

Washington State Economic and Revenue Forecast

September 2020
Volume XLV, No. 3



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Prepared by the
Economic and Revenue Forecast Council

September 2020
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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 October 2, 2020.

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Executive Summary

- **The COVID-19 pandemic and resulting social distancing and business shutdowns have severely weakened the economy. As the economy has opened, economic activity has increased but remains below pre-pandemic levels.**
- **The forecast for GDP growth in 2020 is now -5.6%, up from -6.1% in the June forecast. For 2021, real GDP growth is 3.8%, down from 4.0% in the previous forecast. Our forecast for GDP growth in 2022 is unchanged at 3.9%. GDP growth is down slightly on balance from 2023 to 2025.**
- **The Washington economy has begun to recover from the recession but remains well below pre-Covid activity.**
- **The state's economy has recovered nearly half the jobs lost in March and April.**
- **Washington exports continue to decline, mostly because of transportation equipment.**
- **The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-pandemic outlook.**
- **General Fund-State (GF-S) revenue collections since the June forecast have come in \$963 million (20.5%) above the forecasted amount.**
- **The GF-S forecast was increased by \$2.1 billion in the 2019-21 biennium, \$2.2 billion in the 2021-23 biennium and \$2.5 billion in the 2023-25 biennium.**
- **The forecast of total revenue for funds subject to the budget outlook process was increased by \$2.2 billion in the 2019-21 biennium, \$2.4 billion in the 2021-23 biennium and \$2.6 billion in the 2023-25 biennium.**
- **Though the September forecast restores about half of the revenue reduction from the June forecast, expected revenue for the current and subsequent biennia is still over \$4 billion less than expected in February.**

U.S. Economic Forecast

The United States officially entered recession in February 2020

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 expansion lasted 128 months, the longest on record. As the economy has

opened, economic activity has increased but remains below pre-pandemic levels.

Our forecast was based on the September IHS Markit forecast

The economic forecast is based on a modified version of IHS Markit's September 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 -5.6%, up from -6.1% in the June forecast. For 2021, real GDP growth is 3.8%, down from 4.0% in the previous forecast. The Blue Chip long-range forecast has not changed since early March and does not reflect impacts from the COVID-19 pandemic. Instead of using the long-range forecast from Blue Chip, we extended the short-term Blue Chip 2021 forecast to approach IHS GDP levels by 2025. Our forecast for GDP growth is 3.9% for 2022, 2.8% for 2023, 2.5% for 2024, and 2.3% for 2025. This compares to GDP growth rates in the June forecast of 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025.

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, while below July's peak, remain elevated until a vaccine becomes available in mid-2021. Until then, faced with regional outbreaks of the virus, states haltingly attempt to reopen their economies.

Washington Economic Forecast

The Washington economy has begun to recover from the recession but remains well below pre-Covid activity

The Washington economy has begun to recover from the recession but remains well below pre-Covid activity. As of August, the state's economy has recovered nearly half the jobs lost in March and April. Washington's unemployment rate declined to 8.5% in August from 16.3% in April. Washington housing construction declined in the second quarter but exceeded the June forecast. Washington exports continue to decline, mostly because of transportation equipment. Seattle consumer price inflation exceeded the national average due to higher food and energy inflation. Washington personal income growth was second highest in the nation in 2019.

The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-pandemic outlook

The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-pandemic outlook. We expect a 4.7% decline in Washington employment this year compared to the 5.5% decrease in the June forecast. We expect employment growth to average 2.3% per year in 2021 through 2025 compared to the 2.1% average rate expected in June. Our forecast for nominal personal income growth this year is 7.7%, up from 3.8% in the June forecast. The large upward revision is due mainly to higher transfer payments this year than previously expected. We have revised personal income growth next year down from a positive 2.0% to a negative 1.9%. Our new forecast for nominal personal income

growth in 2023 through 2025 averages 4.6% per year, which is up from the 3.9% rate expected in the June forecast. We expect 44,200 housing units authorized by building permits this year, up from 37,100 units in the June forecast but down from 2019. We expect permits to average 41,300 units in 2021 through 2025, also up from 39,000 units in the June forecast. We expect the Seattle CPI to rise 1.6% this year compared to 1.4% in the June forecast. Rising energy prices will add to inflation in coming years, especially in 2021. We now expect Seattle inflation to average 2.1% per year in 2021 through 2025 compared to 1.9% per year in the June forecast.

Revenue Forecast

The economic disruption caused by the COVID-19 pandemic, while still severe, was lower than forecasted in June

At the time of the June forecast, revenue collections were down significantly and the path of the recovery was unclear. In the period since June, the recovery in revenue collections has been much stronger than expected, mainly in the sectors of retail trade and real estate. The most recent collection period, however, represented taxable activity in July, when a \$600 per week supplemental unemployment benefit was in effect and other federal benefits, though winding down, were still present. The forecast does not therefore expect that collections over the next several months will show the same strength. Nevertheless, income, employment, and housing activity are currently at higher levels than expected in June, which will create more revenue going forward. Though this forecast restores about half of the revenue drop of the June forecast, expected revenue for the current and subsequent biennia is still over \$4 billion less than expected in February.

GF-S forecast change by biennium (billions):

19-21: \$2.1
21-23: \$2.2
23-25: \$2.5

In the current biennium, General Fund-State (GF-S) revenue collections that are tracked monthly came in \$963 million higher than forecasted. The forecasted increase in economic activity for the rest of the biennium added \$1.097 billion, resulting in a total forecast increase of \$2.060 billion. The GF-S forecast for the 2021-23 biennium was increased by \$2.246 billion and the forecast for the 2023-25 biennium was increased by \$2.460 billion. The September 2020 forecast for GF-S revenue totals \$48.189 billion in the 2019-21 biennium, \$52.181 billion in the 2021-23 biennium and \$55.917 billion in the 2023-25 biennium.

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

19-21: \$2.2
21-23: \$2.4
23-25: \$2.6

The forecast of total revenue for funds subject to the budget outlook for the 2019-21 biennium is \$50,360.8 million, \$2,238.6 million more than the June forecast. The forecast of total revenue for the 2021-23 biennium is \$54,337.8 million, \$2,419.3 million more than the June forecast. The forecast for the 2023-25 biennium is \$57,979.4 million, \$2,612.3 million more than the June forecast.



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

- **The COVID-19 pandemic and resulting social distancing and business shutdowns have severely weakened the economy. As the economy has opened, economic activity has increased but remains below pre-pandemic levels.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **U.S. real GDP growth plummeted 31.4% (SAAR) in the second quarter because of the COVID-19 crisis and efforts taken to contain it.**
- **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 are increasing after an unprecedented drop due to the pandemic. U.S. production has fallen.**
- **The forecast for GDP growth in 2020 is now -5.6%, up from -6.1% in the June forecast. For 2021, real GDP growth is 3.8%, down from 4.0% in the previous forecast. Our forecast for GDP growth in 2022 is unchanged at 3.9%. GDP growth is down slightly on balance from 2023 to 2025.**
- **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

The United States officially entered recession in February 2020

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 expansion lasted 128 months, the longest on record. As the economy has opened, economic activity has increased but remains below pre-pandemic levels.

Policymakers have approved trillions of dollars in stimulus

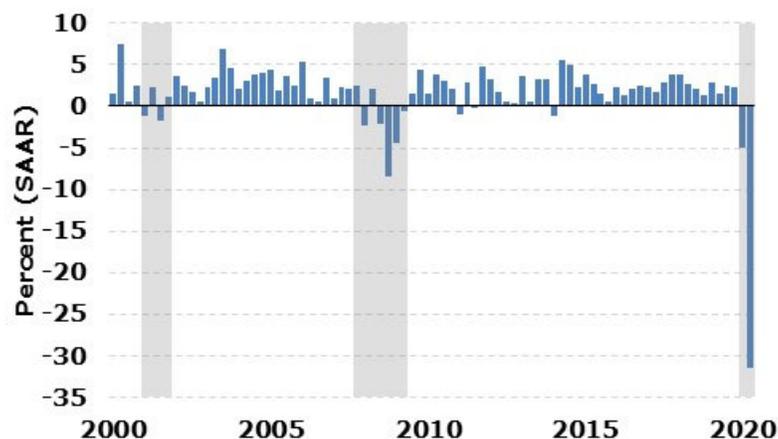
Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic. The federal government passed a \$2.3 trillion stimulus package to

address the impacts of the COVID-19 pandemic. The Coronavirus Aid, Relief and Economic Security (CARES) 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). In addition, the Federal Reserve has authorized another \$2.3 trillion in asset purchases, liquidity measures, and loan programs to assist the economy. There have also been another \$400 billion in administrative actions as Congress debates more stimulus measures.

U.S. real GDP plummeted 31.4% (SAAR) in the second quarter

U.S. real GDP growth plummeted 31.4% (SAAR) in the second quarter because of the COVID-19 crisis and efforts taken to contain it (see Figure 1.1). Weakness was widespread across sectors. Consumer spending plunged 33.2% (SAAR), subtracting 24.0 points from topline GDP. Consumer spending on services fell 41.8% (SAAR) due to many nonessential business closures. Consumer spending on goods was hit slightly less hard, declining 10.8% (SAAR) with growth in nondurable spending (-15.0%) declining more than durable goods (-1.7%). Fixed investment declined 29.2% (SAAR) in the second quarter. Residential construction fell 35.6% (SAAR) and nonresidential construction fell 27.2% (SAAR) as construction companies were not able to start new projects as social distancing rules went into full effect. Government spending increased 2.5% (SAAR) due primarily to a 37.6% (SAAR) increase in federal nondefense spending. Exports declined 64.4% (SAAR) and imports declined 54.1% (SAAR) as trade came to a halt. Net exports resulted in a net positive addition to GDP growth of 0.6 points.

Figure 1.1: U.S. GDP Growth



Source: U.S. BEA; data through 2020 Q2

After declining an unprecedented 20.7 million jobs in April, nonfarm payrolls have grown in each of the past five months. States re-opening their economies and support from the

Total nonfarm employment remains 9.4 million lower than the pre-pandemic March 2020 level

Paycheck Protection Program likely led to a large number of workers being recalled to their jobs. Job gains have been trending down, however, as the pandemic has persisted. In September, the economy added 661,000 new jobs. Government job losses due to temporary Census workers being laid off subtracted 41,000 from total employment growth. Durable goods manufacturing employment accelerated, adding 93,000 jobs in September. Leisure and hospitality employment accelerated as well, despite the ongoing pandemic, adding 318,000 jobs. Retail trade employment gains, while still positive, slowed to 142,400 in September due to a sharp slowdown in temporary help services. Total nonfarm employment remains 9.4 million lower than the pre-pandemic March 2020 level.

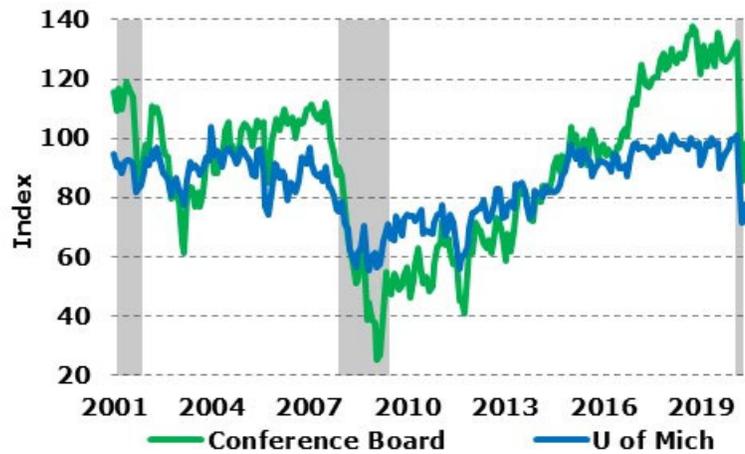
The unemployment rate has trended down after spiking in April

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 7.9% in September. Prior to the pandemic, the unemployment rate was at a historic low of 3.5% in February. The labor force participation rate was at 61.4% in September, down from a cyclical high of 63.4% in February. Average hourly earnings rose 2 cents to \$29.47 and weekly hours increased 0.3 hours to 34.7 hours in September.

Consumer attitudes have started to improve

Consumer confidence has slowly started to improve after plummeting in April as the pandemic weighed heavily on consumer attitudes (see Figure 1.2). The Conference Board measure rose 15.5 points in September to 101.8. This is the highest reading since March but well below pre-pandemic levels. The April reading was 85.7. Both the present conditions and future expectations had strong increases. The University of Michigan Consumer Sentiment index increased in September as well, gaining 6.3 points to 80.4. Like the Conference Board measure, sentiment is above the April reading but remains lower than before the pandemic. In September both the current conditions component and future expectations increased. Despite the sharp drop in consumer attitudes in both measures, confidence remains higher than in the previous recession. Consumers are anticipating that employment will bounce back as states reopen nonessential businesses.

Figure 1.2: Consumer Confidence and Sentiment



Source: Conference Board, University of Michigan; data through September 2020

Oil prices have recovered after plunging in April

Oil prices are recovering after plunging in April. Brent spot crude prices are now at \$41 for the fourth week of September 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 \$40 per barrel in the fourth week of September. 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. Prior to the pandemic, U.S. production was at an all-time high at 12.866 million barrels per day (bpd) in November. The latest data from June show a decline to 10.436 million bpd (see Figure 1.3). The Baker Hughes rig count has declined sharply since the decline in oil prices. In August, the rig count was 250, a sharp decline from 926 a year ago.

Figure 1.3: U.S. Crude Oil Production



Source: U.S. Energy Information Administration; data through June 2020

Inflation has started to increase

Headline inflation has started to increase again after dropping sharply at the onset of the pandemic. The Consumer Price Index (CPI) increased 0.4% in August. Year-over-year, the CPI was up just 1.3% in August. A year ago, headline inflation was 1.7%. 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 16.8% since last year while energy as a whole is down 9.0%. Other sectors affected by stay-at-home orders have been impacted as well. Apparel prices are down 5.9% and transportation service prices are down 4.0%. Food prices are up 4.1% annually, partially due to supply disruptions caused by the pandemic. Shelter cost inflation has remained steady and is now up 2.3% over the year. Core consumer prices, which exclude food and energy, were up 1.7% over the year.

Home prices appear to have been minimally impacted by the pandemic

Home prices appear to have been minimally impacted by the pandemic. The seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index increased 0.6% in July following no change the month before and a 0.03% decline in May. Home prices are now 4.0% higher than a year ago. The Federal Housing Finance Agency house price index showed a similar increase for July, rising 1.0% on a monthly basis and up 6.5% from a year ago. Homebuilder confidence has completely recovered and is now above pre-pandemic levels. In September, confidence rose 5 points to 83, well above the trough of 30 in April. A year ago, homebuilder confidence was at 68. Index levels above 50 indicate positive sentiment. Mortgage rates have recently dropped, and are now at an all-time low. This is providing support for the housing market as is tight supply. The average rate on the 30-year fixed rate loan was 2.90% in the fourth week of September, down from 3.64% a year ago.

The housing market has recovered

The housing market has recovered to pre-pandemic levels. Housing starts fell 5.1% in August but remain 2.8% above a year ago. Single-family starts in May increased 4.1% while volatile

multi-family starts declined 22.7%. Both segments are well above the recent trough in April. Housing permits declined 0.5% in August after increasing 17.9% in July. Single-family permits increased 6.2% while multi-family permits declined 13.4%. Total permits remain up 0.3% from a year ago. New home sales increased 4.8% in September to 1,011,000 (SAAR). New home sales are up 43.2% from a year ago.

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 declined to 55.4 (index values below 50 indicate contraction) in September from 56.0 in August. Supply chain disruptions due to the closure of nonessential businesses appear to be resolving. The new orders and production components both slowed in September, but remain strong at over 60. The employment component increased 3.2 points in September, but remains just below 50 at 49.6. The latest G-17 report from the Federal Reserve indicates manufacturing output rose 1.0% in August but is still 6.7% below its pre-pandemic level in February. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 1.8% in August. New orders are now 1.4% 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 second quarter declined 42.9% year over year. Transportation equipment exports declined 83.7% year over year and now make up only 12.2% of total exports. Typically, transportation equipment exports make up around half of total exports. Oil and gas exports continue to be strong, up 10.3% since last year. 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.

Forecast

Our forecast was based on the September IHS Markit forecast

The economic forecast is based on a modified version of IHS Markit's September 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 -5.6%, up from -6.1% in the June forecast. For 2021, real GDP growth is 3.8%, down from 4.0% in the previous forecast. The Blue Chip long-range forecast has not changed since early March and does not reflect impacts from the COVID-19 pandemic. Instead of using the long-range forecast from Blue Chip, we extended the short-term Blue Chip 2021 forecast to approach IHS GDP levels by 2025. Our forecast for GDP growth is 3.9% for 2022, 2.8% for 2023, 2.5% for 2024, and 2.3% for 2025. This compares to GDP growth rates in the June forecast of 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025.

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, while below July's peak, remain elevated until a vaccine becomes available in mid-2021. Until then, faced with regional outbreaks of the virus, states haltingly attempt to reopen their economies.

The forecast includes the stimulus and tariffs

The September forecast includes the four stimulus packages enacted so far this year. These provide over \$3 trillion (at an annual rate) of income support in the middle quarters of 2020. The forecast also assumes the recent Executive Orders signed by the president are superseded by legislation that extends emergency unemployment benefits of \$300/week from August through December and authorizes a second round of checks to households starting in October. The forecast also 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. The September forecast calls for GDP growth to turn 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 June 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 \$48 in 2025. 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 June forecast. We expect inflation to be 1.1% this year, up from 0.9% 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 1.9% in 2021 and reach 2.0% in 2025. The June forecast had inflation reaching 1.8% in 2025. Core inflation (minus food and energy) is expected to be 1.3%

this year and next year. The forecast calls for core inflation to reach 2.0% in 2025.

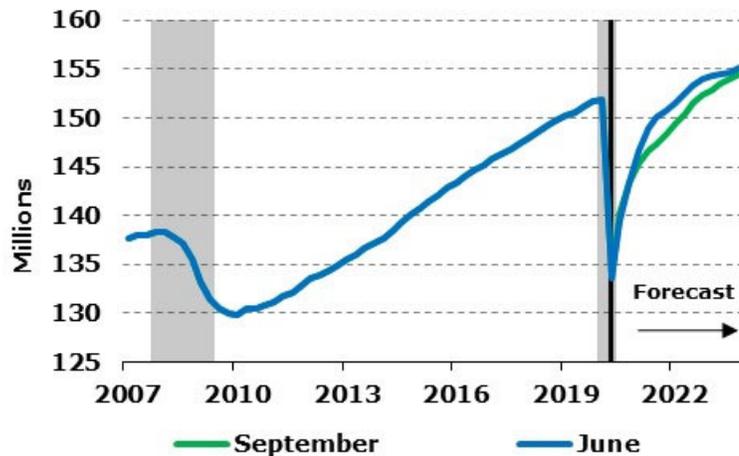
Consumer spending growth is expected to decline this year

Real consumer spending declined at a 34.1% rate in the second quarter of 2020 as COVID-19 caused economic activity to contract. Businesses that were forced to close are now gradually reopening. We expect real consumer spending to rebound in the third quarter to a 29.3% rate. The forecast calls for a 5.0% reduction in real consumer spending this year. The June forecast expected a decline of 6.8%. With the economy returning to growth, we expect real consumption to increase 4.1% in 2021. The forecast then calls for consumption growth to trend downward as the recovery continues, reaching 2.4% 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 3.2% in 2021, bringing average annual employment to 146.9 million jobs; still less than the pre-pandemic annual average of 150.9 million jobs in 2019. We expect the recovery in employment to be slightly slower than we anticipated in June (see Figure 1.4). We expect job growth to continue as the recovery continues but to trend downward throughout the forecast, reaching 0.9% in 2025. We expect the unemployment rate to average 8.5% this year, down from 8.9% forecasted in February. We expect the unemployment rate to decrease to 6.5% in 2021 and then trend down to 3.6% by 2025.

Figure 1.4: U.S. Total Nonfarm Employment



Source: U.S. Bureau of Labor Statistics, September 2020 ERFC forecast; historical data through 2020 Q2

Business investment is expected to fall this year

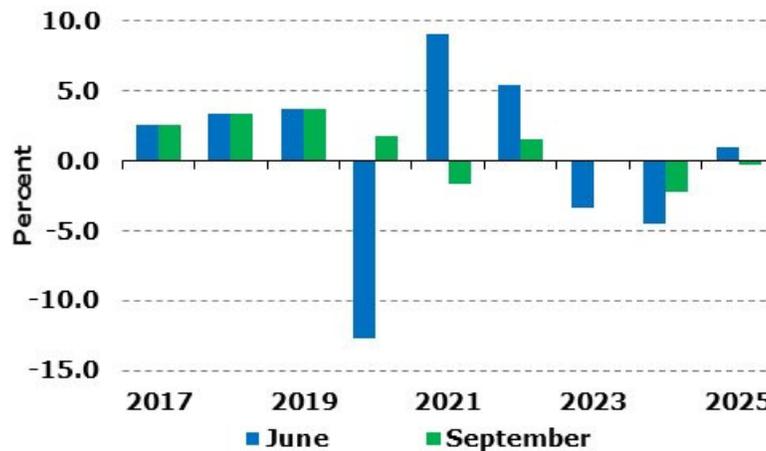
Real nonresidential fixed investment is expected to fall 5.8% this year due to plummeting demand, aversion to risk, and tighter lending standards. The drop in oil prices has led to a downshift in investment by energy companies as well. The capital-

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 12.3% this year followed by a 7.5% drop in 2021. The forecast then calls for growth to average 5.0% in 2022 through 2025. Real equipment investment is expected to decline 7.5% this year. Much of this decline is due to a drop in business spending on motor vehicles and parts. We expect growth to average 4.4% from 2021 through 2025. We expect real nonresidential fixed investment growth to grow 1.5% in 2021 and then average 4.4% 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 more stable compared to June. The September forecast calls for housing starts to increase 1.8% this year. The June forecast expected a decline of 12.7% (see figure). We expect single-family housing starts to increase 2.2% and the multi-family segment to increase 0.9% this year. We expect growth to be uneven throughout the remainder of the forecast, ranging from an increase of 1.6% in 2022 to a 2.2% decline in 2024. In 2025, the forecast calls for 1.28 million new housing starts, just under the 1.30 million starts in 2019.

Figure 1.5: U.S. Housing Start Growth



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

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

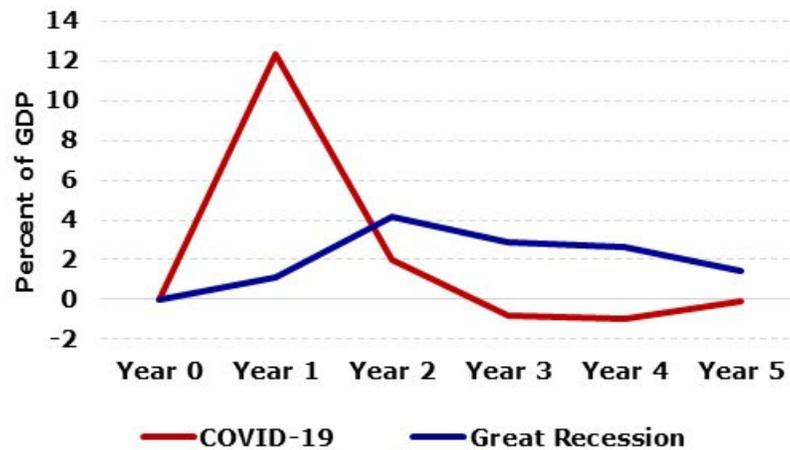
The COVID-19 pandemic has affected economies throughout the world. Economic growth of major U.S. trading partners is expected to decline 6.7% this year, up slightly from the 6.8% decline anticipated in June. We expect U.S. major trading partner growth of 4.5% next year, up from 3.5% in the June forecast. We expect foreign growth to average 2.8% from 2022 through 2025. Real U.S. exports are forecasted to decline 11.2% this year. The grounding of the Boeing 737 MAX has

contributed to the decline in exports, however recertification appears to be on schedule for this fall. Resumed deliveries of these aircraft will provide a boost to exports. We expect real export growth of 11.3% in 2021 as the global economy recovers. Real export growth is then expected to trend downward and reach 4.3% in 2025.

The federal government has enacted \$3.6 trillion in stimulus

The federal government has enacted legislation totaling \$3.6 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 by October 1st of this year (see figure 1.6). In addition, the forecast assumes additional fiscal stimulus will occur this year which includes unemployment benefits of \$300/week and direct payments to households. 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 \$3,740 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 in 2024 and 2025.

Figure 1.6: Stimulus as a Percent of GDP



Source: Committee for a Responsible Federal Budget

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

- COVID-19 infections/deaths don't taper over the summer
- There is a second wave of COVID-19
- Continued social distancing measures cause widespread business failures
- No additional fiscal stimulus
- 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 developed
- Further 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	18,672.2	18,499.9	19,291.4	19,936.9	20,450.0	20,945.6
% Ch	2.9	2.5	-1.1	-0.9	4.3	3.3	2.6	2.4
Real Consumption	12,758.6	13,080.6	12,898.3	12,816.2	13,348.7	13,779.0	14,149.1	14,493.8
% Ch	2.7	2.5	-1.4	-0.6	4.2	3.2	2.7	2.4
Real Nonresidential Fixed Investment	2,610.0	2,748.5	2,708.7	2,613.4	2,711.2	2,843.8	2,970.8	3,096.6
% Ch	5.4	5.3	-1.4	-3.5	3.7	4.9	4.5	4.2
Real Residential Fixed Investment	618.4	600.9	604.0	624.1	617.2	614.6	614.5	617.4
% Ch	2.5	-2.8	0.5	3.3	-1.1	-0.4	0.0	0.5
Real Personal Income	16,251.8	16,726.6	17,359.2	17,352.0	17,214.0	17,763.9	18,233.2	18,687.8
% Ch	3.4	2.9	3.8	0.0	-0.8	3.2	2.6	2.5
Real Per Capita Income (\$/Person)	49,801	51,006	52,675	52,347	51,565	52,846	53,876	54,852
% Ch	2.8	2.4	3.3	-0.6	-1.5	2.5	1.9	1.8
Price and Wage Indexes								
PCE Price Index (2012=100)	107.1	109.0	110.5	112.1	114.2	116.0	117.8	120.0
% Ch	1.9	1.8	1.3	1.4	1.9	1.5	1.6	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.481	2.533	2.573	2.619	2.681	2.728	2.776	2.833
% Ch	2.3	2.1	1.6	1.8	2.4	1.7	1.8	2.1
Employment Cost Index (Dec. 2005=1.0)	1.314	1.354	1.395	1.423	1.464	1.515	1.563	1.610
% Ch	2.8	3.1	3.0	2.0	2.9	3.5	3.2	2.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,087.5	21,024.4	21,083.8	21,109.8	22,320.5	23,492.5	24,560.0	25,667.6
% Ch	5.1	4.7	0.3	0.1	5.7	5.3	4.5	4.5
Personal Income	17,407.8	18,239.0	19,177.7	19,441.1	19,663.0	20,599.9	21,478.1	22,423.9
% Ch	5.4	4.8	5.1	1.4	1.1	4.8	4.3	4.4
Employment (Millions)								
U.S. Civilian Labor Force	161.2	162.7	162.6	161.7	164.3	166.3	167.9	169.1
Total U.S. Employment	154.5	156.5	153.0	149.2	154.9	158.8	161.3	163.0
Unemployment Rate (%)	4.11	3.77	6.00	7.75	5.78	4.48	3.92	3.59
Nonfarm Payroll Employment	147.72	149.93	147.15	143.90	148.90	152.55	154.76	156.48
% Ch	1.5	1.5	-1.9	-2.2	3.5	2.4	1.5	1.1
Manufacturing	12.55	12.79	12.57	12.10	12.18	12.38	12.40	12.36
% Ch	1.4	1.9	-1.7	-3.8	0.6	1.7	0.2	-0.3
Durable Manufacturing	7.83	8.03	7.87	7.51	7.54	7.73	7.74	7.73
% Ch	1.7	2.5	-2.0	-4.6	0.5	2.5	0.1	-0.1
Nondurable Manufacturing	4.72	4.76	4.70	4.60	4.63	4.65	4.66	4.63
% Ch	1.1	0.9	-1.2	-2.3	0.8	0.4	0.3	-0.6
Construction	7.12	7.41	7.39	7.09	7.08	7.19	7.31	7.45
% Ch	4.0	4.1	-0.2	-4.1	-0.2	1.5	1.7	1.9
Service-Providing	127.35	128.99	126.48	124.12	129.08	132.41	134.47	136.07
% Ch	1.4	1.3	-1.9	-1.9	4.0	2.6	1.6	1.2
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	58.6	60.8	46.7	41.3	43.7	44.9	46.0	47.1
Personal Saving/Disposable Income (%)	7.5	7.9	12.5	13.6	9.0	8.8	8.7	8.7
Auto Sales (Millions)	5.7	5.1	3.8	3.4	3.4	3.4	3.5	3.5
% Ch	-11.6	-11.1	-24.1	-12.8	0.1	1.9	1.3	0.4
Housing Starts (Millions)	1.252	1.219	1.317	1.329	1.308	1.319	1.304	1.286
% Ch	4.4	-2.6	8.0	0.9	-1.6	0.8	-1.1	-1.4
Federal Budget Surplus (Billions)	-844.9	-979.1	-2,237.2	-2,682.4	-1,396.3	-1,232.5	-1,108.3	-1,058.9
Net Exports (Billions)	-564.3	-640.0	-553.2	-690.9	-781.6	-676.1	-569.1	-526.9
3-Month Treasury Bill Rate (%)	1.41	2.26	1.20	0.10	0.10	0.09	0.09	0.11
10-Year Treasury Note Yield (%)	2.57	2.74	1.41	0.76	1.07	1.26	1.33	1.58
Bond Index of 20 G.O. Munis. (%)	3.67	4.01	3.20	2.26	2.41	2.41	2.42	2.58
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	3.06	3.09	3.15	3.17	3.37

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

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

Table 1.4

Fiscal Years

Forecast Comparison

Forecast 2021 to 2025

	2019	2020	2021	2022	2023	2024	2025
U.S.							
Real GDP							
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
June	18,866.4	18,575.2	18,141.4	18,996.3	19,711.8	20,224.0	20,675.9
% Ch	2.6	-1.5	-2.3	4.7	3.8	2.6	2.2
PCE Price Index							
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
June	108.9	110.3	111.2	112.8	114.5	116.3	118.3
% Ch	1.7	1.3	0.8	1.5	1.5	1.6	1.7
Unemployment Rate							
September	3.77	6.00	7.75	5.78	4.48	3.92	3.59
June	3.77	5.98	8.03	5.53	4.54	4.33	4.25
Mortgage Rate							
September	4.43	3.53	3.06	3.09	3.15	3.17	3.37
June	4.43	3.55	3.28	3.05	2.98	3.14	3.34
3 Month T-Bill Rate							
September	2.26	1.20	0.10	0.10	0.09	0.09	0.11
June	2.26	1.22	0.16	0.06	0.08	0.10	0.16



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy has begun to recover from the recession but remains well below pre-Covid activity.**
- **The state’s economy has recovered nearly half the jobs lost in March and April.**
- **Washington’s unemployment rate declined to 8.5% in August from 16.3% in April.**
- **Washington housing construction declined in the second quarter but exceeded the June forecast.**
- **Washington exports continue to decline, mostly because of transportation equipment.**
- **Seattle consumer price inflation exceeded the national average due to higher food and energy inflation.**
- **Washington personal income growth was second highest in the nation in 2019.**
- **The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-pandemic outlook.**

Current Conditions

The Washington economy has begun to recover from the recession but remains well below pre-Covid activity

The Washington economy has begun to recover from the recession but remains well below pre-Covid activity. As of August, the state’s economy has recovered nearly half the jobs lost in March and April. Washington’s unemployment rate declined to 8.5% in August from 16.3% in April. Washington housing construction declined in the second quarter but exceeded the June forecast. Washington exports continue to decline, mostly because of transportation equipment. Seattle consumer price inflation exceeded the national average due to higher food and energy inflation. Washington personal income growth was second highest in the nation in 2019.

We have three months of new Washington employment data since the June forecast was released. Employment continued to rise in June, July, and August following the historic decline in March and April. Total nonfarm payroll employment rose

The state's economy has recovered nearly half the jobs lost in March and April

190,800 (seasonally adjusted) in the last three months which was 81,800 more than expected in the June forecast. As of August, the state's economy has recovered nearly half the jobs lost in March and April. Private services-providing sectors added 161,700 jobs in the three-month period. The manufacturing sector lost 3,700 jobs which was more than accounted for by the loss of 6,500 aerospace jobs. Construction employment increased by 10,800. Federal government employment increased by 10,000 however 5,900 of those were temporary Census jobs. State and local government payrolls expanded by 11,900 jobs in June, July, and August.

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 2,900 (0.1%) from the estimated level of total employment in May 2020. August employment is 78,900 (2.5%) higher than expected in the June forecast because of the faster-than-expected employment growth in June, July, and August.

Unemployment is down significantly

Washington's unemployment rate declined to 8.5% in August from 10.2% in July. The August 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 rose remain elevated

Initial claims for unemployment insurance have declined from the unprecedented levels of the spring but remain high. The seasonally adjusted number of claims in Washington declined to 25,400 in the week ending September 26, 2020 from 28,400 in the previous week. The four-week moving average declined from 28,100 to 27,600. While the number of initial claims is down 87% since the peak in late March, it is still nearly than four times its year-ago level.

