

Washington State Economic and Revenue Forecast

November 2020
Volume XLIV, No. 4



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

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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 seven members, two appointed by the Governor, four appointed by the Legislature – one from each caucus of the Senate and House of Representatives, and the State Treasurer. 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 the GF-S share of court fees, fines, and forfeitures. 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 IHS Markit. 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 December 3, 2020.

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Executive Summary

- **The COVID-19 pandemic has severely weakened the economy. Economic activity has expanded rapidly since reaching a trough in April, but a recent increase in COVID-19 cases threatens the recovery.**
- **The forecast for GDP growth in 2020 is now -3.7%, up from -4.6% in the September forecast. For 2021, real GDP growth is 4.0%, up from 3.8% in the previous forecast. Our forecast for GDP growth in 2022 to 2025 is down from the September forecast.**
- **The Washington economy continues to recover from the recession but growth is slowing.**
- **Washington's unemployment rate declined to 6.0% in October, down significantly from the 16.3% rate reached in April.**
- **Washington GDP declined 7.7% from the peak compared to 10.1% for the U.S..**
- **The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September.**
- **General Fund-State (GF-S) revenue collections since the September forecast have come in \$380 million (11.5%) above the forecasted amount.**
- **The GF-S forecast was increased by \$607 million in the 2019-21 biennium, \$297 million in the 2021-23 biennium and \$16 million in the 2023-25 biennium.**
- **The forecast of total revenue for funds subject to the budget outlook process was increased by \$634 million in the 2019-21 biennium, \$328 million in the 2021-23 biennium and \$28 million in the 2023-25 biennium.**
- **Though the November forecast once again increases revenue, expected revenue for the current and next biennium is still over \$3 billion less than expected in February.**

U.S. Economic Forecast

Economic activity has expanded, but a recent increase in COVID-19 cases threatens the recovery.

The COVID-19 pandemic and resulting social distancing and business shutdowns have severely weakened the economy. The Business Cycle Dating Committee of the National Bureau of Economic Research has determined that the United States entered recession in February 2020. The peak marks the end of the expansion that began in June 2009, the longest on record. As COVID-19 cases trended down, the economy reached a trough in April as the economy reopened. Economic activity has expanded rapidly in the past few months, but a recent increase

in COVID-19 cases has resulted in a new round of business shutdowns and social distancing measures.

Our forecast was based on the November IHS Markit forecast

The forecast is based on a modified version of IHS Markit's November 2020 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. The forecast for GDP growth in 2020 is now -3.7%, up from -4.6% in the September forecast. For 2021, real GDP growth is 4.0%, up from 3.8% in the previous forecast. The GDP forecast for the remainder of the forecast period is consistent with the level of potential GDP implied in the Blue Chip long-range forecast: 2.9% in 2022, 2.1% in 2023, 2.0% in 2024 and 1.9% in 2025. This compares to GDP growth rates of 3.9%, 2.8%, 2.5% and 2.3% from 2022 through 2025 in the September forecast.

The forecast includes key assumptions related to the recovery and pandemic

The forecast includes key assumptions related to the economic recovery and the pandemic. The forecast assumes rates of infection and death remain elevated until a vaccine becomes available in mid-2021, then begin to subside. Until then, faced with regional outbreaks of the virus, states haltingly attempt to reopen their economies.

Washington Economic Forecast

The Washington economy continues to recover from the recession but growth is slowing

The Washington economy continues to recover from the recession but growth is slowing. As of October, the state's economy has recovered nearly half the jobs lost in March, April, and May but employment growth has slowed. Washington's unemployment rate declined to 6.0% in October, down significantly from the 16.3% rate reached in April. Washington housing construction improved to 43,700 units in the third quarter from 40,300 units in the second quarter. Washington exports continue to decline, mostly because of transportation equipment. Washington GDP declined 7.7% from the peak compared to 10.1% for the U.S. Seattle consumer price inflation exceeded the national average in October.

The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September

The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September. We expect a 4.8% decline in Washington employment this year which is down slightly from the 4.7% decline the September forecast. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 2.3% average rate expected in September. Our forecast for nominal personal income growth this year is 7.3%, down from 7.7% in the September forecast. The slightly slower growth than expected in September is due to the absence of any new federal stimulus in the fourth quarter. We expect personal income to decline 1.1% in 2021 compared to the 1.9% decline in the September forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 4.4% per year compared to the 4.6% rate in the

September forecast. We expect 44,900 housing units authorized by building permits this year, up from 44,200 units in the September forecast but down from the 48,400 units authorized in 2019. We expect permits to average 42,600 units in 2021 through 2025, also up from 41,300 units in the September forecast. We expect the Seattle CPI to rise 1.9% this year compared to 1.6% in the September forecast. We expect Seattle inflation to average 2.2% per year in 2021 through 2025 compared to 2.1% per year in the September forecast.

Revenue Forecast

Revenue has been coming in higher than forecasted but retail activity is expected to slow through the middle of 2021

At the time of the September forecast, revenue collections had begun to recover from their spring lows, but the expiration of the largest federal income support payments in August brought significant uncertainty about collections going forward. Despite the drop in support, revenue continued to come in above the forecast, especially in retail trade and real estate. Going forward, however, the additional federal stimulus we assumed in September is no longer expected, and pandemic-related restrictions are increasing in response to an upswing in new cases. We therefore expect that retail trade activity continued at its levels of early fall through the middle of November (which will be reflected in the next two collections periods), but fell off thereafter and will be weaker than previously expected through mid-2021. Despite the lower near-term retail activity, however, total forecasted revenue has increased, due to the surplus in collections since September, the extra expected activity through mid-November and increases in forecasted property and real estate excise taxes. Though this forecast once again increases revenue, expected revenue for the current and next biennium is still over \$3 billion less than expected in February.

GF-S forecast change by biennium (millions):

19-21: \$607
21-23: \$297
23-25: \$16

Since September, revenue collections that are tracked monthly came in \$380 million higher than forecasted. The forecasted increase in economic activity for the rest of the biennium added \$227 million, resulting in a total forecast increase of \$607 million. The forecast for the 2021-23 biennium was increased by \$297 million and the forecast for the 2023-25 biennium was increased by \$16 million. The November 2020 forecast for GF-S revenue totals \$48.796 billion in the 2019-21 biennium, \$52.478 billion in the 2021-23 biennium and \$55.933 billion in the 2023-25 biennium.

Change in forecast of funds subject to the budget outlook (millions):

19-21: \$633.8
21-23: \$328.4
23-25: \$27.7

The forecast of total revenue for funds subject to the budget outlook for the 2019-21 biennium is \$50,994.7 million, \$633.8 million more than the September forecast. The forecast of total revenue for the 2021-23 biennium is \$54,666.2 million, \$328.4 million more than the September forecast. The forecast for the 2023-25 biennium is \$58,007.1 million, \$27.7 million more than the September forecast.



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

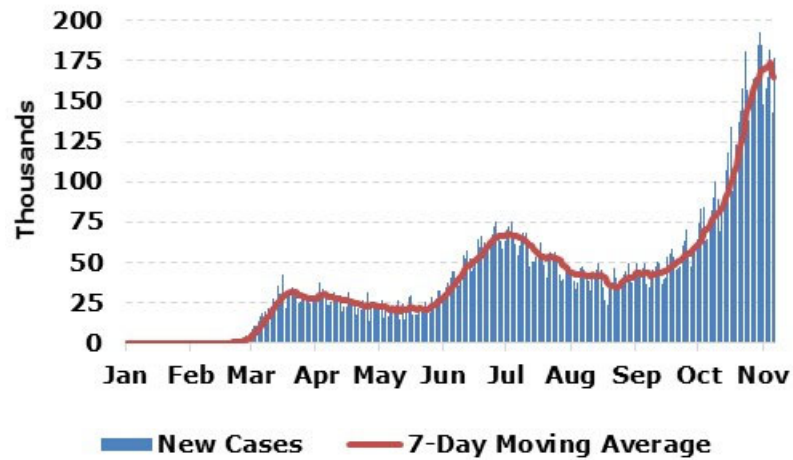
- **The COVID-19 pandemic has severely weakened the economy. Economic activity has expanded rapidly since reaching a trough in April, but a recent increase in COVID-19 cases threatens the recovery.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **U.S. real GDP rebounded to a record 33.1% (SAAR) gain in the third quarter. The increase made up roughly three quarters of the initial 31.4% (SAAR) decline.**
- **Employment has increased and unemployment has trended down but neither are at pre-pandemic levels.**
- **The housing market has recovered; manufacturing has returned to growth.**
- **Oil prices have stabilized after an unprecedented drop due to the pandemic. U.S. production has fallen.**
- **The forecast for GDP growth in 2020 is now -3.7%, up from -4.6% in the September forecast. For 2021, real GDP growth is 4.0%, up from 3.8% in the previous forecast. Our forecast for GDP growth in 2022 to 2025 is down from the September forecast.**
- **Due to the high degree of uncertainty regarding the extent to which the COVID-19 pandemic will continue, the uncertainty in the baseline forecast is elevated.**

Current Conditions

Economic activity has expanded rapidly since reaching a trough in April, but a recent increase in COVID-19 cases threatens the recovery.

The COVID-19 pandemic and resulting social distancing and business shutdowns have severely weakened the economy. The Business Cycle Dating Committee of the National Bureau of Economic Research has determined that the United States entered recession in February 2020. The peak marks the end of the expansion that began in June 2009, the longest on record. As COVID-19 cases trended down, the economy reached a trough in April as the economy reopened. Economic activity has expanded rapidly in the past few months, but a recent increase in COVID-19 cases has resulted in a new round of business shutdowns and social distancing measures (see figure 1.1).

Figure 1.1: New COVID-19 Cases



Source: Source: U.S. Centers for Disease Control; data through November 25th, 2020

Policymakers have approved trillions of dollars in stimulus

Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic. Congress has disbursed \$2.4 trillion, primarily through the Coronavirus Aid, Relief and Economic Security (CARES) Act. The Act consisted of direct payments to households (\$290 billion), expanded unemployment benefits (\$260 billion), tax breaks (\$300 billion), loans to businesses (\$875 billion), grants primarily to states and municipalities (\$230 billion), and other spending (\$325 billion). The Federal Reserve has provided another \$2.4 trillion in asset purchases, liquidity measures, and loan programs to assist the economy. There have also been another \$455 billion in administrative actions as Congress debates more stimulus measures. In addition, the federal government has provided \$12.5 billion for vaccine and therapeutic development to twelve companies.

U.S. real GDP rebounded 33.1% (SAAR) in the third quarter

The COVID-19 crisis and efforts taken to contain it has created unprecedented volatility in economic growth. After U.S. real GDP plummeted a record 31.4% (SAAR) in the second quarter, real GDP rebounded to a record 33.1% (SAAR) gain in the third quarter. The increase made up roughly three-quarters of the initial decline. Strength was widespread across sectors. Consumer spending surged 40.6% (SAAR), adding 25.2 points to topline GDP. Consumer spending on services increased 37.6% (SAAR) and spending on goods increased 46.9% (SAAR). Fixed investment increased 30.4% (SAAR) in the third quarter. Residential construction increased 62.3% (SAAR), more than making up the decline in the second quarter. Nonresidential construction fell another 15.8% (SAAR) as social distancing measures still in effect have limited the demand for new office space, lodging, and other buildings. Government spending declined 4.9% (SAAR) due primarily to a 18.1% (SAAR) decline in federal nondefense spending. Exports increased 60.5% (SAAR) and imports increased 93.1% (SAAR) as trade resumed.

Net exports resulted in a net negative to GDP growth of 3.2 points.

Total nonfarm employment remains 10.1 million lower than the pre-pandemic February 2020 level

After declining an unprecedented 20.7 million jobs in April, nonfarm payrolls have grown in each of the past seven months. States re-opening their economies led to a large number of workers being recalled to their jobs. In October, the economy added 638,000 new jobs. Strong private sector job growth of 906,000 more than made up for a 268,000 decline in government jobs. The construction sector added 84,000 jobs as the housing market has stayed strong. The manufacturing sector added 38,000 jobs. Leisure and hospitality employment was again strong as businesses continued to open, adding 271,000 jobs. Job gains in temporary help services accelerated in October with 109,000 new jobs. Retail trade employment picked up again in October, adding 104,000 new jobs. Total nonfarm employment remains 10.1 million lower than the pre-pandemic February 2020 level.

The unemployment rate has trended down after spiking in April

The unemployment rate has continued to trend downward as shutdowns have been lifted and the economy has recovered. After spiking in April at 14.7%, the unemployment rate has fallen to 6.9% in October. Prior to the pandemic, the unemployment rate was at a historic low of 3.5% in February. The labor force participation rate was at 61.7% in September, down from a cyclical high of 63.4% in February. Average hourly earnings rose 4 cents to \$29.50 while the average workweek remained unchanged at 34.8 hours in October.

Consumer attitudes are once again declining

Consumer confidence is once again declining as COVID-19 infections rise and millions remain without work. The Conference Board measure fell 5.3 points in November to 96.1. The present conditions component led the decline, falling 8.7 points. Future expectations dipped 0.3 points. The University of Michigan Consumer Sentiment index declined in November as well, falling 4.9 points to 76.9. Unlike the Conference Board measure, the expectations component led the decline, falling 8.7 points. Current conditions increased 1.1 points in November. Both measures have reversed most of the gains through summer and are nearing the cyclical lows experienced at the onset of the pandemic.

Oil prices have stabilized after plunging in April

Oil prices have stabilized in the high thirty dollar to low forty dollar range after plummeting at the onset of the pandemic. Brent spot crude prices are now at \$43 for the fourth week of November after a trough of \$14 in the third week of April. West Texas Intermediate (WTI) prices were hit harder as oil markets fully took account of the pandemic. WTI prices reached a weekly low of \$3 per barrel in April and even posted a single day price of an unheard of -\$40 per barrel. WTI prices have since recovered to \$42 per barrel in the fourth week of November. A price war between Saudi Arabia and Russia increased supply just as the pandemic and social distancing measures sharply reduced demand. OPEC and Russia have now agreed to cut output by 7.7

million barrels per day through December to limit supply. With states reopening their economies, demand has stabilized. However, with a new wave of COVID-19 infections, states are implementing a new round of lockdowns which could again limit demand for oil. Prior to the pandemic, U.S. production was at an all-time high at 12.866 million barrels per day (bpd) in November 2019. The latest data from August show a decline to 10.579 million bpd. The Baker Hughes rig count has declined sharply since the decline in oil prices. In November, the rig count was 320, a sharp decline from 802 a year ago.

Inflation remains tame

Headline inflation remains tame. After dropping sharply at the onset of the pandemic, inflation increased but remains well below 2%. Year-over-year, the Consumer Price Index (CPI) was up just 1.2% in October. A year ago, headline inflation was 1.8%. Most of the fluctuation recently has come from energy prices, particularly gasoline. Both have been increasing in recent months but remain lower than a year ago. Gasoline is down 18.0% since last year while energy as a whole is down 9.2%. Other sectors affected by stay-at-home orders have been impacted as well. Apparel prices are down 5.5% and transportation service prices are down 5.1%. Food prices are up 3.9% annually, partially due to supply disruptions caused by the pandemic. Shelter cost inflation has remained steady and is now up 2.0% over the year. Core consumer prices, which exclude food and energy, were up 1.6% over the year.

Home prices appear to have been minimally impacted by the pandemic

Home prices were only minimally impacted by the pandemic and are once again rising rapidly. The seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index increased 1.3% in September following a 1.4% gain the month before. Home prices are now 6.6% higher than a year ago. The Federal Housing Finance Agency house price index showed a similar increase for the third quarter of 2020, rising 7.8% from a year ago. Homebuilder confidence has completely recovered and is now above pre-pandemic levels. In November, confidence rose 5 points to 90, the third straight month of setting a record high. Expansionary monetary policy combined with the tight housing market are supporting home prices. Historically low mortgage rates are also enabling buyers to purchase more expensive homes. The rate on a 30-year mortgage was 2.72% as of November 25th, the lowest in nearly 50 years of record keeping (see figure 1.2).

Figure 1.2: 30-Year Mortgage Rate



Source: Freddie Mac; data through November 25th 2020

The housing market has recovered

The housing market has recovered to pre-pandemic levels. Housing starts increased 1.9% in September and are 11.1% above a year ago. Single-family starts in September increased 8.5% while volatile multi-family starts declined 16.3%. Both segments are well above the recent trough in April. Housing permits increased 4.7% in September. Single-family permits increased 7.2% while multi-family permits declined 1.4%. Total permits remain up 7.5% from a year ago. A shift of homebuyer preferences to more suburban areas has contributed to the strength in single family home construction. New home sales declined 3.5% in September to 959,000 (SAAR), but remain up 32.0% since last year.

The manufacturing sector has returned to growth

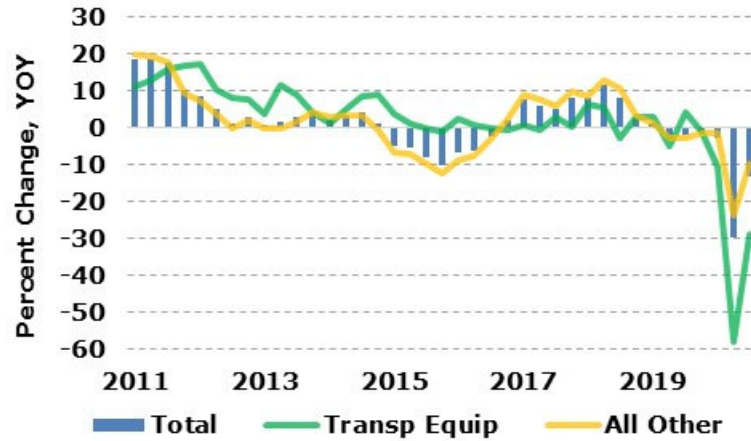
The manufacturing sector has been increasing after contracting sharply in April and May. The Institute for Supply Management (ISM) Report on Business index increased to 59.3 (index values below 50 indicate contraction) in October from 55.4 in September. Supply chain disruptions due to the closure of nonessential businesses appear to be resolving. The new orders and production components both improved and remain over 60. The employment component increased 3.6 points and is now at 53.2. The latest G-17 report from the Federal Reserve indicates manufacturing output rose 1.0% in October but is still 5.0% below its pre-pandemic level in February. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 1.0% in September. New orders are now 0.5% below year-ago levels.

U.S. exports are declining

The global recession due to COVID-19, ongoing trade tensions, and the grounding of the 737 Max are contributing to declining U.S. exports. Total exports in the third quarter declined 13.2% year over year, the sixth consecutive quarter of decline (see figure 1.3). Transportation equipment exports declined 29.0% year over year and now make up only 14.4% of total exports. Typically, transportation equipment exports make up around half

of total exports. Oil and gas exports, which had been strong, are now declining (-15.5%) due to weaker demand. The trade war with China, which was beginning to thaw, has seen no movement recently as it has taken a back seat to the pandemic.

Figure 1.3: U.S. Export Growth



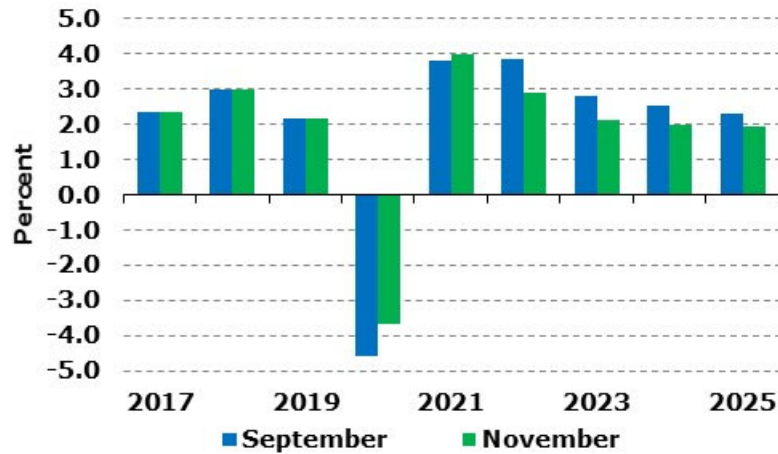
Source: Wiser Trade; data through 2020 Q3

Forecast

Our forecast was based on the November IHS Markit forecast

This forecast is based on a modified version of IHS Markit's November 2020 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. The forecast for GDP growth in 2020 is now -3.7%, up from -4.6% in the September forecast. For 2021, real GDP growth is 4.0%, up from 3.8% in the previous forecast. The GDP forecast for the remainder of the forecast period is consistent with the level of potential GDP implied in the Blue Chip long-range forecast: 2.9% in 2022, 2.1% in 2023, 2.0% in 2024 and 1.9% in 2025. This compares to GDP growth rates of 3.9%, 2.8%, 2.5% and 2.3% from 2022 through 2025 in the September forecast.

Figure 1.4: U.S. Real GDP Growth



Source: U.S. Bureau of Economic Analysis, November 2020 ERFC forecast; historical data through 2019

Key assumptions regarding the pandemic are included in the forecast

The forecast includes key assumptions related to the economic recovery and the pandemic. The forecast assumes rates of infection and death remain elevated until a vaccine becomes available in mid-2021, then begin to subside. Until then, faced with regional outbreaks of the virus, states haltingly attempt to reopen their economies.

The forecast includes the stimulus and tariffs

The November forecast includes the four stimulus packages enacted so far this year. However, unlike the September forecast, the current forecast no longer includes emergency unemployment benefits of \$300/week or a second round of checks to households through December. The forecast includes tariffs enacted by the U.S. and China since 2017 that are still in effect.

The U.S. just ended the longest recovery on record

The U.S. economy entered recession in February 2020. This marked the end of the longest economic recovery on record. The recovery lasted 128 months from the 2007-09 recession through February, surpassing the 120 months from the 1990 recession. GDP growth turned positive in the third quarter of 2020. Depending on official dates of the business cycle, this recession is likely to be one of the shortest recorded.

Oil prices will remain low

The global recession and price war between Saudi Arabia and Russia have caused oil prices to plummet. Oil prices have been under severe downward pressure since COVID-19 started influencing trading in late January. Social distancing and stay-at-home orders caused demand for gasoline to plummet. The refiner acquisition price of crude oil in 2020 is expected to average \$38 per barrel in 2020, unchanged from the September forecast. As global growth rebounds and the OPEC+ countries succeed in restricting production, the price will gradually recover. Oil prices are projected to increase to \$45 in 2025, \$3 less than the previous forecast. The United States will soon be a

consistent net exporter of oil as new pipelines continue to come online. Inventories bought at depressed prices during the crisis will put downward pressure on prices as the recovery unfolds. Oil prices will remain well below the levels seen early in the previous recovery.

Inflation will remain moderate

Inflation (as measured by the price index for personal consumption expenditures) is expected to be slightly higher than in the September forecast. We expect inflation to be 1.2% this year, up from 1.1% in the previous forecast. The low inflation expected this year is primarily due to impacts of COVID-19. Food prices have been higher as a result of supply disruptions and a shift away from restaurants and towards more meals at home. Gasoline prices plummeted due to reduced travel. Inflation is expected to increase to 2.0% in 2021 but decline slightly thereafter and stay below 2% through 2025. Core inflation (minus food and energy) is expected to be 1.4% this year and increase to 2.0% in 2021.

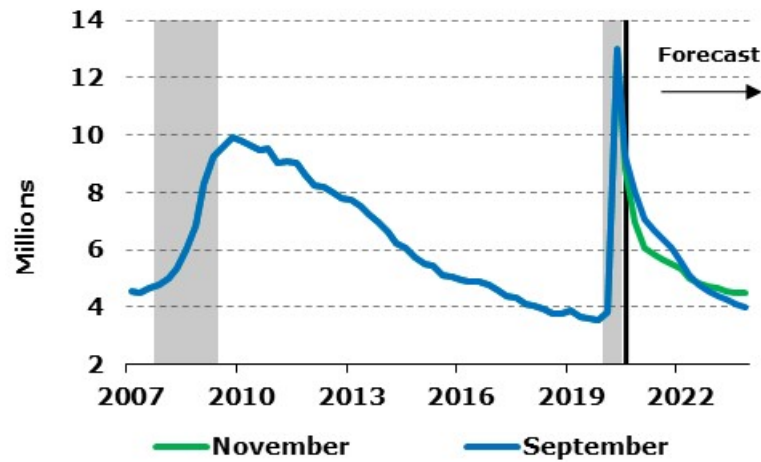
Consumer spending growth is expected to decline this year

Real consumer spending declined at a 33.2% rate in the second quarter of 2020 as COVID-19 caused economic activity to contract. Many businesses that were forced to close were able to reopen in some capacity. Real consumer spending rebounded in third quarter at a 40.7% rate. We expect consumer spending to grow throughout the forecast. The forecast calls for a 3.9% reduction in real consumer spending this year due to the severe second quarter drop. The September forecast expected a decline of 5.0%. As a vaccine becomes readily available, spending on services that were put on hold should pick up. With the economy returning to growth, we expect real consumption to increase 4.6% in 2021. The forecast then calls for consumption growth to trend downward as the recovery continues, reaching 2.0% in 2025.

Employment will take time to recover

Employment took a major hit from the COVID-19 pandemic but is now in the process of recovering. The forecast calls for a 5.7% reduction in employment this year. Almost all of the reduction is due to the unprecedented 20.8 million job loss in the month of April. The employment forecast calls for growth of 3.7% in 2021, bringing average annual employment to 147.6 million jobs; still less than the pre-pandemic annual average of 150.9 million jobs in 2019. We expect job growth to continue as the recovery continues but to trend downward throughout the forecast, reaching 0.4% in 2025. We expect the unemployment rate to average 8.2% this year, down from 8.5% forecasted in September. In 2021, we expect an unemployment rate of 5.8%, compared to 6.5% in September. Going forward, the forecast calls for the unemployment rate to decline slower than in the previous forecast, reaching 4.3% in 2025 (see figure 1.5).

Figure 1.5: U.S. Unemployment Rate



Source: U.S. Bureau of Labor Statistics, November 2020 ERFC forecast; historical data through 2020 Q3

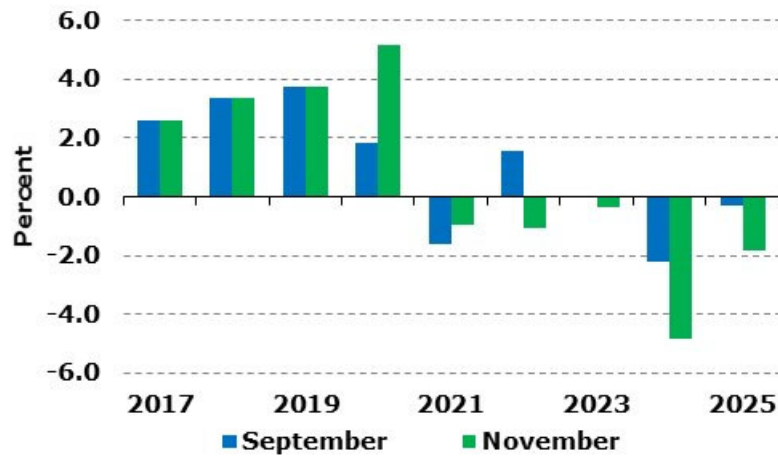
Business investment is expected to fall this year

Real nonresidential fixed investment is expected to fall 5.1% this year due to plummeting demand, aversion to risk, and tighter lending standards. Low oil prices have led to a downshift in investment by energy companies as well. The capital-intensive manufacturing sector has been declining. Office vacancy rates have been rising even before the pandemic shifted many Americans into working from home. We expect real nonresidential construction to decline 11.1% this year followed by a 5.1% drop in 2021. The forecast then calls for growth to average 4.4% in 2022 through 2025. Real equipment investment is expected to decline 5.9% this year. Much of this decline was due to a drop in business spending on motor vehicles and parts which has since recovered. We expect growth in real equipment investment to be 6.9% in 2021 and then average 2.8% from 2022 through 2025. We expect real nonresidential fixed investment growth to grow 2.4% in 2021 and then average 4.3% for the remainder of the forecast.

The housing market has rebounded

The housing market has rebounded. Record low interest rates and inventories have helped the market. There has also been a surge in demand from people working remotely and wanting to relocate. The outlook for housing is higher compared to September. The November forecast calls for housing starts to increase 5.2% this year. The September forecast expected an increase of 1.8% (see figure). We expect single-family housing starts to increase 9.0% and the multi-family segment to decline 3.1% this year. We expect 2020 to be the peak in housing starts at 1.36 million units. We expect a slow decline through the remainder of the forecast, with housing starts reaching 1.24 million in 2025.

Figure 1.6: U.S. Housing Start Growth



Source: U.S. Census Bureau, November 2020 ERFC forecast; historical data through 2019

Economic growth of U.S. trading partners is expected to decline

The COVID-19 pandemic has affected economies throughout the world. Economic growth of major U.S. trading partners is expected to decline 6.1% this year, up from the 6.7% decline anticipated in September. We expect U.S. major trading partner growth of 4.5% next year and then average growth of 2.7% from 2022 through 2025. Real U.S. exports are forecasted to decline 13.5% this year. The grounding of the Boeing 737 MAX has contributed to the decline in exports. The forecast assumes deliveries resume in December, providing a boost to exports. We expect real export growth of 7.7% in 2021 and 8.9% in 2022 as the global economy recovers. Real export growth is then expected to trend downward and reach 4.1% in 2025.

The federal government has enacted \$4.1 trillion in stimulus

The federal government has enacted legislation totaling \$4.1 trillion of fiscal stimulus to address the impacts of the COVID-19 pandemic. In terms of cost to the government and as a percentage of GDP, the size of the stimulus is similar to the spending related to the Great Recession of 2007-09. The major difference is the speed at which the stimulus occurred. Fiscal support during the Great Recession was spent out gradually between 2008 and 2012. By comparison, it is likely the entire cost will be spent this year. In addition, the forecast includes additional fiscal stimulus of \$600 billion by administrative action. The loss of revenue due to the recession as well as stimulus legislation enacted so far this year is expected to contribute to a deficit that is expected to reach \$3,132 billion this year. In comparison, the highest annual deficit prior to this was \$1,416 billion. The deficit is expected to decline to under \$1 trillion through 2023 to 2025.

The Fed has lowered rates

The Federal Reserve has lowered the federal funds rate to near zero in response to the pandemic. The Federal Reserve has also brought back several credit facilities from the previous recession and created new ones to support the economy and ensure

normal functioning of credit markets. We expect the Federal Reserve to maintain extraordinary policy support through credit programs, liquidity support, and near zero interest rates until the economy is well into its recovery. In addition, the Federal Reserve revised its framework and will now adopt a flexible 2% average inflation target and will no longer pre-emptively raise interest rates to counter perceived inflation risk. Monetary policy will also seek to minimize shortfalls of maximum employment instead of working to minimize deviations from maximum sustainable employment.

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

The level of uncertainty in the baseline forecast remains elevated, downside risks and upside risks are balanced.

Downside Risks

- The second wave of COVID-19 cases is worse than expected
- Continued social distancing measures cause widespread business failures
- Weak demand causes businesses to slow re-hiring of laid-off workers
- Increasing geopolitical tensions negatively affect consumer confidence
- No Brexit agreement
- Monetary policy is ineffective
- Deficit fears limit fiscal policy
- A breakdown in trade relations
- Weak global growth persists, further affecting exports

Upside Risks

- COVID-19 infections/deaths decline faster than anticipated
- An effective COVID-19 vaccine is approved and distributed more quickly than expected
- Federal stimulus measures are enacted
- An infrastructure package passes
- Increased business confidence leads to more hiring
- Increased consumer confidence gives a boost to consumer spending
- The housing sector improves faster than anticipated
- China successfully transitions to a more consumption based economy
- European and emerging market economies grow faster than expected
- Wage growth picks up faster than expected

Table 1.1
U.S. Economic Forecast Summary
 Forecast 2021 to 2023

Fiscal Years

	2018	2019	2020	2021	2022	2023	2024	2025
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,432.5	18,884.3	18,677.3	18,787.5	19,434.6	19,900.2	20,306.6	20,702.5
% Ch	2.9	2.5	-1.1	0.6	3.4	2.4	2.0	1.9
Real Consumption	12,758.6	13,080.6	12,908.4	13,072.8	13,515.0	13,821.1	14,115.5	14,398.2
% Ch	2.7	2.5	-1.3	1.3	3.4	2.3	2.1	2.0
Real Nonresidential Fixed Investment	2,610.0	2,748.5	2,706.2	2,655.7	2,743.2	2,859.2	2,987.9	3,121.0
% Ch	5.4	5.3	-1.5	-1.9	3.3	4.2	4.5	4.5
Real Residential Fixed Investment	618.4	600.9	605.3	653.5	640.1	627.6	623.6	622.8
% Ch	2.5	-2.8	0.7	7.9	-2.0	-2.0	-0.6	-0.1
Real Personal Income	16,251.8	16,726.6	17,356.1	17,285.8	17,255.6	17,693.9	18,169.0	18,606.7
% Ch	3.4	2.9	3.8	-0.4	-0.2	2.5	2.7	2.4
Real Per Capita Income (\$/Person)	49,801	51,006	52,666	52,147	51,690	52,638	53,686	54,614
% Ch	2.8	2.4	3.3	-1.0	-0.9	1.8	2.0	1.7
Price and Wage Indexes								
PCE Price Index (2012=100)	107.1	109.0	110.5	112.3	114.6	116.5	118.5	120.8
% Ch	1.9	1.8	1.3	1.6	2.1	1.7	1.7	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.481	2.533	2.573	2.620	2.684	2.736	2.786	2.844
% Ch	2.3	2.1	1.6	1.9	2.4	1.9	1.8	2.1
Employment Cost Index (Dec. 2005=1.0)	1.314	1.354	1.395	1.427	1.470	1.524	1.573	1.617
% Ch	2.8	3.1	3.0	2.3	3.0	3.6	3.2	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,087.5	21,024.4	21,092.2	21,537.9	22,687.4	23,712.6	24,689.5	25,682.8
% Ch	5.1	4.7	0.3	2.1	5.3	4.5	4.1	4.0
Personal Income	17,407.8	18,239.0	19,176.5	19,404.2	19,772.2	20,622.7	21,534.1	22,471.5
% Ch	5.4	4.8	5.1	1.2	1.9	4.3	4.4	4.4
Employment (Millions)								
U.S. Civilian Labor Force	161.2	162.7	162.6	161.9	164.9	166.7	168.2	169.3
Total U.S. Employment	154.5	156.5	153.0	150.7	156.0	158.9	160.7	161.9
Unemployment Rate (%)	4.11	3.77	6.00	6.92	5.39	4.70	4.46	4.35
Nonfarm Payroll Employment	147.72	149.93	147.15	144.10	149.91	153.12	154.80	155.65
% Ch	1.5	1.5	-1.9	-2.1	4.0	2.1	1.1	0.5
Manufacturing	12.55	12.79	12.57	12.24	12.40	12.62	12.67	12.47
% Ch	1.4	1.9	-1.7	-2.7	1.3	1.8	0.4	-1.6
Durable Manufacturing	7.83	8.03	7.87	7.61	7.71	7.90	7.95	7.80
% Ch	1.7	2.5	-2.0	-3.2	1.3	2.5	0.6	-1.8
Nondurable Manufacturing	4.72	4.76	4.70	4.63	4.69	4.72	4.72	4.66
% Ch	1.1	0.9	-1.2	-1.7	1.4	0.7	0.0	-1.3
Construction	7.12	7.41	7.39	7.21	7.19	7.28	7.35	7.42
% Ch	4.0	4.1	-0.2	-2.5	-0.3	1.3	0.9	1.0
Service-Providing	127.35	128.99	126.48	124.05	129.73	132.62	134.19	135.17
% Ch	1.4	1.3	-1.9	-1.9	4.6	2.2	1.2	0.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	58.6	60.8	46.7	41.3	43.2	43.6	44.2	44.7
Personal Saving/Disposable Income (%)	7.5	7.9	12.5	11.5	7.8	7.8	8.4	9.1
Auto Sales (Millions)	5.7	5.1	3.8	3.5	3.5	3.4	3.5	3.4
% Ch	-11.6	-11.1	-24.2	-8.3	-2.1	-0.3	0.4	-0.6
Housing Starts (Millions)	1.252	1.219	1.321	1.401	1.339	1.332	1.299	1.252
% Ch	4.4	-2.6	8.3	6.1	-4.4	-0.5	-2.5	-3.6
Federal Budget Surplus (Billions)	-844.9	-979.1	-2,234.3	-2,116.2	-1,277.5	-1,072.3	-1,019.1	-1,071.2
Net Exports (Billions)	-564.3	-640.0	-555.3	-758.8	-708.2	-595.1	-528.4	-559.6
3-Month Treasury Bill Rate (%)	1.41	2.26	1.20	0.10	0.11	0.09	0.08	0.08
10-Year Treasury Note Yield (%)	2.57	2.74	1.41	0.83	1.12	1.25	1.32	1.61
Bond Index of 20 G.O. Munis. (%)	3.67	4.01	3.20	2.27	2.31	2.28	2.35	2.64
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	2.95	3.09	3.11	3.17	3.41

Table 1.2
Forecast Analysis
 Comparison of Forecasts for 2019-21

U.S.	Average Annual Rate of Growth (Percent) 2019:2-2021:2		Average Rate (Percent) 2019:3 to 2021:2	
	Real GDP	PCE Price Index	3 Month T-Bill Rate	Mortgage Rate
2016				
February	2.2	1.7	2.79	5.60
June	2.2	1.9	2.81	5.67
September	2.2	1.9	2.79	5.77
November	2.1	2.0	2.55	5.57
2017				
March	2.0	1.9	2.80	5.96
June	2.0	2.0	2.81	5.97
September	2.0	1.9	2.83	6.00
November	2.1	2.0	2.56	5.08
2018				
February	2.0	2.0	3.00	5.26
June	1.9	2.1	3.09	5.28
September	1.9	2.0	3.09	5.11
November	1.8	2.0	3.10	5.17
2019				
March	1.8	2.1	2.66	4.77
June	1.8	1.8	2.23	4.26
September	1.7	2.1	1.70	3.86
November	1.8	1.9	1.64	3.97
2020				
February	1.9	1.6	1.59	3.84
June	-1.2	1.0	0.69	3.41
September	-0.5	1.4	0.65	3.29
November	0.1	1.5	0.65	3.24

Table 1.3
Forecast Analysis
 Comparison of Forecasts for 2021-23

U.S.	Average Annual Rate of Growth (Percent) 2021:2-2023:2		Average Rate (Percent) 2021:3 to 2023:2	
	Real GDP	PCE Price Index	3 Month T-Bill Rate	Mortgage Rate
2018				
February	2.1	2.0	3.15	5.28
June	2.1	2.1	3.17	5.30
September	2.1	1.9	3.14	5.13
November	2.0	2.0	3.16	5.20
2019				
March	1.9	2.0	2.66	4.92
June	1.9	1.9	2.20	4.72
September	1.9	1.9	2.16	4.65
November	1.9	2.0	2.16	4.53
2020				
February	1.9	2.0	1.96	4.43
June	3.7	1.5	0.07	3.02
September	3.4	1.6	0.10	3.12
November	2.6	1.8	0.10	3.10

Table 1.4

Fiscal Years

Forecast Comparison

Forecast 2021 to 2025

	2019	2020	2021	2022	2023	2024	2025
U.S.							
Real GDP							
November	18,884.3	18,677.3	18,787.5	19,434.6	19,900.2	20,306.6	20,702.5
% Ch	2.5	-1.1	0.6	3.4	2.4	2.0	1.9
September	18,884.3	18,672.2	18,499.9	19,291.4	19,936.9	20,450.0	20,945.6
% Ch	2.5	-1.1	-0.9	4.3	3.3	2.6	2.4
PCE Price Index							
November	109.0	110.5	112.3	114.6	116.5	118.5	120.8
% Ch	1.8	1.3	1.6	2.1	1.7	1.7	1.9
September	109.0	110.5	112.1	114.2	116.0	117.8	120.0
% Ch	1.8	1.3	1.4	1.9	1.5	1.6	1.9
Unemployment Rate							
November	3.77	6.00	6.92	5.39	4.70	4.46	4.35
September	3.77	6.00	7.75	5.78	4.48	3.92	3.59
Mortgage Rate							
November	4.43	3.53	2.95	3.09	3.11	3.17	3.41
September	4.43	3.53	3.06	3.09	3.15	3.17	3.37
3 Month T-Bill Rate							
November	2.26	1.20	0.10	0.11	0.09	0.08	0.08
September	2.26	1.20	0.10	0.10	0.09	0.09	0.11



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy continues to recover from the recession but growth is slowing.**
- **The state’s economy has recovered nearly half the jobs lost in March, April, and May.**
- **Washington’s unemployment rate declined to 6.0% in October, down significantly from the 16.3% rate reached in April.**
- **Washington housing construction improved to 43,700 units in the third quarter from 40,300 units in the second quarter.**
- **Washington exports continue to decline, mostly because of transportation equipment.**
- **Washington GDP declined 7.7% from the peak compared to 10.1% for the U.S.**
- **Seattle consumer price inflation exceeded the national average in October.**
- **The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September.**

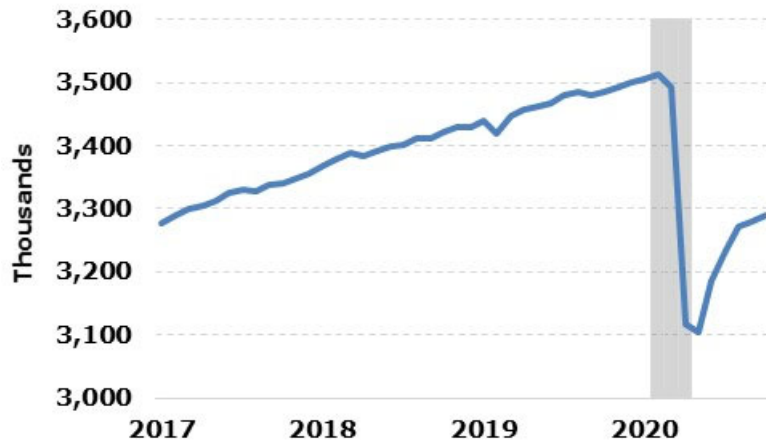
Current Conditions

The Washington economy continues to recover from the recession but growth is slowing

The Washington economy continues to recover from the recession but growth is slowing. As of October, the state’s economy has recovered nearly half the jobs lost in March, April, and May but employment growth has slowed (see Figure 2.1). Washington’s unemployment rate declined to 6.0% in October, down significantly from the 16.3% rate reached in April. Washington housing construction improved to 43,700 units in the third quarter from 40,300 units in the second quarter. Washington exports continue to decline, mostly because of transportation equipment. Washington GDP declined 7.7% from the peak compared to 10.1% for the U.S. Seattle consumer price inflation exceeded the national average in October.

