

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

Washington State Economic and Revenue Forecast

February 2022
Volume XLIV, No. 1



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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 GF-S revenue from fines and forfeitures collected by the Administrative Office of the Courts with 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 February 25, 2022.

Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

February 2022
Volume XLIV, No. 1

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Executive Summary

- **The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. Despite the pandemic continuing, the economy has largely reopened, and with the help of recent stimulus, economic growth has resumed.**
- **The forecast for real GDP growth in 2022 is now 3.7%, down from 4.0% in the November forecast. For 2023 and 2024, real GDP growth is 2.7% and 2.2%, up from 2.5% and 2.1% in the previous forecast. 2025 GDP growth is unchanged at 2.0%.**
- **Inflation has risen rapidly and is expected to be higher than in the previous forecast.**
- **The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus.**
- **Washington employment growth during the last two months of 2021 was less than expected in the November forecast.**
- **Washington personal income grew only 2.0% (SAAR) in the third quarter of 2021 due to reductions in income from Covid-related programs. Washington personal income excluding these programs increased at an 11.0% annual rate.**
- **The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar.**
- **General Fund-State (GF-S) revenue collections since the November 2021 forecast have come in \$452 million (5.9%) above the forecasted amount.**
- **The GF-S forecast was increased by \$1.40 billion in the 2021-23 biennium and \$1.31 billion in the 2023-25 biennium.**
- **The total forecast for funds subject to the budget outlook process was increased by \$1.45 billion in the 2021-23 biennium and \$1.32 billion in the 2023-25 biennium.**
- **This is the first forecast to include projections for the 2025-27 biennium.**

U.S. Economic Forecast

The economy has improved since the onset of the pandemic

The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Omicron variant created more concern just as the

impact from the Delta variant waned. The surge in cases from the Omicron variant has ended and cases are now closer to the average of the past two years. Despite the pandemic continuing, the economy has largely reopened, and with the help of recent stimulus, economic growth has resumed. Even with the rapid improvement, however, not all economic activity has fully recovered.

Our forecast was based on a modified version of the February IHS Markit forecast

This forecast is based on a modified version of IHS Markit's February 2022 Control forecast for the U.S. economy. The forecast for GDP growth in 2022 is now 3.7%, down from 4.0% in the November forecast. For 2023, real GDP growth is 2.7%, up from 2.5% in the previous forecast and for 2024 real GDP growth is 2.2%, up from 2.1% in the previous forecast. We do not have a new long term forecast from Blue Chip since the October 2021 forecast. The February 2022 forecast is the first to extend to 2026 and 2027. For 2025-27, we assume the same growth rates as in the October Blue Chip long term forecast. We expect growth rates of 2.0%, 2.0%, and 1.9% in 2025 through 2027.

Inflation is expected to be higher than in the previous forecast

Inflation is expected to be higher this year than in the November forecast. We expect inflation to be 4.4% this year, up from 2.9% in the previous forecast. Prices, driven up by shifts in demand during the pandemic as the global economy recovered faster than expected, have soared above their rising pre-pandemic trends. Constraints on supply chains have also impacted prices. The increase in inflation this year is expected to be the peak with inflation moderating throughout the forecast. Inflation is expected to decline to 2.0% in 2023. Inflation is expected to be 2.1% from 2024 through 2027. Core inflation (excluding food and energy) is expected to be 4.3% this year and then trend down to 2.2% in 2024 through 2027.

Washington

The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus

The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus. Washington employment growth during the last two months of 2021 was less than expected in the November forecast. Washington employment is now 87,900 (2.5%) lower than at its February 2020 peak. Washington's unemployment rate declined to 4.5% in December from 4.7% in November. Washington housing construction increased in the fourth quarter of 2021 on continued strength in multi-family activity. Seattle-area home prices continue to rise rapidly. Washington exports of transportation equipment increased over the year for a third consecutive quarter. Washington personal income grew only 2.0% (SAAR) in the third quarter of 2021 due to reductions in income from Covid-related programs. Washington personal income excluding these programs increased at an 11.0% annual

rate. Seattle consumer price inflation of 7.6% outpaced the national average of 7.1% in the year ending in December 2021.

The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar

The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar. We expect a 4.2% increase in Washington employment this year which is slightly less than the 4.4% growth rate expected in the November forecast. We expect above-average growth through the remainder of the forecast as the economy continues to recover from the recession. We expect employment growth to average 1.5% per year in 2023 through 2025 which is the same average growth rate expected in the November forecast. Employment growth is expected to slow to an average rate of 0.8% per year in 2026 and 2027. Our forecast for nominal personal income growth this year is 2.9%, up from 1.9% in the November forecast. Personal income growth will be weak this year as the extraordinary stimulus of the last two years is withdrawn. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.5% per year compared to 5.2% in the November forecast. Personal income growth is expected to grow at an average rate of 5.1% per year in 2026 and 2027. We expect permits to total 48,900 units this year, up from 47,100 units in the November forecast. We expect permits to average 44,400 units in 2023 through 2025, up from 43,500 units in the November forecast. We expect headline inflation to reach 5.0% this year, up from 4.0% in the November forecast. We expect Seattle inflation to average 2.1% per year in 2023 through 2025 which is the same average rate as in the November forecast.

Revenue Forecast

The revenue forecast has been increased due to stronger-than-expected taxable activity and stronger projected growth in income and construction activity

Since the November 2021 forecast, taxable activity has been stronger than expected, with tracked collections coming in well above the November forecast. While much of the surplus in collections stemmed from one-time payments unrelated to current activity, the level of activity in the general economy has been stronger than expected. The real estate market has also showed unexpected strength. The updated economic forecast projects a continuation of this strength, with increases in state personal income, construction employment and housing permits. Combining those factors with the recent strength in collections, forecasted revenue collections have been increased in the 2021-23 and 2023-25 biennia. This month's forecast is also the first to include projections for the 2025-27 biennium, which shows growth continuing into that period.

GF-S forecast change by biennium (millions):

21-23: \$1,400
23-25: \$1,311

Tracked revenue collections through February 10 for the current 2021-23 biennium came in \$452.3 million higher than forecasted. The forecasted increase in taxable activity adds \$948.0 million to expected revenue for the remainder of the biennium, resulting in a total forecast increase of \$1,400.3 million. The forecast for the 2023-25 biennium was increased by \$1,311.2 million. The February 2022 forecast for GF-S revenue totals \$58.919 billion in the 2021-23 biennium and \$62.175 billion in the 2023-25 biennium. The initial forecast of GF-S revenue for the 2025-27 biennium is \$66.533 million.

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

2021-23:
\$1.453

2023-25:
\$1.320

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 at not only GF-S revenue and spending but also that of the ELTA, OPA and the WEIA. The forecast of total revenue for the 2021-23 biennium is \$61,690.7 million, \$1,452.6 million more than the November forecast. The forecast for the 2023-25 biennium is \$65,367.6 million, \$1,320.2 million more than the November forecast. The initial forecast of total revenue for the 2025-27 biennium is \$70,025.4 million.



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

- **The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. Despite the pandemic continuing, the economy has largely reopened, and with the help of recent stimulus, economic growth has resumed.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **Real GDP growth increased to 7.0% (SAAR) in the fourth quarter of 2021 from 2.3% (SAAR) in the third quarter.**
- **Employment has increased and unemployment has trended downward but neither are at pre-pandemic levels.**
- **Headline inflation has risen rapidly.**
- **The housing market has recovered as home prices surge; manufacturing growth may be slowing, but remains solid.**
- **Oil prices are increasing.**
- **The forecast for real GDP growth in 2022 is now 3.7%, down from 4.0% in the November forecast. For 2023 and 2024, real GDP growth is 2.7% and 2.2%, up from 2.5% and 2.1% in the previous forecast. 2025 GDP growth is unchanged at 2.0%.**
- **The February 2022 forecast is the first to extend to 2026 and 2027. We expect real GDP growth rates of 2.0%, and 1.9% in 2026 and 2027.**
- **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.**

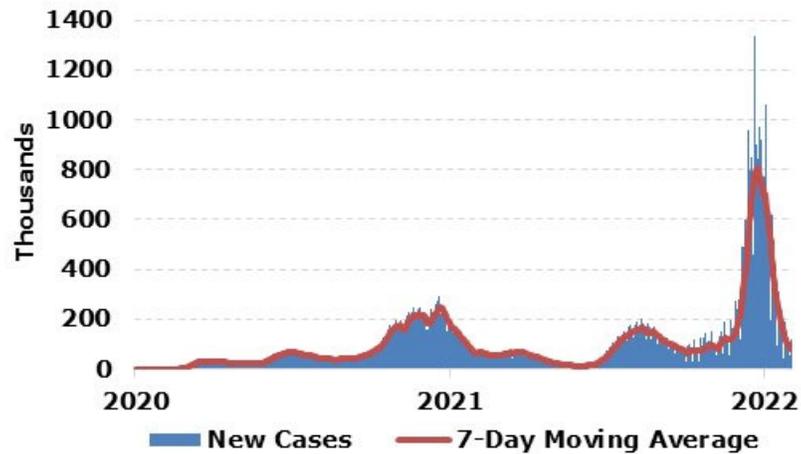
Current Conditions

The economy has improved since the onset of the pandemic

The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Omicron variant created more concern just as the impact from the Delta variant waned (see figure 1.1). The surge in cases from the Omicron variant has ended and cases are now closer to the average of the past two years. Despite the pandemic continuing, the economy has largely reopened, and with the help of recent stimulus, economic growth has resumed.

Even with the rapid improvement, however, not all economic activity has fully recovered.

Figure 1.1: New COVID-19 Cases



Source: Source: U.S. Centers for Disease Control; data through February 22, 2022

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. Stimulus related to the pandemic has been over \$5.9 trillion in five major categories. Loan and grant programs (\$1.56 trillion), income support (\$906 billion), state and local government funding (\$884 billion), direct payments (\$869 billion), and health spending (\$662 billion). The remainder of the spending is comprised of tax policy and other spending such as disaster support, higher education, and housing. The Federal Reserve has engaged in asset purchases, liquidity measures, and loan programs to assist the economy.

U.S. real GDP has returned to pre-pandemic levels

The COVID-19 crisis, efforts taken to contain it, and the subsequent stimulus programs and other responses have created unprecedented volatility in economic growth. U.S. real GDP plummeted a record 31.4% (SAAR) in the second quarter of 2020 followed by a record 33.4% (SAAR) gain in the third quarter of 2020. GDP has since continued to recover and reached the pre-pandemic peak in the second quarter of 2021. Real GDP growth increased to 7.0% (SAAR) in the fourth quarter of 2021 from 2.3% (SAAR) in the third quarter. Inventory accumulation accounted for 4.9 points of overall growth. Consumer spending growth picked up to 3.1% (SAAR) after increasing 2.0% (SAAR) in the third quarter. Consumption added 2.1 points to topline GDP growth in the fourth quarter. Fixed investment increased 2.6% (SAAR) in the fourth quarter and added 0.5 points to topline GDP growth. Nonresidential structures declined 9.4% (SAAR) but was more than offset by a 10.6% (SAAR) gain in intellectual property. Government spending declined 2.6% (SAAR) in the fourth quarter with declines in federal and state and local. Exports surged 23.6%

(SAAR) while imports increased 17.6% (SAAR) as trade reopened from the shutdowns.

Employment remains 2.9 million lower than the pre-pandemic level

Nonfarm payroll employment has continued to grow after the unprecedented 20.7 million job decline in April 2020 due to the pandemic. Job growth remained strong in January with an increase of 467,000. The annual benchmarking process by the Bureau of Labor Statistics also resulted in a large upward revision to previous months. Over the past twelve months, employment growth has averaged 551,000 jobs each month. It appears supply chain issues have continued to impact goods-producing industries which gained just 4,000 jobs in January. The construction sector lost 5,000 jobs despite the strong housing market. Employment increases in the service sector were led by a 151,000 job increase in leisure and hospitality as it continues to recovery from deep declines related to the shutdowns. Retail trade employment increased by 61,400 jobs, with large increases in general merchandise stores (+29,000) and healthcare stores (+11,300). Government payrolls increased by 23,000 due to a 29,400 job gain in local government education. Even with the recent job gains, total nonfarm employment remains 2.9 million lower than the pre-pandemic February 2020 level.

The unemployment rate continues to trend downward

The unemployment rate has continued to trend downward as shutdowns have been lifted and the economy has recovered. After spiking in April 2020 at 14.8%, the unemployment rate has steadily declined to 3.9% in December 2021, before an uptick in January to 4.0%. Prior to the pandemic, the unemployment rate was at a historic low of 3.5% in February 2020. The labor force participation rate increased to 62.2% in January, up from 61.4% a year ago but down from a pre-pandemic high of 63.4% in January 2020. Average hourly earnings rose 23 cents to \$31.63 while the average workweek declined 0.2 hours to 34.5 hours in January.

Consumer confidence is declining

Consumer confidence has declined recently, although the severity of the decline is unclear due to the divergence in the Conference Board and University of Michigan measures. Consumer confidence as measured by the Conference Board declined 0.6 points in February to a 6-month low. Consumers' assessment of present conditions improved in February, but expectations fell. The University of Michigan Consumer Sentiment index shows a much worse picture of consumer attitudes. The index fell another 4.4 points in February to a ten year low of 62.8 points. The Russia invasion of Ukraine occurred after both surveys were conducted and is likely to weigh down confidence going forward.

Oil prices have risen

Oil prices have risen sharply since the beginning of December. Brent spot crude prices are now at \$98 per barrel in the third week of January, up from \$71 in the first week of December. West Texas Intermediate (WTI) prices have increased to \$93 per barrel from \$67 per barrel over the same time period. OPEC+

continues to try to manipulate prices by keeping supplies tight despite an agreement to ramp up oil production. Fears of war between Russia and Ukraine and possible sanctions against Russia have also contributed to the recent increase. U.S. oil production increased to 11.753 million bpd in November from 11.509 in October. Prior to the pandemic, U.S. production was at an all-time high at 12.866 million bpd in November 2019. The Baker Hughes rig count has been slowly increasing since reaching a trough in August 2020. As of February 18th the rig count was 645, up 248 since last year.

Inflation has risen rapidly

Headline inflation has risen rapidly. With the economy reopening, supply has not been able to meet the surge in demand. Supply chain issues have not resolved from the onset of the pandemic. Shortages of commodities have also pushed prices higher. Year-over-year, the seasonally adjusted Consumer Price Index (CPI) was up 7.5% in January, up from 7.1% the month before and the highest level of inflation in 40 years (see figure 1.2). A year ago, headline inflation was 1.4% as the economy was under shutdown orders due to the pandemic. Lean inventories for cars, combined with increased demand helped by recent stimulus, have pushed prices in the auto sector up significantly. New car prices are up 12.2% and used car prices are up 40.5% over the year. Other sectors affected by earlier stay-at-home orders have seen some of the largest impacts. Energy prices, particularly gasoline (+40.0%), have surged as workers have returned to the office and began commuting again. Shelter cost inflation has been relatively in check, up 4.4% over the year despite the recent surge in home prices. Core consumer prices, which exclude food and energy, were up 6.0% over the year.

Figure 1.2: Consumer Price Index



Source: Bureau of Labor Statistics; data through January 2022

Home price growth is strong

Home price appreciation remains very strong. Tight supply and strong demand for housing has led to the ongoing strength. The

seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index increased 1.5% in December following a 1.2% gain the month before. Home prices are now 18.5% higher than a year ago (see Figure 1.3). Lumber prices are once again near historic highs, adding to the cost of new homes. The random length lumber price reached an all-time high \$1,671 per 100,000 board feet in May 2021. Prices came down to \$454 in August but have since climbed to \$1,200 as of February 24th. Homebuilder confidence remains high and well above pre-pandemic levels. In February, confidence fell one point to 82, but remains well above the historical average of 52. Expansionary monetary policy is supporting home prices by keeping interest rates low which allows buyers to purchase more expensive homes. However, mortgage rates are starting to increase. The rate on a 30-year mortgage increased to 3.89% as of February 24th, up from 2.97% a year ago.

