0	403.8	404.0	404.0	404.0
% Ch, Annual Rate	1.0	0.8	0.8	0.4	-0.2	0.2	0.0	0.0
Trans., Warehousing, and Utilities	108.4	108.4	108.4	108.5	108.5	108.5	108.5	108.5
% Ch, Annual Rate	-0.1	0.0	0.2	0.2	0.2	0.0	-0.1	-0.1
Information	128.4	129.0	129.9	130.8	131.8	132.8	133.8	134.6
% Ch, Annual Rate	2.9	2.1	2.7	2.8	3.1	3.1	2.8	2.5
Software Publishers	62.7	62.8	63.0	63.1	63.3	63.4	63.6	63.7
% Ch, Annual Rate	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0
Other Publishing Industries	4.1	4.0	3.9	3.8	3.7	3.6	3.6	3.5
% Ch, Annual Rate	-9.5	-9.6	-8.9	-9.0	-8.3	-8.8	-8.8	-9.0
Other Information	61.6	62.2	63.1	63.9	64.8	65.8	66.6	67.4
% Ch, Annual Rate	6.0	4.3	5.3	5.5	6.0	5.8	5.2	4.6
Financial Activities	157.9	157.8	157.8	158.0	158.0	157.8	157.6	157.2
% Ch, Annual Rate	-0.4	-0.2	0.1	0.3	0.0	-0.4	-0.7	-0.9
Professional and Business Services	467.1	470.9	474.9	478.6	482.1	485.5	489.1	492.7
% Ch, Annual Rate	3.1	3.3	3.4	3.1	2.9	2.8	3.0	3.0
Education and Health Services	499.8	500.9	502.5	504.3	506.5	508.3	509.9	511.8
% Ch, Annual Rate	1.1	0.9	1.3	1.4	1.8	1.4	1.3	1.5
Leisure and Hospitality	347.8	348.8	350.0	351.0	351.6	352.5	353.3	354.0
% Ch, Annual Rate	1.2	1.2	1.3	1.2	0.7	1.1	0.9	0.8
Other Services	124.7	124.9	125.1	125.4	125.7	125.9	126.1	126.2
% Ch, Annual Rate	0.7	0.7	0.8	0.8	0.9	0.7	0.6	0.5
Federal Government	73.6	81.8	76.8	74.2	73.7	73.6	73.5	73.5
% Ch, Annual Rate	-2.9	52.5	-22.3	-12.9	-2.8	-0.4	-0.3	-0.2
State and Local Government	529.3	530.6	532.1	533.6	535.2	536.9	538.6	540.3
% Ch, Annual Rate	1.0	1.0	1.1	1.1	1.2	1.3	1.3	1.2

Table A3.1

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

Forecast 2017 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	14,818.2	15,553.0	15,928.7	16,423.2	17,069.3	17,889.8	18,747.4	19,575.6
% Ch	5.3	5.0	2.4	3.1	3.9	4.8	4.8	4.4
Total Wage and Salary Disbursements	7,476.8	7,858.9	8,085.3	8,345.3	8,660.5	9,010.9	9,371.1	9,759.2
% Ch	5.1	5.1	2.9	3.2	3.8	4.0	4.0	4.1
Nonwage Personal Income	7,341.4	7,694.1	7,843.5	8,077.9	8,408.8	8,878.8	9,376.3	9,816.4
% Ch	5.5	4.8	1.9	3.0	4.1	5.6	5.6	4.7
Supplements to Wages and Salaries	1,779.7	1,849.4	1,893.4	1,955.2	2,007.4	2,064.3	2,119.8	2,160.1
% Ch	3.1	3.9	2.4	3.3	2.7	2.8	2.7	1.9
Proprietor's Income	1,315.8	1,318.8	1,341.9	1,385.3	1,440.7	1,493.4	1,543.2	1,599.5
% Ch	2.4	0.2	1.8	3.2	4.0	3.7	3.3	3.7
Farm	68.2	53.7	43.2	33.3	28.4	28.2	30.9	34.3
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,247.7	1,265.1	1,298.7	1,352.0	1,412.3	1,465.2	1,512.3	1,565.3
% Ch	4.2	1.4	2.7	4.1	4.5	3.7	3.2	3.5
Less: Contribution For Govt. Soc. Ins.	1,155.3	1,208.0	1,245.3	1,301.0	1,349.0	1,402.4	1,458.7	1,520.6
% Ch	4.6	4.6	3.1	4.5	3.7	4.0	4.0	4.2
Dividends/Int./Rent	2,856.9	3,049.6	3,085.1	3,187.2	3,323.5	3,567.8	3,840.6	4,073.4
% Ch	8.9	6.7	1.2	3.3	4.3	7.4	7.6	6.1
Transfer Payments	2,544.4	2,684.4	2,768.4	2,851.2	2,986.3	3,155.7	3,331.4	3,504.0
% Ch	4.8	5.5	3.1	3.0	4.7	5.7	5.6	5.2

Table A3.2

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

Forecast 2017 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	15,751.0	15,910.1	16,028.0	16,025.7	16,245.2	16,363.9	16,473.5	16,610.2
% Ch, Annual Rate	-0.5	4.1	3.0	-0.1	5.6	3.0	2.7	3.4
Total Wage and Salary Disbursements	7,964.9	8,090.2	8,178.1	8,107.8	8,232.1	8,323.1	8,377.5	8,448.7
% Ch, Annual Rate	-3.2	6.4	4.4	-3.4	6.3	4.5	2.6	3.4
Nonwage Personal Income	7,786.1	7,819.9	7,849.9	7,917.9	8,013.1	8,040.8	8,096.0	8,161.5
% Ch, Annual Rate	2.4	1.7	1.5	3.5	4.9	1.4	2.8	3.3
Supplements to Wages and Salaries	1,873.7	1,889.4	1,903.4	1,907.1	1,934.3	1,950.0	1,963.0	1,973.6
% Ch, Annual Rate	-0.4	3.4	3.0	0.8	5.8	3.3	2.7	2.2
Proprietor's Income	1,327.6	1,339.5	1,346.0	1,354.5	1,380.3	1,374.8	1,385.0	1,401.2
% Ch, Annual Rate	0.7	3.6	2.0	2.6	7.8	-1.6	3.0	4.8
Farm	46.8	46.7	41.4	37.8	41.9	33.0	30.2	28.1
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,280.8	1,292.8	1,304.6	1,316.7	1,338.4	1,341.8	1,354.8	1,373.1
% Ch, Annual Rate	2.1	3.8	3.7	3.8	6.8	1.0	3.9	5.5
Less: Contribution For Govt. Soc. Ins.	1,227.5	1,245.4	1,258.2	1,250.2	1,284.1	1,297.6	1,306.1	1,316.4
% Ch, Annual Rate	-1.4	5.9	4.2	-2.5	11.3	4.3	2.6	3.2
Dividends/Int./Rent	3,072.5	3,076.1	3,081.4	3,110.4	3,150.9	3,175.9	3,198.4	3,223.6
% Ch, Annual Rate	1.8	0.5	0.7	3.8	5.3	3.2	2.9	3.2
Transfer Payments	2,739.9	2,760.2	2,777.4	2,795.9	2,831.9	2,837.7	2,855.7	2,879.5
% Ch, Annual Rate	4.3	3.0	2.5	2.7	5.3	0.8	2.6	3.4

Table A3.2 (continued)