Washington exports declined over the year for a seventh consecutive quarter

Washington exports declined over the year for a seventh consecutive quarter. Year-over-year exports decreased 42.9% in the second quarter of 2020. The large decline was mostly because of transportation equipment exports (mostly Boeing planes) which fell 83.7% over the year (see Figure 2.1). The second quarter of 2019 had already been severely depressed by Boeing's suspension of 737 Max deliveries in March 2019. Second quarter exports of agricultural products decreased 2.8% over the year and exports of all other commodities (mostly manufacturing) declined 16.4% over the year.

Figure 2.1: Washington Transportation Equipment Exports

Washington transportation equipment exports (mostly Boeing planes) fell 83.7% over the year



Source: Wiser Trade; data through 2020 Q2

Washington housing permits declined in the second quarter

Washington housing construction declined in the second quarter but exceeded the June forecast. Washington housing units authorized by building permits averaged 40,300 (SAAR) in the second quarter of 2020, down from 49,800 in the first quarter. Second quarter permits consisted of 17,800 single-family units and 22,600 multi-family units. The June forecast predicted 12,300 single-family units and 16,700 multi-family units for a total of 28,900 units in the second quarter. Housing construction remained moderate at the beginning of the third quarter. In July and August, single-family permits improved to an average of 23,900 units (SAAR) but multi-family units slowed to an average of 16,200 for a total of 40,100 units.

According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 0.9% in July

Seattle-area home prices increased in July after three consecutive monthly declines (see Figure 2.2). According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 0.9% in July following declines of 0.2% in each of the previous three months. The composite-20 index increased 0.6% in July, which was also better than the previous three months which grew 0.2%, 0.0%, and 0.0%. Since the reported figure for a given month is actually the average of the most recent three months, July's result was the first since March that did not include prices for the month of April, which was the low point in economic activity. Seattle home prices were up 7.0% over the year. In comparison, the composite-20 index was up 4.0% over the year. In July, Seattle home prices were up 102% since the December 2011 trough and exceeded the May 2007 peak by 41%.

Figure 2.2: Seattle Home Price Appreciation

Seattle-area home prices increased in July after three consecutive monthly declines



Source: S&P/Case-Shiller Home Price Indices; data through July 2020

Washington Manufacturing activity is declining again

The Institute of Supply Management - Western Washington Index (ISM-WW) indicated declining manufacturing activity again after briefly indicating growth. The index, which measures conditions in the manufacturing sector, declined to 48.9 in August from 56.4 in July and 50.9 in June (index values above 50 indicate growth while values below 50 indicate contraction). The index was below 50 in March, April, and May. The inventory and deliveries components indicated expansion in August while the employment component indicated contraction. The production and orders components were neutral at 50.

Washington car and truck sales declined in August

Washington car and truck sales declined slightly after three months of strong growth. The seasonally adjusted number of new vehicle registrations decreased 1.3% in August following increases of 20.4% in May, 75.9% in June, and 27.2% in July. Previously sales had declined 11.8% and 63.5% in March and April. The number of new vehicle registrations fell 11.4% over the year in August.

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

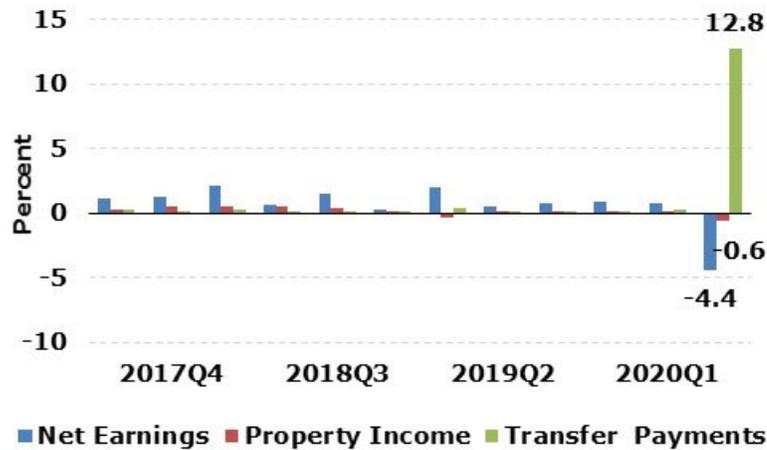
The simple (not annualized) growth rate was 7.8%

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 loss in net earnings and property income in the second quarter (see Figure 2.3).

Figure 2.3: Contributions to WA Personal Income Growth

Second quarter simple (not annualized) income growth of 7.8% is the sum of -4.4% from net earnings, -0.6% from property income, and +12.8% from transfer payments



Source: BEA, ERFC Calculations; data through 2020 Q2

Washington personal income growth was second highest in the nation in 2019

The September state personal income release also incorporated the results of the BEA's annual update of state personal income. The update revised annual estimates of state personal income for 2013 to 2019. The annual revision produced no major surprises. The BEA revised its 2019 personal income estimate down \$1.1 billion (0.2%). Wages and salaries were revised up \$0.4 billion (0.2%) but income from other sources was revised down \$1.5 billion (0.6%). Washington's 5.4% personal income growth rate in 2019 was the second highest among the states and District of Columbia and exceeded the 3.9% national average growth rate.

Seattle consumer price inflation exceeded the national average due to higher food and energy inflation

Seattle-area consumer price inflation exceeded the national average in August due to higher food and energy inflation. From August 2019 to August 2020, the Seattle CPI rose 1.7% compared to a 1.3% increase in the U.S. City Average index. However, core prices, which exclude food and energy, increased only 1.4% over the year in Seattle compared to 1.7% for the U.S. City Average. Over-the-year shelter-cost inflation in Seattle was 2.2% compared to the national rate of 2.3%. Seattle inflation excluding shelter exceeded the national average at 1.3% compared to 0.8%.

Washington State Forecast

The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-

The Washington forecast is generally more positive than the forecast adopted in June but substantially weaker than the pre-pandemic outlook

pandemic outlook. We expect a 4.7% decline in Washington employment this year compared to the 5.5% decrease in the June forecast. We expect employment growth to average 2.3% per year in 2021 through 2025 compared to the 2.1% average rate expected in June. Our forecast for nominal personal income growth this year is 7.7%, up from 3.8% in the June forecast. The large upward revision is due mainly to higher transfer payments this year than previously expected. We have revised personal income growth next year down from a positive 2.0% to a negative 1.9%. Our new forecast for nominal personal income growth in 2023 through 2025 averages 4.6% per year, which is up from the 3.9% rate expected in the June forecast. We expect 44,200 housing units authorized by building permits this year, up from 37,100 units in the June forecast but down from 2019. We expect permits to average 41,300 units in 2021 through 2025, also up from 39,000 units in the June forecast. We expect the Seattle CPI to rise 1.6% this year compared to 1.4% in the June forecast. Rising energy prices will add to inflation in coming years, especially in 2021. We now expect Seattle inflation to average 2.1% per year in 2021 through 2025 compared to 1.9% per year in the June 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 19.3%. At the opposite extreme, electronic shopping is expected to increase 19.7%. We expect a 4.7% decline in Washington employment this year compared to the 5.5% decrease in the June 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 2.3% per year in 2021 through 2025 compared to the 2.1% average rate expected in June. On an annual basis, we expect 4.1% employment growth in 2021, 3.1% in 2022, 2.0% in 2023, 1.3% in 2024, and 1.1% in 2025.

The disruption of airline travel is expected to reduce demand for new aircraft for some time

The disruption of airline travel is expected to reduce demand for new aircraft for some time. Boeing has indicated that there will be significant reductions in employment, particularly in the commercial airplane division. As of August, Washington aerospace employment had already declined by 10,800 since April when Boeing first announced major job cuts. We assume a decline of another 2,800 aerospace employees by the end of the year. The forecast makes no assumption concerning a possible consolidation of 787 production in South Carolina. On an annual average basis, we expect aerospace employment to decline 9.0% this year and 8.4% next year. We expect employment to grow just 0.5% in 2022 before declining 1.7% in 2023, 2.5% in 2024, and 1.5% in 2025.

Software employment will be flat through 2021 with growth resuming in 2022

We expect the software sector to lose fewer than 100 jobs in the third quarter of 2020 based on employment data through August, following a decline of 3,400 jobs in the second quarter. Software employment is expected to be relatively flat through the end of 2021 with growth resuming in 2022. On an annual average basis, we expect growth rates of 1.6% in 2020, -1.4% in 2021, 2.3% in 2022, 2.1% in 2023, 1.8% in 2024, and 1.6% in 2025.

Electronic shopping and mail order employment is higher than assumed in June

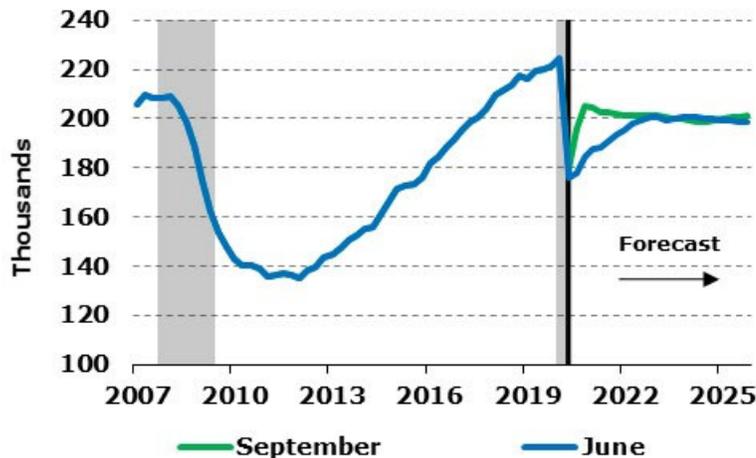
One sector that has continued to grow during the pandemic is electronic shopping and mail order. In Washington, this sector consists almost entirely of electronic shopping employment. We have increased our forecast for employment growth in 2020 from 17.1% to 19.7% and increased next years' projected growth from 3.6% to 8.6% based mainly on very strong growth through August. The forecast for growth during the remainder of the forecast is similar to the June 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 dropped sharply in the second quarter of 2020

Construction employment dropped sharply in the second quarter of 2020, losing 64,200 (28.4%) jobs in March and April. There has been a strong recovery since April that has restored about half those jobs. While we expect the rebound to continue in the fourth quarter, we do not expect to recover all the lost construction jobs (see Figure 2.4). On a calendar year basis, we expect employment to decline 8.3% this year before rising 0.9% in 2021. We expect little change during the next few years with declines of 0.9% in 2022, 0.4% in 2023, and 0.6% in 2024. We expect 0.7% growth in 2025.

Figure 2.4: Washington Construction Employment

We expect the rebound to continue in the fourth quarter, we do not expect to recover all the lost construction jobs



Source: Employment Security Department, ERFC; historical data through 2020 Q2

Washington Personal Income

First quarter personal income was higher than previously thought

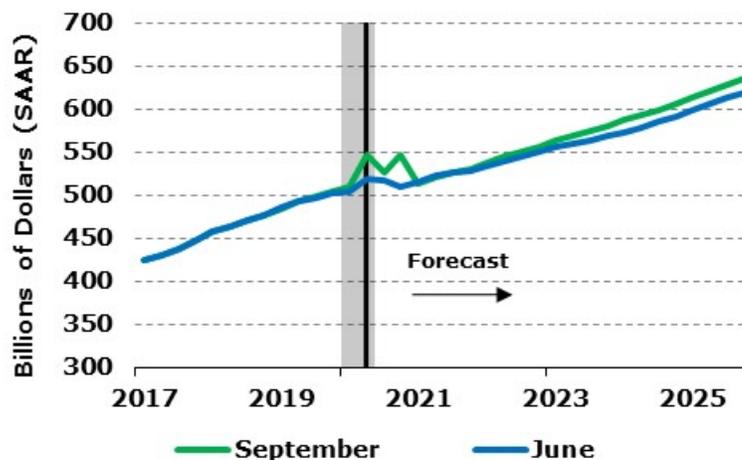
In June, after the forecast was complete, the Bureau of Economic Analysis released estimates for state personal income through the first quarter of 2020. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) data. Our current estimate of Washington personal income in the first quarter of 2020 is \$4.9 billion (1.0%) higher than in the June forecast due to higher than expected wages and salaries. Nonwage income was close to the forecast.

Washington personal income is higher in 2020 than in the June forecast

Our forecast for nominal personal income growth this year is 7.7%, up from 3.8% in the June forecast. The large upward revision is due mainly to higher transfer payments this year than previously expected. Our forecast for the level of personal income in 2021 when, as in June, the government programs to support income will have ended, is little changed since June (see Figure 2.5). As a result, we have revised personal income growth next year down from a positive 2.0% to a negative 1.9%. However, our new forecast for nominal personal income growth in 2023 through 2025 averages 4.6% per year, which is up from the 3.9% rate expected in the June forecast. On an annual basis, we expect personal income to grow 3.6% in 2022, 3.6% in 2023, 3.6% in 2024, and 4.7% in 2025.

Figure 2.5: Washington Personal Income

Washington personal income is higher than in the June forecast



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

Washington Building Permits

Washington housing construction will decline in 2020

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

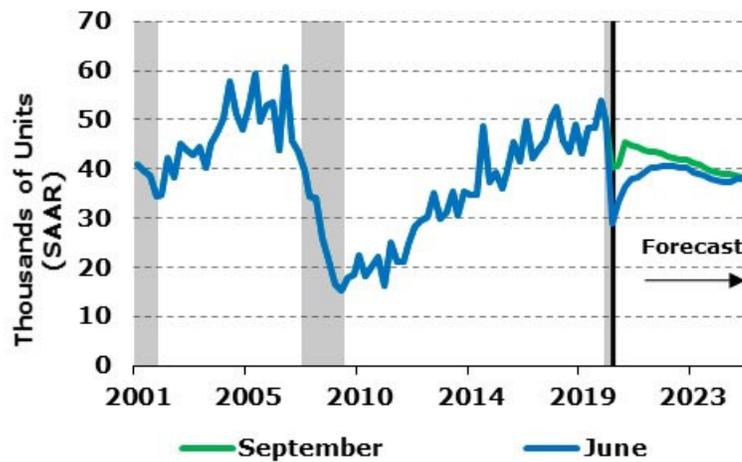
than six years. Permits have improved enough since April to average 40,300 for the second quarter as a whole. We think the second quarter will prove to be the low point in permits and that a partial recovery is likely as restrictions are lifted.

We expect 44,200 housing units this year

We expect 44,200 housing units authorized by building permits this year, up from 37,100 units in the June forecast but down from 2019. We expect permits to average 41,300 units in 2021 through 2025, also up from 39,000 units in the June forecast (see Figure 2.6). On a calendar year basis, we expect 44,100 units in 2021, 42,800 units in 2022, 41,500 units in 2023, 39,500 units in 2024, and 38,500 units in 2025.

Figure 2.6: Washington Housing Permits

Washington housing construction is higher than in the June forecast



Source: Census Bureau, ERFC; historical data through 2020 Q2

Consumer Price Index

The inflation outlook has also increased since the June forecast

With a somewhat quicker recovery than previously expected, the inflation outlook has also increased since the June forecast. With actual data through August, we expect the core index to rise 1.7% this year compared to 1.4% in the June forecast. We now expect core inflation to average 2.0% per year in 2021 through 2025 compared to 1.8% in the June forecast. Our forecast calls for annual core Seattle inflation rates of 2.1% in 2021, 1.9% in 2022, 1.8% in 2023, 2.0% in 2024, and 2.2% in 2025.

Energy costs have also partially recovered

Energy costs have also partially recovered since declines in March, April, and May. Over the year, the energy component was still down 6.4% over the year. This will help to hold down inflation this year. We expect the Seattle CPI to rise 1.6% this year compared to 1.4% in the June forecast. The recovery in energy prices will add to inflation in 2021. We now expect Seattle inflation to average 2.1% per year in 2021 through 2025 compared to 1.9% per year in the June forecast. On a calendar

year basis, we expect inflation rates of 2.5% in 2021, 2.1% in 2022, 1.7% in 2023, 1.9% in 2024, and 2.2% 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 quicker recovery than in the baseline

The optimistic scenario assumes the spread of COVID-19 and its health ramifications remain less threatening than in the base forecast. This scenario assumes the daily number of new cases declines faster than in the baseline. Guidelines for social distancing are mostly observed, which enables government officials to resume or restart the reopening of the economy, thereby allowing a quicker rise in economic activity than in the baseline. Another potential catalyst for optimism on the healthcare front is the possibility that an effective treatment for the virus is discovered. In this scenario, the U.S. economy suffers a two-quarter recession in the first half of 2020. The unemployment rate spiked to 13.0% in the second quarter, but quickly falls to below 4.5% by mid-2022. While the downturn is similar to the baseline forecast, the recovery is much quicker. The previous peak in GDP is passed in the first quarter of 2021, four quarters earlier than in the baseline forecast.

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 this year as in the baseline, but then begins to recover rather than level off as in the baseline. Software employment turns positive sooner and 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 rebounds more as restrictions are lifted than in the baseline and begins to grow again in 2022. By the end of 2025, Washington nonfarm payroll employment is higher by 80,200 jobs (2.2%) than in the baseline forecast and Washington personal income is \$38.7 billion (6.1%) higher.

Pessimistic

In the pessimistic scenario, the pace of “opening up” and its success in promoting economic activity is less than assumed in the baseline as a result of an upturn in new cases. This results in

The pessimistic scenario assumes the recovery stumbles as cases rebound in the fall

a retrenchment in consumer spending, causing the contraction to continue through the second half of the year. The recovery is hampered by the failure to maintain a steady decline in new cases and deaths. The persistence of the threat keeps many consumers from resuming previous spending habits as quickly as in the baseline forecast. GDP declines at 1.3% and 2.3% annualized rates in the third and fourth quarter. Peak to trough, real GDP declines 11.1%. The unemployment rate peaked at 13.0% in the second quarter but declines at a slower pace than in the baseline, not falling below 5.0% until early 2024. Core PCE inflation remains below 1.0% through 2023 and remains below the Fed's 2% target through 2025. The recovery takes significantly longer than the baseline. The previous peak in GDP is not exceeded until the fourth quarter of 2023, seven quarters later than in the base 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 reflecting a weaker recovery in air travel and the consolidation of 787 production in South Carolina. Software employment also continues to decline through the end of 2021 rather than flattening out as in the baseline forecast. After an initial rebound due to a partial lifting of restrictions, construction employment declines throughout the forecast rather than levelling off. 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 205,800 (5.5%) lower than in the baseline forecast and Washington personal income is \$94.0 billion (14.8%) 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 deeper recession

The GCEA national forecast predicts a slightly deeper recession than does the baseline forecast. The Governor's Council members forecast a 5.0% decline in real GDP growth this year compared to the 4.6% decline in the baseline forecast. The GCEA forecast also rises more slowly in 2021-23 though it rises at the same rate in 2024 and 2025. On average, the Council members' forecast averages 1.6% per year over the six-year interval compared to the baseline forecast of 1.8% per year. The GCEA forecast of 1.7% average real consumer spending growth is also slightly lower than the 1.8% rate in the baseline forecast. The GCEA members' PCE inflation forecast averages 1.6% per year, which is the same as in the baseline forecast. The Council members' mortgage rate forecast averages 3.1% over the forecast horizon, which is slightly lower than the 3.2% average mortgage rate in the baseline forecast but their oil price forecast

averages \$52 per barrel compared to \$48 in the baseline forecast.

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

The Governor's Council of Economic Advisors' Washington forecast is weaker than the baseline forecast. The GCEA scenario for Washington real personal income growth averages 2.0% per year in 2020 through 2025, compared to the 2.3% average rate in the baseline forecast. The Council members' forecast for total employment growth over the six-year period averages 0.9% per year compared to 1.1% in the baseline forecast. The GCEA forecast for manufacturing employment growth is slightly weaker than the baseline forecast but construction employment growth is slightly stronger. The GCEA housing permit forecast is slightly higher, averaging 44,000 units per year compared to 41,800 in the baseline forecast. At the end of 2025, the GCEA forecast for Washington nonfarm payroll employment is 52,300 (1.4%) lower than in the baseline forecast but Washington personal income is \$16.2 billion (2.6%) lower.

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	421.438	440.950	465.701	470.014	468.062	482.970	495.757	508.722
% Ch	5.2	4.6	5.6	0.9	-0.4	3.2	2.6	2.6
Real Wage and Salary Disb.	213.042	224.733	232.646	238.942	248.066	256.988	263.734	270.552
% Ch	6.6	5.5	3.5	2.7	3.8	3.6	2.6	2.6
Real Nonwage Income	208.396	216.217	233.056	231.071	219.996	225.982	232.023	238.169
% Ch	3.9	3.8	7.8	-0.9	-4.8	2.7	2.7	2.6
Real Per Capita Income (\$/Person)	56,380	58,247	60,787	60,634	59,648	60,836	61,759	62,705
% Ch	3.6	3.3	4.4	-0.3	-1.6	2.0	1.5	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.071	1.090	1.105	1.121	1.142	1.160	1.178	1.200
% Ch	1.9	1.8	1.3	1.4	1.9	1.5	1.6	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.671	2.745	2.802	2.860	2.928	2.979	3.032	3.095
% Ch	3.1	2.8	2.1	2.1	2.4	1.7	1.8	2.1
Average Nonfarm Annual Wage	65,769	69,274	73,607	77,402	78,765	80,689	82,926	85,628
% Ch	6.3	5.3	6.3	5.2	1.8	2.4	2.8	3.3
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.93	28.91	28.93	28.88	29.65	30.64	31.56	32.43
% Ch	4.2	3.5	0.0	-0.2	2.7	3.3	3.0	2.8
Current Dollar Income (Billions of Dollars)								
Personal Income	451.422	480.818	514.470	526.613	534.652	560.077	583.985	610.426
% Ch	7.3	6.5	7.0	2.4	1.5	4.8	4.3	4.5
Disposable Personal Income	397.423	424.237	455.678	467.441	472.230	493.674	514.385	537.191
% Ch	7.4	6.7	7.4	2.6	1.0	4.5	4.2	4.4
Per Capita Income (\$/Person)	60,390	63,512	67,153	67,935	68,133	70,547	72,749	75,240
% Ch	5.6	5.2	5.7	1.2	0.3	3.5	3.1	3.4
Employment (Thousands)								
Washington Civilian Labor Force	3,763.5	3,859.7	3,936.6	4,002.9	4,085.1	4,148.5	4,197.4	4,240.6
Total Washington Employment	3,591.9	3,688.6	3,678.1	3,694.6	3,842.9	3,948.8	4,012.9	4,064.1
Unemployment Rate (%)	4.56	4.43	6.57	7.71	5.93	4.81	4.40	4.16
Nonfarm Payroll Employment	3,362.7	3,433.1	3,395.7	3,358.4	3,493.3	3,587.3	3,639.2	3,683.6
% Ch	2.4	2.1	-1.1	-1.1	4.0	2.7	1.4	1.2
Manufacturing	284.0	291.9	285.3	265.6	270.8	273.9	273.5	272.8
% Ch	-1.1	2.8	-2.2	-6.9	2.0	1.2	-0.2	-0.3
Durable Manufacturing	199.4	205.5	200.2	182.1	186.5	189.1	187.8	187.0
% Ch	-2.1	3.1	-2.6	-9.1	2.4	1.4	-0.7	-0.4
Aerospace	82.5	86.6	87.6	74.5	74.0	73.7	71.9	70.4
% Ch	-5.9	4.9	1.2	-14.9	-0.6	-0.4	-2.4	-2.1
Nondurable Manufacturing	84.6	86.3	85.1	83.5	84.3	84.8	85.7	85.7
% Ch	1.5	2.0	-1.5	-1.9	1.0	0.7	1.0	0.1
Construction	206.5	216.7	211.4	202.1	201.8	201.0	199.5	199.6
% Ch	6.7	4.9	-2.5	-4.4	-0.2	-0.4	-0.7	0.0
Service-Providing	2,865.8	2,918.4	2,893.4	2,885.7	3,015.9	3,107.6	3,161.4	3,206.3
% Ch	2.5	1.8	-0.9	-0.3	4.5	3.0	1.7	1.4
Software Publishers	63.1	67.6	71.5	70.3	70.6	72.5	73.9	75.2
% Ch	4.7	7.2	5.7	-1.8	0.4	2.8	1.9	1.7
Electronic Shopping and Mail-Order	53.5	58.1	69.0	80.9	83.8	86.1	88.1	90.1
% Ch	21.7	8.7	18.7	17.1	3.6	2.7	2.4	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	48.753	45.964	48.125	43.916	43.490	42.149	40.509	38.948
% Ch	9.6	-5.7	4.7	-8.7	-1.0	-3.1	-3.9	-3.9
Single-Family	24.161	22.364	23.104	24.452	24.304	24.194	23.808	23.448
% Ch	9.5	-7.4	3.3	5.8	-0.6	-0.5	-1.6	-1.5
Multi-Family	24.593	23.599	25.021	19.465	19.186	17.954	16.701	15.499
% Ch	9.7	-4.0	6.0	-22.2	-1.4	-6.4	-7.0	-7.2
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	3.06	3.09	3.15	3.17	3.37

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2020	2021	2022	2023	2024	2025
U.S.						
Real GDP, Percent Change						
Optimistic	-1.1	3.0	2.6	1.5	1.8	2.2
Baseline	-1.1	-0.9	4.3	3.3	2.6	2.4
Pessimistic	-1.1	-7.5	4.5	3.5	3.4	3.0
PCE Price Index, Percent Change						
Optimistic	1.3	1.7	2.0	1.9	2.0	2.1
Baseline	1.3	1.4	1.9	1.5	1.6	1.9
Pessimistic	1.3	0.7	0.9	0.8	0.9	1.3
Mortgage Rate, Percent						
Optimistic	3.53	3.07	3.19	3.40	3.54	3.77
Baseline	3.53	3.06	3.09	3.15	3.17	3.37
Pessimistic	3.53	2.98	2.86	2.71	2.68	2.81
3 Month T-Bill Rate, Percent						
Optimistic	1.20	0.11	0.10	0.11	0.18	0.59
Baseline	1.20	0.10	0.10	0.09	0.09	0.11
Pessimistic	1.20	0.09	0.09	0.09	0.10	0.11
Washington						
Real Personal Income, Percent Change						
Optimistic	5.6	4.3	0.3	2.4	2.5	3.2
Baseline	5.6	0.9	-0.4	3.2	2.6	2.6
Pessimistic	5.6	-4.6	-2.4	3.0	1.5	1.0
Personal Income, Percent Change						
Optimistic	7.0	6.0	2.4	4.3	4.5	5.3
Baseline	7.0	2.4	1.5	4.8	4.3	4.5
Pessimistic	7.0	-3.9	-1.5	3.8	2.5	2.3
Employment, Percent Change						
Optimistic	-1.1	0.3	3.9	2.9	1.9	1.3
Baseline	-1.1	-1.1	4.0	2.7	1.4	1.2
Pessimistic	-1.1	-5.4	2.2	3.2	2.1	1.4
Housing Permits, Thousands of Authorized Units						
Optimistic	48.1	45.2	45.0	44.0	43.2	42.1
Baseline	48.1	43.9	43.5	42.1	40.5	38.9
Pessimistic	48.1	38.3	37.2	35.9	34.3	31.7

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	-4.6	3.8	3.9	2.8	2.5	2.3
GCEA Average	-5.0	4.1	3.2	2.5	2.5	2.3
Real Consumption						
<i>Growth</i>						
ERFC	-5.0	4.1	3.7	2.9	2.5	2.4
GCEA Average	-5.2	4.5	3.3	2.7	2.5	2.4
PCE Price Index						
<i>Growth</i>						
ERFC	1.1	1.9	1.7	1.5	1.7	2.0
GCEA Average	0.9	1.9	1.9	1.6	1.6	1.5
Mortgage Rate						
<i>Percent</i>						
ERFC	3.2	3.1	3.1	3.1	3.3	3.5
GCEA Average	3.1	2.9	3.0	3.1	3.3	3.5
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	41.4	45.2	47.7	49.5	50.9	52.4
GCEA Average	42.0	48.6	52.5	54.8	56.1	57.4
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	6.5	-3.7	3.0	3.0	2.4	2.7
GCEA Average	4.5	-3.2	2.6	2.6	2.5	2.9
Wage and Salary Employment						
<i>Growth</i>						
ERFC	-4.7	4.1	3.1	2.0	1.3	1.1
GCEA Average	-5.2	2.1	2.8	2.2	1.8	1.6
Manufacturing Employment						
<i>Growth</i>						
ERFC	-7.9	-0.8	1.8	0.4	-0.5	0.0
GCEA Average	-8.6	-2.8	1.2	0.8	0.6	0.3
Construction Employment						
<i>Growth</i>						
ERFC	-8.3	0.9	-0.9	-0.4	-0.6	0.7
GCEA Average	-7.9	-1.0	0.3	0.6	0.7	0.8
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	44.2	44.1	42.8	41.5	39.5	38.5
GCEA Average	43.5	44.9	45.1	44.0	43.8	42.6
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	7.5	1.9	2.4	2.5	3.0	3.5
GCEA Average	5.5	1.8	1.9	1.9	2.2	2.5

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

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

Table 2.6
Forecast Comparison
 Forecast 2021 to 2025

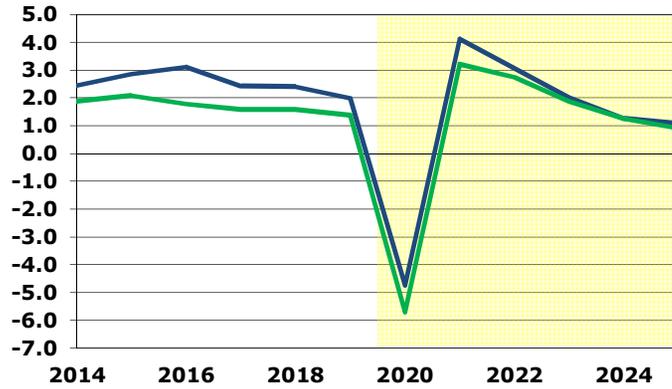
Fiscal Years

	2019	2020	2021	2022	2023	2024	2025
Washington							
Real Personal Income							
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
June	441.818	458.649	464.556	471.564	482.434	490.857	503.207
% Ch	4.8	3.8	1.3	1.5	2.3	1.7	2.5
Personal Income							
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
June	481.127	505.752	516.623	532.052	552.300	570.981	595.399
% Ch	6.6	5.1	2.1	3.0	3.8	3.4	4.3
Employment							
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
June	3433.1	3395.1	3326.3	3493.4	3562.3	3588.3	3619.1
% Ch	2.1	-1.1	-2.0	5.0	2.0	0.7	0.9
Housing Permits							
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
June	45.964	45.276	36.496	40.127	40.367	38.730	37.617
% Ch	-5.7	-1.5	-19.4	9.9	0.6	-4.1	-2.9

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

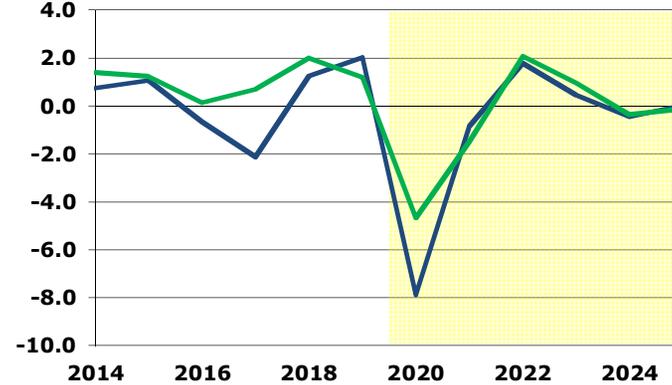
Forecast

Total Nonfarm Payroll Employment



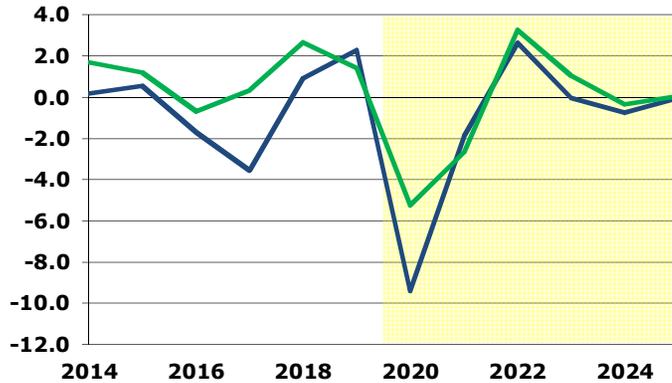
Source: WA State Employment Security Dept. 2019, ERFC 2025

Manufacturing Employment



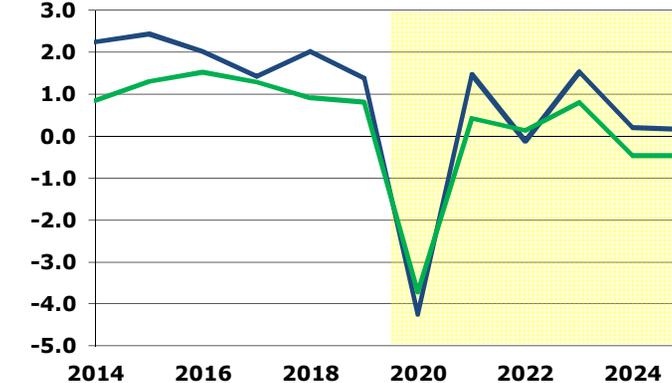
Source: WA State Employment Security Dept. 2019, ERFC 2025

Durable Manufacturing Employment



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

Nondurable Manufacturing Employment



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

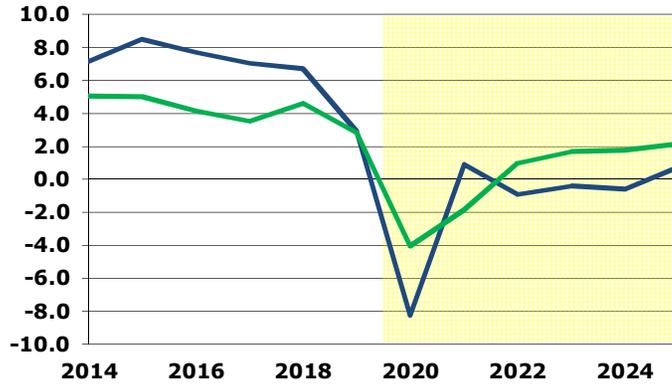
Washington

U.S.