Figure 1.3: S&P CoreLogic Case-Shiller 20-city Home Price Index



Source: S&P CoreLogic Case-Shiller; data through December 2021

The housing market has recovered

The housing market has recovered and is now above pre-pandemic levels. Housing starts fell 4.1% in January and are down 5.0% since last year. Freezing weather across many parts of the country limited new construction. Single-family starts in January declined 5.6% while multi-family starts fell 0.8%. Low inventory should help keep new construction strong despite high material costs. Housing permits increased 0.5% in January to 1.895 million (SAAR), the highest in fifteen years. Single-family permits increased 7.5% and multi-family permits declined 9.9%. Total permits are up 0.6% from a year ago. New home sales fell 4.5% in January to 801,000 (SAAR) and are down 19.3% since last year. The backlog of homes approved but not yet under construction is at an all-time high as builders struggle with shortages and higher prices for materials.

The manufacturing sector remains solid

Growth in the manufacturing sector is solid but may be starting to slow. The Institute for Supply Management (ISM) Report on

Business index fell to 57.6 (index values below 50 indicate contraction) in January from 58.8 in October. The new orders component declined 3.1 points to 57.9 as demand is starting to soften. Production fell to 57.8 from 59.4 the month before. The employment component remained positive, increasing 0.6 points to 54.5. Production continues to be constrained by supplier delivery, inventory, and import problems. The latest G-17 report from the Federal Reserve indicates manufacturing output advanced 0.2% in January and is now up 2.5% from a year ago. Both durable and nondurable manufacturing increased 0.2% in January. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 0.9% in January and are up 10.2% from a year ago.

U.S. exports have returned to growth

U.S. exports are growing again as the global economy continues to emerge from pandemic related restrictions. Global containment measures to combat virus outbreaks have eased. Total exports in the fourth quarter surged 22.7% year over year. Oil and gas exports continue to surge as demand picked up and prices rose, increasing 85.4% from a year ago. Transportation equipment exports grew 11.9% in the fourth quarter, the third consecutive quarterly increase. Exports to the rest of North America have remained strong. Year-over-year growth in exports to Canada increased to 19.6% while exports to Mexico are up 22.2%. Export growth to China has slowed. Fourth quarter exports grew 5.9% from a year ago, down from 7.4% the prior quarter.

Forecast

Our forecast was based on a modified version of the February IHS Markit forecast

This forecast is based on a modified version of IHS Markit's February 2022 Control forecast for the U.S. economy. The forecast for GDP growth in 2022 is now 3.7%, down from 4.0% in the November forecast. For 2023, real GDP growth is 2.7%, up from 2.5% in the previous forecast and for 2024 real GDP growth is 2.2%, up from 2.1% in the previous forecast. We do not have a new long term forecast from Blue Chip since the October 2021 forecast. The February 2022 forecast is the first to extend to 2026 and 2027. For 2025-27, we assume the same growth rates as in the October Blue Chip long term forecast. We expect growth rates of 2.0%, 2.0%, and 1.9% in 2025 through 2027.

Key assumptions regarding the pandemic are included in the forecast

The forecast includes key assumptions related to the economic recovery and the pandemic. The Omicron strain of the virus temporarily and moderately slows consumer spending on certain services affected by social distancing. However, by spring the transition from pandemic to endemic resumes as more of the population is vaccinated and personal behavior adjusts to the risks of living through repeated waves of the virus. There is no repeat of the national lock-down that precipitated the 2020 recession.

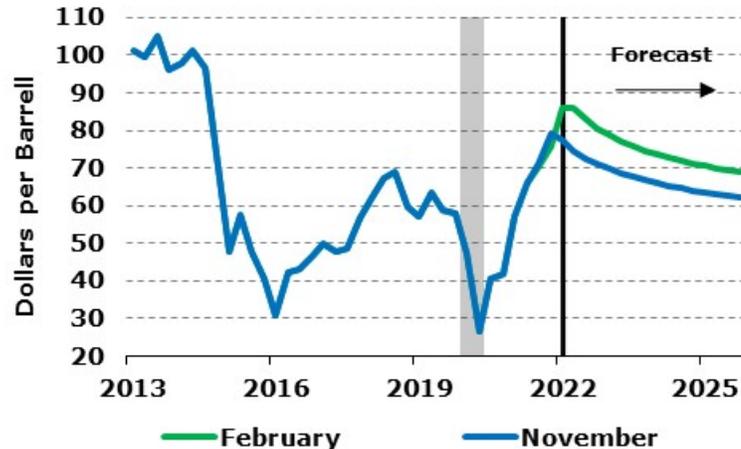
The forecast includes the stimulus and tariffs

The November forecast includes all pandemic relief measures enacted in 2020 and the \$1.9 trillion American Rescue Plan enacted in March of 2021. This forecast includes the Infrastructure Investment and Jobs Act signed by the President on November 15th. The forecast does not include the “Build Back Better” reconciliation bill on social infrastructure. The forecast includes tariffs enacted by the U.S. and China since 2017 that are still in effect.

Oil prices are higher than in September

Oil prices have increased due to production restraint by OPEC+ and continued strong demand. OPEC+ had agreed to a plan to ramp oil production back up, however they have consistently under-delivered on targets, trimming inventories and tightening the oil market. Fears about the Omicron variant took a toll on December oil prices but shrank as disruptions to oil consumption remained mild. The refiner acquisition price of crude oil in 2022 is expected to average \$84 per barrel, up from \$74 in the November forecast (see Figure 1.4). The firming of prices will result in increased U.S. production, keeping prices in check even as demand continues to grow. Oil prices are expected to soften as U.S. supplies hit the market. We expect oil prices to decline to \$76 per barrel in 2023 and decline throughout the forecast reaching \$67 per barrel in 2027.

Figure 1.5: Average Price of Crude Oil



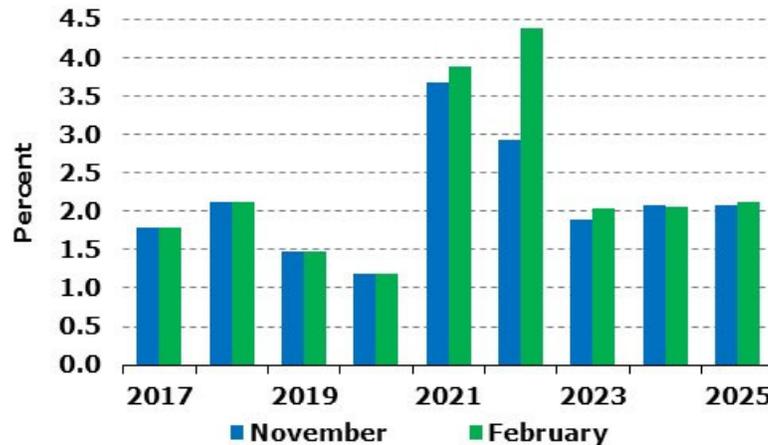
Source: EIA, February 2022 ERFC forecast; historical data through 2021 Q4

Inflation is expected to be higher than in the previous forecast

Inflation (as measured by the price index for personal consumption expenditures) is expected to be higher this year than in the November forecast (see Figure 1.5). We expect inflation to be 4.4% this year, up from 2.9% in the previous forecast. Prices, driven up by shifts in demand during the pandemic as the global economy recovered faster than expected, have soared above their rising pre-pandemic trends. Constraints on supply chains have also impacted prices. The increase in inflation this year is expected to be the peak with inflation moderating throughout the forecast. Inflation is expected to decline to 2.0% in 2023. Inflation is expected to be 2.1% from

2024 through 2027. Core inflation (excluding food and energy) is expected to be 4.3% this year and then trend down to 2.2% in 2024 through 2027.

Figure 1.5: Personal Consumption Expenditure (PCE) Inflation



Source: U.S. Bureau of Economic Analysis, February 2022 ERFC forecast; historical data through 2021

Consumer spending growth is expected to slow

Consumer spending growth is expected to slow this year after strong growth last year due to the reopening of the economy after various measures taken in 2020 to combat the spread of COVID-19. Fiscal stimulus measures are no longer giving a boost to consumers as they did last year. Consumers are seeing real wage declines due to high inflation this year. Going forward, continued wage growth and slowing inflation is expected to turn real income growth positive. Real consumer spending is expected to grow 3.2% this year, down from a 7.9% increase in 2021. The forecast calls for growth of 2.7% in 2023 trending downward as the recovery continues, reaching 2.2% in 2025 through 2027.

Employment will take time to recover

Employment took a major hit from the COVID-19 pandemic but is now in the process of recovering. In 2020, there was a 5.7% reduction in employment. Almost all of the reduction was due to the unprecedented 20.7 million job loss in the month of April. Employment grew 2.8% in 2021 and is expected to accelerate to 3.7% growth this year. We expect average annual employment of 151.5 million jobs in 2022, finally reaching the 2019 pre-pandemic annual average of 150.9 million jobs. We expect to reach the pre-pandemic peak of 150.9 million jobs in the third quarter of 2022. Job growth is expected to continue as the recovery continues but to trend downward throughout the forecast, reaching 0.2% in 2026 and 2027. We expect the unemployment rate to average 3.6% this year, down from 5.4% in 2021. Going forward, the forecast calls for the unemployment rate to decline to 3.5% in 2023 and then to slowly increase to 4.3% in 2027.

Business investment is expected to rebound this year

Real nonresidential fixed investment is expected to increase 6.3% this year after a 7.3% increase in 2021. The continuing recovery is motivating businesses to expand capacity to keep pace with recovering sales. Financial conditions are favorable and bank lending standards are easing. The increase in oil prices has led to rising drilling activity. The capital-intensive manufacturing sector is expanding to meet demand. After an extended grounding, Boeing resumed delivery of the 737 MAX in December. Office vacancy rates remain high however as Americans still work from home even after social distancing requirements have eased. We expect real nonresidential construction to decline 2.4% this year after declining 8.2% in 2021. The forecast calls for essentially no growth in 2023 before turning positive in 2024 at 1.9%. We expect growth to accelerate and average 3.4% in 2025 through 2027. Real nonresidential construction will not have fully recovered to its level before the pandemic by the end of 2027. Real equipment investment is expected decline 5.2% this year after growing 9.5% in 2021. We expect growth in real equipment investment to turn positive in 2024 and average 1.8% from 2024 through 2027. We expect real nonresidential fixed investment growth to average 4.0% from 2023 through 2027.

The housing market has been surging

The housing market has been surging although headwinds are building. Rising mortgage rates, labor and material shortages, soaring construction costs, and high quit rates weigh down growth. The February forecast calls for housing starts to decline 7.1% this year after strong growth of 14.4% in 2021. We expect single-family housing starts to decline 6.8% and the multi-family segment to decline 8.0% this year. We expect 2021 to be the peak in housing starts at 1.60 million units. The forecast assumes a decline through 2027 with housing starts reaching 1.22 million.

Growth in major U.S. trading partners is expected to be slightly weaker than in the previous forecast

The COVID-19 pandemic has affected economies throughout the world. Just as countries were rebounding from the Delta variant, the Omicron variant emerged leading to new highs in infection rates. Economic growth of U.S. major trading partners is expected to be slightly weaker than in the November forecast. Economic growth of major U.S. trading partners is expected to be 3.5% this year after growth of 5.8% in 2021. The November forecast called for growth of 3.7% in 2022. We expect U.S. major trading partner growth to trend down and reach 2.5% in 2025 through 2027. Real U.S. exports are forecasted to increase 9.4% this year after growing 4.6% in 2021. The forecast calls for real exports to reach their pre-pandemic peak in the fourth quarter of this year. We expect real export growth to trend downward and reach 4.2% in 2026 and 2027.

The Infrastructure Investment and Jobs Act (IIJA) was signed into law, marking the seventh stimulus measure related to the pandemic. The COVID-19 relief measures have been far more substantial than the fiscal response to the 2007-09 Great Recession. The American Recovery and Reinvestment Act

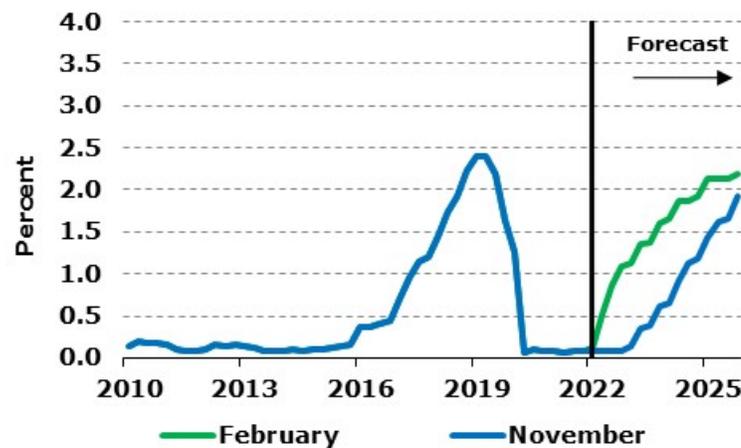
The fiscal response to COVID has been massive

(ARRA) of 2009 had its highest one-year cost, or peak cost, in the third year after the initial stimulus to the federal government of \$1.0 trillion. ARRA ended up costing \$787 billion over ten years. The combination of COVID-19 stimulus to date, with the inclusion of IIJA, is expected to have a total cost of \$5.8 trillion over ten years. The cost of the COVID-19 fiscal measures continues to rise through at least 2030.

We expect the first Federal Reserve rate hike in March of 2022

The Federal Reserve is expected to raise the target for the federal funds rate in March of this year. The November forecast assumed there wouldn't be a rate hike until March of 2023 (see Figure 1.6). Inflation that has remained higher for longer than policymakers had anticipated has made it likely that rate increases will occur sooner than previously assumed. We expect three consecutive increases of a quarter-point in the target for the federal funds rate at the March, May, and June meetings, followed by one more rate hike later in the year. We then expect the Federal Reserve to slow the pace of rate hikes to assess the impact of the increase. The forecast also calls for the Federal Reserve to begin removing stimulus tied to its balance sheet this year.

Figure 1.6: Effective Rate on Federal Funds



Source: Board of Governors of the Federal Reserve, February 2022 ERFC forecast; historical data through 2021 Q4

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, with downside risks outweighing upside risks.

Downside Risks

- New variants to COVID-19 emerge
- Rising COVID-19 virus infections
- The re-imposition of some social restrictions
- New travel restrictions
- War in Ukraine
- Inflation continues to increase
- The increase in inflation lasts longer than anticipated
- Weak demand causes businesses to slow re-hiring of laid-off workers
- Increasing geopolitical tensions negatively affect consumer confidence
- Monetary policy is ineffective
- Deficit fears limit fiscal policy
- A breakdown in trade relations
- Global growth weakens, pulling exports down

Upside Risks

- COVID-19 infections/deaths decline faster than anticipated
- COVID-19 vaccines are distributed more quickly than expected in underserved countries
- The impact of the Infrastructure Investment and Jobs Act is more robust than expected
- 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