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

Forecast 2017 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	16,799.2	16,969.4	17,153.1	17,355.5	17,581.6	17,783.4	17,994.7	18,199.4
% Ch, Annual Rate	4.6	4.1	4.4	4.8	5.3	4.7	4.8	4.6
Total Wage and Salary Disbursements	8,533.8	8,617.1	8,702.2	8,789.0	8,882.4	8,968.7	9,053.2	9,139.3
% Ch, Annual Rate	4.1	4.0	4.0	4.1	4.3	3.9	3.8	3.9
Nonwage Personal Income	8,265.4	8,352.3	8,450.9	8,566.6	8,699.2	8,814.6	8,941.5	9,060.0
% Ch, Annual Rate	5.2	4.3	4.8	5.6	6.3	5.4	5.9	5.4
Supplements to Wages and Salaries	1,988.5	2,001.4	2,013.3	2,026.5	2,044.4	2,057.5	2,070.8	2,084.3
% Ch, Annual Rate	3.1	2.6	2.4	2.7	3.6	2.6	2.6	2.6
Proprietor's Income	1,416.9	1,436.7	1,447.7	1,461.4	1,475.7	1,488.7	1,498.9	1,510.4
% Ch, Annual Rate	4.5	5.7	3.1	3.8	4.0	3.6	2.8	3.1
Farm	28.1	29.1	28.4	28.1	27.7	27.4	28.4	29.1
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,388.8	1,407.6	1,419.3	1,433.3	1,448.0	1,461.2	1,470.5	1,481.3
% Ch, Annual Rate	4.6	5.5	3.4	4.0	4.2	3.7	2.6	3.0
Less: Contribution For Govt. Soc. Ins.	1,333.0	1,343.9	1,354.1	1,365.0	1,387.5	1,397.4	1,407.0	1,417.6
% Ch, Annual Rate	5.2	3.3	3.1	3.3	6.8	2.9	2.8	3.1
Dividends/Int./Rent	3,257.1	3,288.4	3,342.6	3,405.8	3,465.5	3,529.4	3,605.1	3,671.3
% Ch, Annual Rate	4.2	3.9	6.8	7.8	7.2	7.6	8.9	7.6
Transfer Payments	2,936.0	2,969.7	3,001.5	3,037.8	3,101.1	3,136.5	3,173.7	3,211.7
% Ch, Annual Rate	8.1	4.7	4.4	4.9	8.6	4.6	4.8	4.9

Table A3.2 (continued)

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

Forecast 2017 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	18,435.6	18,650.6	18,853.8	19,049.4	19,272.6	19,476.5	19,674.2	19,878.8
% Ch, Annual Rate	5.3	4.7	4.4	4.2	4.8	4.3	4.1	4.2
Total Wage and Salary Disbursements	9,230.7	9,325.8	9,417.5	9,510.3	9,610.1	9,708.3	9,808.4	9,909.9
% Ch, Annual Rate	4.1	4.2	4.0	4.0	4.3	4.1	4.2	4.2
Nonwage Personal Income	9,204.9	9,324.9	9,436.2	9,539.1	9,662.5	9,768.3	9,865.8	9,968.9
% Ch, Annual Rate	6.5	5.3	4.9	4.4	5.3	4.5	4.1	4.2
Supplements to Wages and Salaries	2,104.0	2,115.3	2,125.8	2,133.9	2,148.7	2,155.5	2,163.5	2,172.6
% Ch, Annual Rate	3.8	2.2	2.0	1.5	2.8	1.3	1.5	1.7
Proprietor's Income	1,520.8	1,536.3	1,551.6	1,564.0	1,577.0	1,592.2	1,607.0	1,621.9
% Ch, Annual Rate	2.8	4.1	4.1	3.2	3.4	3.9	3.8	3.8
Farm	29.3	30.6	31.9	31.8	32.9	34.1	34.9	35.2
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,491.5	1,505.7	1,519.8	1,532.2	1,544.1	1,558.1	1,572.1	1,586.7
% Ch, Annual Rate	2.8	3.9	3.8	3.3	3.2	3.7	3.6	3.7
Less: Contribution For Govt. Soc. Ins.	1,441.9	1,453.0	1,463.6	1,476.1	1,503.1	1,514.6	1,526.3	1,538.2
% Ch, Annual Rate	7.0	3.1	2.9	3.5	7.5	3.1	3.1	3.1
Dividends/Int./Rent	3,742.6	3,812.0	3,874.0	3,933.8	3,993.7	4,051.2	4,099.2	4,149.6
% Ch, Annual Rate	8.0	7.6	6.7	6.3	6.2	5.9	4.8	5.0
Transfer Payments	3,279.5	3,314.3	3,348.4	3,383.5	3,446.3	3,484.0	3,522.5	3,563.0
% Ch, Annual Rate	8.7	4.3	4.2	4.3	7.6	4.4	4.5	4.7

Table A3.3

**Washington Personal Income by Component (Billions of Dollars)**

Forecast 2017 to 2021

	2014	2015	2016	2017	2018	2019	2020	2021
Personal Income	355.677	372.125	388.989	411.623	430.047	453.767	478.354	502.238
% Ch	6.8	4.6	4.5	5.8	4.5	5.5	5.4	5.0
Total Wage and Salary Disbursements	181.710	191.805	204.099	218.805	228.083	239.267	250.639	262.744
% Ch	6.5	5.6	6.4	7.2	4.2	4.9	4.8	4.8
Manufacturing	21.773	21.799	21.781	21.620	21.930	22.804	23.791	24.877
% Ch	5.9	0.1	-0.1	-0.7	1.4	4.0	4.3	4.6
Durable Manufacturing	17.667	17.591	17.356	17.027	17.166	17.782	18.522	19.381
% Ch	6.5	-0.4	-1.3	-1.9	0.8	3.6	4.2	4.6
Nondurable Manufacturing	4.106	4.208	4.425	4.593	4.764	5.022	5.268	5.496
% Ch	3.7	2.5	5.2	3.8	3.7	5.4	4.9	4.3
Nonmanufacturing	153.167	163.012	175.051	189.832	198.540	208.564	218.653	229.355
% Ch	7.0	6.4	7.4	8.4	4.6	5.0	4.8	4.9
Other Private Wages	1.111	1.135	1.243	1.186	1.225	1.272	1.318	1.367
% Ch	2.9	2.1	9.6	-4.6	3.3	3.8	3.6	3.7
Farm Wages	1.534	1.756	1.805	1.859	1.943	2.040	2.138	2.243
% Ch	-2.5	14.5	2.8	3.0	4.5	5.0	4.8	4.9
Military Wages	4.125	4.103	4.219	4.308	4.446	4.587	4.740	4.903
% Ch	-4.3	-0.6	2.8	2.1	3.2	3.2	3.3	3.4
Nonwage Personal Income	173.967	180.320	184.890	192.818	201.964	214.500	227.714	239.494
% Ch	7.1	3.7	2.5	4.3	4.7	6.2	6.2	5.2
Supplements to Wages and Salaries	42.724	43.783	46.626	48.817	50.559	52.455	54.278	55.756
% Ch	3.0	2.5	6.5	4.7	3.6	3.8	3.5	2.7
Proprietor's Income	27.307	30.359	30.992	32.153	33.346	34.388	35.354	36.461
% Ch	2.2	11.2	2.1	3.7	3.7	3.1	2.8	3.1
Farm	1.260	2.497	1.596	1.167	1.017	0.957	0.945	0.951
% Ch	...	...	...	...	...	...	...	...
Nonfarm	26.047	27.862	29.396	30.986	32.329	33.432	34.409	35.510
% Ch	3.7	7.0	5.5	5.4	4.3	3.4	2.9	3.2
Less: Contribution For Govt. Soc. Ins.	30.402	31.799	33.898	35.789	37.330	39.064	40.864	42.817
% Ch	4.9	4.6	6.6	5.6	4.3	4.6	4.6	4.8
Plus: Residence Adjustment	3.203	3.657	3.835	3.929	4.083	4.250	4.424	4.612
% Ch	-2.1	14.2	4.8	2.5	3.9	4.1	4.1	4.3
Dividends/Int./Rent	75.706	77.925	79.612	83.241	87.480	94.558	102.398	109.202
% Ch	9.6	2.9	2.2	4.6	5.1	8.1	8.3	6.6
Transfer Payments	55.429	56.395	57.724	60.466	63.826	67.913	72.125	76.281
% Ch	8.8	1.7	2.4	4.8	5.6	6.4	6.2	5.8
State U.I. Benefits	1.052	0.972	0.947	0.884	0.803	0.774	0.756	0.749
% Ch	-39.0	-7.6	-2.6	-6.7	-9.1	-3.7	-2.3	-0.9
Other Transfers	54.377	55.423	56.777	59.582	63.023	67.138	71.369	75.532
% Ch	10.5	1.9	2.4	4.9	5.8	6.5	6.3	5.8