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

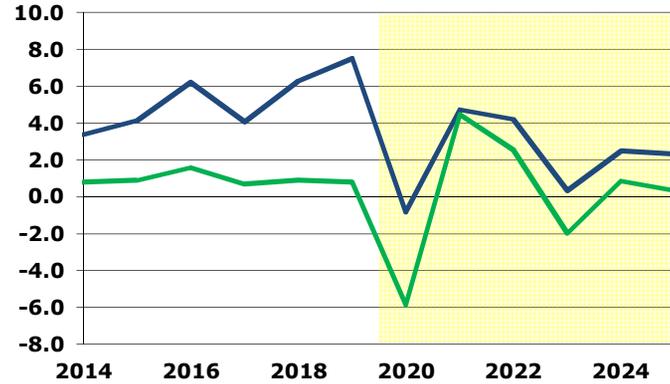
Forecast

Construction Employment



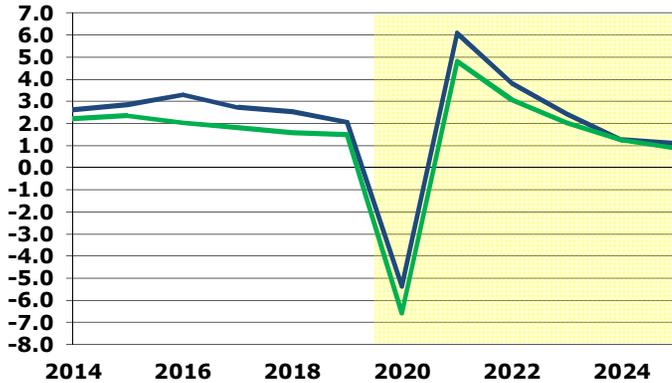
Source: WA State Employment Security Dept. 2019, ERFC 2025

Information Employment



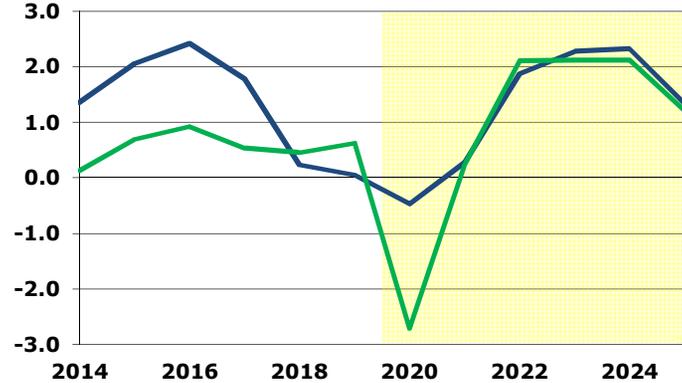
Source: WA State Employment Security Dept. 2019, ERFC 2025

Other Private Employment



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

Government Employment



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

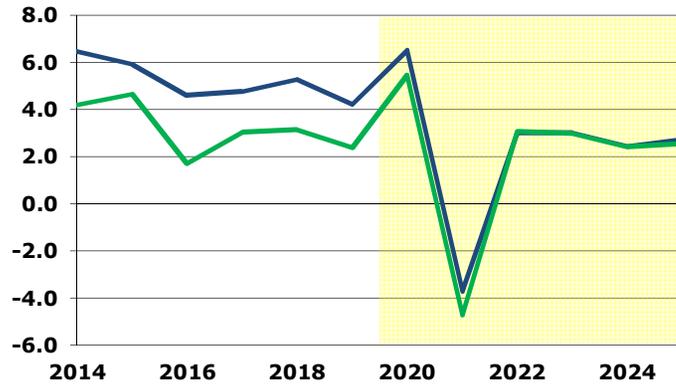
Washington

U.S.

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

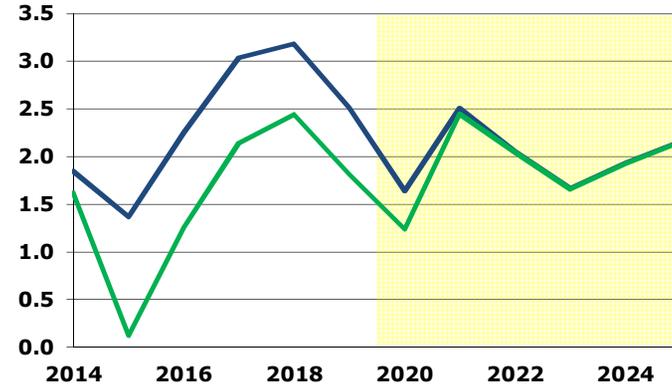
Forecast

Real Personal Income



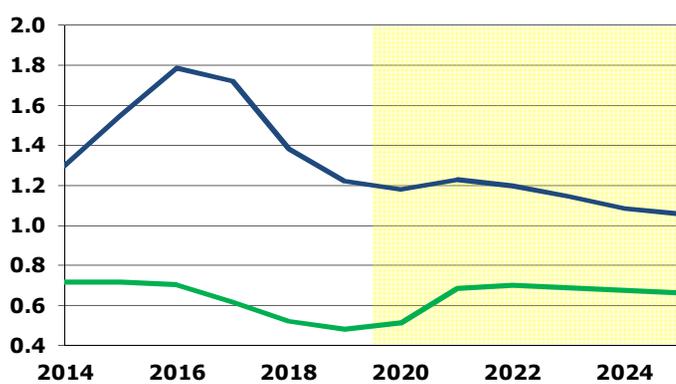
Source: Bureau of Economic Analysis 2019, ERFC 2025

Consumer Price Indices



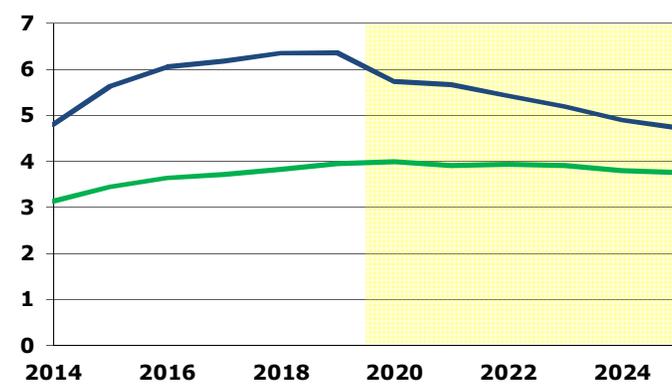
Source: Bureau of Labor Statistics 2019, ERFC 2025

Population



Source: Census Bureau 2019, ERFC 2025

New Housing Units Per 1,000 Population (Level)



Source: Census Bureau 2019, ERFC 2025

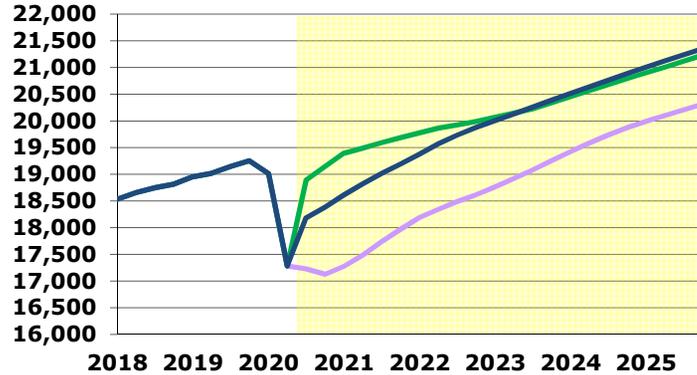
Washington

U.S.

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

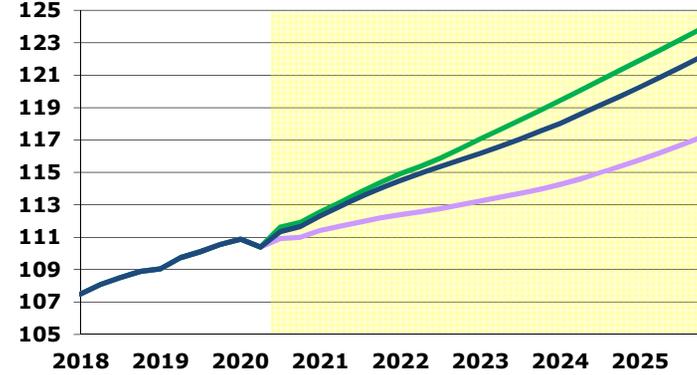
Forecast

Real GDP, Billions of 2012 Dollars



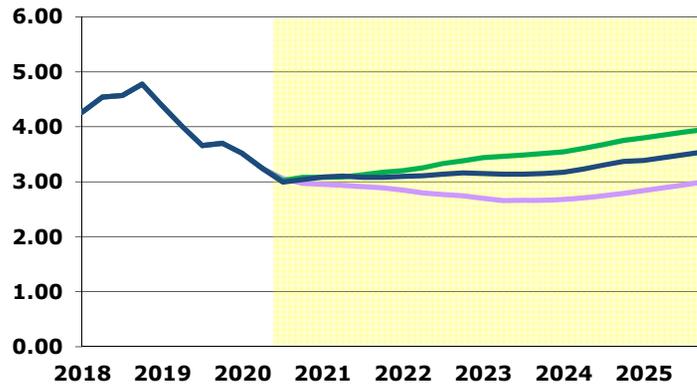
Source: Bureau of Economic Analysis 2020 Q2, ERFC 2025

PCE Price Index, 2012 = 100



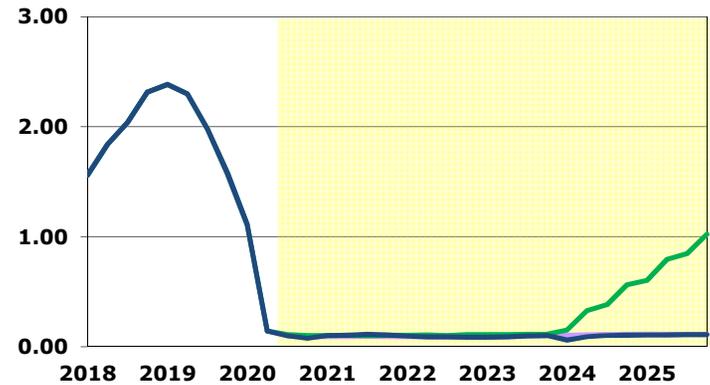
Source: Bureau of Economic Analysis 2020 Q2, ERFC 2025

Mortgage Rate, Percent



Source: Freddie Mac 2020 Q2 ERFC 2025

Three Month T-Bill Rate, Percent



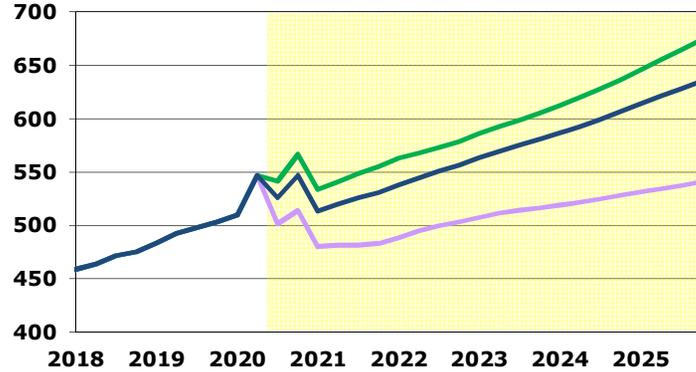
Source: Federal Reserve Board 2020 Q2 ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

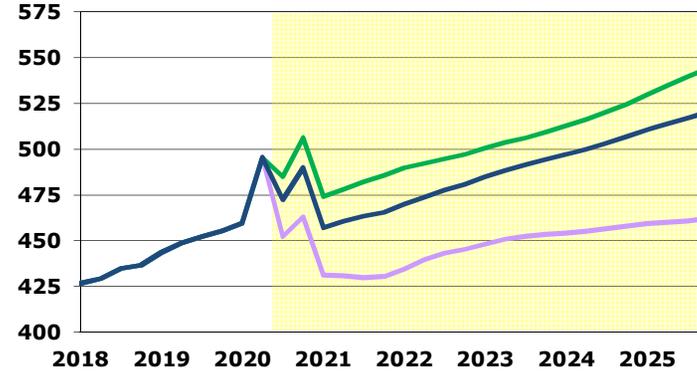
Forecast

Personal Income, Billions of Dollars



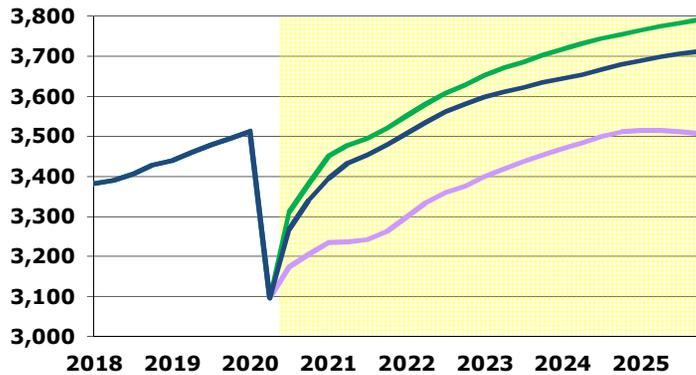
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Real Personal Income, Billions of 2012 Dollars



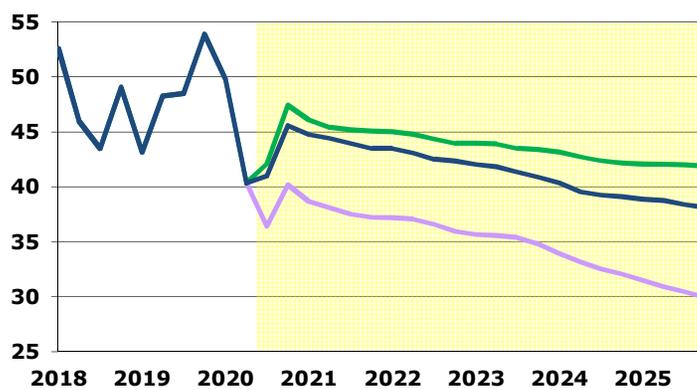
Source: Bureau of Economic Analysis 2019Q4, ERFC 2025

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2020 Q2, ERFC 2023

Housing Permits, Thousands



Source: Census Bureau 2020 Q2, ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **General Fund-State (GF-S) revenue collections since the June forecast have come in \$963 million (20.5%) above the forecasted amount.**
- **The GF-S forecast was increased by \$2.1 billion in the 2019-21 biennium, \$2.2 billion in the 2021-23 biennium and \$2.5 billion in the 2023-25 biennium.**
- **The forecast of total revenue for funds subject to the budget outlook process was increased by \$2.2 billion in the 2019-21 biennium, \$2.4 billion in the 2021-23 biennium and \$2.6 billion in the 2023-25 biennium.**
- **Though the September forecast restores about half of the revenue reduction from the June forecast, expected revenue for the current and subsequent biennia is still over \$4 billion less than expected in February.**

Overview

The economic disruption caused by the COVID-19 pandemic, while still severe, was lower than forecasted in June

At the time of the June forecast, revenue collections were down significantly and the path of the recovery was unclear. In the period since June, the recovery in revenue collections has been much stronger than expected, mainly in the sectors of retail trade and real estate. The most recent collection period, however, represented taxable activity in July, when a \$600 per week supplemental unemployment benefit was in effect and other federal benefits, though winding down, were still present. The forecast does not therefore expect that collections over the next several months will show the same strength. Nevertheless, income, employment, and housing activity are currently at higher levels than expected in June, which will create more revenue going forward. Though this forecast restores about half of the revenue drop of the June forecast, expected revenue for the current and subsequent biennia is still over \$4 billion less than expected in February.

GF-S forecast change by biennium (billions):

19-21: \$2.1
21-23: \$2.2
23-25: \$2.5

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 \$963 million higher than forecasted. The forecasted increase in economic activity for the rest of the biennium added \$1.097 billion, resulting in a total forecast increase of \$2.060 billion. The forecast for the 2021-23 biennium was increased by \$2.246 billion and the forecast for the 2023-25 biennium was increased by \$2.460 billion. The September 2020 forecast for GF-S revenue totals \$48.189 billion in the 2019-21 biennium, \$52.181 billion in the 2021-23 biennium and \$55.917 billion in the 2023-25 biennium.

GF-S forecast (\$billions):

2019-21:
\$48.189

2021-23:
\$52.181

2023-25:
\$55.917

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	\$962.8	NA	NA
Non-Economic Change	\$0.0	\$0.0	\$0.0
Forecast Change	\$1,096.8	\$2,246.0	\$2,459.9
Total Change	\$2,059.7	\$2,246.0	\$2,459.9

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

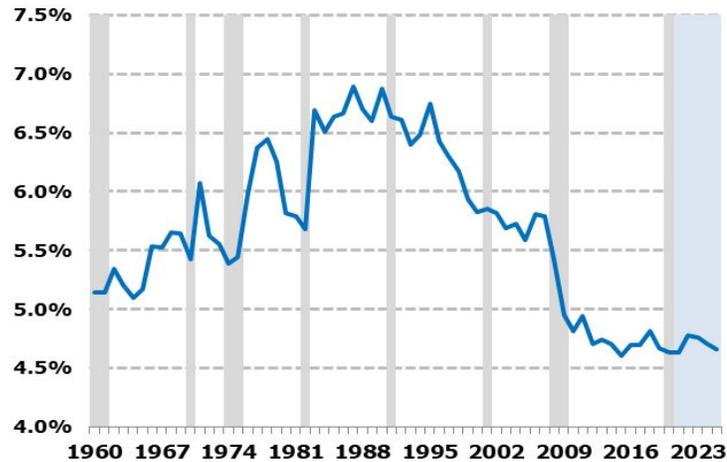
As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income has been relatively stable since reaching a trough in FY 2015. Since 1995, however, the ratio of revenue to income had been on a downward trend, broken only by the housing boom that raised the ratio from 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 is now expected to decline further in FY 2020 and FY 2021. After recovery in FY 2022, the ratio is expected continue its downward trend.

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 2019. Gray shaded area indicates recession; blue shaded area indicates forecast.

Recent Collection Experience

Collections were \$963 million (20.5%) more than forecasted in June

Revenue collections from the Department of Revenue (DOR) and the Washington court system are tracked monthly. In the period since the June forecast, total revenue from the above sources came in \$962.8 million (20.5%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$845.5 million (22.6%) higher than forecasted. Revenue from other DOR tax sources was \$117.8 million (12.4%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the June 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	\$845.5	22.6%
Non-Revenue Act	\$117.8	12.4%
Subtotal	\$963.4	20.6%
Washington court system	(\$0.6)	-4.4%
Total*	\$962.8	20.5%

* Detail may not add to total due to rounding.

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

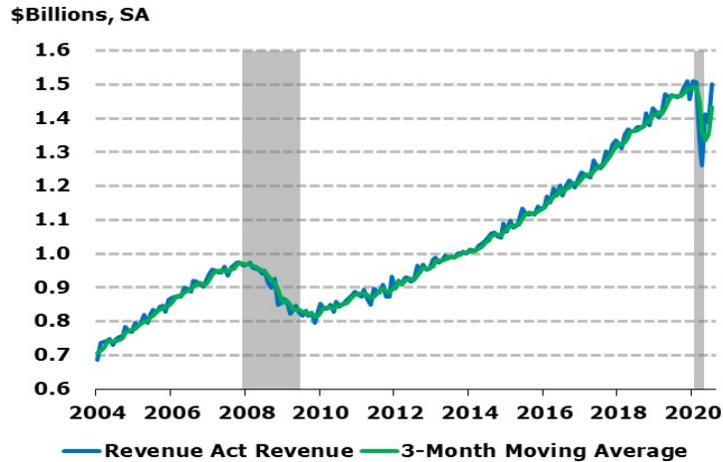
Real Estate Excise Tax collections were much higher than forecasted

Most of the surplus in non-Revenue Act collections came from real estate excise tax (REET) collections, which came in \$103.3 million (60.7%) higher than forecasted. Liquor sales and liter tax receipts came in \$14.4 million (19.0%) higher than

forecasted. Property tax collections were \$9.0 million (1.5%) higher than forecasted. Cigarette tax collections, however, came in \$1.7 million (1.9%) lower than forecasted. Net refunds of unclaimed property from the GF-S were \$5.7 million higher than forecasted. Revenue from all other DOR revenue sources came in \$1.4 million (3.8%) lower than forecasted. Revenue from the Washington court system was \$0.6 million (4.4%) lower than forecasted.

Figure 3.2: Revenue Act Collections*

Revenue Act collections for July activity rebounded to a level above last year's



Source: ERFC; Data through September 10, 2020

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

Adjusted Revenue Act collections were down 8.1% year over year for second quarter activity after 1.6% growth in the previous 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 somewhat. Adjusted for large one-time payments and refunds and estimated deferred payments, collections were down 5.1% year over year for May activity and 5.0% for June activity. Adjusted collections for July activity (August 11 – September 10 collections) were up 3.6% year over year. July's strength in collections, however, is not expected to continue as it was the last month of the \$600 supplemental unemployment benefits from the federal government and other federal stimulus is winding down. Adjusted collections representing second quarter activity (May 11 – August 10, 2020 collections) dropped 8.1% year over year. Adjusted year-over-year growth in collections representing first quarter activity (February 11 – May 10, 2020 collections) was 1.6% despite the large drop in May 10 collections. Adjusted

year-over-year growth in collections representing fourth quarter 2019 activity was 5.5% and growth for third quarter 2019 activity was 6.6%.

Real estate activity has rebounded much faster than expected in June

The positive variance in REET collections was due to stronger-than-expected recovery 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 (see Figure 3.3). After being down 16% year over year in June and 15% in July, taxable activity was up 5% year over year in August.

Figure 3.3: Taxable Real Estate Excise Activity, SA

Taxable real estate activity was up 5% year over year in August



Source: ERF; data through August 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.

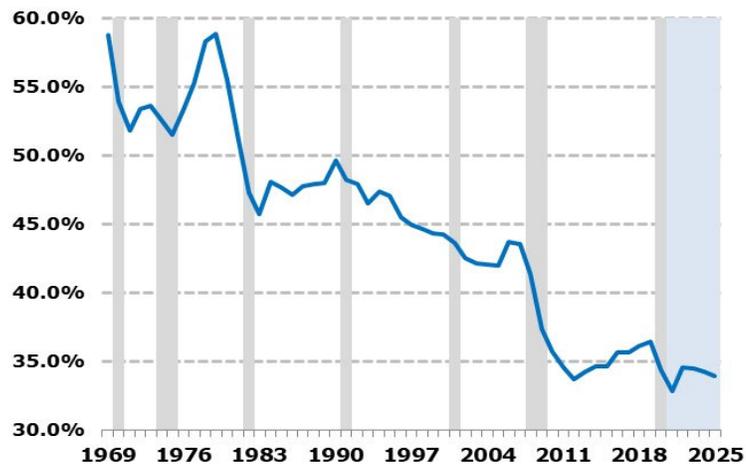
Retail sales taxes are the largest source of GF-S revenue

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 a continued increase in the ratio. The COVID-19-related collapse in late FY2020, however, caused the ratio of sales to income to decline in FY2020. The ratio is now forecasted to reach a new historical low of 32.8% in FY 2021, due to both declining sales and an increase in personal income due to federal stimulus spending. While the ratio is expected to bounce back 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 2019, forecast through FY 2025

Retail sales tax receipt growth forecast:

FY20: 1.7%
FY21: -1.1%
FY22: 6.0%
FY23: 5.0%

Strong growth in construction and auto sales brought taxable retail sales growth of 8.1% in FY 2015. Legislative changes coupled with continued growth in construction and auto sales boosted growth in FY 2016 taxable activity to 8.4%. Slowing construction growth and flat auto sales lowered growth in FY 2017 activity to 6.3%. 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

is forecasted to grow by 1.0% in FY 2020 but decline by 2.3% in FY 2021. Growth is then forecasted to rebound by 6.8% in FY 2022 before slowing to 4.6% in FY 2023, 3.4% in FY 2024 and 3.6% 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%. Collections growth is forecasted to remain positive at 1.7% in FY 2020 before declining by 1.1% in FY 2021. Collections are then forecasted to rebound by 6.0% in FY 2022 and 5.0% in FY 2023. Growth is forecasted at 3.4% for FY 2024 and 3.5% for 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:

*FY20: 3.6%
FY21: -2.5%
FY22: 6.5%
FY23: 6.4%*

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 the second quarter collapse in activity, forecasted FY 2020 growth remains positive at 3.6%. Collections are forecasted to decrease by 2.5% in FY 2021 before they grow 6.5% in FY 2022. Growth is forecasted at 6.4% in FY 2023 and 4.8% 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:

*FY20: 44.2%
FY21: 25.4%
FY22: 0.3%
FY23: 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 25.4% 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 0.3% growth in FY 2022 before growth increases to 2.6% in FY 2023. Growth is forecasted at 2.6% for FY 2024 and 2.5% 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:

*FY20: -0.7%
FY21: -8.4%
FY22: 9.2%
FY23: -2.5%*

From FY 2013 through 2019, the recovery in the 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 collapse that began with April 2020 collections, however, brought a total decline of 0.7% in FY 2020. The decline is forecasted to increase to 8.4% in FY 2021 before growth resumes at 9.2% in FY 2022. Receipts decline by 2.5% in FY 2023 and 2.0% in FY 2024 but then grow 1.9% 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:

FY20: -4.9%
FY21: 1.8%
FY22: -1.5%
FY23: 3.8%

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 are now forecasted to decline by 4.9%. Collections are forecasted to increase by 1.8% in FY 2021 due to very strong used car sales in the third quarter of 2020 before decreasing by 1.5% in FY 2022. Growth then resumes at 3.8% in FY 2023, 2.5% in FY 2024 and 3.4% 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:

FY20: 0.3%
FY21: 17.6%
FY22: -1.2%
FY23: 3.8%

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 are forecasted to grow 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 collections growth to 17.6% in FY 2021. The expected return of workers to their workplaces decreases expected collections by 1.2% in FY 2022. Growth is then forecasted to continue at 3.8% in FY 2023 and 2.9% in FY 2024 and 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:

FY20: -6.0%
FY21: -1.9%
FY22: -3.7%
FY23: -3.2%

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 is forecasted to accelerate 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, 3.7% 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: \$32.9
21-23: \$34.1
23-25: \$29.0

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 \$351.1 million in the 2019-21 biennium, an increase of \$32.9 million from the previous forecast, and \$359.4 million in the 2021-23 biennium, an increase of \$34.1 million. The forecast of GF-S distributions for the 2023-25 biennium is \$386.6 million, an increase of \$29.0 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: \$16.0
21-23: \$15.8
23-25: \$91.2

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 \$16.0 million to \$222.6 million and the forecast for the 2021-23 biennium was increased \$15.8 million to \$217.3 million. The office's forecast of revenue for the 2023-25 biennium was increased \$91.2 million to \$260.5 million, due mainly to expected increases in payments to the state from the tobacco Master Settlement Agreement.

State Treasurer

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's forecast

*Forecast
change by
biennium
(millions):*

19-21: *-\$0.5*
21-23: *-\$7.8*
23-25: *-\$5.3*

for the 2019-21 biennium has been decreased \$0.5 million to \$3.4 million. The office's forecast for the 2021-23 biennium has been decreased \$7.8 million to -\$6.9 million and the forecast of revenue for the 2023-25 biennium has been decreased \$5.3 million to -\$1.9 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. The decreases in forecasted revenue were due to reductions in both forecasted balances and forecasted interest rates.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

19-21: *\$11.0*
21-23: *\$15.5*
23-25: *\$6.4*

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 \$11.0 million to \$1,155.3 million and the forecast of revenue for the 2021-23 biennium has been increased \$15.5 million to \$1,365.7 million. The forecast of GF-S revenue for the 2023-25 biennium has been increased \$6.4 million to \$1,483.3 million.

Liquor and Cannabis Board

*Forecast
change by
biennium
(millions):*

19-21: *\$43.6*
21-23: *\$37.9*
23-25: *\$34.5*

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 \$43.6 million to \$629.3 million and the forecast of revenue for the 2021-23 biennium has been increased \$37.9 million to \$650.2 million. The forecast of GF-S distributions for the 2023-25 biennium has been increased \$34.5 million to \$697.4 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 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.

GF-S forecast change by biennium (millions):

19-21: \$2.0
21-23: \$4.6
23-25: \$4.1

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 have been increased \$2.0 million to \$41.7 million and the forecast of GF-S transfers for the 2021-23 biennium has been increased \$4.6 million to \$51.9 million. The forecast for the 2023-25 biennium has been increased \$4.1 million to \$52.7 million.

OPA forecast change by biennium (millions):

19-21: -\$1.4
21-23: -\$5.0
23-25: -\$6.9

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 decreased \$1.4 million to \$297.9 million and the forecast for the 2021-23 biennium has been decreased \$5.0 million to \$315.3 million. The forecast for the 2023-25 biennium has been decreased \$6.9 million to \$322.3 million.

Administrative Office of the Courts

Forecast change by biennium (millions):

19-21: -\$2.7
21-23: -\$6.9
23-25: -\$8.4

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 \$2.7 million to \$114.5 million and the forecast of revenue for the 2021-23 biennium has been decreased \$6.9 million to \$99.4 million. The forecast of transfers for the 2023-25 biennium has been decreased \$8.4 million to \$95.5 million.

Track Record for the 2019-21 Biennium

The current forecast is \$1.5 billion (3.1%) 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 September 2020 forecast is \$4.7 billion (10.9%) 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 \$1.4 billion (3.1%) 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 September forecast of biennial revenue is \$1.5 billion (3.1%) lower than that sum.

Track Record for the 2021-23 Biennium

The current forecast is \$249 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 September 2020 forecast is \$249 million (0.5%) 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 \$516 million (1.0%) 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 \$759 million 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 September 2020 revenue forecast and currently enacted budgets, there will be a \$1,381.2 million shortfall in GF-S balances at the end of the 2019-21 biennium and a shortfall of \$1,164.5 million in total GF-S, ELTA, OPA and WEIA balances. The Budget Stabilization Account (BSA) is projected to have a balance of \$1,923.2 million. Using the BSA funds would change the the projected GF-S biennial shortfall to a surplus of \$541.9 million and the total

shortfall for GF-S, ELTA, OPA and WEIA balances to \$758.7 million.

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

Optimistic scenario (billions):
19-21: +\$1.58
21-23: +\$4.19

Pessimistic scenario (billions):
19-21: -\$1.99
21-23: -\$5.28

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 \$49.770 billion in GF-S revenue, \$1.581 billion (3.3%) more than the baseline scenario, while the pessimistic forecast produces \$46.201 billion in revenue, \$1.988 billion (4.1%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$56.372 billion in GF-S revenue, \$4.191 billion (8.0%) more than the baseline scenario, while the pessimistic forecast produces \$46.904 billion in revenue, \$5.277 billion (10.1%) less than the baseline.