Figure 2.1: Washington Employment

Washington employment growth has slowed



Source: Employment Security Department; data through 2020 Q3

Employment continued to recover in September and October

We have two months of new Washington employment data since the September forecast was released. Employment continued to rise in September and October following the historic declines in March, April, and May. Total nonfarm payroll employment rose 18,200 (seasonally adjusted) in September and October which was 22,000 less than expected in the September forecast. Private services-providing sectors added 32,400 jobs in the two-month period. The manufacturing sector lost 700 jobs which was more than accounted for by the loss of 3,800 aerospace jobs. Construction employment increased by 6,000. Federal government employment decreased by 7,500 however 2,300 of those were temporary Census jobs. State and local government payrolls declined by 12,200 jobs in September and October.

New QCEW data lowered employment slightly

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 subtracted 4,900 (0.1%) from the estimated level of total employment in August 2020. Because of the lower-than-expected employment growth in September and October in addition to the downward revision to the August estimate, employment is 26,900 (0.8%) lower in October than expected in the September forecast.

Unemployment is down significantly

Washington's unemployment rate declined to 6.0% in October from a revised 8.3% in September. The October rate is down significantly from the 16.3% rate reached in April which was an all-time high in the series that dates back to 1976.

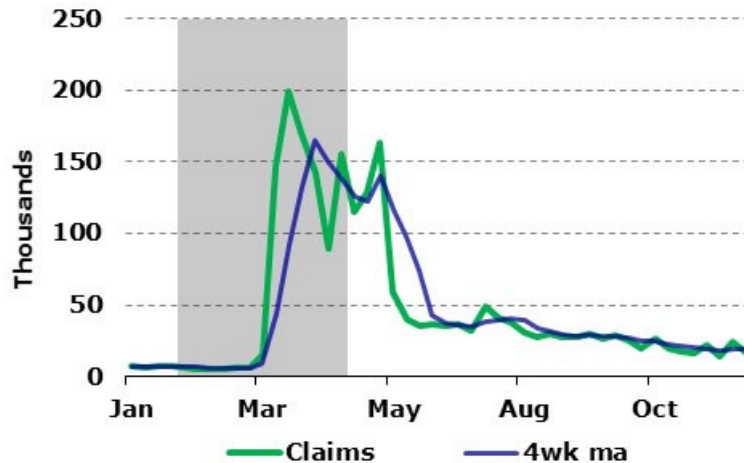
UI claims have declined sharply since the peak

Initial claims for unemployment insurance have declined from the unprecedented levels of the spring but remain high (see Figure 2.2). The seasonally adjusted number of claims in Washington declined to 16,600 in the week ending November 28, 2020 from 24,500 in the previous week. The four-week moving

average was unchanged at 19,300. While the moving average is down 88% since the peak in early April, it is still more than three times its year-ago level.

Figure 2.2: Initial Claims for Unemployment Insurance

Initial claims are still nearly twice their year-ago level



Source: Source: Washington Department of Employment Security; data through November 28, 2020

Washington housing permits increased in the third quarter

Washington housing construction improved to 43,700 units (SAAR) in the third quarter from 40,300 units in the second quarter and exceeded the September forecast of 41,000 units. In the third quarter, single-family units averaged of 24,700 and multi-family units averaged 19,000. Housing construction slowed slightly at the start of the fourth quarter. Permits averaged 42,200 units (SAAR) in October consisting of 27,600 single-family units and 14,600 multi-family units.

Seattle-area home prices increased rapidly in July, August, and September

Seattle-area home prices increased rapidly in July, August, and September after three consecutive monthly declines. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 1.0% in July, 2.0% in August, and 2.3% in September following declines of 0.1%, 0.3%, and 0.1% in April, May, and June. Seattle home prices were up 10.1% over the year. In comparison, the composite-20 index was up 6.6% over the year. In September, Seattle home prices were up 111% since the December 2011 trough and exceeded the May 2007 peak by 47%.

Washington exports declined over the year for an eighth consecutive quarter

Washington exports declined over the year for an eighth consecutive quarter. Year-over-year exports decreased 30.5% in the third quarter of 2020. The large decline was mostly because of transportation equipment exports (mostly Boeing planes) which fell 63.2% over the year. Third quarter exports of agricultural products increased 9.2% over the year but exports of all other commodities (mostly manufacturing) declined 17.0% over the year.

Washington Manufacturing activity is expanding

The Institute of Supply Management - Western Washington Index (ISM-WW) barely indicated expanding manufacturing activity in October. The index, which measures conditions in the manufacturing sector, decreased to 50.9 in October from 53.0 in September (index values above 50 indicate growth while values below 50 indicate contraction). The index has been positive in four of the last five months after indicating manufacturing declines in March, April, and May. The orders, inventory, and deliveries components indicated expansion in October while the production and employment components indicated contraction.

Washington car and truck sales continued to recover

Washington car and truck sales continued to recover in October. The seasonally adjusted number of new vehicle registrations increased 7.8% in October following a 4.1% increase in September. Light vehicle sales have largely recovered from April's low. The number of new vehicle registrations fell 0.3% over the year in October.

Washington personal income grew 35.1% (SAAR) in the second quarter.

The simple (not annualized) growth rate was 7.8%

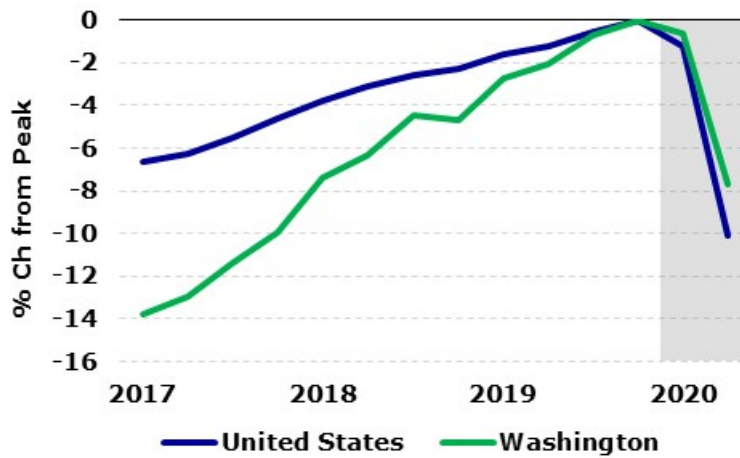
In September, after the forecast was complete, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the second quarter of 2020. According to these estimates, Washington personal income rose from \$506.5 billion (SAAR) in the first quarter of 2020 to \$546.0 billion in the second quarter of 2020. The reported 35.1% growth rate (SAAR) in Washington personal income was the 24th largest among the states and District of Columbia and slightly exceeded the 34.2% growth rate for the U.S. as a whole. The income growth in the second quarter was extraordinary, especially considering the sharp contraction in economic activity. Washington personal income from net earnings (wages and salaries plus employer-provided benefits plus proprietors' income less contributions for government social insurance plus an adjustment for residence) declined at a 25.1% rate (SAAR) and income from property (dividends, interest, and rent) declined at a 9.6% rate. However, personal current transfer receipts, boosted by the CARES Act, soared at a 1,260.4% rate (SAAR). As a result, increased transfer payments far outweighed the decline in net earnings and property income in the second quarter.

Every jurisdiction suffered a sharp decline in real GDP

The BEA released estimates of real GDP for the 50 states and District of Columbia in October. Every jurisdiction suffered a sharp decline in real GDP from the business cycle peak in the fourth quarter of 2019 to the second quarter of 2020. The decline in Washington was 7.7% compared to 10.1% for the U.S. (see Figure 2.3). Bad as the recession was in Washington, only one state (Utah) and the District of Columbia declined less. Unsurprisingly, the highly tourism-dependent states of Nevada and Hawaii suffered the largest declines.

Figure 2.3: Real GDP Compared to the Peak

Washington real GDP declined 7.7% from the fourth quarter of 2019 to the second quarter of 2020



Source: BEA, ERFC Calculations; data through 2020 Q2

Seattle consumer price inflation exceeded the national average

Seattle-area consumer price inflation exceeded the national average in October. From October 2019 to October 2020, the Seattle CPI rose 2.1% compared to a 1.2% increase in the U.S. City Average index. Core prices, which exclude food and energy, increased 2.4% over the year in Seattle compared to 1.6% for the U.S. City Average. Above average shelter cost inflation contributed to the higher local rate. Over-the-year shelter-cost inflation in Seattle was 3.1% compared to the national rate of 2.0%. However, Seattle inflation excluding shelter also exceeded the national average at 1.5% compared to 0.8%.

Washington State Forecast

The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September

The Washington forecast features lower income and employment but higher housing construction and inflation than did the forecast adopted in September. We expect a 4.8% decline in Washington employment this year which is down slightly from the 4.7% decline the September forecast. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 2.3% average rate expected in September. Our forecast for nominal personal income growth this year is 7.3%, down from 7.7% in the September forecast. The slightly slower growth than expected in September is due to the absence of any new federal stimulus in the fourth quarter. We expect personal income to decline 1.1% in 2021 compared to the 1.9% decline in the September forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 4.4% per year compared to the 4.6% rate in the September forecast. We expect 44,900 housing units authorized by building permits this year, up from 44,200 units in the September forecast but down from the 48,400 units authorized in 2019. We expect permits to average 42,600 units in 2021 through 2025, also up from 41,300 units in the September forecast. We expect the Seattle CPI to rise 1.9% this year

compared to 1.6% in the September forecast. We expect Seattle inflation to average 2.2% per year in 2021 through 2025 compared to 2.1% per year in the September forecast.

Washington Payroll Employment

Washington employment will decline sharply in 2020

Washington employment will decline sharply in 2020. The impact on the economy will be uneven. Industries in which social distancing is most difficult will be hardest hit. Employment in leisure and hospitality, which includes eating and drinking places, accommodation, arts, entertainment, and recreation, is expected to decline 20.8%. At the opposite extreme, electronic shopping is expected to increase 17.5%. We expect a 4.8% decline in Washington employment this year which is down slightly from the 4.7% decline the September forecast. We expect above-average growth through the remainder of the forecast as the economy recovers from this deep recession. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 2.3% average rate expected in September. On an annual basis, we expect 3.5% employment growth in 2021, 2.9% in 2022, 1.9% in 2023, 1.1% in 2024, and 1.0% in 2025.

This forecast incorporates Boeing's announcement of deep cuts to company-wide employment in 2021 as well as the consolidation of 787 production in South Carolina

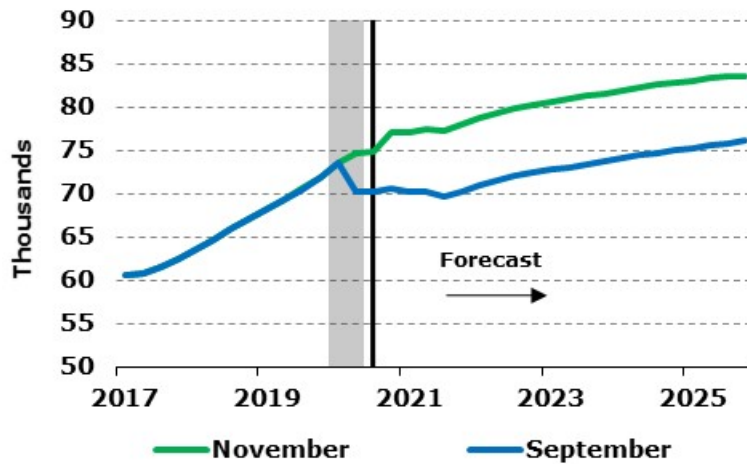
This forecast incorporates Boeing's announcement of deep cuts to company-wide employment in 2021 as well as the consolidation of 787 production in South Carolina. Boeing's latest announcement indicates they plan to reduce employment from 161,000 at the beginning of 2020 to about 130,000 by the end of 2021, a reduction of 31,000 jobs. We assume that Boeing is currently slightly more than halfway through this process. We also assume that the vast majority of cuts will continue to be made in Washington State and that non-Boeing aerospace employment will also decline as a result of lower production rates. Specifically, the forecast assumes that Washington aerospace employment will be 27,600 lower in December 2021 than in January 2020. We have already lost about 14,100 aerospace jobs as of October 2020 and expect a further decline of 13,500 by December 2021. On an annual average basis, we expect aerospace employment to decline 7.9% this year, 17.9% next year, and 6.7% in 2022. We expect aerospace employment to grow 0.6% in 2023, 0.8% in 2024, and 0.7% in 2025.

The software sector will grow 7.3% this year

Despite the national recession, we expect Washington's software sector to continue to grow. Based on employment data through October, we expect employment to rise 7.3% this year, up from 1.6% expected in September. The large upward revision in growth this year is due to a revision in data for the second quarter (see Figure 2.4). On an annual average basis, we expect growth rates of 3.2% in 2021, 2.7% in 2022, 2.0% in 2023, 1.6% in 2024, and 1.2% in 2025.

Figure 2.4: Washington Software Employment

Software employment was revised higher



Source: Employment Security Department, ERFC; historical data through 2020 Q3

Electronic shopping and mail order employment has continued to grow

Another sector that has continued to grow during the pandemic is electronic shopping and mail order. In Washington, this sector consists almost entirely of electronic shopping employment. We have decreased our forecast for employment growth in 2020 from 19.7% to a still very strong 17.5% and decreased next years' projected growth from 8.6% to 6.3% based on growth through October. The forecast for growth during the remainder of the forecast is similar to the September forecast. On an annual basis, electronic shopping and mail order employment will grow 3.0% in 2022, 2.5% in 2023, 2.3% in 2024, and 2.2% in 2025.

Construction employment was recovered half the jobs lost in the second quarter

Historical construction employment estimates for the second quarter were also revised up sharply. As a result, we have revised our forecast for growth this year from -8.3% to -2.8%. Even with the upward revision, construction employment declined by 23,600 in the second quarter. The sector recovered half those jobs in the third quarter and we expect growth to continue into the fourth quarter. However, we do not expect employment to surpass the previous peak. On a calendar year basis, we expect construction employment to decline 1.8% in 2021, 2.6% in 2022, 1.2% in 2023, and 0.2% in 2024. We expect 1.2% growth in 2025.

Washington Personal Income

Second quarter personal income was higher than previously thought

In September, after the forecast was complete, the Bureau of Economic Analysis released estimates for state personal income through the second quarter of 2020. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) data. Our current estimate of Washington personal income in the second quarter of 2020 is \$4.8 billion (0.9%) higher than in the September

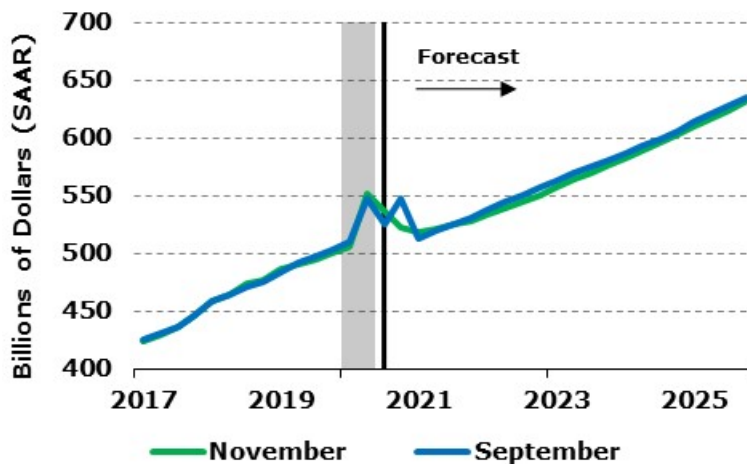
forecast. Wages and salaries are \$3.0 Billion (1.2%) higher than expected and nonwage income is \$1.8 (0.6%) billion higher than expected.

Personal income growth in 2020 is lower than expected in September due to absence of renewed stimulus

Our forecast for nominal personal income growth this year is 7.3%, down from 7.7% in the September forecast. The strong personal income growth this year is the result of extraordinary fiscal stimulus. The slightly slower growth than expected in September is due to the absence of any new federal stimulus in the fourth quarter. Personal income will decline next year as the stimulus is withdrawn. We expect personal income to decline 1.1% in 2021 compared to the 1.9% decline in the September forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 4.4% per year compared to the 4.6% rate in the September forecast. On an annual basis, we expect personal income to grow 3.7% in 2022, 4.5% in 2023, 4.6% in 2024, and 4.8% in 2025 (see Figure 2.5).

Figure 2.5: Washington Personal Income

Stimulus boosted personal income in 2020



Source: Bureau of Economic Analysis, ERFC; historical data through 2020 Q2

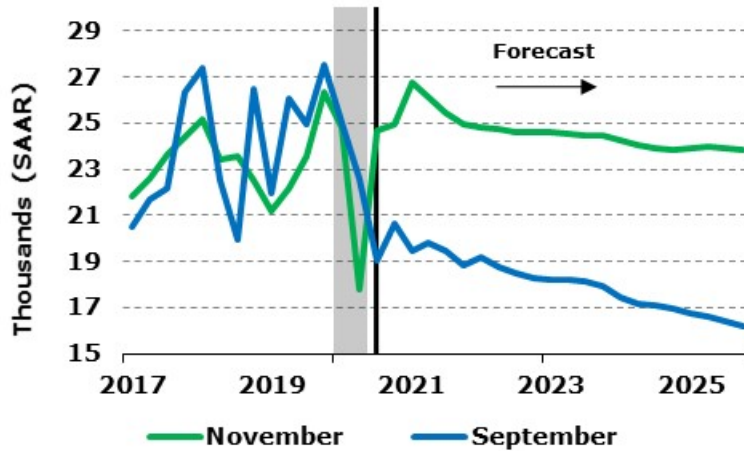
Washington Building Permits

Washington housing construction has improved in recent months

Washington housing construction has improved in recent months but not enough to prevent a decline for the year. The number of housing units authorized by building permits rose from just 17,000 in 2009 to 48,400 in 2019. Permits tumbled to just 28,600 (SAAR) units in April, which was the lowest rate in more than six years. Permits have improved enough since April to average 40,300 units in the second quarter and 43,700 units in the third quarter. The housing recovery has been concentrated in the single-family segment, which has returned to pre-recession levels of activity (see Figure 2.6).

Figure 2.6: Washington Housing Permits

The housing recovery has been concentrated in the single-family segment



Source: Census Bureau, ERFC; historical data through 2020 Q3

We expect 44,900 housing units this year

We expect 44,900 housing units authorized by building permits this year, up from 44,200 units in the September forecast but down from the 48,400 units authorized in 2019. We expect permits to average 42,600 units in 2021 through 2025, also up from 41,300 units in the September forecast. On a calendar year basis, we expect 45,200 units in 2021, 43,400 units in 2022, 42,600 units in 2023, 41,200 units in 2024, and 40,400 units in 2025.

Consumer Price Index

The inflation outlook has increased since the September forecast

The inflation outlook has increased since the September forecast to reflect a downward revision in unemployment and dollar depreciation. With actual data through October, we expect the core index to rise 1.9% this year compared to 1.7% in the September forecast. We now expect core inflation to average 2.2% per year in 2021 through 2025 compared to 2.0% in the September forecast. Our forecast calls for annual core Seattle inflation rates of 2.7% in 2021, 2.2% in 2022, 2.0% in 2023, 2.1% in 2024, and 2.2% in 2025.

Energy costs have partially recovered

Energy costs have partially recovered since the large decline in the second quarter but they are still down substantially over the year. This will help dampen headline inflation this year. We expect the Seattle CPI to rise 1.9% this year compared to 1.6% in the September forecast. Energy costs are not expected to have a significant impact on inflation in the next several years. We expect Seattle inflation to average 2.2% per year in 2021 through 2025 compared to 2.1% per year in the September forecast. On a calendar year basis, we expect inflation rates of 2.8% in 2021, 2.2% in 2022, 1.8% in 2023, 2.0% in 2024, and 2.1% in 2025.

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 in addition to the baseline forecast.

Optimistic

The optimistic scenario assumes a new fiscal stimulus package and better COVID containment

The optimistic scenario is characterized by a quicker recovery than in the baseline. This scenario assumes that a new fiscal stimulus package is implemented early next year. The stimulus package includes \$270 billion worth of direct payments to households, the reintroduction of emergency unemployment benefits of \$300 per week, and an extension of the PUA and PEUC programs through the second quarter of 2021. In addition, this scenario assumes that a vaccine is ready for limited use in the fourth quarter of 2020 and for widespread use in the spring of next year. This renders the spread of COVID-19 and its health ramifications less threatening than in the baseline forecast. In this scenario, the fiscal stimulus and better COVID containment keeps economic activity above levels observed in the baseline. The previous peak in GDP is passed in the third quarter of 2021, one quarter sooner than in the baseline. The unemployment rate spiked to 13.0% in the second quarter, but quickly falls to below 4.5% by early 2022.

The optimistic scenario also assumes a 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 bottoms out in the fourth quarter of 2021 as in the baseline, but then begins to recover rather than level off as in the baseline. Software employment grows more rapidly 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. Construction employment declines less through early 2022 than in the baseline then begins to rise. By the end of 2025, Washington nonfarm payroll employment is higher by 131,000 jobs (3.6%) than in the baseline forecast and Washington personal income is \$53.8 billion (8.5%) higher.

Pessimistic

This pessimistic scenario is characterized by a weaker recovery in consumer spending than in the baseline forecast. As a result of an upturn in new cases, hospitalizations, and deaths, the pace of "opening up" and its success in promoting economic activity partially reverses and remains slower than in the baseline. This slows the rise of spending, production, and employment more

broadly. In addition, this scenario assumes no new fiscal stimulus. Consumer spending declines slightly at the end of the year and in the first quarter, compared to modest increases in the base forecast. GDP rises at a 1.0% annualized rate in the fourth quarter but slips to 0.6% in the first quarter, compared to 1.7% and 4.3% rates of increase in the baseline forecast. The unemployment rate peaked at 13.0% in second quarter, and declines at a slower pace than in the baseline, not falling below 5.0% until mid-2023. The previous peak in GDP is not passed until the third quarter of 2022, three quarters later than in the baseline forecast.

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 more quickly in the baseline. Software employment also declines rather than rising as in the baseline forecast. After an initial rebound due to a partial lifting of restrictions, construction employment declines faster than in the baseline and the decline continues throughout the forecast. The relatively weak local economy also puts downward pressure on Washington wages and the Seattle CPI. By the end of 2025, Washington nonfarm payroll employment is 34,900 (1.0%) lower than in the baseline forecast and Washington personal income is \$44.6 billion (7.1%) 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 GCEA national forecast predicts a slightly shallower recession

The GCEA national forecast predicts a slightly shallower recession than does the baseline forecast. The Governor’s Council members forecast a 3.3% decline in real GDP growth this year compared to the 3.7% decline in the baseline forecast. On average, the Council members’ forecast averages 1.8% per year over the six-year interval compared to the baseline forecast of 1.6% per year. The GCEA forecast of 1.8% average real consumer spending growth is also slightly higher than the 1.6% rate in the baseline forecast. The GCEA members’ PCE inflation forecast averages 1.6% per year compared to 1.8% per year in the baseline forecast. The Council members’ mortgage rate forecast averages 3.3% over the forecast horizon, which is slightly higher than the 3.2% average mortgage rate in the baseline forecast and their oil price forecast averages \$52 per barrel compared to \$46 in the baseline forecast.

The Governor’s Council of Economic Advisors’ Washington forecast is generally stronger than the baseline. The GCEA scenario for Washington real personal income growth averages 2.5% per year in 2020 through 2025, compared to the 2.2% average rate in the baseline forecast. Because their inflation forecast is lower than ours is, the difference in average nominal

The Governor's Council of Economic Advisors' Washington forecast is generally stronger than the baseline

income growth is smaller at 4.1% compared to our 3.9%. The Council members' forecast for total employment growth over the six-year period averages 0.9% per year, which is the same rate as in the baseline forecast. The GCEA forecast for average manufacturing employment growth is also the same as the baseline forecast but construction employment growth is stronger. The GCEA housing permit forecast is slightly higher, averaging 45,500 units per year compared to 42,900 in the baseline forecast. At the end of 2025, the GCEA forecast for Washington nonfarm payroll employment is 800 (0.0%) higher than in the baseline forecast and Washington personal income is \$7.1 billion (1.1%) higher.

Table 2.3 compares the GCEA forecast with the baseline forecast.

Table 2.1
Washington Economic Forecast Summary
 Forecast 2021 to 2023

Fiscal Years

	2018	2019	2020	2021	2022	2023	2024	2025
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	421.242	441.810	464.639	467.607	464.028	475.541	488.913	502.301
% Ch	5.5	4.9	5.2	0.6	-0.8	2.5	2.8	2.7
Real Wage and Salary Disb.	213.059	225.733	232.738	238.432	243.214	250.112	257.663	265.102
% Ch	6.6	5.9	3.1	2.4	2.0	2.8	3.0	2.9
Real Nonwage Income	208.183	216.077	231.900	229.175	220.814	225.430	231.250	237.199
% Ch	4.5	3.8	7.3	-1.2	-3.6	2.1	2.6	2.6
Real Per Capita Income (\$/Person)	56,354	58,361	60,644	60,317	59,150	59,924	60,913	61,882
% Ch	3.9	3.6	3.9	-0.5	-1.9	1.3	1.7	1.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.071	1.090	1.105	1.123	1.146	1.165	1.185	1.208
% Ch	1.9	1.8	1.3	1.6	2.1	1.7	1.7	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.671	2.745	2.802	2.873	2.946	3.003	3.058	3.122
% Ch	3.1	2.8	2.1	2.5	2.5	1.9	1.8	2.1
Average Nonfarm Annual Wage	65,777	69,620	73,486	77,808	77,891	79,559	82,256	85,360
% Ch	6.3	5.8	5.6	5.9	0.1	2.1	3.4	3.8
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.93	28.91	28.93	28.01	28.65	29.65	30.55	31.36
% Ch	4.2	3.5	0.0	-3.2	2.3	3.5	3.0	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	451.213	481.750	513.354	524.908	531.700	554.257	579.469	606.636
% Ch	7.6	6.8	6.6	2.3	1.3	4.2	4.5	4.7
Disposable Personal Income	397.240	425.062	454.708	464.670	468.168	486.592	509.400	535.410
% Ch	7.7	7.0	7.0	2.2	0.8	3.9	4.7	5.1
Per Capita Income (\$/Person)	60,362	63,636	67,002	67,707	67,776	69,842	72,194	74,734
% Ch	5.9	5.4	5.3	1.1	0.1	3.0	3.4	3.5
Employment (Thousands)								
Washington Civilian Labor Force	3,763.5	3,859.7	3,936.6	3,944.8	4,012.1	4,072.9	4,122.9	4,170.2
Total Washington Employment	3,591.9	3,688.6	3,678.1	3,661.3	3,765.7	3,846.4	3,900.8	3,950.2
Unemployment Rate (%)	4.56	4.43	6.57	7.19	6.14	5.56	5.39	5.28
Nonfarm Payroll Employment	3,362.6	3,433.1	3,403.5	3,339.4	3,472.6	3,556.9	3,604.9	3,642.8
% Ch	2.4	2.1	-0.9	-1.9	4.0	2.4	1.3	1.1
Manufacturing	284.1	291.9	287.2	267.6	263.0	266.2	268.4	267.0
% Ch	-1.1	2.8	-1.6	-6.8	-1.7	1.2	0.9	-0.5
Durable Manufacturing	199.4	205.5	202.2	184.4	177.8	179.8	181.5	180.9
% Ch	-2.1	3.1	-1.6	-8.8	-3.6	1.2	0.9	-0.3
Aerospace	82.5	86.6	87.6	73.6	63.3	62.5	63.2	63.5
% Ch	-5.9	4.9	1.2	-16.0	-13.9	-1.3	1.0	0.6
Nondurable Manufacturing	84.6	86.3	84.9	83.2	85.2	86.3	86.9	86.1
% Ch	1.5	2.0	-1.7	-2.1	2.5	1.3	0.7	-1.0
Construction	206.5	216.7	216.2	212.8	205.8	202.5	200.6	201.7
% Ch	6.7	4.9	-0.2	-1.6	-3.3	-1.6	-1.0	0.6
Service-Providing	2,865.8	2,918.4	2,894.4	2,853.4	2,998.0	3,082.4	3,130.1	3,168.2
% Ch	2.5	1.8	-0.8	-1.4	5.1	2.8	1.5	1.2
Software Publishers	63.1	67.6	72.7	76.7	78.3	80.4	81.8	82.9
% Ch	4.7	7.2	7.4	5.5	2.2	2.7	1.7	1.4
Electronic Shopping and Mail-Order	53.5	58.1	69.3	77.7	80.5	82.7	84.7	86.5
% Ch	21.7	8.7	19.1	12.1	3.6	2.7	2.4	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	48.753	45.964	48.125	45.350	44.035	42.889	41.974	40.792
% Ch	9.6	-5.7	4.7	-5.8	-2.9	-2.6	-2.1	-2.8
Single-Family	24.161	22.364	23.104	25.620	24.989	24.594	24.289	23.922
% Ch	9.5	-7.4	3.3	10.9	-2.5	-1.6	-1.2	-1.5
Multi-Family	24.593	23.599	25.021	19.730	19.047	18.295	17.685	16.870
% Ch	9.7	-4.0	6.0	-21.1	-3.5	-3.9	-3.3	-4.6
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	2.95	3.09	3.11	3.17	3.41

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2020	2021	2022	2023	2024	2025
U.S.						
Real GDP, Percent Change						
Optimistic	-1.1	1.3	3.1	2.5	2.8	2.8
Baseline	-1.1	0.6	3.4	2.4	2.0	1.9
Pessimistic	-1.1	-0.4	1.6	3.1	2.7	3.4
PCE Price Index, Percent Change						
Optimistic	1.3	1.6	2.4	2.3	2.1	2.1
Baseline	1.3	1.6	2.1	1.7	1.7	1.9
Pessimistic	1.3	1.3	1.1	1.1	1.1	1.3
Mortgage Rate, Percent						
Optimistic	3.53	2.93	3.15	3.42	3.56	3.74
Baseline	3.53	2.95	3.09	3.11	3.17	3.41
Pessimistic	3.53	2.91	2.95	2.90	2.88	3.04
3 Month T-Bill Rate, Percent						
Optimistic	1.20	0.11	0.11	0.11	0.18	0.59
Baseline	1.20	0.10	0.11	0.09	0.08	0.08
Pessimistic	1.20	0.10	0.09	0.09	0.09	0.09
Washington						
Real Personal Income, Percent Change						
Optimistic	5.2	2.4	0.4	2.4	3.6	4.3
Baseline	5.2	0.6	-0.8	2.5	2.8	2.7
Pessimistic	5.2	-0.8	-2.4	1.6	2.7	2.8
Personal Income, Percent Change						
Optimistic	6.6	4.1	2.9	4.8	5.8	6.5
Baseline	6.6	2.3	1.3	4.2	4.5	4.7
Pessimistic	6.6	0.5	-1.3	2.7	3.8	4.2
Employment, Percent Change						
Optimistic	-0.9	-1.2	4.9	2.4	1.9	1.9
Baseline	-0.9	-1.9	4.0	2.4	1.3	1.1
Pessimistic	-0.9	-2.5	3.0	2.1	1.7	1.5
Housing Permits, Thousands of Authorized Units						
Optimistic	48.1	46.6	46.8	45.8	45.4	45.6
Baseline	48.1	45.4	44.0	42.9	42.0	40.8
Pessimistic	48.1	45.0	42.2	40.3	40.1	39.6

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2020	2021	2022	2023	2024	2025
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	-3.7	4.0	2.9	2.1	2.0	1.9
GCEA Average	-3.3	4.7	2.5	2.4	2.3	2.3
Real Consumption						
<i>Growth</i>						
ERFC	-3.9	4.6	2.7	2.2	2.1	2.0
GCEA Average	-3.6	4.9	2.7	2.3	2.4	2.4
PCE Price Index						
<i>Growth</i>						
ERFC	1.2	2.0	1.9	1.6	1.8	1.9
GCEA Average	1.3	1.9	1.9	1.7	1.6	1.5
Mortgage Rate						
<i>Percent</i>						
ERFC	3.1	3.0	3.1	3.1	3.3	3.5
GCEA Average	3.1	3.0	3.1	3.2	3.5	3.7
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	41.2	44.7	46.2	47.4	48.5	49.2
GCEA Average	41.8	49.1	53.6	54.8	55.9	57.0
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	6.1	-3.1	1.7	2.8	2.7	2.8
GCEA Average	6.4	-2.7	2.2	2.6	3.0	3.3
Wage and Salary Employment						
<i>Growth</i>						
ERFC	-4.8	3.5	2.9	1.9	1.1	1.0
GCEA Average	-5.1	2.6	2.7	2.1	1.7	1.6
Manufacturing Employment						
<i>Growth</i>						
ERFC	-6.3	-4.0	0.0	1.5	-0.1	-0.6
GCEA Average	-6.5	-5.1	0.5	0.5	0.4	0.5
Construction Employment						
<i>Growth</i>						
ERFC	-2.8	-1.8	-2.6	-1.2	-0.2	1.2
GCEA Average	-3.2	0.2	0.7	0.7	0.7	0.8
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	44.9	45.2	43.4	42.6	41.2	40.4
GCEA Average	45.2	47.2	46.6	45.4	44.9	43.7
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	7.7	1.3	1.1	2.9	3.6	3.9
GCEA Average	6.2	2.4	2.5	2.5	3.0	3.2

Table 2.4
Forecast Analysis
 Comparison of Forecasts for 2019-21

Washington	Average Annual Rate of Growth (Percent) 2019:2-2021:2			Average Annual Rate (Thousands) 2019:3 to 2021:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2016				
February	1.1	4.7	3.0	44.3
June	1.1	5.0	3.1	44.3
September	1.1	5.1	3.0	44.3
November	1.2	5.0	3.0	41.5
2017				
March	1.1	4.9	2.9	40.7
June	1.2	5.1	3.0	42.0
September	1.2	5.3	3.3	42.0
November	1.2	5.3	3.2	42.6
2018				
February	1.4	5.2	3.1	42.8
June	1.2	5.0	2.9	43.2
September	1.2	5.0	2.9	44.0
November	1.3	4.9	2.8	43.5
2019				
March	1.3	4.8	2.7	42.1
June	1.4	4.9	3.0	41.8
September	1.5	4.7	2.6	43.3
November	1.3	4.0	2.1	43.8
2020				
February	1.5	4.3	2.7	46.8
June	-0.4	3.0	1.9	40.9
September	-0.4	2.8	1.3	46.0
November	-0.8	3.1	1.5	46.7

Table 2.5
Forecast Analysis
 Comparison of Forecasts for 2021-23

Washington	Average Annual Rate of Growth (Percent) 2021:2-2023:2			Average Annual Rate (Thousands) 2021:3 to 2023:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2018				
February	1.0	5.0	2.9	42.4
June	0.7	5.0	2.9	41.9
September	0.8	4.8	2.9	42.0
November	1.0	4.8	2.8	41.4
2019				
March	1.0	4.7	2.7	42.5
June	1.1	4.9	2.9	42.0
September	1.0	4.9	2.9	42.3
November	0.9	4.8	2.8	42.2
2020				
February	1.0	4.6	2.6	43.4
June	2.0	3.5	2.0	40.2
September	2.6	4.6	3.0	42.8
November	2.4	3.9	2.1	43.5

Table 2.6

Fiscal Years

Forecast Comparison

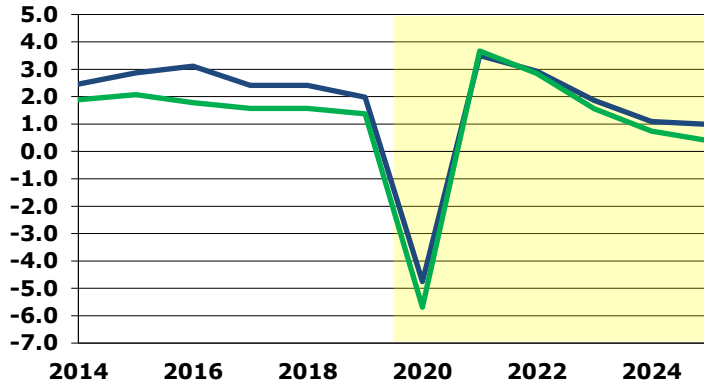
Forecast 2021 to 2025

	2019	2020	2021	2022	2023	2024	2025
Washington							
Real Personal Income							
November	441.810	464.639	467.607	464.028	475.541	488.913	502.301
% Ch	4.9	5.2	0.6	-0.8	2.5	2.8	2.7
September	440.950	465.701	470.014	468.062	482.970	495.757	508.722
% Ch	4.6	5.6	0.9	-0.4	3.2	2.6	2.6
Personal Income							
November	481.750	513.354	524.908	531.700	554.257	579.469	606.636
% Ch	6.8	6.6	2.3	1.3	4.2	4.5	4.7
September	480.818	514.470	526.613	534.652	560.077	583.985	610.426
% Ch	6.5	7.0	2.4	1.5	4.8	4.3	4.5
Employment							
November	3433.1	3403.5	3339.4	3472.6	3556.9	3604.9	3642.8
% Ch	2.1	-0.9	-1.9	4.0	2.4	1.3	1.1
September	3433.1	3395.7	3358.4	3493.3	3587.3	3639.2	3683.6
% Ch	2.1	-1.1	-1.1	4.0	2.7	1.4	1.2
Housing Permits							
November	45.964	48.125	45.350	44.035	42.889	41.974	40.792
% Ch	-5.7	4.7	-5.8	-2.9	-2.6	-2.1	-2.8
September	45.964	48.125	43.916	43.490	42.149	40.509	38.948
% Ch	-5.7	4.7	-8.7	-1.0	-3.1	-3.9	-3.9

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

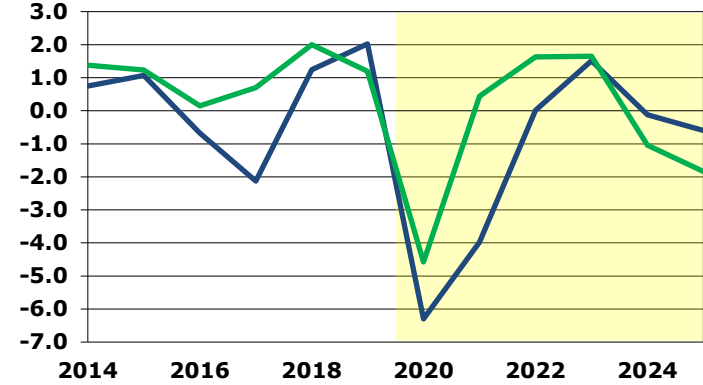
Forecast

Total Nonfarm Payroll Employment



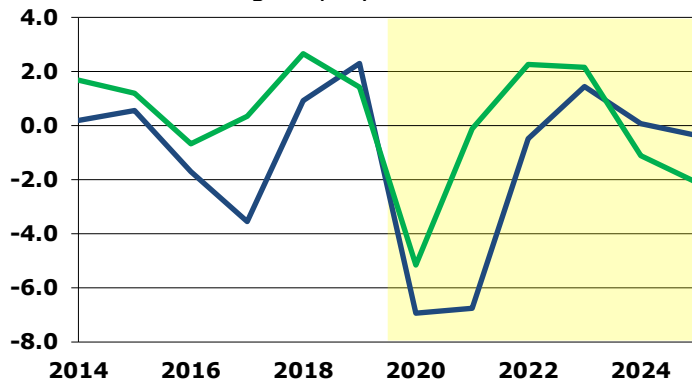
Source: WA State Employment Security Dept. 2019, ERFC 2025

Manufacturing Employment



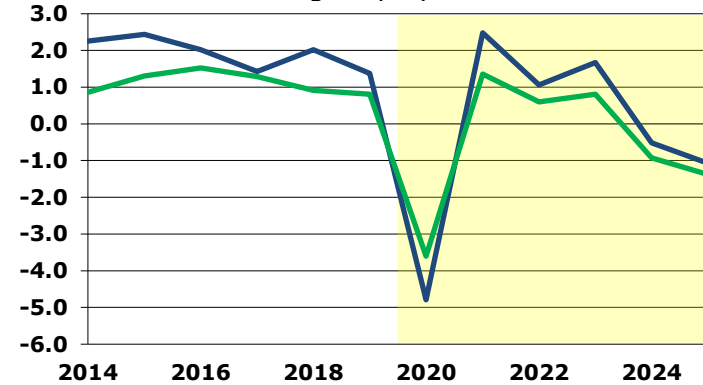
Source: WA State Employment Security Dept. 2019, ERFC 2025

Durable Manufacturing Employment



Source: WA State Employment Security Dept. 2019, ERFC 2025

Nondurable Manufacturing Employment



Source: WA State Employment Security Dept. 2019, ERFC 2025

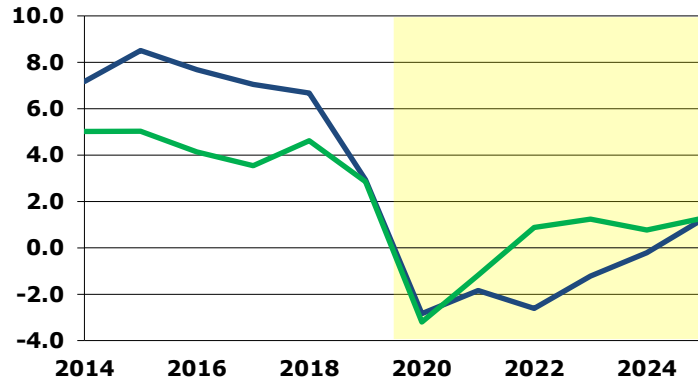
Washington

U.S.