Table A3.4

**Washington Personal Income by Component (Billions of Dollars)**

Forecast 2017 to 2021

	2016:1	2016:2	2016:3	2016:4	2017:1	2017:2	2017:3	2017:4
Personal Income	381.664	386.905	391.825	395.563	406.607	410.103	413.031	416.750
% Ch, Annual Rate	5.2	5.6	5.2	3.9	11.6	3.5	2.9	3.7
Total Wage and Salary Disbursements	200.063	203.243	206.206	206.883	216.084	218.292	219.471	221.373
% Ch, Annual Rate	8.6	6.5	6.0	1.3	19.0	4.1	2.2	3.5
Manufacturing	21.571	21.892	21.998	21.662	22.105	21.499	21.455	21.421
% Ch, Annual Rate	-4.4	6.1	1.9	-6.0	8.4	-10.5	-0.8	-0.6
Durable Manufacturing	17.187	17.475	17.550	17.212	17.537	16.941	16.854	16.776
% Ch, Annual Rate	-7.5	6.9	1.7	-7.5	7.8	-12.9	-2.0	-1.9
Nondurable Manufacturing	4.384	4.417	4.448	4.450	4.568	4.558	4.600	4.646
% Ch, Annual Rate	9.6	3.0	2.8	0.2	11.1	-0.9	3.8	4.0
Nonmanufacturing	171.123	174.081	176.965	178.036	186.684	189.444	190.643	192.558
% Ch, Annual Rate	9.8	7.1	6.8	2.4	20.9	6.0	2.6	4.1
Other Private Wages	1.354	1.246	1.217	1.156	1.175	1.185	1.187	1.195
% Ch, Annual Rate	140.7	-28.2	-9.1	-18.7	6.9	3.4	0.7	2.5
Farm Wages	1.787	1.799	1.811	1.823	1.835	1.855	1.864	1.881
% Ch, Annual Rate	2.1	2.7	2.7	2.7	2.7	4.5	1.9	3.6
Military Wages	4.228	4.224	4.215	4.207	4.284	4.307	4.321	4.318
% Ch, Annual Rate	8.1	-0.3	-0.8	-0.8	7.5	2.2	1.3	-0.3
Nonwage Personal Income	181.601	183.662	185.618	188.679	190.523	191.811	193.560	195.377
% Ch, Annual Rate	1.6	4.6	4.3	6.8	4.0	2.7	3.7	3.8
Supplements to Wages and Salaries	45.985	46.453	46.638	47.427	48.131	48.683	49.083	49.373
% Ch, Annual Rate	13.8	4.1	1.6	6.9	6.1	4.7	3.3	2.4
Proprietor's Income	30.500	30.771	31.150	31.546	31.876	31.925	32.235	32.575
% Ch, Annual Rate	-6.1	3.6	5.0	5.2	4.3	0.6	3.9	4.3
Farm	1.654	1.649	1.631	1.449	1.286	1.181	1.123	1.076
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	28.846	29.122	29.519	30.096	30.590	30.744	31.112	31.500
% Ch, Annual Rate	6.2	3.9	5.6	8.1	6.7	2.0	4.9	5.1
Less: Contribution For Govt. Soc. Ins.	33.454	33.791	33.989	34.357	35.207	35.696	35.985	36.269
% Ch, Annual Rate	13.8	4.1	2.4	4.4	10.3	5.7	3.3	3.2
Plus: Residence Adjustment	3.749	3.832	3.887	3.870	3.869	3.916	3.948	3.984
% Ch, Annual Rate	-1.5	9.1	5.9	-1.8	-0.1	5.0	3.2	3.8
Dividends/Int./Rent	78.248	79.230	79.908	81.062	82.007	82.862	83.640	84.456
% Ch, Annual Rate	2.5	5.1	3.5	5.9	4.7	4.2	3.8	4.0
Transfer Payments	56.572	57.166	58.024	59.132	59.848	60.120	60.639	61.259
% Ch, Annual Rate	2.3	4.3	6.1	7.9	4.9	1.8	3.5	4.2
State U.I. Benefits	0.965	0.942	0.966	0.915	0.903	0.898	0.898	0.836
% Ch, Annual Rate	-1.8	-9.0	10.6	-19.7	-5.0	-2.2	0.0	-24.8
Other Transfers	55.608	56.224	57.058	58.217	58.945	59.222	59.741	60.422
% Ch, Annual Rate	2.4	4.5	6.1	8.4	5.1	1.9	3.6	4.6

Table A3.4 (continued)

**Washington Personal Income by Component (Billions of Dollars)**

Forecast 2017 to 2021

	2018:1	2018:2	2018:3	2018:4	2019:1	2019:2	2019:3	2019:4
Personal Income	422.138	427.129	432.560	438.362	444.802	450.711	456.796	462.759
% Ch, Annual Rate	5.3	4.8	5.2	5.5	6.0	5.4	5.5	5.3
Total Wage and Salary Disbursements	224.059	226.720	229.431	232.123	235.127	237.925	240.617	243.400
% Ch, Annual Rate	4.9	4.8	4.9	4.8	5.3	4.8	4.6	4.7
Manufacturing	21.606	21.839	22.036	22.238	22.468	22.688	22.918	23.141
% Ch, Annual Rate	3.5	4.4	3.7	3.7	4.2	4.0	4.1	3.9
Durable Manufacturing	16.927	17.099	17.244	17.392	17.547	17.699	17.862	18.021
% Ch, Annual Rate	3.7	4.1	3.5	3.5	3.6	3.5	3.7	3.6
Nondurable Manufacturing	4.678	4.740	4.792	4.846	4.922	4.989	5.056	5.120
% Ch, Annual Rate	2.8	5.4	4.4	4.6	6.4	5.6	5.5	5.2
Nonmanufacturing	194.911	197.286	199.752	202.211	204.827	207.356	209.773	212.300
% Ch, Annual Rate	5.0	5.0	5.1	5.0	5.3	5.0	4.7	4.9
Other Private Wages	1.207	1.219	1.232	1.243	1.256	1.267	1.278	1.289
% Ch, Annual Rate	4.2	4.1	4.0	3.8	4.2	3.7	3.4	3.5
Farm Wages	1.906	1.930	1.955	1.979	2.005	2.029	2.052	2.076
% Ch, Annual Rate	5.4	5.3	5.2	5.0	5.4	4.8	4.6	4.7
Military Wages	4.430	4.444	4.457	4.452	4.571	4.585	4.597	4.595
% Ch, Annual Rate	10.8	1.3	1.1	-0.4	11.1	1.2	1.0	-0.1
Nonwage Personal Income	198.079	200.409	203.129	206.239	209.675	212.786	216.180	219.359
% Ch, Annual Rate	5.6	4.8	5.5	6.3	6.8	6.1	6.5	6.0
Supplements to Wages and Salaries	49.894	50.354	50.779	51.210	51.808	52.242	52.664	53.107
% Ch, Annual Rate	4.3	3.7	3.4	3.4	4.8	3.4	3.3	3.4
Proprietor's Income	32.884	33.262	33.483	33.755	34.042	34.304	34.492	34.715
% Ch, Annual Rate	3.8	4.7	2.7	3.3	3.5	3.1	2.2	2.6
Farm	1.047	1.029	1.005	0.986	0.970	0.956	0.952	0.948
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	31.837	32.232	32.478	32.768	33.072	33.348	33.539	33.767
% Ch, Annual Rate	4.3	5.1	3.1	3.6	3.8	3.4	2.3	2.7
Less: Contribution For Govt. Soc. Ins.	36.794	37.159	37.506	37.860	38.557	38.898	39.220	39.580
% Ch, Annual Rate	5.9	4.0	3.8	3.8	7.6	3.6	3.4	3.7
Plus: Residence Adjustment	4.024	4.062	4.102	4.144	4.188	4.229	4.270	4.312
% Ch, Annual Rate	4.0	3.9	4.0	4.1	4.4	4.0	3.9	3.9
Dividends/Int./Rent	85.494	86.476	88.061	89.887	91.620	93.463	95.620	97.527
% Ch, Annual Rate	5.0	4.7	7.5	8.6	7.9	8.3	9.6	8.2
Transfer Payments	62.578	63.414	64.210	65.103	66.573	67.445	68.353	69.279
% Ch, Annual Rate	8.9	5.5	5.1	5.7	9.3	5.3	5.5	5.5
State U.I. Benefits	0.822	0.799	0.801	0.791	0.776	0.772	0.775	0.773
% Ch, Annual Rate	-6.5	-10.8	1.1	-5.2	-7.2	-1.8	1.2	-1.0
Other Transfers	61.756	62.615	63.409	64.312	65.797	66.673	67.578	68.506
% Ch, Annual Rate	9.1	5.7	5.2	5.8	9.6	5.4	5.5	5.6