Education Legacy Trust Account

OPA forecast change by biennium (millions):
19-21: \$164
21-23: \$149
23-25: \$125

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 \$163.7 million for the current biennium, \$148.5 million for the 2021-23 biennium and \$124.5 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 \$1,535.3 million for the current biennium, \$1,240.7 million for the 2021-23 biennium and \$1,040.7 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 \$16.7 million in the current biennium, \$29.7 million in the 2021-23 biennium and \$34.8 million in the 2023-25 biennium. WEIA revenue is now forecasted at \$338.5 million in the 2019-21 biennium, \$601.3 million in the 2021-23 biennium and \$699.5 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 (billions):

19-21: \$2.2
21-23: \$2.4
23-25: \$2.6

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 \$50,360.8 million, \$2,238.6 million more than the June forecast. The forecast of total revenue for the 2021-23 biennium is \$54,337.8 million, \$2,419.3 million more than the June forecast. The forecast for the 2023-25 biennium is \$57,979.4 million, \$2,612.3 million more than the June 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	48,189.1	9.2%	43,311.2	6.0%
2021-23 ^F	52,180.5	8.3%	45,338.3	4.7%
2023-25 ^F	55,916.9	7.2%	47,032.5	3.7%

^F September 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 September 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 ^F	176,960	1.0%
2021 ^F	172,858	-2.3%
2022 ^F	184,635	6.8%
2023 ^F	193,180	4.6%
2024 ^F	199,754	3.4%
2025 ^F	206,897	3.6%

^F September 2020 forecast

Source: ERFRC

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

Table 3.5

Comparison of the General Fund-State forecast by agency

2019-21 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2020 Forecast¹	Non-Economic Changes	Forecast Revision	Sept 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$21,427.0	\$0.0	\$1,038.1	\$22,465.1	\$1,038.1
Business & Occupation	8,563.5	0.0	514.2	9,077.7	514.2
Use	1,341.7	0.0	109.4	1,451.1	109.4
Public Utility	837.9	0.0	36.2	874.1	36.2
Liquor Sales/Liter	603.9	0.0	32.4	636.3	32.4
Cigarette	642.9	0.0	0.5	643.5	0.5
Property (State Levy)	7,775.4	0.0	35.1	7,810.5	35.1
Real Estate Excise	1,800.2	0.0	280.9	2,081.1	280.9
Timber Excise	3.1	0.0	(1.9)	1.2	(1.9)
Other	1,036.4	0.0	(54.5)	981.9	(54.5)
Subtotal	44,032.0	0.0	1,990.3	46,022.4	1,990.3
Insurance Commissioner					
Insurance Premiums	1,144.4	0.0	11.0	1,155.3	11.0
Liquor Control Board					
Fees, Cannabis Excise Tax	528.0	0.0	44.2	572.2	44.2
Beer & Wine Surtax	57.7	0.0	(0.7)	57.1	(0.7)
Lottery Commission					
Lottery Revenue	39.7	0.0	2.0	41.7	2.0
State Treasurer					
Interest Earnings	3.9	0.0	(0.5)	3.4	(0.5)
Office of Financial Management					
Other Agencies	206.6	0.0	16.0	222.6	16.0
Washington Court System					
Court Fees, Fines & Forfeitures	117.2	0.0	(2.7)	114.5	(2.7)
Total General Fund-State *	\$46,129.5	\$0.0	\$2,059.7	\$48,189.1	\$2,059.7

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council June 17, 2020² Forecast for the 2019-21 biennium, adopted September 23, 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	June 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Sept 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$21,427.0	\$0.0	\$1,009.5	\$22,436.5	\$1,009.5
Business & Occupation	8,563.5	0.0	514.0	9,077.4	514.0
Use	1,341.7	0.0	105.0	1,446.7	105.0
Public Utility	837.9	0.0	35.7	873.6	35.7
Liquor Sales/Liter	609.9	0.0	37.3	647.3	37.3
Cigarette	642.9	0.0	3.6	646.5	3.6
Property (State Levy)	7,859.2	0.0	205.0	8,064.2	205.0
Real Estate Excise	1,800.2	0.0	282.9	2,083.1	282.9
Timber Excise	3.2	0.0	(2.1)	1.1	(2.1)
Other	1,034.3	0.0	(10.7)	1,023.6	(10.7)
Subtotal	44,119.8	0.0	2,180.1	46,299.9	2,180.1
Insurance Commissioner					
Insurance Premiums	1,144.4	0.0	11.0	1,155.3	11.0
Liquor Control Board					
Fees, Cannabis Excise Tax	528.0	0.0	44.2	572.2	44.2
Beer & Wine Surtax	57.7	0.0	(0.7)	57.1	(0.7)
Lottery Commission					
Lottery Revenue	39.1	0.0	3.2	42.3	3.2
State Treasurer					
Interest Earnings	1.5	0.0	(1.6)	(0.1)	(1.6)
Office of Financial Management					
Other Agencies	206.6	0.0	16.0	222.6	16.0
Washington Court System					
Court Fees, Fines & Forfeitures	117.2	0.0	(2.7)	114.5	(2.7)
Total General Fund-State *	\$46,214.3	\$0.0	\$2,249.5	\$48,463.9	\$2,249.5

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council June 17, 2020² Forecast for the 2019-21 biennium, adopted September 23, 2020

*Detail may not add to totals because of rounding.

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

Table 3.7

Comparison of the General Fund-State forecast by agency

2021-23 biennium; cash basis

(millions of dollars)

Forecast by Agency	June 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Sept 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$22,990.7	\$0.0	\$1,264.6	\$24,255.3	\$1,264.6
Business & Occupation	9,296.9	0.0	546.7	9,843.7	546.7
Use	1,383.3	0.0	85.2	1,468.5	85.2
Public Utility	947.6	0.0	4.1	951.7	4.1
Liquor Sales/Liter	619.3	0.0	5.0	624.3	5.0
Cigarette	599.8	0.0	3.8	603.6	3.8
Property (State Levy)	8,660.7	0.0	170.8	8,831.5	170.8
Real Estate Excise	2,032.0	0.0	113.2	2,145.2	113.2
Timber Excise	4.0	0.0	(1.4)	2.7	(1.4)
Other	1,081.7	0.0	(5.2)	1,076.5	(5.2)
Subtotal	47,616.2	0.0	2,186.8	49,803.0	2,186.8
Insurance Commissioner					
Insurance Premiums	1,350.1	0.0	15.5	1,365.7	15.5
Liquor Control Board					
Fees, Cannabis Excise Tax	553.8	0.0	38.2	592.0	38.2
Beer & Wine Surtax	58.5	0.0	(0.3)	58.2	(0.3)
Lottery Commission					
Lottery Revenue	47.3	0.0	4.6	51.9	4.6
State Treasurer					
Interest Earnings	0.9	0.0	(7.8)	(6.9)	(7.8)
Office of Financial Management					
Other Agencies	201.4	0.0	15.8	217.3	15.8
Washington Court System					
Court Fees, Fines & Forfeitures	106.3	0.0	(6.9)	99.4	(6.9)
Total General Fund-State *	\$49,934.5	\$0.0	\$2,246.0	\$52,180.5	\$2,246.0

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 17, 2020² Forecast for the 2021-23 biennium, adopted September 23, 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	June 2020 Forecast¹	Non- Economic Changes	Forecast Revision	Sept 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$22,990.7	\$0.0	\$1,264.6	\$24,255.3	\$1,264.6
Business & Occupation	9,296.9	0.0	546.7	9,843.7	546.7
Use	1,383.3	0.0	85.2	1,468.5	85.2
Public Utility	947.6	0.0	4.1	951.7	4.1
Liquor Sales/Liter	619.3	0.0	5.0	624.3	5.0
Cigarette	599.8	0.0	3.8	603.6	3.8
Property (State Levy)	8,660.7	0.0	170.8	8,831.5	170.8
Real Estate Excise	2,032.0	0.0	113.2	2,145.2	113.2
Timber Excise	4.1	0.0	(1.3)	2.8	(1.3)
Other	1,081.7	0.0	(11.4)	1,070.3	(11.4)
Subtotal	47,616.2	0.0	2,180.8	49,796.9	2,180.8
Insurance Commissioner					
Insurance Premiums	1,350.1	0.0	15.5	1,365.7	15.5
Liquor Control Board					
Fees, Cannabis Excise Tax	553.8	0.0	38.2	592.0	38.2
Beer & Wine Surtax	58.5	0.0	(0.3)	58.2	(0.3)
Lottery Commission					
Lottery Revenue	48.3	0.0	3.5	51.9	3.5
State Treasurer					
Interest Earnings	1.0	0.0	(7.7)	(6.7)	(7.7)
Office of Financial Management					
Other Agencies	201.4	0.0	15.8	217.3	15.8
Washington Court System					
Court Fees, Fines & Forfeitures	106.3	0.0	(6.9)	99.4	(6.9)
Total General Fund-State *	\$49,935.7	\$0.0	\$2,238.9	\$52,174.6	\$2,238.9

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 17, 2020² Forecast for the 2021-23 biennium, adopted September 23, 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

**September 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	\$11,168.9	\$24,255.3	\$11,834.5	\$12,420.9	\$26,132.2	\$12,838.8	\$13,293.4	\$26,132.2
Business & occupation Use**	4,596.8	4,480.9	9,843.7	4,770.1	5,073.6	10,883.3	5,314.6	5,568.7	10,883.3
Public Utility	719.2	731.9	1,468.5	720.6	748.0	1,559.5	766.6	792.9	1,559.5
Liquor sales/liter	401.7	472.5	951.7	467.0	484.8	1,011.8	498.8	513.1	1,011.8
Beer & wine surtax	311.6	324.7	624.3	308.7	315.6	658.1	324.9	333.2	658.1
Cigarette	28.2	28.9	58.2	29.0	29.2	58.8	29.3	29.4	58.8
Tobacco products	331.3	324.8	620.0	314.9	305.1	580.4	295.2	285.2	580.4
Cannabis Excise Taxes	53.1	57.3	117.2	58.3	58.9	119.7	59.5	60.2	119.7
Property (state school levy)	149.9	191.4	349.3	172.4	177.0	376.4	184.0	192.4	376.4
Leasehold Excise Tax	3,464.9	4,345.6	8,831.5	4,359.0	4,472.5	9,296.9	4,590.0	4,706.9	9,296.9
Public utility district	36.3	28.1	75.6	37.5	38.1	78.1	38.7	39.3	78.1
Brokered Natural Gas	58.4	60.9	125.5	62.1	63.3	130.1	64.5	65.6	130.1
Real estate excise***	23.1	20.6	42.6	21.1	21.5	44.2	21.9	22.3	44.2
Timber excise	1,086.2	994.8	2,145.2	1,086.4	1,058.7	2,095.2	1,038.0	1,057.2	2,095.2
Estate/inheritance	0.2	1.0	2.7	1.2	1.5	3.5	1.7	1.8	3.5
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	31.9	16.0	16.0	31.4	16.0	15.4	31.4
Penalties and interest on past due taxes	652.3	503.0	1,365.7	667.3	698.3	1,483.3	727.5	755.7	1,483.3
Other	140.7	151.2	328.5	159.4	169.2	355.6	174.8	180.8	355.6
Total Taxes	23,390.4	23,955.0	47,345.4	25,142.2	26,209.4	51,351.6	27,042.6	27,971.8	55,014.4
State Non-Tax Sources									
Licenses, permits, fees	154.5	143.4	311.7	154.0	157.7	315.8	161.7	154.1	315.8
Liquor & Cannabis fees	104.7	126.3	242.6	119.3	123.3	262.3	128.6	133.8	262.3
Earnings on investments	4.2	(0.8)	(6.9)	(4.2)	(2.7)	(1.9)	(1.0)	(0.9)	(1.9)
Administrative Office of the Courts	62.5	52.0	99.4	50.4	49.0	95.5	47.8	47.7	95.5
Transfers of unclaimed property	110.4	103.2	194.0	96.5	97.6	198.1	98.6	99.5	198.1
Other revenue & transfers	(9.3)	(7.2)	(11.9)	(5.6)	(6.3)	32.7	13.2	19.5	32.7
Total Non-Tax	426.9	416.8	843.8	410.3	418.6	828.9	448.9	453.6	902.5
Total General Fund-State *	\$23,817.3	\$24,371.8	\$48,189.1	\$25,552.5	\$26,628.1	\$52,180.5	\$27,491.5	\$28,425.4	\$55,916.9

* 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 September 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
Total change***:						
From February 2016	1,553	(198)	1,355	3,393	4,748	
Percent change	4.2	(10.9)	3.1	7.8	10.9	

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

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

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

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 September 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
Total change***:						
From February 2018	(445)	(71)	(516)	765	249	
Percent change	(0.9)	(3.0)	(1.0)	1.5	0.5	

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

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

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

First official forecast for the 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

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
June 2020 Revenue Forecast	46,129.5	1,992.7	48,122.2
September 2020 Revenue Forecast change	2,059.7	179.0	2,238.6
Current Revenue Totals	48,189.1	2,171.7	50,360.8
Transfer to Budget Stabilization Account (1% of GSR)	(460.7)		(460.7)
Transfer to Budget Stabilization Account (EGSR)	-		-
Enacted Fund Transfers	35.2	160.0	195.2
Assumed Prior Period Adjustments	38.5		38.5
Total Resources (including beginning fund balance)	48,801.5	3,313.6	52,115.1
EXPENDITURES			
2019-21 Biennium			
Enacted Budgets	50,602.8	3,096.9	53,699.7
Assumed Reversions	(420.1)	-	(420.1)
Total Expenditures	50,182.7	3,096.9	53,279.6
RESERVES			
Projected Ending Balance	(1,381.2)	216.7	(1,164.5)
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	1,618.4		1,618.4
Transfers from General Fund (1% of GSR)	460.7		460.7
Transfers from GFS (EGSR)	-		-
Assumed Interest Earnings	44.0		44.0
Less 2020 Supplemental Approp from BSA-Coronavirus	(200.0)		(200.0)
Projected Budget Stabilization Account Ending Balance	1,923.2		1,923.2
Total Reserves (Near General Fund plus Budget Stabilization)	541.9	216.7	758.7

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	\$23,373.1	\$22,465.1	\$21,286.2
Business & Occupation Use	9,448.2	9,077.7	8,558.8
Public Utility	1,513.4	1,451.1	1,350.6
Property (school levy)	906.6	874.1	835.4
Real Estate Excise	7,851.0	7,810.5	7,778.0
Other	2,111.7	2,081.1	2,013.4
Subtotal	2,304.1	2,262.8	2,192.1
	47,508.1	46,022.4	44,014.6
Insurance Commissioner¹	1,167.9	1,155.3	1,142.7
Lottery Commission	43.1	41.7	40.2
State Treasurer - Interest earnings	10.2	3.4	1.5
Liquor and Cannabis Surtaxes & Fees²	700.6	629.3	672.0
Office of Financial Management			
Other agencies	224.8	222.6	220.3
Washington Court System			
Court Fees, Fines & Forfeitures	115.4	114.5	109.9
Total General Fund - State*	\$49,770.1	\$48,189.1	\$46,201.3
Difference from September 2020 Baseline	\$1,581.0		(\$1,987.8)

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 3.14

**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	\$26,703.8	\$24,255.3	\$21,189.7
Business & Occupation Use	10,825.5	9,843.7	8,538.9
Public Utility	1,610.5	1,468.5	1,281.9
Property (school levy)	1,037.6	951.7	860.1
Real Estate Excise	8,902.1	8,831.5	8,728.7
Other	2,288.1	2,145.2	1,833.5
Subtotal	2,405.2	2,307.1	2,091.3
	53,772.9	49,803.0	44,524.1
Insurance Commissioner¹	1,399.8	1,365.7	1,331.5
Lottery Commission	54.5	51.9	49.3
State Treasurer - Interest earnings	11.7	(6.9)	(12.5)
Liquor and Cannabis Surtaxes & Fees²	806.4	650.2	711.9
Office of Financial Management			
Other agencies	223.8	217.3	210.8
Washington Court System			
Court Fees, Fines & Forfeitures	102.6	99.4	88.5
Total General Fund - State*	\$56,371.7	\$52,180.5	\$46,903.6
Difference from September 2020 Baseline	\$4,191.2		(\$5,277.0)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.15

Lottery transfers by fund

September 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	189.2	24.9	0.0	14.2	0.0	0.0	0.4	4.3	145.4	0.0	0.0
2019-21 Biennium	375.6	41.7	0.0	27.9	0.0	0.0	0.8	7.4	297.9	0.0	0.0
2022	187.4	25.9	0.0	0.0	0.0	0.0	0.4	4.3	156.8	0.0	0.0
2023	189.2	26.0	0.0	0.0	0.0	0.0	0.4	4.3	158.4	0.0	0.0
2021-23 Biennium	376.6	51.9	0.0	0.0	0.0	0.0	0.8	8.6	315.3	0.0	0.0
2024	191.1	26.2	0.0	0.0	0.0	0.0	0.4	4.3	160.2	0.0	0.0
2025	193.2	26.4	0.0	0.0	0.0	0.0	0.4	4.3	162.1	0.0	0.0
2023-25 Biennium	384.3	52.7	0.0	0.0	0.0	0.0	0.8	8.6	322.3	0.0	0.0

Table 3.16

Lottery transfers by fund

September 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	181.4	16.2	0.0	13.7	0.0	0.0	0.4	3.4	147.8	0.0	0.0
2021	187.8	26.1	0.0	14.2	0.0	0.0	0.4	4.3	142.8	0.0	0.0
2019-21 Biennium	369.2	42.3	0.0	27.9	0.0	0.0	0.8	7.7	290.6	0.0	0.0
2022	187.4	25.8	0.0	0.0	0.0	0.0	0.4	4.3	156.9	0.0	0.0
2023	189.3	26.1	0.0	0.0	0.0	0.0	0.4	4.3	158.6	0.0	0.0
2021-23 Biennium	376.7	51.9	0.0	0.0	0.0	0.0	0.8	8.6	315.4	0.0	0.0
2024	191.3	26.3	0.0	0.0	0.0	0.0	0.4	4.3	160.4	0.0	0.0
2025	193.4	26.3	0.0	0.0	0.0	0.0	0.4	4.3	162.4	0.0	0.0
2023-25 Biennium	384.7	52.6	0.0	0.0	0.0	0.0	0.8	8.6	322.7	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)
September 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%
Forecast:										
FY 2020	\$23,817	6.2%	\$913	-32.5%	\$153	-2.0%	\$32		\$24,915	4.1%
FY 2021	\$24,372	2.3%	\$622	-31.9%	\$145	-4.7%	\$307	862.5%	\$25,446	2.1%
FY 2022	\$25,552	4.8%	\$613	-1.4%	\$157	7.9%	\$291	-5.0%	\$26,614	4.6%
FY 2023	\$26,628	4.2%	\$627	2.3%	\$158	1.0%	\$310	6.4%	\$27,724	4.2%
FY 2024	\$27,491	3.2%	\$509	-18.8%	\$160	1.1%	\$342	10.5%	\$28,503	2.8%
FY 2025	\$28,425	3.4%	\$531	4.3%	\$162	1.2%	\$357	4.3%	\$29,476	3.4%
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	\$48,189	9.2%	\$1,535	-7.2%	\$298	4.8%	\$339	NA	\$50,361	9.3%
21-23 Biennium	\$52,181	8.3%	\$1,241	-19.2%	\$315	5.8%	\$601	77.6%	\$54,338	7.9%
23-25 Biennium	\$55,917	7.2%	\$1,041	-16.1%	\$322	2.2%	\$700	16.3%	\$57,979	6.7%

*Education legacy trust fund excluding FY 14 and FY 15 lottery fund transfers. Includes pension stabilization fund interest in FY 08 and FY 09.

Table 3.18

Forecasted distribution of excise tax and license fees from cannabis sales

September 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	\$531,965	\$18,660	\$513,305	\$0	\$10,616	\$390	\$256,653	\$48,746	\$530	\$196,371	
2022	\$492,150	\$16,760	\$475,390	\$0	\$10,616	\$390	\$237,695	\$48,746	\$530	\$177,413	
2023	\$502,725	\$16,760	\$485,965	\$0	\$10,616	\$390	\$242,983	\$49,446	\$530	\$182,001	
2024	\$516,926	\$16,760	\$500,166	\$0	\$10,616	\$390	\$250,083	\$49,446	\$530	\$189,101	
2025	\$533,706	\$16,760	\$516,946	\$0	\$10,616	\$390	\$258,473	\$49,446	\$530	\$197,491	
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	\$980,392	\$36,894	\$943,498	\$0	\$21,402	\$764	\$471,749	\$97,406	\$1,052	\$351,125	
2021-23	\$994,876	\$33,520	\$961,356	\$0	\$21,232	\$780	\$480,678	\$98,192	\$1,060	\$359,414	
2023-25	\$1,050,632	\$33,520	\$1,017,112	\$0	\$21,232	\$780	\$508,556	\$98,892	\$1,060	\$386,592	

*Before distributions to local governments

Table 3.19

Workforce Education Investment Account

September 2020

Thousands of dollars

	FY20	FY21	2019-21 Biennium	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium
June 2020 forecast	34,091	287,710	321,800	275,976	295,595	571,571	318,982	345,714	664,696
Forecast change	(2,227)	18,975	16,747	15,374	14,319	29,693	23,383	11,436	34,819
September 2020 forecast	31,863	306,684	338,548	291,350	309,914	601,263	342,365	357,150	699,515

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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	18,215.0	18,911.6	19,641.2	20,194.5	20,701.7	21,181.4
% Ch	3.0	2.2	-4.6	3.8	3.9	2.8	2.5	2.3
Real Consumption	12,928.1	13,240.2	12,572.7	13,092.6	13,575.0	13,969.1	14,321.6	14,667.7
% Ch	2.7	2.4	-5.0	4.1	3.7	2.9	2.5	2.4
Real Nonresidential Fixed Investment	2,698.9	2,776.8	2,615.8	2,656.1	2,776.2	2,907.0	3,033.7	3,160.3
% Ch	6.9	2.9	-5.8	1.5	4.5	4.7	4.4	4.2
Real Residential Fixed Investment	612.0	601.5	613.9	620.5	615.4	614.0	615.6	619.0
% Ch	-0.6	-1.7	2.1	1.1	-0.8	-0.2	0.3	0.6
Real Personal Income	16,492.4	16,887.6	17,810.2	16,971.5	17,491.5	18,014.5	18,448.8	18,921.0
% Ch	3.1	2.4	5.5	-4.7	3.1	3.0	2.4	2.6
Real Per Capita Income (\$/Person)	50,412	51,373	53,903	51,017	52,215	53,410	54,331	55,355
% Ch	2.6	1.9	4.9	-5.4	2.3	2.3	1.7	1.9
Price and Wage Indexes								
PCE Price Index (2012=100)	108.2	109.9	111.1	113.2	115.1	116.8	118.9	121.2
% Ch	2.1	1.5	1.1	1.9	1.7	1.5	1.7	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.511	2.557	2.588	2.651	2.706	2.751	2.804	2.864
% Ch	2.4	1.8	1.2	2.4	2.0	1.7	1.9	2.2
Employment Cost Index (Dec. 2005=1.0)	1.334	1.374	1.411	1.441	1.490	1.540	1.586	1.633
% Ch	3.1	3.0	2.7	2.2	3.4	3.4	3.0	3.0
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,611.9	21,433.2	20,667.6	21,711.2	22,925.8	24,024.5	25,107.9	26,238.6
% Ch	5.5	4.0	-3.6	5.0	5.6	4.8	4.5	4.5
Personal Income	17,851.8	18,551.5	19,781.6	19,206.3	20,138.3	21,048.0	21,927.6	22,927.8
% Ch	5.3	3.9	6.6	-2.9	4.9	4.5	4.2	4.6
Employment (Millions)								
U.S. Civilian Labor Force	162.1	163.5	161.0	163.2	165.4	167.1	168.5	169.5
Total U.S. Employment	155.8	157.5	147.3	152.5	157.1	160.1	162.3	163.5
Unemployment Rate (%)	3.89	3.66	8.53	6.55	4.99	4.18	3.71	3.55
Nonfarm Payroll Employment	148.89	150.94	142.33	146.91	150.93	153.74	155.68	157.08
% Ch	1.6	1.4	-5.7	3.2	2.7	1.9	1.3	0.9
Manufacturing	12.69	12.84	12.24	12.06	12.30	12.42	12.38	12.36
% Ch	2.0	1.2	-4.7	-1.5	2.1	1.0	-0.4	-0.1
Durable Manufacturing	7.95	8.06	7.64	7.43	7.68	7.76	7.73	7.74
% Ch	2.7	1.4	-5.2	-2.7	3.3	1.0	-0.3	0.1
Nondurable Manufacturing	4.74	4.78	4.60	4.62	4.63	4.67	4.64	4.62
% Ch	0.9	0.8	-3.7	0.4	0.1	0.8	-0.5	-0.5
Construction	7.29	7.49	7.19	7.06	7.13	7.25	7.37	7.53
% Ch	4.6	2.9	-4.0	-1.9	1.0	1.7	1.8	2.1
Service-Providing	128.19	129.87	122.26	127.22	130.93	133.50	135.34	136.60
% Ch	1.3	1.3	-5.9	4.1	2.9	2.0	1.4	0.9
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	64.9	57.0	38.7	42.6	44.4	45.5	46.5	47.8
Personal Saving/Disposable Income (%)	7.9	7.6	17.6	9.5	8.8	8.8	8.6	8.7
Auto Sales (Millions)	5.3	4.7	3.3	3.3	3.4	3.4	3.5	3.5
% Ch	-12.8	-11.1	-30.4	1.5	1.7	1.8	0.7	0.6
Housing Starts (Millions)	1.248	1.295	1.319	1.297	1.317	1.318	1.288	1.285
% Ch	3.4	3.8	1.8	-1.6	1.6	0.0	-2.2	-0.3
Federal Budget Surplus (Billions)	-931.7	-1,047.0	-3,586.3	-1,522.8	-1,298.4	-1,175.1	-1,067.5	-1,064.9
Net Exports (Billions)	-609.5	-610.5	-593.3	-754.0	-738.2	-614.8	-541.4	-517.3
3-Month Treasury Bill Rate (%)	1.94	2.06	0.36	0.11	0.09	0.09	0.09	0.11
10-Year Treasury Note Yield (%)	2.91	2.14	0.85	0.93	1.18	1.29	1.43	1.71
Bond Index of 20 G.O. Munis. (%)	3.96	3.60	2.66	2.37	2.40	2.41	2.48	2.69
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.20	3.09	3.13	3.14	3.27	3.46

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	17,282.2	18,182.6	18,384.4	18,612.5	18,820.0	19,020.0	19,194.1
% Ch , Annual Rate	-5.0	-31.7	22.5	4.5	5.1	4.5	4.3	3.7
Real Consumption	13,118.4	11,819.6	12,603.0	12,749.9	12,885.8	13,026.1	13,164.4	13,294.3
% Ch , Annual Rate	-6.9	-34.1	29.3	4.7	4.3	4.4	4.3	4.0
Real Nonresidential Fixed Investment	2,733.8	2,535.8	2,590.6	2,603.0	2,608.9	2,651.2	2,671.3	2,693.1
% Ch , Annual Rate	-6.7	-26.0	8.9	1.9	0.9	6.6	3.1	3.3
Real Residential Fixed Investment	637.6	566.1	625.0	626.9	623.3	621.3	619.4	618.2
% Ch , Annual Rate	19.0	-37.9	48.6	1.2	-2.3	-1.2	-1.3	-0.7
Real Personal Income	17,091.1	18,481.8	17,472.0	18,196.1	16,803.9	16,935.9	17,032.3	17,114.0
% Ch , Annual Rate	2.8	36.7	-20.1	17.6	-27.3	3.2	2.3	1.9
Real Per Capita Income (\$/Person)	51,839	55,986	52,846	54,939	50,647	50,955	51,155	51,311
% Ch , Annual Rate	2.4	36.0	-20.6	16.8	-27.8	2.5	1.6	1.2
Price and Wage Indexes								
PCE Price Index (2012=100)	110.9	110.4	111.3	111.7	112.3	112.9	113.5	114.0
% Ch , Annual Rate	1.3	-1.8	3.5	1.1	2.3	2.1	2.0	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.586	2.563	2.596	2.607	2.627	2.644	2.660	2.675
% Ch , Annual Rate	1.2	-3.5	5.3	1.7	3.1	2.6	2.4	2.3
Employment Cost Index (Dec. 2005=1.0)	1.403	1.408	1.413	1.418	1.426	1.436	1.445	1.457
% Ch , Annual Rate	4.1	1.4	1.4	1.4	2.3	2.7	2.7	3.3
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,561.1	19,486.5	20,674.8	20,947.9	21,260.2	21,556.4	21,867.6	22,160.7
% Ch , Annual Rate	-3.4	-33.3	26.7	5.4	6.1	5.7	5.9	5.5
Personal Income	18,951.0	20,401.5	19,454.9	20,319.0	18,871.0	19,119.7	19,325.8	19,508.6
% Ch , Annual Rate	4.1	34.3	-17.3	19.0	-25.6	5.4	4.4	3.8
Employment (Millions)								
U.S. Civilian Labor Force	164.0	158.2	160.4	161.3	162.2	163.0	163.5	164.1
Total U.S. Employment	157.7	137.6	145.5	148.4	150.7	152.1	153.1	154.2
Unemployment Rate (%)	3.82	13.02	9.25	8.00	7.09	6.66	6.39	6.04
Nonfarm Payroll Employment	151.92	133.72	140.32	143.37	145.33	146.60	147.37	148.34
% Ch , Annual Rate	0.4	-40.0	21.3	9.0	5.6	3.6	2.1	2.7
Manufacturing	12.83	11.77	12.22	12.13	12.00	12.06	12.00	12.17
% Ch , Annual Rate	-0.4	-29.3	16.3	-2.8	-4.5	2.1	-1.8	5.5
Durable Manufacturing	8.05	7.32	7.63	7.55	7.41	7.43	7.34	7.55
% Ch , Annual Rate	-0.1	-31.6	18.3	-4.3	-7.0	0.9	-4.7	12.0
Nondurable Manufacturing	4.79	4.45	4.59	4.59	4.58	4.63	4.66	4.61
% Ch , Annual Rate	-1.0	-25.3	13.0	-0.2	-0.2	4.0	3.0	-4.1
Construction	7.60	6.91	7.20	7.05	7.08	7.04	7.05	7.07
% Ch , Annual Rate	3.1	-31.6	17.6	-8.1	1.4	-2.1	0.5	1.5
Service-Providing	130.78	114.40	120.28	123.58	125.67	126.93	127.74	128.53
% Ch , Annual Rate	0.3	-41.4	22.2	11.4	6.9	4.0	2.6	2.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	45.8	27.8	40.9	40.4	41.5	42.4	43.1	43.6
Personal Saving/Disposable Income (%)	9.6	26.0	16.0	18.6	10.0	9.8	9.4	8.9
Auto Sales (Millions)	3.8	2.5	3.5	3.3	3.3	3.3	3.3	3.3
% Ch , Annual Rate	-43.6	-81.7	266.7	-18.9	2.1	2.1	0.9	0.4
Housing Starts (Millions)	1.484	1.064	1.419	1.307	1.296	1.294	1.297	1.301
% Ch , Annual Rate	15.2	-73.6	216.2	-27.9	-3.4	-0.5	0.9	1.0
Federal Budget Surplus (Billions)	-1,150.8	-5,659.1	-4,036.5	-3,498.9	-1,633.5	-1,560.6	-1,499.8	-1,397.4
Net Exports (Billions)	-494.3	-536.8	-681.9	-660.2	-671.0	-750.6	-788.0	-806.6
3-Month Treasury Bill Rate (%)	1.11	0.14	0.10	0.08	0.10	0.11	0.11	0.11
10-Year Treasury Note Yield (%)	1.38	0.69	0.63	0.71	0.81	0.89	0.98	1.04
Bond Index of 20 G.O. Munis. (%)	3.45	2.79	2.15	2.24	2.28	2.36	2.42	2.43
30-Year Fixed Mortgage Rate (%)	3.51	3.24	3.00	3.04	3.08	3.11	3.08	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	19,378.4	19,573.3	19,736.5	19,876.7	20,003.9	20,130.4	20,257.0	20,386.8
% Ch , Annual Rate	3.9	4.1	3.4	2.9	2.6	2.6	2.5	2.6
Real Consumption	13,410.2	13,525.9	13,631.9	13,732.0	13,827.9	13,924.1	14,017.0	14,107.3
% Ch , Annual Rate	3.5	3.5	3.2	3.0	2.8	2.8	2.7	2.6
Real Nonresidential Fixed Investment	2,720.7	2,759.6	2,795.6	2,828.7	2,859.9	2,891.0	2,922.6	2,954.6
% Ch , Annual Rate	4.2	5.8	5.3	4.8	4.5	4.4	4.5	4.5
Real Residential Fixed Investment	616.0	615.2	615.6	615.0	614.1	613.8	613.7	614.3
% Ch , Annual Rate	-1.5	-0.5	0.2	-0.4	-0.6	-0.2	0.0	0.4
Real Personal Income	17,283.1	17,426.5	17,566.3	17,689.9	17,835.0	17,964.2	18,075.3	18,183.4
% Ch , Annual Rate	4.0	3.4	3.2	2.8	3.3	2.9	2.5	2.4
Real Per Capita Income (\$/Person)	51,728	52,067	52,394	52,672	53,013	53,306	53,545	53,774
% Ch , Annual Rate	3.3	2.6	2.5	2.1	2.6	2.2	1.8	1.7
Price and Wage Indexes								
PCE Price Index (2012=100)	114.5	114.9	115.3	115.7	116.2	116.6	117.1	117.5
% Ch , Annual Rate	1.7	1.6	1.4	1.4	1.5	1.5	1.6	1.6
U.S. Consumer Price Index (1982-84=1.0)	2.688	2.701	2.711	2.722	2.733	2.744	2.756	2.769
% Ch , Annual Rate	2.0	2.0	1.5	1.6	1.6	1.7	1.8	1.8
Employment Cost Index (Dec. 2005=1.0)	1.470	1.484	1.496	1.509	1.522	1.534	1.546	1.558
% Ch , Annual Rate	3.7	3.6	3.4	3.5	3.4	3.2	3.1	3.1
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	22,466.5	22,787.3	23,084.5	23,365.1	23,629.6	23,890.9	24,154.0	24,423.5
% Ch , Annual Rate	5.6	5.8	5.3	5.0	4.6	4.5	4.5	4.5
Personal Income	19,786.7	20,030.9	20,260.0	20,475.7	20,718.2	20,945.7	21,157.2	21,370.9
% Ch , Annual Rate	5.8	5.0	4.7	4.3	4.8	4.5	4.1	4.1
Employment (Millions)								
U.S. Civilian Labor Force	164.6	165.1	165.6	166.1	166.5	166.9	167.3	167.7
Total U.S. Employment	155.4	156.7	157.8	158.6	159.2	159.8	160.4	161.0
Unemployment Rate (%)	5.58	5.09	4.75	4.54	4.39	4.25	4.11	3.97
Nonfarm Payroll Employment	149.42	150.48	151.53	152.30	152.90	153.48	154.03	154.57
% Ch , Annual Rate	2.9	2.9	2.8	2.1	1.6	1.5	1.4	1.4
Manufacturing	12.26	12.27	12.32	12.37	12.41	12.43	12.43	12.42
% Ch , Annual Rate	3.3	0.3	1.6	1.5	1.5	0.7	0.0	-0.5
Durable Manufacturing	7.63	7.66	7.69	7.73	7.76	7.76	7.76	7.75
% Ch , Annual Rate	4.4	1.2	2.0	1.7	1.6	0.4	-0.3	-0.5
Nondurable Manufacturing	4.63	4.62	4.63	4.64	4.65	4.67	4.67	4.67
% Ch , Annual Rate	1.5	-1.3	0.9	1.2	1.3	1.2	0.5	-0.6
Construction	7.08	7.11	7.14	7.17	7.20	7.23	7.26	7.29
% Ch , Annual Rate	0.5	1.6	1.9	1.5	1.7	1.8	1.7	1.7
Service-Providing	129.51	130.53	131.49	132.19	132.71	133.24	133.75	134.28
% Ch , Annual Rate	3.1	3.2	3.0	2.2	1.6	1.6	1.5	1.6
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	43.9	44.2	44.5	44.8	45.1	45.3	45.6	45.9
Personal Saving/Disposable Income (%)	8.9	8.9	8.8	8.7	8.8	8.9	8.8	8.7
Auto Sales (Millions)	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5
% Ch , Annual Rate	1.9	3.5	0.1	3.8	0.5	2.5	1.4	1.0
Housing Starts (Millions)	1.319	1.315	1.308	1.326	1.322	1.319	1.319	1.312
% Ch , Annual Rate	5.8	-1.2	-2.1	5.7	-1.3	-1.1	-0.1	-2.0
Federal Budget Surplus (Billions)	-1,367.0	-1,320.8	-1,272.6	-1,233.1	-1,221.5	-1,202.7	-1,158.7	-1,117.4
Net Exports (Billions)	-780.6	-751.3	-727.8	-693.0	-657.1	-626.8	-599.0	-576.5
3-Month Treasury Bill Rate (%)	0.10	0.09	0.09	0.09	0.09	0.09	0.10	0.10
10-Year Treasury Note Yield (%)	1.09	1.15	1.22	1.26	1.29	1.28	1.29	1.32
Bond Index of 20 G.O. Munis. (%)	2.40	2.39	2.40	2.41	2.42	2.40	2.40	2.41
30-Year Fixed Mortgage Rate (%)	3.10	3.11	3.14	3.16	3.15	3.14	3.14	3.15