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

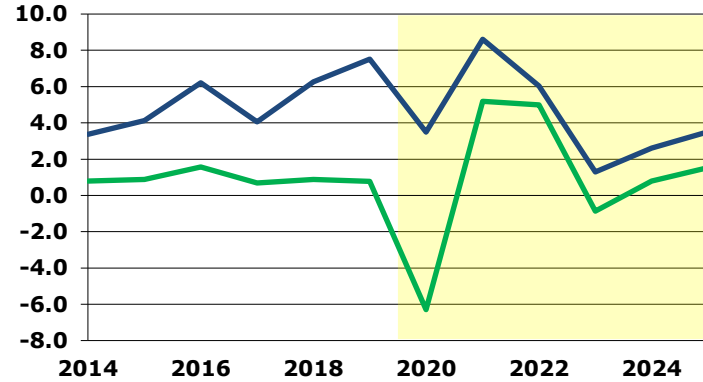
Forecast

Construction Employment



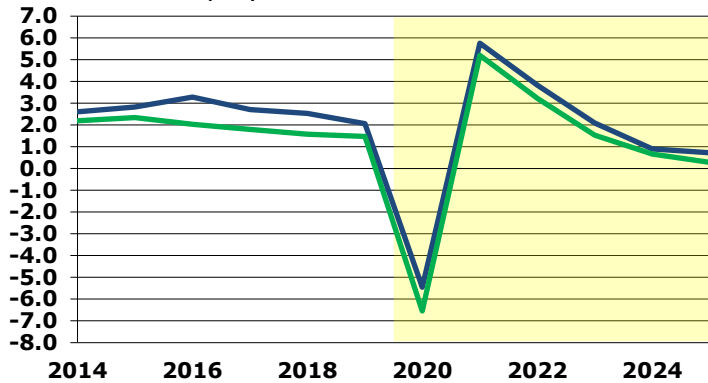
Source: WA State Employment Security Dept. 2019, ERFC 2025

Information Employment



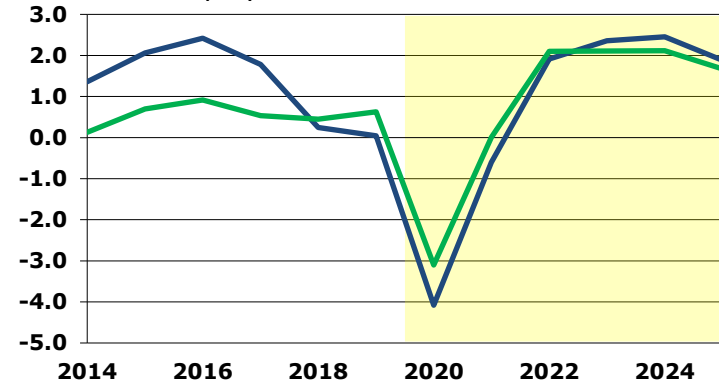
Source: WA State Employment Security Dept. 2019, ERFC 2025

Other Private Employment



Source: WA State Employment Security Dept. 2019, ERFC 2025

Government Employment



Source: WA State Employment Security Dept. 2019, ERFC 2025

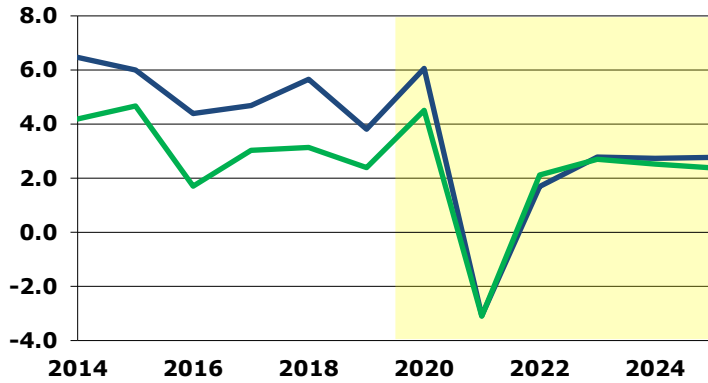
Washington

U.S.

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

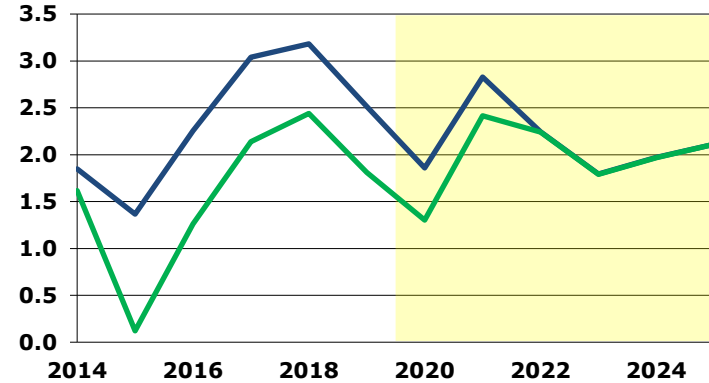
Forecast

Real Personal Income



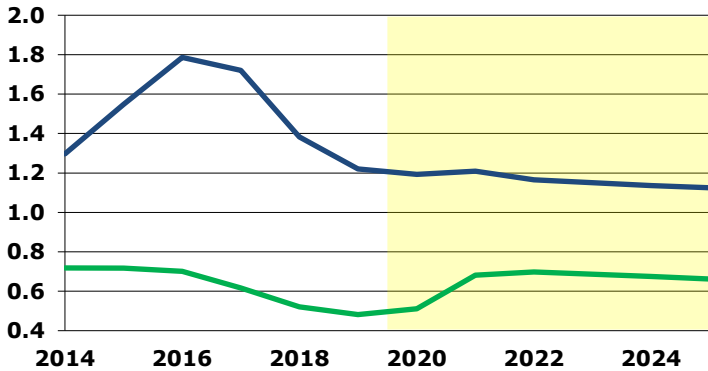
Source: Bureau of Economic Analysis 2019, ERFC 2025

Consumer Price Indices



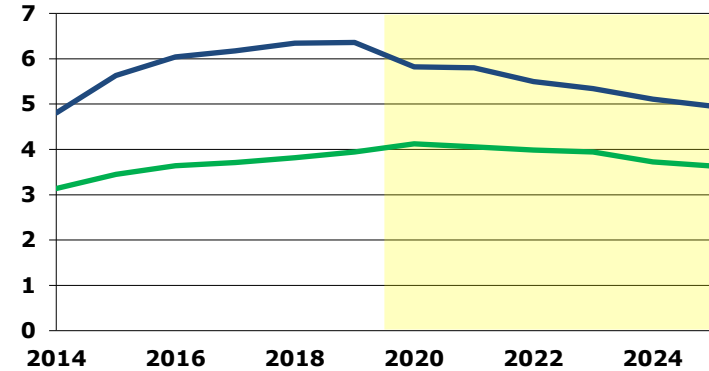
Source: Bureau of Labor Statistics 2019, ERFC 2025

Population



Source: Census Bureau 2019, ERFC 2025

New Housing Units Per 1,000 Population (Level)



Source: Census Bureau 2019, ERFC 2025

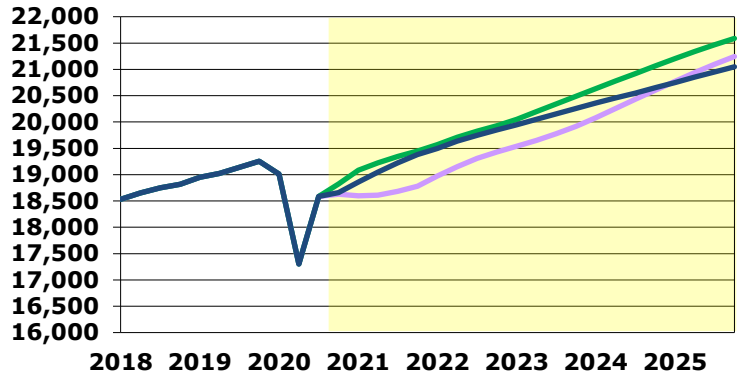
Washington

U.S.

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

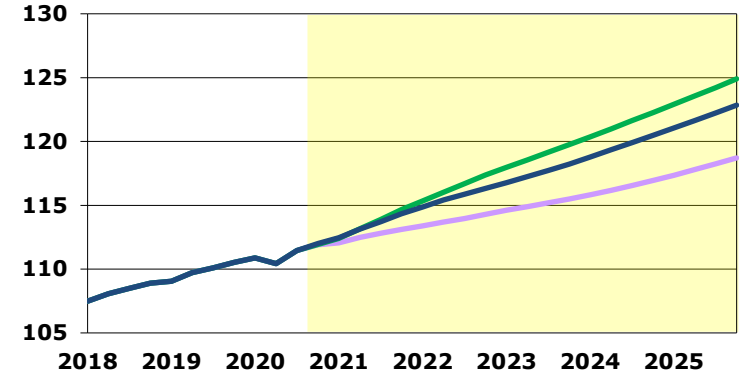
Forecast

Real GDP, Billions of 2012 Dollars



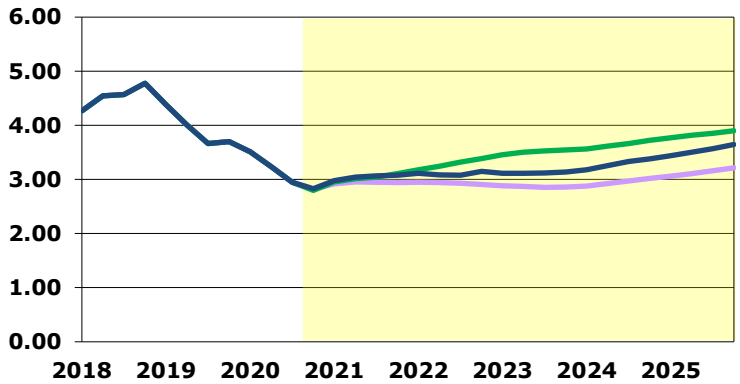
Source: Bureau of Economic Analysis 2020 Q3, ERFC 2025

PCE Price Index, 2012 = 100



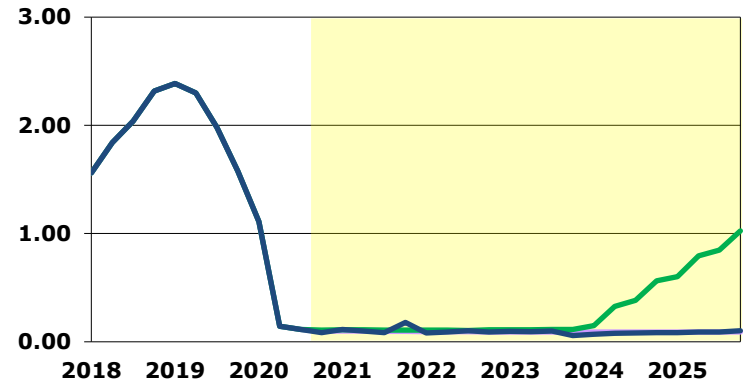
Source: Bureau of Economic Analysis 2020 Q3, ERFC 2025

Mortgage Rate, Percent



Source: Freddie Mac 2020 Q3, ERFC 2025

Three Month T-Bill Rate, Percent



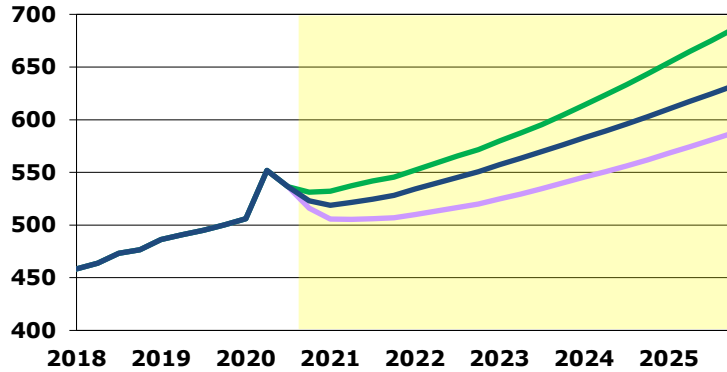
Source: Federal Reserve Board 2020 Q3, ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

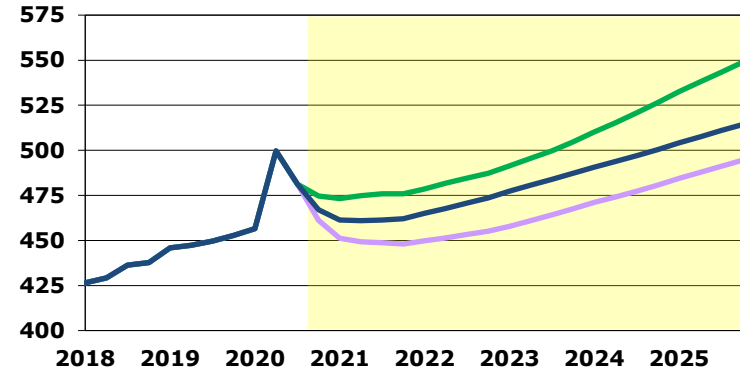
Forecast

Personal Income, Billions of Dollars



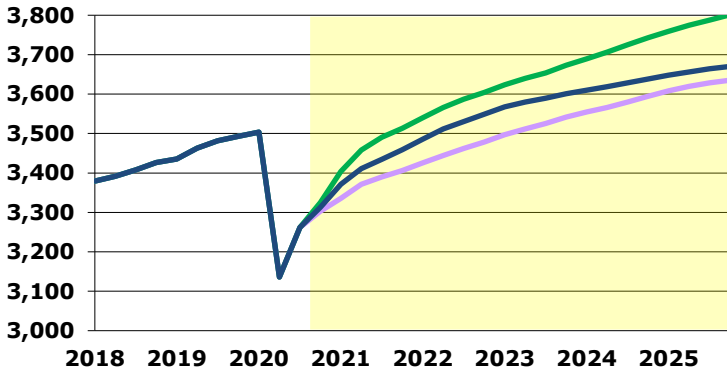
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Real Personal Income, Billions of 2012 Dollars



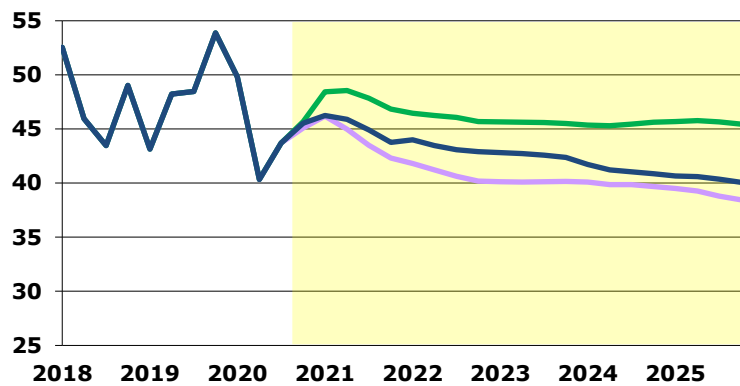
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2020 Q3, ERFC 2025

Housing Permits, Thousands



Source: Census Bureau 2020 Q3, ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **General Fund-State (GF-S) revenue collections since the September forecast have come in \$380 million (11.5%) above the forecasted amount.**
- **The GF-S forecast was increased by \$607 million in the 2019-21 biennium, \$297 million in the 2021-23 biennium and \$16 million in the 2023-25 biennium.**
- **The forecast of total revenue for funds subject to the budget outlook process was increased by \$634 million in the 2019-21 biennium, \$328 million in the 2021-23 biennium and \$28 million in the 2023-25 biennium.**
- **Though the November forecast once again increases revenue, expected revenue for the current and next biennium is still over \$3 billion less than expected in February.**

Overview

Revenue has been coming in higher than forecasted but retail activity is expected to slow through the middle of 2021

At the time of the September forecast, revenue collections had begun to recover from their spring lows, but the expiration of the largest federal income support payments in August brought significant uncertainty about collections going forward. Despite the drop in support, revenue continued to come in above the forecast, especially in retail trade and real estate. Going forward, however, the additional federal stimulus we assumed in September is no longer expected, and pandemic-related restrictions are increasing in response to an upswing in new cases. We therefore expect that retail trade activity continued at its levels of early autumn through the middle of November (which will be reflected in the next two collections periods), but will decline thereafter and will be weaker than previously expected through mid-2021. Despite the lower near-term retail activity, however, total forecasted revenue has increased, due to the surplus in collections since September, the extra expected activity through mid-November and increases in forecasted property and real estate excise taxes. Though this forecast once again increases revenue, expected revenue for the current and next biennium is still over \$3 billion less than expected in February.

GF-S forecast change by biennium (millions):

19-21: \$607
21-23: \$297
23-25: \$16

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2019-21 and 2021-23 biennia. For the current biennium, revenue collections that are tracked monthly came in \$380 million higher than forecasted. The forecasted increase in economic activity for the rest of the biennium added \$227 million, resulting in a total forecast increase of \$607 million. The forecast for the 2021-23 biennium was increased by \$297 million and the forecast for the 2023-25 biennium was increased by \$16 million. The November 2020 forecast for GF-S revenue totals \$48.796 billion in the 2019-21 biennium, \$52.478 billion in the 2021-23 biennium and \$55.933 billion in the 2023-25 biennium.

GF-S forecast (\$billions):

2019-21:
\$48.796

2021-23:
\$52.478

2023-25:
\$55.933

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

	2019-21 Biennium	2021-23 Biennium	2023-25 Biennium
Collection Experience	\$380.3	NA	NA
Non-Economic Change	\$0.0	\$0.0	\$0.0
Forecast Change	\$227.0	\$297.3	\$16.0
Total Change	\$607.3	\$297.3	\$16.0

Though the ratio of collections to income has increased from the FY 2015 trough, it is still near historical lows

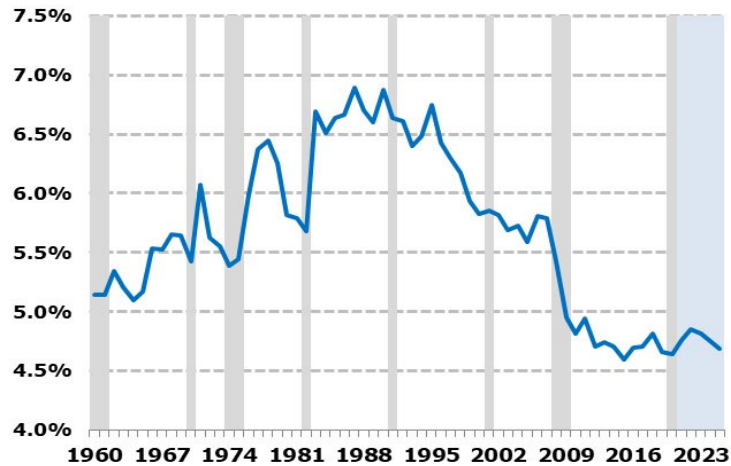
As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income had been on an increasing trend after reaching a trough in FY 2015. The ratio of revenue to income had been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 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 personal 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. Additional legislative changes enacted in June of 2017 boosted the FY 2018 ratio, but legislative changes from the 2018 session reduced the ratio in FY 2019. The ratio declined further in FY 2020 due to the pandemic, but is expected to increase in FY 2021 and FY 2022. The ratio is then forecasted to continue its downward trend through FY 2025.

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 2019-21 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2021-23 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 2023 can be found in Table 3.9.

Figure 3.1: GF-S Revenue 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 2020. Gray shaded area indicates recession; blue shaded area indicates forecast.

Recent Collection Experience

Collections were \$380 million (11.5%) more than forecasted in September

Revenue collections from the Department of Revenue (DOR) and the Washington court system are tracked monthly. In the period since the September forecast, total revenue from the above sources came in \$380.3 million (11.5%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$255.6 million (9.1%) higher than forecasted. Revenue from other DOR tax sources was \$124.5 million (24.8%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the September 2020 forecast, cash basis, millions of dollars)

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$255.6	9.1%
Non-Revenue Act	\$124.5	24.8%
Subtotal	\$380.1	11.5%
Washington court system	\$0.3	3.2%
Total*	\$380.3	11.5%

* Detail may not add to total due to rounding.

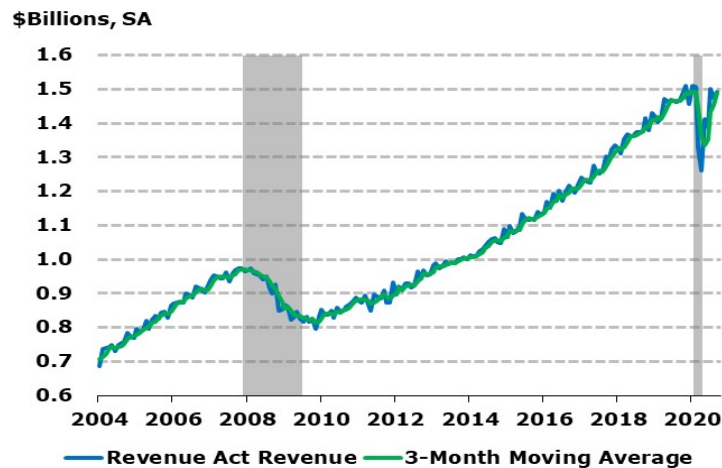
Source: ERFC; Period: September 11, 2020 - November 10, 2020

Real Estate Excise Tax collections were much higher than forecasted

Most of the surplus in non-Revenue Act collections came from real estate excise tax (REET) collections, which came in \$78.2 million (45.8%) higher than forecasted. Liquor sales and liter tax receipts came in \$2.5 million (4.7%) higher than forecasted. Property tax collections were \$12.9 million (13.0%) higher than forecasted. Cigarette tax collections came in \$1.7 million (3.1%) higher than forecasted. Net deposits of unclaimed property into the GF-S were \$22.0 million higher than forecasted. Revenue from all other DOR revenue sources came in \$7.2 million (30.6%) higher than forecasted. Revenue from the Washington court system was \$0.3 million (3.2%) higher than forecasted.

Figure 3.2: Revenue Act Collections*

Revenue Act collections for July and September activity were above last year's levels



Source: ERFC; Data through November 10, 2020

*Adjusted for large payments/refunds, payment pattern change and deferred payments

Adjusted Revenue Act collections were up 1.8% year over year for third quarter activity after dropping 8.1% in the second quarter

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 past changes in payment patterns and deferred payments in the first half of 2020. As shown in the figure, collections dropped precipitously in the periods representing March and April activity, declining 14.8% year over year in the May 11-June 10 collection period (April activity). Collections then strengthened over the following three months. Adjusted collections for July activity (August 11 – September 10 collections) were up 3.6% year over year. Collections for August activity were down 1.6% year-over-year but collections in the October 11-November 10 period, reflecting September taxable activity, were up 3.4%. Adjusted collections representing third quarter activity (August 11 – November 10, 2020 collections) were up 1.8% year over year, while collections representing second quarter activity (May 11 – August 10, 2020 collections) were down 8.1% year over year. Adjusted year-over-year growth in collections representing first

quarter activity was 1.6% and year-over-year growth in collections representing fourth quarter 2019 activity was 5.5%.

Real estate activity was much higher than expected in September

The positive variance in REET collections was due to a stronger-than-expected jump in taxable activity. Collections in April and May dropped sharply as real estate services were shut down due to the pandemic, falling 32% and 37% year over year, respectively. While collections were expected to improve in subsequent months, the rebound has been sharper than expected, due to both low mortgage rates and people re-assessing their living situations in light of their newfound ability to work from home. After being down 16% year over year in June and 15% in July, estimated taxable activity was up 5% year over year in August. September activity, however, jumped 31.8% year-over-year to a near-record seasonally adjusted high (see Figure 3.3). Activity was up only 0.9% year-over-year in October but was still well above first quarter levels on a seasonally adjusted basis.

Figure 3.3: Taxable Real Estate Excise Activity, SA

Taxable real estate activity was up 31.8% year over year in September



Source: ERFC; data through October 2020

Revenue Forecasts by Source

Department of Revenue

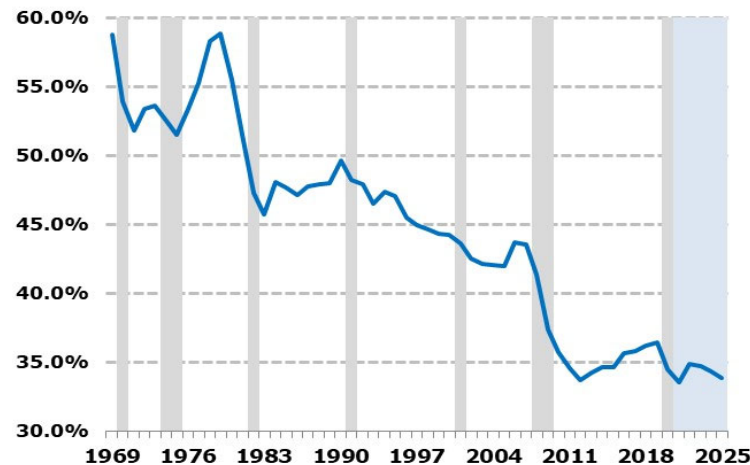
Taxes collected by DOR are most of GF-S taxes

The Department of Revenue (DOR) collects and administers the majority of Washington’s GF-S revenue, accounting for 95.0% of total GF-S revenue in FY 2019. 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 49.5% of GF-S revenue in FY 2019. The state’s share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other services are taxed, the tax does not apply to most services. Taxable sales as a share of personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 33.7% 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 36.1% of personal income. Legislation passed in 2017, 2018 and March 2019 that extends the tax to bottled water and online sales caused the a continued increase in the ratio. The COVID-19-related collapse in late FY 2020, however, coupled with federal emergency income support, caused the ratio of sales to income to decline in FY 2020. The ratio is now forecasted to reach a new historical low of 33.5% in FY 2021. While the ratio is expected to bounce back to 34.9% in FY 2022, it is forecasted to then continue to trend downward through FY 2025. The historical and forecasted relationship between taxable sales and income is illustrated in Figure 3.4. Taxable retail sales by fiscal year can be found in Table 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. Gray shaded area indicates recession, blue shaded area indicates forecast.
Source: ERFC; Data through FY 2020, forecast through FY 2025

Retail sales tax receipt growth forecast:

- FY21: 1.3%
- FY22: 4.0%
- FY23: 4.0%
- FY24: 3.1%
- FY25: 3.4%

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%. Growth increased to 8.6% in FY 2018, due largely to increased taxation of online sales. Growth in FY

2019 taxable activity stayed relatively strong at 7.6% despite slowing auto sales and construction because of continuing increases in the volume of taxable online sales. Taxable activity grew by 1.0% in FY 2020 but is forecasted to decline by 0.6% in FY 2021. Growth is then forecasted to rebound by 5.4% in FY 2022 before slowing to 3.8% in FY 2023, 3.2% in FY 2024 and 3.5% in 2025 (see Table 3.4). Due to the lag between taxable activity and collections and the presence of tax deferrals, credits, refunds, and payments of past due taxes, the growth in actual collections differs from the growth in taxable activity. Growth in collections for FY 2019 was 8.6% and growth in FY 2020 was 1.7%. Growth is expected to remain positive at 1.3% in FY 2021. Collections are forecasted to increase by 4.0% in FY 2022 and FY 2023 before slowing slightly to 3.1% growth in FY 2024 and 3.4% in FY 2025.

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

The business and occupation (B&O) tax is the second largest source of GF-S revenue, accounting for 19.8% of GF-S revenue in FY 2019. 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 2019, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 43% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 24% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 19% of taxes due.

B&O tax growth forecast:

*FY21: -1.0%
FY22: 4.9%
FY23: 5.4%
FY24: 4.4%
FY25: 4.4%*

In FY 2018, B&O tax receipts grew by 8.6% due to several large one-time payments of past due taxes and legislative expansion of the tax base. Growth slowed to a still-strong 6.9% in FY 2019. Despite a second quarter collapse in activity, FY 2020 growth remained positive at 3.6%. Collections are forecasted to decrease by 1.0% in FY 2021 before they grow 4.9% in FY 2022. Growth is forecasted at 5.4% in FY 2023 and 4.4% in FY 2024 and FY 2025.

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 10.7% of total revenue in FY 2019. Although the tax goes into the GF-S, it is dedicated to the funding of basic education. As discussed in the [September 2017](#) forecast publication, the total amount of the state levy was increased by new legislation in June 2017, with the increases beginning in FY 2018.

Property tax growth forecast:

*FY21: 26.8%
FY22: 2.0%
FY23: 2.7%
FY24: 2.7%
FY25: 2.6%*

Constrained by prior law to a levy growth rate of one percent on existing property (or the rate of inflation if less than one percent), property tax collections grew by 1.9% in FY 2017. The first payments of the additional state levy began to arrive in the latter half of FY 2018, bringing total GF-S property tax growth of 31.4% for the fiscal year. Collections fell by 12.4% in FY 2019

due to a temporary reduction in the levy rate for calendar year 2019 and a \$936 million transfer of collections from the levy to the Education Legacy Trust Account (ELTA). Collections rebounded by 44.2% in FY 2020 due to a smaller \$83.8 million transfer to ELTA and the end of the temporary levy reduction in the second half of the year. FY 2021 growth is forecasted at 26.8% due to a full year of collections at the unreduced levy rate along with the collection of some taxes which would have been collected in FY 2020 but were instead deferred due to the pandemic. The absence of the extra payments from deferrals brings 2.0% growth in FY 2022 before growth increases to 2.7% in FY 2023. Growth is forecasted at 2.7% for FY 2024 and 2.6% for FY 2025.

REET rates and distributions changed on January 1, 2020

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2019, accounting for 4.9% of total revenue. The tax is applied to both residential and commercial real estate, including purchases of vacant land. Prior to January 1, 2020, the state portion of REET was 1.28% of the sales price and was 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 ELTA (4.1%). As of January 1, rates are 1.1% for the portion of the selling price less than or equal to \$500 thousand, 1.28% for the portion greater than \$500 thousand and less than or equal to \$1.5 million, 2.75% for the portion greater than \$1.5 million and less than or equal to \$3.0 million and 3.0% for the portion greater than \$3.0 million. The distributions of the tax are also changed: 79.4% is deposited in the GF-S, 1.7% in the public works assistance account, 1.4% in the city-county assistance account and the remainder (17.5%) in ELTA. Beginning July 1, 2023, distributions to the city-county assistance account increase to 5.2% and distributions to the Education Legacy Trust Account decrease to 14%. The new rates and distributions were designed to result in increased collections for both the GF-S and ELTA.

GF-S REET growth forecast:

*FY21: 4.3%
FY22: -2.8%
FY23: -2.1%
FY24: -2.1%
FY25: 1.4%*

From FY 2013 through 2019, the recovery in the residential real estate market after the Great Recession has been accompanied by a boom in commercial real estate. Sales of large commercial properties began to weaken in FY 2019 while residential sales increased, resulting in a 0.5% increase in collections in FY 2019. In the first half of FY2020, residential sales remained strong, and commercial sales surged in December 2019 ahead of the January 1, 2020 change in tax rates. The real estate market downturn that began with April 2020 collections, however, brought a total decline of 0.7% in FY 2020. The sales boom that began in July 2020 and is expected to last through the end of the year is forecasted to bring growth of 4.3% in FY 2021. In the aftermath of the huge growth in sales and prices in late 2020, receipts are forecasted to decline by 2.8% in FY2022 and 2.1% in FY 2023 and FY 2024. Growth then resumes at 1.4% in FY 2025.

Use tax was the fifth largest GF-S source in FY 2019

The state use tax was the fifth largest GF-S revenue source in FY 2019 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:

*FY21: 7.9%
FY22: -8.1%
FY23: 2.9%
FY24: 2.5%
FY25: 3.3%*

Use tax collections grew 9.0% in FY 2019, boosted by several large one-time purchases. Despite strong collections in the first half of the fiscal year, FY 2020 collections declined by 4.9%. Collections are forecasted to increase by 7.9% in FY 2021 due to record high used car sales in the third quarter of 2020 before decreasing by 8.1% in FY 2022 in the absence of those sales. Growth then resumes at 2.9% in FY 2023, 2.5% in FY 2024 and 3.3% in FY 2025.

Public utility taxes were the sixth largest GF-S source in FY 2019

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2019, bringing in 1.8% 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:

*FY21: 15.7%
FY22: 0.3%
FY23: 3.6%
FY24: 3.2%
FY25: 3.0%*

Public utility tax receipts shrank by 1.1% in FY 2018 after 1.4% growth in FY 2017. Growth shrank by a further 0.3% in FY 2019, but collections grew by 0.3% in FY 2020. The expiration of a large tax credit plus increased natural gas and electricity use due to people working from home boosts forecasted collections growth to 15.7% in FY 2021. The expected return of workers to their workplaces slows expected growth to 0.3% in FY 2022. Growth is then forecasted to continue at 3.6% in FY 2023, 3.2% in FY 2024 and 3.0% in FY 2025.

The cigarette tax was the seventh largest GF-S source in FY 2019

The state tax on cigarettes was the seventh largest DOR GF-S revenue source in FY 2019 at 1.5% 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:

*FY21: -1.9%
FY22: -3.6%
FY23: -3.2%
FY24: -3.3%
FY25: -3.5%*

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. Collections decreased by 3.3% in FY 2019 after decreasing by 5.4% in FY 2018. The decrease in collections accelerated to 6.0% in FY 2020, partially due to a state increase in the legal age to purchase cigarettes from 18 to 21 that took effect on

January 1, 2020. Declining collections are forecasted to continue at a rate of 1.9% in FY 2021, 3.6% in FY 2022, 3.2% in FY 2023, 3.3% FY 2024 and 3.5% in FY 2025.

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):

19-21: \$5.2
21-23: \$9.8
23-25: \$11.3

Distributions of cannabis excise taxes to the GF-S totaled \$15.3 million in the 2013-15 biennium and \$147.6 million in the 2015-17 biennium. GF-S distributions were \$248.9 million in the 2017-19 biennium. Distributions are forecasted at \$356.4 million in the 2019-21 biennium, an increase of \$5.2 million from the previous forecast, and \$369.2 million in the 2021-23 biennium, an increase of \$9.8 million. The forecast of GF-S distributions for the 2023-25 biennium is \$397.9 million, an increase of \$11.3 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):

19-21: \$2.0
21-23: \$3.7
23-25: \$3.4

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The office's forecast for the 2019-21 biennium was increased \$2.0 million to \$224.6 million and the forecast for the 2021-23 biennium was increased \$3.7 million to \$221.0 million. The office's forecast of revenue for the 2023-25 biennium was increased \$3.4 million to \$263.9 million.

State Treasurer

*Forecast
change by
biennium
(millions):*

19-21: \$11.4
21-23: \$2.3
23-25: -\$0.5

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's forecast for the 2019-21 biennium has been increased \$11.4 million to \$14.8 million due to higher-than-expected account balances. The office's forecast for the 2021-23 biennium has been increased \$2.3 million to -\$4.6 million and the forecast of revenue for the 2023-25 biennium has been decreased \$0.5 million to -\$2.3 million. The forecasted revenues for these biennia are negative because the average daily balance for each biennium is forecasted to be negative. When this occurs, the GF-S effectively pays interest to the other funds managed by the office.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

19-21: \$11.3
21-23: \$18.4
23-25: \$18.1

The Office of the Insurance Commissioner collects premium taxes on most classes of insurance sold in Washington State. These taxes are distributed to the GF-S and various accounts in support of fire services. The forecast of GF-S revenue for the 2019-21 biennium has been increased \$11.3 million to \$1,166.6 million and the forecast of revenue for the 2021-23 biennium has been increased \$18.4 million to \$1,384.0 million. The forecast of GF-S revenue for the 2023-25 biennium has been increased \$18.1 million to \$1,501.4 million.

Liquor and Cannabis Board

*Forecast
change by
biennium
(millions):*

19-21: \$7.6
21-23: \$12.9
23-25: \$13.4

The Liquor and Cannabis Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis discussed previously. The forecast of GF-S distributions for the 2019-21 biennium has been increased \$7.6 million to \$636.9 million and the forecast of revenue for the 2021-23 biennium has been increased \$12.9 million to \$663.1 million. The forecast of GF-S distributions for the 2023-25 biennium has been increased \$13.4 million to \$710.9 million. The forecast changes were a combination of increases in expected fees and taxes associated with beer, wine, and liquor distribution and the increases in expected distributions of cannabis excise taxes to the GF-S discussed above.

Lottery Commission

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

GF-S forecast change by biennium (millions):

19-21: \$0.0
21-23: -\$0.4
23-25: \$0.1

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. Forecasted transfers for the 2019-21 biennium are unchanged at \$41.7 million and the forecast of GF-S transfers for the 2021-23 biennium has been decreased \$0.4 million to \$51.5 million. The forecast for the 2023-25 biennium has been increased \$0.1 million to \$52.7 million.