Fiscal Years

U.S. Economic Forecast Summary
 Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,631.3	18,938.1	19,816.4	20,442.1	20,931.3	21,367.7	21,797.1	22,215.0
% Ch	-0.9	1.6	4.6	3.2	2.4	2.1	2.0	1.9
Real Consumption	12,803.0	13,174.2	13,881.8	14,253.1	14,648.2	14,995.0	15,323.1	15,651.7
% Ch	-1.4	2.9	5.4	2.7	2.8	2.4	2.2	2.1
Real Nonresidential Fixed Investment	2,748.1	2,764.1	2,949.2	3,119.8	3,242.3	3,370.6	3,503.5	3,643.2
% Ch	-0.7	0.6	6.7	5.8	3.9	4.0	3.9	4.0
Real Residential Fixed Investment	612.2	701.2	690.4	660.1	638.8	640.3	641.8	637.8
% Ch	1.4	14.5	-1.5	-4.4	-3.2	0.2	0.2	-0.6
Real Personal Income	17,254.9	18,139.7	17,731.8	18,127.7	18,675.7	19,188.1	19,681.2	20,154.9
% Ch	4.0	5.1	-2.2	2.2	3.0	2.7	2.6	2.4
Real Per Capita Income (\$/Person)	52,110	54,678	53,331	54,291	55,665	56,897	58,048	59,128
% Ch	3.6	4.9	-2.5	1.8	2.5	2.2	2.0	1.9
Price and Wage Indexes								
PCE Price Index (2012=100)	110.6	112.8	118.6	121.9	124.3	126.9	129.6	132.3
% Ch	1.3	2.0	5.1	2.8	2.0	2.1	2.1	2.1
U.S. Consumer Price Index (1982-84=1.0)	2.573	2.631	2.793	2.868	2.931	2.994	3.059	3.128
% Ch	1.6	2.3	6.1	2.7	2.2	2.1	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.395	1.437	1.512	1.598	1.669	1.737	1.805	1.875
% Ch	3.0	3.0	5.3	5.7	4.5	4.1	4.0	3.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,039.6	21,848.8	24,099.4	25,691.2	26,961.1	28,214.2	29,477.6	30,739.4
% Ch	0.5	3.8	10.3	6.6	4.9	4.6	4.5	4.3
Personal Income	19,076.0	20,464.2	21,021.9	22,090.1	23,214.7	24,348.0	25,504.4	26,671.4
% Ch	5.4	7.3	2.7	5.1	5.1	4.9	4.7	4.6
Employment (Millions)								
U.S. Civilian Labor Force	162.6	160.6	163.0	166.2	168.1	169.5	170.6	171.6
Total U.S. Employment	152.9	149.5	156.2	160.6	162.0	162.9	163.6	164.3
Unemployment Rate (%)	6.00	6.92	4.19	3.42	3.62	3.88	4.12	4.27
Nonfarm Payroll Employment	147.08	142.96	149.18	153.04	154.56	155.33	155.70	156.07
% Ch	-1.9	-2.8	4.3	2.6	1.0	0.5	0.2	0.2
Manufacturing	12.52	12.18	12.53	12.68	12.71	12.60	12.42	12.28
% Ch	-2.1	-2.7	2.9	1.2	0.2	-0.9	-1.4	-1.1
Durable Manufacturing	7.82	7.57	7.81	7.93	7.99	7.93	7.82	7.74
% Ch	-2.6	-3.2	3.2	1.5	0.8	-0.7	-1.4	-1.0
Nondurable Manufacturing	4.70	4.61	4.73	4.75	4.72	4.67	4.60	4.54
% Ch	-1.4	-1.9	2.6	0.6	-0.7	-1.1	-1.4	-1.2
Construction	7.39	7.32	7.49	7.56	7.52	7.50	7.55	7.61
% Ch	-0.3	-0.9	2.3	0.9	-0.6	-0.2	0.6	0.8
Service-Providing	126.50	122.90	128.56	132.15	133.66	134.56	135.07	135.52
% Ch	-1.9	-2.8	4.6	2.8	1.1	0.7	0.4	0.3
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	46.7	51.8	80.7	80.5	74.3	70.7	68.4	66.8
Personal Saving/Disposable Income (%)	12.6	15.3	7.2	6.2	6.4	6.9	7.5	8.0
Auto Sales (Millions)	3.8	3.7	2.9	3.3	3.5	3.6	3.5	3.5
% Ch	-24.3	-3.2	-21.4	13.6	6.3	2.4	-2.1	-2.2
Housing Starts (Millions)	1.317	1.551	1.576	1.379	1.324	1.317	1.292	1.241
% Ch	8.1	17.7	1.6	-12.5	-4.0	-0.6	-1.9	-3.9
Federal Budget Surplus (Billions)	-2,231.2	-3,264.5	-1,615.6	-853.8	-806.9	-865.3	-973.9	-1,087.3
Net Exports (Billions)	-556.7	-819.6	-960.3	-872.9	-816.4	-795.5	-779.7	-786.5
3-Month Treasury Bill Rate (%)	1.20	0.07	0.18	0.98	1.47	1.82	2.04	2.27
10-Year Treasury Note Yield (%)	1.41	1.11	1.64	2.38	2.74	2.92	3.05	3.15
Bond Index of 20 G.O. Munis. (%)	3.20	2.21	2.26	2.78	3.07	3.24	3.43	3.60
30-Year Fixed Mortgage Rate (%)	3.53	2.89	3.22	4.03	4.45	4.65	4.79	4.89

Table 1.2

Forecast Analysis

Comparison of Forecasts for 2021-23

U.S.	Average Annual Rate of Growth (Percent) 2021:2-2023:2		Average Rate (Percent) 2021:3 to 2023:2	
	Real GDP	PCE Price Index	3 Month T-Bill Rate	Mortgage Rate
2018				
February	2.1	2.0	3.15	5.28
June	2.1	2.1	3.17	5.30
September	2.1	1.9	3.14	5.13
November	2.0	2.0	3.16	5.20
2019				
March	1.9	2.0	2.66	4.92
June	1.9	1.9	2.20	4.72
September	1.9	1.9	2.16	4.65
November	1.9	2.0	2.16	4.53
2020				
February	1.9	2.0	1.96	4.43
June	3.7	1.5	0.07	3.02
September	3.4	1.6	0.10	3.12
November	2.6	1.8	0.10	3.10
2021				
March	3.5	1.6	0.07	3.56
June	3.5	2.0	0.04	3.46
September	3.5	2.1	0.08	3.39
November	3.2	2.5	0.09	3.43
2022				
February	3.2	3.4	0.58	3.62

Table 1.3

Forecast Analysis

Comparison of Forecasts for 2023-25

U.S.	Average Annual Rate of Growth (Percent) 2023:2-2025:2		Average Rate (Percent) 2023:3 to 2025:2	
	Real GDP	PCE Price Index	3 Month T-Bill Rate	Mortgage Rate
2020				
February	2.0	2.1	2.30	4.62
June	2.3	1.7	0.13	3.24
September	2.4	1.8	0.10	3.27
November	2.0	1.9	0.08	3.29
2021				
March	2.2	1.9	0.23	3.92
June	1.9	1.9	0.22	3.86
September	2.2	1.9	0.47	4.02
November	2.1	2.1	0.88	4.26
2022				
February	2.1	2.1	1.64	4.55

Table 1.4
Forecast Comparison
 Forecast 2022 to 2025

Fiscal Years

	2019	2020	2021	2022	2023	2024	2025
U.S.							
Real GDP							
February	18,804.2	18,631.3	18,938.1	19,816.4	20,442.1	20,931.3	21,367.7
% Ch	2.4	-0.9	1.6	4.6	3.2	2.4	2.1
November	18,804.2	18,631.3	18,938.1	19,789.1	20,444.9	20,888.8	21,312.6
% Ch	2.4	-0.9	1.6	4.5	3.3	2.2	2.0
PCE Price Index							
February	109.1	110.6	112.8	118.6	121.9	124.3	126.9
% Ch	1.8	1.3	2.0	5.1	2.8	2.0	2.1
November	109.1	110.6	112.8	117.5	119.8	122.2	124.8
% Ch	1.8	1.3	2.0	4.1	2.0	2.0	2.1
Unemployment Rate							
February	3.77	6.00	6.92	4.19	3.42	3.62	3.88
November	3.77	6.00	6.92	4.44	3.72	3.84	3.98
Mortgage Rate							
February	4.43	3.53	2.89	3.22	4.03	4.45	4.65
November	4.43	3.53	2.89	3.14	3.71	4.09	4.42
3 Month T-Bill Rate							
February	2.26	1.20	0.07	0.18	0.98	1.47	1.82
November	2.26	1.20	0.07	0.05	0.12	0.56	1.20



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus.**
- **Washington employment growth during the last two months of 2021 was less than expected in the November forecast.**
- **Washington employment is now 87,900 (2.5%) lower than at its February 2020 peak.**
- **Washington’s unemployment rate declined to 4.5% in December from 4.7% in November.**
- **Washington housing construction increased in the fourth quarter of 2021 on continued strength in multi-family activity.**
- **Seattle-area home prices continue to rise rapidly.**
- **Washington exports of transportation equipment increased over the year for a third consecutive quarter.**
- **Washington personal income grew only 2.0% (SAAR) in the third quarter of 2021 due to reductions in income from Covid-related programs. Washington personal income excluding these programs increased at an 11.0% annual rate.**
- **Seattle consumer price inflation of 7.6% outpaced the national average of 7.1% in the year ending in December 2021.**
- **The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar.**

Current Conditions

The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus

The Washington economy continues to recover but growth has been hampered by the Omicron wave of the COVID-19 virus. Washington employment growth during the last two months of 2021 was less than expected in the November forecast. Washington employment is now 87,900 (2.5%) lower than at its February 2020 peak. Washington’s unemployment rate declined to 4.5% in December from 4.7% in November. Washington housing construction increased in the fourth quarter of 2021 on continued strength in multi-family activity. Seattle-area home prices continue to rise rapidly. Washington exports of

transportation equipment increased over the year for a third consecutive quarter. Washington personal income grew only 2.0% (SAAR) in the third quarter of 2021 due to reductions in income from Covid-related programs. Washington personal income excluding these programs increased at an 11.0% annual rate. Seattle consumer price inflation of 7.6% outpaced the national average of 7.1% in the year ending in December 2021.

Washington employment grew less than expected

We have two months of new Washington employment data since the November forecast was released. Total seasonally adjusted nonfarm payroll employment increased 11,900 in November and December which was 9,700 less than the increase of 21,600 expected in the forecast. Washington employment is now 87,900 (2.5%) lower than at its February 2020 peak. Private services-providing sectors added only 4,600 jobs in the two-month period compared to an expected gain of 18,900 jobs. The manufacturing sector added 3,200 jobs including 1,100 jobs in aerospace manufacturing, and construction employment increased by 2,500 jobs. State and local government employment increased by 2,300 jobs in November and December and the federal government added 1,500 jobs.

Revisions raised employment slightly

Data revisions added 1,800 (0.1%) to the estimated level of total employment in October 2021. Because employment growth in November and December was less than expected, employment is 7,900 (0.2%) lower in December than expected in the November forecast.

Unemployment is down significantly

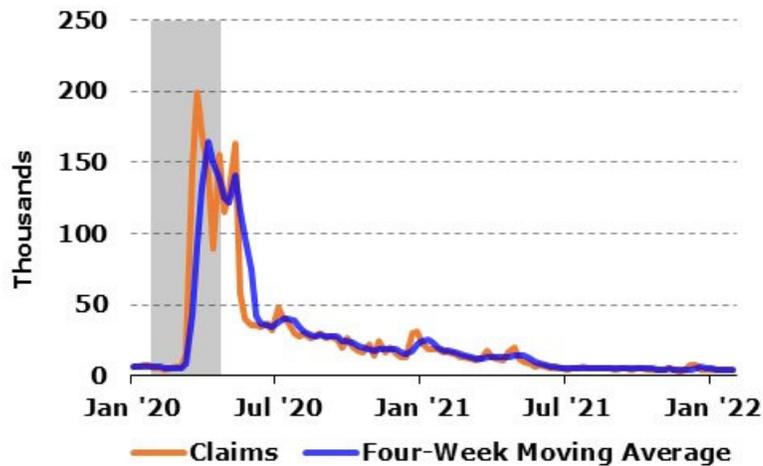
Washington's unemployment rate declined to 4.5% in December from 4.7% in November. December's rate was the lowest rate since the pandemic hit. The unemployment rate is down significantly from the 16.3% rate reached in April 2020 which was an all-time high in the series that dates back to 1976. At the business cycle peak in February 2020 the Washington unemployment rate was 4.1%.

Washington initial claims are close to the all-time low in the series

Washington initial claims for unemployment insurance have fully recovered after rising to unprecedented levels in the spring of 2020 (see Figure 2.1). The four-week moving average of the seasonally adjusted number of claims in Washington decreased slightly to 4,322 in the week ending February 26, 2022 from 4,340 in the previous week. Initial claims have recovered from a bump up in early January due to unusually severe weather. Washington initial claims have declined 97% from the April 2020 peak and are close to the all-time low in the series recorded earlier in February.

Figure 2.1: Initial Claims for Unemployment Insurance

Washington initial claims for unemployment insurance have fully recovered



Source: Source: Washington Department of Employment Security; data through February 26, 2022

Washington housing construction increased in the fourth quarter of 2021 on continued strength in multi-family activity

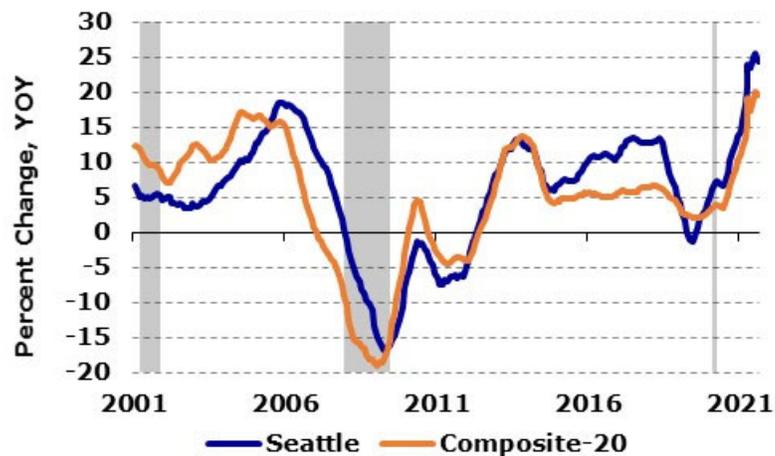
Washington housing construction increased in the fourth quarter of 2021 on continued strength in multi-family activity. Washington housing permits increased from 55,700 units (SAAR) in the third quarter of 2021 to 58,600 units in the fourth quarter. Fourth quarter permits consisted of 23,000 single-family units and 35,600 multi-family units. The November forecast expected 50,500 (SAAR) units in the fourth quarter consisting of 25,100 single-family units and 25,400 multi-family units. The first quarter of 2022 got off to a strong start thanks once again to multi-family activity. A total of 59,000 (SAAR) housing units were permitted in January consisting of 24,800 single-family units and 34,200 multi-family units. The November forecast expected 49,200 units for the first quarter as a whole consisting of 26,800 single-family units and 22,400 multi-family units.

Seattle-area home prices continue to rise rapidly

Seattle-area home prices continue to rise rapidly. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 2.0% in December compared to a 1.5% increase in the composite-20 index. December Seattle home prices were up 23.9% over the year, down only slightly from a record 25.5% over-the-year increase in July (see Figure 2.2). In comparison, the composite-20 index was up 18.5% over the year in December. December Seattle home prices were up 176% since the December 2011 trough and exceeded the May 2007 peak by 92%.

Figure 2.2: S&P/Case-Shiller Home Price Indices

December Seattle home prices were up 23.9% over the year, down only slightly from a record 25.5% over-the-year increase in July



Source: S&P/Case-Shiller Home Price Indices; data through December 2021

Washington exports of transportation equipment increased over the year for a third consecutive quarter, rising 110%

According to the World Institute for Strategic Economic Research (WISER), Washington exports increased 39% from the fourth quarter of 2020 to the fourth quarter of 2021. After more than two years of year-over-year declines, Washington exports of transportation equipment (mostly Boeing planes) increased over the year for a third consecutive quarter, rising 110%. Agricultural exports increased 29% over the year but this could be misleading as the data include soybean and corn exports which receive only minimal processing in Washington. Exports from all other sectors (mostly manufacturing) increased 15% over the year.

Washington car and truck sales edged up in January

Washington car and truck sales edged up in January after five consecutive monthly declines. The seasonally adjusted number of new vehicle registrations increased 2.1% in January following declines of 7.7%, 9.5%, 2.6%, 3.4%, and 5.1% in August, September, October, November, and December. The number of registrations is down 20.2% over the year.

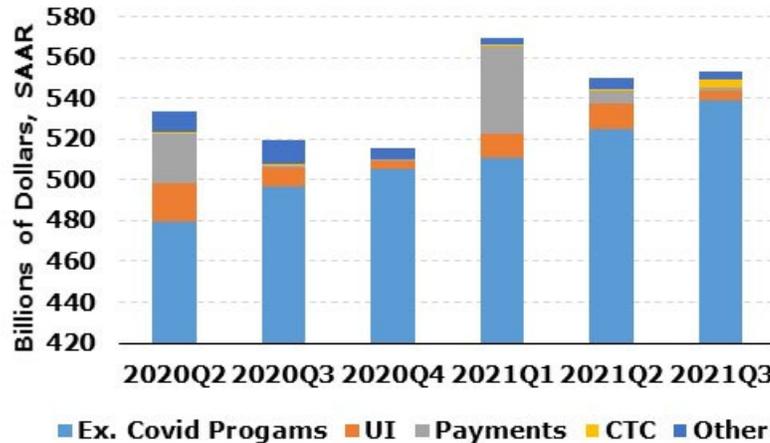
Reductions in income from Covid-related programs subtracted \$11.1 billion from Washington personal income growth in the third quarter.