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	20,516.0	20,640.0	20,763.5	20,887.1	21,007.1	21,124.6	21,241.2	21,352.6
% Ch , Annual Rate	2.6	2.4	2.4	2.4	2.3	2.3	2.2	2.1
Real Consumption	14,193.5	14,278.8	14,365.3	14,448.9	14,536.7	14,624.4	14,709.9	14,799.8
% Ch , Annual Rate	2.5	2.4	2.4	2.3	2.5	2.4	2.4	2.5
Real Nonresidential Fixed Investment	2,987.2	3,018.5	3,049.0	3,080.1	3,112.9	3,144.5	3,176.4	3,207.2
% Ch , Annual Rate	4.5	4.3	4.1	4.1	4.3	4.1	4.1	3.9
Real Residential Fixed Investment	614.8	615.1	615.2	617.2	618.4	619.0	620.8	617.8
% Ch , Annual Rate	0.3	0.2	0.1	1.3	0.8	0.4	1.2	-1.9
Real Personal Income	18,288.3	18,385.9	18,501.9	18,619.0	18,762.0	18,868.4	18,975.1	19,078.7
% Ch , Annual Rate	2.3	2.2	2.5	2.6	3.1	2.3	2.3	2.2
Real Per Capita Income (\$/Person)	53,994	54,191	54,442	54,696	55,025	55,246	55,468	55,680
% Ch , Annual Rate	1.6	1.5	1.9	1.9	2.4	1.6	1.6	1.5
Price and Wage Indexes								
PCE Price Index (2012=100)	118.0	118.6	119.1	119.7	120.3	120.9	121.5	122.1
% Ch , Annual Rate	1.7	1.9	1.9	1.9	2.0	2.0	2.0	2.1
U.S. Consumer Price Index (1982-84=1.0)	2.782	2.796	2.811	2.826	2.841	2.856	2.872	2.888
% Ch , Annual Rate	1.8	2.1	2.1	2.1	2.1	2.2	2.2	2.3
Employment Cost Index (Dec. 2005=1.0)	1.569	1.581	1.592	1.604	1.615	1.627	1.639	1.652
% Ch , Annual Rate	3.0	3.0	2.9	3.0	2.9	3.0	3.0	3.1
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	24,694.0	24,968.6	25,244.5	25,524.6	25,807.7	26,093.7	26,382.7	26,670.4
% Ch , Annual Rate	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.4
Personal Income	21,583.6	21,800.8	22,041.5	22,284.6	22,564.5	22,804.8	23,048.8	23,293.0
% Ch , Annual Rate	4.0	4.1	4.5	4.5	5.1	4.3	4.3	4.3
Employment (Millions)								
U.S. Civilian Labor Force	168.0	168.4	168.7	168.9	169.2	169.4	169.7	169.9
Total U.S. Employment	161.6	162.1	162.5	162.9	163.2	163.4	163.7	163.9
Unemployment Rate (%)	3.84	3.75	3.66	3.59	3.57	3.55	3.54	3.55
Nonfarm Payroll Employment	155.02	155.44	155.92	156.34	156.68	156.97	157.24	157.45
% Ch, Annual Rate	1.2	1.1	1.2	1.1	0.9	0.7	0.7	0.5
Manufacturing	12.39	12.38	12.37	12.37	12.36	12.36	12.36	12.36
% Ch, Annual Rate	-0.9	-0.4	0.0	-0.2	-0.3	0.1	0.1	-0.1
Durable Manufacturing	7.73	7.73	7.73	7.73	7.73	7.73	7.74	7.75
% Ch, Annual Rate	-0.9	-0.1	0.2	-0.1	-0.2	0.4	0.4	0.2
Nondurable Manufacturing	4.66	4.65	4.64	4.64	4.63	4.63	4.62	4.61
% Ch, Annual Rate	-1.0	-0.9	-0.4	-0.5	-0.4	-0.4	-0.5	-0.6
Construction	7.33	7.35	7.39	7.43	7.47	7.51	7.55	7.59
% Ch, Annual Rate	1.7	1.6	1.9	2.2	2.2	2.2	2.4	1.9
Service-Providing	134.73	135.13	135.57	135.96	136.26	136.50	136.72	136.90
% Ch, Annual Rate	1.4	1.2	1.3	1.2	0.9	0.7	0.6	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	46.1	46.4	46.7	47.0	47.3	47.6	48.0	48.3
Personal Saving/Disposable Income (%)	8.7	8.6	8.6	8.6	8.8	8.7	8.7	8.7
Auto Sales (Millions)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
% Ch, Annual Rate	0.1	0.3	0.3	0.6	0.4	0.8	1.5	0.2
Housing Starts (Millions)	1.305	1.281	1.281	1.287	1.287	1.290	1.284	1.278
% Ch, Annual Rate	-2.2	-7.2	0.1	1.8	-0.1	0.9	-1.7	-1.9
Federal Budget Surplus (Billions)	-1,090.4	-1,066.6	-1,058.0	-1,055.0	-1,062.8	-1,059.7	-1,063.3	-1,073.9
Net Exports (Billions)	-556.4	-544.5	-536.2	-528.5	-523.5	-519.3	-514.9	-511.5
3-Month Treasury Bill Rate (%)	0.06	0.09	0.10	0.11	0.11	0.11	0.11	0.11
10-Year Treasury Note Yield (%)	1.30	1.40	1.47	1.55	1.61	1.68	1.75	1.81
Bond Index of 20 G.O. Munis. (%)	2.39	2.46	2.51	2.56	2.61	2.66	2.71	2.77
30-Year Fixed Mortgage Rate (%)	3.17	3.23	3.30	3.37	3.39	3.44	3.49	3.54

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	431.817	450.017	479.356	461.617	475.501	489.821	501.809	515.534
% Ch	5.3	4.2	6.5	-3.7	3.0	3.0	2.4	2.7
Real Wage and Salary Disb.	219.103	231.069	233.842	243.679	252.805	260.518	267.016	274.064
% Ch	6.5	5.5	1.2	4.2	3.7	3.1	2.5	2.6
Real Nonwage Income	212.714	218.948	245.514	217.938	222.696	229.303	234.793	241.470
% Ch	4.0	2.9	12.1	-11.2	2.2	3.0	2.4	2.8
Real Per Capita Income (\$/Person)	57,394	59,092	62,210	59,182	60,241	61,353	62,180	63,212
% Ch	3.8	3.0	5.3	-4.9	1.8	1.8	1.3	1.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.082	1.098	1.111	1.132	1.151	1.168	1.189	1.212
% Ch	2.1	1.5	1.1	1.9	1.7	1.5	1.7	2.0
Seattle Cons. Price Index (1982-84=1.0)	2.711	2.779	2.825	2.896	2.955	3.004	3.062	3.128
% Ch	3.2	2.5	1.6	2.5	2.1	1.7	1.9	2.2
Average Nonfarm Annual Wage	67,640	71,056	76,397	77,835	79,729	81,757	84,202	87,190
% Ch	6.4	5.1	7.5	1.9	2.4	2.5	3.0	3.5
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.42	29.16	28.70	29.21	30.15	31.11	31.99	32.88
% Ch	3.8	2.6	-1.6	1.8	3.2	3.2	2.8	2.8
Current Dollar Income (Billions of Dollars)								
Personal Income	467.399	494.356	532.409	522.400	547.454	572.304	596.436	624.705
% Ch	7.5	5.8	7.7	-1.9	4.8	4.5	4.2	4.7
Disposable Personal Income	412.802	435.654	474.006	461.758	482.934	504.281	525.123	549.629
% Ch	8.0	5.5	8.8	-2.6	4.6	4.4	4.1	4.7
Per Capita Income (\$/Person)	62,122	64,913	69,094	66,973	69,356	71,684	73,904	76,597
% Ch	6.0	4.5	6.4	-3.1	3.6	3.4	3.1	3.6
Employment (Thousands)								
Washington Civilian Labor Force	3,806.8	3,912.7	3,955.3	4,049.1	4,118.4	4,174.4	4,219.5	4,260.3
Total Washington Employment	3,637.3	3,745.8	3,608.4	3,781.4	3,902.3	3,983.1	4,040.3	4,083.6
Unemployment Rate (%)	4.45	4.27	8.77	6.61	5.25	4.58	4.25	4.15
Nonfarm Payroll Employment	3,401.1	3,468.3	3,303.8	3,439.9	3,545.4	3,616.4	3,661.7	3,701.2
% Ch	2.4	2.0	-4.7	4.1	3.1	2.0	1.3	1.1
Manufacturing	287.8	293.6	270.5	268.2	272.9	274.1	272.9	272.9
% Ch	1.2	2.0	-7.9	-0.8	1.8	0.4	-0.5	0.0
Durable Manufacturing	202.2	206.8	187.4	183.9	188.7	188.6	187.2	187.1
% Ch	0.9	2.3	-9.4	-1.9	2.6	0.0	-0.7	0.0
Aerospace	83.9	88.6	80.6	73.8	74.2	72.9	71.1	70.0
% Ch	-0.3	5.5	-9.0	-8.4	0.5	-1.7	-2.5	-1.5
Nondurable Manufacturing	85.6	86.8	83.1	84.3	84.2	85.5	85.7	85.8
% Ch	2.0	1.4	-4.2	1.5	-0.1	1.5	0.2	0.2
Construction	213.1	219.3	201.2	203.1	201.2	200.4	199.1	200.6
% Ch	6.7	2.9	-8.3	0.9	-0.9	-0.4	-0.6	0.7
Service-Providing	2,893.9	2,949.5	2,826.9	2,963.8	3,066.4	3,137.1	3,184.7	3,222.6
% Ch	2.2	1.9	-4.2	4.8	3.5	2.3	1.5	1.2
Software Publishers	65.3	70.0	71.1	70.1	71.7	73.2	74.6	75.7
% Ch	6.4	7.1	1.6	-1.4	2.3	2.1	1.8	1.6
Electronic Shopping and Mail-Order	54.8	63.5	76.0	82.5	85.0	87.1	89.1	91.0
% Ch	10.1	15.9	19.7	8.6	3.0	2.5	2.3	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	47.746	48.424	44.171	44.145	42.830	41.486	39.540	38.497
% Ch	4.3	1.4	-8.8	-0.1	-3.0	-3.1	-4.7	-2.6
Single-Family	23.676	23.300	22.759	24.496	24.258	24.061	23.549	23.399
% Ch	2.4	-1.6	-2.3	7.6	-1.0	-0.8	-2.1	-0.6
Multi-Family	24.070	25.124	21.412	19.649	18.572	17.425	15.991	15.099
% Ch	6.1	4.4	-14.8	-8.2	-5.5	-6.2	-8.2	-5.6
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.20	3.09	3.13	3.14	3.27	3.46

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	459.610	495.543	472.324	489.946	457.048	460.737	463.284	465.399
% Ch, Annual Rate	3.6	35.1	-17.5	15.8	-24.3	3.3	2.2	1.8
Real Wage and Salary Disb.	237.400	225.626	234.523	237.821	240.522	242.904	244.644	246.645
% Ch, Annual Rate	3.9	-18.4	16.7	5.7	4.6	4.0	2.9	3.3
Real Nonwage Income	222.211	269.917	237.801	252.125	216.526	217.833	218.640	218.754
% Ch, Annual Rate	3.4	117.7	-39.8	26.4	-45.6	2.4	1.5	0.2
Real Per Capita Income (\$/Person)	59,908	64,418	61,215	63,298	58,865	59,159	59,305	59,398
% Ch, Annual Rate	2.5	33.7	-18.5	14.3	-25.2	2.0	1.0	0.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.109	1.104	1.113	1.117	1.123	1.129	1.135	1.140
% Ch, Annual Rate	1.3	-1.8	3.5	1.1	2.3	2.1	2.0	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.818	2.798	2.835	2.848	2.869	2.888	2.905	2.921
% Ch, Annual Rate	2.7	-2.8	5.4	1.8	3.1	2.6	2.4	2.3
Average Nonfarm Annual Wage	72,786	78,015	77,595	77,193	77,253	77,568	78,030	78,488
% Ch, Annual Rate	3.2	32.0	-2.1	-2.1	0.3	1.6	2.4	2.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.70	28.62	28.70	28.78	28.93	29.11	29.29	29.52
% Ch, Annual Rate	-5.3	-1.1	1.2	1.2	2.0	2.5	2.5	3.1
Current Dollar Income (Billions of Dollars)								
Personal Income	509.608	546.993	525.928	547.107	513.269	520.147	525.667	530.518
% Ch, Annual Rate	5.0	32.7	-14.5	17.1	-22.5	5.5	4.3	3.7
Disposable Personal Income	449.039	490.814	467.435	488.735	453.722	459.872	464.687	468.750
% Ch, Annual Rate	4.7	42.7	-17.7	19.5	-25.7	5.5	4.3	3.5
Per Capita Income (\$/Person)	66,425	71,106	68,162	70,682	66,106	66,787	67,291	67,708
% Ch, Annual Rate	3.8	31.3	-15.6	15.6	-23.5	4.2	3.1	2.5
Employment (Thousands)								
Washington Civilian Labor Force	3,936.1	3,934.0	3,961.2	3,990.0	4,018.2	4,042.0	4,059.8	4,076.4
Total Washington Employment	3,767.6	3,391.1	3,602.1	3,672.8	3,732.3	3,771.1	3,797.3	3,824.8
Unemployment Rate (%)	4.28	13.80	9.07	7.95	7.11	6.70	6.47	6.17
Nonfarm Payroll Employment	3,511.8	3,096.9	3,266.7	3,339.9	3,394.5	3,432.5	3,454.1	3,478.5
% Ch, Annual Rate	2.0	-39.5	23.8	9.3	6.7	4.6	2.5	2.9
Manufacturing	292.4	261.5	261.1	266.9	266.2	268.2	268.1	270.1
% Ch, Annual Rate	-0.8	-36.1	-0.7	9.2	-1.0	3.1	-0.2	3.0
Durable Manufacturing	205.2	182.1	179.0	183.2	182.6	183.7	183.0	186.2
% Ch, Annual Rate	-1.7	-37.9	-6.7	9.7	-1.4	2.5	-1.4	7.1
Aerospace	88.8	82.9	77.2	73.4	73.6	73.9	73.9	73.8
% Ch, Annual Rate	-0.4	-24.2	-25.0	-18.0	0.9	1.8	-0.2	-0.6
Nondurable Manufacturing	87.3	79.4	82.0	83.7	83.6	84.6	85.1	83.9
% Ch, Annual Rate	1.5	-31.6	14.2	8.2	-0.2	4.6	2.6	-5.5
Construction	223.9	180.0	196.1	205.0	204.6	202.9	202.6	202.2
% Ch, Annual Rate	4.7	-58.2	40.7	19.5	-0.8	-3.2	-0.5	-0.8
Service-Providing	2,989.8	2,650.3	2,804.5	2,863.0	2,918.8	2,956.6	2,978.7	3,001.3
% Ch, Annual Rate	2.1	-38.3	25.4	8.6	8.0	5.3	3.0	3.1
Software Publishers	73.6	70.2	70.1	70.5	70.2	70.2	69.7	70.2
% Ch, Annual Rate	9.9	-17.1	-0.3	2.1	-1.6	-0.3	-2.4	2.4
Electronic Shopping and Mail-Order	71.5	72.7	79.0	80.8	81.5	82.2	82.9	83.5
% Ch, Annual Rate	24.8	7.2	38.9	9.4	3.7	3.5	3.3	3.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	49.811	40.345	40.987	45.540	44.761	44.377	43.944	43.495
% Ch, Annual Rate	-26.9	-57.0	6.5	52.4	-6.7	-3.4	-3.8	-4.0
Single-Family	24.783	17.783	23.551	24.919	24.708	24.628	24.371	24.277
% Ch, Annual Rate	-21.4	-73.5	207.6	25.3	-3.4	-1.3	-4.1	-1.5
Multi-Family	25.028	22.562	17.435	20.621	20.054	19.749	19.573	19.218
% Ch, Annual Rate	-31.9	-34.0	-64.3	95.7	-10.6	-5.9	-3.5	-7.1
30-Year Fixed Mortgage Rate (%)	3.51	3.24	3.00	3.04	3.08	3.11	3.08	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	469.845	473.720	477.512	480.925	484.980	488.463	491.446	494.396
% Ch, Annual Rate	3.9	3.3	3.2	2.9	3.4	2.9	2.5	2.4
Real Wage and Salary Disb.	249.132	251.844	254.140	256.103	258.010	259.701	261.321	263.042
% Ch, Annual Rate	4.1	4.4	3.7	3.1	3.0	2.6	2.5	2.7
Real Nonwage Income	220.713	221.876	223.372	224.822	226.970	228.762	230.125	231.355
% Ch, Annual Rate	3.6	2.1	2.7	2.6	3.9	3.2	2.4	2.2
Real Per Capita Income (\$/Person)	59,787	60,103	60,409	60,665	61,002	61,268	61,472	61,673
% Ch, Annual Rate	2.7	2.1	2.0	1.7	2.2	1.8	1.3	1.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.145	1.149	1.153	1.157	1.162	1.166	1.171	1.175
% Ch, Annual Rate	1.7	1.6	1.4	1.4	1.5	1.5	1.6	1.6
Seattle Cons. Price Index (1982-84=1.0)	2.936	2.950	2.961	2.973	2.985	2.997	3.011	3.024
% Ch, Annual Rate	2.0	2.0	1.5	1.6	1.6	1.7	1.8	1.9
Average Nonfarm Annual Wage	79,000	79,543	79,945	80,428	80,920	81,461	82,023	82,625
% Ch, Annual Rate	2.6	2.8	2.0	2.4	2.5	2.7	2.8	3.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	29.77	30.03	30.27	30.53	30.77	31.00	31.23	31.45
% Ch, Annual Rate	3.6	3.5	3.3	3.4	3.3	3.0	2.9	2.9
Current Dollar Income (Billions of Dollars)								
Personal Income	537.905	544.517	550.737	556.659	563.381	569.532	575.240	581.063
% Ch, Annual Rate	5.7	5.0	4.6	4.4	4.9	4.4	4.1	4.1
Disposable Personal Income	474.996	480.489	485.605	490.645	496.533	501.910	506.835	511.845
% Ch, Annual Rate	5.4	4.7	4.3	4.2	4.9	4.4	4.0	4.0
Per Capita Income (\$/Person)	68,448	69,086	69,672	70,218	70,863	71,436	71,953	72,484
% Ch, Annual Rate	4.4	3.8	3.4	3.2	3.7	3.3	2.9	3.0
Employment (Thousands)								
Washington Civilian Labor Force	4,093.4	4,111.0	4,127.3	4,141.8	4,156.4	4,168.7	4,180.4	4,192.2
Total Washington Employment	3,857.3	3,892.0	3,919.6	3,940.4	3,959.7	3,975.6	3,990.7	4,006.3
Unemployment Rate (%)	5.77	5.33	5.03	4.86	4.73	4.63	4.54	4.44
Nonfarm Payroll Employment	3,506.0	3,534.4	3,561.0	3,580.0	3,597.6	3,610.7	3,622.4	3,634.9
% Ch, Annual Rate	3.2	3.3	3.0	2.2	2.0	1.5	1.3	1.4
Manufacturing	272.3	272.6	273.2	273.7	274.3	274.4	274.2	273.7
% Ch, Annual Rate	3.2	0.4	0.9	0.8	0.8	0.2	-0.3	-0.7
Durable Manufacturing	188.1	188.7	189.0	189.1	189.2	188.9	188.5	188.0
% Ch, Annual Rate	4.2	1.3	0.6	0.3	0.2	-0.6	-1.0	-1.0
Aerospace	74.2	74.3	74.2	73.9	73.6	73.1	72.6	72.2
% Ch, Annual Rate	2.6	0.2	-0.6	-1.2	-1.9	-2.4	-2.7	-2.6
Nondurable Manufacturing	84.2	83.8	84.2	84.6	85.1	85.5	85.7	85.7
% Ch, Annual Rate	1.3	-1.6	1.6	2.1	2.1	2.0	1.2	0.0
Construction	201.0	201.2	201.3	201.3	201.0	200.5	200.1	199.8
% Ch, Annual Rate	-2.3	0.4	0.1	0.0	-0.5	-1.0	-0.8	-0.7
Service-Providing	3,027.8	3,055.8	3,081.7	3,100.3	3,117.5	3,130.9	3,143.3	3,156.6
% Ch, Annual Rate	3.6	3.8	3.4	2.4	2.2	1.7	1.6	1.7
Software Publishers	70.9	71.5	72.0	72.4	72.8	73.0	73.4	73.7
% Ch, Annual Rate	4.4	3.1	3.1	2.0	2.2	1.5	1.9	1.8
Electronic Shopping and Mail-Order	84.1	84.7	85.3	85.8	86.3	86.9	87.4	87.9
% 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	43.452	43.069	42.508	42.291	42.024	41.771	41.318	40.832
% Ch, Annual Rate	-0.4	-3.5	-5.1	-2.0	-2.5	-2.4	-4.3	-4.6
Single-Family	24.275	24.291	24.256	24.210	24.204	24.108	24.021	23.911
% Ch, Annual Rate	0.0	0.3	-0.6	-0.8	-0.1	-1.6	-1.4	-1.8
Multi-Family	19.177	18.777	18.253	18.081	17.821	17.663	17.296	16.921
% Ch, Annual Rate	-0.9	-8.1	-10.7	-3.7	-5.6	-3.5	-8.1	-8.4
30-Year Fixed Mortgage Rate (%)	3.10	3.11	3.14	3.16	3.15	3.14	3.14	3.15

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	497.230	499.956	503.305	506.747	510.851	513.983	517.120	520.182
% Ch, Annual Rate	2.3	2.2	2.7	2.8	3.3	2.5	2.5	2.4
Real Wage and Salary Disb.	264.565	266.009	267.795	269.695	271.493	273.226	274.944	276.592
% Ch, Annual Rate	2.3	2.2	2.7	2.9	2.7	2.6	2.5	2.4
Real Nonwage Income	232.665	233.947	235.510	237.052	239.358	240.757	242.176	243.590
% Ch, Annual Rate	2.3	2.2	2.7	2.6	3.9	2.4	2.4	2.4
Real Per Capita Income (\$/Person)	61,859	62,033	62,284	62,545	62,886	63,106	63,324	63,532
% Ch, Annual Rate	1.2	1.1	1.6	1.7	2.2	1.4	1.4	1.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.180	1.186	1.191	1.197	1.203	1.209	1.215	1.221
% Ch, Annual Rate	1.7	1.9	1.9	1.9	2.0	2.0	2.0	2.1
Seattle Cons. Price Index (1982-84=1.0)	3.038	3.054	3.071	3.086	3.103	3.120	3.137	3.155
% Ch, Annual Rate	1.8	2.1	2.1	2.1	2.1	2.2	2.2	2.3
Average Nonfarm Annual Wage	83,214	83,844	84,514	85,236	85,990	86,771	87,578	88,422
% Ch, Annual Rate	2.9	3.1	3.2	3.5	3.6	3.7	3.8	3.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	31.67	31.88	32.10	32.32	32.53	32.76	32.99	33.23
% Ch, Annual Rate	2.8	2.8	2.7	2.8	2.7	2.8	2.8	2.9
Current Dollar Income (Billions of Dollars)								
Personal Income	586.823	592.814	599.592	606.513	614.386	621.214	628.138	635.084
% Ch, Annual Rate	4.0	4.1	4.7	4.7	5.3	4.5	4.5	4.5
Disposable Personal Income	516.856	522.006	527.834	533.796	540.638	546.496	552.599	558.782
% Ch, Annual Rate	4.0	4.0	4.5	4.6	5.2	4.4	4.5	4.6
Per Capita Income (\$/Person)	73,005	73,554	74,199	74,858	75,631	76,271	76,919	77,566
% Ch, Annual Rate	2.9	3.0	3.6	3.6	4.2	3.4	3.4	3.4
Employment (Thousands)								
Washington Civilian Labor Force	4,203.2	4,214.0	4,224.9	4,235.8	4,246.0	4,255.7	4,265.2	4,274.1
Total Washington Employment	4,021.0	4,033.7	4,046.9	4,059.7	4,070.2	4,079.7	4,088.7	4,096.0
Unemployment Rate (%)	4.34	4.28	4.21	4.16	4.14	4.14	4.14	4.17
Nonfarm Payroll Employment	3,645.0	3,654.7	3,667.4	3,679.6	3,689.4	3,698.0	3,705.7	3,711.5
% Ch, Annual Rate	1.1	1.1	1.4	1.3	1.1	0.9	0.8	0.6
Manufacturing	273.2	272.9	272.8	272.7	272.7	272.9	273.1	273.1
% Ch, Annual Rate	-0.8	-0.4	-0.1	-0.1	0.0	0.3	0.3	0.0
Durable Manufacturing	187.5	187.3	187.1	187.0	186.9	187.1	187.2	187.3
% Ch, Annual Rate	-1.0	-0.5	-0.3	-0.3	-0.1	0.3	0.3	0.1
Aerospace	71.7	71.3	70.8	70.5	70.2	70.0	69.9	69.7
% Ch, Annual Rate	-2.5	-2.4	-2.4	-2.0	-1.4	-1.0	-1.0	-0.9
Nondurable Manufacturing	85.7	85.6	85.7	85.7	85.8	85.8	85.8	85.8
% Ch, Annual Rate	-0.3	-0.2	0.3	0.2	0.2	0.2	0.1	-0.1
Construction	199.4	198.9	198.9	199.3	199.8	200.4	200.9	201.4
% Ch, Annual Rate	-0.7	-1.0	0.1	0.8	1.0	1.1	1.2	0.9
Service-Providing	3,167.6	3,178.0	3,190.7	3,202.6	3,211.9	3,219.8	3,226.7	3,232.1
% Ch, Annual Rate	1.4	1.3	1.6	1.5	1.2	1.0	0.9	0.7
Software Publishers	74.1	74.4	74.7	75.0	75.3	75.6	75.9	76.1
% Ch, Annual Rate	2.1	1.8	1.6	1.6	1.7	1.6	1.3	1.3
Electronic Shopping and Mail-Order	88.4	88.9	89.4	89.8	90.3	90.8	91.3	91.7
% 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	40.335	39.551	39.219	39.054	38.830	38.687	38.389	38.083
% Ch, Annual Rate	-4.8	-7.6	-3.3	-1.7	-2.3	-1.5	-3.0	-3.2
Single-Family	23.749	23.550	23.470	23.426	23.422	23.475	23.393	23.306
% Ch, Annual Rate	-2.7	-3.3	-1.3	-0.8	-0.1	0.9	-1.4	-1.5
Multi-Family	16.587	16.001	15.749	15.627	15.409	15.213	14.996	14.776
% Ch, Annual Rate	-7.7	-13.4	-6.2	-3.0	-5.5	-5.0	-5.6	-5.7
30-Year Fixed Mortgage Rate (%)	3.17	3.23	3.30	3.37	3.39	3.44	3.49	3.54

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	142.33	146.91	150.93	153.74	155.68	157.08
% Ch	1.6	1.4	-5.7	3.2	2.7	1.9	1.3	0.9
Manufacturing	12.69	12.84	12.24	12.06	12.30	12.42	12.38	12.36
% Ch	2.0	1.2	-4.7	-1.5	2.1	1.0	-0.4	-0.1
Durable Manufacturing	7.95	8.06	7.64	7.43	7.68	7.76	7.73	7.74
% Ch	2.7	1.4	-5.2	-2.7	3.3	1.0	-0.3	0.1
Wood Products	0.41	0.41	0.40	0.37	0.39	0.39	0.39	0.40
% Ch	2.3	0.7	-3.3	-5.4	4.6	0.0	-0.8	2.5
Primary and Fabricated Metals	1.85	1.88	1.75	1.68	1.79	1.83	1.85	1.86
% Ch	3.0	1.4	-6.7	-3.9	6.5	2.3	1.0	0.5
Computer and Electronic Products	1.05	1.08	1.09	1.10	1.09	1.09	1.09	1.09
% Ch	1.5	2.5	0.4	0.9	-0.1	-0.8	0.3	0.3
Machinery and Electrical Equipment	1.52	1.53	1.45	1.42	1.49	1.51	1.49	1.49
% Ch	3.5	1.0	-5.4	-1.7	4.9	0.8	-0.7	0.1
Transportation Equipment	1.70	1.73	1.61	1.52	1.52	1.55	1.54	1.53
% Ch	3.6	1.9	-7.0	-5.9	-0.1	2.4	-0.9	-0.3
Other Durables	1.42	1.43	1.34	1.34	1.39	1.39	1.37	1.36
% Ch	1.3	0.7	-5.8	-0.2	3.7	0.0	-1.3	-1.1
Nondurable Manufacturing	4.74	4.78	4.60	4.62	4.63	4.67	4.64	4.62
% Ch	0.9	0.8	-3.7	0.4	0.1	0.8	-0.5	-0.5
Food Manufacturing	1.62	1.64	1.62	1.67	1.66	1.73	1.75	1.77
% Ch	1.4	1.3	-1.6	3.1	-0.1	3.8	1.3	1.1
Paper and Paper Products	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.36
% Ch	-0.1	0.0	-2.1	0.6	-0.3	0.9	-0.4	-0.5
Other Nondurables	2.76	2.77	2.63	2.60	2.60	2.58	2.53	2.49
% Ch	0.8	0.6	-5.2	-1.2	0.3	-1.1	-1.7	-1.5
Natural Resources and Mining	0.73	0.74	0.64	0.58	0.57	0.58	0.59	0.60
% Ch	7.6	1.2	-12.7	-9.9	-1.6	1.3	1.6	1.6
Construction	7.29	7.49	7.19	7.06	7.13	7.25	7.37	7.53
% Ch	4.6	2.9	-4.0	-1.9	1.0	1.7	1.8	2.1
Trade, Transportation, and Utilities	27.60	27.71	26.60	27.59	27.61	27.02	26.59	26.64
% Ch	0.8	0.4	-4.0	3.7	0.1	-2.1	-1.6	0.2
Wholesale Trade	5.84	5.90	5.71	5.80	6.13	6.39	6.55	6.63
% Ch	0.5	1.1	-3.3	1.5	5.7	4.2	2.5	1.3
Retail Trade	15.78	15.64	15.01	15.84	15.23	14.24	13.57	13.47
% Ch	-0.4	-0.9	-4.0	5.6	-3.8	-6.5	-4.7	-0.7
Trans., Warehousing, and Utilities	5.98	6.17	5.88	5.95	6.24	6.40	6.47	6.54
% Ch	4.3	3.1	-4.6	1.2	4.9	2.5	1.1	1.0
Information	2.84	2.86	2.69	2.81	2.88	2.83	2.85	2.86
% Ch	0.9	0.8	-5.9	4.5	2.5	-2.0	0.8	0.3
Publishing Industries	0.74	0.76	0.75	0.68	0.69	0.69	0.69	0.68
% Ch	1.3	2.9	-1.7	-8.5	1.0	0.4	-0.7	-1.6
Other Information	2.10	2.10	1.95	2.13	2.19	2.13	2.16	2.18
% Ch	0.7	0.0	-7.4	9.4	3.0	-2.7	1.3	1.0
Financial Activities	8.59	8.75	8.70	8.43	8.87	9.09	9.20	9.21
% Ch	1.7	1.8	-0.5	-3.1	5.1	2.6	1.2	0.1
Professional and Business Services	20.95	21.32	20.23	20.88	22.69	23.51	24.58	25.51
% Ch	2.2	1.7	-5.1	3.2	8.7	3.6	4.6	3.8
Education and Health Services	23.64	24.18	23.34	24.12	24.49	24.97	25.30	25.43
% Ch	1.9	2.3	-3.4	3.3	1.5	2.0	1.3	0.5
Leisure and Hospitality	16.30	16.58	13.29	15.68	15.78	16.81	17.01	16.82
% Ch	1.5	1.7	-19.8	18.0	0.6	6.5	1.2	-1.1
Other Services	5.83	5.89	5.43	5.67	6.12	6.30	6.35	6.38
% Ch	1.1	1.1	-7.8	4.5	7.9	3.0	0.8	0.4
Federal Government	2.80	2.83	2.96	2.85	2.84	2.84	2.84	2.84
% Ch	-0.2	1.2	4.6	-3.9	-0.1	0.0	0.0	0.0
State and Local Government	19.65	19.75	19.01	19.18	19.65	20.12	20.61	20.89
% Ch	0.5	0.5	-3.8	0.9	2.4	2.4	2.4	1.4