Table A3.4 (continued)

**Washington Personal Income by Component (Billions of Dollars)**

Forecast 2017 to 2021

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	469.318	475.580	481.389	487.127	493.513	499.378	505.093	510.969
% Ch, Annual Rate	5.8	5.4	5.0	4.9	5.3	4.8	4.7	4.7
Total Wage and Salary Disbursements	246.220	249.258	252.078	255.000	258.167	261.184	264.263	267.362
% Ch, Annual Rate	4.7	5.0	4.6	4.7	5.1	4.8	4.8	4.8
Manufacturing	23.397	23.645	23.922	24.198	24.462	24.730	25.012	25.303
% Ch, Annual Rate	4.5	4.3	4.8	4.7	4.4	4.5	4.7	4.7
Durable Manufacturing	18.218	18.410	18.623	18.839	19.047	19.261	19.490	19.724
% Ch, Annual Rate	4.5	4.3	4.7	4.7	4.5	4.6	4.8	4.9
Nondurable Manufacturing	5.179	5.236	5.300	5.360	5.415	5.468	5.523	5.579
% Ch, Annual Rate	4.7	4.5	5.0	4.6	4.2	4.0	4.1	4.1
Nonmanufacturing	214.705	217.439	219.929	222.538	225.274	227.967	230.706	233.473
% Ch, Annual Rate	4.6	5.2	4.7	4.8	5.0	4.9	4.9	4.9
Other Private Wages	1.300	1.313	1.324	1.336	1.349	1.360	1.373	1.385
% Ch, Annual Rate	3.6	3.9	3.5	3.6	3.9	3.6	3.6	3.6
Farm Wages	2.100	2.126	2.151	2.176	2.203	2.229	2.256	2.283
% Ch, Annual Rate	4.8	5.1	4.7	4.8	5.1	4.8	4.9	4.8
Military Wages	4.719	4.734	4.752	4.753	4.880	4.897	4.916	4.918
% Ch, Annual Rate	11.2	1.3	1.5	0.1	11.1	1.4	1.6	0.2
Nonwage Personal Income	223.097	226.323	229.311	232.127	235.346	238.195	240.830	243.607
% Ch, Annual Rate	7.0	5.9	5.4	5.0	5.7	4.9	4.5	4.7
Supplements to Wages and Salaries	53.722	54.124	54.474	54.791	55.325	55.594	55.891	56.213
% Ch, Annual Rate	4.7	3.0	2.6	2.3	4.0	2.0	2.2	2.3
Proprietor's Income	34.916	35.217	35.512	35.769	36.019	36.313	36.605	36.907
% Ch, Annual Rate	2.3	3.5	3.4	2.9	2.8	3.3	3.3	3.3
Farm	0.943	0.945	0.948	0.943	0.946	0.951	0.954	0.954
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	33.974	34.273	34.564	34.825	35.073	35.362	35.652	35.954
% Ch, Annual Rate	2.5	3.6	3.4	3.1	2.9	3.3	3.3	3.4
Less: Contribution For Govt. Soc. Ins.	40.311	40.686	41.026	41.433	42.258	42.627	43.003	43.380
% Ch, Annual Rate	7.6	3.8	3.4	4.0	8.2	3.5	3.6	3.6
Plus: Residence Adjustment	4.356	4.402	4.446	4.491	4.539	4.587	4.636	4.685
% Ch, Annual Rate	4.2	4.2	4.1	4.1	4.3	4.3	4.3	4.4
Dividends/Int./Rent	99.568	101.562	103.361	105.102	106.848	108.532	109.966	111.462
% Ch, Annual Rate	8.6	8.3	7.3	6.9	6.8	6.5	5.4	5.6
Transfer Payments	70.847	71.704	72.543	73.407	74.873	75.795	76.735	77.720
% Ch, Annual Rate	9.4	4.9	4.8	4.8	8.2	5.0	5.1	5.2
State U.I. Benefits	0.777	0.759	0.749	0.739	0.739	0.744	0.752	0.763
% Ch, Annual Rate	2.0	-8.9	-5.0	-5.3	-0.1	2.8	4.2	5.9
Other Transfers	70.070	70.945	71.794	72.668	74.134	75.051	75.983	76.957
% Ch, Annual Rate	9.5	5.1	4.9	5.0	8.3	5.0	5.1	5.2

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	1.075	1.3	2.329	1.5	2.416	1.2
2014	1.092	1.5	2.367	1.6	2.460	1.8
2015	1.095	0.3	2.370	0.1	2.494	1.4
2016	1.108	1.2	2.400	1.3	2.550	2.3
Forecast						
2017	1.126	1.7	2.451	2.1	2.623	2.9
2018	1.144	1.6	2.498	1.9	2.677	2.1
2019	1.163	1.7	2.550	2.1	2.735	2.1
2020	1.185	1.9	2.606	2.2	2.797	2.3
2021	1.209	2.0	2.665	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	1.1	148.9	-1.2	149.7	-3.2
2014	110.9	2.5	109.8	1.8	148.2	-0.5	145.5	-2.8
2015	113.1	1.9	111.0	1.1	105.3	-29.0	107.0	-26.5
2016	115.9	2.5	109.9	-0.9	87.7	-16.7	95.3	-10.9
Forecast								
2017	118.5	2.3	110.0	0.1	100.7	14.9	106.1	11.4
2018	121.1	2.2	111.6	1.4	106.6	5.8	105.2	-0.8
2019	123.9	2.3	113.3	1.6	109.6	2.8	106.1	0.8
2020	127.1	2.6	115.4	1.9	113.3	3.3	107.7	1.5
2021	130.4	2.6	117.6	1.8	117.3	3.5	109.6	1.8

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	5000.4	133.7	2.7	79.1	36.6	91.2
1992	5091.1	90.8	1.8	80.2	37.2	47.7
1993	5188.0	96.9	1.9	79.1	39.4	57.1
1994	5291.6	103.6	2.0	78.2	39.5	64.9
1995	5396.6	105.0	2.0	77.5	40.0	67.5
1996	5483.1	86.5	1.6	77.0	41.2	50.7
1997	5579.1	96.0	1.8	78.0	42.6	60.6
1998	5685.5	106.3	1.9	78.8	41.6	69.1
1999	5792.2	106.8	1.9	79.8	43.1	70.1
2000	5894.1	101.9	1.8	79.9	43.7	65.8
2001	5970.5	76.3	1.3	80.7	43.9	39.5
2002	6059.7	89.2	1.5	79.3	44.9	54.9
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	54.0
2006	6420.2	121.4	1.9	83.2	45.3	83.5
2007	6525.1	104.9	1.6	87.8	46.2	63.3
2008	6608.2	83.1	1.3	89.6	47.9	41.5
2009	6672.3	64.0	1.0	89.8	48.1	22.3
2010	6724.5	52.3	0.8	88.4	47.7	11.5
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
2016	7183.7	122.3	1.7	90.0	54.6	86.9
<b>Forecast</b>						
2017	7299.9	116.2	1.6	91.6	55.9	80.5
2018	7410.6	110.7	1.5	93.2	56.5	74.0
2019	7511.9	101.3	1.4	94.4	57.4	64.2
2020	7604.0	92.1	1.2	95.4	58.3	55.1
2021	7690.7	86.7	1.1	96.0	59.3	50.0

\* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2  
**Washington Population\***  
 (Thousands)

	<b>2012</b>	<b>2013</b>	<b>Actual 2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>Forecast 2019</b>	<b>2020</b>	<b>2021</b>
Total Population	6817.8	6882.4	6968.2	7061.4	7183.7	7299.9	7410.6	7511.9	7604.0	7690.7
Percent Change	0.7	0.9	1.2	1.3	1.7	1.6	1.5	1.4	1.2	1.1
Age 17 and Under	1572.6	1577.2	1588.4	1602.8	1625.8	1647.3	1667.2	1685.4	1703.9	1721.0
Percent of Total	23.1	22.9	22.8	22.7	22.6	22.6	22.5	22.4	22.4	22.4
Age 6-18	1137.5	1141.1	1151.0	1162.2	1178.6	1193.0	1207.1	1219.0	1229.1	1241.3
Percent of Total	16.7	16.6	16.5	16.5	16.4	16.3	16.3	16.2	16.2	16.1
Age 18 and Over	5245.2	5305.2	5379.8	5458.7	5557.9	5652.5	5743.4	5826.4	5900.1	5969.6
Percent of Total	76.9	77.1	77.2	77.3	77.4	77.4	77.5	77.6	77.6	77.6
Age 21 and Over	4965.3	5029.2	5107.4	5187.1	5283.8	5375.1	5462.7	5543.8	5618.6	5689.9
Percent of Total	72.8	73.1	73.3	73.5	73.6	73.6	73.7	73.8	73.9	74.0
Age 20-34	1413.1	1426.9	1445.8	1458.8	1482.6	1502.6	1519.7	1534.6	1544.2	1551.6
Percent of Total	20.7	20.7	20.7	20.7	20.6	20.6	20.5	20.4	20.3	20.2
Age 18-64	4349.5	4365.7	4396.9	4431.0	4484.6	4531.8	4571.2	4603.1	4623.7	4641.6
Percent of Total	63.8	63.4	63.1	62.7	62.4	62.1	61.7	61.3	60.8	60.4
Age 65 and Over	895.6	939.5	982.8	1027.7	1073.3	1120.7	1172.2	1223.4	1276.5	1328.1
Percent of Total	13.1	13.7	14.1	14.6	14.9	15.4	15.8	16.3	16.8	17.3

\* 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	August 2017	+
U.S. Real GDP Growth	2nd quarter 2017	+
U.S. ISM Index	August 2017	+
U.S. Employment YOY%Δ	August 2017	-
U.S. Unemployment Rate	August 2017	-
U.S. Consumer Confidence	September 2017	-
U.S. Consumer Sentiment	September 2017	-
U.S. Light Vehicle Sales	August 2017	-
U.S. CPI YOY%Δ	August 2017	-
U.S. Home Prices YOY%Δ	July 2017	+
S&P 500 Index	September 2017	+
WA Leading Index	August 2017	+
WA ISM-WW Index	August 2017	+
WA Employment YOY%Δ	August 2017	-
WA Aerospace Empl. YOY%Δ	August 2017	-
WA Unemployment Rate	August 2017	-
WA Help Wanted Index	August 2017	-
WA Business Cycle Indicator	August 2017	+
WA Initial Unemploy. Claims	August 2017	-
WA Housing Permits	August 2017	+
WA Weekly Hours in Mfg.	August 2017	+
WA New Vehicle Registration	August 2017	+
WA In-Migration	August 2017	-
WA Exports-Total YOY%Δ	2nd quarter 2017	+
WA Exports- w/o Trans. Equip. YOY%Δ	2nd quarter 2017	+
Seattle CPI YOY%Δ	August 2017	+
Seattle Home Prices YOY%Δ	July 2017	+
WA Construction Activity Index	August 2017	+

\*Change from the previous reading

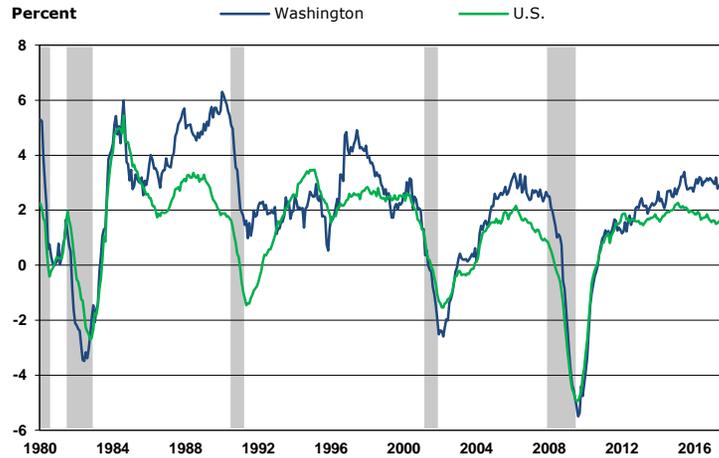
Table A6.2  
**Washington Business Indicators**  
 Historical Data

	<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>2014:01</b>	115.8	113.7	44.4	94.9	118.2	63.5	51.8
<b>2014:02</b>	115.5	114.3	43.0	93.1	118.5	68.7	54.3
<b>2014:03</b>	116.3	115.4	43.8	93.8	118.6	63.6	54.4
<b>2014:04</b>	117.1	115.8	45.9	97.1	120.6	53.7	55.3
<b>2014:05</b>	117.2	116.5	46.7	95.7	118.7	59.6	55.6
<b>2014:06</b>	118.4	117.2	47.0	97.4	121.0	67.0	55.7
<b>2014:07</b>	118.6	118.4	48.7	97.4	121.3	50.1	56.4
<b>2014:08</b>	118.8	118.5	49.0	98.1	121.6	62.9	58.1
<b>2014:09</b>	118.4	119.2	49.1	98.4	114.3	60.3	56.1
<b>2014:10</b>	119.1	119.9	49.1	101.0	119.0	57.6	57.9
<b>2014:11</b>	119.8	120.5	51.4	101.7	128.0	63.1	57.6
<b>2014:12</b>	119.5	121.0	51.8	102.8	122.0	53.3	55.1
<b>2015:01</b>	119.2	121.2	53.0	98.6	127.6	66.6	53.5
<b>2015:02</b>	120.4	120.9	57.7	108.6	137.2	65.9	52.9
<b>2015:03</b>	119.9	121.5	57.7	100.4	138.8	64.1	51.5
<b>2015:04</b>	120.1	122.2	58.3	99.5	135.7	60.4	51.5
<b>2015:05</b>	120.4	122.8	58.5	98.1	139.0	60.3	52.8
<b>2015:06</b>	120.7	122.9	58.8	99.6	136.0	51.4	53.5
<b>2015:07</b>	120.4	122.8	59.9	99.8	141.0	53.6	52.7
<b>2015:08</b>	120.1	122.8	59.2	99.6	139.1	48.0	51.1
<b>2015:09</b>	118.6	122.6	58.3	94.6	126.6	48.0	50.2
<b>2015:10</b>	119.9	123.2	59.9	99.8	132.4	46.1	50.1
<b>2015:11</b>	120.1	123.7	60.4	100.4	134.3	50.0	48.6
<b>2015:12</b>	119.6	123.3	63.0	98.5	130.7	54.5	48.0
<b>2016:01</b>	119.4	123.0	64.6	100.6	128.7	57.2	48.2
<b>2016:02</b>	119.6	123.0	66.0	101.7	124.9	55.4	49.7
<b>2016:03</b>	120.6	123.0	64.3	104.8	128.9	55.7	51.7
<b>2016:04</b>	121.3	123.6	64.5	103.4	130.9	50.8	50.7
<b>2016:05</b>	122.3	123.4	67.2	106.2	148.2	49.2	51.0
<b>2016:06</b>	122.1	122.9	67.6	104.2	151.3	49.1	52.8
<b>2016:07</b>	122.3	123.5	68.5	103.0	156.3	50.8	52.3
<b>2016:08</b>	122.3	123.4	67.3	102.7	153.1	47.7	49.4
<b>2016:09</b>	122.1	123.7	67.8	102.3	143.4	51.4	51.7
<b>2016:10</b>	122.1	123.9	69.6	100.1	152.3	53.1	52.0
<b>2016:11</b>	122.0	124.1	71.1	102.0	148.8	53.3	53.5
<b>2016:12</b>	121.6	124.7	72.0	102.2	149.2	47.3	54.5
<b>2017:01</b>	122.3	125.4	71.3	100.4	152.5	54.2	56.0
<b>2017:02</b>	121.6	125.9	70.1	99.9	140.1	48.6	57.7
<b>2017:03</b>	122.7	126.4	72.9	101.2	143.4	59.2	57.2
<b>2017:04</b>	123.5	126.7	71.3	107.3	143.3	59.2	54.8
<b>2017:05</b>	123.6	127.1	73.2	100.5	149.2	45.0	54.9
<b>2017:06</b>	124.2	127.9	72.0	103.4	145.4	50.0	57.8
<b>2017:07</b>	124.4	128.3	71.9	104.6	139.5	47.0	56.3
<b>2017:08</b>	124.8	128.8	72.9	105.6	135.1	58.2	58.8