In December, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the third quarter of 2021. In early February the data were revised back to 2016 to correct "a data processing error involving industry wage estimates." According to the reposted estimates, Washington personal income increased from \$550.1 billion (SAAR) in the second quarter of 2021 to \$552.8 billion in the third quarter. The 2.0% increase (SAAR) in Washington personal income was the 28th best performance among the states and District of Columbia and trailed the 2.6% rate of increase for the U.S. as a whole. Once again, changes to personal income from Covid-19 relief programs dominated overall personal income growth (see Figure 2.3). Special Covid-related unemployment insurance (UI) programs declined by \$7.1 billion in the third quarter and direct payments to individuals declined by \$5.6 billion. Partially offsetting these was a \$3.3 billion

increase in child tax credits (CTC). Other Covid-related programs subtracted another \$1.6 billion for a total decline of \$11.1 billion in personal income growth from Covid-related programs in the third quarter. Washington personal income excluding these programs increased at an 11.0% annual rate which was 13th best in the nation and surpassed the national rate of 10.1%.

Figure 2.3: Contributions to Washington Personal Income

Changes to personal income from Covid-19 relief programs dominated overall personal income growth



Source: BEA, ERFC Calculations; data through 2021 Q3

Seattle consumer price inflation outpaced the national average in the year ending in December 2021

Seattle-area consumer price inflation outpaced the national average in the year ending in December 2021. From December 2020 to December 2021, the seasonally adjusted Seattle CPI rose 7.6% compared to the 7.1% increase in the U.S. City Average index. These relatively high rates were partially due to much higher food and energy prices this year compared to last year. However, core prices, which exclude food and energy, still increased 6.5% in Seattle and 5.5% in the national index. Seattle shelter cost inflation trailed the national average at 3.0% compared to 4.2%. Seattle inflation excluding shelter exceeded the national average at 10.2% compared to 8.6%.

Washington State Forecast

The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar

The Washington forecast features higher personal income growth, higher housing construction, and higher inflation than in November, but employment growth is similar. We expect a 4.2% increase in Washington employment this year which is slightly less than the 4.4% growth rate expected in the November forecast. We expect above-average growth through the remainder of the forecast as the economy continues to recover from the recession. We expect employment growth to average 1.5% per year in 2023 through 2025 which is the same average growth rate expected in the November forecast. Employment growth is expected to slow to an average rate of 0.8% per year in 2026 and 2027. Our forecast for nominal personal income

growth this year is 2.9%, up from 1.9% in the November forecast. Personal income growth will be weak this year as the extraordinary stimulus of the last two years is withdrawn. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.5% per year compared to 5.2% in the November forecast. Personal income growth is expected to grow at an average rate of 5.1% per year in 2026 and 2027. We expect permits to total 48,900 units this year, up from 47,100 units in the November forecast. We expect permits to average 44,400 units in 2023 through 2025, up from 43,500 units in the November forecast. We expect headline inflation to reach 5.0% this year, up from 4.0% in the November forecast. We expect Seattle inflation to average 2.1% per year in 2023 through 2025 which is the same average rate as in the November forecast.

Washington Payroll Employment

The February Washington employment forecast is very close to the November forecast

The February Washington employment forecast is very close to the November forecast. We expect a 4.2% increase in Washington employment this year which is slightly less than the 4.4% growth rate expected in the November forecast. We expect above-average growth through the remainder of the forecast as the economy continues to recover from the recession. We expect employment growth to average 1.5% per year in 2023 through 2025 which is the same average growth rate expected in the November forecast. Employment growth is expected to slow to an average rate of 0.8% per year in 2026 and 2027. On an annual basis, we expect 2.5% employment growth in 2023, 1.1% in 2024, and 0.8% per year in 2025, 2026, and 2027.

Aerospace employment is increasing

After the grounding of the 737 Max and then the pandemic, Washington's aerospace employment declined from 89,600 at end of 2019 to a low of 66,800 in June 2021, a loss of 22,700 jobs. During the last half of 2021 the industry added back 1,900 jobs, bringing the level to 68,800 in December 2021. We expect aerospace employment to continue to expand in Washington, adding another 5,500 jobs from the fourth quarter of 2021 to the fourth quarter of 2023. We expect slower but still positive growth for the remainder of the forecast. On an annual average basis, we expect aerospace employment to grow 4.7% this year and 3.6% in 2023, slowing to 0.9% in 2024, 0.0% in 2025, 0.3% in 2026, and 0.7% in 2027.

The software sector did not experience a significant decline during the recession

The software sector in Washington did not experience a significant decline during the recession as most software jobs are amenable to remote work. Employment growth since the recession has been erratic but positive on average. We believe the erratic quarterly pattern may be due to abnormal seasonality caused by the pandemic. As of December 2021, Washington software employment was 8.9% higher than at the business cycle peak of February 2020. Based on actual growth through December we are decreasing our calendar year forecast for the 2022 forecast to 3.8% from 4.2% in the November forecast. We expect slower growth during the remainder of the forecast with

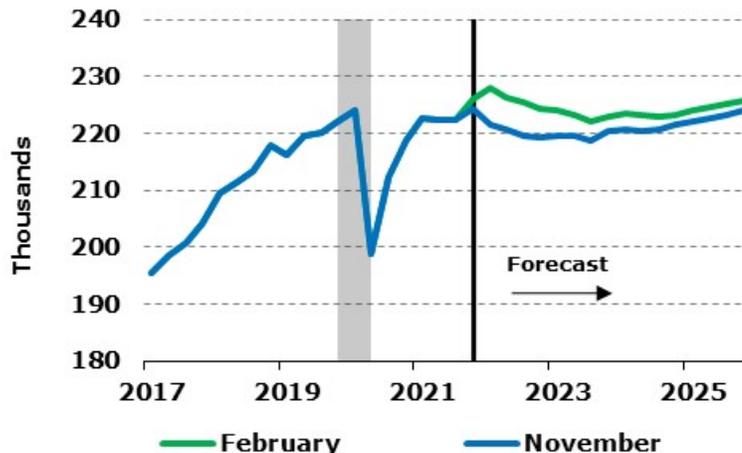
growth rates of 1.4% in 2023, 1.7% in 2024, 1.5% in 2025, 1.0% in 2026, and 1.1% in 2027.

Construction has recovered more than all the jobs lost in the recession

Construction has recovered more than all the jobs lost in the recession. After an initial drop in employment in March and April of 2020, construction employment came roaring back. As of December 2021, construction employment was 0.7% higher than at its peak in February 2020. The recovery has been entirely due to residential construction. Employment in residential building and residential specialty trades is 7,200 higher than at the business cycle peak while all other construction employment is 5,600 lower. We expect some near-term weakness in construction employment due to lower housing construction (see Figure 2.4). We expect construction employment to grow only 1.2% in calendar year 2022 followed by a 1.3% decline in 2023. We expect construction to be unchanged in 2024 followed by growth rates of 0.8% in 2025, 1.4% in 2026, and 1.5% in 2027.

Figure 2.4: Washington Construction Employment

We expect some near-term weakness in construction employment



Source: Employment Security Department, ERFC; historical data through 2021 Q4

Washington Personal Income

Personal income was slightly lower than previously thought

In December, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the third quarter of 2021. In early February the data were revised back to 2016 to correct "a data processing error involving industry wage estimates." 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 third quarter of 2021 is \$2.6 billion (0.5%) lower than in the November forecast. Wages and salaries are \$0.6 billion (0.2%) lower than expected and nonwage income is \$2.0 billion (0.8%) lower than expected.

Personal income growth will be weak this year

Our forecast for nominal personal income growth this year is 2.9%, up from 1.9% in the November forecast. Personal income growth will be weak this year as the extraordinary stimulus of the last two years is withdrawn. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.5% per year compared to 5.2% in the November forecast (see Figure 2.5). Personal income growth is expected to grow at an average rate of 5.1% per year in 2026 and 2027. On an annual basis, we expect personal income to grow 5.9% in 2023, 5.3% in 2024, 5.2% in 2025, 5.2% in 2026, and 5.1% in 2027.

Figure 2.5: Washington Personal Income

Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.5% per year compared to 5.2% in the November forecast



Source: Bureau of Economic Analysis, ERFC; historical data through 2021 Q3

Washington Building Permits

Washington housing construction is slightly higher than in the November forecast

The outlook for Washington housing construction as measured by units authorized by building permits is slightly higher than in the November forecast. The number of authorized housing units jumped to 56,200 in 2021 from 44,100 in 2020. This was the highest annual total since 1978. As in November, we expect housing construction to decline from the recent highs. We expect permits to total 48,900 units this year, up from 47,100 units in the November forecast. We expect permits to average 44,400 units in 2023 through 2025, up from 43,500 units in the November forecast. On a calendar year basis, we expect 44,900 units in 2023, 44,100 units in 2024, 44,100 in 2025, 42,900 units in 2026, and 41,600 units in 2027.

Consumer Price Index

The near-term inflation outlook has increased since the November forecast

The near-term inflation outlook has increased since the November forecast but we expect price pressures to diminish over the course of 2022. The Seattle core CPI index rose 3.8% in 2021 which was the highest rate since 1997. While we expect inflation to diminish over the course of 2022, on an annual average basis, core inflation will rise further to 5.2% this year, up from 4.2% in the November forecast. We now expect Seattle

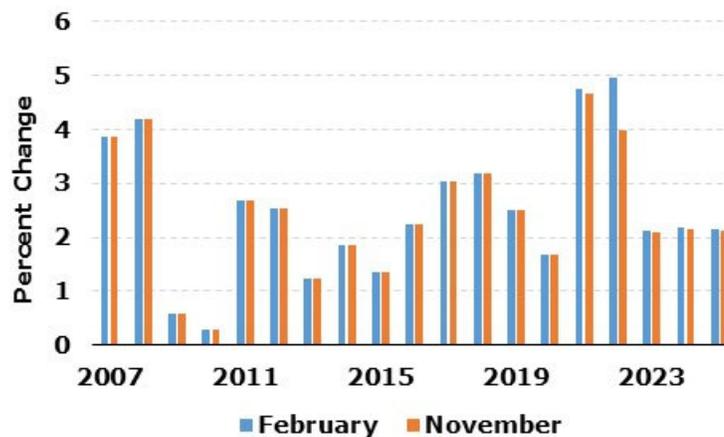
core inflation to average 2.5% per year in 2023 through 2025, up from 2.4% per year in the November forecast. Our forecast calls for annual Seattle core inflation rates of 2.6% in 2023 and 2.4% per year in 2024, 2025, 2026, and 2027.

Energy costs are expected to fall

Energy costs rebounded in 2021 adding to headline inflation. The all-items Seattle CPI rose 4.7% in 2021 which was the highest annual rate since 1991 and was well above the 3.8% core inflation rate. We expect headline inflation to reach 5.0% this year, up from 4.0% in the November forecast (see Figure 2.6). Energy costs are expected to fall in 2023, 2024, and 2025 and to rise less than overall inflation in 2026 and 2027. This will result in all-items inflation dropping below core inflation through 2027. We expect Seattle inflation to average 2.1% per year in 2023 through 2025 which is the same average rate as in the November forecast. On a calendar year basis, we expect inflation rates of 2.1% 2023, 2.2% in 2024, 2.1% in 2025, 2.2% in 2026, and 2.3% in 2027.

Figure 2.6: Seattle Consumer Price Inflation

We expect headline inflation to reach 5.0% this year, up from 4.0% in the November forecast



Source: BLS, ERFC; historical data through 2021

Table 2.1 provides a fiscal year summary of the state economic indicators. For calendar year tables, see the appendix.

Alternative Scenarios

Alternative forecasts are 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

Return to "normal", still more stimulus, and improving supply issues drive faster growth

The optimistic scenario assumes a quicker recovery of consumer spending and stronger productivity relative to the baseline. We assume the consumer and business response to the Infrastructure Investment and Jobs Act is more robust than in the baseline, while a quick decline in COVID-19 cases allows for a resumption of strong growth in consumer spending. Moreover, we assume firms continue to capitalize on the productivity gains they achieved during the early stages of the pandemic, which improves corporate profitability. GDP rises at a 5.1% annual rate in the first quarter of 2022 and 4.8% over 2022, compared to 1.6% and 2.9% rates of increase in the baseline. Because of the faster growth of GDP, the unemployment rate quickly falls below 4.0% in early 2022.

The optimistic scenario also assumes a stronger Washington economy

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast assumes that aerospace employment recovers much faster than assumed in the baseline. Software employment also 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. After a pause in 2022, construction employment begins to grow again in 2023 rather than declining slightly through the third quarter of 2023 as in the baseline forecast. By the end of 2027, Washington nonfarm payroll employment is higher by 130,300 jobs (3.5%) than in the baseline forecast and Washington personal income is \$69.5 billion (9.2%) higher.

Pessimistic

The recovery stumbles as supply issues persist and the Omicron variant lingers

The pessimistic scenario assumes a weaker recovery in consumer spending than in the baseline forecast. In this scenario, the alarming rise in COVID-19 cases and hospitalizations wanes slowly and leads to more caution on the part of consumers, as they refrain from socially-dense consumer activities. In addition, a worsening of ongoing supply-chain issues leads to a prolonged delay in the production and shipment of consumer durable goods. GDP falls at a 0.5% annualized rate in the first quarter and increases at a 1.0% annualized rate in the second quarter of 2022, compared to 1.6% and 4.3% rates of increase in the baseline. The unemployment rate declined to 4.2% in the fourth quarter of 2021. In this scenario, it is expected to rise to 4.5% in the first quarter before continuing to decline at a slower pace than in the baseline, reaching 4.1% by mid-2023.

The pessimistic scenario also assumes a weaker local economy

In addition to reflecting the impact of the weaker U.S. forecast on the state economy, after a slight rebound in 2022, aerospace employment begins to decline again in 2023-27 rather than levelling off as in the baseline. Software employment declines rather than continuing to grow as in the baseline forecast. Construction employment declines faster than in the baseline and the decline continues through 2027. The relatively weak local

economy also puts downward pressure on Washington wages and the Seattle CPI. By the end of 2027, Washington nonfarm payroll employment is 85,300 (2.3%) lower than in the baseline forecast and Washington personal income is \$57.8 billion (7.7%) lower.

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

Governor’s Council of Economic Advisors (GCEA)

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

The Governor’s Council of Economic Advisors’ national forecast is very similar to our baseline forecast

The Governor’s Council of Economic Advisors’ (GCEA) national forecast is very similar to our baseline forecast. The GCEA real GDP growth forecast averages 2.4% per year in 2022 through 2027 as does the baseline forecast. Their forecast of 2.6% average real consumer spending growth is only slightly higher than the baseline forecast of 2.5%. The GCEA members’ personal consumption expenditures (PCE) inflation forecast averages 2.5% per year which is the same as the average rate in the baseline forecast. The Council members’ mortgage rate forecast averages 4.5% over the six-year forecast horizon, which is also the same as the average rate in our forecast. The GCEA oil price forecast averages \$77 per barrel which is the same average price as in the baseline forecast.

The Governor’s Council of Economic Advisors’ Washington forecast is slightly higher than the baseline forecast

The Governor’s Council of Economic Advisors’ Washington forecast is slightly higher than the baseline forecast. The GCEA scenario for Washington real personal income growth averages 2.5% per year in 2022 through 2027 compared to the 2.4% average rate in the baseline forecast. Because their inflation forecast is also slightly higher than ours, however, their implied average nominal income growth is 5.1% compared to our 4.9%. The Council members’ forecast for total employment growth over the five-year period averages 1.8% per year, which is slightly stronger than the 1.7% rate in the baseline forecast. The GCEA forecasts for average manufacturing employment growth and average construction employment growth are both slightly higher than their counterparts in the baseline forecast. The GCEA housing permit forecast is also slightly higher than the baseline, averaging 45,100 units per year compared to 44,400 in the baseline forecast. At the end of 2027, the GCEA forecast for Washington nonfarm payroll employment is 11,900 (0.3%) higher than in the baseline forecast and Washington personal income is \$7.6 billion (1.0%) higher.