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	133.72	140.32	143.37	145.33	146.60	147.37	148.34
% Ch, Annual Rate	0.4	-40.0	21.3	9.0	5.6	3.6	2.1	2.7
Manufacturing	12.83	11.77	12.22	12.13	12.00	12.06	12.00	12.17
% Ch, Annual Rate	-0.4	-29.3	16.3	-2.8	-4.5	2.1	-1.8	5.5
Durable Manufacturing	8.05	7.32	7.63	7.55	7.41	7.43	7.34	7.55
% Ch, Annual Rate	-0.1	-31.6	18.3	-4.3	-7.0	0.9	-4.7	12.0
Wood Products	0.41	0.38	0.40	0.39	0.38	0.37	0.36	0.38
% Ch, Annual Rate	-0.3	-24.3	14.7	-3.8	-13.3	-4.5	-13.3	25.5
Primary and Fabricated Metals	1.85	1.72	1.73	1.69	1.66	1.67	1.66	1.73
% Ch, Annual Rate	-2.8	-25.7	3.0	-9.4	-6.7	2.1	-1.4	16.5
Computer and Electronic Products	1.10	1.09	1.08	1.08	1.08	1.09	1.10	1.10
% Ch, Annual Rate	2.0	-3.6	-2.7	-1.6	2.8	3.3	3.4	1.1
Machinery and Electrical Equipment	1.51	1.42	1.44	1.43	1.41	1.43	1.40	1.46
% Ch, Annual Rate	-2.6	-23.7	5.8	-2.1	-4.6	3.9	-6.9	17.1
Transportation Equipment	1.74	1.44	1.63	1.64	1.55	1.53	1.49	1.50
% Ch, Annual Rate	2.9	-53.0	66.2	0.7	-18.8	-6.9	-10.4	4.5
Other Durables	1.43	1.27	1.35	1.32	1.32	1.34	1.33	1.38
% Ch, Annual Rate	0.9	-37.9	27.7	-8.2	-0.1	5.7	-4.0	15.6
Nondurable Manufacturing	4.79	4.45	4.59	4.59	4.58	4.63	4.66	4.61
% Ch, Annual Rate	-1.0	-25.3	13.0	-0.2	-0.2	4.0	3.0	-4.1
Food Manufacturing	1.65	1.57	1.61	1.63	1.65	1.67	1.69	1.65
% Ch, Annual Rate	-1.3	-17.7	9.9	3.9	5.2	6.0	4.7	-8.7
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	-10.7	5.1	-3.0	-0.5	7.5	3.6	-6.1
Other Nondurables	2.77	2.52	2.62	2.60	2.58	2.59	2.61	2.60
% Ch, Annual Rate	-0.7	-31.3	16.2	-2.4	-3.4	2.3	1.8	-0.8
Natural Resources and Mining	0.71	0.64	0.62	0.60	0.58	0.58	0.58	0.57
% Ch, Annual Rate	-7.5	-35.0	-13.6	-7.6	-11.9	-2.8	-2.2	-2.7
Construction	7.60	6.91	7.20	7.05	7.08	7.04	7.05	7.07
% Ch, Annual Rate	3.1	-31.6	17.6	-8.1	1.4	-2.1	0.5	1.5
Trade, Transportation, and Utilities	27.80	25.06	26.37	27.16	27.44	27.66	27.46	27.80
% Ch, Annual Rate	0.3	-34.0	22.8	12.5	4.2	3.2	-2.9	5.1
Wholesale Trade	5.93	5.57	5.56	5.78	5.77	5.74	5.78	5.91
% Ch, Annual Rate	0.2	-22.0	-0.9	16.4	-0.6	-1.9	2.5	9.3
Retail Trade	15.64	13.82	15.00	15.56	15.81	15.97	15.76	15.84
% Ch, Annual Rate	-0.2	-39.1	38.8	15.8	6.5	4.0	-5.2	2.2
Trans., Warehousing, and Utilities	6.22	5.66	5.81	5.83	5.87	5.95	5.93	6.05
% Ch, Annual Rate	1.6	-31.4	11.1	1.0	2.9	5.9	-1.8	8.8
Information	2.89	2.59	2.63	2.65	2.83	2.85	2.79	2.78
% Ch, Annual Rate	2.5	-36.1	7.7	3.2	28.7	3.5	-8.9	-0.8
Publishing Industries	0.77	0.74	0.74	0.74	0.71	0.69	0.66	0.66
% Ch, Annual Rate	2.6	-13.4	-2.6	0.2	-13.5	-9.2	-17.2	1.4
Other Information	2.12	1.84	1.90	1.92	2.12	2.16	2.12	2.12
% Ch, Annual Rate	2.5	-43.1	12.0	4.4	48.4	8.1	-6.0	-1.5
Financial Activities	8.83	8.59	8.60	8.78	8.47	8.42	8.36	8.48
% Ch, Annual Rate	1.3	-10.7	0.5	8.8	-13.4	-2.5	-2.5	5.5
Professional and Business Services	21.51	19.47	19.89	20.06	20.52	20.82	20.89	21.28
% Ch, Annual Rate	0.6	-32.9	9.0	3.5	9.5	5.9	1.5	7.6
Education and Health Services	24.51	22.25	22.85	23.76	23.88	23.87	24.61	24.12
% Ch, Annual Rate	1.4	-32.0	11.2	16.9	2.1	-0.3	13.1	-7.8
Leisure and Hospitality	16.60	10.15	12.77	13.64	15.07	15.70	15.90	16.06
% Ch, Annual Rate	-3.4	-86.0	151.0	30.3	48.7	17.9	5.2	4.1
Other Services	5.91	4.85	5.38	5.59	5.59	5.64	5.64	5.82
% Ch, Annual Rate	-0.7	-54.6	51.2	16.3	0.3	3.8	0.2	12.7
Federal Government	2.87	2.89	3.10	3.00	2.86	2.84	2.84	2.84
% Ch, Annual Rate	3.2	2.6	32.3	-12.0	-18.0	-1.5	0.0	0.0
State and Local Government	19.86	18.57	18.70	18.93	19.01	19.13	19.24	19.36
% Ch, Annual Rate	0.9	-23.6	2.8	5.1	1.8	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	149.42	150.48	151.53	152.30	152.90	153.48	154.03	154.57
% Ch, Annual Rate	2.9	2.9	2.8	2.1	1.6	1.5	1.4	1.4
Manufacturing	12.26	12.27	12.32	12.37	12.41	12.43	12.43	12.42
% Ch, Annual Rate	3.3	0.3	1.6	1.5	1.5	0.7	0.0	-0.5
Durable Manufacturing	7.63	7.66	7.69	7.73	7.76	7.76	7.76	7.75
% Ch, Annual Rate	4.4	1.2	2.0	1.7	1.6	0.4	-0.3	-0.5
Wood Products	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
% Ch, Annual Rate	8.3	1.3	0.2	1.4	0.7	-1.5	-1.7	-1.6
Primary and Fabricated Metals	1.77	1.79	1.80	1.81	1.82	1.83	1.84	1.84
% Ch, Annual Rate	9.0	4.7	2.4	2.2	2.6	1.9	1.5	1.0
Computer and Electronic Products	1.10	1.10	1.09	1.09	1.09	1.09	1.09	1.09
% Ch, Annual Rate	-0.8	-2.3	-1.6	-1.2	-0.5	-0.3	-0.1	-0.1
Machinery and Electrical Equipment	1.48	1.49	1.50	1.51	1.51	1.51	1.50	1.50
% Ch, Annual Rate	6.1	3.5	2.4	1.4	1.5	-0.5	-1.4	-1.4
Transportation Equipment	1.51	1.50	1.52	1.54	1.55	1.55	1.55	1.55
% Ch, Annual Rate	1.4	-2.6	6.0	4.8	3.2	1.2	-0.3	-0.5
Other Durables	1.39	1.39	1.39	1.39	1.40	1.39	1.39	1.39
% Ch, Annual Rate	3.2	1.3	0.0	0.5	0.8	-0.5	-1.0	-1.6
Nondurable Manufacturing	4.63	4.62	4.63	4.64	4.65	4.67	4.67	4.67
% Ch, Annual Rate	1.5	-1.3	0.9	1.2	1.3	1.2	0.5	-0.6
Food Manufacturing	1.66	1.65	1.67	1.69	1.71	1.73	1.74	1.74
% Ch, Annual Rate	0.8	-2.1	4.6	5.1	4.8	4.4	3.0	1.0
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	0.0	-0.6	0.3	1.1	1.7	1.1	0.5	-0.5
Other Nondurables	2.62	2.61	2.60	2.59	2.59	2.58	2.57	2.56
% Ch, Annual Rate	2.2	-0.9	-1.4	-1.3	-1.0	-0.9	-1.2	-1.6
Natural Resources and Mining	0.57	0.57	0.57	0.57	0.57	0.57	0.58	0.58
% Ch, Annual Rate	-2.0	-2.0	2.3	-0.8	3.0	1.2	1.8	1.9
Construction	7.08	7.11	7.14	7.17	7.20	7.23	7.26	7.29
% Ch, Annual Rate	0.5	1.6	1.9	1.5	1.7	1.8	1.7	1.7
Trade, Transportation, and Utilities	27.88	27.65	27.65	27.25	26.97	27.15	27.05	26.93
% Ch, Annual Rate	1.2	-3.3	0.1	-5.7	-4.1	2.8	-1.6	-1.7
Wholesale Trade	5.99	6.03	6.22	6.28	6.34	6.36	6.40	6.44
% Ch, Annual Rate	5.6	2.9	13.6	3.4	4.1	1.3	2.8	2.4
Retail Trade	15.76	15.45	15.10	14.62	14.23	14.41	14.24	14.07
% Ch, Annual Rate	-2.0	-7.7	-8.7	-12.1	-10.2	5.0	-4.6	-4.7
Trans., Warehousing, and Utilities	6.13	6.17	6.32	6.35	6.39	6.39	6.40	6.42
% Ch, Annual Rate	5.4	2.4	10.4	1.8	2.7	-0.5	1.1	0.8
Information	2.81	2.89	2.94	2.90	2.86	2.81	2.81	2.82
% Ch, Annual Rate	4.3	11.4	7.0	-5.0	-5.4	-6.1	-1.0	2.3
Publishing Industries	0.68	0.69	0.70	0.70	0.70	0.69	0.69	0.69
% Ch, Annual Rate	10.0	4.1	4.4	0.0	0.6	-2.1	-0.5	-0.9
Other Information	2.13	2.20	2.24	2.20	2.16	2.12	2.12	2.13
% Ch, Annual Rate	2.5	13.8	7.8	-6.6	-7.2	-7.3	-1.1	3.4
Financial Activities	8.66	8.80	8.98	9.02	9.08	9.06	9.10	9.13
% Ch, Annual Rate	9.0	6.6	8.2	2.2	2.5	-0.8	1.6	1.3
Professional and Business Services	22.11	22.65	22.93	23.06	23.31	23.38	23.53	23.81
% Ch, Annual Rate	16.6	10.1	5.1	2.3	4.3	1.2	2.7	4.8
Education and Health Services	23.96	24.56	24.75	24.70	24.90	24.91	24.99	25.09
% Ch, Annual Rate	-2.6	10.4	3.0	-0.8	3.3	0.2	1.3	1.6
Leisure and Hospitality	15.81	15.48	15.50	16.34	16.51	16.73	16.95	17.04
% Ch, Annual Rate	-6.2	-8.0	0.4	23.7	4.2	5.3	5.4	2.2
Other Services	5.96	6.07	6.20	6.25	6.30	6.29	6.30	6.31
% Ch, Annual Rate	10.1	7.9	8.8	3.0	3.4	-0.5	0.8	0.4
Federal Government	2.84	2.84	2.84	2.84	2.84	2.84	2.84	2.84
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.47	19.59	19.71	19.82	19.94	20.06	20.18	20.30
% 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	155.02	155.44	155.92	156.34	156.68	156.97	157.24	157.45
% Ch, Annual Rate	1.2	1.1	1.2	1.1	0.9	0.7	0.7	0.5
Manufacturing	12.39	12.38	12.37	12.37	12.36	12.36	12.36	12.36
% Ch, Annual Rate	-0.9	-0.4	0.0	-0.2	-0.3	0.1	0.1	-0.1
Durable Manufacturing	7.73	7.73	7.73	7.73	7.73	7.73	7.74	7.75
% Ch, Annual Rate	-0.9	-0.1	0.2	-0.1	-0.2	0.4	0.4	0.2
Wood Products	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40
% Ch, Annual Rate	-1.5	-0.2	0.6	2.4	2.8	3.9	4.2	0.6
Primary and Fabricated Metals	1.84	1.85	1.85	1.85	1.85	1.86	1.86	1.86
% Ch, Annual Rate	0.6	0.9	1.1	0.5	-0.1	0.7	0.8	0.7
Computer and Electronic Products	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09
% Ch, Annual Rate	0.3	0.6	0.8	0.7	0.4	0.1	-0.2	-0.6
Machinery and Electrical Equipment	1.49	1.49	1.49	1.49	1.49	1.49	1.50	1.50
% Ch, Annual Rate	-1.1	0.0	0.2	-0.4	-0.3	0.5	0.5	0.5
Transportation Equipment	1.54	1.54	1.54	1.54	1.53	1.53	1.53	1.53
% Ch, Annual Rate	-2.5	-0.7	-0.4	-0.5	-0.4	0.3	0.1	-0.4
Other Durables	1.38	1.37	1.37	1.37	1.36	1.36	1.36	1.36
% Ch, Annual Rate	-1.5	-1.4	-1.0	-1.4	-1.6	-0.7	-0.7	0.4
Nondurable Manufacturing	4.66	4.65	4.64	4.64	4.63	4.63	4.62	4.61
% Ch, Annual Rate	-1.0	-0.9	-0.4	-0.5	-0.4	-0.4	-0.5	-0.6
Food Manufacturing	1.75	1.75	1.75	1.76	1.76	1.77	1.77	1.78
% Ch, Annual Rate	0.6	0.6	1.2	1.2	1.1	1.2	1.1	0.8
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	-1.0	-0.7	-0.3	-0.3	-0.5	-0.6	-0.7	-0.8
Other Nondurables	2.55	2.54	2.53	2.52	2.51	2.50	2.49	2.48
% Ch, Annual Rate	-2.0	-1.9	-1.6	-1.6	-1.4	-1.5	-1.5	-1.6
Natural Resources and Mining	0.58	0.58	0.59	0.59	0.59	0.59	0.60	0.60
% Ch, Annual Rate	1.6	1.3	1.8	2.0	1.5	1.0	2.1	1.8
Construction	7.33	7.35	7.39	7.43	7.47	7.51	7.55	7.59
% Ch, Annual Rate	1.7	1.6	1.9	2.2	2.2	2.2	2.4	1.9
Trade, Transportation, and Utilities	26.73	26.53	26.54	26.57	26.60	26.62	26.68	26.68
% Ch, Annual Rate	-2.9	-3.1	0.2	0.4	0.5	0.3	0.8	0.1
Wholesale Trade	6.50	6.54	6.57	6.59	6.61	6.63	6.64	6.65
% Ch, Annual Rate	3.8	2.5	1.5	1.3	1.5	1.1	0.9	0.5
Retail Trade	13.78	13.51	13.50	13.50	13.48	13.46	13.48	13.46
% Ch, Annual Rate	-8.1	-7.6	-0.4	0.1	-0.6	-0.6	0.7	-0.5
Trans., Warehousing, and Utilities	6.45	6.48	6.48	6.48	6.51	6.53	6.55	6.56
% Ch, Annual Rate	2.4	1.3	0.3	0.1	1.7	1.4	1.2	0.8
Information	2.82	2.83	2.86	2.88	2.89	2.88	2.86	2.81
% Ch, Annual Rate	0.0	1.3	4.2	2.7	1.0	-0.8	-3.6	-5.9
Publishing Industries	0.69	0.69	0.69	0.68	0.68	0.68	0.68	0.67
% Ch, Annual Rate	0.4	-0.7	-1.5	-1.6	-1.2	-1.4	-2.8	-2.9
Other Information	2.13	2.14	2.18	2.20	2.21	2.20	2.18	2.14
% Ch, Annual Rate	-0.2	1.9	6.1	4.1	1.7	-0.7	-3.9	-6.8
Financial Activities	9.18	9.21	9.21	9.21	9.21	9.22	9.21	9.21
% Ch, Annual Rate	2.2	1.3	0.2	0.0	-0.1	0.3	-0.1	-0.3
Professional and Business Services	24.12	24.47	24.74	24.99	25.25	25.45	25.62	25.73
% Ch, Annual Rate	5.3	6.0	4.6	4.1	4.1	3.2	2.7	1.7
Education and Health Services	25.23	25.30	25.33	25.35	25.39	25.42	25.45	25.48
% Ch, Annual Rate	2.3	1.2	0.5	0.2	0.7	0.5	0.5	0.4
Leisure and Hospitality	17.03	17.04	17.00	16.97	16.89	16.83	16.77	16.80
% Ch, Annual Rate	-0.1	0.2	-1.0	-0.7	-1.8	-1.4	-1.5	0.7
Other Services	6.34	6.36	6.36	6.35	6.36	6.37	6.38	6.40
% Ch, Annual Rate	1.9	1.0	0.0	-0.3	0.4	0.7	0.9	0.9
Federal Government	2.84	2.84	2.84	2.84	2.84	2.84	2.84	2.84
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.43	20.55	20.67	20.80	20.84	20.87	20.91	20.95
% Ch, Annual Rate	2.4	2.4	2.4	2.4	0.8	0.7	0.7	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	3,303.8	3,439.9	3,545.4	3,616.4	3,661.7	3,701.2
% Ch	2.4	2.0	-4.7	4.1	3.1	2.0	1.3	1.1
Manufacturing	287.8	293.6	270.5	268.2	272.9	274.1	272.9	272.9
% Ch	1.2	2.0	-7.9	-0.8	1.8	0.4	-0.5	0.0
Durable Manufacturing	202.2	206.8	187.4	183.9	188.7	188.6	187.2	187.1
% Ch	0.9	2.3	-9.4	-1.9	2.6	0.0	-0.7	0.0
Wood Products	13.0	12.9	11.8	11.7	11.9	11.6	11.2	11.2
% Ch	0.9	-0.4	-8.6	-1.2	1.5	-2.4	-3.0	-0.3
Primary and Fabricated Metals	26.1	26.9	24.3	24.4	26.1	26.7	27.0	27.1
% Ch	4.3	2.7	-9.7	0.7	6.8	2.3	1.0	0.6
Computer and Electronic Products	19.8	19.8	19.0	19.9	20.1	20.1	20.4	20.7
% Ch	0.9	-0.3	-3.6	4.7	0.9	-0.2	1.6	1.7
Machinery and Electrical Equipment	21.3	21.3	19.2	19.1	21.0	21.8	22.2	22.9
% Ch	3.0	-0.3	-9.8	-0.6	10.1	4.0	1.8	3.1
Aerospace	83.9	88.6	80.6	73.8	74.2	72.9	71.1	70.0
% Ch	-0.3	5.5	-9.0	-8.4	0.5	-1.7	-2.5	-1.5
Other Transportation Equip.	9.9	9.7	8.9	9.0	8.9	8.8	8.5	8.3
% Ch	-3.0	-1.8	-8.7	1.8	-0.7	-1.6	-3.0	-3.2
Other Durables	28.1	27.7	23.6	26.0	26.6	26.8	26.8	26.9
% Ch	1.5	-1.2	-14.8	9.8	2.3	0.7	0.1	0.4
Nondurable Manufacturing	85.6	86.8	83.1	84.3	84.2	85.5	85.7	85.8
% Ch	2.0	1.4	-4.2	1.5	-0.1	1.5	0.2	0.2
Food Manufacturing	39.1	39.4	38.3	39.3	38.9	40.0	40.1	40.2
% Ch	2.8	0.8	-2.9	2.8	-1.1	2.8	0.3	0.1
Paper and Paper Products	7.7	7.8	7.7	7.8	7.7	7.7	7.6	7.5
% Ch	-1.2	1.5	-1.5	2.4	-1.3	0.0	-1.5	-1.6
Other Nondurables	38.9	39.6	37.2	37.1	37.6	37.8	37.9	38.1
% Ch	1.9	1.9	-6.1	-0.1	1.2	0.5	0.4	0.5
Natural Resources and Mining	6.3	5.9	5.2	4.8	4.8	4.8	4.9	5.0
% Ch	1.1	-5.9	-11.6	-7.6	-0.6	0.1	2.9	1.0
Construction	213.1	219.3	201.2	203.1	201.2	200.4	199.1	200.6
% Ch	6.7	2.9	-8.3	0.9	-0.9	-0.4	-0.6	0.7
Trade, Transportation, and Utilities	636.0	643.8	638.7	664.6	669.6	661.4	654.8	658.6
% Ch	1.8	1.2	-0.8	4.1	0.7	-1.2	-1.0	0.6
Wholesale Trade	135.6	136.9	132.3	135.1	142.5	148.5	152.4	154.6
% Ch	1.8	0.9	-3.3	2.1	5.4	4.2	2.6	1.4
Retail Trade	385.8	390.6	392.5	413.5	404.4	386.6	375.2	375.8
% Ch	1.9	1.2	0.5	5.4	-2.2	-4.4	-2.9	0.1
Electronic Shopping and Mail-Order	54.8	63.5	76.0	82.5	85.0	87.1	89.1	91.0
% Ch	10.1	15.9	19.7	8.6	3.0	2.5	2.3	2.2
Other Retail Trade	331.1	327.1	316.5	331.0	319.5	299.5	286.1	284.7
% Ch	0.6	-1.2	-3.3	4.6	-3.5	-6.3	-4.5	-0.5
Trans., Warehousing, and Utilities	114.5	116.3	113.8	116.0	122.7	126.3	127.2	128.2
% Ch	1.8	1.5	-2.1	1.9	5.8	2.9	0.7	0.8
Information	134.2	144.3	143.1	149.8	156.1	156.7	160.6	164.3
% Ch	6.3	7.5	-0.8	4.7	4.2	0.3	2.5	2.3
Software Publishers	65.3	70.0	71.1	70.1	71.7	73.2	74.6	75.7
% Ch	6.4	7.1	1.6	-1.4	2.3	2.1	1.8	1.6
Other Publishing Industries	5.1	4.8	4.4	3.6	3.5	3.3	3.0	2.6
% Ch	-6.8	-6.5	-8.0	-18.3	-4.1	-5.6	-8.9	-12.5
Other Information	63.8	69.5	67.6	76.2	81.0	80.2	83.0	85.9
% Ch	7.4	9.1	-2.8	12.7	6.3	-1.0	3.6	3.5
Financial Activities	157.7	160.5	157.0	151.3	159.3	162.9	164.1	163.4
% Ch	2.4	1.7	-2.1	-3.6	5.3	2.3	0.7	-0.4
Professional and Business Services	424.3	435.1	424.9	447.9	488.7	509.8	530.7	549.3
% Ch	2.6	2.5	-2.3	5.4	9.1	4.3	4.1	3.5
Education and Health Services	490.2	502.6	481.4	512.2	530.3	546.7	555.3	560.6
% Ch	3.1	2.5	-4.2	6.4	3.5	3.1	1.6	0.9
Leisure and Hospitality	341.9	347.7	280.7	325.8	333.4	353.5	357.4	355.0
% Ch	3.1	1.7	-19.3	16.1	2.3	6.1	1.1	-0.7
Other Services	122.4	128.1	116.5	125.8	131.6	135.2	136.8	138.2
% Ch	2.2	4.7	-9.1	8.0	4.6	2.7	1.2	1.0
Federal Government	74.8	75.7	82.1	77.3	77.5	77.8	78.0	78.2
% Ch	0.0	1.2	8.4	-5.8	0.3	0.3	0.3	0.3
State and Local Government	512.4	511.8	502.7	509.1	519.8	533.1	547.1	555.2
% Ch	0.3	-0.1	-1.8	1.3	2.1	2.6	2.6	1.5

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	3,511.8	3,096.9	3,266.7	3,339.9	3,394.5	3,432.5	3,454.1	3,478.5
% Ch, Annual Rate	2.0	-39.5	23.8	9.3	6.7	4.6	2.5	2.9
Manufacturing	292.4	261.5	261.1	266.9	266.2	268.2	268.1	270.1
% Ch, Annual Rate	-0.8	-36.1	-0.7	9.2	-1.0	3.1	-0.2	3.0
Durable Manufacturing	205.2	182.1	179.0	183.2	182.6	183.7	183.0	186.2
% Ch, Annual Rate	-1.7	-37.9	-6.7	9.7	-1.4	2.5	-1.4	7.1
Wood Products	12.9	10.8	11.3	12.4	11.9	11.7	11.3	11.8
% Ch, Annual Rate	-3.0	-51.0	23.4	41.3	-13.7	-6.1	-13.7	18.8
Primary and Fabricated Metals	26.6	22.7	23.1	24.5	24.1	24.3	24.2	25.2
% Ch, Annual Rate	-4.9	-47.1	7.6	26.5	-6.9	2.4	-1.2	17.4
Computer and Electronic Products	19.6	18.5	18.8	19.2	19.5	19.8	20.1	20.3
% Ch, Annual Rate	6.0	-19.2	6.5	8.4	5.8	6.6	6.8	2.9
Machinery and Electrical Equipment	20.2	18.7	19.0	18.9	18.7	19.0	18.7	19.9
% Ch, Annual Rate	-10.3	-26.6	7.2	-3.1	-4.0	8.3	-7.9	29.3
Aerospace	88.8	82.9	77.2	73.4	73.6	73.9	73.9	73.8
% Ch, Annual Rate	-0.4	-24.2	-25.0	-18.0	0.9	1.8	-0.2	-0.6
Other Transportation Equip.	9.7	8.5	8.1	9.1	9.0	9.0	9.0	9.0
% Ch, Annual Rate	8.0	-41.9	-15.0	54.9	-1.7	-1.8	-0.6	0.8
Other Durables	27.4	20.0	21.4	25.7	25.7	25.9	25.9	26.3
% Ch, Annual Rate	-3.9	-71.2	29.7	109.1	0.4	2.9	-0.8	6.1
Nondurable Manufacturing	87.3	79.4	82.0	83.7	83.6	84.6	85.1	83.9
% Ch, Annual Rate	1.5	-31.6	14.2	8.2	-0.2	4.6	2.6	-5.5
Food Manufacturing	39.7	37.2	37.4	38.7	39.1	39.5	39.9	38.9
% Ch, Annual Rate	3.5	-23.0	2.3	13.9	4.0	4.8	3.6	-9.5
Paper and Paper Products	8.0	7.4	7.4	7.8	7.7	7.9	7.9	7.8
% Ch, Annual Rate	13.9	-25.1	1.6	19.1	-1.6	7.1	3.0	-7.6
Other Nondurables	39.5	34.7	37.2	37.2	36.8	37.2	37.3	37.3
% Ch, Annual Rate	-2.7	-40.6	31.2	0.7	-4.2	3.8	1.6	-0.6
Natural Resources and Mining	5.7	5.1	5.1	5.1	4.9	4.8	4.7	4.9
% Ch, Annual Rate	-4.5	-37.4	1.2	-2.1	-8.8	-10.1	-10.2	17.6
Construction	223.9	180.0	196.1	205.0	204.6	202.9	202.6	202.2
% Ch, Annual Rate	4.7	-58.2	40.7	19.5	-0.8	-3.2	-0.5	-0.8
Trade, Transportation, and Utilities	653.8	608.4	641.3	651.1	659.1	665.4	663.1	670.9
% Ch, Annual Rate	2.7	-25.0	23.5	6.2	5.1	3.9	-1.4	4.8
Wholesale Trade	137.4	128.4	129.0	134.5	134.4	133.9	134.9	137.5
% Ch, Annual Rate	-4.2	-23.8	1.7	18.4	-0.6	-1.4	3.0	7.9
Retail Trade	397.9	369.1	398.0	405.0	411.3	415.6	412.2	415.0
% Ch, Annual Rate	4.9	-26.0	35.2	7.2	6.4	4.3	-3.2	2.7
Electronic Shopping and Mail-Order	71.5	72.7	79.0	80.8	81.5	82.2	82.9	83.5
% Ch	24.8	7.2	38.9	9.4	3.7	3.5	3.3	3.1
Other Retail Trade	326.4	296.4	319.0	324.2	329.8	333.4	329.4	331.5
% Ch	1.1	-32.0	34.3	6.7	7.1	4.5	-4.8	2.6
Trans., Warehousing, and Utilities	118.5	110.9	114.4	111.6	113.5	115.9	116.0	118.5
% Ch, Annual Rate	3.6	-23.4	13.1	-9.5	7.1	8.9	0.1	8.9
Information	149.5	140.7	140.7	141.5	149.2	151.1	149.3	149.8
% Ch, Annual Rate	6.8	-21.6	0.1	2.2	23.7	5.0	-4.6	1.5
Software Publishers	73.6	70.2	70.1	70.5	70.2	70.2	69.7	70.2
% Ch, Annual Rate	9.9	-17.1	-0.3	2.1	-1.6	-0.3	-2.4	2.4
Other Publishing Industries	4.7	4.3	4.3	4.5	4.1	3.8	3.3	3.3
% Ch, Annual Rate	15.1	-26.6	-3.6	17.5	-30.7	-24.3	-40.7	-3.4
Other Information	71.3	66.2	66.3	66.5	74.9	77.1	76.2	76.4
% Ch, Annual Rate	3.2	-25.7	0.7	1.3	61.1	12.1	-4.5	0.8
Financial Activities	159.4	153.1	156.7	158.9	152.3	151.1	149.9	151.9
% Ch, Annual Rate	-6.0	-14.9	9.8	5.7	-15.5	-3.2	-3.2	5.6
Professional and Business Services	445.3	408.6	421.2	424.3	436.8	446.0	449.8	458.8
% Ch, Annual Rate	3.2	-29.1	12.8	3.1	12.3	8.7	3.5	8.3
Education and Health Services	509.8	450.0	471.0	494.9	502.4	507.0	522.4	517.0
% Ch, Annual Rate	2.3	-39.3	20.0	21.9	6.2	3.7	12.7	-4.1
Leisure and Hospitality	348.4	218.5	269.6	286.3	312.8	325.7	330.4	334.4
% Ch, Annual Rate	-1.9	-84.5	132.1	27.0	42.6	17.5	5.9	5.0
Other Services	129.2	97.9	116.5	122.3	123.7	125.3	126.2	128.0
% Ch, Annual Rate	0.0	-67.0	100.0	21.5	4.7	5.4	2.9	5.6
Federal Government	77.3	81.1	89.1	80.8	77.3	77.2	77.2	77.3
% Ch, Annual Rate	7.4	21.6	45.2	-32.3	-16.0	-1.0	0.4	0.4
State and Local Government	517.1	492.0	498.5	503.1	505.0	507.7	510.5	513.2
% Ch, Annual Rate	3.8	-18.1	5.4	3.7	1.6	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	3,506.0	3,534.4	3,561.0	3,580.0	3,597.6	3,610.7	3,622.4	3,634.9
% Ch, Annual Rate	3.2	3.3	3.0	2.2	2.0	1.5	1.3	1.4
Manufacturing	272.3	272.6	273.2	273.7	274.3	274.4	274.2	273.7
% Ch, Annual Rate	3.2	0.4	0.9	0.8	0.8	0.2	-0.3	-0.7
Durable Manufacturing	188.1	188.7	189.0	189.1	189.2	188.9	188.5	188.0
% Ch, Annual Rate	4.2	1.3	0.6	0.3	0.2	-0.6	-1.0	-1.0
Wood Products	11.9	11.9	11.8	11.8	11.7	11.6	11.5	11.4
% Ch, Annual Rate	4.7	-1.3	-2.2	-1.2	-1.7	-3.6	-3.7	-3.7
Primary and Fabricated Metals	25.7	26.0	26.2	26.4	26.5	26.7	26.8	26.8
% Ch, Annual Rate	9.3	5.0	2.5	2.3	2.7	1.9	1.5	1.0
Computer and Electronic Products	20.3	20.1	20.1	20.0	20.0	20.0	20.1	20.1
% Ch, Annual Rate	-0.2	-2.7	-1.7	-1.0	0.2	0.6	0.9	1.0
Machinery and Electrical Equipment	20.5	20.9	21.2	21.5	21.7	21.8	21.9	21.9
% Ch, Annual Rate	11.9	8.0	6.5	5.0	5.1	2.1	0.8	0.9
Aerospace	74.2	74.3	74.2	73.9	73.6	73.1	72.6	72.2
% Ch, Annual Rate	2.6	0.2	-0.6	-1.2	-1.9	-2.4	-2.7	-2.6
Other Transportation Equip.	9.0	8.9	8.9	8.9	8.9	8.8	8.8	8.7
% Ch, Annual Rate	0.8	-3.3	-1.8	-0.5	-1.0	-1.5	-2.6	-2.8
Other Durables	26.4	26.5	26.6	26.7	26.7	26.8	26.8	26.8
% Ch, Annual Rate	2.4	1.8	1.2	0.9	0.9	0.3	0.1	0.0
Nondurable Manufacturing	84.2	83.8	84.2	84.6	85.1	85.5	85.7	85.7
% Ch, Annual Rate	1.3	-1.6	1.6	2.1	2.1	2.0	1.2	0.0
Food Manufacturing	38.9	38.6	38.9	39.3	39.7	40.0	40.2	40.2
% Ch, Annual Rate	-0.2	-3.0	3.5	4.1	3.7	3.4	2.0	0.0
Paper and Paper Products	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.7
% Ch, Annual Rate	-1.0	-1.7	-0.7	0.2	0.9	0.2	-0.5	-1.6
Other Nondurables	37.6	37.5	37.6	37.6	37.7	37.7	37.8	37.8
% Ch, Annual Rate	3.3	-0.1	0.1	0.4	0.7	0.9	0.7	0.4
Natural Resources and Mining	4.8	4.8	4.8	4.7	4.8	4.8	4.8	4.8
% Ch, Annual Rate	-3.5	-2.5	0.7	-5.3	1.8	1.1	3.2	2.6
Construction	201.0	201.2	201.3	201.3	201.0	200.5	200.1	199.8
% Ch, Annual Rate	-2.3	0.4	0.1	0.0	-0.5	-1.0	-0.8	-0.7
Trade, Transportation, and Utilities	673.6	670.1	670.8	663.9	659.2	663.8	662.2	660.4
% Ch, Annual Rate	1.6	-2.0	0.4	-4.1	-2.8	2.8	-1.0	-1.1
Wholesale Trade	139.1	140.3	144.5	145.9	147.5	147.8	148.9	149.8
% Ch, Annual Rate	5.0	3.4	12.4	4.2	4.5	0.8	2.8	2.5
Retail Trade	414.3	408.5	402.1	392.8	385.4	389.9	387.0	384.2
% Ch, Annual Rate	-0.7	-5.4	-6.2	-9.0	-7.3	4.7	-2.9	-2.9
Electronic Shopping and Mail-Order	84.1	84.7	85.3	85.8	86.3	86.9	87.4	87.9
% Ch	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	330.2	323.9	316.9	307.0	299.0	303.0	299.7	296.3
% Ch	-1.6	-7.4	-8.4	-11.9	-10.0	5.4	-4.3	-4.4
Trans., Warehousing, and Utilities	120.2	121.3	124.3	125.1	126.3	126.1	126.3	126.4
% Ch, Annual Rate	6.0	3.6	10.2	2.8	3.8	-0.7	0.6	0.4
Information	151.8	155.8	158.8	158.1	157.1	155.8	156.2	157.6
% Ch, Annual Rate	5.4	11.1	7.8	-1.7	-2.6	-3.1	0.9	3.6
Software Publishers	70.9	71.5	72.0	72.4	72.8	73.0	73.4	73.7
% Ch, Annual Rate	4.4	3.1	3.1	2.0	2.2	1.5	1.9	1.8
Other Publishing Industries	3.4	3.5	3.5	3.5	3.4	3.3	3.2	3.2
% Ch, Annual Rate	19.0	3.6	4.4	-6.5	-5.0	-11.8	-8.0	-9.3
Other Information	77.4	80.9	83.3	82.3	80.9	79.5	79.6	80.7
% Ch, Annual Rate	5.7	19.3	12.2	-4.7	-6.6	-6.7	0.5	5.9
Financial Activities	155.4	158.1	161.4	162.2	163.1	162.5	162.9	163.2
% Ch, Annual Rate	9.5	7.1	8.8	2.0	2.2	-1.6	1.1	0.8
Professional and Business Services	475.3	486.8	494.1	498.8	505.4	507.3	510.6	516.0
% Ch, Annual Rate	15.2	10.0	6.1	3.9	5.4	1.5	2.7	4.3
Education and Health Services	517.2	530.1	536.0	538.1	544.2	545.3	547.4	549.8
% Ch, Annual Rate	0.2	10.4	4.5	1.5	4.7	0.8	1.5	1.8
Leisure and Hospitality	331.7	327.8	329.5	344.5	348.6	352.2	355.9	357.5
% Ch, Annual Rate	-3.2	-4.5	2.0	19.5	4.9	4.2	4.3	1.8
Other Services	129.5	131.0	132.5	133.5	134.6	135.0	135.4	135.7
% Ch, Annual Rate	5.0	4.5	4.6	3.3	3.4	1.0	1.2	1.1
Federal Government	77.4	77.5	77.5	77.6	77.7	77.7	77.8	77.9
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3
State and Local Government	516.0	518.6	521.1	523.6	527.6	531.4	535.0	538.5
% Ch, Annual Rate	2.2	2.1	2.0	1.9	3.1	2.9	2.7	2.7