# Figure A7.1: Washington State Economic Indicators

## Year-over-Year Employment Growth

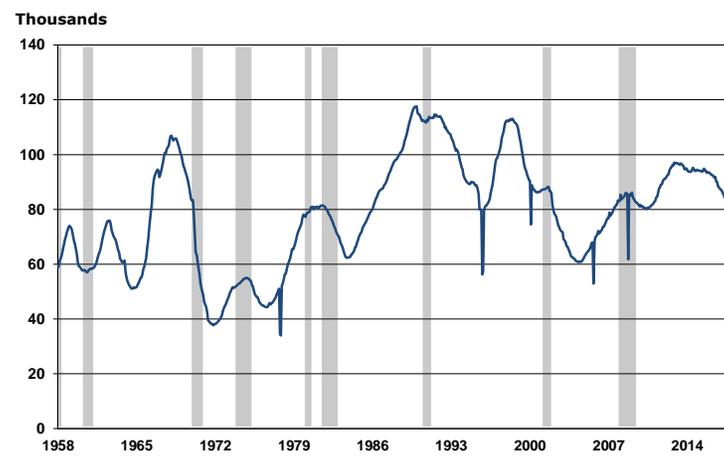
January 1980 to August 2017



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

## Washington Aircraft and Parts Employment

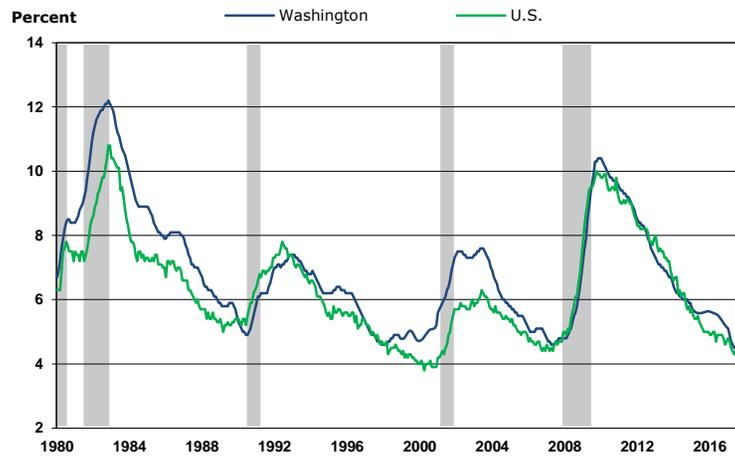
January 1958 to August 2017



\* Source: Bureau of Labor Statistics, ERFC

## Unemployment Rate, S.A.

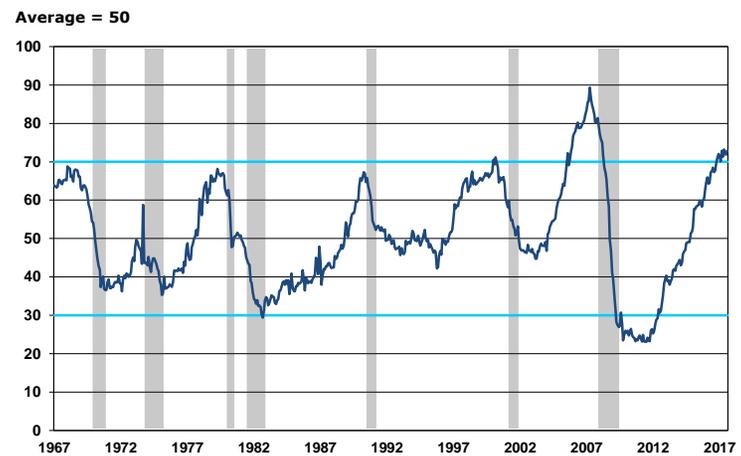
January 1980 to August 2017



\* Source: Bureau of Labor Statistics

## Washington Business Cycle Indicator

January 1968 to August 2017



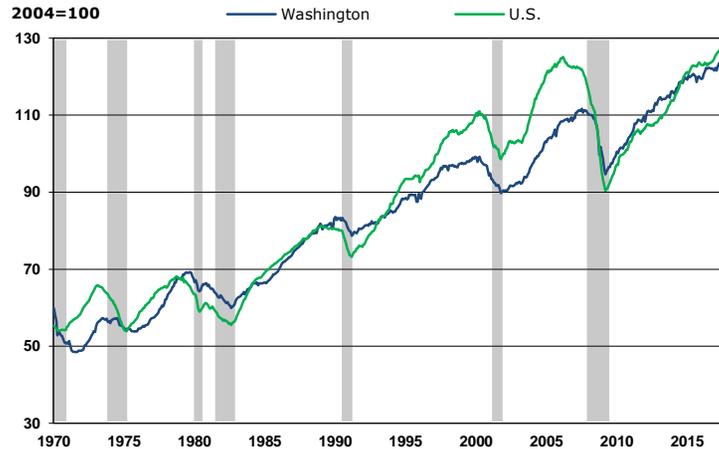
\* Source: ERFC

\* Shaded areas correspond with national recessions.  
Appendix

# Figure A7.2: Washington State Leading Indicators

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

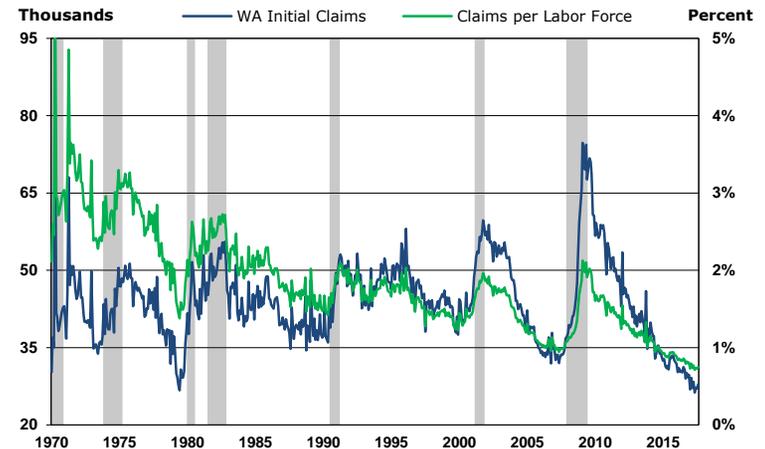
January 1970 to August 2017



\* The Conference Board, ERFC

## Washington Initial Claims for Unemployment Insurance

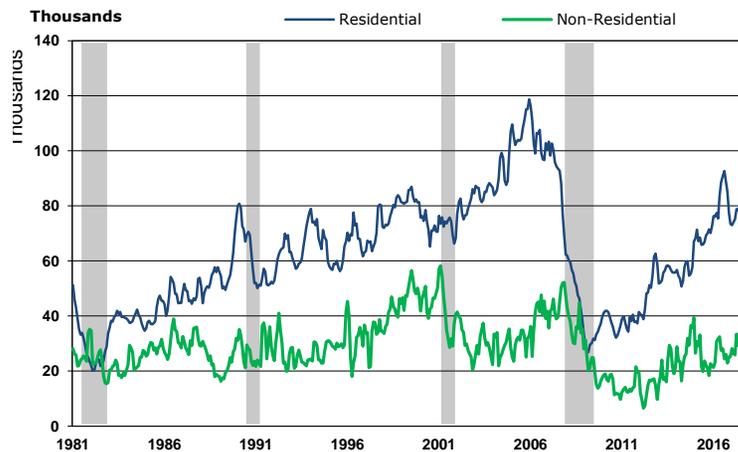
January 1970 to August 2017, S.A.



\* Source: WA State Employment Security, ERFC