Table 2.1

Fiscal Years

Washington Economic Forecast Summary
 Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	452.172	476.981	470.246	483.023	499.695	514.996	530.586	546.176
% Ch	5.5	5.5	-1.4	2.7	3.5	3.1	3.0	2.9
Real Wage and Salary Disb.	232.968	245.056	256.196	267.708	276.968	284.829	292.927	301.410
% Ch	3.4	5.2	4.5	4.5	3.5	2.8	2.8	2.9
Real Nonwage Income	219.204	231.925	214.050	215.315	222.727	230.167	237.659	244.766
% Ch	7.7	5.8	-7.7	0.6	3.4	3.3	3.3	3.0
Real Per Capita Income (\$/Person)	59,045	61,714	60,279	61,339	62,838	64,106	65,367	66,596
% Ch	4.3	4.5	-2.3	1.8	2.4	2.0	2.0	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.105	1.128	1.186	1.219	1.243	1.269	1.296	1.323
% Ch	1.3	2.0	5.1	2.8	2.0	2.1	2.1	2.1
Seattle Cons. Price Index (1982-84=1.0)	2.803	2.871	3.056	3.138	3.207	3.275	3.347	3.422
% Ch	2.1	2.4	6.4	2.7	2.2	2.1	2.2	2.2
Average Nonfarm Annual Wage	73,741	81,864	85,983	89,333	92,865	96,602	100,672	104,926
% Ch	5.9	11.0	5.0	3.9	4.0	4.0	4.2	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.93	27.87	28.45	29.93	31.23	32.46	33.70	34.95
% Ch	0.0	-3.6	2.1	5.2	4.3	3.9	3.8	3.7
Current Dollar Income (Billions of Dollars)								
Personal Income	499.856	538.032	557.465	588.608	621.145	653.489	687.578	722.773
% Ch	6.9	7.6	3.6	5.6	5.5	5.2	5.2	5.1
Disposable Personal Income	442.414	476.318	484.445	508.927	536.795	565.471	596.424	628.200
% Ch	7.3	7.7	1.7	5.1	5.5	5.3	5.5	5.3
Per Capita Income (\$/Person)	65,272	69,611	71,457	74,746	78,109	81,345	84,707	88,127
% Ch	5.7	6.6	2.7	4.6	4.5	4.1	4.1	4.0
Employment (Thousands)								
Washington Civilian Labor Force	3,935.8	3,873.0	3,961.6	4,054.8	4,115.4	4,165.7	4,213.1	4,259.7
Total Washington Employment	3,683.7	3,612.3	3,781.9	3,894.5	3,942.5	3,979.5	4,015.9	4,055.4
Unemployment Rate (%)	6.41	6.73	4.54	3.95	4.20	4.47	4.68	4.80
Nonfarm Payroll Employment	3,403.3	3,285.9	3,443.3	3,560.4	3,615.2	3,648.8	3,677.9	3,708.5
% Ch	-0.9	-3.4	4.8	3.4	1.5	0.9	0.8	0.8
Manufacturing	287.4	260.0	264.7	274.2	276.9	276.8	276.1	275.9
% Ch	-1.5	-9.5	1.8	3.6	1.0	0.0	-0.3	-0.1
Durable Manufacturing	202.4	178.2	178.7	185.6	188.1	188.7	188.8	189.4
% Ch	-1.5	-12.0	0.3	3.9	1.4	0.3	0.1	0.3
Aerospace	87.6	70.9	69.0	72.8	74.2	74.4	74.4	74.9
% Ch	1.2	-19.0	-2.7	5.5	2.0	0.3	0.0	0.6
Nondurable Manufacturing	85.0	81.8	86.0	88.6	88.8	88.1	87.2	86.5
% Ch	-1.6	-3.7	5.0	3.1	0.1	-0.7	-1.0	-0.8
Construction	216.3	219.0	225.7	224.2	222.9	223.6	226.2	229.8
% Ch	-0.2	1.3	3.1	-0.7	-0.6	0.3	1.2	1.6
Service-Providing	2,893.9	2,801.2	2,947.1	3,056.2	3,109.8	3,142.6	3,169.8	3,197.0
% Ch	-0.8	-3.2	5.2	3.7	1.8	1.1	0.9	0.9
Software Publishers	73.6	77.1	80.5	82.5	83.7	85.2	86.2	87.1
% Ch	8.6	4.9	4.3	2.6	1.4	1.7	1.2	1.0
Electronic Shopping and Mail-Order	69.3	77.1	77.8	80.3	82.3	84.1	85.9	87.6
% Ch	19.1	11.3	0.9	3.3	2.4	2.2	2.1	2.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	47.547	49.375	53.849	46.418	44.243	44.147	43.540	42.212
% Ch	3.3	3.8	9.1	-13.8	-4.7	-0.2	-1.4	-3.1
Single-Family	22.863	25.951	24.055	24.156	23.530	23.942	23.885	23.386
% Ch	1.9	13.5	-7.3	0.4	-2.6	1.7	-0.2	-2.1
Multi-Family	24.684	23.423	29.795	22.262	20.712	20.204	19.655	18.826
% Ch	4.6	-5.1	27.2	-25.3	-7.0	-2.5	-2.7	-4.2
30-Year Fixed Mortgage Rate (%)	3.53	2.89	3.22	4.03	4.45	4.65	4.79	4.89

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2022	2023	2024	2025	2026	2027
U.S.						
Real GDP, Percent Change						
Optimistic	5.2	4.5	2.9	2.5	2.3	1.9
Baseline	4.6	3.2	2.4	2.1	2.0	1.9
Pessimistic	4.1	2.0	2.6	2.6	2.7	2.8
PCE Price Index, Percent Change						
Optimistic	5.1	3.0	2.1	2.1	2.2	2.2
Baseline	5.1	2.8	2.0	2.1	2.1	2.1
Pessimistic	4.9	1.6	0.7	1.1	1.5	1.9
Mortgage Rate, Percent						
Optimistic	3.25	4.07	4.46	4.64	4.73	4.79
Baseline	3.22	4.03	4.45	4.65	4.79	4.89
Pessimistic	3.18	3.66	4.06	4.25	4.38	4.49
3 Month T-Bill Rate, Percent						
Optimistic	0.23	1.25	1.70	2.04	2.29	2.40
Baseline	0.18	0.98	1.47	1.82	2.04	2.27
Pessimistic	0.06	0.09	0.09	0.09	0.59	1.25
Washington						
Real Personal Income, Percent Change						
Optimistic	-0.4	5.0	4.9	4.2	4.1	3.8
Baseline	-1.4	2.7	3.5	3.1	3.0	2.9
Pessimistic	-2.3	1.2	3.3	2.6	2.8	2.8
Personal Income, Percent Change						
Optimistic	4.7	8.1	7.1	6.4	6.4	6.1
Baseline	3.6	5.6	5.5	5.2	5.2	5.1
Pessimistic	2.5	2.8	4.0	3.8	4.3	4.8
Employment, Percent Change						
Optimistic	4.9	3.9	2.0	1.5	1.5	1.4
Baseline	4.8	3.4	1.5	0.9	0.8	0.8
Pessimistic	4.4	2.7	1.3	0.5	0.5	0.7
Housing Permits, Thousands of Authorized Units						
Optimistic	54.2	48.0	46.5	47.1	47.5	46.7
Baseline	53.8	46.4	44.2	44.1	43.5	42.2
Pessimistic	52.9	44.3	41.9	40.7	39.4	38.3

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

Calendar Years

	2022	2023	2024	2025	2026	2027
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	3.7	2.7	2.2	2.0	2.0	1.9
GCEA Average	3.8	2.3	2.4	2.2	2.0	1.8
Real Consumption						
<i>Growth</i>						
ERFC	3.2	2.7	2.6	2.2	2.2	2.2
GCEA Average	3.9	2.5	2.3	2.3	2.3	2.1
PCE Price Index						
<i>Growth</i>						
ERFC	4.4	2.0	2.1	2.1	2.1	2.1
GCEA Average	3.9	2.7	2.3	1.9	2.0	2.1
Mortgage Rate						
<i>Percent</i>						
ERFC	3.7	4.3	4.6	4.7	4.8	4.9
GCEA Average	3.8	4.3	4.7	4.9	4.6	4.6
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	88.0	80.8	76.7	74.3	72.9	72.1
GCEA Average	86.1	80.6	76.0	74.3	71.6	71.6
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	-1.4	3.7	3.2	3.0	3.0	2.9
GCEA Average	-0.4	3.1	3.0	3.1	3.2	3.2
Wage and Salary Employment						
<i>Growth</i>						
ERFC	4.2	2.5	1.1	0.8	0.8	0.8
GCEA Average	3.8	2.0	1.6	1.1	1.0	1.0
Manufacturing Employment						
<i>Growth</i>						
ERFC	4.4	2.0	0.4	-0.3	-0.1	-0.2
GCEA Average	3.5	0.9	0.8	0.5	0.4	0.3
Construction Employment						
<i>Growth</i>						
ERFC	1.2	-1.3	0.0	0.8	1.4	1.5
GCEA Average	1.6	-0.1	0.7	0.7	1.0	1.2
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	48.9	44.9	44.1	44.1	42.9	41.6
GCEA Average	49.4	45.6	44.6	44.5	43.9	42.7
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	4.3	3.9	4.0	4.1	4.2	4.2
GCEA Average	3.9	3.9	4.3	4.0	4.1	4.0

Table 2.4
Forecast Analysis
 Comparison of Forecasts for 2021-23

Washington	Average Annual Rate of Growth (Percent) 2021:2-2023:2			Average Annual Rate (Thousands) 2021:3 to 2023:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2018				
February	1.0	5.0	2.9	42.4
June	0.7	5.0	2.9	41.9
September	0.8	4.8	2.9	42.0
November	1.0	4.8	2.8	41.4
2019				
March	1.0	4.7	2.7	42.5
June	1.1	4.9	2.9	42.0
September	1.0	4.9	2.9	42.3
November	0.9	4.8	2.8	42.2
2020				
February	1.0	4.6	2.6	43.4
June	2.0	3.5	2.0	40.2
September	2.6	4.6	3.0	42.8
November	2.4	3.9	2.1	43.5
2021				
March	3.1	0.1	-1.5	46.3
June	3.7	3.0	1.0	47.0
September	3.5	3.9	1.8	47.1
November	3.6	3.7	1.1	48.0
2022				
February	3.6	4.6	1.1	50.1

Table 2.5
Forecast Analysis
 Comparison of Forecasts for 2023-25

Washington	Average Annual Rate of Growth (Percent) 2023:2-2025:2			Average Annual Rate (Thousands) 2023:3 to 2025:2
	Employment	Personal Income	Real Personal Income	Housing Units Authorized
2020				
February	0.6	5.0	2.9	42.3
June	0.9	4.1	2.4	38.2
September	1.2	4.4	2.6	39.7
November	1.1	4.7	2.8	41.4
2021				
March	1.4	5.3	3.4	43.5
June	1.4	4.9	3.0	45.2
September	1.3	5.2	3.2	44.1
November	1.0	5.2	3.0	43.4
2022				
February	1.0	5.3	3.1	44.2

Table 2.6
Forecast Comparison
 Forecast 2022 to 2025

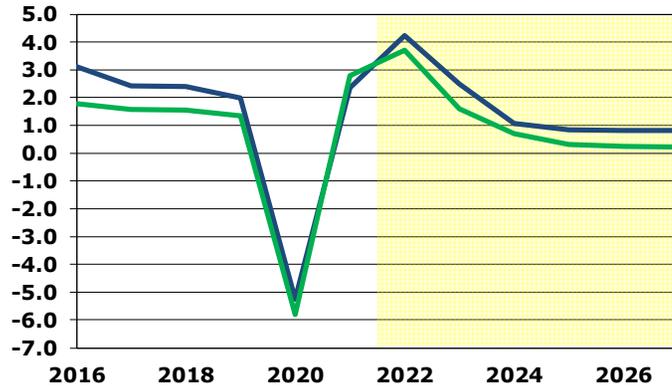
Fiscal Years

	2019	2020	2021	2022	2023	2024	2025
Washington							
Real Personal Income							
February	428.678	452.172	476.981	470.246	483.023	499.695	514.996
% Ch	4.3	5.5	5.5	-1.4	2.7	3.5	3.1
November	428.786	451.785	476.806	472.029	484.039	498.738	513.784
% Ch	4.4	5.4	5.5	-1.0	2.5	3.0	3.0
Personal Income							
February	467.768	499.856	538.032	557.465	588.608	621.145	653.489
% Ch	6.2	6.9	7.6	3.6	5.6	5.5	5.2
November	467.888	499.429	537.841	554.437	579.988	609.347	641.009
% Ch	6.3	6.7	7.7	3.1	4.6	5.1	5.2
Employment							
February	3433.0	3403.3	3285.9	3443.3	3560.4	3615.2	3648.8
% Ch	2.1	-0.9	-3.4	4.8	3.4	1.5	0.9
November	3433.0	3403.3	3285.9	3447.9	3563.8	3616.5	3652.4
% Ch	2.1	-0.9	-3.4	4.9	3.4	1.5	1.0
Housing Permits							
February	46.042	47.547	49.375	53.849	46.418	44.243	44.147
% Ch	-5.8	3.3	3.8	9.1	-13.8	-4.7	-0.2
November	46.042	47.547	49.603	50.829	45.136	43.370	43.333
% Ch	-5.8	3.3	4.3	2.5	-11.2	-3.9	-0.1

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

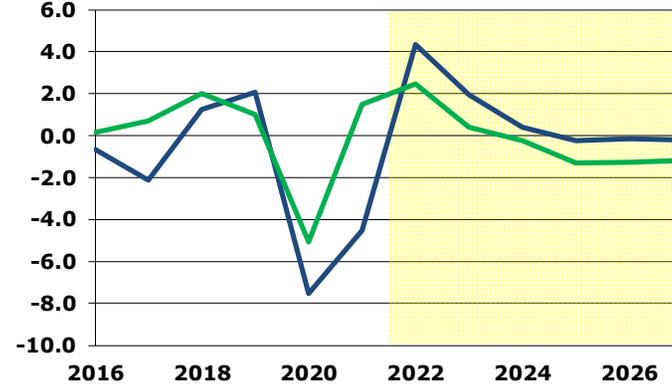
Forecast

Total Nonfarm Payroll Employment



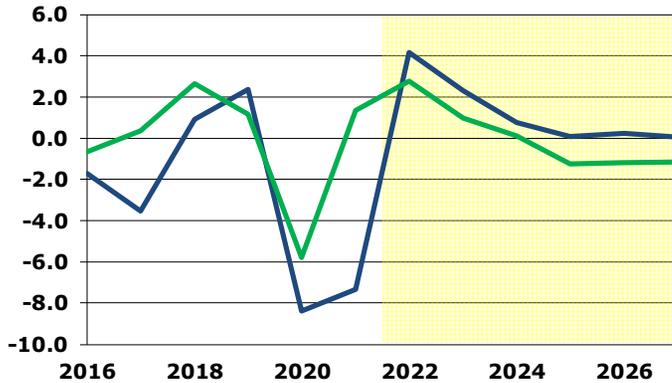
Source: WA State Employment Security Dept. 2020, ERFC 2027

Manufacturing Employment



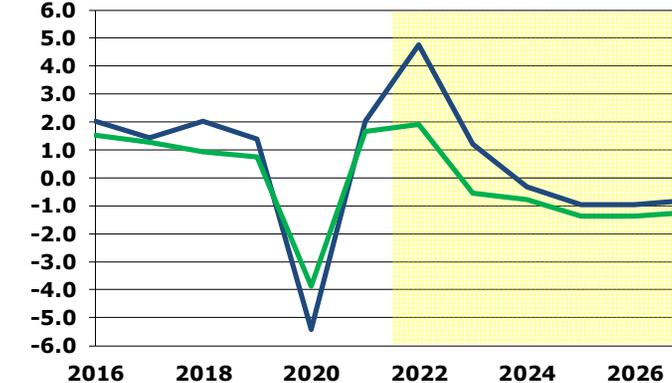
Source: WA State Employment Security Dept. 2020, ERFC 2027

Durable Manufacturing Employment



Source: WA State Employment Security Dept. 2020, ERFC 2027

Nondurable Manufacturing Employment



Source: WA State Employment Security Dept. 2020, ERFC 2027

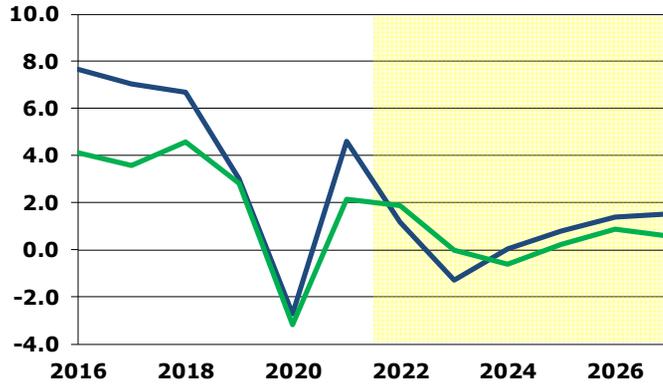
Washington

U.S.