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	3,645.0	3,654.7	3,667.4	3,679.6	3,689.4	3,698.0	3,705.7	3,711.5
% Ch, Annual Rate	1.1	1.1	1.4	1.3	1.1	0.9	0.8	0.6
Manufacturing	273.2	272.9	272.8	272.7	272.7	272.9	273.1	273.1
% Ch, Annual Rate	-0.8	-0.4	-0.1	-0.1	0.0	0.3	0.3	0.0
Durable Manufacturing	187.5	187.3	187.1	187.0	186.9	187.1	187.2	187.3
% Ch, Annual Rate	-1.0	-0.5	-0.3	-0.3	-0.1	0.3	0.3	0.1
Wood Products	11.3	11.2	11.2	11.2	11.2	11.2	11.2	11.2
% Ch, Annual Rate	-3.6	-2.5	-1.9	-0.3	0.0	0.9	1.2	-1.9
Primary and Fabricated Metals	26.9	26.9	27.0	27.1	27.0	27.1	27.2	27.2
% Ch, Annual Rate	0.6	0.9	1.2	0.7	0.0	0.8	0.9	0.8
Computer and Electronic Products	20.2	20.3	20.5	20.6	20.7	20.7	20.8	20.8
% Ch, Annual Rate	1.5	2.2	2.5	2.4	1.8	1.3	0.8	0.1
Machinery and Electrical Equipment	22.0	22.2	22.3	22.5	22.6	22.8	23.0	23.3
% Ch, Annual Rate	1.3	3.0	3.3	2.3	2.6	3.8	3.8	3.9
Aerospace	71.7	71.3	70.8	70.5	70.2	70.0	69.9	69.7
% Ch, Annual Rate	-2.5	-2.4	-2.4	-2.0	-1.4	-1.0	-1.0	-0.9
Other Transportation Equip.	8.6	8.6	8.5	8.4	8.4	8.3	8.2	8.2
% Ch, Annual Rate	-3.3	-3.2	-3.2	-3.1	-3.2	-3.2	-3.2	-3.2
Other Durables	26.8	26.8	26.8	26.8	26.8	26.9	26.9	27.0
% Ch, Annual Rate	-0.1	0.1	0.4	0.3	0.3	0.7	0.7	0.5
Nondurable Manufacturing	85.7	85.6	85.7	85.7	85.8	85.8	85.8	85.8
% Ch, Annual Rate	-0.3	-0.2	0.3	0.2	0.2	0.2	0.1	-0.1
Food Manufacturing	40.1	40.1	40.1	40.2	40.2	40.2	40.2	40.2
% Ch, Annual Rate	-0.4	-0.4	0.3	0.2	0.1	0.3	0.1	-0.1
Paper and Paper Products	7.7	7.6	7.6	7.6	7.5	7.5	7.5	7.4
% Ch, Annual Rate	-2.1	-1.8	-1.3	-1.4	-1.6	-1.7	-1.8	-2.0
Other Nondurables	37.9	37.9	37.9	38.0	38.0	38.1	38.1	38.2
% Ch, Annual Rate	0.1	0.3	0.6	0.5	0.6	0.5	0.5	0.4
Natural Resources and Mining	4.9	4.9	5.0	5.0	5.0	5.0	5.0	4.9
% Ch, Annual Rate	3.9	2.8	2.3	3.1	1.3	-0.1	-0.8	-4.1
Construction	199.4	198.9	198.9	199.3	199.8	200.4	200.9	201.4
% Ch, Annual Rate	-0.7	-1.0	0.1	0.8	1.0	1.1	1.2	0.9
Trade, Transportation, and Utilities	656.8	653.1	654.1	655.4	656.6	657.7	659.5	660.3
% Ch, Annual Rate	-2.1	-2.3	0.6	0.8	0.8	0.7	1.1	0.5
Wholesale Trade	151.2	152.3	152.8	153.3	153.9	154.4	154.8	155.1
% Ch, Annual Rate	3.9	2.8	1.5	1.3	1.6	1.3	1.0	0.8
Retail Trade	378.6	373.6	374.0	374.7	374.9	375.2	376.3	376.6
% Ch, Annual Rate	-5.6	-5.2	0.4	0.8	0.2	0.3	1.2	0.3
Electronic Shopping and Mail-Order	88.4	88.9	89.4	89.8	90.3	90.8	91.3	91.7
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	290.3	284.7	284.6	284.9	284.6	284.4	285.0	284.9
% Ch	-7.9	-7.4	-0.1	0.3	-0.4	-0.3	0.9	-0.2
Trans., Warehousing, and Utilities	126.9	127.2	127.3	127.3	127.8	128.1	128.4	128.6
% Ch, Annual Rate	1.7	0.8	0.2	0.1	1.4	1.1	0.9	0.5
Information	158.3	159.4	161.5	163.1	164.3	164.8	164.5	163.4
% Ch, Annual Rate	1.8	2.9	5.3	4.1	2.8	1.4	-0.8	-2.6
Software Publishers	74.1	74.4	74.7	75.0	75.3	75.6	75.9	76.1
% Ch, Annual Rate	2.1	1.8	1.6	1.6	1.7	1.6	1.3	1.3
Other Publishing Industries	3.1	3.0	2.9	2.9	2.8	2.7	2.6	2.4
% Ch, Annual Rate	-6.0	-9.0	-11.5	-12.0	-11.4	-12.2	-16.5	-17.6
Other Information	81.1	82.0	83.8	85.3	86.2	86.5	86.1	84.9
% Ch, Annual Rate	1.8	4.3	9.4	7.1	4.4	1.7	-2.1	-5.4
Financial Activities	164.0	164.3	164.1	163.9	163.6	163.6	163.3	163.0
% Ch, Annual Rate	1.8	0.8	-0.4	-0.6	-0.6	-0.2	-0.6	-0.8
Professional and Business Services	521.9	528.5	533.8	538.7	543.7	547.8	551.4	554.1
% Ch, Annual Rate	4.6	5.2	4.1	3.7	3.8	3.1	2.7	1.9
Education and Health Services	552.9	554.9	556.2	557.2	558.6	559.9	561.2	562.5
% Ch, Annual Rate	2.3	1.4	0.9	0.7	1.1	0.9	0.9	0.9
Leisure and Hospitality	357.6	357.8	357.3	356.9	355.9	355.1	354.2	354.9
% Ch, Annual Rate	0.1	0.3	-0.6	-0.4	-1.2	-0.9	-1.0	0.7
Other Services	136.2	136.6	136.9	137.2	137.6	138.0	138.4	138.8
% Ch, Annual Rate	1.4	1.2	1.0	0.9	1.0	1.1	1.2	1.2
Federal Government	77.9	78.0	78.0	78.1	78.1	78.2	78.3	78.3
% Ch, Annual Rate	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
State and Local Government	542.0	545.4	548.8	552.1	553.5	554.7	555.8	556.9
% Ch, Annual Rate	2.6	2.5	2.5	2.5	1.0	0.9	0.8	0.8

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	19,781.6	19,206.3	20,138.3	21,048.0	21,927.6	22,927.8
% Ch	5.3	3.9	6.6	-2.9	4.9	4.5	4.2	4.6
Total Wage and Salary Disbursements	8,894.2	9,309.3	9,261.5	9,801.5	10,375.4	10,860.7	11,337.4	11,849.5
% Ch	5.0	4.7	-0.5	5.8	5.9	4.7	4.4	4.5
Nonwage Personal Income	8,957.6	9,242.2	10,520.1	9,404.7	9,763.0	10,187.3	10,590.3	11,078.3
% Ch	5.7	3.2	13.8	-10.6	3.8	4.3	4.0	4.6
Supplements to Wages and Salaries	2,055.9	2,123.1	2,110.6	2,229.5	2,357.6	2,460.4	2,568.9	2,684.4
% Ch	5.4	3.3	-0.6	5.6	5.7	4.4	4.4	4.5
Proprietor's Income	1,585.9	1,657.7	1,533.3	1,295.9	1,415.2	1,556.2	1,671.2	1,781.9
% Ch	5.1	4.5	-7.5	-15.5	9.2	10.0	7.4	6.6
Farm	43.0	49.7	40.4	32.6	56.1	69.5	63.5	61.1
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,542.9	1,608.0	1,492.9	1,263.3	1,359.1	1,486.7	1,607.7	1,720.8
% Ch	5.1	4.2	-7.2	-15.4	7.6	9.4	8.1	7.0
Less: Contribution For Govt. Soc. Ins.	1,360.4	1,418.8	1,418.2	1,474.0	1,560.9	1,633.4	1,706.4	1,784.8
% Ch	4.8	4.3	0.0	3.9	5.9	4.6	4.5	4.6
Dividends/Int./Rent	3,705.9	3,755.0	3,689.5	3,704.3	3,785.0	3,898.4	4,025.1	4,159.8
% Ch	7.1	1.3	-1.7	0.4	2.2	3.0	3.2	3.3
Transfer Payments	2,970.3	3,125.2	4,604.9	3,649.1	3,766.1	3,905.6	4,031.5	4,237.1
% Ch	4.0	5.2	47.3	-20.8	3.2	3.7	3.2	5.1

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	20,401.5	19,454.9	20,319.0	18,871.0	19,119.7	19,325.8	19,508.6
% Ch, Annual Rate	4.1	34.3	-17.3	19.0	-25.6	5.4	4.4	3.8
Total Wage and Salary Disbursements	9,526.1	8,847.4	9,248.6	9,424.0	9,590.9	9,741.0	9,867.5	10,006.9
% Ch, Annual Rate	4.5	-25.6	19.4	7.8	7.3	6.4	5.3	5.8
Nonwage Personal Income	9,424.9	11,554.1	10,206.3	10,895.0	9,280.1	9,378.7	9,458.3	9,501.7
% Ch, Annual Rate	3.8	125.9	-39.1	29.8	-47.4	4.3	3.4	1.9
Supplements to Wages and Salaries	2,148.3	2,036.5	2,118.5	2,138.9	2,181.6	2,217.3	2,244.6	2,274.4
% Ch, Annual Rate	1.1	-19.3	17.1	3.9	8.2	6.7	5.0	5.4
Proprietor's Income	1,706.0	1,507.6	1,595.8	1,323.9	1,254.2	1,285.3	1,321.7	1,322.2
% Ch, Annual Rate	2.0	-39.0	25.6	-52.6	-19.4	10.3	11.8	0.1
Farm	56.4	34.9	41.1	29.1	27.6	29.6	33.6	39.6
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,649.6	1,472.6	1,554.7	1,294.8	1,226.6	1,255.7	1,288.2	1,282.6
% Ch, Annual Rate	2.6	-36.5	24.2	-51.9	-19.5	9.8	10.7	-1.7
Less: Contribution For Govt. Soc. Ins.	1,451.5	1,380.3	1,429.6	1,411.3	1,443.3	1,465.7	1,483.9	1,503.2
% Ch, Annual Rate	5.3	-18.2	15.0	-5.0	9.4	6.4	5.0	5.3
Dividends/Int./Rent	3,786.6	3,702.6	3,646.4	3,622.5	3,667.1	3,704.6	3,720.7	3,725.0
% Ch, Annual Rate	1.1	-8.6	-5.9	-2.6	5.0	4.2	1.7	0.5
Transfer Payments	3,235.5	5,687.8	4,275.1	5,221.0	3,620.5	3,637.3	3,655.1	3,683.4
% Ch, Annual Rate	10.6	855.0	-68.1	122.4	-76.9	1.9	2.0	3.1

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	19,786.7	20,030.9	20,260.0	20,475.7	20,718.2	20,945.7	21,157.2	21,370.9
% Ch, Annual Rate	5.8	5.0	4.7	4.3	4.8	4.5	4.1	4.1
Total Wage and Salary Disbursements	10,161.0	10,317.2	10,451.3	10,571.9	10,685.6	10,800.5	10,917.3	11,039.5
% Ch, Annual Rate	6.3	6.3	5.3	4.7	4.4	4.4	4.4	4.6
Nonwage Personal Income	9,625.7	9,713.8	9,808.7	9,903.7	10,032.6	10,145.2	10,239.9	10,331.4
% Ch, Annual Rate	5.3	3.7	4.0	3.9	5.3	4.6	3.8	3.6
Supplements to Wages and Salaries	2,311.7	2,346.4	2,373.9	2,398.2	2,424.4	2,447.1	2,471.8	2,498.2
% Ch, Annual Rate	6.7	6.1	4.8	4.1	4.5	3.8	4.1	4.3
Proprietor's Income	1,355.5	1,396.9	1,437.0	1,471.5	1,505.9	1,540.5	1,573.7	1,604.7
% Ch, Annual Rate	10.5	12.8	12.0	10.0	9.7	9.5	8.9	8.1
Farm	45.9	53.0	60.1	65.6	69.1	70.4	70.0	68.5
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,309.7	1,343.9	1,376.9	1,405.9	1,436.8	1,470.1	1,503.7	1,536.2
% Ch, Annual Rate	8.7	10.9	10.2	8.7	9.1	9.6	9.5	9.0
Less: Contribution For Govt. Soc. Ins.	1,531.6	1,553.3	1,571.4	1,587.1	1,609.8	1,625.4	1,641.0	1,657.3
% Ch, Annual Rate	7.8	5.8	4.7	4.1	5.9	3.9	3.9	4.0
Dividends/Int./Rent	3,756.8	3,769.4	3,794.8	3,818.9	3,848.4	3,880.3	3,916.0	3,949.1
% Ch, Annual Rate	3.5	1.3	2.7	2.6	3.1	3.4	3.7	3.4
Transfer Payments	3,733.2	3,754.4	3,774.4	3,802.3	3,863.8	3,902.7	3,919.5	3,936.6
% Ch, Annual Rate	5.5	2.3	2.2	3.0	6.6	4.1	1.7	1.8

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	21,583.6	21,800.8	22,041.5	22,284.6	22,564.5	22,804.8	23,048.8	23,293.0
% Ch, Annual Rate	4.0	4.1	4.5	4.5	5.1	4.3	4.3	4.3
Total Wage and Salary Disbursements	11,154.1	11,270.5	11,397.5	11,527.5	11,656.6	11,784.6	11,914.1	12,042.7
% Ch, Annual Rate	4.2	4.2	4.6	4.6	4.6	4.5	4.5	4.4
Nonwage Personal Income	10,429.6	10,530.3	10,644.0	10,757.1	10,907.9	11,020.3	11,134.7	11,250.3
% Ch, Annual Rate	3.9	3.9	4.4	4.3	5.7	4.2	4.2	4.2
Supplements to Wages and Salaries	2,528.5	2,554.7	2,582.1	2,610.5	2,642.2	2,670.2	2,698.6	2,726.5
% Ch, Annual Rate	4.9	4.2	4.4	4.5	4.9	4.3	4.3	4.2
Proprietor's Income	1,630.3	1,657.9	1,685.0	1,711.5	1,737.8	1,767.0	1,796.8	1,826.1
% Ch, Annual Rate	6.5	6.9	6.7	6.4	6.3	6.9	6.9	6.7
Farm	66.2	64.1	62.4	61.3	60.7	60.6	61.1	61.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,564.1	1,593.8	1,622.6	1,650.2	1,677.1	1,706.4	1,735.7	1,764.2
% Ch, Annual Rate	7.4	7.8	7.4	7.0	6.7	7.2	7.0	6.7
Less: Contribution For Govt. Soc. Ins.	1,680.9	1,697.2	1,714.8	1,732.7	1,758.4	1,776.0	1,793.7	1,811.2
% Ch, Annual Rate	5.8	3.9	4.2	4.2	6.1	4.1	4.1	4.0
Dividends/Int./Rent	3,976.3	4,008.8	4,041.9	4,073.4	4,118.4	4,145.1	4,173.2	4,202.4
% Ch, Annual Rate	2.8	3.3	3.3	3.2	4.5	2.6	2.7	2.8
Transfer Payments	3,975.5	4,006.1	4,049.9	4,094.5	4,168.0	4,213.9	4,259.9	4,306.5
% Ch, Annual Rate	4.0	3.1	4.4	4.5	7.4	4.5	4.4	4.4

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	467.399	494.356	532.409	522.400	547.454	572.304	596.436	624.705
% Ch	7.5	5.8	7.7	-1.9	4.8	4.5	4.2	4.7
Total Wage and Salary Disbursements	237.156	253.839	259.745	275.769	291.062	304.388	317.367	332.101
% Ch	8.7	7.0	2.3	6.2	5.5	4.6	4.3	4.6
Manufacturing	22.833	23.774	22.386	23.061	23.948	24.588	25.023	25.783
% Ch	5.3	4.1	-5.8	3.0	3.8	2.7	1.8	3.0
Durable Manufacturing	17.976	18.703	17.346	17.787	18.565	18.977	19.254	19.815
% Ch	5.3	4.0	-7.3	2.5	4.4	2.2	1.5	2.9
Nondurable Manufacturing	4.857	5.071	5.040	5.274	5.383	5.611	5.769	5.968
% Ch	5.5	4.4	-0.6	4.7	2.1	4.2	2.8	3.5
Nonmanufacturing	207.226	222.691	229.743	244.697	258.734	271.087	283.307	296.932
% Ch	9.4	7.5	3.2	6.5	5.7	4.8	4.5	4.8
Other Private Wages	1.339	1.374	1.409	1.500	1.580	1.644	1.703	1.769
% Ch	8.0	2.6	2.5	6.4	5.4	4.1	3.6	3.9
Farm Wages	1.490	1.581	1.614	1.766	1.904	2.020	2.130	2.253
% Ch	0.6	6.1	2.1	9.4	7.8	6.1	5.4	5.8
Military Wages	4.269	4.420	4.593	4.745	4.895	5.048	5.204	5.363
% Ch	2.0	3.5	3.9	3.3	3.2	3.1	3.1	3.1
Nonwage Personal Income	230.243	240.516	272.663	246.631	256.393	267.916	279.068	292.605
% Ch	6.3	4.5	13.4	-9.5	4.0	4.5	4.2	4.9
Supplements to Wages and Salaries	52.360	55.344	55.735	58.889	62.192	64.908	67.732	70.863
% Ch	5.7	5.7	0.7	5.7	5.6	4.4	4.4	4.6
Proprietor's Income	36.045	37.680	34.752	28.818	31.243	34.254	36.770	39.216
% Ch	2.0	4.5	-7.8	-17.1	8.4	9.6	7.3	6.7
Farm	1.902	2.112	1.887	1.090	1.419	1.642	1.540	1.499
% Ch	...	...	...	...	...	...	...	...
Nonfarm	34.143	35.568	32.866	27.728	29.824	32.612	35.230	37.717
% Ch	3.6	4.2	-7.6	-15.6	7.6	9.3	8.0	7.1
Less: Contribution For Govt. Soc. Ins.	38.088	40.454	40.828	42.426	44.746	46.671	48.568	50.722
% Ch	5.4	6.2	0.9	3.9	5.5	4.3	4.1	4.4
Plus: Residence Adjustment	4.324	4.496	4.448	4.763	5.099	5.384	5.663	5.963
% Ch	2.1	4.0	-1.1	7.1	7.1	5.6	5.2	5.3
Dividends/Int./Rent	109.752	112.657	111.679	112.685	115.560	119.319	123.460	127.960
% Ch	8.7	2.6	-0.9	0.9	2.6	3.3	3.5	3.6
Transfer Payments	65.849	70.793	106.878	83.903	87.045	90.722	94.011	99.325
% Ch	5.0	7.5	51.0	-21.5	3.7	4.2	3.6	5.7
State U.I. Benefits	0.978	0.949	19.081	4.893	4.129	3.235	1.296	1.241
% Ch	-2.2	-2.9	1,910.9	-74.4	-15.6	-21.7	-59.9	-4.3
Other Transfers	64.871	69.844	87.797	79.010	82.917	87.488	92.715	98.085
% Ch	5.1	7.7	25.7	-10.0	4.9	5.5	6.0	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	509.608	546.993	525.928	547.107	513.269	520.147	525.667	530.518
% Ch, Annual Rate	5.0	32.7	-14.5	17.1	-22.5	5.5	4.3	3.7
Total Wage and Salary Disbursements	263.225	249.052	261.139	265.567	270.108	274.225	277.586	281.156
% Ch, Annual Rate	5.2	-19.9	20.9	7.0	7.0	6.2	5.0	5.2
Manufacturing	22.117	22.513	22.360	22.554	22.621	22.969	23.174	23.481
% Ch, Annual Rate	-20.1	7.4	-2.7	3.5	1.2	6.3	3.6	5.4
Durable Manufacturing	16.979	17.680	17.315	17.410	17.456	17.702	17.821	18.169
% Ch, Annual Rate	-25.5	17.6	-8.0	2.2	1.0	5.8	2.7	8.0
Nondurable Manufacturing	5.138	4.833	5.046	5.144	5.166	5.267	5.353	5.312
% Ch, Annual Rate	1.2	-21.7	18.8	8.0	1.7	8.1	6.7	-3.0
Nonmanufacturing	233.497	219.088	231.121	235.265	239.613	243.284	246.352	249.538
% Ch, Annual Rate	8.2	-22.5	23.8	7.4	7.6	6.3	5.1	5.3
Other Private Wages	1.436	1.345	1.415	1.440	1.467	1.492	1.511	1.530
% Ch, Annual Rate	-1.2	-22.9	22.5	7.3	7.7	6.8	5.2	5.2
Farm Wages	1.647	1.519	1.625	1.667	1.711	1.751	1.784	1.817
% Ch, Annual Rate	7.3	-27.7	31.2	10.5	11.0	9.8	7.7	7.6
Military Wages	4.528	4.586	4.617	4.640	4.696	4.729	4.765	4.789
% Ch, Annual Rate	3.6	5.2	2.8	2.0	4.9	2.8	3.1	2.0
Nonwage Personal Income	246.383	297.941	264.789	281.540	243.161	245.922	248.081	249.363
% Ch, Annual Rate	4.7	113.8	-37.6	27.8	-44.4	4.6	3.6	2.1
Supplements to Wages and Salaries	56.546	53.740	56.142	56.512	57.647	58.585	59.291	60.032
% Ch, Annual Rate	0.4	-18.4	19.1	2.7	8.3	6.7	4.9	5.1
Proprietor's Income	38.707	34.364	36.212	29.727	27.999	28.613	29.360	29.298
% Ch, Annual Rate	1.6	-37.9	23.3	-54.6	-21.3	9.1	10.9	-0.8
Farm	2.415	1.919	1.907	1.306	1.095	1.042	1.069	1.153
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	36.292	32.445	34.305	28.421	26.903	27.571	28.291	28.145
% Ch, Annual Rate	0.0	-36.1	25.0	-52.9	-19.7	10.3	10.9	-2.0
Less: Contribution For Govt. Soc. Ins.	41.644	39.689	41.298	40.683	41.593	42.222	42.700	43.189
% Ch, Annual Rate	3.3	-17.5	17.2	-5.8	9.3	6.2	4.6	4.7
Plus: Residence Adjustment	4.604	4.205	4.440	4.542	4.640	4.728	4.802	4.883
% Ch, Annual Rate	-1.5	-30.4	24.3	9.6	8.9	7.8	6.4	7.0
Dividends/Int./Rent	114.381	112.004	110.468	109.863	111.361	112.634	113.250	113.495
% Ch, Annual Rate	3.3	-8.1	-5.4	-2.2	5.6	4.7	2.2	0.9
Transfer Payments	73.789	133.317	98.826	121.580	83.107	83.584	84.079	84.843
% Ch, Annual Rate	11.8	965.5	-69.8	129.1	-78.2	2.3	2.4	3.7
State U.I. Benefits	1.423	34.031	23.204	17.666	5.108	4.896	4.848	4.720
% Ch, Annual Rate	517.1	###	-78.4	-66.4	-99.3	-15.5	-3.9	-10.2
Other Transfers	72.366	99.287	75.622	103.914	77.999	78.687	79.231	80.123
% Ch, Annual Rate	8.8	254.3	-66.3	256.5	-68.3	3.6	2.8	4.6

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	537.905	544.517	550.737	556.659	563.381	569.532	575.240	581.063
% Ch, Annual Rate	5.7	5.0	4.6	4.4	4.9	4.4	4.1	4.1
Total Wage and Salary Disbursements	285.220	289.482	293.112	296.432	299.719	302.803	305.878	309.152
% Ch, Annual Rate	5.9	6.1	5.1	4.6	4.5	4.2	4.1	4.4
Manufacturing	23.763	23.877	23.972	24.182	24.356	24.552	24.677	24.768
% Ch, Annual Rate	4.9	1.9	1.6	3.5	2.9	3.3	2.1	1.5
Durable Manufacturing	18.413	18.529	18.590	18.730	18.840	18.959	19.028	19.083
% Ch, Annual Rate	5.5	2.6	1.3	3.1	2.4	2.6	1.5	1.1
Nondurable Manufacturing	5.350	5.348	5.383	5.452	5.516	5.593	5.649	5.685
% Ch, Annual Rate	2.9	-0.2	2.6	5.2	4.8	5.7	4.1	2.6
Nonmanufacturing	253.208	257.263	260.711	263.753	266.764	269.576	272.446	275.562
% Ch, Annual Rate	6.0	6.6	5.5	4.7	4.6	4.3	4.3	4.7
Other Private Wages	1.551	1.573	1.591	1.607	1.623	1.637	1.651	1.666
% Ch, Annual Rate	5.6	5.7	4.6	4.1	4.0	3.6	3.5	3.7
Farm Wages	1.853	1.891	1.922	1.951	1.980	2.007	2.033	2.061
% Ch, Annual Rate	8.2	8.3	6.8	6.2	6.0	5.6	5.4	5.6
Military Wages	4.845	4.879	4.916	4.940	4.997	5.031	5.069	5.094
% Ch, Annual Rate	4.8	2.8	3.1	2.0	4.7	2.8	3.0	2.0
Nonwage Personal Income	252.685	255.036	257.625	260.226	263.662	266.729	269.362	271.911
% Ch, Annual Rate	5.4	3.8	4.1	4.1	5.4	4.7	4.0	3.8
Supplements to Wages and Salaries	60.999	61.900	62.615	63.252	63.988	64.574	65.199	65.873
% Ch, Annual Rate	6.6	6.0	4.7	4.1	4.7	3.7	3.9	4.2
Proprietor's Income	29.986	30.860	31.702	32.423	33.170	33.910	34.627	35.307
% Ch, Annual Rate	9.7	12.2	11.4	9.4	9.5	9.2	8.7	8.1
Farm	1.249	1.366	1.483	1.576	1.635	1.656	1.650	1.625
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	28.736	29.494	30.219	30.847	31.535	32.254	32.977	33.682
% Ch, Annual Rate	8.7	11.0	10.2	8.6	9.2	9.4	9.3	8.8
Less: Contribution For Govt. Soc. Ins.	43.960	44.553	45.030	45.443	46.082	46.474	46.860	47.270
% Ch, Annual Rate	7.3	5.5	4.4	3.7	5.7	3.5	3.4	3.6
Plus: Residence Adjustment	4.974	5.065	5.144	5.214	5.281	5.348	5.417	5.488
% Ch, Annual Rate	7.6	7.6	6.4	5.6	5.2	5.2	5.2	5.4
Dividends/Int./Rent	114.568	115.045	115.906	116.722	117.694	118.735	119.887	120.960
% Ch, Annual Rate	3.8	1.7	3.0	2.8	3.4	3.6	3.9	3.6
Transfer Payments	86.118	86.717	87.289	88.058	89.611	90.635	91.092	91.553
% Ch, Annual Rate	6.1	2.8	2.7	3.6	7.2	4.6	2.0	2.0
State U.I. Benefits	4.468	4.165	3.988	3.895	3.821	3.776	3.045	2.296
% Ch, Annual Rate	-19.7	-24.5	-16.0	-9.0	-7.3	-4.6	-57.7	-67.7
Other Transfers	81.650	82.552	83.301	84.163	85.789	86.858	88.046	89.257
% Ch, Annual Rate	7.8	4.5	3.7	4.2	8.0	5.1	5.6	5.6