OPA forecast change by biennium (millions):

19-21: \$3.1
21-23: \$5.6
23-25: \$2.0

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The forecast of OPA revenue for the 2019-21 biennium has been increased \$3.1 million to \$301.0 million and the forecast for the 2021-23 biennium has been increased \$5.6 million to \$320.8 million. The forecast for the 2023-25 biennium has been increased \$2.0 million to \$324.3 million.

Administrative Office of the Courts

Forecast change by biennium (millions):

19-21: -\$1.8
21-23: -\$4.8
23-25: -\$2.2

The Administrative Office of the Courts collects surcharges on certain filing fees, fines, and infraction penalties and transfers this revenue to the GF-S on a monthly basis. The forecast of GF-S transfers for the 2019-21 biennium has been decreased \$1.8 million to \$112.7 million and the forecast of revenue for the 2021-23 biennium has been decreased \$4.8 million to \$94.6 million. The forecast of transfers for the 2023-25 biennium has been decreased \$2.2 million to \$93.2 million.

Track Record for the 2019-21 Biennium

The current forecast is \$0.9 billion (1.9%) lower than the forecasted revenue at the time of the initial 2019-21 budget

Table 3.10 summarizes the historical changes to the GF-S revenue forecast for the 2019-21 biennium. The February 2016 forecast was the initial forecast for the biennium. The November 2020 forecast is \$5.4 billion (12.3%) higher than the initial forecast. Non-economic changes have increased the forecast by \$3.4 billion (7.8%). Excluding non-economic changes, the current forecast is \$2.0 billion (4.5%) higher than the initial forecast. The March 2019 forecast, coupled with \$109 million in legislative and budget-driven revenue changes passed in the 2019 legislative session subsequent to the March forecast, was the basis for the initial budget for the 2019-21 biennium. The November forecast of biennial revenue is \$921 million (1.9%) lower than that sum.

Track Record for the 2021-23 Biennium

The current forecast is \$546 million higher than the initial forecast in February 2018

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2021-23 biennium. The February 2018 forecast was the initial forecast for the biennium. The November 2020 forecast is \$546 million (1.1%) higher than the initial forecast. Non-economic changes have increased the forecast by \$765 million (1.5%). Excluding non-economic changes, the current forecast is \$219 million (0.4%) lower 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 2017-19 and 2019-21 biennia are presented in Tables 3.6 and 3.8 and the GAAP forecast of Lottery revenue transfers for those 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 2019-21 Biennium

The forecast implies a total balance of \$1.791 billion at the end of the 2019-21 biennium for GF-S, ELTA, OPA and WEIA

Table 3.12 shows the budgetary balance sheets for the 2019-21 biennium as prepared by the Office of Financial Management and the House and Senate fiscal committees. The balance sheet shows not only projected GF-S spending and resources but also total projected spending and resources for the GF-S plus the other main non-transportation state-funded accounts: the Education Legacy Trust Account (ELTA), the Washington Opportunity Pathways Account (OPA) and the Workforce Education Investment Account (WEIA). As shown in the table, the GF-S beginning fund balance for the 2019-21 biennium was \$999.3 million and the total beginning balance for GF-S, ELTA, OPA and WEIA was \$1,981.2 million. Based on the November 2020 revenue forecast and currently enacted budgets, there will

be a \$423.4 million shortfall in GF-S balances at the end of the 2019-21 biennium and a shortfall of \$152.0 million in total GF-S, ELTA, OPA and WEIA balances. The Budget Stabilization Account (BSA) is projected to have a balance of \$1,942.6 million.

Including the BSA funds, the GF-S has a projected biennial surplus of \$1,519.1 million and the total surplus for GF-S, ELTA, OPA and WEIA balances is \$1,790.5 million.

Alternative Forecasts for the 2019-21 and 2021-23 Biennia

Optimistic scenario (billions):
19-21: +\$1.26
21-23: +\$3.94

Pessimistic scenario:
19-21: -\$1.31
21-23: -\$4.12

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 50% to the baseline forecast, 25% to the optimistic scenario and 25% to the pessimistic scenario. The revenue implications of these alternative scenarios for the 2019-21 biennium are shown in Table 3.13 and those of the 2021-23 biennium are shown in Table 3.14. For the 2019-21 biennium, the optimistic forecast generates \$50.054 billion in GF-S revenue, \$1.257 billion (2.6%) more than the baseline scenario, while the pessimistic forecast produces \$47.484 billion in revenue, \$1.312 billion (2.7%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$56.421 billion in GF-S revenue, \$3.943 billion (7.5%) more than the baseline scenario, while the pessimistic forecast produces \$48.356 billion in revenue, \$4.122 billion (7.9%) less than the baseline.

Education Legacy Trust Account

ELTA forecast change by biennium (millions):

19-21: \$18.7
21-23: \$21.6
23-25: \$13.7

The Education Legacy Trust Account (ELTA) was created in the 2005 legislative session, with revenue collection beginning in FY 2006. Funds from the account may only be used for support of the common schools, expanding access to higher education through funding for new enrollments and financial aid, and other educational improvement efforts. 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 (REET), which had previously gone into non-GF-S accounts. Subsequent legislation also added revenue from solid waste taxes beginning in FY 2016 and a transfer of \$935 million from the additional property tax levy to the account in FY 2019. The forecast of ELTA revenue has been increased by \$18.7 million for the current biennium, \$21.6 million for the 2021-23 biennium and \$13.7 million for the 2023-25 biennium. The forecast increases were due to increases in both the REET and estate tax forecasts. Forecasted ELTA receipts are now \$1,554.0 million for the current biennium, \$1,262.3 million for the 2021-23 biennium and \$1,054.4 million for the 2023-25 biennium. The large forecast decrease from the 2021-23 to 2023-25 biennium is due to the removal of the solid waste and

public utility taxes as a funding source for the account beginning in FY 2024.

Workforce Education Investment Account

The WEIA was created in 2019 to help fund the state's higher education system and student loans

The Workforce Education Investment Account (WEIA) was created in the 2019 legislative session. The account, the purpose of which is to help fund the state's higher education system and student loans, was originally funded by a surcharge on specific industries that benefitted from an educated workforce. This tax was scheduled to take effect on January 1, 2020, and the Economic and Revenue Forecast Council was later tasked with forecasting revenue generated for the account. ESSB 6492, passed in early February of the 2020 legislative session, retroactively eliminated the existing surcharge and replaced it with a simplified version that is effective April 1, 2020. The simplified surcharge applies to businesses with gross taxable activity under the "services and other activities" category of \$1 million or more (with some nonprofit and other businesses exempt). In addition to this surcharge, which equals 0.25% of gross taxable income, another surcharge is applied to a group of "select advanced computing businesses," and is paid quarterly. The forecast of WEIA revenue has been increased by \$4.7 million in the current biennium and \$3.9 million in the 2021-23 biennium. The forecast has been decreased by \$4.1 million in the 2023-25 biennium. WEIA revenue is now forecasted at \$343.3 million in the 2019-21 biennium, \$605.2 million in the 2021-23 biennium and \$695.4 million in the 2023-25 biennium. The WEIA forecast by fiscal year is presented in Table 3.19.

Funds Subject to the Budget Outlook

Change in forecast of funds subject to the budget outlook (millions):

*2019-21:
\$633.8*

*2021-23:
\$328.4*

*2023-25:
\$27.7*

By law, enacted biennial budgets must balance not only in the initial biennium of the budget but in the subsequent biennium as well, given assumptions of growth in spending from one biennium to the next and the current revenue forecast. The budget outlook that determines this balance looks not only at GF-S revenue and spending but also that of the ELTA, OPA and the WEIA. The forecast of total revenue for funds subject to the budget outlook for the 2019-21 biennium is \$50,994.7 million, \$633.8 million more than the September forecast. The forecast of total revenue for the 2021-23 biennium is \$54,666.2 million, \$328.4 million more than the September forecast. The forecast for the 2023-25 biennium is \$58,007.1 million, \$27.7 million more than the September forecast. The forecast of total GF-S, ELTA, OPA and WEIA revenue and recent history by fiscal year is presented in Table 3.17.

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

Biennium	Current Dollars	Percent Change	2012 Chained Dollars	Percent Change
1961-63	\$817.1		\$4,300.0	
1963-65	866.2	6.0%	4,439.3	3.2%
1965-67	1,128.6	30.3%	5,565.5	25.4%
1967-69	1,440.5	27.6%	6,658.6	19.6%
1969-71	1,732.7	20.3%	8,271.5	24.2%
1971-73	1,922.1	10.9%	8,490.3	2.6%
1973-75	2,372.4	23.4%	9,054.3	6.6%
1975-77	3,395.0	43.1%	11,271.8	24.5%
1977-79	4,490.0	32.3%	13,091.7	16.1%
1979-81	5,356.4	19.3%	12,990.7	-0.8%
1981-83	6,801.4	27.0%	14,354.4	10.5%
1983-85	8,202.4	20.6%	15,975.3	11.3%
1985-87	9,574.6	16.7%	17,604.4	10.2%
1987-89	10,934.1	14.2%	18,775.3	6.7%
1989-91	13,309.0	21.7%	21,047.1	12.1%
1991-93	14,862.2	11.7%	22,112.5	5.1%
1993-95	16,564.6	11.5%	23,547.7	6.5%
1995-97	17,637.7	6.5%	24,059.4	2.2%
1997-99	19,620.1	11.2%	26,059.1	8.3%
1999-01	21,262.1	8.4%	27,187.8	4.3%
2001-03	21,140.7	-0.6%	26,144.9	-3.8%
2003-05	23,388.5	10.6%	27,714.8	6.0%
2005-07	27,772.0	18.7%	31,145.3	12.4%
2007-09	27,703.0	-0.2%	29,633.3	-4.9%
2009-11	28,218.1	1.9%	29,418.7	-0.7%
2011-13	30,657.0	8.6%	30,679.6	4.3%
2013-15	33,666.0	9.8%	32,834.8	7.0%
2015-17	38,317.4	13.8%	36,751.1	11.9%
2017-19	44,142.6	15.2%	40,846.5	11.1%
2019-21 ^F	48,796.4	10.5%	43,813.1	7.3%
2021-23 ^F	52,477.9	7.5%	45,410.0	3.6%
2023-25 ^F	55,932.9	6.6%	46,750.3	3.0%

^F November 2020 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 November 2020 forecast.

Table 3.4
Taxable retail sales*
(millions of dollars)

Fiscal Year	Amount	Percent Change
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	149,992	6.3%
2018	162,958	8.6%
2019	175,266	7.6%
2020	176,961	1.0%
2021 ^F	175,891	-0.6%
2022 ^F	185,409	5.4%
2023 ^F	192,434	3.8%
2024 ^F	198,589	3.2%
2025 ^F	205,483	3.5%

^F November 2020 forecast

Source: ERFC

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

2019-21 biennium; cash basis

(millions of dollars)

Forecast by Agency	Sept 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Nov 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$22,465.1	\$0.0	\$272.6	\$22,737.7	\$272.6
Business & Occupation	9,077.7	0.0	71.5	9,149.2	71.5
Use	1,451.1	0.0	44.5	1,495.6	44.5
Public Utility	874.1	0.0	(7.7)	866.4	(7.7)
Liquor Sales/Liter	636.3	0.0	0.3	636.6	0.3
Cigarette	643.5	0.0	(0.2)	643.3	(0.2)
Property (State Levy)	7,810.5	0.0	47.3	7,857.8	47.3
Real Estate Excise	2,081.1	0.0	138.0	2,219.1	138.0
Timber Excise	1.2	0.0	(0.1)	1.1	(0.1)
Other	981.9	0.0	10.4	992.3	10.4
Subtotal	46,022.4	0.0	576.7	46,599.1	576.7
Insurance Commissioner					
Insurance Premiums	1,155.3	0.0	11.3	1,166.6	11.3
Liquor Control Board					
Fees, Cannabis Excise Tax	572.2	0.0	8.1	580.3	8.1
Beer & Wine Surtax	57.1	0.0	(0.5)	56.6	(0.5)
Lottery Commission					
Lottery Revenue	41.7	0.0	0.0	41.7	0.0
State Treasurer					
Interest Earnings	3.4	0.0	11.4	14.8	11.4
Office of Financial Management					
Other Agencies	222.6	0.0	2.0	224.6	2.0
Washington Court System					
Court Fees, Fines & Forfeitures	114.5	0.0	(1.8)	112.7	(1.8)
Total General Fund-State *	\$48,189.1	\$0.0	\$607.3	\$48,796.4	\$607.3

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council September 23, 2020² Forecast for the 2019-21 biennium, adopted November 18, 2020

*Detail may not add to totals because of rounding.

Source: ERF, 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

2019-21 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Sept 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Nov 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$22,436.5	\$0.0	\$272.6	\$22,709.1	\$272.6
Business & Occupation	9,077.4	0.0	71.5	9,148.9	71.5
Use	1,446.7	0.0	44.5	1,491.2	44.5
Public Utility	873.6	0.0	(7.7)	865.9	(7.7)
Liquor Sales/Liter	647.3	0.0	4.7	652.0	4.7
Cigarette	646.5	0.0	(0.2)	646.3	(0.2)
Property (State Levy)	8,064.2	0.0	47.3	8,111.5	47.3
Real Estate Excise	2,083.1	0.0	138.0	2,221.1	138.0
Timber Excise	1.1	0.0	(0.1)	1.0	(0.1)
Other	1,023.6	0.0	8.9	1,032.5	8.9
Subtotal	46,299.9	0.0	579.6	46,879.5	579.6
Insurance Commissioner					
Insurance Premiums	1,155.3	0.0	11.3	1,166.6	11.3
Liquor Control Board					
Fees, Cannabis Excise Tax	572.2	0.0	8.1	580.3	8.1
Beer & Wine Surtax	57.1	0.0	(0.5)	56.6	(0.5)
Lottery Commission					
Lottery Revenue	42.3	0.0	(0.4)	41.9	(0.4)
State Treasurer					
Interest Earnings	(0.1)	0.0	12.5	12.5	12.5
Office of Financial Management					
Other Agencies	222.6	0.0	2.0	224.6	2.0
Washington Court System					
Court Fees, Fines & Forfeitures	114.5	0.0	(1.8)	112.7	(1.8)
Total General Fund-State *	\$48,463.9	\$0.0	\$610.8	\$49,074.7	\$610.8

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council September 23, 2020² Forecast for the 2019-21 biennium, adopted November 18, 2020

*Detail may not add to totals because of rounding.

Source: ERF, 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

2021-23 biennium; cash basis

(millions of dollars)

Forecast by Agency	Sept 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Nov 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$24,255.3	\$0.0	\$20.1	\$24,275.4	\$20.1
Business & Occupation	9,843.7	0.0	(30.9)	9,812.8	(30.9)
Use	1,468.5	0.0	(21.1)	1,447.4	(21.1)
Public Utility	951.7	0.0	(2.6)	949.1	(2.6)
Liquor Sales/Liter	624.3	0.0	2.9	627.2	2.9
Cigarette	603.6	0.0	0.2	603.9	0.2
Property (State Levy)	8,831.5	0.0	248.8	9,080.3	248.8
Real Estate Excise	2,145.2	0.0	32.8	2,178.0	32.8
Timber Excise	2.7	0.0	(0.2)	2.5	(0.2)
Other	1,076.5	0.0	15.2	1,091.7	15.2
Subtotal	49,803.0	0.0	265.2	50,068.2	265.2
Insurance Commissioner					
Insurance Premiums	1,365.7	0.0	18.4	1,384.0	18.4
Liquor Control Board					
Fees, Cannabis Excise Tax	592.0	0.0	13.4	605.3	13.4
Beer & Wine Surtax	58.2	0.0	(0.4)	57.8	(0.4)
Lottery Commission					
Lottery Revenue	51.9	0.0	(0.4)	51.5	(0.4)
State Treasurer					
Interest Earnings	(6.9)	0.0	2.3	(4.6)	2.3
Office of Financial Management					
Other Agencies	217.3	0.0	3.7	221.0	3.7
Washington Court System					
Court Fees, Fines & Forfeitures	99.4	0.0	(4.8)	94.6	(4.8)
Total General Fund-State *	\$52,180.5	\$0.0	\$297.3	\$52,477.9	\$297.3

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council September 23, 2020² Forecast for the 2021-23 biennium, adopted November 18, 2020

*Detail may not add to totals because of rounding.

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

2021-23 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Sept 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Nov 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$24,255.3	\$0.0	\$20.1	\$24,275.4	\$20.1
Business & Occupation	9,843.7	0.0	(30.9)	9,812.8	(30.9)
Use	1,468.5	0.0	(21.1)	1,447.4	(21.1)
Public Utility	951.7	0.0	(2.6)	949.1	(2.6)
Liquor Sales/Liter	624.3	0.0	2.9	627.2	2.9
Cigarette	603.6	0.0	0.2	603.9	0.2
Property (State Levy)	8,831.5	0.0	248.8	9,080.3	248.8
Real Estate Excise	2,145.2	0.0	32.8	2,178.0	32.8
Timber Excise	2.8	0.0	(0.2)	2.6	(0.2)
Other	1,070.3	0.0	21.4	1,091.7	21.4
Subtotal	49,796.9	0.0	271.4	50,068.3	271.4
Insurance Commissioner					
Insurance Premiums	1,365.7	0.0	18.4	1,384.0	18.4
Liquor Control Board					
Fees, Cannabis Excise Tax	592.0	0.0	13.4	605.3	13.4
Beer & Wine Surtax	58.2	0.0	(0.4)	57.8	(0.4)
Lottery Commission					
Lottery Revenue	51.9	0.0	0.1	51.9	0.1
State Treasurer					
Interest Earnings	(6.7)	0.0	1.3	(5.4)	1.3
Office of Financial Management					
Other Agencies	217.3	0.0	3.7	221.0	3.7
Washington Court System					
Court Fees, Fines & Forfeitures	99.4	0.0	(4.8)	94.6	(4.8)
Total General Fund-State *	\$52,174.6	\$0.0	\$303.0	\$52,477.6	\$303.0

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council September 23, 2020² Forecast for the 2021-23 biennium, adopted November 18, 2020

*Detail may not add to totals because of rounding.

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

Table 3.9

**November 2020 General Fund-State forecast detail
2019-21 to 2023-25 biennia; cash basis**
(Millions of Dollars)

Forecast by Source	Fiscal 2020	Fiscal 2021	2019-21 Biennium	Fiscal 2022	Fiscal 2023	2021-23 Biennium	Fiscal 2024	Fiscal 2025	2023-25 Biennium
State Taxes									
Retail sales**	\$11,296.2	\$11,441.5	\$22,737.7	\$11,900.0	\$12,375.4	\$24,275.4	\$12,762.1	\$13,200.4	\$25,962.5
Business & occupation Use**	4,596.8	4,552.4	9,149.2	4,777.7	5,035.1	9,812.8	5,255.3	5,485.0	10,740.4
Public Utility	719.2	776.4	1,495.6	713.2	734.2	1,447.4	752.8	777.5	1,530.3
Liquor sales/liter	401.7	464.7	866.4	466.1	483.0	949.1	497.4	512.2	1,009.6
Beer & wine surtax	311.6	325.0	636.6	310.8	316.4	627.2	325.6	334.0	659.6
Cigarette	28.2	28.4	56.6	28.8	29.0	57.8	29.1	29.1	58.2
Tobacco products	331.3	329.4	660.7	315.2	305.3	620.5	295.5	285.5	580.9
Cannabis Excise Taxes	53.1	55.2	108.3	56.6	57.2	113.8	57.8	58.4	116.2
Property (state school levy)	149.9	196.7	346.6	176.9	182.3	359.2	189.6	198.2	387.8
Leasehold Excise Tax	3,464.9	4,392.9	7,857.8	4,479.5	4,600.8	9,080.3	4,725.7	4,850.7	9,576.3
Public utility district	36.3	28.2	64.5	37.4	38.0	75.4	38.6	39.2	77.8
Brokered Natural Gas	58.4	61.4	119.8	62.6	63.9	126.6	65.1	66.3	131.4
Real estate excise***	23.1	20.6	43.7	21.0	21.5	42.6	21.9	22.2	44.1
Timber excise	1,086.2	1,132.9	2,219.1	1,100.7	1,077.3	2,178.0	1,055.2	1,070.1	2,125.3
Estate/inheritance	0.2	0.9	1.1	1.1	1.4	2.5	1.6	1.7	3.3
Boat excise	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	16.1	16.0	32.1	16.0	16.0	31.9	17.1	16.4	33.5
Penalties and interest on past due taxes	652.3	514.4	1,166.6	677.0	707.1	1,384.0	735.9	765.5	1,501.4
Other	140.7	128.3	269.0	155.7	167.5	323.2	173.0	179.0	352.0
Total Taxes	23,390.4	24,521.9	47,912.3	25,355.2	26,270.6	51,625.8	27,058.9	27,951.7	55,010.6
State Non-Tax Sources									
Licenses, permits, fees	154.5	149.7	304.2	157.3	160.5	317.7	163.1	159.6	322.7
Liquor & Cannabis fees	104.7	129.0	233.7	121.5	124.7	246.2	129.7	135.2	264.9
Earnings on investments	4.2	10.6	14.8	(3.2)	(1.5)	(4.6)	(1.1)	(1.2)	(2.3)
Administrative Office of the Courts	62.5	50.2	112.7	47.6	47.1	94.6	46.7	46.5	93.2
Transfers of unclaimed property	110.4	125.9	236.4	105.9	106.9	212.7	107.8	108.7	216.5
Other revenue & transfers	(9.3)	(8.3)	(17.6)	(7.2)	(7.3)	(14.5)	12.3	15.0	27.3
Total Non-Tax	426.9	457.2	884.1	421.9	430.2	852.1	458.4	463.8	922.3
Total General Fund-State *	\$23,817.3	\$24,979.1	\$48,796.4	\$25,777.0	\$26,700.9	\$52,477.9	\$27,517.4	\$28,415.5	\$55,932.9

* 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 2019-21 General Fund-State Cash Forecast

February 2016 through November 2020

Cash Basis - Millions of Dollars

Date of Forecast	Department of Revenue*	Other Agencies	Subtotal*	Non-Economic Changes**	Total Change	Total General Fund-State Cash Basis
February 2016 #	\$36,887	\$1,823				\$43,441
Changes to Forecast						
June 2016	172	(31)	141	(7) #1	134	43,575
September 2016	86	(31)	55	0	55	43,630
November 2016	21	4	26	0	26	43,656
March 2017	241	(55)	186	0	186	43,842
June 2017	47	(13)	34	(1) #2	34	43,875
September 2017	245	(3)	243	3,278 #3	3,521	47,396
November 2017	188	(2)	186	0	186	47,582
February 2018	655	16	671	0	671	48,253
June 2018	426	22	448	(181) #4	267	48,520
September 2018	295	22	317	38 #5	355	48,875
November 2018	186	3	189	0	189	49,064
March 2019	465	(35)	430	115 #6	545	49,609
June 2019	57	29	86	109 #7	195	49,804
September 2019	307	3	310	(84) #8	226	50,030
November 2019	283	(8)	274	0	274	50,304
February 2020	309	(2)	307	0	307	50,611
June 2020	(4,422)	(185)	(4,607)	125 #9	(4,482)	46,129
September 2020	1,990	69	2,060	0	2,060	48,189
November 2020	577	31	607	0	607	48,796
Total change***:						
From February 2016	2,130	(167)	1,962	3,393	5,355	
Percent change	5.8	(9.2)	4.5	7.8	12.3	

* 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 2019-21 biennium.

#1 Legislative revenue changes from the 2016 regular and first special legislative sessions

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

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

#4 Sum of legislative and budget driven revenue changes from the 2018 legislative session

#5 Estimated increase in sales tax collections due US Supreme Court ruling of June 21, 2018.

#6 Effects of SSB 5581, passed in March of 2019 legislative session

#7 Sum of legislative and budget driven revenue changes from the 2018 legislative session subsequent to the March 2019 forecast

#8 Later-than-forecasted cash transfer of Property Tax out of GF-S into ELTA

#9 Legislative and budget-driven revenue changes from the 2020 legislative session

Table 3.11

Track Record for the 2021-23 General Fund-State Cash Forecast

February 2018 through November 2020

Cash Basis - Millions of Dollars

Date of Forecast	Department of Revenue*	Other Agencies	Subtotal*	Non-Economic Changes**	Total Change	Total General Fund-State Cash Basis
February 2018 #	\$49,551	\$2,381				\$51,932
Changes to Forecast						
June 2018	324	33	357	(7) #1	350	52,282
September 2018	248	1	249	46 #2	295	52,577
November 2018	228	(27)	201	0	201	52,778
March 2019	402	(33)	369	190 #3	559	53,337
June 2019	17	8	24	322 #4	347	53,683
September 2019	(89)	10	(79)	0	(79)	53,604
November 2019	169	6	175	0	175	53,779
February 2020	501	12	512	0	512	54,291
June 2020	(4,431)	(139)	(4,570)	213 #5	(4,357)	49,935
September 2020	2187	59	2,246	0	2,246	52,181
November 2020	265	32	297	0	297	52,478
Total change***:						
From February 2018	(180)	(39)	(219)	765	546	
Percent change	(0.4)	(1.6)	(0.4)	1.5	1.1	

* 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 2021-23 biennium.

#1 Sum of legislative and budget driven revenue changes from the 2018 legislative session

#2 Estimated increase in sales tax collections due US Supreme Court ruling of June 21, 2018.

#3 Effects of SSB 5581, passed in March of 2019 legislative session

#4 Sum of legislative and budget driven revenue changes from the 2018 legislative session subsequent to the March 2019 forecast

#5 Legislative and budget-driven revenue changes from the 2020 legislative session

Table 3.12

2019-21 Enacted Budget Balance Sheet
General Fund-State (GFS), Education Legacy Trust Account (ELTA),
Washington Opportunity Pathways Account (OPA),
Workforce Education Investment Account (WEIA) and Budget Stabilization Account (BSA)
Dollars in Millions

	2019-21		
	GFS	ELTA, OPA and WEIA	TOTAL
RESOURCES			
Beginning Fund Balance	999.3	981.9	1,981.2
September 2020 Revenue Forecast	48,189.1	2,171.7	50,360.8
November 2020 Revenue Forecast change	607.3	26.5	633.8
Current Revenue Totals	48,796.4	2,198.2	50,994.7
Transfer to Budget Stabilization Account (1% of GSR)	(479.8)		(479.8)
Transfer to Budget Stabilization Account (EGSR)	-		-
Enacted Fund Transfers	35.2	160.0	195.2
CAFR Adjustments FY 20	(3.9)	28.2	24.2
Actual/Assumed Prior Period Adjustments	59.7		59.7
Total Resources (including beginning fund balance)	49,407.0	3,368.3	52,775.3
EXPENDITURES			
2019-21 Biennium			
Enacted Budgets	50,602.8	3,096.9	53,699.7
Actual/Assumed Reversions	(772.4)	-	(772.4)
Total Expenditures	49,830.4	3,096.9	52,927.3
RESERVES			
Projected Ending Balance	(423.4)	271.4	(152.0)
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	1,618.4		1,618.4
Transfers from General Fund (1% of GSR)	479.8		479.8
Transfers from GFS (EGSR)	-		-
Prior Period Adjustment-FY 20	0.9		0.9
Actual/Assumed Interest Earnings	43.4		43.4
Less 2020 Supplemental Approp from BSA-Coronavirus	(200.0)		(200.0)
Projected Budget Stabilization Account Ending Balance	1,942.6		1,942.6
Total Reserves (Near General Fund plus Budget Stabilization)	1,519.1	271.4	1,790.5

Acronyms

GSR- General State Revenues

EGSR- Extraordinary General State Revenues

CAFR- Comprehensive Annual Financial Report

Table 3.13
Alternative forecasts compared to the baseline forecast
2019-21 biennium
(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$23,435.2	\$22,737.7	\$21,919.2
Business & Occupation Use	9,426.3	9,149.2	8,799.7
Public Utility	1,546.4	1,495.6	1,438.5
Property (school levy)	897.2	866.4	828.5
Real Estate Excise	7,900.1	7,857.8	7,817.7
Other	2,264.7	2,219.1	2,200.1
Subtotal	2,294.0	2,273.3	2,253.1
	47,764.0	46,599.1	45,256.8
Insurance Commissioner¹	1,179.5	1,166.6	1,153.8
Lottery Commission	43.2	41.7	40.2
State Treasurer - Interest earnings	21.9	14.8	10.5
Liquor and Cannabis Surtaxes & Fees²	704.9	636.9	689.7
Office of Financial Management			
Other agencies	225.7	224.6	223.5
Washington Court System			
Court Fees, Fines & Forfeitures	114.5	112.7	109.6
Total General Fund - State*	\$50,053.6	\$48,796.4	\$47,484.1
Difference from November 2020 Baseline	\$1,257.2		(\$1,312.3)

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
2021-23 biennium**

(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$26,451.0	\$24,275.4	\$21,805.5
Business & Occupation Use	10,662.3	9,812.8	8,754.7
Public Utility	1,594.3	1,447.4	1,311.7
Property (school levy)	1,034.4	949.1	858.3
Real Estate Excise	9,176.7	9,080.3	8,988.3
Other	2,459.3	2,178.0	1,998.1
Subtotal	2,410.3	2,325.2	2,209.7
	53,788.3	50,068.2	45,926.3
Insurance Commissioner¹	1,418.7	1,384.0	1,349.4
Lottery Commission	54.1	51.5	48.9
State Treasurer - Interest earnings	17.0	(4.6)	(14.1)
Liquor and Cannabis Surtaxes & Fees²	817.0	663.1	745.3
Office of Financial Management			
Other agencies	227.6	221.0	214.4
Washington Court System			
Court Fees, Fines & Forfeitures	98.6	94.6	85.8
Total General Fund - State*	\$56,421.4	\$52,477.9	\$48,356.0
Difference from November 2020 Baseline	\$3,943.5		(\$4,121.8)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.15

Lottery transfers by fundNovember 2020 Forecast
(cash basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
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	159.7	14.8	0.0	12.2	0.0	0.0	0.3	4.8	126.6	0.0	0.0
2015-17 Biennium	331.2	31.9	0.0	23.8	0.0	0.0	0.7	8.0	265.7	0.0	0.0
2018	183.6	38.5	0.0	12.6	0.0	0.0	0.3	3.5	128.5	0.0	0.0
2019	213.8	38.7	0.0	13.1	0.0	0.0	0.4	5.8	155.7	0.0	0.0
2017-19 Biennium	397.3	77.3	0.0	25.8	0.0	0.0	0.8	9.3	284.2	0.0	0.0
2020	186.4	16.7	0.0	13.7	0.0	0.0	0.4	3.1	152.5	0.0	0.0
2021	192.2	25.0	0.0	14.2	0.0	0.0	0.4	4.1	148.5	0.0	0.0
2019-21 Biennium	378.6	41.7	0.0	27.9	0.0	0.0	0.8	7.2	301.0	0.0	0.0
2022	190.0	25.4	0.0	0.0	0.0	0.0	0.4	4.1	160.2	0.0	0.0
2023	191.2	26.1	0.0	0.0	0.0	0.0	0.4	4.1	160.7	0.0	0.0
2021-23 Biennium	381.3	51.5	0.0	0.0	0.0	0.0	0.8	8.1	320.8	0.0	0.0
2024	192.4	26.3	0.0	0.0	0.0	0.0	0.4	4.1	161.6	0.0	0.0
2025	193.6	26.5	0.0	0.0	0.0	0.0	0.4	4.1	162.7	0.0	0.0
2023-25 Biennium	386.0	52.7	0.0	0.0	0.0	0.0	0.8	8.1	324.3	0.0	0.0

Table 3.16

Lottery transfers by fundNovember 2020 Forecast
(GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
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	183.0	31.2	0.0	12.6	0.0	0.0	0.4	4.6	134.2	0.0	0.0
2019	215.8	30.9	0.0	13.1	0.0	0.0	0.4	4.6	166.7	0.0	0.0
2017-19 Biennium	398.8	62.1	0.0	25.8	0.0	0.0	0.8	9.2	300.9	0.0	0.0
2020	180.9	16.2	0.0	13.7	0.0	0.0	0.4	3.4	147.3	0.0	0.0
2021	191.2	25.7	0.0	14.2	0.0	0.0	0.4	4.1	146.9	0.0	0.0
2019-21 Biennium	372.2	41.9	0.0	27.9	0.0	0.0	0.8	7.4	294.2	0.0	0.0
2022	190.3	25.8	0.0	0.0	0.0	0.0	0.4	4.1	160.0	0.0	0.0
2023	191.3	26.1	0.0	0.0	0.0	0.0	0.4	4.1	160.7	0.0	0.0
2021-23 Biennium	381.6	51.9	0.0	0.0	0.0	0.0	0.8	8.1	320.7	0.0	0.0
2024	192.5	26.3	0.0	0.0	0.0	0.0	0.4	4.1	161.7	0.0	0.0
2025	193.7	26.4	0.0	0.0	0.0	0.0	0.4	4.1	162.9	0.0	0.0
2023-25 Biennium	386.2	52.6	0.0	0.0	0.0	0.0	0.8	8.1	324.6	0.0	0.0

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

Source: Lottery Commission, ERF

Table 3.17

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

History and Forecast by Fiscal Year (Cash basis)

November 2020 - Millions of Dollars

	General Fund-State (GF-S) (current definition)		Education Legacy Trust Account* (ELTA)		WA Opportunity Pathways Account (OPA)		Workforce Ed. Investment Acct. (WEIA)		Total GF-S, ELTA, OPA and WEIA	
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.
History:										
FY 2001	\$11,560	4.4%							\$11,560	4.4%
FY 2002	\$11,632	0.6%						\$11,632	0.6%	
FY 2003	\$11,721	0.8%						\$11,721	0.8%	
FY 2004	\$12,358	5.4%						\$12,358	5.4%	
FY 2005	\$13,036	5.5%						\$13,036	5.5%	
FY 2006	\$14,318	9.8%	\$115					\$14,432	10.7%	
FY 2007	\$15,467	8.0%	\$266	132.2%				\$15,734	9.0%	
FY 2008	\$15,659	1.2%	\$213	-20.1%				\$15,872	0.9%	
FY 2009	\$14,158	-9.6%	\$224	5.4%				\$14,382	-9.4%	
FY 2010	\$13,571	-4.1%	\$157	-29.9%				\$13,728	-4.6%	
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$99			\$14,859	8.2%	
FY 2012	\$14,874	1.5%	\$114	2.3%	\$118	19.1%		\$15,107	1.7%	
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$126	5.9%		\$16,009	6.0%	
FY 2014	\$16,383	3.8%	\$197	95.3%	\$114	-9.4%		\$16,694	4.3%	
FY 2015	\$17,283	5.5%	\$207	5.0%	\$120	5.7%		\$17,611	5.5%	
FY 2016	\$18,579	7.5%	\$215	3.6%	\$139	15.7%		\$18,933	7.5%	
FY 2017	\$19,739	6.2%	\$252	17.5%	\$127	-9.0%		\$20,118	6.3%	
FY 2018	\$21,712	10.0%	\$302	19.6%	\$129	1.5%		\$22,143	10.1%	
FY 2019	\$22,430	3.3%	\$1,352	348.1%	\$156	21.1%		\$23,938	8.1%	
FY 2020	\$23,817	6.2%	\$913	-32.5%	\$153	-2.0%	\$32	\$24,915	4.1%	
Forecast:										
FY 2021	\$24,979	4.9%	\$641	-29.9%	\$148	-2.6%	\$311	877.3%	\$26,080	4.7%
FY 2022	\$25,777	3.2%	\$624	-2.6%	\$160	7.9%	\$293	-5.8%	\$26,855	3.0%
FY 2023	\$26,701	3.6%	\$638	2.2%	\$161	0.3%	\$312	6.4%	\$27,812	3.6%
FY 2024	\$27,517	3.1%	\$516	-19.1%	\$162	0.6%	\$342	9.6%	\$28,537	2.6%
FY 2025	\$28,416	3.3%	\$538	4.2%	\$163	0.6%	\$353	3.3%	\$29,470	3.3%
Biennial Totals										
07-09 Biennium	\$29,817	0.1%	\$437	14.8%	\$0	NA	\$0	NA	\$30,254	0.3%
09-11 Biennium	\$28,218	-5.4%	\$269	-38.5%	\$99	NA	\$0	NA	\$28,586	-5.5%
11-13 Biennium	\$30,657	8.6%	\$215	-19.9%	\$244	145.2%	\$0	NA	\$31,116	8.8%
13-15 Biennium	\$33,666	9.8%	\$405	88.0%	\$234	-4.1%	\$0	NA	\$34,305	10.2%
15-17 Biennium	\$38,317	13.8%	\$467	15.4%	\$266	13.6%	\$0	NA	\$39,050	13.8%
17-19 Biennium	\$44,143	15.2%	\$1,654	254.1%	\$284	6.9%	\$0	NA	\$46,081	18.0%
19-21 Biennium	\$48,796	10.5%	\$1,554	-6.1%	\$301	5.9%	\$343	NA	\$50,995	10.7%
21-23 Biennium	\$52,478	7.5%	\$1,262	-18.8%	\$321	6.6%	\$605	76.3%	\$54,666	7.2%
23-25 Biennium	\$55,933	6.6%	\$1,054	-16.5%	\$324	1.1%	\$695	14.9%	\$58,007	6.1%

*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

November 2020

Thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	LCB administration and pre-distribution allotments	Total to distribute	Distribution of remaining funds							General Fund-State*
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention		
2015	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269	
2016	\$168,051	\$8,551	\$159,500	\$12,814	\$7,500	\$345	\$79,750	\$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	\$360,608	\$13,772	\$346,836	\$27,786	\$9,761	\$365	\$173,418	\$17,616	\$513	\$117,377	
2019	\$391,191	\$14,558	\$376,633	\$0	\$9,764	\$365	\$188,317	\$46,191	\$515	\$131,482	
2020	\$448,427	\$18,234	\$430,193	\$0	\$10,786	\$374	\$215,096	\$48,660	\$522	\$154,754	
2021	\$542,461	\$18,660	\$523,801	\$0	\$10,616	\$390	\$261,901	\$48,746	\$530	\$201,619	
2022	\$501,183	\$16,760	\$484,423	\$0	\$10,616	\$390	\$242,212	\$48,746	\$530	\$181,930	
2023	\$513,215	\$16,760	\$496,455	\$0	\$10,616	\$390	\$248,227	\$49,446	\$530	\$187,245	
2024	\$528,037	\$16,760	\$511,277	\$0	\$10,616	\$390	\$255,639	\$49,446	\$530	\$194,657	
2025	\$545,254	\$16,760	\$528,494	\$0	\$10,616	\$390	\$264,247	\$49,446	\$530	\$203,265	
Biennial totals											
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	\$751,799	\$28,330	\$723,469	\$27,786	\$19,525	\$730	\$361,735	\$63,807	\$1,028	\$248,859	
2019-21	\$990,888	\$36,894	\$953,994	\$0	\$21,402	\$764	\$476,997	\$97,406	\$1,052	\$356,373	
2021-23	\$1,014,398	\$33,520	\$980,878	\$0	\$21,232	\$780	\$490,439	\$98,192	\$1,060	\$369,175	
2023-25	\$1,073,291	\$33,520	\$1,039,771	\$0	\$21,232	\$780	\$519,885	\$98,892	\$1,060	\$397,921	

*Before distributions to local governments

Table 3.19

Workforce Education Investment Account

November 2020

Thousands of dollars

	FY20	FY21	2019-21 Biennium	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium
September 2020 forecast	\$31,863	\$306,684	\$338,548	\$291,350	\$309,914	\$601,263	\$342,365	\$357,150	\$699,515
Forecast change	-	\$4,726	\$4,726	\$1,864	\$2,030	\$3,893	(\$356)	(\$3,721)	(\$4,077)
November 2020 forecast	\$31,863	\$311,410	\$343,274	\$293,213	\$311,943	\$605,157	\$342,009	\$353,429	\$695,438

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Detail Components of the Washington State Economic and Revenue Forecast