## Square Footage of Construction Projects in WA State

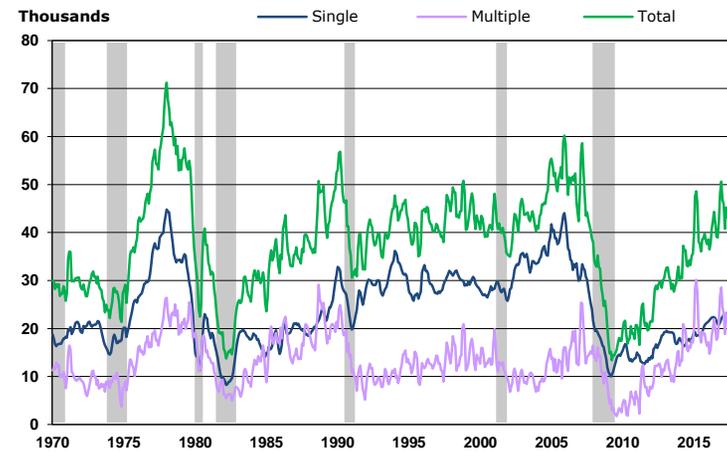
January 1981 to August 2017, 3mma, SAAR



\* Source: McGraw-Hill Construction, ERFC

## Housing Units Authorized in Washington State

January 1970 to August 2017, 3mma, SAAR



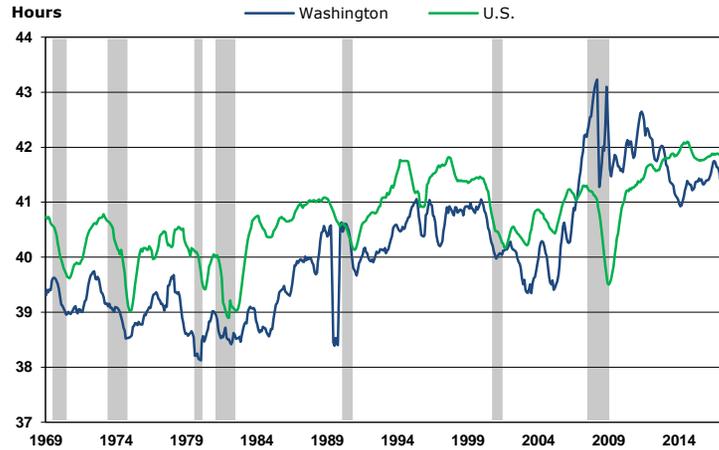
\* Source: Census Bureau, ERFC

\* Shaded areas correspond with national recessions.  
Appendix

# Figure A7.3: Other State Economic Indicators

## Average Weekly Hours in Manufacturing

June 1969 to August 2017, 6-Mo. Moving Average, S.A.



\* Bureau of Labor Statistics, ERFC

## Washington Driver's License In-Migration

January 1988 to August 2017, 12-Month Moving Average



\* Source: WA State Department of Licensing, ERFC

## New Car and Truck Registrations in Washington

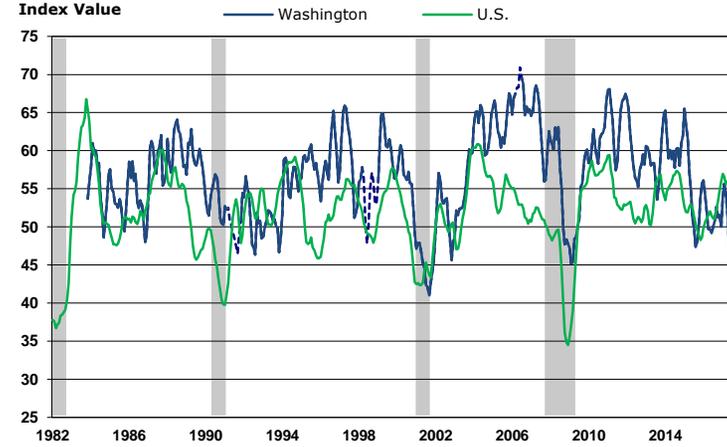
September 1970 to August 2017, 3-Month Moving Average, S.A.



\* Source: WA State Department of Licensing, ERFC

## Institute for Supply Management Index

March 1982 to August 2017, 3-Month Moving Average, S.A.



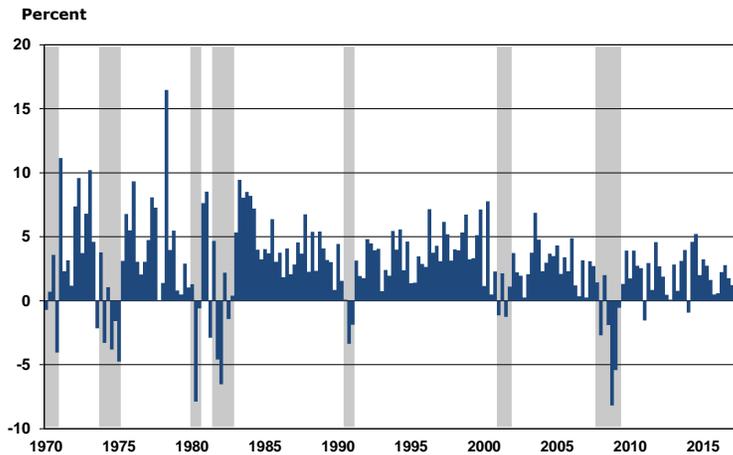
\* Source: Institute for Supply Management, ISM-WW, ERFC