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	586.823	592.814	599.592	606.513	614.386	621.214	628.138	635.084
% Ch, Annual Rate	4.0	4.1	4.7	4.7	5.3	4.5	4.5	4.5
Total Wage and Salary Disbursements	312.236	315.415	319.027	322.791	326.517	330.229	333.970	337.688
% Ch, Annual Rate	4.1	4.1	4.7	4.8	4.7	4.6	4.6	4.5
Manufacturing	24.841	24.939	25.074	25.237	25.425	25.650	25.897	26.160
% Ch, Annual Rate	1.2	1.6	2.2	2.6	3.0	3.6	3.9	4.1
Durable Manufacturing	19.128	19.195	19.288	19.404	19.541	19.712	19.902	20.103
% Ch, Annual Rate	1.0	1.4	1.9	2.4	2.9	3.6	3.9	4.1
Nondurable Manufacturing	5.713	5.744	5.786	5.834	5.884	5.938	5.996	6.057
% Ch, Annual Rate	2.0	2.1	3.0	3.3	3.5	3.7	4.0	4.2
Nonmanufacturing	278.475	281.482	284.873	288.400	291.832	295.234	298.640	302.022
% Ch, Annual Rate	4.3	4.4	4.9	5.0	4.8	4.7	4.7	4.6
Other Private Wages	1.680	1.694	1.710	1.728	1.744	1.761	1.778	1.794
% Ch, Annual Rate	3.3	3.4	3.9	4.1	4.0	3.9	3.9	3.8
Farm Wages	2.087	2.114	2.144	2.176	2.207	2.238	2.269	2.300
% Ch, Annual Rate	5.1	5.2	5.9	6.0	5.9	5.7	5.7	5.6
Military Wages	5.152	5.187	5.226	5.251	5.310	5.346	5.385	5.412
% Ch, Annual Rate	4.6	2.8	3.0	2.0	4.5	2.8	3.0	2.0
Nonwage Personal Income	274.587	277.399	280.565	283.721	287.869	290.986	294.168	297.396
% Ch, Annual Rate	4.0	4.2	4.6	4.6	6.0	4.4	4.4	4.5
Supplements to Wages and Salaries	66.664	67.342	68.076	68.847	69.720	70.480	71.247	72.004
% Ch, Annual Rate	4.9	4.1	4.4	4.6	5.2	4.4	4.4	4.3
Proprietor's Income	35.865	36.471	37.075	37.667	38.248	38.894	39.543	40.179
% Ch, Annual Rate	6.5	6.9	6.8	6.5	6.3	6.9	6.8	6.6
Farm	1.586	1.550	1.522	1.502	1.492	1.492	1.499	1.513
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	34.279	34.922	35.553	36.165	36.756	37.402	38.044	38.666
% Ch, Annual Rate	7.3	7.7	7.4	7.1	6.7	7.2	7.0	6.7
Less: Contribution For Govt. Soc. Ins.	47.893	48.308	48.786	49.282	49.998	50.482	50.967	51.443
% Ch, Annual Rate	5.4	3.5	4.0	4.1	5.9	3.9	3.9	3.8
Plus: Residence Adjustment	5.556	5.624	5.698	5.774	5.850	5.925	6.001	6.076
% Ch, Annual Rate	5.0	5.0	5.4	5.5	5.3	5.2	5.2	5.1
Dividends/Int./Rent	121.854	122.920	124.007	125.056	126.529	127.451	128.424	129.438
% Ch, Annual Rate	3.0	3.5	3.6	3.4	4.8	2.9	3.1	3.2
Transfer Payments	92.542	93.350	94.495	95.659	97.520	98.719	99.920	101.142
% Ch, Annual Rate	4.4	3.5	5.0	5.0	8.0	5.0	5.0	5.0
State U.I. Benefits	1.579	1.202	1.202	1.203	1.214	1.228	1.247	1.274
% Ch, Annual Rate	-77.6	-66.4	0.2	0.2	3.6	5.0	6.2	9.0
Other Transfers	90.963	92.148	93.292	94.457	96.307	97.491	98.673	99.868
% Ch, Annual Rate	7.9	5.3	5.1	5.1	8.1	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	111.1	1.1	2.588	1.2	2.825	1.6
2021	113.2	1.9	2.651	2.4	2.896	2.5
2022	115.1	1.7	2.706	2.0	2.955	2.1
2023	116.8	1.5	2.751	1.7	3.004	1.7
2024	118.9	1.7	2.804	1.9	3.062	1.9
2025	121.2	2.0	2.864	2.2	3.128	2.2

* 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	120.1	2.0	108.1	3.5	62.7	-18.8	64.5	-14.3
2021	123.0	2.4	111.7	3.3	66.1	5.5	68.4	6.1
2022	125.9	2.4	114.4	2.4	68.4	3.4	70.8	3.5
2023	128.7	2.3	116.3	1.7	67.9	-0.7	69.5	-1.9
2024	131.8	2.4	118.2	1.7	68.8	1.4	70.9	1.9
2025	135.3	2.6	120.2	1.7	69.9	1.6	72.8	2.7

Table A5.1

Washington Resident Population and Components of Change*

(Thousands)

	Population	Change	Percent Change	Births	Deaths	Net Migration
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	86.3	57.7	90.2
Forecast						
2020	7659.4	113.0	1.5	87.6	58.3	83.8
2021	7767.5	108.0	1.4	89.7	59.5	77.8
2022	7871.7	104.3	1.3	92.7	60.7	72.3
2023	7972.4	100.7	1.3	95.6	62.0	67.1
2024	8070.5	98.1	1.2	96.4	63.3	65.0
2025	8166.0	95.4	1.2	97.2	64.7	63.0

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

	2016	Actual			2020	2021	Forecast		2024	2025
		2017	2018	2019			2022	2023		
Total Population	7183.7	7310.3	7427.6	7546.4	7659.4	7767.5	7871.7	7972.4	8070.5	8166.0
Percent Change	1.7	1.8	1.6	1.6	1.5	1.4	1.3	1.3	1.2	1.2
Age 17 and Under	1625.6	1648.7	1665.9	1682.6	1700.3	1717.5	1733.9	1749.8	1764.9	1775.9
Percent of Total	22.6	22.6	22.4	22.3	22.2	22.1	22.0	21.9	21.9	21.7
Age 6-18	1178.7	1195.4	1211.9	1228.8	1244.6	1262.7	1280.1	1293.7	1302.1	1307.1
Percent of Total	16.4	16.4	16.3	16.3	16.2	16.3	16.3	16.2	16.1	16.0
Age 18 and Over	5558.1	5661.6	5761.7	5863.8	5959.1	6050.0	6137.8	6222.6	6305.7	6390.1
Percent of Total	77.4	77.4	77.6	77.7	77.8	77.9	78.0	78.1	78.1	78.3
Age 21 and Over	5284.0	5383.5	5479.6	5578.4	5673.5	5765.2	5852.1	5932.3	6010.4	6087.7
Percent of Total	73.6	73.6	73.8	73.9	74.1	74.2	74.3	74.4	74.5	74.5
Age 20-34	1482.7	1507.6	1529.6	1554.8	1575.7	1594.0	1609.7	1621.9	1631.6	1637.3
Percent of Total	20.6	20.6	20.6	20.6	20.6	20.5	20.4	20.3	20.2	20.0
Age 18-64	4484.7	4540.3	4588.0	4637.4	4677.4	4714.4	4748.9	4780.2	4812.8	4845.1
Percent of Total	62.4	62.1	61.8	61.5	61.1	60.7	60.3	60.0	59.6	59.3
Age 65 and Over	1073.3	1121.3	1173.7	1226.4	1281.7	1335.6	1389.0	1442.4	1492.9	1545.0
Percent of Total	14.9	15.3	15.8	16.3	16.7	17.2	17.6	18.1	18.5	18.9

* 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	August 2020	+
U.S. Real GDP Growth	2nd quarter 2020	-
U.S. ISM Index	September 2020	-
U.S. Employment YOY%Δ	September 2020	+
U.S. Unemployment Rate	September 2020	+
U.S. Consumer Confidence	September 2020	+
U.S. Consumer Sentiment	September 2020	+
U.S. Light Vehicle Sales	August 2020	+
U.S. CPI YOY%Δ	August 2020	-
U.S. Home Prices YOY%Δ	July 2020	+
S&P 500 Index	September 2020	-
WA Leading Index	August 2020	+
WA ISM-WW Index	August 2020	-
WA Employment YOY%Δ	August 2020	+
WA Aerospace Empl. YOY%Δ	August 2020	-
WA Unemployment Rate	August 2020	+
WA Help Wanted Index	August 2020	+
WA Business Cycle Indicator	August 2020	+
WA Initial Unemploy. Claims	August 2020	+
WA Housing Permits	August 2020	-
WA Weekly Hours in Mfg.	August 2020	+
WA New Vehicle Registration	August 2020	+
WA In-Migration	August 2020	+
WA Exports-Total YOY%Δ	2nd quarter 2020	-
WA Exports- w/o Trans. Equip. YOY%Δ	2nd quarter 2020	-
Seattle CPI YOY%Δ	August 2020	-
Seattle Home Prices YOY%Δ	July 2020	+
WA Construction Activity Index	August 2020	+

*Change from the previous reading

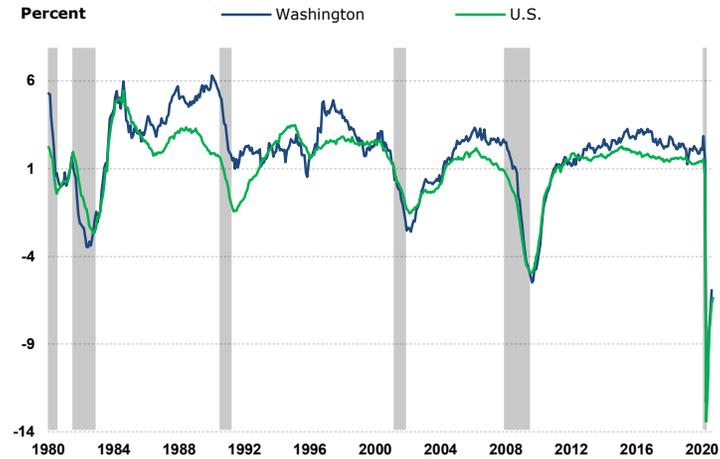
Table A6.2
Washington Business Indicators
 Historical Data

	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	107.7	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	118.8	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	104.5	126.6	48.0	50.2
2015:10	118.4	99.4	60.2	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	65.8	107.4	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	120.8	99.5	65.4	108.1	148.2	49.2	51.0
2016:06	121.1	99.8	66.6	109.2	151.3	49.1	52.8
2016:07	121.7	100.2	67.7	108.6	156.3	50.8	52.3
2016:08	121.0	100.2	67.0	106.4	153.1	47.7	49.4
2016:09	121.8	100.4	67.6	111.1	143.4	51.4	51.7
2016:10	122.2	100.5	68.5	111.6	152.3	53.1	52.0
2016:11	121.6	100.7	70.1	111.7	148.8	53.3	53.5
2016:12	121.7	101.2	71.1	113.0	149.2	47.3	54.5
2017:01	121.9	101.8	69.3	111.1	152.5	54.2	56.0
2017:02	121.8	102.1	68.9	112.2	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	112.6	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	75.0	115.9	136.8	60.8	59.1
2018:02	127.7	108.5	77.0	118.1	133.3	68.3	60.8
2018:03	128.3	108.8	77.8	119.9	137.4	68.0	59.3
2018:04	128.0	109.3	76.5	116.7	133.7	55.8	57.3
2018:05	126.9	109.4	77.2	115.3	128.0	61.7	58.7
2018:06	126.9	110.0	76.9	117.1	123.1	56.0	60.2
2018:07	126.8	110.4	76.9	115.7	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	116.6	131.5	62.7	59.8
2018:10	127.8	111.4	77.3	118.0	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	119.4	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	73.3	114.7	122.5	61.1	54.2
2019:03	128.9	111.7	76.4	119.9	125.6	57.8	55.3
2019:04	128.9	111.8	77.7	120.9	125.5	54.0	52.8
2019:05	128.5	111.8	76.9	119.9	124.0	54.0	52.1
2019:06	128.9	111.6	76.9	119.0	122.8	56.7	51.7
2019:07	129.6	112.0	77.8	121.6	123.0	57.0	51.2
2019:08	129.1	111.8	76.7	119.4	123.3	56.0	49.1
2019:09	129.3	111.6	78.2	120.8	127.6	54.0	47.8
2019:10	129.0	111.4	78.6	120.6	122.9	58.2	48.3
2019:11	129.7	111.6	79.0	123.3	122.5	47.0	48.1
2019:12	130.2	111.4	82.0	125.0	123.5	52.5	47.2
2020:01	129.0	112.0	78.7	119.8	121.8	53.0	50.9
2020:02	129.6	111.8	80.5	120.2	122.1	52.0	50.1
2020:03	120.1	103.5	74.5	120.9	119.9	46.0	49.1
2020:04	108.9	97.0	36.4	98.0	70.7	38.5	41.5
2020:05	112.0	100.0	38.2	108.8	56.1	41.0	43.1
2020:06	115.1	103.1	48.9	110.3	59.3	50.9	52.6
2020:07	117.7	105.2	54.9	112.3	60.0	56.4	54.2
2020:08	119.4	106.5	56.5	112.8	61.0	48.9	56.0
2020:09							55.4

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

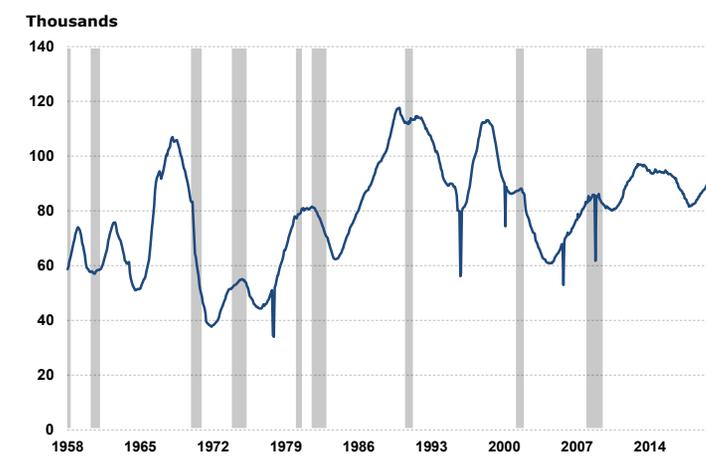
January 1980 to September 2020



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

Washington Aircraft and Parts Employment

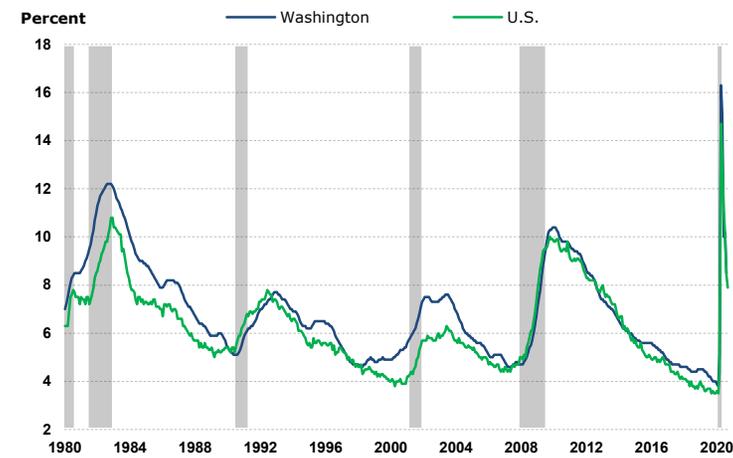
January 1958 to August 2020



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

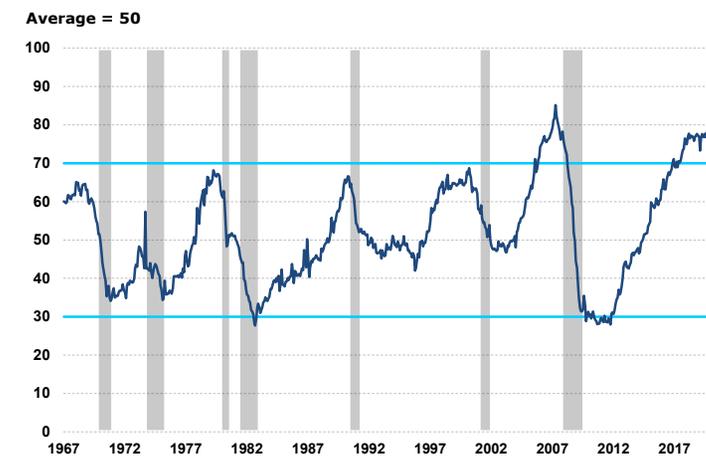
January 1980 to September 2020



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to August 2020

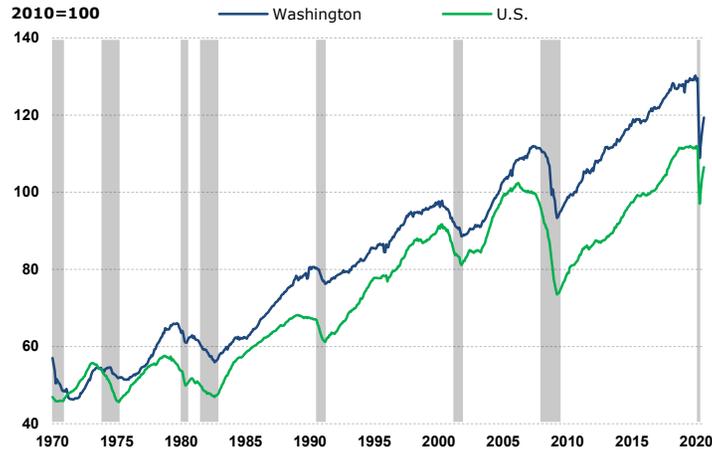


* Source: ERFC

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

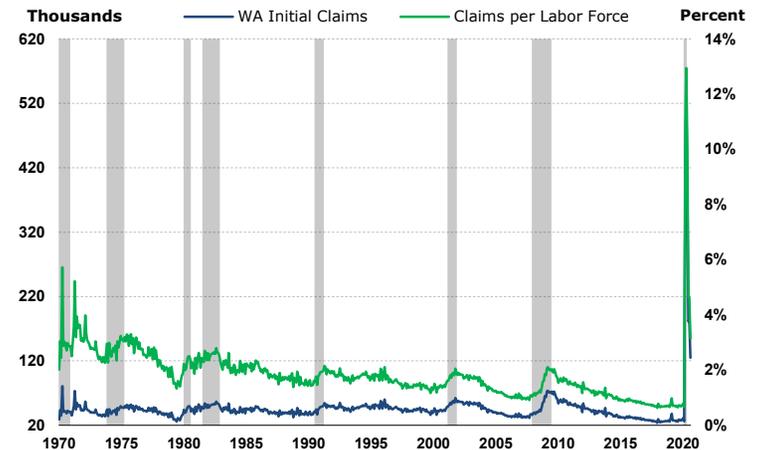
January 1970 to August 2020



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

January 1970 to August 2020, S.A.



* Source: WA State Employment Security, ERFC

Washington State Help Wanted Index

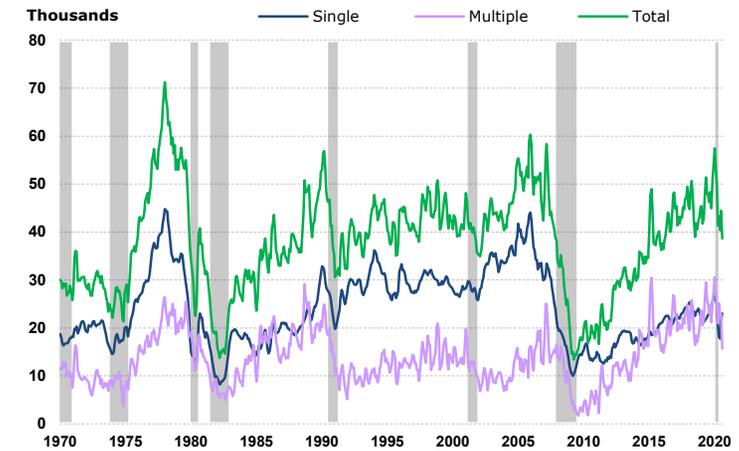
January 1964 to August 2020



* Source: The Conference Board, ERFC

Housing Units Authorized in Washington State

January 1970 to August 2020, 3mma, SAAR

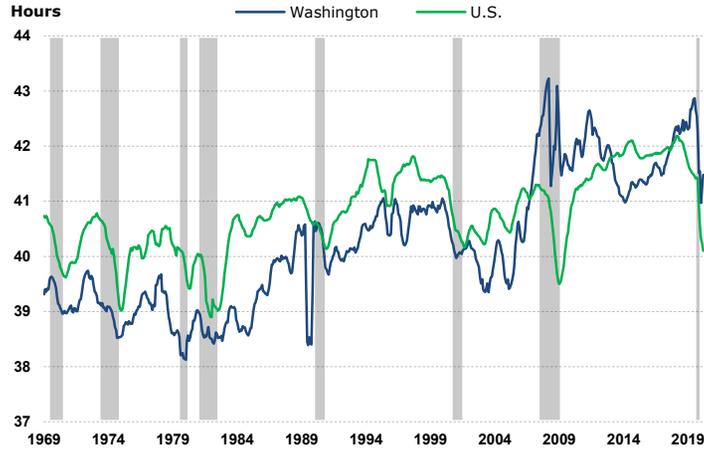


* Source: Census Bureau, ERFC

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

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



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

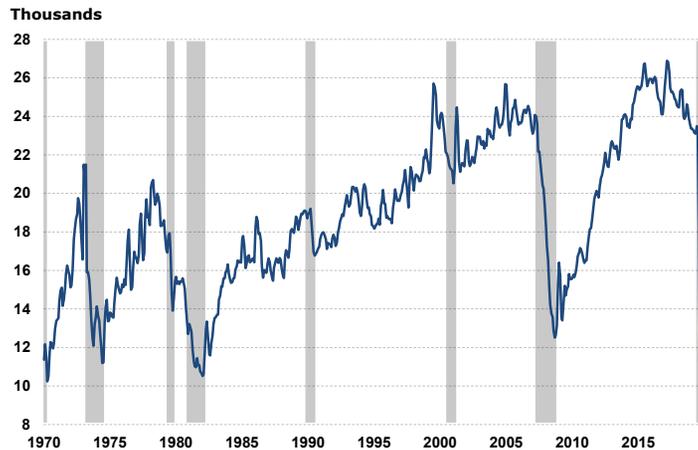
January 1988 to August 2020, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

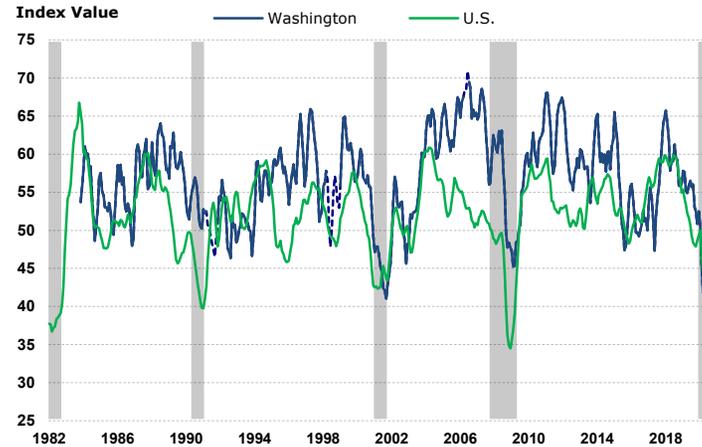
September 1970 to August 2020, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

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

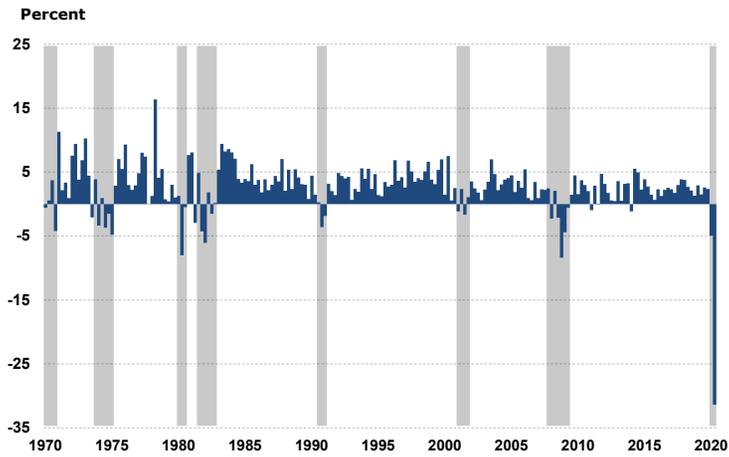


* Source: Institute for Supply Management, ISM-WW, ERFC

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

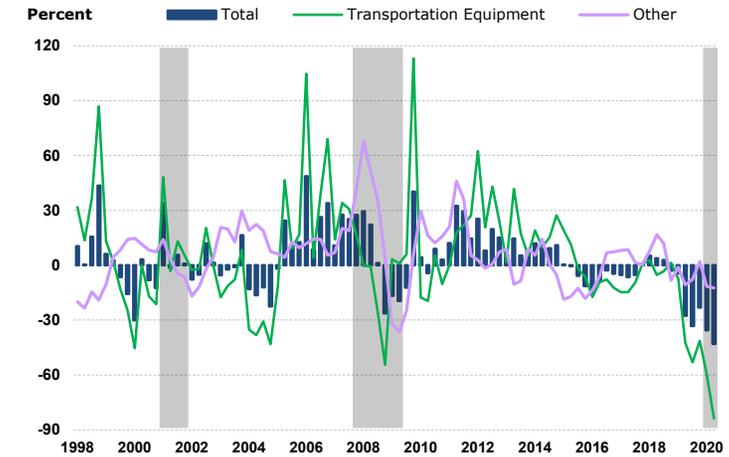
1970Q1 to 2020Q2, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

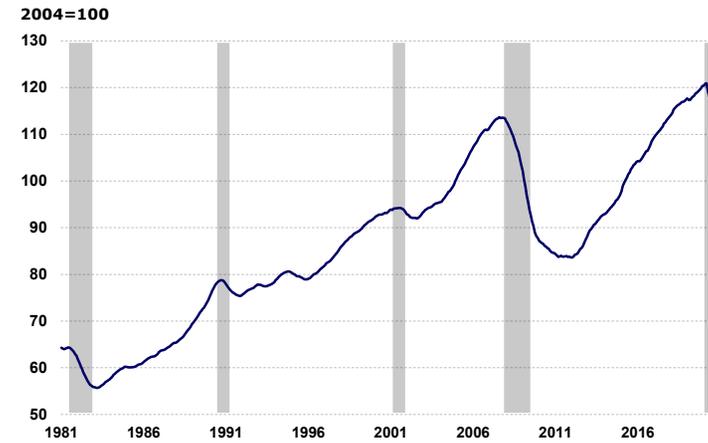
1998Q1 to 2020Q2, Year-over-year percent change



* Source: WISER

Washington State Construction Index

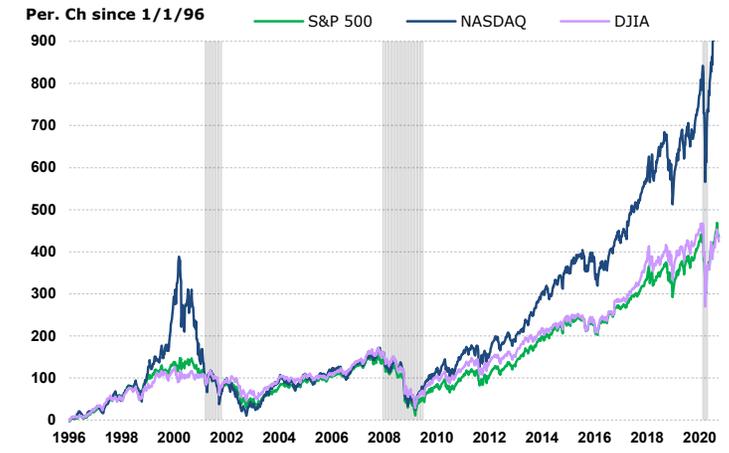
January 1981 to August 2020, 12mma



* Source: ERFC

National Stock Indexes

January 1, 1996 to September 25, 2020

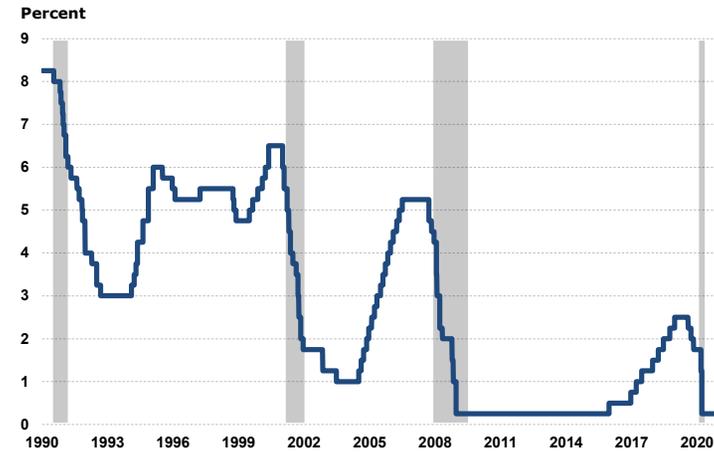


* Source: ERFC

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

Federal Funds Target Rate

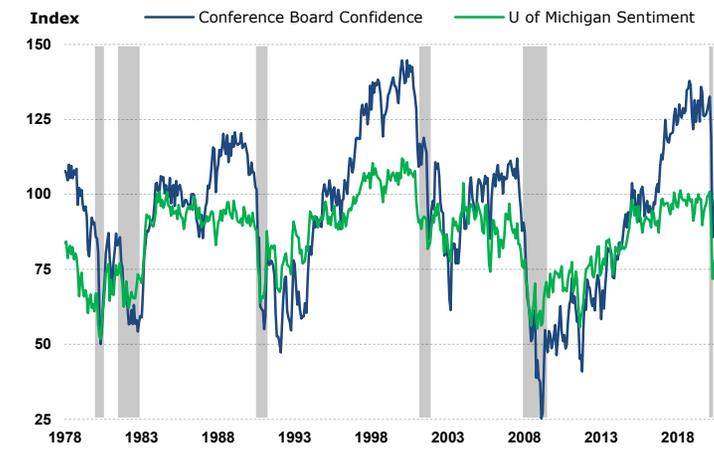
January 1, 1990 to October 2, 2020



* Federal Reserve

Consumer Confidence

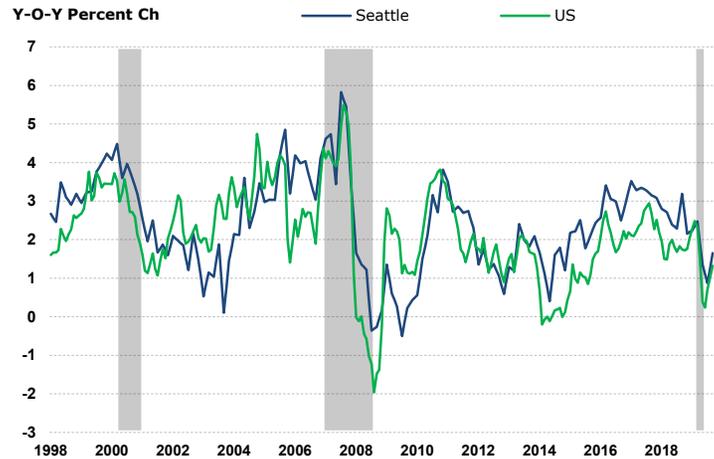
March 1978 to September 2020



* Source: The Conference Board, University of Michigan

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

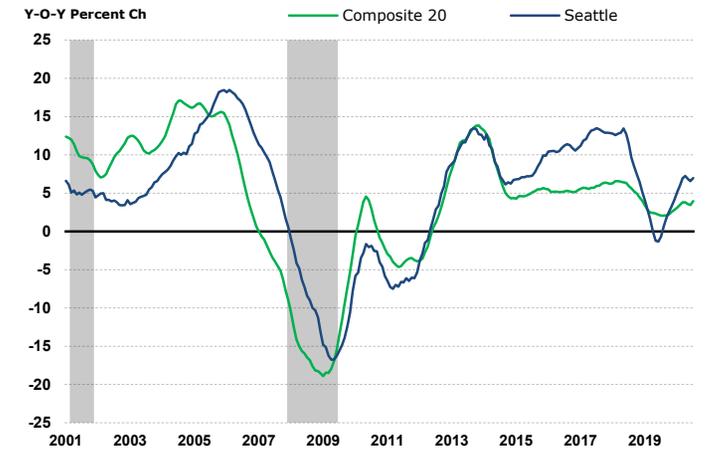
December 1998 to August 2020



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to July 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.