Calendar Years

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

Table A1.1
U.S. Economic Forecast Summary
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,687.8	19,091.7	18,389.7	19,126.9	19,683.3	20,103.8	20,504.9	20,901.3
% Ch	3.0	2.2	-3.7	4.0	2.9	2.1	2.0	1.9
Real Consumption	12,928.1	13,240.2	12,723.3	13,309.7	13,673.1	13,969.8	14,256.6	14,542.5
% Ch	2.7	2.4	-3.9	4.6	2.7	2.2	2.1	2.0
Real Nonresidential Fixed Investment	2,698.9	2,776.8	2,634.8	2,697.5	2,794.2	2,924.2	3,053.2	3,194.4
% Ch	6.9	2.9	-5.1	2.4	3.6	4.7	4.4	4.6
Real Residential Fixed Investment	612.0	601.5	628.7	649.9	631.4	625.5	622.5	622.4
% Ch	-0.6	-1.7	4.5	3.4	-2.9	-0.9	-0.5	0.0
Real Personal Income	16,492.4	16,887.6	17,649.1	17,102.3	17,465.4	17,936.0	18,388.0	18,826.6
% Ch	3.1	2.4	4.5	-3.1	2.1	2.7	2.5	2.4
Real Per Capita Income (\$/Person)	50,412	51,373	53,417	51,410	52,137	53,177	54,152	55,078
% Ch	2.6	1.9	4.0	-3.8	1.4	2.0	1.8	1.7
Price and Wage Indexes								
PCE Price Index (2012=100)	108.2	109.9	111.2	113.4	115.6	117.5	119.6	121.9
% Ch	2.1	1.5	1.2	2.0	1.9	1.6	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.511	2.557	2.590	2.652	2.712	2.760	2.815	2.874
% Ch	2.4	1.8	1.3	2.4	2.2	1.8	2.0	2.1
Employment Cost Index (Dec. 2005=1.0)	1.334	1.374	1.412	1.446	1.497	1.549	1.595	1.640
% Ch	3.1	3.0	2.8	2.4	3.6	3.4	3.0	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,611.9	21,433.2	20,898.7	22,121.2	23,209.0	24,200.8	25,182.7	26,193.2
% Ch	5.5	4.0	-2.5	5.8	4.9	4.3	4.1	4.0
Personal Income	17,851.8	18,551.5	19,622.9	19,396.1	20,193.0	21,074.3	21,996.9	22,958.5
% Ch	5.3	3.9	5.8	-1.2	4.1	4.4	4.4	4.4
Employment (Millions)								
U.S. Civilian Labor Force	162.1	163.5	161.0	163.7	165.9	167.5	168.8	169.7
Total U.S. Employment	155.8	157.5	147.9	154.2	157.6	159.9	161.3	162.4
Unemployment Rate (%)	3.89	3.66	8.16	5.77	4.99	4.55	4.40	4.29
Nonfarm Payroll Employment	148.89	150.94	142.35	147.57	151.76	154.13	155.28	155.89
% Ch	1.6	1.4	-5.7	3.7	2.8	1.6	0.7	0.4
Manufacturing	12.69	12.84	12.25	12.30	12.50	12.71	12.58	12.35
% Ch	2.0	1.2	-4.6	0.4	1.6	1.6	-1.0	-1.8
Durable Manufacturing	7.95	8.06	7.64	7.63	7.81	7.97	7.89	7.72
% Ch	2.7	1.4	-5.2	-0.1	2.3	2.2	-1.1	-2.1
Nondurable Manufacturing	4.74	4.78	4.61	4.67	4.70	4.74	4.69	4.63
% Ch	0.9	0.8	-3.6	1.4	0.6	0.8	-0.9	-1.4
Construction	7.29	7.49	7.25	7.17	7.23	7.32	7.38	7.47
% Ch	4.6	2.9	-3.2	-1.2	0.9	1.2	0.8	1.3
Service-Providing	128.19	129.87	122.20	127.50	131.44	133.52	134.73	135.47
% Ch	1.3	1.3	-5.9	4.3	3.1	1.6	0.9	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	64.9	57.0	38.7	42.6	43.4	43.9	44.5	45.0
Personal Saving/Disposable Income (%)	7.9	7.6	15.7	8.6	7.7	8.1	8.7	9.6
Auto Sales (Millions)	5.3	4.7	3.4	3.5	3.4	3.5	3.4	3.4
% Ch	-12.8	-11.1	-28.4	3.3	-1.6	0.7	-0.3	-0.4
Housing Starts (Millions)	1.248	1.295	1.362	1.349	1.335	1.330	1.265	1.242
% Ch	3.4	3.8	5.2	-1.0	-1.0	-0.4	-4.9	-1.8
Federal Budget Surplus (Billions)	-931.7	-1,047.0	-3,074.6	-1,409.4	-1,156.6	-1,034.8	-1,029.8	-1,134.7
Net Exports (Billions)	-609.5	-610.5	-636.6	-751.3	-651.9	-546.7	-537.4	-584.8
3-Month Treasury Bill Rate (%)	1.94	2.06	0.36	0.12	0.09	0.09	0.08	0.09
10-Year Treasury Note Yield (%)	2.91	2.14	0.88	1.02	1.18	1.27	1.44	1.79
Bond Index of 20 G.O. Munis. (%)	3.96	3.60	2.67	2.33	2.28	2.29	2.48	2.82
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.13	3.04	3.11	3.12	3.29	3.54

Table A1.2
U.S. Economic Forecast Summary
Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	19,010.8	17,302.5	18,584.0	18,661.6	18,857.3	19,047.1	19,221.9	19,381.4
% Ch , Annual Rate	-5.0	-31.4	33.1	1.7	4.3	4.1	3.7	3.4
Real Consumption	13,118.4	11,860.3	12,917.3	12,997.2	13,120.1	13,256.6	13,374.8	13,487.3
% Ch , Annual Rate	-6.9	-33.2	40.7	2.5	3.8	4.2	3.6	3.4
Real Nonresidential Fixed Investment	2,733.8	2,525.5	2,644.8	2,635.2	2,654.6	2,688.1	2,711.2	2,736.0
% Ch , Annual Rate	-6.7	-27.2	20.3	-1.4	3.0	5.1	3.5	3.7
Real Residential Fixed Investment	637.6	571.3	641.8	664.2	656.0	651.9	647.0	644.9
% Ch , Annual Rate	19.0	-35.6	59.3	14.7	-4.9	-2.5	-2.9	-1.3
Real Personal Income	17,091.1	18,469.3	17,817.3	17,218.8	17,039.4	17,067.6	17,123.0	17,179.2
% Ch , Annual Rate	2.8	36.4	-13.4	-12.8	-4.1	0.7	1.3	1.3
Real Per Capita Income (\$/Person)	51,839	55,948	53,891	51,989	51,356	51,351	51,427	51,506
% Ch , Annual Rate	2.4	35.7	-13.9	-13.4	-4.8	0.0	0.6	0.6
Price and Wage Indexes								
PCE Price Index (2012=100)	110.9	110.4	111.4	112.0	112.5	113.1	113.7	114.3
% Ch , Annual Rate	1.3	-1.6	3.7	2.1	1.6	2.4	2.0	2.3
U.S. Consumer Price Index (1982-84=1.0)	2.586	2.563	2.595	2.615	2.627	2.645	2.660	2.677
% Ch , Annual Rate	1.2	-3.5	5.2	3.0	1.9	2.8	2.4	2.6
Employment Cost Index (Dec. 2005=1.0)	1.403	1.408	1.415	1.421	1.430	1.440	1.450	1.463
% Ch , Annual Rate	4.1	1.4	2.0	1.7	2.6	2.8	2.7	3.6
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,561.1	19,520.1	21,157.6	21,355.8	21,659.2	21,978.8	22,274.9	22,571.9
% Ch , Annual Rate	-3.4	-32.8	38.0	3.8	5.8	6.0	5.5	5.4
Personal Income	18,951.0	20,396.6	19,856.0	19,288.2	19,163.8	19,308.8	19,469.3	19,642.3
% Ch , Annual Rate	4.1	34.2	-10.2	-11.0	-2.6	3.1	3.4	3.6
Employment (Millions)								
U.S. Civilian Labor Force	164.0	158.2	160.3	161.4	162.6	163.4	164.1	164.6
Total U.S. Employment	157.7	137.6	146.1	150.2	152.8	153.9	154.7	155.5
Unemployment Rate (%)	3.82	13.02	8.83	6.95	6.05	5.83	5.68	5.53
Nonfarm Payroll Employment	151.92	133.71	140.79	142.96	145.57	147.07	148.21	149.42
% Ch , Annual Rate	0.4	-40.0	22.9	6.3	7.5	4.2	3.1	3.3
Manufacturing	12.83	11.76	12.14	12.27	12.25	12.29	12.29	12.38
% Ch , Annual Rate	-0.4	-29.5	13.7	4.2	-0.4	1.1	0.2	2.9
Durable Manufacturing	8.05	7.31	7.57	7.64	7.62	7.62	7.58	7.71
% Ch , Annual Rate	-0.1	-31.9	15.3	3.6	-1.2	0.2	-1.9	7.0
Nondurable Manufacturing	4.79	4.45	4.57	4.63	4.64	4.67	4.71	4.67
% Ch , Annual Rate	-1.0	-25.3	11.1	5.2	0.8	2.7	3.6	-3.5
Construction	7.60	6.91	7.23	7.27	7.15	7.18	7.17	7.18
% Ch , Annual Rate	3.1	-31.6	19.6	2.5	-6.6	1.6	-0.5	0.7
Service-Providing	130.78	114.40	120.80	122.81	125.57	127.01	128.15	129.26
% Ch , Annual Rate	0.3	-41.4	24.3	6.8	9.3	4.7	3.7	3.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	45.8	27.8	40.9	40.2	41.7	42.5	42.9	43.1
Personal Saving/Disposable Income (%)	9.6	25.7	15.8	11.8	9.7	8.8	8.3	7.7
Auto Sales (Millions)	3.8	2.5	3.6	3.6	3.5	3.5	3.5	3.5
% Ch , Annual Rate	-43.7	-81.7	315.5	-2.5	-9.7	3.0	2.4	-7.2
Housing Starts (Millions)	1.484	1.079	1.430	1.455	1.354	1.366	1.351	1.325
% Ch , Annual Rate	15.2	-72.1	208.5	7.1	-25.0	3.7	-4.4	-7.5
Federal Budget Surplus (Billions)	-1,150.8	-5,647.6	-3,489.4	-2,010.6	-1,507.2	-1,457.7	-1,391.9	-1,280.8
Net Exports (Billions)	-494.3	-545.2	-731.4	-775.6	-757.6	-770.7	-746.9	-730.1
3-Month Treasury Bill Rate (%)	1.11	0.14	0.11	0.09	0.11	0.10	0.08	0.18
10-Year Treasury Note Yield (%)	1.38	0.69	0.65	0.79	0.92	0.98	1.02	1.19
Bond Index of 20 G.O. Munis. (%)	3.45	2.79	2.15	2.29	2.31	2.34	2.29	2.39
30-Year Fixed Mortgage Rate (%)	3.51	3.24	2.95	2.83	2.98	3.04	3.06	3.08

Table A1.2 (continued)
U.S. Economic Forecast Summary
Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	19,500.4	19,635.0	19,748.7	19,849.1	19,949.9	20,053.0	20,154.0	20,258.2
% Ch , Annual Rate	2.5	2.8	2.3	2.0	2.0	2.1	2.0	2.1
Real Consumption	13,561.1	13,636.9	13,710.9	13,783.4	13,856.9	13,933.2	14,007.6	14,081.3
% Ch , Annual Rate	2.2	2.3	2.2	2.1	2.1	2.2	2.2	2.1
Real Nonresidential Fixed Investment	2,748.9	2,776.6	2,808.1	2,843.1	2,876.9	2,908.7	2,939.3	2,971.9
% Ch , Annual Rate	1.9	4.1	4.6	5.1	4.8	4.5	4.3	4.5
Real Residential Fixed Investment	636.8	631.5	629.1	628.0	627.1	626.2	624.6	624.0
% Ch , Annual Rate	-4.9	-3.3	-1.5	-0.7	-0.5	-0.6	-1.0	-0.4
Real Personal Income	17,308.2	17,412.0	17,520.0	17,621.3	17,756.1	17,878.1	17,998.3	18,111.5
% Ch , Annual Rate	3.0	2.4	2.5	2.3	3.1	2.8	2.7	2.5
Real Per Capita Income (\$/Person)	51,803	52,023	52,256	52,468	52,778	53,051	53,317	53,561
% Ch , Annual Rate	2.3	1.7	1.8	1.6	2.4	2.1	2.0	1.8
Price and Wage Indexes								
PCE Price Index (2012=100)	114.9	115.4	115.9	116.3	116.8	117.2	117.7	118.2
% Ch , Annual Rate	1.9	1.9	1.6	1.6	1.6	1.6	1.7	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.692	2.707	2.718	2.730	2.742	2.754	2.766	2.779
% Ch , Annual Rate	2.2	2.2	1.7	1.8	1.8	1.7	1.8	1.9
Employment Cost Index (Dec. 2005=1.0)	1.477	1.491	1.504	1.517	1.531	1.543	1.555	1.567
% Ch , Annual Rate	4.0	3.8	3.5	3.6	3.5	3.3	3.2	3.0
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	22,816.8	23,085.9	23,341.7	23,591.4	23,836.7	24,080.4	24,319.8	24,566.1
% Ch , Annual Rate	4.4	4.8	4.5	4.3	4.2	4.2	4.0	4.1
Personal Income	19,882.6	20,094.7	20,298.2	20,496.7	20,735.7	20,960.2	21,188.6	21,412.9
% Ch , Annual Rate	5.0	4.3	4.1	4.0	4.7	4.4	4.4	4.3
Employment (Millions)								
U.S. Civilian Labor Force	165.2	165.7	166.1	166.6	167.0	167.3	167.7	168.0
Total U.S. Employment	156.4	157.4	158.1	158.7	159.2	159.7	160.1	160.5
Unemployment Rate (%)	5.34	5.02	4.86	4.74	4.64	4.57	4.51	4.47
Nonfarm Payroll Employment	150.55	151.48	152.14	152.88	153.47	153.98	154.41	154.68
% Ch , Annual Rate	3.1	2.5	1.8	2.0	1.5	1.3	1.1	0.7
Manufacturing	12.47	12.46	12.50	12.59	12.68	12.73	12.74	12.70
% Ch , Annual Rate	2.8	-0.2	1.4	2.7	2.9	1.5	0.4	-1.2
Durable Manufacturing	7.77	7.77	7.81	7.88	7.95	7.98	7.99	7.97
% Ch , Annual Rate	3.2	-0.3	1.9	3.6	3.7	1.8	0.5	-1.2
Nondurable Manufacturing	4.69	4.69	4.70	4.71	4.73	4.74	4.74	4.73
% Ch , Annual Rate	2.2	-0.2	0.6	1.2	1.6	1.0	0.0	-1.1
Construction	7.18	7.22	7.25	7.27	7.30	7.32	7.33	7.34
% Ch , Annual Rate	0.2	2.0	1.7	1.4	1.2	1.1	0.8	0.7
Service-Providing	130.31	131.21	131.80	132.44	132.91	133.35	133.76	134.04
% Ch , Annual Rate	3.3	2.8	1.8	2.0	1.4	1.3	1.2	0.9
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	43.2	43.3	43.4	43.6	43.7	43.8	43.9	44.1
Personal Saving/Disposable Income (%)	7.8	7.7	7.7	7.6	7.8	8.0	8.1	8.3
Auto Sales (Millions)	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5
% Ch , Annual Rate	-2.7	-0.9	1.0	1.6	0.5	1.0	0.6	0.2
Housing Starts (Millions)	1.353	1.328	1.322	1.335	1.337	1.334	1.329	1.319
% Ch , Annual Rate	8.9	-7.3	-1.7	4.0	0.5	-0.9	-1.6	-2.9
Federal Budget Surplus (Billions)	-1,253.6	-1,183.8	-1,117.6	-1,071.5	-1,058.6	-1,041.6	-1,024.0	-1,015.2
Net Exports (Billions)	-695.4	-660.5	-639.9	-611.7	-578.8	-549.9	-533.3	-525.0
3-Month Treasury Bill Rate (%)	0.08	0.09	0.10	0.09	0.10	0.09	0.10	0.06
10-Year Treasury Note Yield (%)	1.10	1.17	1.22	1.22	1.27	1.27	1.28	1.26
Bond Index of 20 G.O. Munis. (%)	2.28	2.28	2.29	2.26	2.29	2.28	2.31	2.30
30-Year Fixed Mortgage Rate (%)	3.11	3.08	3.08	3.15	3.11	3.12	3.12	3.14

Table A1.2 (continued)
U.S. Economic Forecast Summary
Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	20,358.5	20,455.4	20,551.7	20,654.1	20,752.3	20,852.0	20,952.4	21,048.4
% Ch , Annual Rate	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.8
Real Consumption	14,151.8	14,221.3	14,291.2	14,362.2	14,433.7	14,505.7	14,578.6	14,652.3
% Ch , Annual Rate	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Real Nonresidential Fixed Investment	3,004.1	3,036.4	3,068.9	3,103.3	3,137.8	3,174.1	3,213.1	3,252.6
% Ch , Annual Rate	4.4	4.4	4.4	4.6	4.5	4.7	5.0	5.0
Real Residential Fixed Investment	623.3	622.5	621.5	622.6	623.3	623.8	623.3	619.4
% Ch , Annual Rate	-0.5	-0.5	-0.6	0.7	0.4	0.3	-0.3	-2.5
Real Personal Income	18,229.9	18,336.3	18,440.1	18,545.9	18,667.3	18,773.7	18,880.9	18,984.5
% Ch , Annual Rate	2.6	2.4	2.3	2.3	2.6	2.3	2.3	2.2
Real Per Capita Income (\$/Person)	53,821	54,044	54,260	54,481	54,747	54,969	55,192	55,405
% Ch , Annual Rate	2.0	1.7	1.6	1.6	2.0	1.6	1.6	1.6
Price and Wage Indexes								
PCE Price Index (2012=100)	118.8	119.3	119.9	120.5	121.1	121.6	122.2	122.8
% Ch , Annual Rate	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.793	2.807	2.822	2.836	2.851	2.866	2.882	2.897
% Ch , Annual Rate	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.578	1.590	1.601	1.612	1.623	1.634	1.646	1.658
% Ch , Annual Rate	3.0	2.9	2.8	2.8	2.8	2.9	2.9	3.0
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	24,814.1	25,058.1	25,302.5	25,556.3	25,808.2	26,064.0	26,322.9	26,577.6
% Ch , Annual Rate	4.1	4.0	4.0	4.1	4.0	4.0	4.0	3.9
Personal Income	21,652.8	21,882.2	22,110.1	22,342.4	22,597.2	22,836.2	23,079.6	23,321.1
% Ch , Annual Rate	4.6	4.3	4.2	4.3	4.6	4.3	4.3	4.3
Employment (Millions)								
U.S. Civilian Labor Force	168.3	168.6	168.9	169.2	169.4	169.6	169.8	170.0
Total U.S. Employment	160.9	161.2	161.5	161.8	162.0	162.3	162.6	162.8
Unemployment Rate (%)	4.44	4.41	4.39	4.36	4.34	4.30	4.28	4.25
Nonfarm Payroll Employment	154.93	155.20	155.40	155.59	155.73	155.86	155.95	156.01
% Ch, Annual Rate	0.6	0.7	0.5	0.5	0.4	0.3	0.2	0.1
Manufacturing	12.65	12.61	12.56	12.50	12.43	12.37	12.32	12.27
% Ch, Annual Rate	-1.5	-1.4	-1.5	-1.9	-2.1	-1.9	-1.8	-1.6
Durable Manufacturing	7.94	7.91	7.87	7.83	7.78	7.74	7.70	7.66
% Ch, Annual Rate	-1.6	-1.6	-1.7	-2.1	-2.4	-2.2	-2.1	-1.8
Nondurable Manufacturing	4.71	4.70	4.69	4.67	4.65	4.64	4.62	4.60
% Ch, Annual Rate	-1.3	-1.1	-1.2	-1.4	-1.5	-1.4	-1.4	-1.4
Construction	7.36	7.37	7.38	7.41	7.43	7.46	7.49	7.51
% Ch, Annual Rate	0.6	0.6	0.9	1.3	1.3	1.5	1.5	1.4
Service-Providing	134.33	134.63	134.87	135.09	135.27	135.43	135.55	135.62
% Ch, Annual Rate	0.9	0.9	0.7	0.7	0.5	0.5	0.4	0.2
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	44.2	44.4	44.5	44.7	44.8	45.0	45.1	45.3
Personal Saving/Disposable Income (%)	8.5	8.6	8.8	9.0	9.3	9.5	9.7	9.9
Auto Sales (Millions)	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4
% Ch, Annual Rate	-0.9	-0.8	-0.7	-0.4	-0.7	-0.3	0.7	-0.5
Housing Starts (Millions)	1.286	1.263	1.260	1.252	1.249	1.249	1.240	1.230
% Ch, Annual Rate	-9.7	-6.8	-1.1	-2.4	-1.0	0.0	-2.6	-3.2
Federal Budget Surplus (Billions)	-1,018.4	-1,019.0	-1,031.0	-1,050.8	-1,088.4	-1,114.5	-1,146.7	-1,189.2
Net Exports (Billions)	-523.9	-531.5	-541.9	-552.3	-565.5	-578.7	-591.5	-603.2
3-Month Treasury Bill Rate (%)	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10
10-Year Treasury Note Yield (%)	1.32	1.40	1.48	1.57	1.65	1.74	1.83	1.93
Bond Index of 20 G.O. Munis. (%)	2.36	2.44	2.52	2.59	2.68	2.77	2.87	2.98
30-Year Fixed Mortgage Rate (%)	3.18	3.26	3.34	3.38	3.44	3.50	3.57	3.64

Table A1.3
Washington Economic Forecast Summary
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	432.420	448.909	476.088	461.416	469.225	482.286	495.499	509.235
% Ch	5.7	3.8	6.1	-3.1	1.7	2.8	2.7	2.8
Real Wage and Salary Disb.	219.336	231.316	234.342	241.270	246.359	254.006	261.284	268.917
% Ch	6.5	5.5	1.3	3.0	2.1	3.1	2.9	2.9
Real Nonwage Income	213.084	217.593	241.746	220.146	222.866	228.279	234.215	240.318
% Ch	4.8	2.1	11.1	-8.9	1.2	2.4	2.6	2.6
Real Per Capita Income (\$/Person)	57,474	58,947	61,780	59,161	59,469	60,428	61,387	62,387
% Ch	4.2	2.6	4.8	-4.2	0.5	1.6	1.6	1.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.082	1.098	1.112	1.134	1.156	1.175	1.196	1.219
% Ch	2.1	1.5	1.2	2.0	1.9	1.6	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.711	2.779	2.831	2.911	2.976	3.030	3.090	3.155
% Ch	3.2	2.5	1.9	2.8	2.2	1.8	2.0	2.1
Average Nonfarm Annual Wage	67,735	71,165	76,651	77,678	78,561	80,831	83,757	87,044
% Ch	6.5	5.1	7.7	1.3	1.1	2.9	3.6	3.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.42	29.16	28.33	28.20	29.16	30.12	30.96	31.77
% Ch	3.8	2.6	-2.8	-0.5	3.4	3.3	2.8	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	468.055	493.128	529.323	523.293	542.506	566.674	592.749	621.003
% Ch	7.9	5.4	7.3	-1.1	3.7	4.5	4.6	4.8
Disposable Personal Income	413.382	434.572	470.317	461.667	476.739	497.620	521.928	549.628
% Ch	8.4	5.1	8.2	-1.8	3.3	4.4	4.9	5.3
Per Capita Income (\$/Person)	62,209	64,752	68,687	67,093	68,755	71,001	73,434	76,078
% Ch	6.4	4.1	6.1	-2.3	2.5	3.3	3.4	3.6
Employment (Thousands)								
Washington Civilian Labor Force	3,806.8	3,912.7	3,932.2	3,978.0	4,043.7	4,098.8	4,146.8	4,192.8
Total Washington Employment	3,637.3	3,745.8	3,600.6	3,722.2	3,809.0	3,875.5	3,925.5	3,974.3
Unemployment Rate (%)	4.45	4.27	8.43	6.43	5.81	5.45	5.34	5.21
Nonfarm Payroll Employment	3,401.1	3,468.3	3,303.4	3,419.1	3,519.2	3,584.7	3,623.9	3,659.6
% Ch	2.4	2.0	-4.8	3.5	2.9	1.9	1.1	1.0
Manufacturing	287.7	293.6	275.1	264.1	264.2	268.2	267.8	266.2
% Ch	1.2	2.0	-6.3	-4.0	0.0	1.5	-0.1	-0.6
Durable Manufacturing	202.2	206.8	192.5	179.5	178.6	181.2	181.3	180.6
% Ch	0.9	2.3	-6.9	-6.8	-0.5	1.4	0.1	-0.4
Aerospace	83.9	88.6	81.6	67.0	62.5	62.9	63.3	63.8
% Ch	-0.3	5.5	-7.9	-17.9	-6.7	0.6	0.8	0.7
Nondurable Manufacturing	85.6	86.8	82.6	84.7	85.6	87.0	86.5	85.6
% Ch	2.0	1.4	-4.8	2.5	1.1	1.7	-0.5	-1.1
Construction	213.1	219.3	213.1	209.2	203.7	201.2	200.8	203.3
% Ch	6.7	2.9	-2.8	-1.8	-2.6	-1.2	-0.2	1.2
Service-Providing	2,894.0	2,949.5	2,809.7	2,940.1	3,045.5	3,109.5	3,149.5	3,184.3
% Ch	2.2	1.9	-4.7	4.6	3.6	2.1	1.3	1.1
Software Publishers	65.3	70.0	75.1	77.5	79.5	81.1	82.4	83.4
% Ch	6.4	7.1	7.3	3.2	2.7	2.0	1.6	1.2
Electronic Shopping and Mail-Order	54.8	63.5	74.6	79.3	81.6	83.7	85.6	87.5
% Ch	10.1	15.9	17.5	6.3	3.0	2.5	2.3	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	47.746	48.424	44.851	45.209	43.367	42.628	41.210	40.421
% Ch	4.3	1.4	-7.4	0.8	-4.1	-1.7	-3.3	-1.9
Single-Family	23.676	23.300	23.036	25.828	24.701	24.495	24.022	23.919
% Ch	2.4	-1.6	-1.1	12.1	-4.4	-0.8	-1.9	-0.4
Multi-Family	24.070	25.124	21.815	19.380	18.666	18.133	17.188	16.502
% Ch	6.1	4.4	-13.2	-11.2	-3.7	-2.9	-5.2	-4.0
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.13	3.04	3.11	3.12	3.29	3.54

Table A1.4
Washington Economic Forecast Summary
Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	456.499	499.697	481.230	466.927	461.274	460.997	461.383	462.010
% Ch, Annual Rate	3.4	43.6	-14.0	-11.4	-4.8	-0.2	0.3	0.5
Real Wage and Salary Disb.	236.794	228.287	234.589	237.698	240.387	241.053	241.451	242.190
% Ch, Annual Rate	4.4	-13.6	11.5	5.4	4.6	1.1	0.7	1.2
Real Nonwage Income	219.705	271.410	246.641	229.229	220.887	219.944	219.932	219.820
% Ch, Annual Rate	2.3	132.9	-31.8	-25.4	-13.8	-1.7	0.0	-0.2
Real Per Capita Income (\$/Person)	59,503	64,942	62,357	60,316	59,405	59,191	59,068	58,981
% Ch, Annual Rate	2.2	41.9	-15.0	-12.5	-5.9	-1.4	-0.8	-0.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.109	1.104	1.114	1.120	1.125	1.131	1.137	1.143
% Ch, Annual Rate	1.3	-1.6	3.7	2.1	1.6	2.4	2.0	2.3
Seattle Cons. Price Index (1982-84=1.0)	2.818	2.798	2.837	2.870	2.883	2.903	2.920	2.939
% Ch, Annual Rate	2.7	-2.8	5.7	4.6	1.9	2.8	2.4	2.6
Average Nonfarm Annual Wage	72,821	77,974	77,790	78,017	77,831	77,593	77,578	77,711
% Ch, Annual Rate	4.7	31.5	-0.9	1.2	-0.9	-1.2	-0.1	0.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.70	28.62	28.26	27.75	27.92	28.10	28.27	28.51
% Ch, Annual Rate	-5.3	-1.1	-4.9	-7.0	2.4	2.6	2.4	3.5
Current Dollar Income (Billions of Dollars)								
Personal Income	506.158	551.819	536.272	523.041	518.785	521.532	524.604	528.252
% Ch, Annual Rate	4.7	41.3	-10.8	-9.5	-3.2	2.1	2.4	2.8
Disposable Personal Income	446.000	495.122	477.076	463.070	458.176	460.360	462.745	465.388
% Ch, Annual Rate	4.5	51.9	-13.8	-11.2	-4.2	1.9	2.1	2.3
Per Capita Income (\$/Person)	65,976	71,716	69,489	67,565	66,811	66,964	67,161	67,437
% Ch, Annual Rate	3.5	39.6	-11.9	-10.6	-4.4	0.9	1.2	1.7
Employment (Thousands)								
Washington Civilian Labor Force	3,936.1	3,934.0	3,939.9	3,918.9	3,948.4	3,972.0	3,988.4	4,003.2
Total Washington Employment	3,767.6	3,391.1	3,593.0	3,650.6	3,685.9	3,715.7	3,734.7	3,752.4
Unemployment Rate (%)	4.28	13.80	8.81	6.85	6.65	6.45	6.36	6.27
Nonfarm Payroll Employment	3,503.2	3,136.0	3,261.6	3,313.0	3,371.6	3,411.3	3,434.7	3,458.7
% Ch, Annual Rate	1.1	-35.8	17.0	6.5	7.3	4.8	2.8	2.8
Manufacturing	292.0	269.7	270.2	268.5	266.7	265.0	263.2	261.6
% Ch, Annual Rate	-1.1	-27.2	0.8	-2.5	-2.7	-2.5	-2.7	-2.4
Durable Manufacturing	204.9	190.7	189.1	185.2	183.0	180.4	177.6	176.8
% Ch, Annual Rate	-2.0	-24.9	-3.4	-7.8	-4.7	-5.6	-6.1	-1.7
Aerospace	88.8	83.1	80.1	74.2	71.5	68.5	65.5	62.5
% Ch, Annual Rate	-0.4	-23.3	-13.8	-26.3	-13.9	-15.8	-16.4	-17.1
Nondurable Manufacturing	87.1	79.0	81.1	83.2	83.7	84.6	85.6	84.8
% Ch, Annual Rate	1.0	-32.4	11.3	10.9	2.1	4.5	4.6	-3.7
Construction	223.5	199.9	211.7	217.4	211.8	210.2	208.3	206.4
% Ch, Annual Rate	4.1	-36.0	25.8	11.3	-10.0	-2.8	-3.7	-3.5
Service-Providing	2,982.0	2,661.0	2,774.2	2,821.5	2,887.4	2,930.4	2,957.7	2,984.8
% Ch, Annual Rate	1.2	-36.6	18.1	7.0	9.7	6.1	3.8	3.7
Software Publishers	73.5	74.8	74.9	77.1	77.1	77.5	77.3	78.0
% Ch, Annual Rate	9.4	7.1	1.0	12.1	-0.1	2.2	-1.2	4.0
Electronic Shopping and Mail-Order	71.2	73.6	75.9	77.6	78.3	79.0	79.6	80.2
% Ch, Annual Rate	22.4	14.3	12.8	9.4	3.7	3.5	3.3	3.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	49.811	40.345	43.706	45.540	46.260	45.896	44.923	43.756
% Ch, Annual Rate	-26.9	-57.0	37.7	17.9	6.5	-3.1	-8.2	-10.0
Single-Family	24.783	17.783	24.658	24.919	26.788	26.117	25.458	24.951
% Ch, Annual Rate	-21.4	-73.5	269.7	4.3	33.5	-9.7	-9.7	-7.7
Multi-Family	25.028	22.562	19.048	20.621	19.472	19.779	19.465	18.805
% Ch, Annual Rate	-31.9	-34.0	-49.2	37.4	-20.5	6.4	-6.2	-12.9
30-Year Fixed Mortgage Rate (%)	3.51	3.24	2.95	2.83	2.98	3.04	3.06	3.08

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	464.995	467.724	470.681	473.500	477.311	480.674	483.877	487.281
% Ch, Annual Rate	2.6	2.4	2.6	2.4	3.3	2.8	2.7	2.8
Real Wage and Salary Disb.	243.781	245.434	247.162	249.059	251.109	253.118	254.926	256.872
% Ch, Annual Rate	2.7	2.7	2.8	3.1	3.3	3.2	2.9	3.1
Real Nonwage Income	221.214	222.291	223.519	224.442	226.202	227.556	228.951	230.409
% Ch, Annual Rate	2.6	2.0	2.2	1.7	3.2	2.4	2.5	2.6
Real Per Capita Income (\$/Person)	59,190	59,364	59,568	59,753	60,062	60,313	60,543	60,796
% Ch, Annual Rate	1.4	1.2	1.4	1.3	2.1	1.7	1.5	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.149	1.154	1.159	1.163	1.168	1.172	1.177	1.182
% Ch, Annual Rate	1.9	1.9	1.6	1.6	1.6	1.6	1.7	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.954	2.971	2.984	2.997	3.010	3.023	3.036	3.050
% Ch, Annual Rate	2.2	2.2	1.7	1.8	1.8	1.7	1.8	1.9
Average Nonfarm Annual Wage	77,975	78,300	78,731	79,237	79,798	80,471	81,165	81,890
% Ch, Annual Rate	1.4	1.7	2.2	2.6	2.9	3.4	3.5	3.6
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.78	29.04	29.29	29.54	29.78	30.01	30.24	30.44
% Ch, Annual Rate	3.8	3.7	3.4	3.5	3.4	3.1	3.0	2.8
Current Dollar Income (Billions of Dollars)								
Personal Income	534.157	539.787	545.318	550.763	557.407	563.538	569.647	576.104
% Ch, Annual Rate	4.5	4.3	4.2	4.1	4.9	4.5	4.4	4.6
Disposable Personal Income	470.039	474.498	478.978	483.441	489.212	494.739	500.259	506.272
% Ch, Annual Rate	4.1	3.8	3.8	3.8	4.9	4.6	4.5	4.9
Per Capita Income (\$/Person)	67,993	68,510	69,013	69,503	70,141	70,710	71,274	71,878
% Ch, Annual Rate	3.3	3.1	3.0	2.9	3.7	3.3	3.2	3.4
Employment (Thousands)								
Washington Civilian Labor Force	4,019.9	4,036.9	4,052.0	4,066.1	4,080.5	4,092.9	4,104.3	4,117.3
Total Washington Employment	3,774.0	3,801.6	3,821.6	3,838.7	3,855.9	3,869.3	3,881.4	3,895.3
Unemployment Rate (%)	6.12	5.83	5.69	5.59	5.50	5.46	5.43	5.39
Nonfarm Payroll Employment	3,485.8	3,511.3	3,530.5	3,549.3	3,567.5	3,580.2	3,590.0	3,601.0
% Ch, Annual Rate	3.2	3.0	2.2	2.1	2.1	1.4	1.1	1.2
Manufacturing	263.5	263.7	264.2	265.3	267.1	268.2	268.7	268.7
% Ch, Annual Rate	2.9	0.4	0.7	1.7	2.7	1.7	0.8	-0.1
Durable Manufacturing	178.2	178.4	178.6	179.2	180.4	181.1	181.5	181.6
% Ch, Annual Rate	3.1	0.5	0.3	1.4	2.8	1.6	0.9	0.2
Aerospace	62.7	62.6	62.4	62.2	62.5	62.8	63.0	63.1
% Ch, Annual Rate	1.2	-0.5	-1.1	-1.1	2.0	1.6	1.2	0.9
Nondurable Manufacturing	85.3	85.3	85.6	86.1	86.7	87.1	87.2	87.0
% Ch, Annual Rate	2.3	0.2	1.4	2.3	2.7	1.9	0.7	-0.7
Construction	204.4	204.1	203.4	202.9	202.3	201.5	200.0	201.0
% Ch, Annual Rate	-3.9	-0.5	-1.3	-1.0	-1.3	-1.6	-2.8	2.0
Service-Providing	3,012.0	3,037.6	3,057.0	3,075.3	3,092.4	3,104.8	3,115.4	3,125.5
% Ch, Annual Rate	3.7	3.4	2.6	2.4	2.2	1.6	1.4	1.3
Software Publishers	78.7	79.3	79.9	80.2	80.7	80.9	81.3	81.6
% Ch, Annual Rate	3.5	3.0	3.1	1.7	2.1	1.3	1.8	1.7
Electronic Shopping and Mail-Order	80.8	81.4	81.9	82.4	82.9	83.4	83.9	84.4
% Ch, Annual Rate	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	43.994	43.468	43.096	42.909	42.832	42.719	42.578	42.384
% Ch, Annual Rate	2.2	-4.7	-3.4	-1.7	-0.7	-1.1	-1.3	-1.8
Single-Family	24.814	24.731	24.627	24.631	24.607	24.512	24.428	24.432
% Ch, Annual Rate	-2.2	-1.3	-1.7	0.1	-0.4	-1.5	-1.4	0.1
Multi-Family	19.180	18.737	18.470	18.278	18.225	18.206	18.149	17.951
% Ch, Annual Rate	8.2	-8.9	-5.6	-4.1	-1.1	-0.4	-1.2	-4.3
30-Year Fixed Mortgage Rate (%)	3.11	3.08	3.08	3.15	3.11	3.12	3.12	3.14

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	490.674	493.821	497.075	500.426	504.158	507.543	510.954	514.284
% Ch, Annual Rate	2.8	2.6	2.7	2.7	3.0	2.7	2.7	2.6
Real Wage and Salary Disb.	258.556	260.299	262.159	264.123	266.102	268.025	269.876	271.664
% Ch, Annual Rate	2.6	2.7	2.9	3.0	3.0	2.9	2.8	2.7
Real Nonwage Income	232.118	233.522	234.917	236.303	238.056	239.518	241.078	242.620
% Ch, Annual Rate	3.0	2.4	2.4	2.4	3.0	2.5	2.6	2.6
Real Per Capita Income (\$/Person)	61,047	61,266	61,497	61,738	62,025	62,267	62,511	62,744
% Ch, Annual Rate	1.7	1.4	1.5	1.6	1.9	1.6	1.6	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.188	1.193	1.199	1.205	1.211	1.216	1.222	1.228
% Ch, Annual Rate	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0
Seattle Cons. Price Index (1982-84=1.0)	3.066	3.082	3.098	3.113	3.130	3.146	3.163	3.180
% Ch, Annual Rate	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2
Average Nonfarm Annual Wage	82,611	83,356	84,126	84,935	85,768	86,610	87,464	88,335
% Ch, Annual Rate	3.6	3.7	3.7	3.9	4.0	4.0	4.0	4.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	30.65	30.86	31.06	31.26	31.45	31.66	31.87	32.09
% Ch, Annual Rate	2.8	2.7	2.6	2.6	2.6	2.7	2.7	2.8
Current Dollar Income (Billions of Dollars)								
Personal Income	582.807	589.318	596.004	602.868	610.297	617.375	624.581	631.759
% Ch, Annual Rate	4.7	4.5	4.6	4.7	5.0	4.7	4.8	4.7
Disposable Personal Income	512.485	518.582	524.998	531.646	539.015	545.982	553.131	560.385
% Ch, Annual Rate	5.0	4.8	5.0	5.2	5.7	5.3	5.3	5.4
Per Capita Income (\$/Person)	72,509	73,113	73,736	74,377	75,083	75,742	76,413	77,076
% Ch, Annual Rate	3.6	3.4	3.5	3.5	3.9	3.6	3.6	3.5
Employment (Thousands)								
Washington Civilian Labor Force	4,129.2	4,140.9	4,152.7	4,164.5	4,176.1	4,187.5	4,198.5	4,209.2
Total Washington Employment	3,907.3	3,919.3	3,931.3	3,944.1	3,956.4	3,968.8	3,980.4	3,991.8
Unemployment Rate (%)	5.37	5.35	5.33	5.29	5.26	5.22	5.20	5.17
Nonfarm Payroll Employment	3,609.7	3,618.8	3,628.6	3,638.6	3,647.8	3,656.4	3,663.8	3,670.2
% Ch, Annual Rate	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.7
Manufacturing	268.3	268.0	267.7	267.3	266.8	266.4	266.1	265.8
% Ch, Annual Rate	-0.5	-0.4	-0.5	-0.7	-0.8	-0.5	-0.5	-0.4
Durable Manufacturing	181.5	181.4	181.2	181.0	180.8	180.7	180.6	180.5
% Ch, Annual Rate	-0.2	-0.2	-0.3	-0.4	-0.6	-0.3	-0.2	-0.1
Aerospace	63.2	63.3	63.4	63.5	63.5	63.7	63.9	64.1
% Ch, Annual Rate	0.7	0.6	0.5	0.5	0.5	0.8	1.2	1.4
Nondurable Manufacturing	86.8	86.7	86.5	86.2	86.0	85.7	85.5	85.3
% Ch, Annual Rate	-1.0	-0.8	-0.9	-1.1	-1.2	-1.1	-1.1	-1.1
Construction	200.7	200.4	200.6	201.3	202.1	202.9	203.7	204.4
% Ch, Annual Rate	-0.6	-0.7	0.4	1.4	1.6	1.6	1.5	1.4
Service-Providing	3,134.8	3,144.5	3,154.4	3,164.1	3,173.1	3,181.3	3,188.3	3,194.3
% Ch, Annual Rate	1.2	1.2	1.3	1.2	1.1	1.0	0.9	0.8
Software Publishers	82.0	82.3	82.6	82.8	83.1	83.3	83.5	83.7
% Ch, Annual Rate	1.7	1.6	1.4	1.2	1.2	1.2	0.8	0.8
Electronic Shopping and Mail-Order	84.9	85.4	85.8	86.3	86.8	87.2	87.7	88.1
% Ch, Annual Rate	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	41.724	41.209	41.055	40.852	40.670	40.591	40.354	40.071
% Ch, Annual Rate	-6.1	-4.8	-1.5	-2.0	-1.8	-0.8	-2.3	-2.8
Single-Family	24.275	24.019	23.928	23.866	23.898	23.995	23.934	23.850
% Ch, Annual Rate	-2.5	-4.2	-1.5	-1.0	0.5	1.6	-1.0	-1.4
Multi-Family	17.449	17.190	17.126	16.985	16.772	16.597	16.420	16.221
% Ch, Annual Rate	-10.7	-5.8	-1.5	-3.3	-4.9	-4.1	-4.2	-4.8
30-Year Fixed Mortgage Rate (%)	3.18	3.26	3.34	3.38	3.44	3.50	3.57	3.64