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

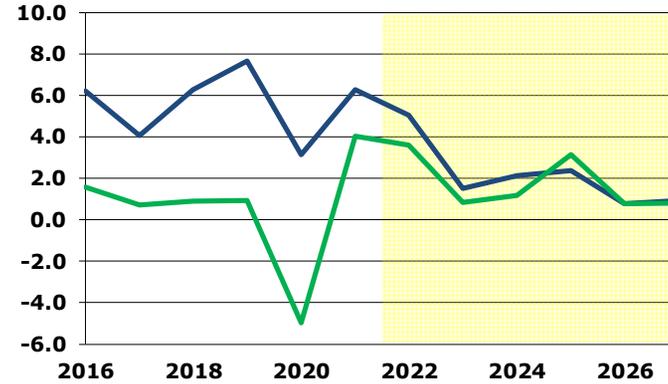
Forecast

Construction Employment



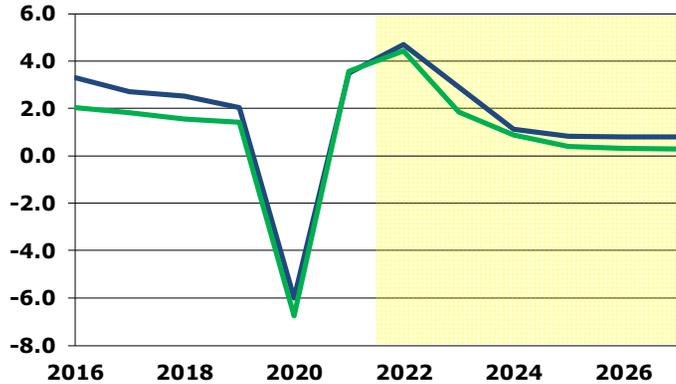
Source: WA State Employment Security Dept. 2020, ERFC 2027

Information Employment



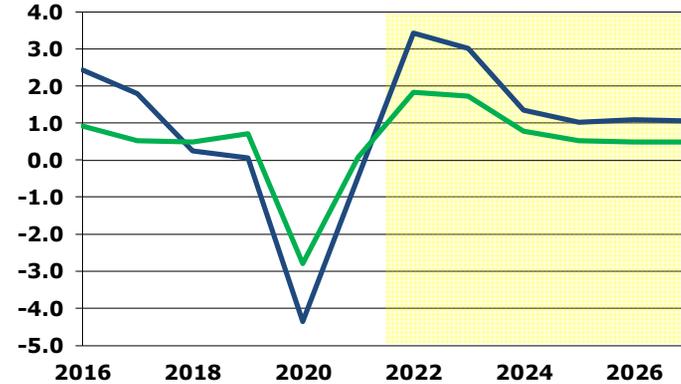
Source: WA State Employment Security Dept. 2020, ERFC 2027

Other Private Employment



Source: WA State Employment Security Dept. 2020, ERFC 2027

Government Employment



Source: WA State Employment Security Dept. 2020, ERFC 2027

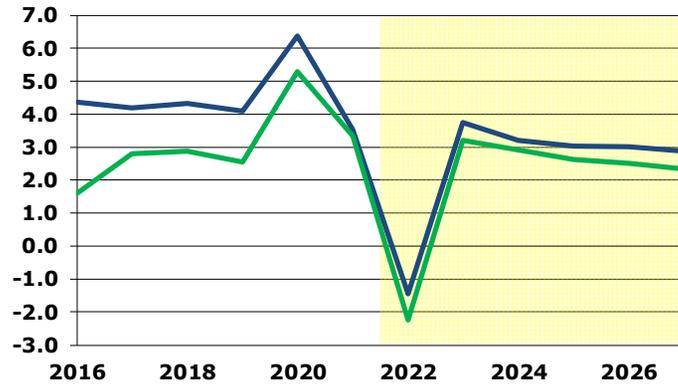
Washington

U.S.

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

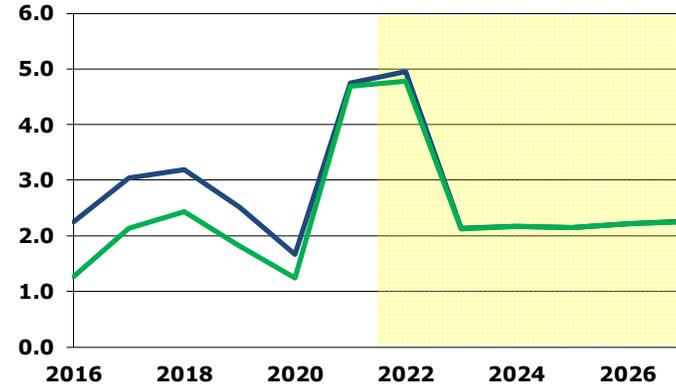
Forecast

Real Personal Income



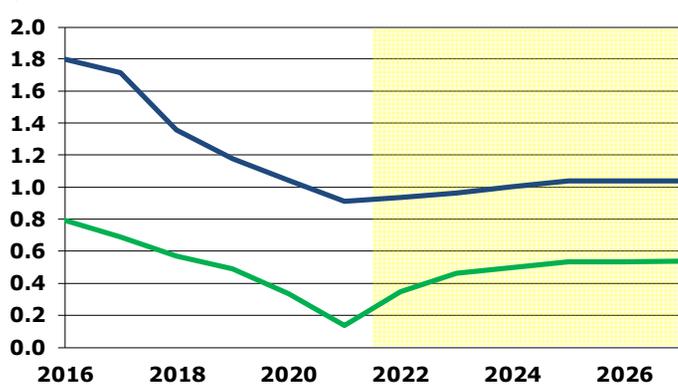
Source: Bureau of Economic Analysis 2020, ERFC 2027

Consumer Price Indices



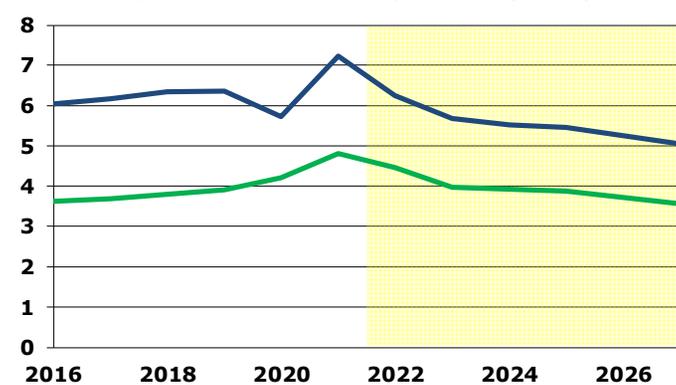
Source: Bureau of Labor Statistics 2021, ERFC 2027

Population



Source: Census Bureau 2020, ERFC 2027

New Housing Units Per 1,000 Population (Level)



Source: Census Bureau 2021, ERFC 2027

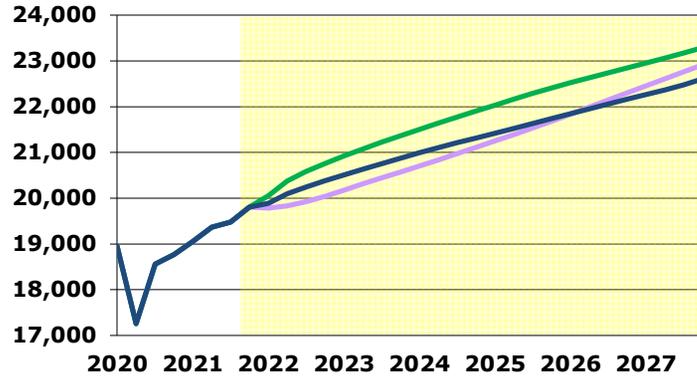
Washington

U.S.

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

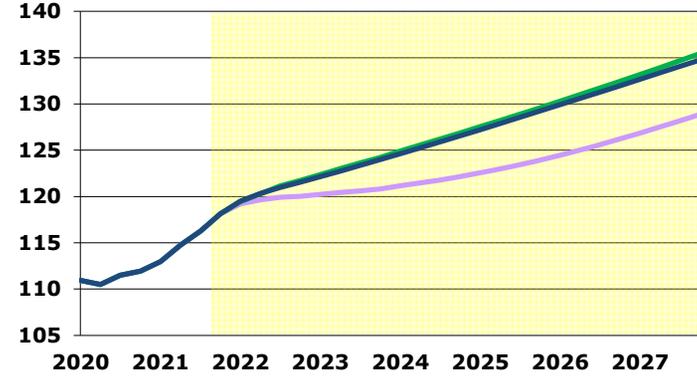
Forecast

Real GDP, Billions of 2012 Dollars



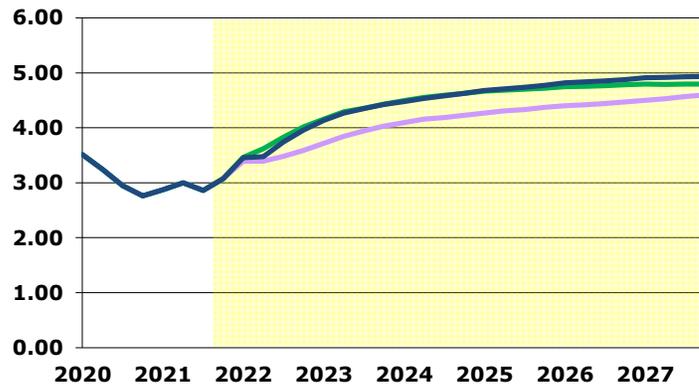
Source: Bureau of Economic Analysis 2021 Q4, ERFC 2027 Q4

PCE Price Index, 2012 = 100



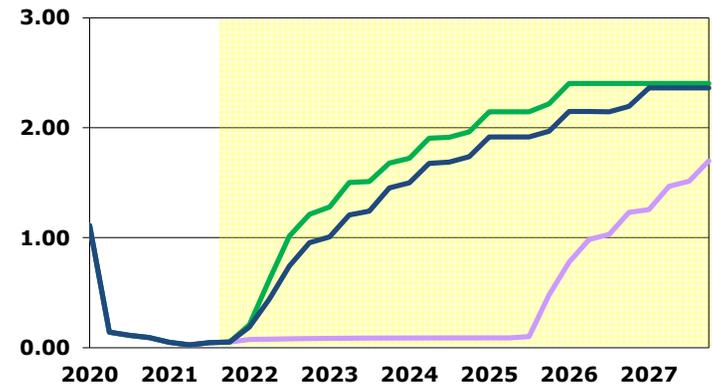
Source: Bureau of Economic Analysis 2021 Q4, ERFC 2027 Q4

Mortgage Rate, Percent



Source: Freddie Mac 2021 Q4, ERFC 2027 Q4

Three Month T-Bill Rate, Percent



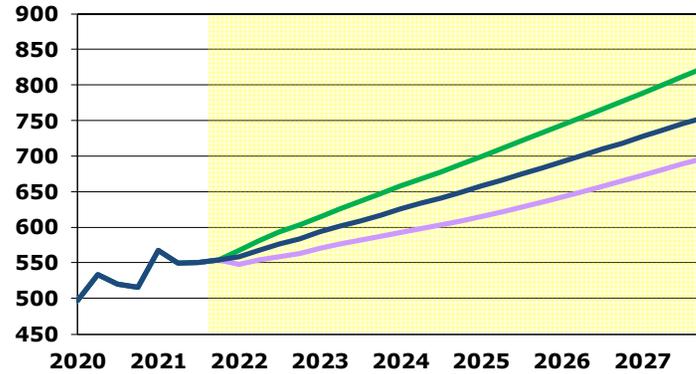
Source: Federal Reserve Board 2021 Q4, ERFC 2027 Q4

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

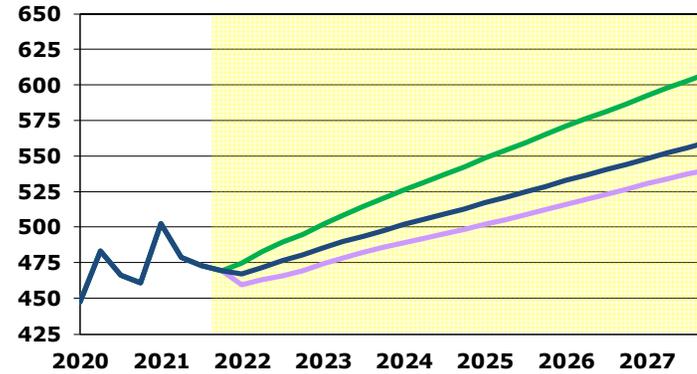
Forecast

Personal Income, Billions of Dollars



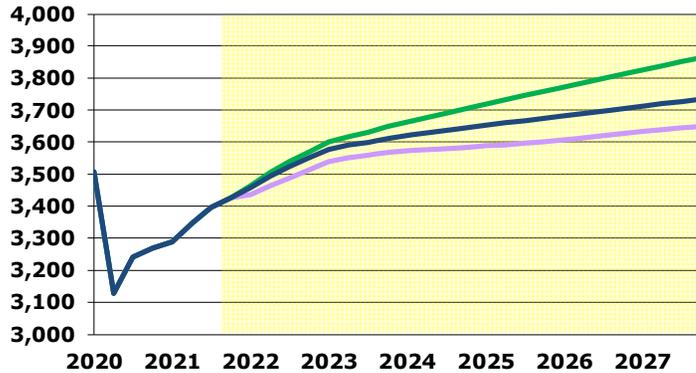
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2027 Q4

Real Personal Income, Billions of 2012 Dollars



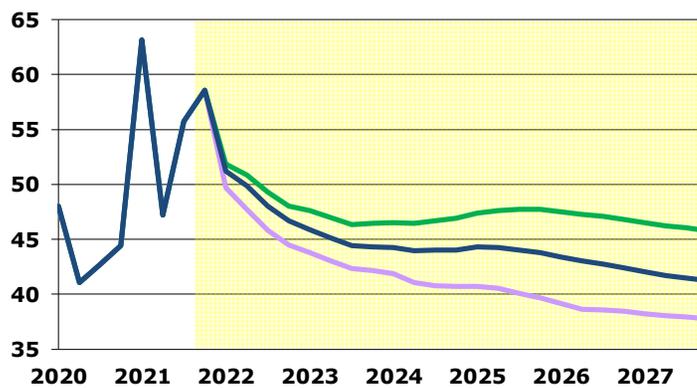
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2027 Q4

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2021 Q2, ERFC 2027 Q4

Housing Permits, Thousands



Source: Census Bureau 2021 Q4, ERFC 2027 Q4

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **General Fund-State (GF-S) revenue collections since the November 2021 forecast have come in \$452 million (5.9%) above the forecasted amount.**
- **The GF-S forecast was increased by \$1.40 billion in the 2021-23 biennium and \$1.31 billion in the 2023-25 biennium.**
- **The total forecast for funds subject to the budget outlook process was increased by \$1.45 billion in the 2021-23 biennium and \$1.32 billion in the 2023-25 biennium.**
- **This is the first forecast to include projections for the 2025-27 biennium.**

Overview

The revenue forecast has been increased due to stronger-than-expected taxable activity and stronger projected growth in income and construction activity

Since the November 2021 forecast, taxable activity has been stronger than expected, with tracked collections coming in well above the November forecast. While much of the surplus in collections stemmed from one-time payments unrelated to current activity, the level of activity in the general economy has been stronger than expected. The real estate market has also showed unexpected strength. The updated economic forecast projects a continuation of this strength, with increases in state personal income, construction employment and housing permits. Combining those factors with the recent strength in collections, forecasted revenue collections have been increased in the 2021-23 and 2023-25 biennia. The February forecast is also the first to include projections for the 2025-27 biennium, which shows growth continuing into that period.

GF-S forecast change by biennium (millions):

*21-23: \$1,400
23-25: \$1,311*

Table 3.1 summarizes the changes to the forecasts of General Fund-State (GF-S) revenue for the 2019-21 through the 2023-25 biennia. Tracked revenue collections through February 10 for the current 2021-23 biennium came in \$452.3 million higher than forecasted. The forecasted increase in taxable activity adds \$948.0 million to expected revenue for the remainder of the biennium, resulting in a total forecast increase of \$1,400.3 million. The forecast for the 2023-25 biennium was increased by \$1,311.2 million. The February 2022 forecast for GF-S revenue totals \$58.919 billion in the 2021-23 biennium and \$62.175

billion in the 2023-25 biennium. The initial forecast of GF-S revenue for the 2025-27 biennium is \$66.533 million.