\* Shaded areas correspond with national recessions.  
Appendix

# Figure A7.4: Other Economic Indicators

## Quarterly U.S. Real GDP Growth

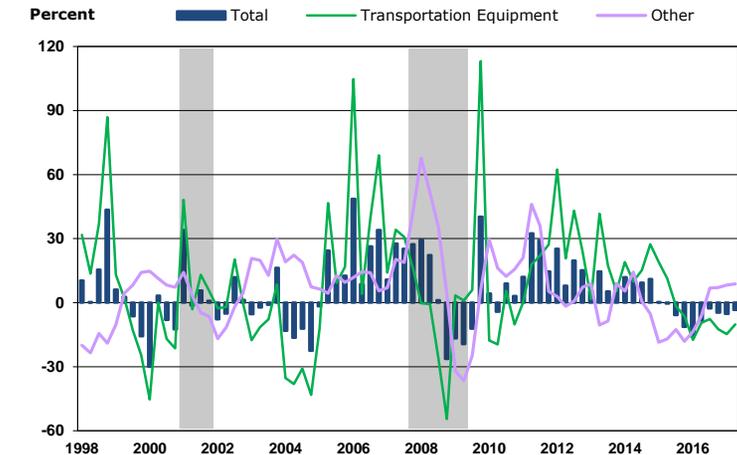
1970Q1 to 2017Q2, SAAR



\* Source: Bureau of Economic Analysis

## Washington State Export Composition

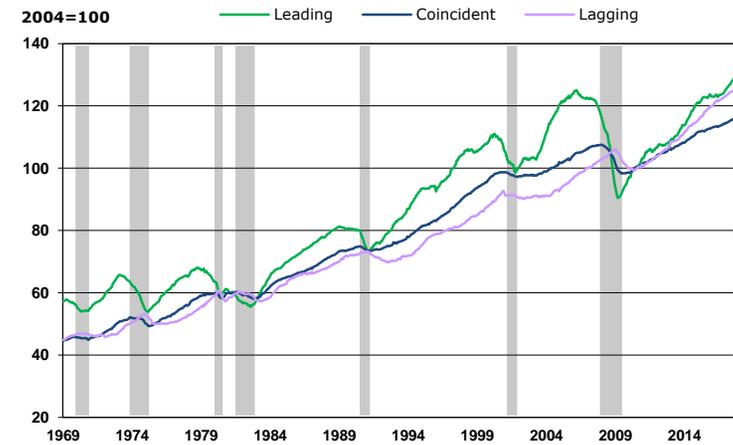
1998Q1 to 2017Q2, Year-over-year percent change



\* Source: WISER

## U.S. Economic Indicators

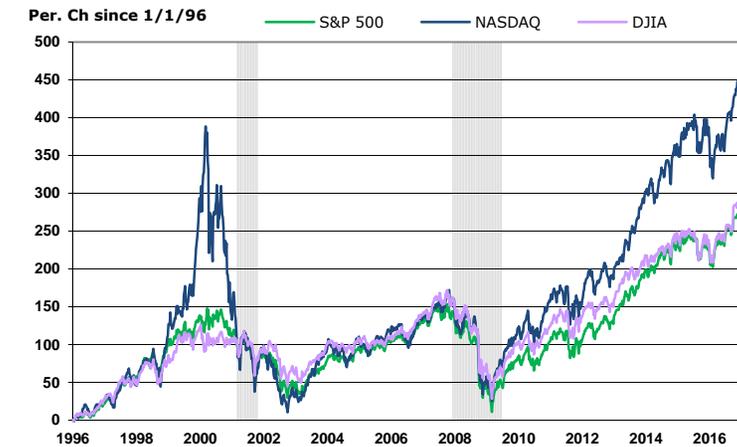
January 1969 to August 2017



\* Source: The Conference Board

## National Stock Indexes

January 1, 1996 to September 18, 2017



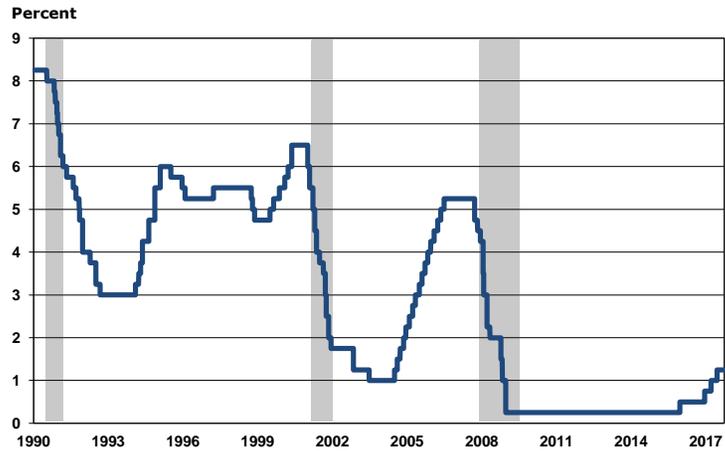
\* Source: ERFC

\* Shaded areas correspond with national recessions.  
Appendix

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

## Federal Funds Target Rate

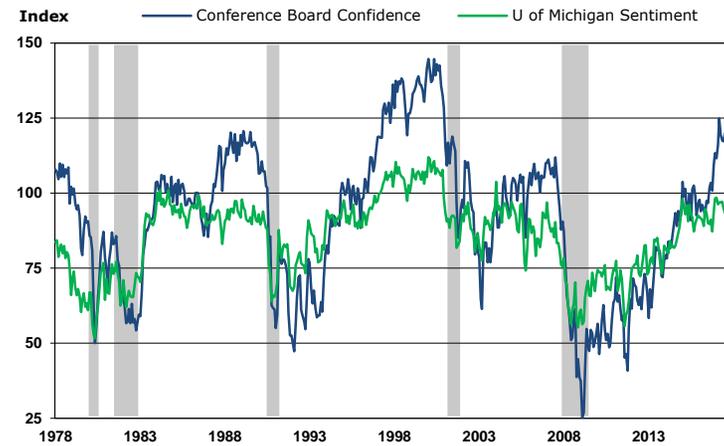
January 1, 1990 to September 27, 2017



\* Federal Reserve

## Consumer Confidence

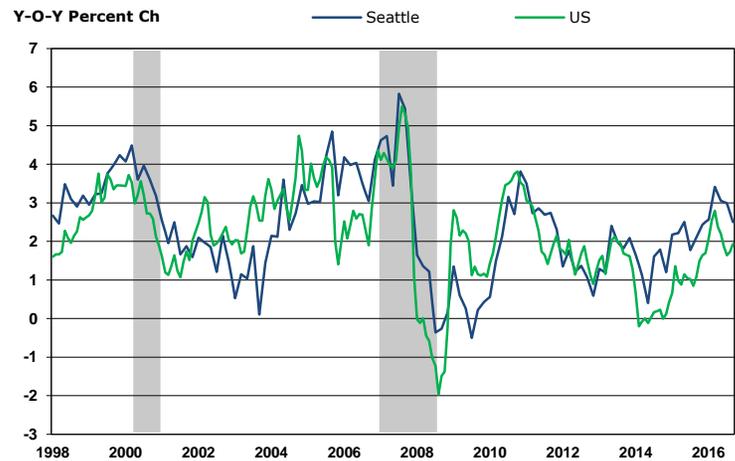
March 1978 to September 2017



\* Source: The Conference Board, University of Michigan

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

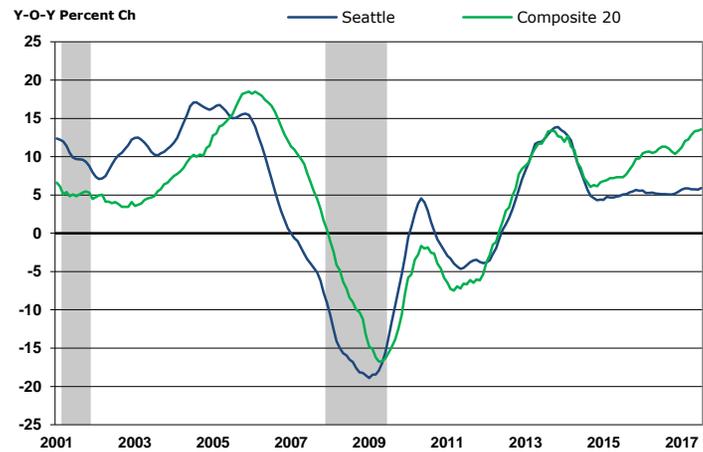
December 1998 to August 2017



\* Source: Bureau of Labor Statistics

## Case Shiller Home Price Index

January 2001 to July 2017, 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 2016, for example, ran from July 1, 2015 through June 30, 2016.

**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.