Table A2.1
U.S. Nonagricultural Employment by Industry (Millions)
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	148.89	150.94	142.35	147.57	151.76	154.13	155.28	155.89
% Ch	1.6	1.4	-5.7	3.7	2.8	1.6	0.7	0.4
Manufacturing	12.69	12.84	12.25	12.30	12.50	12.71	12.58	12.35
% Ch	2.0	1.2	-4.6	0.4	1.6	1.6	-1.0	-1.8
Durable Manufacturing	7.95	8.06	7.64	7.63	7.81	7.97	7.89	7.72
% Ch	2.7	1.4	-5.2	-0.1	2.3	2.2	-1.1	-2.1
Wood Products	0.41	0.41	0.40	0.40	0.40	0.39	0.38	0.37
% Ch	2.3	0.7	-3.0	0.6	-0.8	-0.8	-3.6	-3.1
Primary and Fabricated Metals	1.85	1.88	1.76	1.76	1.86	1.91	1.89	1.84
% Ch	3.0	1.4	-6.1	-0.3	5.6	2.9	-0.8	-2.8
Computer and Electronic Products	1.05	1.08	1.09	1.12	1.13	1.13	1.14	1.14
% Ch	1.5	2.5	0.9	2.4	1.1	0.3	0.4	0.2
Machinery and Electrical Equipment	1.52	1.53	1.45	1.45	1.50	1.53	1.52	1.50
% Ch	3.5	1.0	-5.6	0.1	3.5	2.2	-0.7	-1.2
Transportation Equipment	1.70	1.73	1.60	1.53	1.50	1.56	1.54	1.51
% Ch	3.6	1.9	-7.8	-4.2	-2.2	4.1	-1.1	-2.0
Other Durables	1.42	1.43	1.35	1.39	1.43	1.45	1.42	1.36
% Ch	1.3	0.7	-5.3	2.5	3.4	1.4	-2.3	-3.9
Nondurable Manufacturing	4.74	4.78	4.61	4.67	4.70	4.74	4.69	4.63
% Ch	0.9	0.8	-3.6	1.4	0.6	0.8	-0.9	-1.4
Food Manufacturing	1.62	1.64	1.62	1.66	1.66	1.73	1.75	1.77
% Ch	1.4	1.3	-1.6	2.7	0.0	4.0	1.5	0.9
Paper and Paper Products	0.37	0.37	0.36	0.36	0.36	0.37	0.36	0.36
% Ch	-0.1	0.0	-2.3	0.5	1.3	1.3	-1.3	-2.1
Other Nondurables	2.76	2.77	2.63	2.65	2.68	2.64	2.58	2.51
% Ch	0.8	0.6	-5.0	0.7	0.9	-1.2	-2.4	-2.8
Natural Resources and Mining	0.73	0.74	0.64	0.59	0.59	0.59	0.59	0.60
% Ch	7.6	1.2	-12.4	-7.7	-1.5	0.1	1.0	1.3
Construction	7.29	7.49	7.25	7.17	7.23	7.32	7.38	7.47
% Ch	4.6	2.9	-3.2	-1.2	0.9	1.2	0.8	1.3
Trade, Transportation, and Utilities	27.60	27.71	26.54	27.68	27.80	27.20	26.61	26.46
% Ch	0.8	0.4	-4.2	4.3	0.4	-2.2	-2.2	-0.6
Wholesale Trade	5.84	5.90	5.68	5.80	6.17	6.41	6.57	6.66
% Ch	0.5	1.1	-3.7	2.0	6.3	4.0	2.5	1.2
Retail Trade	15.78	15.64	14.96	15.88	15.31	14.31	13.48	13.19
% Ch	-0.4	-0.9	-4.4	6.2	-3.6	-6.5	-5.8	-2.2
Trans., Warehousing, and Utilities	5.98	6.17	5.90	6.00	6.33	6.47	6.55	6.61
% Ch	4.3	3.1	-4.3	1.7	5.5	2.3	1.2	0.9
Information	2.84	2.86	2.68	2.82	2.96	2.93	2.96	3.00
% Ch	0.9	0.8	-6.3	5.2	5.0	-0.9	0.8	1.5
Publishing Industries	0.74	0.76	0.74	0.70	0.73	0.73	0.72	0.71
% Ch	1.3	2.9	-2.3	-5.5	3.5	0.7	-0.9	-2.6
Other Information	2.10	2.10	1.94	2.12	2.23	2.20	2.23	2.30
% Ch	0.7	0.0	-7.7	9.3	5.5	-1.4	1.4	2.9
Financial Activities	8.59	8.75	8.71	8.84	9.27	9.49	9.60	9.56
% Ch	1.7	1.8	-0.4	1.4	4.9	2.3	1.1	-0.4
Professional and Business Services	20.95	21.32	20.35	21.59	23.25	23.64	24.53	25.22
% Ch	2.2	1.7	-4.5	6.1	7.7	1.7	3.8	2.8
Education and Health Services	23.64	24.18	23.30	24.10	24.62	25.10	25.43	25.46
% Ch	1.9	2.3	-3.6	3.4	2.2	1.9	1.3	0.1
Leisure and Hospitality	16.30	16.58	13.30	14.92	15.07	16.06	15.95	15.66
% Ch	1.5	1.7	-19.8	12.2	1.0	6.6	-0.7	-1.8
Other Services	5.83	5.89	5.43	5.66	6.12	6.28	6.36	6.41
% Ch	1.1	1.1	-7.9	4.4	8.1	2.6	1.3	0.8
Federal Government	2.80	2.83	2.94	2.89	2.89	2.89	2.89	2.89
% Ch	-0.2	1.2	3.9	-2.0	0.0	0.0	0.0	0.0
State and Local Government	19.65	19.75	18.95	19.00	19.46	19.94	20.42	20.81
% Ch	0.5	0.5	-4.1	0.3	2.4	2.4	2.4	1.9

Table A2.2
U.S. Nonagricultural Employment by Industry (Millions)
 Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	151.92	133.71	140.79	142.96	145.57	147.07	148.21	149.42
% Ch, Annual Rate	0.4	-40.0	22.9	6.3	7.5	4.2	3.1	3.3
Manufacturing	12.83	11.76	12.14	12.27	12.25	12.29	12.29	12.38
% Ch, Annual Rate	-0.4	-29.5	13.7	4.2	-0.4	1.1	0.2	2.9
Durable Manufacturing	8.05	7.31	7.57	7.64	7.62	7.62	7.58	7.71
% Ch, Annual Rate	-0.1	-31.9	15.3	3.6	-1.2	0.2	-1.9	7.0
Wood Products	0.41	0.38	0.39	0.40	0.40	0.40	0.39	0.40
% Ch, Annual Rate	-0.3	-24.3	7.7	13.7	0.9	-5.3	-5.2	7.6
Primary and Fabricated Metals	1.85	1.72	1.72	1.74	1.73	1.74	1.75	1.80
% Ch, Annual Rate	-2.8	-25.6	0.7	4.9	-2.4	1.5	2.5	10.7
Computer and Electronic Products	1.10	1.09	1.09	1.09	1.10	1.11	1.12	1.13
% Ch, Annual Rate	2.0	-3.9	-0.2	1.5	3.6	4.6	4.2	1.7
Machinery and Electrical Equipment	1.51	1.42	1.42	1.43	1.44	1.44	1.43	1.48
% Ch, Annual Rate	-2.6	-23.8	1.8	2.3	2.6	0.8	-3.3	13.4
Transportation Equipment	1.74	1.43	1.61	1.62	1.58	1.55	1.50	1.49
% Ch, Annual Rate	2.9	-54.0	58.0	3.2	-8.0	-8.8	-13.0	-0.3
Other Durables	1.43	1.27	1.35	1.36	1.36	1.38	1.39	1.42
% Ch, Annual Rate	0.9	-37.8	25.9	2.7	0.1	7.0	3.2	8.1
Nondurable Manufacturing	4.79	4.45	4.57	4.63	4.64	4.67	4.71	4.67
% Ch, Annual Rate	-1.0	-25.3	11.1	5.2	0.8	2.7	3.6	-3.5
Food Manufacturing	1.65	1.57	1.61	1.63	1.65	1.66	1.68	1.64
% Ch, Annual Rate	-1.3	-17.7	8.4	6.1	4.6	3.8	4.0	-8.4
Paper and Paper Products	0.36	0.35	0.36	0.36	0.35	0.36	0.36	0.36
% Ch, Annual Rate	-1.4	-10.8	1.6	0.9	-1.9	4.7	6.0	-4.5
Other Nondurables	2.77	2.52	2.61	2.64	2.63	2.65	2.67	2.66
% Ch, Annual Rate	-0.7	-31.3	14.2	5.3	-1.0	1.8	3.1	-0.2
Natural Resources and Mining	0.71	0.64	0.62	0.61	0.60	0.60	0.59	0.59
% Ch, Annual Rate	-7.5	-35.3	-10.4	-6.2	-9.5	0.7	-1.0	-1.5
Construction	7.60	6.91	7.23	7.27	7.15	7.18	7.17	7.18
% Ch, Annual Rate	3.1	-31.6	19.6	2.5	-6.6	1.6	-0.5	0.7
Trade, Transportation, and Utilities	27.80	25.06	26.40	26.92	27.41	27.65	27.58	28.08
% Ch, Annual Rate	0.3	-33.9	23.2	8.0	7.6	3.6	-1.1	7.4
Wholesale Trade	5.93	5.57	5.61	5.63	5.73	5.72	5.81	5.95
% Ch, Annual Rate	0.2	-22.2	2.7	1.4	7.3	-0.5	6.2	9.9
Retail Trade	15.64	13.83	14.97	15.39	15.79	15.94	15.78	16.01
% Ch, Annual Rate	-0.2	-38.9	37.1	11.8	10.8	3.9	-3.8	5.7
Trans., Warehousing, and Utilities	6.22	5.66	5.83	5.90	5.90	5.99	5.99	6.12
% Ch, Annual Rate	1.6	-31.4	12.4	5.0	-0.2	6.8	-0.3	9.4
Information	2.89	2.58	2.60	2.64	2.74	2.87	2.82	2.84
% Ch, Annual Rate	2.5	-36.2	1.8	7.6	15.3	21.2	-7.0	1.7
Publishing Industries	0.77	0.74	0.73	0.72	0.71	0.71	0.69	0.70
% Ch, Annual Rate	2.6	-13.6	-4.6	-5.3	-8.2	1.2	-12.8	9.5
Other Information	2.12	1.84	1.86	1.92	2.03	2.16	2.14	2.13
% Ch, Annual Rate	2.5	-43.2	4.4	13.0	25.3	28.8	-5.0	-0.7
Financial Activities	8.83	8.59	8.65	8.78	8.94	8.82	8.75	8.85
% Ch, Annual Rate	1.3	-10.7	3.1	6.2	7.3	-5.2	-3.3	4.9
Professional and Business Services	21.51	19.46	20.05	20.37	20.91	21.40	21.70	22.35
% Ch, Annual Rate	0.6	-32.9	12.6	6.5	11.1	9.8	5.5	12.5
Education and Health Services	24.51	22.25	23.11	23.31	23.74	23.81	24.72	24.11
% Ch, Annual Rate	1.4	-32.0	16.4	3.4	7.7	1.2	16.2	-9.5
Leisure and Hospitality	16.60	10.15	12.79	13.68	14.50	14.98	15.04	15.17
% Ch, Annual Rate	-3.4	-86.0	152.9	30.8	26.2	13.9	1.5	3.6
Other Services	5.91	4.86	5.40	5.53	5.60	5.63	5.61	5.81
% Ch, Annual Rate	-0.7	-54.4	53.1	10.1	5.1	2.0	-1.8	15.7
Federal Government	2.87	2.89	3.07	2.95	2.89	2.89	2.89	2.89
% Ch, Annual Rate	3.2	2.5	27.7	-15.1	-8.0	0.0	0.0	0.0
State and Local Government	19.86	18.57	18.72	18.64	18.83	18.95	19.06	19.18
% Ch, Annual Rate	0.9	-23.6	3.4	-1.8	4.3	2.4	2.4	2.4

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2020 to 2025

	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4
Nonfarm Payroll Employment	150.55	151.48	152.14	152.88	153.47	153.98	154.41	154.68
% Ch, Annual Rate	3.1	2.5	1.8	2.0	1.5	1.3	1.1	0.7
Manufacturing	12.47	12.46	12.50	12.59	12.68	12.73	12.74	12.70
% Ch, Annual Rate	2.8	-0.2	1.4	2.7	2.9	1.5	0.4	-1.2
Durable Manufacturing	7.77	7.77	7.81	7.88	7.95	7.98	7.99	7.97
% Ch, Annual Rate	3.2	-0.3	1.9	3.6	3.7	1.8	0.5	-1.2
Wood Products	0.40	0.40	0.39	0.39	0.39	0.39	0.39	0.39
% Ch, Annual Rate	2.3	-6.5	-4.7	1.4	1.5	-0.4	-1.1	-3.4
Primary and Fabricated Metals	1.83	1.85	1.86	1.88	1.90	1.91	1.92	1.92
% Ch, Annual Rate	7.7	4.2	2.7	3.3	4.0	2.5	1.8	-0.2
Computer and Electronic Products	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
% Ch, Annual Rate	1.8	-1.5	-1.1	-0.1	0.8	1.0	0.8	0.3
Machinery and Electrical Equipment	1.48	1.49	1.50	1.51	1.53	1.53	1.53	1.53
% Ch, Annual Rate	2.3	1.7	2.4	4.2	4.0	0.8	-0.3	-1.1
Transportation Equipment	1.49	1.48	1.50	1.52	1.55	1.56	1.56	1.56
% Ch, Annual Rate	-0.6	-4.3	5.5	7.4	6.7	3.6	1.0	-2.5
Other Durables	1.43	1.43	1.43	1.44	1.45	1.46	1.46	1.45
% Ch, Annual Rate	3.9	-1.0	1.0	3.3	2.9	1.1	-0.4	-1.9
Nondurable Manufacturing	4.69	4.69	4.70	4.71	4.73	4.74	4.74	4.73
% Ch, Annual Rate	2.2	-0.2	0.6	1.2	1.6	1.0	0.0	-1.1
Food Manufacturing	1.65	1.64	1.66	1.68	1.70	1.72	1.74	1.74
% Ch, Annual Rate	1.1	-1.2	4.8	4.6	5.5	4.3	3.0	1.3
Paper and Paper Products	0.36	0.36	0.36	0.37	0.37	0.37	0.37	0.37
% Ch, Annual Rate	2.3	2.7	-0.3	2.4	2.5	1.1	-0.2	-1.8
Other Nondurables	2.68	2.68	2.67	2.66	2.66	2.65	2.64	2.62
% Ch, Annual Rate	2.8	0.1	-1.7	-1.0	-1.0	-1.1	-1.8	-2.5
Natural Resources and Mining	0.59	0.58	0.59	0.58	0.58	0.58	0.59	0.59
% Ch, Annual Rate	-1.9	-3.3	0.5	-2.1	1.5	0.1	0.9	1.3
Construction	7.18	7.22	7.25	7.27	7.30	7.32	7.33	7.34
% Ch, Annual Rate	0.2	2.0	1.7	1.4	1.2	1.1	0.8	0.7
Trade, Transportation, and Utilities	28.13	27.91	27.81	27.36	27.13	27.39	27.24	27.02
% Ch, Annual Rate	0.8	-3.1	-1.5	-6.3	-3.3	3.9	-2.1	-3.2
Wholesale Trade	6.03	6.08	6.26	6.30	6.36	6.38	6.43	6.48
% Ch, Annual Rate	5.7	3.3	12.8	2.2	4.0	1.4	3.1	3.0
Retail Trade	15.89	15.56	15.14	14.65	14.31	14.56	14.34	14.04
% Ch, Annual Rate	-3.0	-7.8	-10.6	-12.3	-8.8	7.0	-5.9	-7.9
Trans., Warehousing, and Utilities	6.22	6.27	6.41	6.42	6.46	6.45	6.48	6.50
% Ch, Annual Rate	6.3	3.1	9.4	0.5	2.6	-0.4	1.5	1.6
Information	2.88	2.95	3.01	3.00	2.97	2.92	2.91	2.93
% Ch, Annual Rate	6.4	10.3	7.7	-1.0	-3.9	-6.3	-1.3	2.7
Publishing Industries	0.71	0.72	0.73	0.73	0.73	0.73	0.73	0.73
% Ch, Annual Rate	7.5	5.2	5.4	-0.7	1.2	-2.2	-0.2	-0.3
Other Information	2.16	2.23	2.27	2.27	2.23	2.19	2.18	2.20
% Ch, Annual Rate	6.0	12.1	8.4	-1.1	-5.5	-7.6	-1.6	3.7
Financial Activities	9.06	9.23	9.39	9.42	9.47	9.45	9.49	9.54
% Ch, Annual Rate	9.5	8.1	7.1	1.1	2.2	-0.8	1.8	2.0
Professional and Business Services	23.09	23.30	23.28	23.31	23.51	23.54	23.68	23.84
% Ch, Annual Rate	13.9	3.8	-0.3	0.5	3.4	0.5	2.3	2.7
Education and Health Services	24.08	24.76	24.87	24.77	24.98	25.01	25.12	25.26
% Ch, Annual Rate	-0.5	11.8	1.8	-1.5	3.5	0.5	1.8	2.2
Leisure and Hospitality	14.94	14.68	14.83	15.82	15.93	16.01	16.15	16.15
% Ch, Annual Rate	-5.9	-6.7	4.0	29.6	2.8	2.1	3.5	-0.1
Other Services	5.96	6.09	6.21	6.23	6.27	6.26	6.28	6.30
% Ch, Annual Rate	10.6	8.7	8.0	1.4	2.8	-0.8	1.2	1.7
Federal Government	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.29	19.41	19.52	19.64	19.76	19.88	20.00	20.12
% Ch, Annual Rate	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

Table A2.2 (continued)
U.S. Nonagricultural Employment by Industry (Millions)
Forecast 2020 to 2025

	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Nonfarm Payroll Employment	154.93	155.20	155.40	155.59	155.73	155.86	155.95	156.01
% Ch, Annual Rate	0.6	0.7	0.5	0.5	0.4	0.3	0.2	0.1
Manufacturing	12.65	12.61	12.56	12.50	12.43	12.37	12.32	12.27
% Ch, Annual Rate	-1.5	-1.4	-1.5	-1.9	-2.1	-1.9	-1.8	-1.6
Durable Manufacturing	7.94	7.91	7.87	7.83	7.78	7.74	7.70	7.66
% Ch, Annual Rate	-1.6	-1.6	-1.7	-2.1	-2.4	-2.2	-2.1	-1.8
Wood Products	0.38	0.38	0.38	0.37	0.37	0.37	0.37	0.36
% Ch, Annual Rate	-4.5	-4.5	-4.9	-3.5	-2.4	-1.7	-2.6	-5.3
Primary and Fabricated Metals	1.91	1.90	1.89	1.88	1.86	1.84	1.83	1.82
% Ch, Annual Rate	-1.6	-1.8	-2.2	-2.8	-3.4	-3.1	-2.8	-2.2
Computer and Electronic Products	1.13	1.14	1.14	1.14	1.14	1.14	1.14	1.14
% Ch, Annual Rate	0.1	0.4	0.6	0.6	0.3	0.1	-0.2	-0.4
Machinery and Electrical Equipment	1.52	1.52	1.52	1.51	1.51	1.50	1.50	1.50
% Ch, Annual Rate	-0.9	-0.8	-0.8	-1.3	-1.7	-1.2	-1.0	-0.4
Transportation Equipment	1.55	1.54	1.54	1.53	1.52	1.51	1.51	1.50
% Ch, Annual Rate	-1.5	-1.4	-1.6	-2.2	-2.4	-2.0	-1.8	-1.9
Other Durables	1.44	1.43	1.41	1.40	1.39	1.37	1.36	1.35
% Ch, Annual Rate	-3.0	-3.1	-3.3	-3.9	-4.2	-4.2	-4.2	-2.7
Nondurable Manufacturing	4.71	4.70	4.69	4.67	4.65	4.64	4.62	4.60
% Ch, Annual Rate	-1.3	-1.1	-1.2	-1.4	-1.5	-1.4	-1.4	-1.4
Food Manufacturing	1.74	1.75	1.75	1.76	1.76	1.77	1.77	1.77
% Ch, Annual Rate	0.7	1.1	1.2	1.0	0.7	0.8	0.7	0.6
Paper and Paper Products	0.37	0.36	0.36	0.36	0.36	0.36	0.35	0.35
% Ch, Annual Rate	-1.7	-1.5	-1.5	-1.8	-2.4	-2.3	-2.3	-2.1
Other Nondurables	2.60	2.59	2.57	2.55	2.53	2.51	2.50	2.48
% Ch, Annual Rate	-2.6	-2.6	-2.7	-3.0	-2.8	-2.8	-2.7	-2.6
Natural Resources and Mining	0.59	0.59	0.59	0.60	0.60	0.60	0.60	0.60
% Ch, Annual Rate	0.8	0.8	1.4	1.7	1.2	0.7	1.7	1.6
Construction	7.36	7.37	7.38	7.41	7.43	7.46	7.49	7.51
% Ch, Annual Rate	0.6	0.6	0.9	1.3	1.3	1.5	1.5	1.4
Trade, Transportation, and Utilities	26.82	26.58	26.53	26.50	26.47	26.46	26.47	26.43
% Ch, Annual Rate	-3.0	-3.5	-0.8	-0.5	-0.4	-0.3	0.2	-0.5
Wholesale Trade	6.52	6.57	6.59	6.62	6.64	6.65	6.66	6.67
% Ch, Annual Rate	2.8	2.6	1.6	1.4	1.3	1.0	0.6	0.1
Retail Trade	13.77	13.46	13.38	13.32	13.25	13.20	13.18	13.14
% Ch, Annual Rate	-7.6	-8.6	-2.5	-1.7	-2.2	-1.6	-0.4	-1.2
Trans., Warehousing, and Utilities	6.53	6.55	6.56	6.56	6.59	6.61	6.62	6.63
% Ch, Annual Rate	1.6	1.4	0.4	0.2	1.6	1.2	0.9	0.3
Information	2.93	2.94	2.97	2.98	3.00	3.01	3.00	3.00
% Ch, Annual Rate	0.1	1.7	3.4	1.5	2.1	1.3	-0.2	-0.4
Publishing Industries	0.73	0.73	0.72	0.72	0.71	0.71	0.70	0.69
% Ch, Annual Rate	-0.6	-0.9	-1.8	-2.4	-2.4	-2.7	-4.3	-4.3
Other Information	2.20	2.22	2.25	2.26	2.28	2.30	2.30	2.31
% Ch, Annual Rate	0.4	2.6	5.1	2.8	3.6	2.6	1.1	0.8
Financial Activities	9.58	9.61	9.61	9.60	9.58	9.57	9.56	9.53
% Ch, Annual Rate	1.6	1.5	-0.2	-0.5	-0.6	-0.3	-0.8	-1.2
Professional and Business Services	24.16	24.47	24.66	24.84	25.02	25.17	25.31	25.40
% Ch, Annual Rate	5.6	5.1	3.2	3.0	2.9	2.4	2.2	1.6
Education and Health Services	25.35	25.44	25.46	25.46	25.48	25.47	25.47	25.44
% Ch, Annual Rate	1.5	1.3	0.4	0.1	0.2	0.0	-0.1	-0.4
Leisure and Hospitality	16.03	16.00	15.91	15.85	15.75	15.67	15.59	15.61
% Ch, Annual Rate	-2.8	-0.8	-2.1	-1.5	-2.6	-1.9	-2.0	0.5
Other Services	6.33	6.36	6.37	6.38	6.39	6.40	6.42	6.43
% Ch, Annual Rate	1.7	1.7	0.9	0.4	0.7	0.9	1.0	0.7
Federal Government	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.24	20.36	20.48	20.60	20.71	20.79	20.85	20.89
% Ch, Annual Rate	2.4	2.4	2.4	2.4	2.0	1.6	1.2	0.7

Table A2.3
Washington Nonagricultural Employment by Industry (Thousands)
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	3,401.1	3,468.3	3,303.4	3,419.1	3,519.2	3,584.7	3,623.9	3,659.6
% Ch	2.4	2.0	-4.8	3.5	2.9	1.9	1.1	1.0
Manufacturing	287.7	293.6	275.1	264.1	264.2	268.2	267.8	266.2
% Ch	1.2	2.0	-6.3	-4.0	0.0	1.5	-0.1	-0.6
Durable Manufacturing	202.2	206.8	192.5	179.5	178.6	181.2	181.3	180.6
% Ch	0.9	2.3	-6.9	-6.8	-0.5	1.4	0.1	-0.4
Wood Products	13.0	12.9	12.5	12.5	12.1	11.8	11.1	10.5
% Ch	0.9	-0.4	-3.3	0.0	-3.0	-3.1	-5.4	-5.1
Primary and Fabricated Metals	26.1	26.9	24.9	24.5	25.9	26.6	26.4	25.7
% Ch	4.3	2.7	-7.1	-1.8	5.6	2.9	-0.8	-2.8
Computer and Electronic Products	19.8	19.8	19.2	20.2	20.8	21.2	21.6	21.9
% Ch	0.9	-0.3	-2.8	5.3	3.0	1.6	1.9	1.6
Machinery and Electrical Equipment	21.3	21.3	19.6	20.7	22.2	23.5	23.9	24.2
% Ch	3.0	-0.3	-7.6	5.3	7.3	5.9	1.7	1.2
Aerospace	83.9	88.6	81.6	67.0	62.5	62.9	63.3	63.8
% Ch	-0.3	5.5	-7.9	-17.9	-6.7	0.6	0.8	0.7
Other Transportation Equip.	9.9	9.7	8.8	8.1	8.1	8.0	7.7	7.5
% Ch	-3.0	-1.8	-8.8	-7.8	-0.1	-1.8	-3.5	-3.4
Other Durables	28.1	27.7	25.7	26.4	26.9	27.3	27.2	27.1
% Ch	1.5	-1.2	-7.2	2.6	1.9	1.2	-0.1	-0.6
Nondurable Manufacturing	85.6	86.8	82.6	84.7	85.6	87.0	86.5	85.6
% Ch	2.0	1.4	-4.8	2.5	1.1	1.7	-0.5	-1.1
Food Manufacturing	39.1	39.4	37.6	37.8	37.5	38.6	38.8	38.8
% Ch	2.8	0.9	-4.5	0.6	-1.0	3.1	0.6	-0.1
Paper and Paper Products	7.7	7.8	7.7	7.8	7.9	7.9	7.7	7.4
% Ch	-1.2	1.5	-0.4	1.1	0.5	0.4	-2.4	-3.3
Other Nondurables	38.9	39.6	37.2	39.0	40.2	40.5	40.0	39.4
% Ch	1.9	1.9	-5.9	4.7	3.2	0.6	-1.2	-1.6
Natural Resources and Mining	6.3	5.9	5.6	5.7	5.9	5.8	5.8	5.8
% Ch	1.1	-5.9	-5.4	2.6	2.6	-1.7	1.0	-0.7
Construction	213.1	219.3	213.1	209.2	203.7	201.2	200.8	203.3
% Ch	6.7	2.9	-2.8	-1.8	-2.6	-1.2	-0.2	1.2
Trade, Transportation, and Utilities	636.0	643.8	631.5	662.4	668.5	659.9	651.0	651.6
% Ch	1.8	1.2	-1.9	4.9	0.9	-1.3	-1.4	0.1
Wholesale Trade	135.6	136.9	131.4	133.9	141.4	147.1	151.5	154.1
% Ch	1.8	0.9	-4.0	1.9	5.6	4.0	3.0	1.7
Retail Trade	385.8	390.6	386.2	410.2	401.7	383.8	369.1	365.7
% Ch	1.9	1.2	-1.1	6.2	-2.1	-4.4	-3.8	-0.9
Electronic Shopping and Mail-Order	54.8	63.5	74.6	79.3	81.6	83.7	85.6	87.5
% Ch	10.1	15.9	17.5	6.3	3.0	2.5	2.3	2.2
Other Retail Trade	331.1	327.2	311.7	331.0	320.1	300.1	283.5	278.3
% Ch	0.6	-1.2	-4.7	6.2	-3.3	-6.2	-5.6	-1.8
Trans., Warehousing, and Utilities	114.5	116.3	113.9	118.3	125.4	128.9	130.4	131.8
% Ch	1.8	1.5	-2.0	3.8	6.0	2.8	1.1	1.1
Information	134.2	144.3	149.3	162.2	172.0	174.2	178.8	185.0
% Ch	6.3	7.5	3.5	8.6	6.0	1.3	2.6	3.5
Software Publishers	65.3	70.0	75.1	77.5	79.5	81.1	82.4	83.4
% Ch	6.4	7.1	7.3	3.2	2.7	2.0	1.6	1.2
Other Publishing Industries	5.1	4.8	4.2	3.7	3.7	3.6	3.3	2.8
% Ch	-6.8	-6.5	-12.7	-12.8	2.2	-4.5	-8.8	-14.5
Other Information	63.7	69.5	70.1	81.0	88.7	89.5	93.1	98.9
% Ch	7.4	9.1	0.8	15.7	9.4	0.9	4.0	6.2
Financial Activities	157.7	160.4	155.7	156.7	164.1	167.3	168.8	167.6
% Ch	2.4	1.7	-3.0	0.6	4.7	1.9	0.9	-0.7
Professional and Business Services	424.3	435.1	429.0	462.6	500.5	514.7	533.0	548.3
% Ch	2.6	2.5	-1.4	7.8	8.2	2.9	3.6	2.9
Education and Health Services	490.3	502.7	488.5	516.0	536.1	552.5	561.6	565.9
% Ch	3.1	2.5	-2.8	5.6	3.9	3.1	1.7	0.8
Leisure and Hospitality	341.9	347.7	275.4	299.5	307.1	326.8	326.1	322.5
% Ch	3.1	1.7	-20.8	8.7	2.5	6.4	-0.2	-1.1
Other Services	122.4	128.1	116.7	120.6	126.3	129.7	131.6	133.3
% Ch	2.2	4.7	-8.9	3.4	4.7	2.7	1.5	1.3
Federal Government	74.8	75.7	78.4	75.6	75.9	76.2	76.4	76.7
% Ch	0.0	1.2	3.6	-3.6	0.4	0.4	0.4	0.4
State and Local Government	512.5	511.8	485.1	484.5	495.0	508.2	522.3	533.3
% Ch	0.3	-0.1	-5.2	-0.1	2.2	2.7	2.8	2.1

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	3,503.2	3,136.0	3,261.6	3,313.0	3,371.6	3,411.3	3,434.7	3,458.7
% Ch, Annual Rate	1.1	-35.8	17.0	6.5	7.3	4.8	2.8	2.8
Manufacturing	292.0	269.7	270.2	268.5	266.7	265.0	263.2	261.6
% Ch, Annual Rate	-1.1	-27.2	0.8	-2.5	-2.7	-2.5	-2.7	-2.4
Durable Manufacturing	204.9	190.7	189.1	185.2	183.0	180.4	177.6	176.8
% Ch, Annual Rate	-2.0	-24.9	-3.4	-7.8	-4.7	-5.6	-6.1	-1.7
Wood Products	12.8	12.0	12.4	12.8	12.8	12.5	12.3	12.4
% Ch, Annual Rate	-3.3	-23.4	14.2	13.2	-1.5	-6.8	-6.7	4.0
Primary and Fabricated Metals	26.6	24.4	24.3	24.4	24.2	24.3	24.4	25.1
% Ch, Annual Rate	-4.4	-28.9	-1.7	0.6	-2.8	1.3	2.4	10.8
Computer and Electronic Products	19.5	19.1	18.9	19.3	19.6	20.1	20.5	20.7
% Ch, Annual Rate	5.2	-8.9	-3.4	8.5	7.3	9.0	8.5	4.0
Machinery and Electrical Equipment	20.1	19.2	19.3	20.0	20.4	20.5	20.4	21.4
% Ch, Annual Rate	-12.0	-17.3	2.0	16.7	6.7	3.5	-2.6	22.0
Aerospace	88.8	83.1	80.1	74.2	71.5	68.5	65.5	62.5
% Ch, Annual Rate	-0.4	-23.3	-13.8	-26.3	-13.9	-15.8	-16.4	-17.1
Other Transportation Equip.	9.7	8.7	8.5	8.4	8.3	8.1	8.1	8.1
% Ch, Annual Rate	7.1	-34.5	-8.6	-3.7	-8.4	-5.8	-3.1	3.3
Other Durables	27.3	24.1	25.5	26.1	26.3	26.4	26.4	26.6
% Ch, Annual Rate	-3.9	-38.5	24.7	9.1	3.6	1.0	0.8	2.6
Nondurable Manufacturing	87.1	79.0	81.1	83.2	83.7	84.6	85.6	84.8
% Ch, Annual Rate	1.0	-32.4	11.3	10.9	2.1	4.5	4.6	-3.7
Food Manufacturing	39.6	36.8	36.7	37.4	37.7	38.0	38.3	37.3
% Ch, Annual Rate	1.6	-25.1	-1.3	7.9	3.6	2.8	3.1	-9.4
Paper and Paper Products	8.0	7.6	7.6	7.8	7.7	7.8	7.9	7.8
% Ch, Annual Rate	11.4	-15.1	-3.3	12.7	-3.1	4.1	5.5	-5.8
Other Nondurables	39.6	34.5	36.8	38.0	38.2	38.8	39.4	39.6
% Ch, Annual Rate	-1.6	-42.1	29.8	13.7	1.7	6.4	6.0	2.6
Natural Resources and Mining	5.7	5.4	5.5	5.7	5.8	5.7	5.6	5.9
% Ch, Annual Rate	-4.8	-15.8	6.5	12.2	5.1	-7.3	-4.6	25.9
Construction	223.5	199.9	211.7	217.4	211.8	210.2	208.3	206.4
% Ch, Annual Rate	4.1	-36.0	25.8	11.3	-10.0	-2.8	-3.7	-3.5
Trade, Transportation, and Utilities	652.8	600.9	629.2	643.2	655.1	661.5	661.2	671.8
% Ch, Annual Rate	2.2	-28.2	20.3	9.2	7.6	4.0	-0.2	6.5
Wholesale Trade	137.4	128.9	128.4	130.7	132.5	132.3	134.1	136.6
% Ch, Annual Rate	-3.3	-22.3	-1.5	7.3	5.6	-0.7	5.6	7.8
Retail Trade	397.2	362.3	387.9	397.5	406.9	411.0	408.7	414.2
% Ch, Annual Rate	4.1	-30.8	31.4	10.3	9.8	4.2	-2.2	5.5
Electronic Shopping and Mail-Order	71.2	73.6	75.9	77.6	78.3	79.0	79.6	80.2
% Ch	22.4	14.3	12.8	9.4	3.7	3.5	3.3	3.1
Other Retail Trade	326.0	288.7	312.1	319.9	328.6	332.1	329.1	334.0
% Ch	0.5	-38.5	36.5	10.5	11.3	4.3	-3.5	6.1
Trans., Warehousing, and Utilities	118.2	109.6	112.9	114.9	115.7	118.2	118.4	120.9
% Ch, Annual Rate	2.4	-26.0	12.4	7.5	2.5	9.1	0.6	8.7
Information	149.4	147.3	148.1	152.5	157.5	164.2	162.9	164.2
% Ch, Annual Rate	6.7	-5.4	2.0	12.6	13.6	18.1	-3.0	3.3
Software Publishers	73.5	74.8	74.9	77.1	77.1	77.5	77.3	78.0
% Ch, Annual Rate	9.4	7.1	1.0	12.1	-0.1	2.2	-1.2	4.0
Other Publishing Industries	4.6	4.1	4.0	4.1	3.8	3.8	3.4	3.6
% Ch, Annual Rate	6.1	-37.7	-6.0	5.8	-22.5	-3.2	-33.0	17.6
Other Information	71.3	68.5	69.1	71.3	76.5	82.8	82.2	82.6
% Ch, Annual Rate	4.1	-14.9	3.6	13.5	32.7	37.3	-3.1	2.0
Financial Activities	159.3	152.7	154.4	156.4	159.2	156.4	154.7	156.4
% Ch, Annual Rate	-5.4	-15.7	4.6	5.2	7.5	-6.8	-4.4	4.6
Professional and Business Services	444.3	414.1	424.6	433.0	446.4	458.8	466.0	479.2
% Ch, Annual Rate	2.4	-24.5	10.5	8.2	12.9	11.6	6.5	11.8
Education and Health Services	507.4	467.1	486.8	492.6	504.6	510.4	528.3	520.7
% Ch, Annual Rate	0.3	-28.2	18.0	4.8	10.1	4.7	14.7	-5.6
Leisure and Hospitality	347.0	222.7	257.8	274.0	290.0	300.1	302.2	305.5
% Ch, Annual Rate	-2.4	-83.0	79.6	27.6	25.4	14.8	2.8	4.4
Other Services	129.1	107.0	113.6	117.0	118.7	120.1	120.8	122.7
% Ch, Annual Rate	0.1	-52.8	27.0	12.5	5.9	5.0	2.4	6.3
Federal Government	77.2	77.6	82.0	76.9	75.5	75.6	75.7	75.7
% Ch, Annual Rate	6.4	1.8	25.1	-22.7	-7.1	0.4	0.4	0.3
State and Local Government	515.4	471.5	477.6	475.9	480.6	483.2	485.9	488.5
% Ch, Annual Rate	2.2	-30.0	5.2	-1.4	4.0	2.2	2.2	2.2