GF-S forecast (\$billions):

2021-23:
\$58.919

2023-25:
\$62.175

2025-27:
\$66.533

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

	2021-23 Biennium	2023-25 Biennium
Collection Experience	\$452.3	NA
Non-Economic Change	\$0.0	\$0.0
Forecast Change	\$948.0	\$1,311.2
Total Change	\$1,400.3	\$1,311.2

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

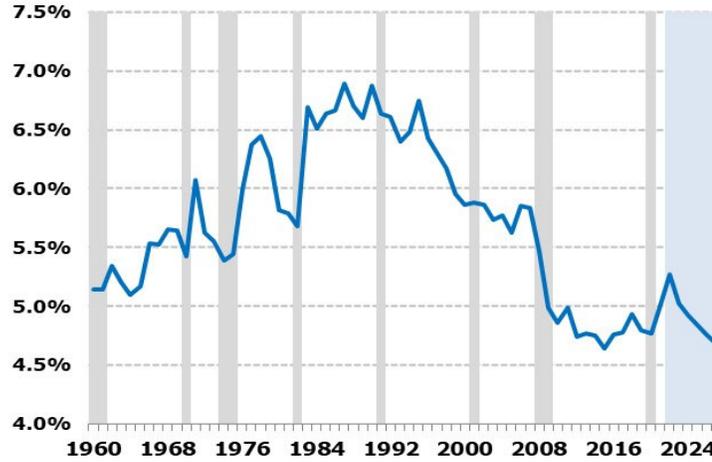
As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income had been on an increasing trend after reaching a trough in FY 2015. The ratio of revenue to income had been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 to mid-2008, and by temporary taxes and transfers of funds from non-GF-S sources into the GF-S that again boosted the ratio in fiscal years 2011 and 2013. The ratio increased slightly in FY 2014 due to low personal income growth and then decreased slightly in FY 2015. The ratio then increased in FY 2016 and 2017, largely due to revenue increases stemming from legislative changes. Additional legislative changes enacted in June of 2017 boosted the FY 2018 ratio, but legislative changes from the 2018 session reduced the ratio in FY 2019. While revenue increased in FY 2020, income increased at the same rate due to federal pandemic relief payments, keeping the ratio of revenue to income roughly constant. While pandemic relief payments boosted income in FY 2021, GF-S revenue grew faster, causing the ratio of revenue to income to increase. Slower growth in income relative to revenue increases the ratio further in FY 2022 but the ratio then continues its downward trend through FY 2027.

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 2021-23 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2023-25 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 2025 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 2021. Gray shaded area indicates recession; blue shaded area indicates forecast.

Recent Collection Experience

Collections were \$452 million (5.9%) higher than forecasted in November

Revenue collections from the Department of Revenue (DOR) and the Washington court system are tracked monthly. In the period since the November forecast, total revenue from the above sources came in \$452.3 million (5.9%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$286.4 million (5.5%) higher than forecasted, but \$132.5 million of the surplus was due to several large one-time payments of past due taxes and one large early payment of deferred taxes. Revenue from other DOR tax sources was \$167.2 million (6.9%) above the forecast.

Table 3.2: Pre-Forecast Collection Variance of Major General Fund-State Taxes by Agency (relative to the November 2021 forecast, cash basis, millions of dollars)

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$286.4	5.5%
Non-Revenue Act	\$167.2	6.9%
Subtotal	\$453.6	6.0%
Washington court system	(\$1.3)	-11.0%
Total*	\$452.3	5.9%

* Detail may not add to total due to rounding.

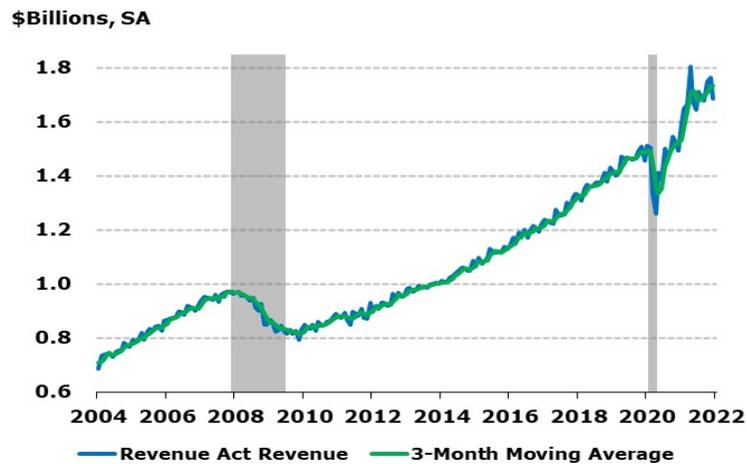
Source: ERFC; Period: November 11, 2021 - February 10, 2022

Real estate excise tax collections were much higher than forecasted

The largest contributor to the surplus in non-Revenue Act collections was real estate excise tax (REET), which came in \$133.4 million (37.2%) higher than forecasted. Net deposits of unclaimed property into the GF-S were \$40.5 million higher than forecasted. Property tax collections came in \$4.5 million (0.2%) lower than forecasted. Cigarette tax collections came in \$8.8 million (10.5%) lower than forecasted, but much of the shortfall was due to a high number of deferred payments that will arrive in the next collection period. Liquor sales and liter tax receipts came in \$0.3 million (0.3%) lower than forecasted. Revenue from all other DOR revenue sources came in \$7.0 million (17.0%) higher than forecasted. Revenue from the Washington court system was \$1.3 million (11.0%) lower than forecasted.

Figure 3.2: Revenue Act Collections*

Growth in Revenue Act collections has decreased from the levels of early 2021 but remains strong



Source: ERFC; Data through February 10, 2021

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

Adjusted Revenue Act collections were up 13.9% year over year for third quarter 2021 activity and 13.1% for fourth quarter activity

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 during the early months of the pandemic, with a peak decline of 14.8% year over year in the May 11-June 10 collection period (April activity). Collections then recovered, and exceptional growth began in the spring of 2021. Adjusted year-over-year collections representing first quarter 2021 activity grew 14.6% year over year and collections representing second quarter 2021 activity grew 26.0% year over year. Adjusted collections representing third quarter 2021 activity were up 13.9% year over year and collections representing fourth quarter 2021 activity were up 13.1%. Adjusted collections for December 2021 activity (January 11 – February 10 collections) were up

10.1% year over year and collections for November 2021 activity were up 17.9% year over year.

Real estate activity was much higher than expected in November

Taxable real estate activity was much higher than previously forecasted. The residential market has been especially strong due to both low mortgage rates and people re-assessing their living situations in light of their newfound ability to work from home. After reaching a record-high level in October, residential activity remained near that level in November and December before decreasing in January (see Figure 3.3). Most of the recent increase in activity has been due to higher prices rather than increases in the number of transactions. On top of the burst in residential activity, large commercial sales (sales greater than \$10 million) spiked to \$2.9 billion in December before decreasing to a still high \$1.5 billion in January.

Figure 3.3: Taxable Real Estate Excise Activity, SA

On top of unexpected growth in residential activity, large commercial sales jumped in December



Source: ERFC; data through January 2022

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 most of Washington’s GF-S revenue, accounting for 95.3% of total GF-S revenue in FY 2021. 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 46.2% of GF-S revenue in FY 2021. 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 FY 2020, however, coupled with federal emergency income support, caused the ratio of sales to income to decline in FY 2020. In the last months of FY 2020 and continuing into FY 2021, however, the trend of increasing purchases of nontaxable services reversed due to pandemic-related shutdowns of services and stimulus payments to households. With the limited availability of services, consumers opted to buy goods. Car sales also increased due to decreases in mass transit availability and increased reluctance to use it. While gradually diminishing, these trends are expected to continue into FY 2022, bringing the ratio to a peak of 38.1%. The ratio is then forecasted to continue its historical downward trend through FY 2027. 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 has been 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 2021, forecast through FY 2027

Retail sales tax receipt growth forecast:

- FY22: 10.4%
- FY23: 3.8%
- FY24: 3.7%
- FY25: 3.6%

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 growth slowed to 1.0% in FY 2020 due to pandemic-related shutdowns in the latter part of the year, but then rebounded by 11.1% in FY 2021. Sales are forecasted to grow an additional 8.0% above FY 2021's high level in FY 2022. Growth then eases to 4.3% in FY 2023, 3.7% in FY 2024, 3.6% in FY 2025, 3.7% in FY 2026 and 3.8% in FY 2027 (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 2020 was 1.7% and growth in FY 2021 was 10.3%. Collections are forecasted to increase by 10.4% in FY 2022, boosted by several large payments of past-due taxes and one large early payment of deferred taxes. Collections are forecasted to increase by 3.8% in FY 2023, 3.7% in FY 2024, 3.6% in FY 2025, 3.7% in FY 2026 and 3.8% in FY 2027.

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 18.4% of GF-S revenue in FY 2021. 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 2021, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 45% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 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:

*FY22: 10.5%
FY23: 1.5%
FY24: 5.3%
FY25: 5.2%*

In FY 2018, B&O tax receipts grew by 8.6% due to several large one-time payments of past due taxes and legislative expansion of the tax base. Growth slowed to a still-strong 6.9% in FY 2019. Despite a second quarter collapse in activity, FY 2020 growth remained positive at 3.6%. Collections increased by 7.9% in FY 2021. Collections are now forecasted to grow by 10.5% in FY 2022 due to both strong activity and the receipt of several large one-time payments of past-due taxes. Growth is forecasted at 3.5% in FY 2023, 5.3% in FY 2024 and 5.2% in FY 2025. Growth is forecasted at 5.0% in FY 2026 and 4.8% in FY 2027.

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 16.3% of total revenue in FY 2021. 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:

FY22: -1.1%
FY23: 3.5%
FY24: 2.8%
FY25: 2.6%

Constrained by prior law to a levy growth rate of one percent on existing property (or the rate of inflation if less than one percent), property tax collections grew by 1.9% in FY 2017. The first payments of the additional state levy began to arrive in the latter half of FY 2018, bringing total GF-S property tax growth of 31.4% for the fiscal year. Collections fell by 12.4% in FY 2019 due to a temporary reduction in the levy rate for calendar year 2019 and a \$936 million transfer of collections from the levy to the Education Legacy Trust Account (ELTA). Collections rebounded by 44.2% in FY 2020 due to a smaller \$83.8 million transfer to ELTA and the end of the temporary levy reduction in the second half of the year. FY 2021 collections grew by 27.3% due to a full year of collections at the unreduced levy rate along with the collection of some taxes that would have been collected in FY 2020 but were instead deferred due to the pandemic. The absence of the extra payments from deferrals is expected to cause collections to decline by 1.1% in FY 2022 before growth resumes at 3.5% in FY 2023, 2.8% in FY 2024, 2.6% in FY 2025 and 2.3% in FY 2026 and 2027. Growth in property tax levies excluding new construction is once again restricted to the lesser of one percent per year or the rate of inflation beginning with the calendar year 2022 levy.

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 2021, accounting for 5.4% 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, 2020 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:

FY22: 26.7%
FY23: -28.1%
FY24: -5.6%
FY25: 3.1%

From FY 2013 through 2019, the recovery in the residential real estate market after the Great Recession has been accompanied by a boom in commercial real estate. Sales of large commercial properties began to weaken in FY 2019 while residential sales increased, resulting in a 0.5% increase in collections in FY 2019. In the first half of FY 2020, residential sales remained strong, and commercial sales surged in December 2019 ahead of the January 1, 2020 change in tax rates. The COVID-induced real

estate market downturn that began with April 2020 collections, however, brought a total decline of 0.7% in FY 2020. The sales boom that began in July 2020 has continued, with record high prices for residential property, bringing collections growth of 34.4% in FY 2021. Continued strength in the residential market, coupled with a resurgence in large commercial sales that began in July 2021, is now expected to bring further growth of 26.7% in FY 2022. After the boom years of FY 2021 and FY 2022, the number of transactions is expected to fall and price increases are expected to moderate, bringing a decline in REET receipts of 28.1% in FY 2023 and 5.6% in FY 2024. Growth is then expected to resume at 3.1% in FY 2025. Activity is then expected to flatten, with a decrease in collections of 1.1% in FY 2026 followed by an increase of 1.5% in FY 2027.

Use tax was the fifth largest DOR GF-S source in FY 2021

The state use tax was the fifth largest DOR GF-S revenue source in FY 2021 at 3.1% 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:

*FY22: 4.2%
FY23: -2.5%
FY24: 2.5%
FY25: 3.9%*

Use tax collections grew 9.0% in FY 2019, boosted by several large one-time purchases. Despite strong collections in the first half of the fiscal year, FY 2020 collections declined by 4.9%. Collections increased by 16.1% in FY 2021 due to record high used car sales. Continued strength in used car sales is expected to increase FY 2022 collections by 4.2% over FY 2021's strong level. Lower used car sales bring a forecasted decline of 2.5% in FY 2023 before growth continues at 2.5% in FY 2024 and 3.9% in FY 2025. Growth is forecasted at 4.5% in FY 2026 and 4.6% in FY 2027.

Public utility taxes were the sixth largest DOR GF-S source in FY 2021

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2021, bringing in 1.6% 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:

*FY22: 17.9%
FY23: 5.5%
FY24: 3.4%
FY25: 3.3%*

Public utility tax receipts grew by 0.3% in FY 2020. The expiration of a large tax credit plus growth in natural gas and electricity use increased collections by 4.2% in FY 2021. The resumption of business activities plus increases in utility prices is forecasted to boost growth to 17.9% in FY 2022. Growth is then forecasted to slow to 5.5% in FY 2023, 3.4% in FY 2024 and 3.3% in FY 2025. Collections are expected to grow by 3.6% in FY 2026 and 3.4% in FY 2027.

Taxes on sales of spirits were the seventh largest DOR GF-S source in FY 2021

State taxes on sales of spirits were the seventh largest DOR GF-S revenue source in FY 2021 at 1.3% of total receipts. Spirits sales are taxed by both volume and price. The total tax rate by volume is \$3.7708 per liter. Liter tax receipts are deposited wholly into the GF-S. The price-based spirits tax is split between the GF-S (65% of receipts) and the Liquor Excise Tax fund (35% of receipts). The overall tax rate on sales to consumers is 20.5% of the sales price and the overall rate on sales to restaurant licensees is 13.7%.

Spirits tax growth forecast:

*FY22: 2.9%
FY23: -2.9%
FY24: -0.2%
FY25: 0.9%*

Total tax collections on spirits sales grew 4.4% in FY 2018 and 5.2% in FY 2019. During the pandemic, spirit sales increased, with total tax collections growing by 8.2% FY 2020 and 9.9% in FY 2021. Collections are forecasted to increase by a further 2.6% in FY 2022 but then decrease by 2.9% in FY 2023 and 0.2% in FY 2024 as the pandemic fades. Collections are then forecasted to increase by 0.9% in FY 2025, 1.3% in FY 2026 and 1.7% in FY 2027.

The cigarette tax was the eighth largest DOR GF-S source in FY 2021

The state tax on cigarettes was the eighth largest DOR GF-S revenue source in FY 2021 at 1.2% 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:

*FY22: -2.4%
FY23: -3.2%
FY24: -3.3%
FY25: -3.6%*

The total number of taxed cigarettes has been on a downward trend due to a continuing decline in the number of smokers. Recently, the rate of decline has increased. Collections decreased by 3.3% in FY 2019 after decreasing by 5.4% in FY 2018. The decrease in collections accelerated to 6.0% in FY 2020, partially due to a state increase in the legal age to purchase cigarettes from 18 to 21 that took effect on January 1, 2020. Collections declined 2.4% in FY 2021 and are expected to decline by 2.4% in FY 2022, 3.2% in FY 2023, 3.3% in FY 2024 and 3.6% in FY 2025. Collections are expected to decline by 2.9% in FY 2026 and 2.7% in FY 2027.

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. After 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 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):

21-23: \$0.4
23-25: \$1.5

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 and \$361.0 million in the 2019-21 biennium. The forecast of GF-S distributions for the 2021-23 biennium has been increased \$0.4 million to \$392.7 million and the forecast for the 2023-25 biennium has been increased \$1.5 million to \$417.0 million. The initial forecast of GF-S distributions for the 2025-27 biennium is \$455.7 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):

21-23: \$1.4
23-25: -\$4.4

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The forecast for the 2021-23 biennium was increased \$1.4 million to \$135.1 million and the forecast of revenue for the 2023-25 biennium was decreased \$4.4 million to \$162.5 million. The initial forecast for the 2025-27 biennium is \$148.1 million.