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Nonfarm Payroll Employment	3,485.8	3,511.3	3,530.5	3,549.3	3,567.5	3,580.2	3,590.0	3,601.0
% Ch, Annual Rate	3.2	3.0	2.2	2.1	2.1	1.4	1.1	1.2
Manufacturing	263.5	263.7	264.2	265.3	267.1	268.2	268.7	268.7
% Ch, Annual Rate	2.9	0.4	0.7	1.7	2.7	1.7	0.8	-0.1
Durable Manufacturing	178.2	178.4	178.6	179.2	180.4	181.1	181.5	181.6
% Ch, Annual Rate	3.1	0.5	0.3	1.4	2.8	1.6	0.9	0.2
Wood Products	12.4	12.2	12.0	11.9	11.9	11.8	11.7	11.6
% Ch, Annual Rate	-0.4	-7.8	-6.3	-1.2	-1.1	-2.7	-3.3	-5.3
Primary and Fabricated Metals	25.5	25.8	26.0	26.2	26.4	26.6	26.7	26.7
% Ch, Annual Rate	7.8	4.3	2.7	3.3	4.1	2.6	1.7	0.0
Computer and Electronic Products	20.9	20.8	20.8	20.8	21.0	21.1	21.3	21.3
% Ch, Annual Rate	4.2	-1.4	-0.8	1.0	2.6	2.9	2.5	1.8
Machinery and Electrical Equipment	21.7	22.0	22.3	22.8	23.3	23.5	23.6	23.7
% Ch, Annual Rate	5.3	4.9	6.1	8.8	8.5	3.8	2.3	1.3
Aerospace	62.7	62.6	62.4	62.2	62.5	62.8	63.0	63.1
% Ch, Annual Rate	1.2	-0.5	-1.1	-1.1	2.0	1.6	1.2	0.9
Other Transportation Equip.	8.2	8.2	8.1	8.1	8.1	8.0	8.0	7.9
% Ch, Annual Rate	2.4	-0.9	-1.9	-0.9	-0.8	-2.5	-4.0	-3.1
Other Durables	26.8	26.9	27.0	27.1	27.2	27.3	27.3	27.3
% Ch, Annual Rate	2.9	1.5	1.5	1.8	1.4	0.9	0.4	0.1
Nondurable Manufacturing	85.3	85.3	85.6	86.1	86.7	87.1	87.2	87.0
% Ch, Annual Rate	2.3	0.2	1.4	2.3	2.7	1.9	0.7	-0.7
Food Manufacturing	37.4	37.2	37.5	37.8	38.3	38.6	38.8	38.8
% Ch, Annual Rate	0.2	-2.2	3.9	3.7	4.6	3.4	2.1	0.3
Paper and Paper Products	7.8	7.9	7.8	7.9	7.9	7.9	7.9	7.8
% Ch, Annual Rate	1.4	2.0	-1.3	1.7	1.8	0.2	-1.2	-2.9
Other Nondurables	40.1	40.3	40.2	40.3	40.5	40.5	40.5	40.4
% Ch, Annual Rate	4.6	2.1	-0.4	1.1	1.1	0.8	-0.3	-1.3
Natural Resources and Mining	5.9	5.9	5.9	5.8	5.8	5.8	5.8	5.8
% Ch, Annual Rate	1.0	-2.2	-0.3	-7.1	-0.6	-1.2	0.7	1.6
Construction	204.4	204.1	203.4	202.9	202.3	201.5	200.0	201.0
% Ch, Annual Rate	-3.9	-0.5	-1.3	-1.0	-1.3	-1.6	-2.8	2.0
Trade, Transportation, and Utilities	673.7	670.4	668.9	661.1	657.5	663.6	661.0	657.5
% Ch, Annual Rate	1.2	-2.0	-0.9	-4.6	-2.1	3.7	-1.5	-2.1
Wholesale Trade	138.3	139.5	143.4	144.5	146.0	146.3	147.4	148.8
% Ch, Annual Rate	4.9	3.6	11.7	3.0	4.3	0.8	3.0	3.9
Retail Trade	412.6	406.7	398.5	389.0	382.7	388.6	384.7	379.3
% Ch, Annual Rate	-1.6	-5.6	-7.8	-9.2	-6.3	6.4	-4.0	-5.6
Electronic Shopping and Mail-Order	80.8	81.4	81.9	82.4	82.9	83.4	83.9	84.4
% Ch	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	331.8	325.4	316.6	306.6	299.8	305.2	300.8	294.8
% Ch	-2.6	-7.5	-10.3	-12.1	-8.6	7.5	-5.7	-7.7
Trans., Warehousing, and Utilities	122.8	124.1	127.0	127.6	128.8	128.6	128.9	129.4
% Ch, Annual Rate	6.7	4.3	9.6	1.8	3.9	-0.5	1.0	1.6
Information	167.0	171.1	174.6	175.3	174.6	173.3	173.6	175.3
% Ch, Annual Rate	6.9	10.2	8.3	1.6	-1.4	-3.2	0.8	4.0
Software Publishers	78.7	79.3	79.9	80.2	80.7	80.9	81.3	81.6
% Ch, Annual Rate	3.5	3.0	3.1	1.7	2.1	1.3	1.8	1.7
Other Publishing Industries	3.7	3.7	3.8	3.7	3.7	3.6	3.5	3.5
% Ch, Annual Rate	12.2	6.5	7.0	-7.7	-3.1	-11.4	-6.8	-7.1
Other Information	84.6	88.1	90.8	91.3	90.3	88.7	88.8	90.2
% Ch, Annual Rate	10.0	17.4	13.2	2.0	-4.3	-6.7	0.3	6.6
Financial Activities	160.1	163.4	166.3	166.6	167.3	166.7	167.2	168.1
% Ch, Annual Rate	9.9	8.5	7.3	0.7	1.9	-1.6	1.2	2.2
Professional and Business Services	494.0	500.1	502.4	505.4	511.3	512.7	515.7	519.3
% Ch, Annual Rate	12.9	5.0	1.9	2.5	4.7	1.1	2.4	2.8
Education and Health Services	522.9	537.0	541.7	542.9	549.3	550.7	553.4	556.6
% Ch, Annual Rate	1.7	11.3	3.5	0.9	4.8	1.0	2.0	2.3
Leisure and Hospitality	303.0	300.2	303.9	321.3	324.4	325.9	328.4	328.6
% Ch, Annual Rate	-3.2	-3.7	5.0	24.9	3.9	1.9	3.0	0.3
Other Services	124.3	125.7	127.1	128.1	129.1	129.4	129.9	130.4
% Ch, Annual Rate	5.2	4.8	4.5	3.0	3.3	1.0	1.4	1.6
Federal Government	75.8	75.9	75.9	76.0	76.1	76.1	76.2	76.3
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	491.2	493.8	496.3	498.7	502.7	506.5	510.0	513.6
% Ch, Annual Rate	2.2	2.1	2.0	2.0	3.2	3.0	2.8	2.8

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Nonfarm Payroll Employment	3,609.7	3,618.8	3,628.6	3,638.6	3,647.8	3,656.4	3,663.8	3,670.2
% Ch, Annual Rate	1.0	1.0	1.1	1.1	1.0	0.9	0.8	0.7
Manufacturing	268.3	268.0	267.7	267.3	266.8	266.4	266.1	265.8
% Ch, Annual Rate	-0.5	-0.4	-0.5	-0.7	-0.8	-0.5	-0.5	-0.4
Durable Manufacturing	181.5	181.4	181.2	181.0	180.8	180.7	180.6	180.5
% Ch, Annual Rate	-0.2	-0.2	-0.3	-0.4	-0.6	-0.3	-0.2	-0.1
Wood Products	11.4	11.2	11.0	10.9	10.7	10.6	10.5	10.3
% Ch, Annual Rate	-6.2	-6.2	-6.5	-5.4	-4.5	-3.9	-4.7	-7.0
Primary and Fabricated Metals	26.6	26.5	26.3	26.2	25.9	25.7	25.5	25.4
% Ch, Annual Rate	-1.7	-1.8	-2.2	-2.8	-3.5	-3.1	-2.8	-2.2
Computer and Electronic Products	21.4	21.5	21.6	21.7	21.8	21.9	22.0	22.0
% Ch, Annual Rate	1.3	1.9	2.1	2.2	1.8	1.4	0.8	0.4
Machinery and Electrical Equipment	23.8	23.9	24.0	24.0	24.1	24.1	24.2	24.4
% Ch, Annual Rate	1.5	1.7	1.7	1.0	0.5	1.3	1.6	2.3
Aerospace	63.2	63.3	63.4	63.5	63.5	63.7	63.9	64.1
% Ch, Annual Rate	0.7	0.6	0.5	0.5	0.5	0.8	1.2	1.4
Other Transportation Equip.	7.8	7.7	7.7	7.6	7.5	7.5	7.4	7.4
% Ch, Annual Rate	-3.6	-3.8	-3.7	-3.4	-3.2	-3.2	-3.3	-3.3
Other Durables	27.3	27.3	27.2	27.2	27.1	27.1	27.1	27.0
% Ch, Annual Rate	-0.2	-0.4	-0.5	-0.6	-0.6	-0.6	-0.7	-0.7
Nondurable Manufacturing	86.8	86.7	86.5	86.2	86.0	85.7	85.5	85.3
% Ch, Annual Rate	-1.0	-0.8	-0.9	-1.1	-1.2	-1.1	-1.1	-1.1
Food Manufacturing	38.8	38.8	38.9	38.9	38.8	38.8	38.8	38.8
% Ch, Annual Rate	-0.2	0.2	0.3	0.1	-0.3	-0.1	-0.2	-0.3
Paper and Paper Products	7.8	7.7	7.7	7.6	7.5	7.5	7.4	7.3
% Ch, Annual Rate	-2.8	-2.6	-2.7	-3.1	-3.7	-3.6	-3.7	-3.5
Other Nondurables	40.2	40.1	39.9	39.7	39.6	39.4	39.3	39.1
% Ch, Annual Rate	-1.4	-1.4	-1.6	-1.9	-1.6	-1.5	-1.5	-1.3
Natural Resources and Mining	5.8	5.8	5.8	5.9	5.9	5.8	5.8	5.7
% Ch, Annual Rate	1.3	1.4	0.6	1.0	-0.1	-1.4	-3.1	-4.9
Construction	200.7	200.4	200.6	201.3	202.1	202.9	203.7	204.4
% Ch, Annual Rate	-0.6	-0.7	0.4	1.4	1.6	1.6	1.5	1.4
Trade, Transportation, and Utilities	654.1	649.9	649.7	650.1	650.5	651.1	652.3	652.6
% Ch, Annual Rate	-2.1	-2.5	-0.1	0.2	0.3	0.4	0.7	0.2
Wholesale Trade	150.0	151.2	152.0	152.7	153.4	154.0	154.4	154.7
% Ch, Annual Rate	3.4	3.2	2.0	1.9	1.9	1.5	1.1	0.7
Retail Trade	374.1	368.3	367.2	366.7	365.9	365.4	365.8	365.7
% Ch, Annual Rate	-5.3	-6.1	-1.2	-0.6	-0.9	-0.4	0.4	-0.2
Electronic Shopping and Mail-Order	84.9	85.4	85.8	86.3	86.8	87.2	87.7	88.1
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	289.2	283.0	281.4	280.4	279.1	278.2	278.2	277.5
% Ch	-7.4	-8.4	-2.2	-1.4	-1.9	-1.2	-0.1	-0.9
Trans., Warehousing, and Utilities	129.9	130.3	130.5	130.7	131.3	131.7	132.0	132.2
% Ch, Annual Rate	1.4	1.3	0.7	0.5	1.7	1.4	1.0	0.6
Information	176.2	177.7	179.8	181.3	183.1	184.6	185.7	186.7
% Ch, Annual Rate	2.1	3.4	4.8	3.4	4.0	3.4	2.3	2.2
Software Publishers	82.0	82.3	82.6	82.8	83.1	83.3	83.5	83.7
% Ch, Annual Rate	1.7	1.6	1.4	1.2	1.2	1.2	0.8	0.8
Other Publishing Industries	3.4	3.3	3.2	3.1	3.0	2.9	2.7	2.6
% Ch, Annual Rate	-8.0	-8.9	-11.5	-13.3	-13.7	-15.0	-20.0	-20.9
Other Information	90.9	92.1	94.0	95.4	97.0	98.4	99.5	100.5
% Ch, Annual Rate	2.8	5.5	8.6	5.9	7.1	6.0	4.2	4.0
Financial Activities	168.6	169.1	168.9	168.5	168.2	167.9	167.4	166.8
% Ch, Annual Rate	1.3	1.2	-0.6	-0.8	-0.9	-0.5	-1.2	-1.6
Professional and Business Services	525.5	531.4	535.6	539.5	543.4	546.8	550.1	552.7
% Ch, Annual Rate	4.9	4.6	3.2	3.0	2.9	2.5	2.4	1.9
Education and Health Services	559.0	561.3	562.6	563.6	564.7	565.6	566.4	566.9
% Ch, Annual Rate	1.8	1.6	0.9	0.7	0.8	0.6	0.6	0.3
Leisure and Hospitality	327.0	326.7	325.6	324.9	323.5	322.6	321.6	322.2
% Ch, Annual Rate	-1.9	-0.4	-1.3	-0.9	-1.7	-1.1	-1.2	0.7
Other Services	130.9	131.4	131.8	132.2	132.7	133.1	133.6	134.0
% Ch, Annual Rate	1.6	1.5	1.3	1.2	1.3	1.4	1.4	1.3
Federal Government	76.3	76.4	76.5	76.5	76.6	76.7	76.8	76.8
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	517.1	520.6	524.0	527.4	530.3	532.7	534.4	535.6
% Ch, Annual Rate	2.8	2.7	2.6	2.6	2.3	1.8	1.3	0.9

Table A3.1
U.S. Personal Income by Component (Billions of Dollars)
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	17,851.8	18,551.5	19,622.9	19,396.1	20,193.0	21,074.3	21,996.9	22,958.5
% Ch	5.3	3.9	5.8	-1.2	4.1	4.4	4.4	4.4
Total Wage and Salary Disbursements	8,894.2	9,309.3	9,286.6	9,830.8	10,290.2	10,773.1	11,253.7	11,744.7
% Ch	5.0	4.7	-0.2	5.9	4.7	4.7	4.5	4.4
Nonwage Personal Income	8,957.6	9,242.2	10,336.3	9,565.3	9,902.8	10,301.2	10,743.1	11,213.9
% Ch	5.7	3.2	11.8	-7.5	3.5	4.0	4.3	4.4
Supplements to Wages and Salaries	2,055.9	2,123.1	2,110.6	2,183.0	2,268.9	2,358.6	2,481.9	2,626.4
% Ch	5.4	3.3	-0.6	3.4	3.9	4.0	5.2	5.8
Proprietor's Income	1,585.9	1,657.7	1,665.5	1,602.0	1,699.4	1,820.6	1,940.6	2,057.4
% Ch	5.1	4.5	0.5	-3.8	6.1	7.1	6.6	6.0
Farm	43.0	49.7	53.2	40.2	49.2	65.5	67.4	65.6
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,542.9	1,608.0	1,612.4	1,561.8	1,650.2	1,755.0	1,873.3	1,991.8
% Ch	5.1	4.2	0.3	-3.1	5.7	6.4	6.7	6.3
Less: Contribution For Govt. Soc. Ins.	1,360.4	1,418.8	1,428.5	1,495.9	1,559.2	1,628.4	1,699.7	1,772.6
% Ch	4.8	4.3	0.7	4.7	4.2	4.4	4.4	4.3
Dividends/Int./Rent	3,705.9	3,755.0	3,705.1	3,689.6	3,804.0	3,913.9	4,014.6	4,107.0
% Ch	7.1	1.3	-1.3	-0.4	3.1	2.9	2.6	2.3
Transfer Payments	2,970.3	3,125.2	4,283.5	3,586.6	3,689.7	3,836.6	4,005.7	4,195.6
% Ch	4.0	5.2	37.1	-16.3	2.9	4.0	4.4	4.7

Table A3.2

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

Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	18,951.0	20,396.6	19,856.0	19,288.2	19,163.8	19,308.8	19,469.3	19,642.3
% Ch, Annual Rate	4.1	34.2	-10.2	-11.0	-2.6	3.1	3.4	3.6
Total Wage and Salary Disbursements	9,526.1	8,844.0	9,287.9	9,488.5	9,674.6	9,779.2	9,875.2	9,994.0
% Ch, Annual Rate	4.5	-25.7	21.6	8.9	8.1	4.4	4.0	4.9
Nonwage Personal Income	9,424.9	11,552.6	10,568.1	9,799.7	9,489.2	9,529.6	9,594.1	9,648.3
% Ch, Annual Rate	3.8	125.7	-30.0	-26.1	-12.1	1.7	2.7	2.3
Supplements to Wages and Salaries	2,148.3	2,036.3	2,119.7	2,138.2	2,155.3	2,174.0	2,192.3	2,210.4
% Ch, Annual Rate	1.1	-19.3	17.4	3.5	3.2	3.5	3.4	3.3
Proprietor's Income	1,706.0	1,511.9	1,810.8	1,633.4	1,588.5	1,595.0	1,616.4	1,608.1
% Ch, Annual Rate	2.0	-38.3	105.8	-33.8	-10.6	1.7	5.5	-2.0
Farm	56.4	38.9	63.2	54.1	43.5	39.5	38.4	39.3
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,649.6	1,473.0	1,747.6	1,579.2	1,545.0	1,555.5	1,578.0	1,568.8
% Ch, Annual Rate	2.6	-36.4	98.2	-33.3	-8.4	2.7	5.9	-2.3
Less: Contribution For Govt. Soc. Ins.	1,451.5	1,379.9	1,434.4	1,448.0	1,478.2	1,490.0	1,500.7	1,514.7
% Ch, Annual Rate	5.3	-18.3	16.8	3.9	8.6	3.2	2.9	3.8
Dividends/Int./Rent	3,786.6	3,706.3	3,668.7	3,659.0	3,658.1	3,670.6	3,697.6	3,732.0
% Ch, Annual Rate	1.1	-8.2	-4.0	-1.1	-0.1	1.4	3.0	3.8
Transfer Payments	3,235.5	5,678.0	4,403.3	3,817.2	3,565.6	3,579.9	3,588.4	3,612.5
% Ch, Annual Rate	10.6	848.5	-63.8	-43.5	-23.9	1.6	1.0	2.7

Table A3.2 (continued)

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

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	19,882.6	20,094.7	20,298.2	20,496.7	20,735.7	20,960.2	21,188.6	21,412.9
% Ch, Annual Rate	5.0	4.3	4.1	4.0	4.7	4.4	4.4	4.3
Total Wage and Salary Disbursements	10,119.0	10,234.1	10,343.3	10,464.4	10,585.6	10,712.3	10,838.0	10,956.6
% Ch, Annual Rate	5.1	4.6	4.3	4.8	4.7	4.9	4.8	4.4
Nonwage Personal Income	9,763.6	9,860.6	9,954.9	10,032.2	10,150.1	10,247.9	10,350.6	10,456.3
% Ch, Annual Rate	4.9	4.0	3.9	3.1	4.8	3.9	4.1	4.1
Supplements to Wages and Salaries	2,238.8	2,260.6	2,277.8	2,298.4	2,321.4	2,344.4	2,370.0	2,398.5
% Ch, Annual Rate	5.2	3.9	3.1	3.7	4.1	4.0	4.4	4.9
Proprietor's Income	1,640.3	1,683.2	1,726.8	1,747.4	1,774.6	1,804.3	1,836.5	1,866.9
% Ch, Annual Rate	8.2	10.9	10.8	4.9	6.4	6.9	7.3	6.8
Farm	42.1	46.1	51.6	57.1	61.6	64.9	67.3	68.3
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,598.2	1,637.1	1,675.2	1,690.4	1,713.0	1,739.4	1,769.2	1,798.6
% Ch, Annual Rate	7.7	10.1	9.7	3.7	5.5	6.3	7.0	6.8
Less: Contribution For Govt. Soc. Ins.	1,537.7	1,552.3	1,565.8	1,581.0	1,603.5	1,620.4	1,637.1	1,652.8
% Ch, Annual Rate	6.2	3.9	3.5	3.9	5.8	4.3	4.2	3.9
Dividends/Int./Rent	3,764.2	3,789.6	3,817.1	3,845.2	3,874.5	3,901.1	3,927.0	3,953.1
% Ch, Annual Rate	3.5	2.7	2.9	3.0	3.1	2.8	2.7	2.7
Transfer Payments	3,657.9	3,679.6	3,699.1	3,722.2	3,783.0	3,818.4	3,854.3	3,890.6
% Ch, Annual Rate	5.1	2.4	2.1	2.5	6.7	3.8	3.8	3.8

Table A3.2 (continued)

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

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	21,652.8	21,882.2	22,110.1	22,342.4	22,597.2	22,836.2	23,079.6	23,321.1
% Ch, Annual Rate	4.6	4.3	4.2	4.3	4.6	4.3	4.3	4.3
Total Wage and Salary Disbursements	11,073.0	11,193.5	11,312.7	11,435.7	11,560.4	11,684.1	11,806.8	11,927.4
% Ch, Annual Rate	4.3	4.4	4.3	4.4	4.4	4.4	4.3	4.2
Nonwage Personal Income	10,579.8	10,688.7	10,797.4	10,906.7	11,036.9	11,152.1	11,272.9	11,393.6
% Ch, Annual Rate	4.8	4.2	4.1	4.1	4.9	4.2	4.4	4.4
Supplements to Wages and Salaries	2,432.4	2,464.6	2,498.0	2,532.7	2,572.2	2,608.5	2,644.8	2,680.1
% Ch, Annual Rate	5.8	5.4	5.5	5.7	6.4	5.8	5.7	5.4
Proprietor's Income	1,896.0	1,926.1	1,955.3	1,985.1	2,012.5	2,042.6	2,072.6	2,102.1
% Ch, Annual Rate	6.4	6.5	6.2	6.2	5.6	6.1	6.0	5.8
Farm	68.3	67.9	67.1	66.2	65.6	65.4	65.4	65.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,827.7	1,858.3	1,888.3	1,918.9	1,946.8	1,977.2	2,007.2	2,036.2
% Ch, Annual Rate	6.6	6.9	6.6	6.6	6.0	6.4	6.2	5.9
Less: Contribution For Govt. Soc. Ins.	1,675.7	1,691.7	1,707.5	1,723.9	1,748.1	1,764.5	1,780.8	1,796.8
% Ch, Annual Rate	5.7	3.9	3.8	3.9	5.7	3.8	3.7	3.6
Dividends/Int./Rent	3,978.0	4,003.6	4,027.3	4,049.4	4,069.5	4,092.8	4,119.5	4,146.4
% Ch, Annual Rate	2.5	2.6	2.4	2.2	2.0	2.3	2.6	2.6
Transfer Payments	3,949.1	3,986.1	4,024.3	4,063.3	4,130.8	4,172.9	4,216.9	4,261.9
% Ch, Annual Rate	6.2	3.8	3.9	3.9	6.8	4.1	4.3	4.3

Table A3.3
Washington Personal Income by Component (Billions of Dollars)
Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	468.055	493.128	529.323	523.293	542.506	566.674	592.749	621.003
% Ch	7.9	5.4	7.3	-1.1	3.7	4.5	4.6	4.8
Total Wage and Salary Disbursements	237.411	254.104	260.584	273.629	284.836	298.452	312.566	327.940
% Ch	8.8	7.0	2.6	5.0	4.1	4.8	4.7	4.9
Manufacturing	22.822	23.869	21.980	20.890	20.812	21.752	22.440	23.132
% Ch	5.3	4.6	-7.9	-5.0	-0.4	4.5	3.2	3.1
Durable Manufacturing	17.971	18.794	16.940	15.608	15.440	16.121	16.661	17.216
% Ch	5.2	4.6	-9.9	-7.9	-1.1	4.4	3.4	3.3
Nondurable Manufacturing	4.851	5.074	5.040	5.282	5.373	5.631	5.778	5.916
% Ch	5.4	4.6	-0.7	4.8	1.7	4.8	2.6	2.4
Nonmanufacturing	207.564	222.965	230.975	244.697	255.671	268.011	281.097	295.419
% Ch	9.5	7.4	3.6	5.9	4.5	4.8	4.9	5.1
Other Private Wages	1.311	1.343	1.393	1.469	1.526	1.592	1.657	1.727
% Ch	5.7	2.5	3.7	5.5	3.9	4.3	4.1	4.2
Farm Wages	1.455	1.548	1.693	1.842	1.945	2.064	2.183	2.311
% Ch	-3.5	6.4	9.4	8.8	5.6	6.1	5.8	5.9
Military Wages	4.259	4.379	4.543	4.730	4.880	5.034	5.190	5.350
% Ch	1.8	2.8	3.8	4.1	3.2	3.1	3.1	3.1
Nonwage Personal Income	230.644	239.024	268.738	249.664	257.671	268.222	280.183	293.063
% Ch	7.0	3.6	12.4	-7.1	3.2	4.1	4.5	4.6
Supplements to Wages and Salaries	53.261	56.367	56.484	57.961	60.050	62.524	65.865	69.860
% Ch	8.5	5.8	0.2	2.6	3.6	4.1	5.3	6.1
Proprietor's Income	36.464	38.357	38.258	36.054	37.958	40.525	43.174	45.840
% Ch	5.0	5.2	-0.3	-5.8	5.3	6.8	6.5	6.2
Farm	1.591	1.798	2.005	1.280	1.305	1.575	1.605	1.575
% Ch	...	...	...	...	...	...	...	...
Nonfarm	34.873	36.558	36.253	34.775	36.653	38.950	41.569	44.265
% Ch	6.5	4.8	-0.8	-4.1	5.4	6.3	6.7	6.5
Less: Contribution For Govt. Soc. Ins.	38.315	40.387	41.016	42.434	43.891	45.766	47.756	49.919
% Ch	6.2	5.4	1.6	3.5	3.4	4.3	4.4	4.5
Plus: Residence Adjustment	4.579	4.668	4.650	4.972	5.241	5.524	5.806	6.093
% Ch	6.8	1.9	-0.4	6.9	5.4	5.4	5.1	4.9
Dividends/Int./Rent	109.949	111.772	110.458	110.420	114.375	118.232	121.838	125.231
% Ch	7.9	1.7	-1.2	0.0	3.6	3.4	3.1	2.8
Transfer Payments	64.707	68.247	99.905	82.692	83.937	87.182	91.255	95.958
% Ch	4.9	5.5	46.4	-17.2	1.5	3.9	4.7	5.2
State U.I. Benefits	1.005	1.059	18.729	5.526	3.729	2.873	2.169	1.686
% Ch	-1.2	5.3	1,668.8	-70.5	-32.5	-23.0	-24.5	-22.3
Other Transfers	63.701	67.189	81.177	77.166	80.208	84.310	89.086	94.272
% Ch	5.0	5.5	20.8	-4.9	3.9	5.1	5.7	5.8

Table A3.4
Washington Personal Income by Component (Billions of Dollars)
Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	506.158	551.819	536.272	523.041	518.785	521.532	524.604	528.252
% Ch, Annual Rate	4.7	41.3	-10.8	-9.5	-3.2	2.1	2.4	2.8
Total Wage and Salary Disbursements	262.553	252.099	261.420	266.264	270.358	272.707	274.536	276.915
% Ch, Annual Rate	5.8	-15.0	15.6	7.6	6.3	3.5	2.7	3.5
Manufacturing	22.061	22.534	21.787	21.538	21.284	20.968	20.754	20.554
% Ch, Annual Rate	-20.6	8.9	-12.6	-4.5	-4.6	-5.8	-4.0	-3.8
Durable Manufacturing	16.969	17.687	16.762	16.344	16.063	15.702	15.414	15.253
% Ch, Annual Rate	-25.4	18.0	-19.3	-9.6	-6.7	-8.7	-7.1	-4.1
Nondurable Manufacturing	5.092	4.847	5.026	5.194	5.221	5.266	5.340	5.301
% Ch, Annual Rate	-1.6	-17.9	15.6	14.1	2.1	3.4	5.8	-2.9
Nonmanufacturing	233.042	221.993	231.929	236.935	241.135	243.728	245.703	248.224
% Ch, Annual Rate	8.9	-17.7	19.1	8.9	7.3	4.4	3.3	4.2
Other Private Wages	1.393	1.354	1.399	1.426	1.450	1.465	1.475	1.487
% Ch, Annual Rate	-5.2	-10.6	13.9	7.9	7.0	3.9	2.8	3.4
Farm Wages	1.626	1.654	1.724	1.768	1.808	1.833	1.853	1.876
% Ch, Annual Rate	10.6	7.0	18.0	10.5	9.4	5.7	4.4	5.0
Military Wages	4.432	4.564	4.581	4.596	4.681	4.714	4.750	4.774
% Ch, Annual Rate	2.3	12.5	1.5	1.3	7.6	2.9	3.1	2.0
Nonwage Personal Income	243.605	299.720	274.852	256.777	248.427	248.825	250.069	251.337
% Ch, Annual Rate	3.6	129.1	-29.3	-23.8	-12.4	0.6	2.0	2.0
Supplements to Wages and Salaries	57.550	54.928	56.471	56.987	57.379	57.798	58.156	58.510
% Ch, Annual Rate	2.7	-17.0	11.7	3.7	2.8	3.0	2.5	2.5
Proprietor's Income	39.454	34.862	41.344	37.373	35.936	35.944	36.307	36.029
% Ch, Annual Rate	2.4	-39.0	97.8	-33.2	-14.5	0.1	4.1	-3.0
Farm	1.727	1.986	2.280	2.027	1.502	1.274	1.181	1.161
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	37.727	32.877	39.063	35.346	34.434	34.670	35.126	34.868
% Ch, Annual Rate	3.9	-42.3	99.3	-33.0	-9.9	2.8	5.4	-2.9
Less: Contribution For Govt. Soc. Ins.	41.670	39.950	41.019	41.425	42.132	42.357	42.507	42.740
% Ch, Annual Rate	6.8	-15.5	11.1	4.0	7.0	2.2	1.4	2.2
Plus: Residence Adjustment	4.781	4.393	4.654	4.771	4.881	4.942	4.998	5.068
% Ch, Annual Rate	1.3	-28.7	26.0	10.5	9.5	5.1	4.6	5.7
Dividends/Int./Rent	113.084	110.271	109.310	109.166	109.282	109.790	110.728	111.879
% Ch, Annual Rate	2.0	-9.6	-3.4	-0.5	0.4	1.9	3.5	4.2
Transfer Payments	70.407	135.217	104.093	89.905	83.082	82.708	82.386	82.591
% Ch, Annual Rate	9.7	1,260.4	-64.9	-44.4	-27.1	-1.8	-1.5	1.0
State U.I. Benefits	1.612	36.409	25.182	11.712	6.440	5.732	5.188	4.745
% Ch, Annual Rate	502.2	###	-77.1	-95.3	-90.9	-37.2	-32.9	-30.0
Other Transfers	68.795	98.807	78.911	78.193	76.641	76.976	77.199	77.846
% Ch, Annual Rate	6.3	325.5	-59.3	-3.6	-7.7	1.8	1.2	3.4

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	534.157	539.787	545.318	550.763	557.407	563.538	569.647	576.104
% Ch, Annual Rate	4.5	4.3	4.2	4.1	4.9	4.5	4.4	4.6
Total Wage and Salary Disbursements	280.040	283.248	286.355	289.699	293.247	296.753	300.113	303.696
% Ch, Annual Rate	4.6	4.7	4.5	4.8	5.0	4.9	4.6	4.9
Manufacturing	20.688	20.716	20.801	21.044	21.346	21.673	21.911	22.078
% Ch, Annual Rate	2.6	0.5	1.6	4.8	5.9	6.3	4.5	3.1
Durable Manufacturing	15.357	15.378	15.428	15.595	15.818	16.058	16.237	16.371
% Ch, Annual Rate	2.8	0.6	1.3	4.4	5.8	6.2	4.5	3.3
Nondurable Manufacturing	5.331	5.338	5.373	5.449	5.528	5.616	5.675	5.707
% Ch, Annual Rate	2.3	0.5	2.6	5.8	5.9	6.5	4.3	2.3
Nonmanufacturing	251.115	254.217	257.161	260.192	263.333	266.429	269.469	272.813
% Ch, Annual Rate	4.7	5.0	4.7	4.8	4.9	4.8	4.6	5.1
Other Private Wages	1.503	1.518	1.533	1.549	1.567	1.584	1.600	1.617
% Ch, Annual Rate	4.3	4.2	4.0	4.3	4.6	4.4	4.1	4.3
Farm Wages	1.904	1.932	1.959	1.988	2.019	2.049	2.078	2.109
% Ch, Annual Rate	6.1	6.0	5.7	6.1	6.4	6.2	5.8	6.0
Military Wages	4.830	4.864	4.901	4.926	4.982	5.017	5.055	5.080
% Ch, Annual Rate	4.8	2.9	3.1	2.0	4.7	2.8	3.1	2.0
Nonwage Personal Income	254.117	256.539	258.963	261.065	264.160	266.785	269.534	272.408
% Ch, Annual Rate	4.5	3.9	3.8	3.3	4.8	4.0	4.2	4.3
Supplements to Wages and Salaries	59.229	59.814	60.299	60.858	61.531	62.152	62.813	63.601
% Ch, Annual Rate	5.0	4.0	3.3	3.8	4.5	4.1	4.3	5.1
Proprietor's Income	36.692	37.616	38.556	38.966	39.549	40.173	40.848	41.529
% Ch, Annual Rate	7.6	10.5	10.4	4.3	6.1	6.5	6.9	6.8
Farm	1.192	1.252	1.342	1.432	1.508	1.564	1.605	1.622
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	35.500	36.364	37.214	37.534	38.041	38.609	39.244	39.907
% Ch, Annual Rate	7.4	10.1	9.7	3.5	5.5	6.1	6.7	6.9
Less: Contribution For Govt. Soc. Ins.	43.320	43.707	44.070	44.469	45.104	45.552	45.977	46.429
% Ch, Annual Rate	5.5	3.6	3.4	3.7	5.8	4.0	3.8	4.0
Plus: Residence Adjustment	5.141	5.209	5.273	5.343	5.414	5.489	5.562	5.632
% Ch, Annual Rate	5.9	5.3	5.0	5.5	5.4	5.6	5.5	5.1
Dividends/Int./Rent	112.978	113.875	114.834	115.814	116.835	117.775	118.693	119.623
% Ch, Annual Rate	4.0	3.2	3.4	3.5	3.6	3.3	3.2	3.2
Transfer Payments	83.396	83.732	84.071	84.551	85.935	86.748	87.594	88.452
% Ch, Annual Rate	4.0	1.6	1.6	2.3	6.7	3.8	4.0	4.0
State U.I. Benefits	4.219	3.813	3.563	3.322	3.124	2.958	2.801	2.608
% Ch, Annual Rate	-37.5	-33.3	-23.7	-24.5	-21.7	-19.7	-19.5	-24.9
Other Transfers	79.176	79.919	80.507	81.229	82.811	83.791	84.792	85.845
% Ch, Annual Rate	7.0	3.8	3.0	3.6	8.0	4.8	4.9	5.1

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	582.807	589.318	596.004	602.868	610.297	617.375	624.581	631.759
% Ch, Annual Rate	4.7	4.5	4.6	4.7	5.0	4.7	4.8	4.7
Total Wage and Salary Disbursements	307.104	310.636	314.334	318.191	322.123	326.025	329.892	333.719
% Ch, Annual Rate	4.6	4.7	4.8	5.0	5.0	4.9	4.8	4.7
Manufacturing	22.216	22.357	22.509	22.676	22.840	23.024	23.225	23.440
% Ch, Annual Rate	2.5	2.6	2.7	3.0	2.9	3.3	3.5	3.8
Durable Manufacturing	16.483	16.596	16.716	16.849	16.980	17.128	17.290	17.465
% Ch, Annual Rate	2.8	2.8	2.9	3.2	3.1	3.5	3.8	4.1
Nondurable Manufacturing	5.732	5.761	5.793	5.826	5.860	5.896	5.934	5.976
% Ch, Annual Rate	1.8	2.0	2.2	2.3	2.3	2.5	2.6	2.8
Nonmanufacturing	275.982	279.291	282.750	286.366	290.024	293.655	297.231	300.767
% Ch, Annual Rate	4.7	4.9	5.0	5.2	5.2	5.1	5.0	4.8
Other Private Wages	1.632	1.648	1.665	1.683	1.701	1.718	1.736	1.753
% Ch, Annual Rate	3.9	4.0	4.1	4.3	4.4	4.2	4.1	4.0
Farm Wages	2.137	2.167	2.197	2.230	2.263	2.295	2.328	2.360
% Ch, Annual Rate	5.5	5.6	5.8	6.0	6.0	5.9	5.8	5.6
Military Wages	5.138	5.173	5.212	5.238	5.296	5.333	5.372	5.399
% Ch, Annual Rate	4.6	2.8	3.0	2.0	4.5	2.8	3.0	2.0
Nonwage Personal Income	275.702	278.681	281.670	284.677	288.173	291.350	294.689	298.040
% Ch, Annual Rate	4.9	4.4	4.4	4.3	5.0	4.5	4.7	4.6
Supplements to Wages and Salaries	64.523	65.382	66.299	67.258	68.363	69.366	70.367	71.346
% Ch, Annual Rate	5.9	5.4	5.7	5.9	6.7	6.0	5.9	5.7
Proprietor's Income	42.171	42.838	43.503	44.185	44.815	45.504	46.187	46.855
% Ch, Annual Rate	6.3	6.5	6.4	6.4	5.8	6.3	6.1	5.9
Farm	1.622	1.614	1.600	1.586	1.576	1.571	1.572	1.580
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	40.549	41.224	41.903	42.599	43.239	43.933	44.614	45.274
% Ch, Annual Rate	6.6	6.8	6.7	6.8	6.2	6.6	6.4	6.0
Less: Contribution For Govt. Soc. Ins.	47.067	47.513	47.979	48.467	49.186	49.680	50.167	50.644
% Ch, Annual Rate	5.6	3.8	4.0	4.1	6.1	4.1	4.0	3.9
Plus: Residence Adjustment	5.700	5.770	5.840	5.912	5.985	6.057	6.129	6.200
% Ch, Annual Rate	4.9	5.0	4.9	5.0	5.0	4.9	4.8	4.7
Dividends/Int./Rent	120.517	121.435	122.293	123.109	123.866	124.721	125.682	126.654
% Ch, Annual Rate	3.0	3.1	2.9	2.7	2.5	2.8	3.1	3.1
Transfer Payments	89.859	90.769	91.713	92.680	94.330	95.382	96.491	97.631
% Ch, Annual Rate	6.5	4.1	4.2	4.3	7.3	4.5	4.7	4.8
State U.I. Benefits	2.421	2.254	2.084	1.917	1.756	1.667	1.658	1.664
% Ch, Annual Rate	-25.7	-24.9	-26.9	-28.4	-29.6	-18.7	-2.2	1.4
Other Transfers	87.438	88.515	89.629	90.763	92.574	93.714	94.833	95.966
% Ch, Annual Rate	7.6	5.0	5.1	5.2	8.2	5.0	4.9	4.9

Table A4.1
Selected Inflation Indicators
(PCE Price Index 2012=100; CPI 1982-84=1)

	PCE Price Index*		U.S. CPI#		Seattle CPI+	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	21.8	4.2	0.405	4.2	0.382	2.1
1972	22.6	3.4	0.418	3.3	0.393	2.9
1973	23.8	5.4	0.444	6.3	0.418	6.4
1974	26.3	10.4	0.493	11.0	0.464	11.0
1975	28.5	8.3	0.538	9.1	0.511	10.2
1976	30.0	5.5	0.569	5.8	0.540	5.5
1977	32.0	6.5	0.606	6.5	0.583	8.0
1978	34.2	7.0	0.652	7.6	0.640	9.9
1979	37.3	8.9	0.726	11.3	0.709	10.8
1980	41.3	10.8	0.824	13.5	0.827	16.7
1981	45.0	9.0	0.909	10.4	0.916	10.8
1982	47.5	5.6	0.965	6.2	0.978	6.7
1983	49.5	4.3	0.996	3.2	0.993	1.5
1984	51.3	3.8	1.039	4.4	1.030	3.8
1985	53.1	3.5	1.076	3.5	1.056	2.5
1986	54.3	2.2	1.097	1.9	1.066	1.0
1987	56.0	3.1	1.136	3.6	1.092	2.4
1988	58.2	3.9	1.183	4.1	1.128	3.3
1989	60.7	4.4	1.239	4.8	1.181	4.7
1990	63.4	4.4	1.307	5.4	1.268	7.3
1991	65.5	3.3	1.362	4.2	1.341	5.8
1992	67.2	2.7	1.403	3.0	1.390	3.7
1993	68.9	2.5	1.445	3.0	1.429	2.8
1994	70.3	2.1	1.482	2.6	1.478	3.4
1995	71.8	2.1	1.524	2.8	1.522	3.0
1996	73.3	2.1	1.569	2.9	1.575	3.4
1997	74.6	1.7	1.605	2.3	1.630	3.5
1998	75.2	0.8	1.630	1.5	1.677	2.9
1999	76.3	1.5	1.666	2.2	1.728	3.0
2000	78.2	2.5	1.722	3.4	1.792	3.7
2001	79.7	1.9	1.770	2.8	1.857	3.6
2002	80.8	1.3	1.799	1.6	1.893	2.0
2003	82.4	1.9	1.840	2.3	1.924	1.6
2004	84.4	2.5	1.889	2.7	1.947	1.2
2005	86.8	2.8	1.953	3.4	2.002	2.8
2006	89.2	2.7	2.016	3.2	2.076	3.7
2007	91.4	2.5	2.073	2.9	2.157	3.9
2008	94.2	3.0	2.153	3.8	2.247	4.2
2009	94.1	-0.1	2.146	-0.3	2.260	0.6
2010	95.7	1.7	2.181	1.6	2.267	0.3
2011	98.1	2.5	2.249	3.1	2.328	2.7
2012	100.0	1.9	2.296	2.1	2.387	2.5
2013	101.3	1.3	2.330	1.5	2.416	1.2
2014	102.8	1.5	2.367	1.6	2.460	1.8
2015	103.0	0.2	2.370	0.1	2.494	1.4
2016	104.1	1.0	2.400	1.3	2.550	2.3
2017	106.0	1.8	2.451	2.1	2.628	3.0
2018	108.2	2.1	2.511	2.4	2.711	3.2
2019	109.9	1.5	2.557	1.8	2.779	2.5
Forecast						
2020	111.2	1.2	2.590	1.3	2.831	1.9
2021	113.4	2.0	2.652	2.4	2.911	2.8
2022	115.6	1.9	2.712	2.2	2.976	2.2
2023	117.5	1.6	2.760	1.8	3.030	1.8
2024	119.6	1.8	2.815	2.0	3.090	2.0
2025	121.9	1.9	2.874	2.1	3.155	2.1

* GDP Price Index 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 PCE Price Index 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
Price Indexes for Gross Domestic Product
(2012=100)

	Services		Food		Fuels		Gasoline	
	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	16.8	5.5	21.4	2.3	4.9	6.4	9.1	0.7
1972	17.5	4.2	22.4	4.8	5.0	0.6	9.2	1.3
1973	18.3	4.8	25.2	12.7	5.7	14.6	10.1	9.6
1974	19.9	8.5	29.0	15.2	9.0	58.9	13.6	35.1
1975	21.6	8.6	31.2	7.5	9.8	8.5	14.6	6.7
1976	23.1	6.9	31.8	1.9	10.5	7.3	15.2	4.2
1977	24.8	7.6	33.7	5.9	11.9	13.2	16.1	5.8
1978	26.8	7.7	36.9	9.6	12.6	5.7	16.8	4.3
1979	29.0	8.4	40.5	9.8	17.3	37.9	22.5	34.0
1980	32.0	10.4	43.9	8.4	24.3	40.4	31.2	38.8
1981	35.3	10.2	47.1	7.1	29.8	22.3	34.7	11.3
1982	38.1	7.8	48.3	2.6	29.2	-1.9	32.9	-5.1
1983	40.4	6.1	48.8	1.1	26.9	-7.8	31.9	-3.3
1984	42.5	5.2	50.3	3.0	27.5	2.2	31.4	-1.5
1985	44.6	4.9	50.9	1.1	26.4	-3.9	31.6	0.8
1986	46.4	4.1	52.1	2.4	20.7	-21.7	24.8	-21.5
1987	47.8	3.0	53.7	3.2	21.2	2.6	25.8	3.8
1988	50.1	4.8	55.3	3.0	21.2	0.0	26.0	0.8
1989	52.4	4.7	58.2	5.3	22.5	5.9	28.4	9.2
1990	54.8	4.6	61.1	4.9	27.1	20.4	32.3	13.8
1991	57.0	3.9	63.0	3.1	25.8	-4.8	31.9	-1.3
1992	59.0	3.6	63.5	0.8	24.7	-4.1	31.8	-0.4
1993	61.1	3.5	64.3	1.4	24.6	-0.7	31.5	-1.0
1994	62.7	2.7	65.4	1.7	24.1	-1.8	31.6	0.5
1995	64.5	2.8	66.8	2.2	23.9	-0.9	32.1	1.6
1996	66.2	2.7	68.9	3.1	27.1	13.3	34.1	6.1
1997	68.1	2.8	70.2	1.9	27.1	0.2	34.1	0.0
1998	69.5	2.1	71.1	1.3	24.0	-11.4	29.7	-12.9
1999	71.0	2.0	72.2	1.6	24.4	1.7	32.3	8.9
2000	72.9	2.8	73.9	2.3	35.8	46.6	41.3	27.8
2001	75.2	3.1	76.1	2.9	35.1	-2.0	39.8	-3.6
2002	77.1	2.6	77.2	1.5	31.3	-10.8	37.4	-6.0
2003	79.5	3.1	78.7	1.9	37.9	20.9	43.6	16.5
2004	82.0	3.1	81.2	3.1	44.1	16.4	51.3	17.6
2005	84.7	3.3	82.6	1.7	58.7	33.0	62.3	21.6
2006	87.6	3.5	84.0	1.7	66.7	13.7	70.3	12.9
2007	90.5	3.3	87.2	3.9	71.3	6.9	76.3	8.4
2008	93.2	3.0	92.6	6.1	96.8	35.7	88.8	16.5
2009	94.2	1.1	93.7	1.2	66.2	-31.6	65.2	-26.6
2010	96.0	1.8	93.9	0.3	77.5	16.9	76.9	18.0
2011	97.8	1.9	97.7	4.0	98.6	27.3	96.6	25.7
2012	100.0	2.2	100.0	2.4	100.0	1.4	100.0	3.5
2013	102.3	2.3	101.0	1.0	98.8	-1.2	97.2	-2.8
2014	104.8	2.4	102.9	1.9	98.3	-0.5	93.5	-3.8
2015	106.7	1.8	104.1	1.1	69.9	-28.8	68.7	-26.5
2016	109.2	2.3	103.0	-1.0	58.0	-17.1	61.0	-11.2
2017	111.9	2.5	102.9	-0.1	66.8	15.3	68.9	12.8
2018	115.0	2.8	103.4	0.5	80.8	20.9	78.0	13.2
2019	117.7	2.4	104.4	1.0	77.2	-4.5	75.3	-3.4
Forecast								
2020	120.2	2.1	108.0	3.4	60.4	-21.7	64.2	-14.8
2021	123.3	2.6	109.6	1.5	61.9	2.5	66.8	4.1
2022	126.4	2.5	111.5	1.7	63.7	2.9	68.8	2.9
2023	129.6	2.5	112.9	1.3	63.7	0.0	67.7	-1.6
2024	133.0	2.7	114.5	1.4	64.2	0.8	68.6	1.4
2025	136.7	2.8	116.2	1.5	64.9	1.1	70.0	2.1

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	89.8	54.7	87.1
2017	7310.3	126.6	1.8	89.7	56.1	93.0
2018	7427.6	117.3	1.6	87.3	56.4	86.3
2019	7546.4	118.8	1.6	85.7	57.2	90.3
2020	7656.2	109.8	1.5	85.2	59.1	83.7
Forecast						
2021	7714.7	58.5	0.8	85.6	61.1	33.9
2022	7776.1	61.4	0.8	86.4	60.4	35.5
2023	7839.7	63.6	0.8	86.9	61.5	38.3
2024	7904.4	64.7	0.8	87.3	62.8	40.2
2025	7969.8	65.5	0.8	87.5	64.1	42.1

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	2016	2017	Actual 2018	2019	2020	2021	2022	Forecast 2023	2024	2025
Total Population	7183.7	7310.3	7427.6	7546.4	7656.2	7714.7	7776.1	7839.7	7904.4	7969.8
Percent Change	1.7	1.8	1.6	1.6	1.5	0.8	0.8	0.8	0.8	0.8
Age 17 and Under	1625.6	1648.7	1665.9	1682.1	1697.4	1698.8	1699.6	1700.2	1700.8	1698.3
Percent of Total	22.6	22.6	22.4	22.3	22.2	22.0	21.9	21.7	21.5	21.3
Age 6-18	1178.7	1195.4	1211.9	1228.8	1244.6	1254.5	1264.7	1272.4	1275.4	1275.1
Percent of Total	16.4	16.4	16.3	16.3	16.3	16.3	16.3	16.2	16.1	16.0
Age 18 and Over	5558.1	5661.6	5761.7	5864.3	5958.8	6015.9	6076.5	6139.4	6203.5	6271.6
Percent of Total	77.4	77.4	77.6	77.7	77.8	78.0	78.1	78.3	78.5	78.7
Age 21 and Over	5284.0	5383.5	5479.6	5578.9	5673.2	5733.7	5795.1	5854.5	5914.3	5975.8
Percent of Total	73.6	73.6	73.8	73.9	74.1	74.3	74.5	74.7	74.8	75.0
Age 20-34	1482.7	1507.6	1529.6	1554.8	1575.7	1576.7	1577.8	1578.7	1579.2	1577.7
Percent of Total	20.6	20.6	20.6	20.6	20.6	20.4	20.3	20.1	20.0	19.8
Age 18-64	4484.7	4540.3	4588.0	4637.5	4677.3	4684.8	4694.7	4706.6	4722.5	4740.5
Percent of Total	62.4	62.1	61.8	61.5	61.1	60.7	60.4	60.0	59.7	59.5
Age 65 and Over	1073.3	1121.3	1173.7	1226.8	1281.4	1331.1	1381.8	1432.8	1481.1	1531.1
Percent of Total	14.9	15.3	15.8	16.3	16.7	17.3	17.8	18.3	18.7	19.2

* As of April 1 of Each Year

Source: Office of Financial Management

Table A6.1

Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	October 2020	+
U.S. Real GDP Growth	3rd quarter 2020	+
U.S. ISM Index	October 2020	+
U.S. Employment YOY%Δ	October 2020	+
U.S. Unemployment Rate	October 2020	+
U.S. Consumer Confidence	November 2020	-
U.S. Consumer Sentiment	November 2020	-
U.S. Light Vehicle Sales	October 2020	-
U.S. CPI YOY%Δ	October 2020	+
U.S. Home Prices YOY%Δ	September 2020	+
S&P 500 Index	November 2020	+
WA Leading Index	October 2020	+
WA ISM-WW Index	October 2020	-
WA Employment YOY%Δ	October 2020	+
WA Aerospace Empl. YOY%Δ	October 2020	-
WA Unemployment Rate	October 2020	+
WA Help Wanted Index	October 2020	+
WA Business Cycle Indicator	October 2020	+
WA Initial Unemploy. Claims	October 2020	+
WA Housing Permits	October 2020	-
WA Weekly Hours in Mfg.	October 2020	+
WA New Vehicle Registration	October 2020	+
WA In-Migration	October 2020	+
WA Exports-Total YOY%Δ	3rd quarter 2020	+
WA Exports- w/o Trans. Equip. YOY%Δ	3rd quarter 2020	+
Seattle CPI YOY%Δ	October 2020	-
Seattle Home Prices YOY%Δ	September 2020	+
WA Construction Activity Index	October 2020	-

*Change from the previous reading

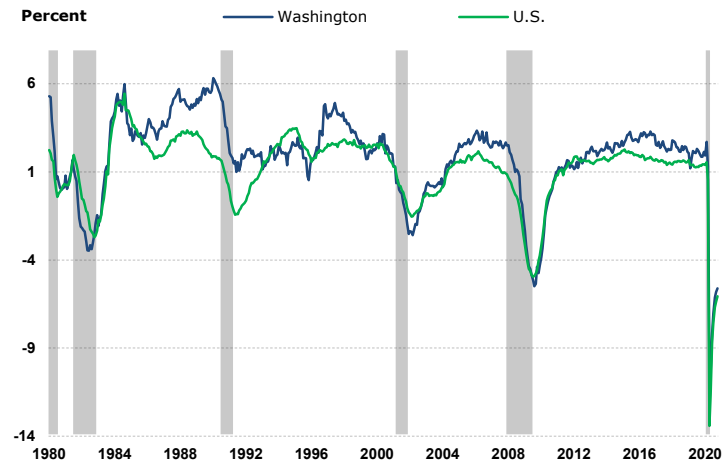
Table A6.2
Washington Business Indicators
 Historical Data

	WA Index of Leading Indicators	U.S. Index of Leading Indicators	WA State Business Cycle Indicator	WA State Construction Index	WA State Help Wanted Index	WA Purchasing Management Index	U.S. Purchasing Management Index
2015:01	117.9	97.4	54.8	103.8	127.6	66.6	53.5
2015:02	118.9	97.4	59.8	107.6	137.2	65.9	52.9
2015:03	118.2	97.9	58.9	104.0	138.8	64.1	51.5
2015:04	118.3	98.4	59.0	102.5	135.7	60.4	51.5
2015:05	119.0	98.8	58.3	102.8	139.0	60.3	52.8
2015:06	118.9	99.3	59.0	103.1	136.0	51.4	53.5
2015:07	118.9	99.1	60.8	103.2	141.0	53.6	52.7
2015:08	119.0	99.1	59.8	104.8	139.1	48.0	51.1
2015:09	117.9	99.0	59.1	104.6	126.6	48.0	50.2
2015:10	118.5	99.4	60.3	103.3	132.4	46.1	50.1
2015:11	118.5	99.8	60.4	103.5	134.3	50.0	48.6
2015:12	118.7	99.6	63.1	105.9	130.7	54.5	48.0
2016:01	118.4	99.3	63.4	105.9	128.7	57.2	48.2
2016:02	118.6	99.2	65.7	107.3	124.9	55.4	49.7
2016:03	119.1	99.2	63.2	106.9	128.9	55.7	51.7
2016:04	120.2	99.7	63.2	107.9	130.9	50.8	50.7
2016:05	120.9	99.5	65.4	108.2	148.2	49.2	51.0
2016:06	121.1	99.8	66.6	109.2	151.3	49.1	52.8
2016:07	121.8	100.2	67.7	108.7	156.3	50.8	52.3
2016:08	121.1	100.2	67.0	106.5	153.1	47.7	49.4
2016:09	121.8	100.4	67.7	111.2	143.4	51.4	51.7
2016:10	122.2	100.5	68.5	111.7	152.3	53.1	52.0
2016:11	121.6	100.7	70.1	111.7	148.8	53.3	53.5
2016:12	121.8	101.2	71.1	113.0	149.2	47.3	54.5
2017:01	122.0	101.8	69.3	111.1	152.5	54.2	56.0
2017:02	121.8	102.1	68.8	112.0	140.1	48.6	57.7
2017:03	122.4	102.6	70.4	111.6	143.4	59.2	57.2
2017:04	122.9	102.8	69.0	111.8	143.3	59.2	54.8
2017:05	123.4	103.2	70.6	112.7	149.2	45.0	54.9
2017:06	124.0	103.8	70.2	113.3	145.4	50.0	57.8
2017:07	124.4	104.1	70.7	113.7	139.5	47.0	56.3
2017:08	124.6	104.5	72.0	114.3	135.1	58.2	58.8
2017:09	125.1	104.5	73.5	113.8	140.4	57.5	60.8
2017:10	125.6	105.9	73.7	117.1	132.7	51.8	58.7
2017:11	125.8	106.3	76.4	116.9	134.7	65.0	58.2
2017:12	126.7	107.1	75.3	116.3	138.6	65.8	59.7
2018:01	126.5	107.8	74.9	115.9	136.8	60.8	59.1
2018:02	127.7	108.5	76.9	118.0	133.3	68.3	60.8
2018:03	128.3	108.8	77.7	119.9	137.4	68.0	59.3
2018:04	128.0	109.3	76.5	116.8	133.7	55.8	57.3
2018:05	127.0	109.4	77.2	115.4	128.0	61.7	58.7
2018:06	127.0	110.0	76.9	117.2	123.1	56.0	60.2
2018:07	126.8	110.4	77.0	115.8	124.8	60.0	58.1
2018:08	127.0	110.9	75.9	117.5	123.4	61.1	61.3
2018:09	127.9	111.5	76.7	116.7	131.5	62.7	59.8
2018:10	127.8	111.4	77.3	118.1	129.3	55.0	57.7
2018:11	127.5	111.5	77.6	118.5	121.9	60.0	59.3
2018:12	128.0	111.3	77.2	119.5	121.8	52.7	54.1
2019:01	127.9	111.3	77.0	119.2	123.5	54.5	56.6
2019:02	125.9	111.5	73.2	114.6	122.5	61.1	54.2
2019:03	128.9	111.7	76.3	119.9	125.6	57.8	55.3
2019:04	128.9	111.8	77.7	121.0	125.5	54.0	52.8
2019:05	128.6	111.8	76.9	120.0	124.0	54.0	52.1
2019:06	128.9	111.6	76.9	119.1	122.8	56.7	51.7
2019:07	129.6	112.0	77.8	121.7	123.0	57.0	51.2
2019:08	129.1	111.8	76.7	119.5	123.3	56.0	49.1
2019:09	129.3	111.6	78.2	120.8	127.6	54.0	47.8
2019:10	129.1	111.4	78.6	120.6	122.9	58.2	48.3
2019:11	129.8	111.6	78.9	123.3	122.5	47.0	48.1
2019:12	130.3	111.4	82.0	125.0	123.5	52.5	47.2
2020:01	129.0	112.0	78.7	119.9	121.8	53.0	50.9
2020:02	129.5	111.8	80.3	120.0	122.1	52.0	50.1
2020:03	120.1	103.5	74.4	120.9	119.9	46.0	49.1
2020:04	109.9	96.9	39.8	104.9	70.7	38.5	41.5
2020:05	112.7	99.8	40.8	113.9	56.1	41.0	43.1
2020:06	115.9	102.9	51.5	114.4	59.3	50.9	52.6
2020:07	118.6	105.0	57.6	116.5	60.0	56.4	54.2
2020:08	120.4	106.7	59.3	117.1	61.0	48.9	56.0
2020:09	120.5	107.5	62.4	120.9	61.4	53.0	55.4
2020:10	121.9	108.2	65.2	119.7	62.9	50.9	59.3

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

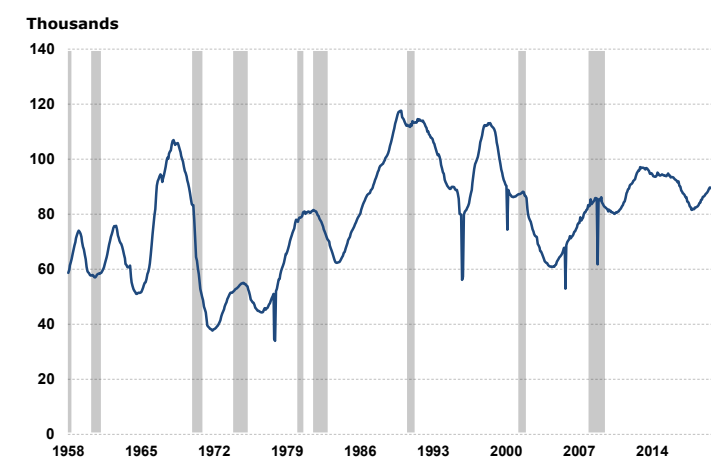
January 1980 to October 2020



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

Washington Aircraft and Parts Employment

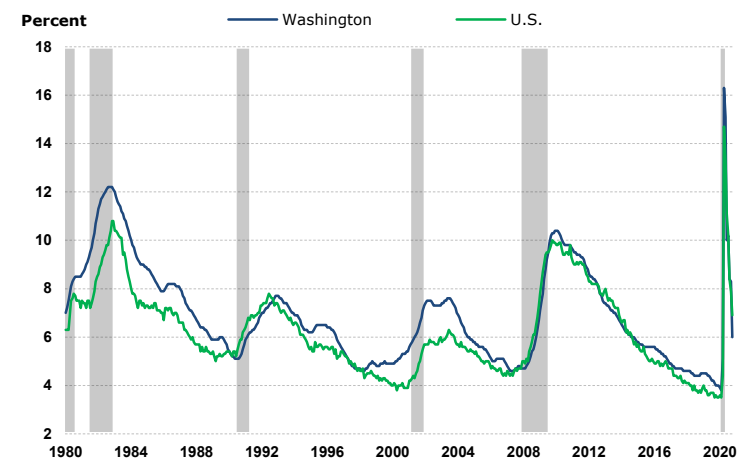
January 1958 to October 2020



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

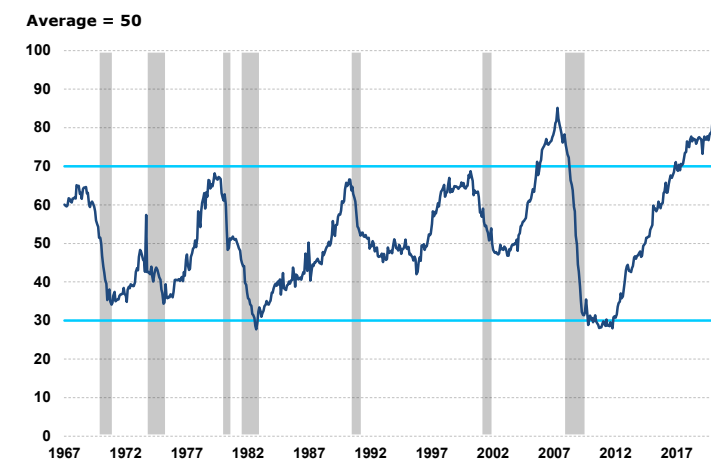
January 1980 to October 2020



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to October 2020

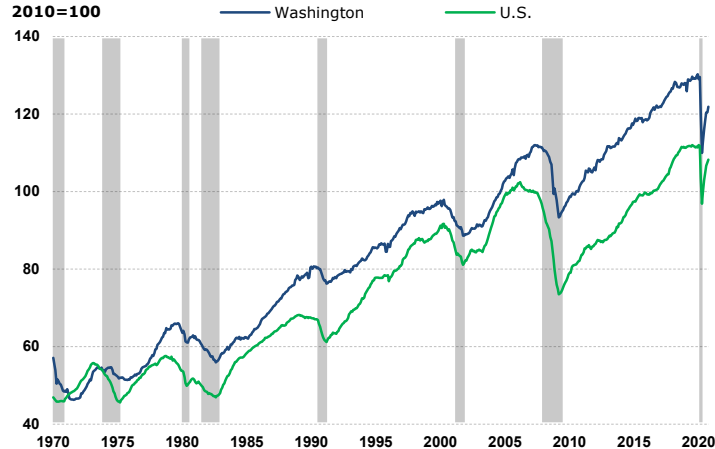


* Source: ERFC

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

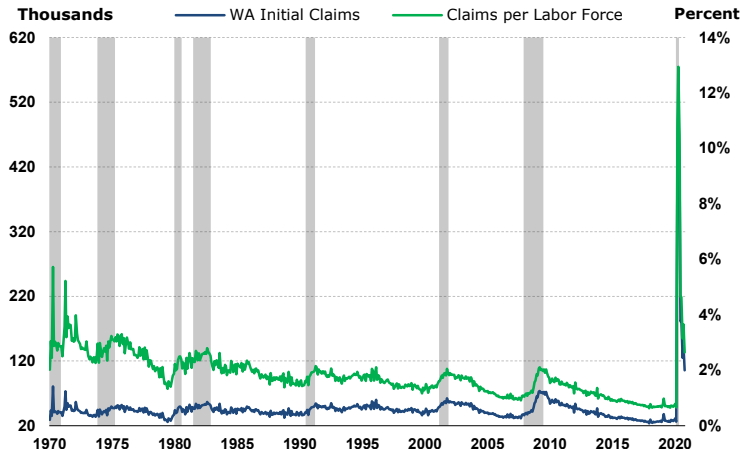
January 1970 to October 2020



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

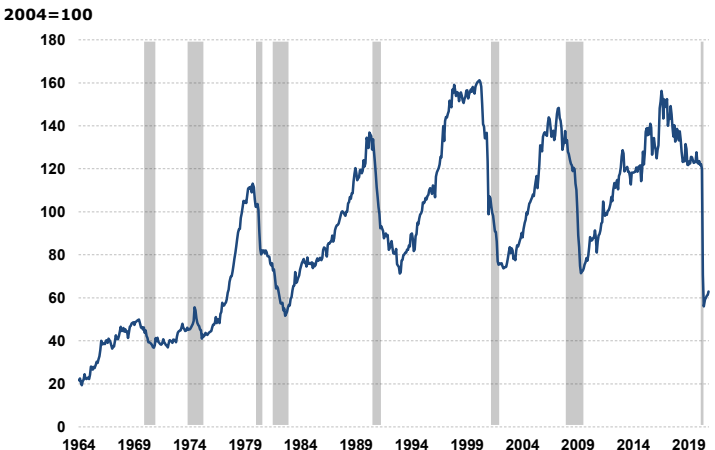
January 1970 to October 2020, S.A.



* Source: WA State Employment Security, ERFC

Washington State Help Wanted Index

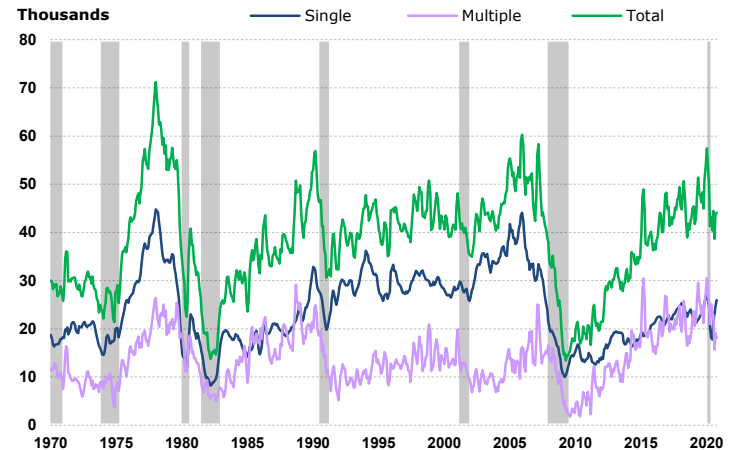
January 1964 to October 2020



* Source: The Conference Board, ERFC

Housing Units Authorized in Washington State

January 1970 to October 2020, 3mma, SAAR

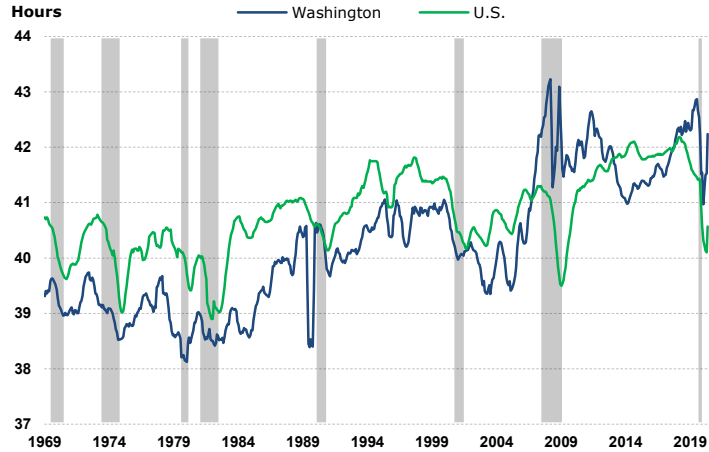


* Source: Census Bureau, ERFC

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

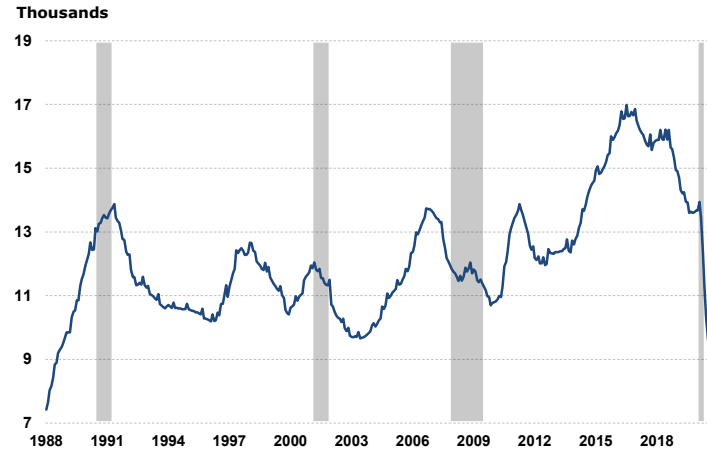
June 1969 to October 2020, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

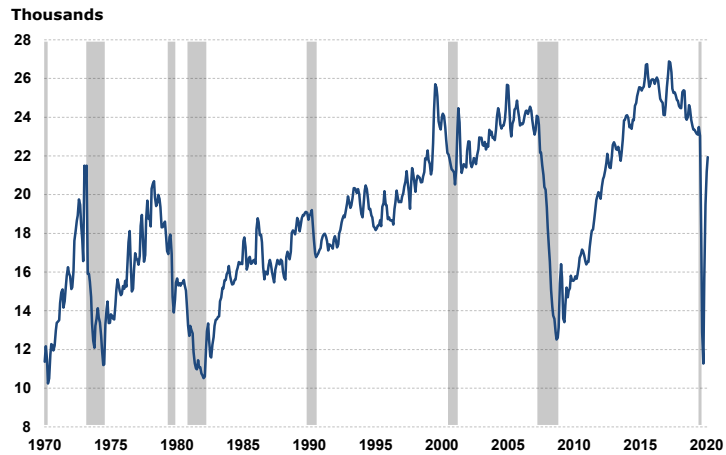
January 1988 to October 2020, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

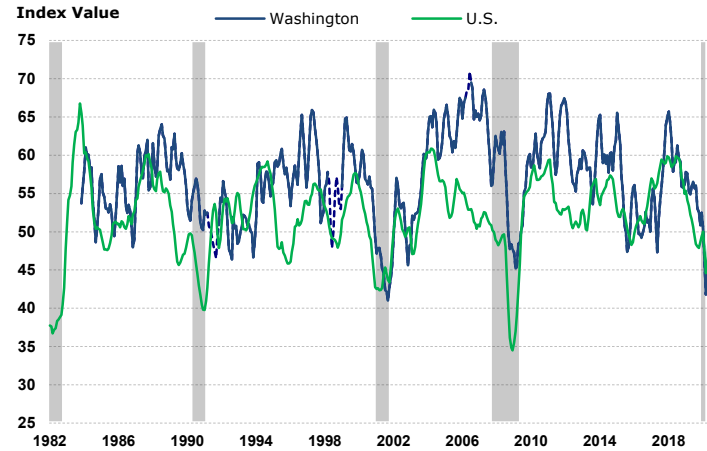
September 1970 to October 2020, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

March 1982 to October 2020, 3-Month Moving Average, S.A.

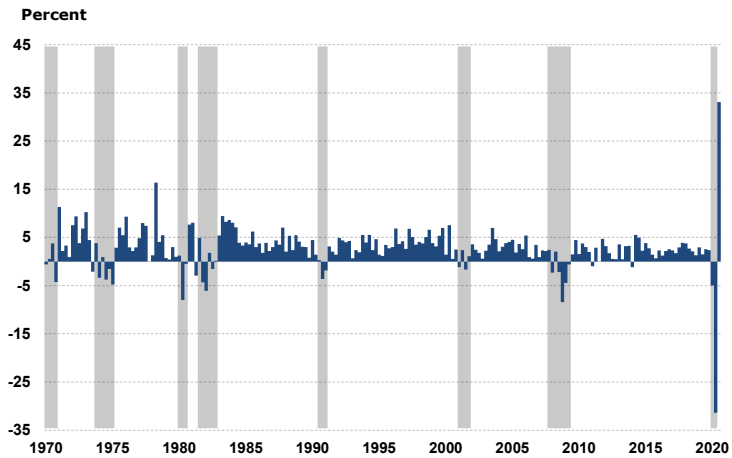


* Source: Institute for Supply Management, ISM-WW, ERFC

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

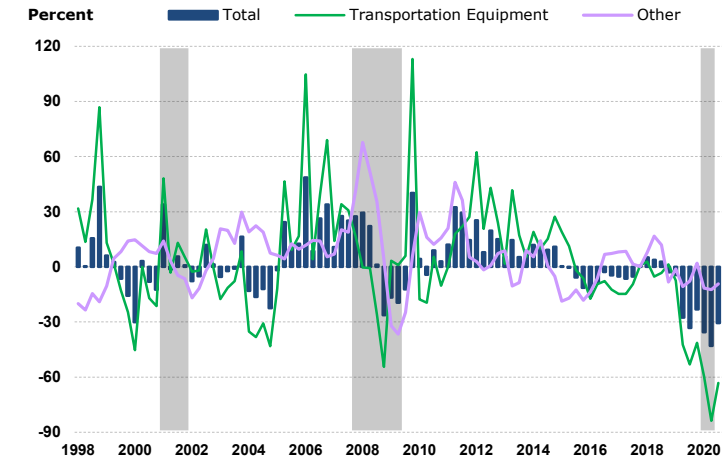
1970Q1 to 2020Q3, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

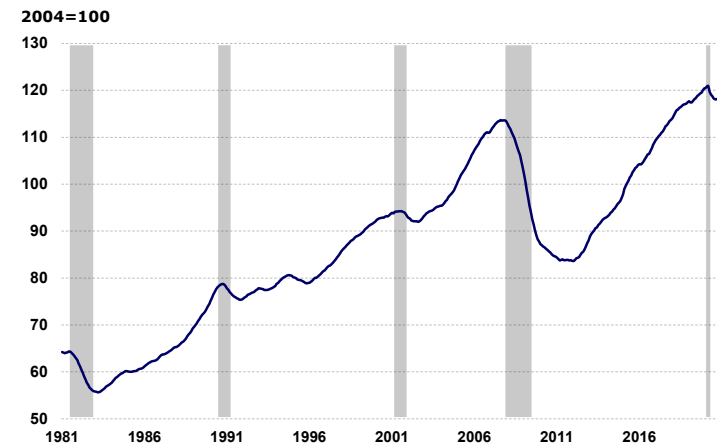
1998Q1 to 2020Q3, Year-over-year percent change



* Source: WISER

Washington State Construction Index

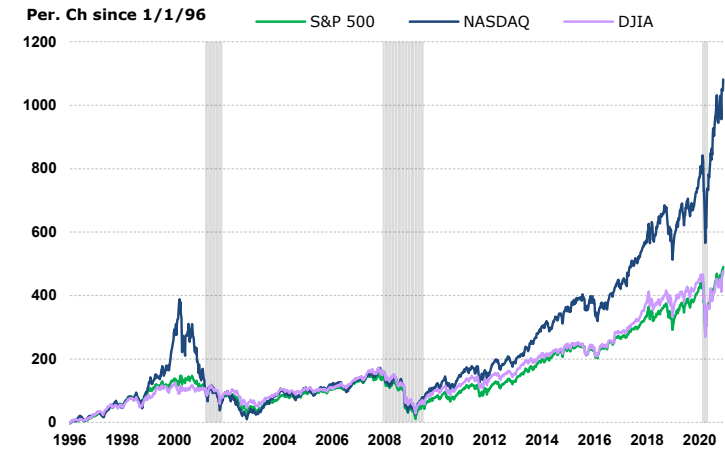
January 1981 to October 2020, 12mma



* Source: ERFC

National Stock Indexes

January 1, 1996 to November 27, 2020

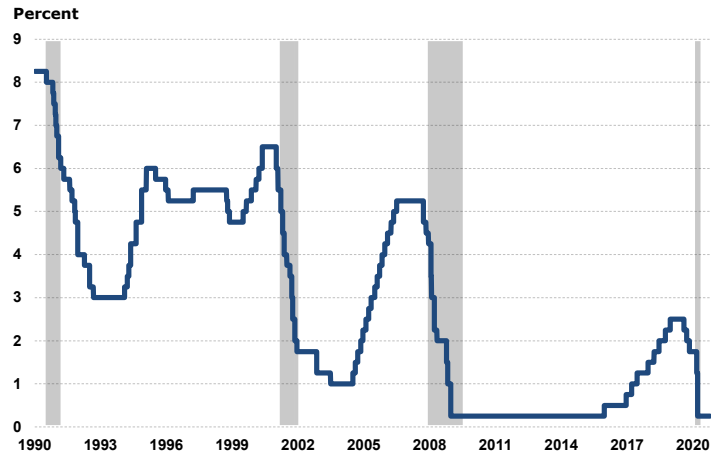


* Source: ERFC

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

Federal Funds Target Rate

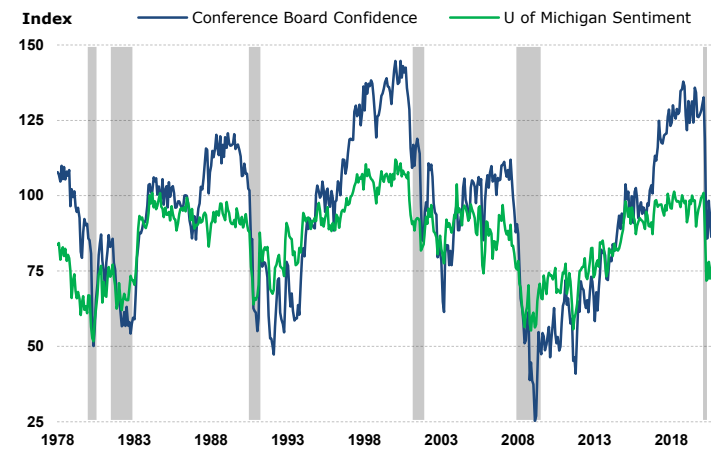
January 1, 1990 to November 27, 2020



* Federal Reserve

Consumer Confidence

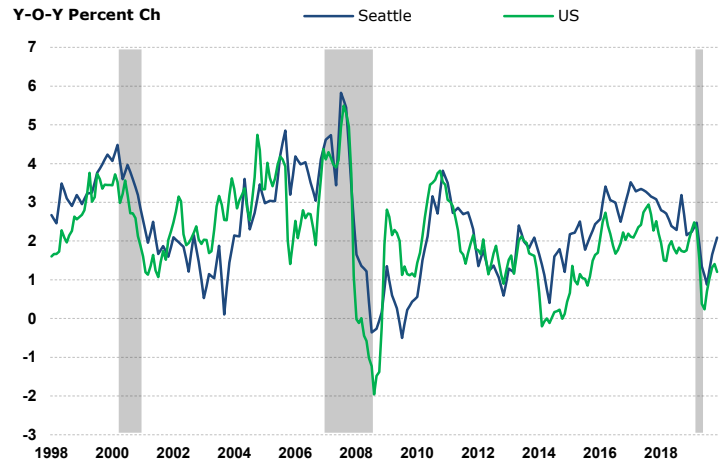
March 1978 to November 2020



* Source: The Conference Board, University of Michigan

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

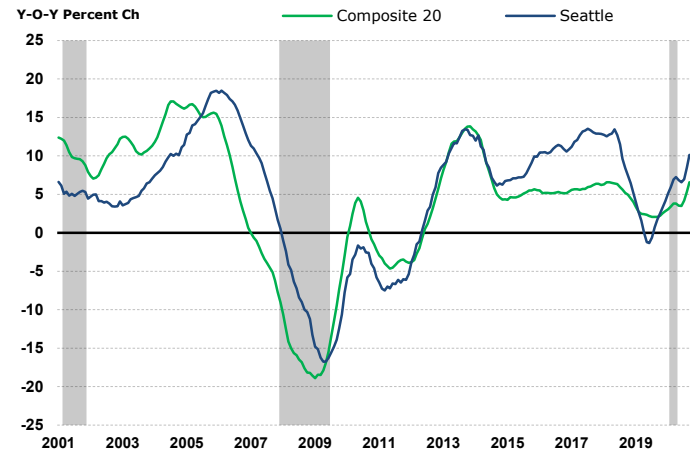
December 1998 to October 2020



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to September 2020, SA



* Source: Case Shiller, ERFC



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 2018, for example, ran from July 1, 2017 through June 30, 2018.

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 and the Washington Opportunity Pathways 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.