State Treasurer

Forecast change by biennium (millions):

21-23: \$13.0
23-25: \$35.3

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The forecast of GF-S revenue for the 2021-23 biennium has been increased \$13.0 million to \$78.1 million and the forecast of revenue for the 2023-25 biennium has been increased \$35.3 million to \$70.7 million. The increases were due to an expected rise in interest rates. The initial forecast of GF-S revenue for the 2025-27 biennium is \$75.8 million.

Insurance Commissioner

Forecast change by biennium (millions):

21-23: \$3.0
23-25: \$10.5

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 2021-23 biennium has been increased \$3.0 million to \$1,470.2 million and

the forecast for the 2023-25 biennium has been increased \$10.5 million to \$1,559.7 million. The initial forecast of GF-S revenue for the 2025-27 biennium is \$1,642.9 million.

Liquor and Cannabis Board

Forecast change by biennium (millions):

21-23: \$16.2
23-25: \$9.0

The Liquor and Cannabis Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis discussed previously. The forecast of GF-S distributions for the 2021-23 biennium has been increased \$16.2 million to \$739.6 million and the forecast of for the 2023-25 biennium has been increased \$9.0 million to \$769.5 million. The initial forecast of GF-S distributions for the 2025-27 biennium is \$814.6 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

GF-S forecast change by biennium (millions):

21-23: \$9.8
23-25: \$1.3

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions are also made to the Problem Gambling and Economic Development accounts. Details of the forecast of the distribution of Lottery earnings can be found in Table 3.15 on a cash basis and Table 3.16 on a GAAP basis. When total profits from all Washington-only games plus the Powerball game exceed \$102 million per year, the amount above \$102 million is transferred to the GF-S. The forecast of GF-S transfers for the 2021-23 biennium has been increased \$9.8 million to \$58.6 million and the forecast for the 2023-25 biennium has been increased \$1.3 million to \$55.6 million. The initial forecast of GF-S transfers for the 2025-27 biennium is \$56.3 million.

OPA forecast change by biennium (millions):

21-23: -\$9.9
23-25: \$1.7

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 2021-23 biennium has been decreased \$9.9 million to \$344.5 million and the forecast for the 2023-25 biennium has been increased \$1.7 million to \$356.2 million. The initial forecast of OPA revenue for the 2025-27 biennium is \$356.9 million.

Washington Court System

Forecast change by biennium (millions):

21-23: -\$4.9
23-25: -\$4.6

The GF-S receives surcharges on certain filing fees, fines, and infraction penalties collected by the Washington court system. This revenue is transferred to the GF-S on a monthly basis. The forecast of GF-S transfers for the 2021-23 biennium has been

decreased \$4.9 million to \$87.0 million and the forecast for the 2023-25 biennium has been decreased \$4.6 million to \$80.5 million. The initial forecast of transfers for the 2025-27 biennium is \$76.7 million.

Track Record for the 2021-23 Biennium

The current forecast is \$4.65 billion higher than the forecasted revenue at the time of the initial 2021-23 budget

Table 3.10 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 February 2022 forecast is \$6.99 billion (13.5%) higher than the initial forecast. Non-economic changes have increased the forecast by \$0.73 billion (1.4%). Excluding non-economic changes, the current forecast is \$6.26 billion (12.0%) higher than the initial forecast. The March 2021 forecast, coupled with a \$101 million revenue reduction from legislative and budget-driven revenue changes passed in the 2021 legislative session after the March forecast, was the basis for the initial budget for the 2021-23 biennium. The February forecast of biennial revenue is \$4.65 billion (8.6%) higher than that sum.

Track Record for the 2023-25 Biennium

The current forecast is \$4.25 billion higher than the initial forecast in February 2020

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2023-25 biennium. The February 2020 forecast was the initial forecast for the biennium. The February forecast of GF-S revenue is \$4.25 billion (7.3%) higher than the initial forecast. Non-economic changes have increased the forecast by \$0.16 billion (0.3%). Excluding non-economic changes, the current forecast is \$4.09 billion (7.1%) higher than the initial forecast.

The Relationship between the Cash and GAAP General Fund-State Revenue Forecasts

GAAP forecasts are based on the period in which the revenue is earned rather than received

Legislation enacted in 1987 requires that the state's biennial budget be in conformance with Generally Accepted Accounting Principles (GAAP). It also requires a GF-S revenue forecast on both a cash and GAAP basis. The GAAP forecasts of GF-S revenue for the 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 2021-23 Biennium

The forecast implies total reserves of \$7.459 billion at the end of the 2021-23 biennium for GF-S, ELTA, OPA and WEIA

Table 3.12 shows the budgetary balance sheets for the 2021-23 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 2021-23 biennium was \$3,673.7 million and the total beginning balance for GF-S, ELTA, OPA and WEIA combined was \$4,160.7 million. Based on the current enacted budget, the balance sheet projects total GF-S reserves of \$7,079.3 million at the end for the 2021-23 biennium and total reserves for the GF-S, ELTA, OPA and WEIA accounts of \$7,458.9 million.

Alternative Forecasts for the 2021-23 and 2023-25 Biennia

Optimistic scenario (billions):

*21-23: +\$2.53
23-25: +\$5.55*

Pessimistic scenario:

*21-23: -\$2.31
23-25: -\$5.22*

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, 20% to the optimistic scenario and 30% to the pessimistic scenario. The revenue implications of these alternative scenarios for the 2021-23 biennium are shown in Table 3.13 and those of the 2023-25 biennium are shown in Table 3.14. For the 2021-23 biennium, the optimistic forecast generates \$61.453 billion in GF-S revenue, \$2.534 billion (4.3%) more than the baseline scenario, while the pessimistic forecast produces \$56.606 billion in revenue, \$2.314 billion (3.9%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$67.721 billion in GF-S revenue, \$5.546 billion (8.9%) more than the baseline scenario, while the pessimistic forecast produces \$56.953 billion in revenue, \$5.222 billion (8.4%) less than the baseline.

Education Legacy Trust Account

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

ELTA forecast change by biennium (millions):

21-23: \$55.9
23-25: \$2.1

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 from FY 2016 – FY 2023 and a transfer of \$935 million from the additional property tax levy to the account in FY 2019. Forecasted revenue was further increased in the 2021 legislative session by ESSB 5096, which establishes a tax on certain transactions that produce capital gains above \$250,000. The forecast of ELTA revenue has been increased by \$55.9 million for the 2021-23 biennium and \$2.1 million for the 2023-25 biennium. Forecasted ELTA receipts are now \$1,742.8 million for the 2021-23 biennium and \$2,083.7 million for the 2023-25 biennium. The initial forecast of ELTA revenue for the 2025-27 biennium is \$2,304.7 million.

Workforce Education Investment Account

WEIA forecast change by biennium (millions):

21-23: \$6.2
23-25: \$5.1

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 \$6.2 million in the 2021-23 biennium and \$5.1 million in the 2023-25 biennium. WEIA revenue is now forecasted at \$684.2 million in the 2021-23 biennium and \$752.9 million in the 2023-25 biennium. The initial forecast of WEIA revenue for the 2025-27 biennium is \$831.3 million. 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):

2021-23:
\$1.453

2023-25:
\$1.320

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 at not only GF-S revenue and spending but also that of the ELTA, OPA and the WEIA. The forecast of total revenue for the 2021-23 biennium is \$61,690.7 million, \$1,452.6 million more than the

November forecast. The forecast for the 2023-25 biennium is \$65,367.6 million, \$1,320.2 million more than the November forecast. The initial forecast of total revenue for the 2025-27 biennium is \$70,025.4 million. 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%	8,287.6	24.5%
1971-73	1,922.1	10.9%	8,506.9	2.6%
1973-75	2,372.4	23.4%	9,071.9	6.6%
1975-77	3,395.0	43.1%	11,293.8	24.5%
1977-79	4,490.0	32.3%	13,117.2	16.1%
1979-81	5,356.4	19.3%	13,016.1	-0.8%
1981-83	6,801.4	27.0%	14,382.4	10.5%
1983-85	8,202.4	20.6%	16,006.5	11.3%
1985-87	9,574.6	16.7%	17,638.7	10.2%
1987-89	10,934.1	14.2%	18,811.9	6.7%
1989-91	13,309.0	21.7%	21,088.0	12.1%
1991-93	14,862.2	11.7%	22,155.5	5.1%
1993-95	16,564.6	11.5%	23,593.5	6.5%
1995-97	17,637.7	6.5%	24,106.2	2.2%
1997-99	19,620.1	11.2%	26,113.3	8.3%
1999-01	21,262.1	8.4%	27,233.5	4.3%
2001-03	21,140.7	-0.6%	26,166.2	-3.9%
2003-05	23,388.5	10.6%	27,699.2	5.9%
2005-07	27,772.0	18.7%	31,098.9	12.3%
2007-09	27,703.0	-0.2%	29,596.4	-4.8%
2009-11	28,218.1	1.9%	29,411.6	-0.6%
2011-13	30,657.0	8.6%	30,677.3	4.3%
2013-15	33,666.0	9.8%	32,817.7	7.0%
2015-17	38,317.4	13.8%	36,735.5	11.9%
2017-19	44,142.6	15.2%	40,816.9	11.1%
2019-21	50,803.4	15.1%	45,497.3	11.5%
2021-23 ^F	58,919.2	16.0%	49,016.9	7.7%
2023-25 ^F	62,174.8	5.5%	49,505.4	1.0%
2025-27 ^F	66,640.2	7.2%	50,888.1	2.8%

^F February 2022 forecast

*Total General Fund-State revenue and transfers. Cash basis; includes rate base and administrative changes. Modified cash basis: 1985-87 and prior; pure cash basis: 1987-89 and after. May not be comparable because the collection totals include the impact of rate, base and administrative changes.

Source: Department of Revenue, the Office of Financial Management and the Economic and Revenue Forecast Council 's February 2022 forecast.

Table 3.4
Taxable retail sales*
(millions of dollars)

Fiscal Year	Amount	Percent Change
1981	25,197	4.7%
1982	26,097	3.6%
1983	29,368	12.5%
1984	29,156	-0.7%
1985	30,687	5.3%
1986	32,158	4.8%
1987	34,647	7.7%
1988	37,452	8.1%
1989	41,429	10.6%
1990	47,183	13.9%
1991	49,812	5.6%
1992	53,189	6.8%
1993	55,319	4.0%
1994	59,009	6.7%
1995	61,927	4.9%
1996	62,817	1.4%
1997	66,748	6.3%
1998	72,059	8.0%
1999	77,197	7.1%
2000	83,335	8.0%
2001	85,633	2.8%
2002	84,418	-1.4%
2003	86,165	2.1%
2004	90,139	4.6%
2005	97,253	7.9%
2006	107,071	10.1%
2007	115,527	7.9%
2008	118,676	2.7%
2009	106,379	-10.4%
2010	99,983	-6.0%
2011	101,825	1.8%
2012	106,036	4.1%
2013	113,173	6.7%
2014	120,453	6.4%
2015	130,168	8.1%
2016	141,103	8.4%
2017	149,992	6.3%
2018	162,958	8.6%
2019	175,266	7.6%
2020	176,961	1.0%
2021	196,651	11.1%
2022 ^F	212,387	8.0%
2023 ^F	221,567	4.3%
2024 ^F	229,868	3.7%
2025 ^F	238,123	3.6%
2026 ^F	246,855	3.7%
2027 ^F	256,163	3.8%

^F February 2022 forecast

Source: ERFC

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

Table 3.5

Comparison of the General Fund-State forecast by agency

2021-23 biennium; cash basis

(millions of dollars)

Forecast by Agency	Nov 2021 Forecast¹	Legislative Changes	Forecast Revision	Feb 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$27,352.7	\$0.0	\$681.1	\$28,033.8	\$681.1
Business & Occupation	10,804.4	0.0	235.4	11,039.7	235.4
Use	1,675.7	0.0	43.2	1,718.9	43.2
Public Utility	985.9	0.0	27.6	1,013.5	27.6
Liquor Sales/Liter	691.4	0.0	2.9	694.3	2.9
Cigarette	611.9	0.0	(3.1)	608.8	(3.1)
Property (State Levy)	8,880.3	0.0	(8.3)	8,872.0	(8.3)
Real Estate Excise	2,897.4	0.0	282.5	3,179.9	282.5
Timber Excise	1.6	0.0	3.9	5.5	3.9
Other	1,087.8	0.0	96.4	1,184.2	96.4
Subtotal	54,988.9	0.0	1,361.7	56,350.6	1,361.7
Insurance Commissioner					
Insurance Premiums	1,467.2	0.0	3.0	1,470.2	3.0
Liquor Control Board					
Fees, Cannabis Excise Tax	663.7	0.0	16.0	679.7	16.0
Beer & Wine Surtax	59.6	0.0	0.2	59.9	0.2
Lottery Commission					
Lottery Revenue	48.8	0.0	9.8	58.6	9.8
State Treasurer					
Interest Earnings	65.1	0.0	13.0	78.1	13.0
Office of Financial Management					
Other Agencies	133.7	0.0	1.4	135.1	1.4
Washington Court System					
Court Fees, Fines & Forfeitures	91.9	0.0	(4.9)	87.0	(4.9)
Total General Fund-State *	\$57,518.9	\$0.0	\$1,400.3	\$58,919.2	\$1,400.3

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council November 19, 2021² Forecast for the 2021-23 biennium, adopted February 16, 2022

*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 3.6

Comparison of the General Fund-State forecast by agency

2021-23 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Nov 2021 Forecast¹	Legislative Changes	Forecast Revision	Feb 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$27,352.7	\$0.0	\$681.1	\$28,033.8	\$681.1
Business & Occupation	10,804.4	0.0	235.4	11,039.7	235.4
Use	1,675.7	0.0	43.2	1,718.9	43.2
Public Utility	985.9	0.0	27.6	1,013.5	27.6
Liquor Sales/Liter	705.3	0.0	1.1	706.3	1.1
Cigarette	611.9	0.0	(3.1)	608.8	(3.1)
Property (State Levy)	8,880.3	0.0	(8.3)	8,872.0	(8.3)
Real Estate Excise	2,897.4	0.0	282.5	3,179.9	282.5
Timber Excise	1.6	0.0	4.0	5.6	4.0
Other	1,087.9	0.0	96.0	1,183.9	96.0
Subtotal	55,002.9	0.0	1,359.5	56,362.4	1,359.5
Insurance Commissioner					
Insurance Premiums	1,467.2	0.0	3.0	1,470.2	3.0
Liquor Control Board					
Fees, Cannabis Excise Tax	663.7	0.0	16.0	679.7	16.0
Beer & Wine Surtax	59.6	0.0	0.2	59.9	0.2
Lottery Commission					
Lottery Revenue	53.8	0.0	5.3	59.1	5.3
State Treasurer					
Interest Earnings	50.0	0.0	14.1	64.1	14.1
Office of Financial Management					
Other Agencies	133.7	0.0	1.4	135.1	1.4
Washington Court System					
Court Fees, Fines & Forfeitures	91.9	0.0	(4.9)	87.0	(4.9)
Total General Fund-State *	\$57,522.9	\$0.0	\$1,394.7	\$58,917.6	\$1,394.7

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council November 19, 2021² Forecast for the 2021-23 biennium, adopted February 16, 2022

*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 3.7

Comparison of the General Fund-State forecast by agency

2023-25 biennium; cash basis

(millions of dollars)

Forecast by Agency	Nov 2021 Forecast¹	Legislative Changes	Forecast Revision	Feb 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$29,272.6	\$0.0	\$890.3	\$30,162.8	\$890.3
Business & Occupation	11,880.2	0.0	139.8	12,020.0	139.8
Use	1,734.9	0.0	38.4	1,773.3	38.4
Public Utility	1,053.5	0.0	39.9	1,093.4	39.9
Liquor Sales/Liter	684.0	0.0	1.6	685.5	1.6
Cigarette	567.7	0.0	0.8	568.5	0.8
Property (State Levy)	9,411.7	0.0	(15.5)	9,396.2	(15.5)
Real Estate Excise	2,456.8	0.0	93.3	2,550.1	93.3
Timber Excise	2.3	0.0	0.1	2.5	0.1
Other	1,148.6	0.0	75.3	1,223.9	75.3
Subtotal	58,212.3	0.0	1,264.0	59,476.3	1,264.0
Insurance Commissioner					
Insurance Premiums	1,549.3	0.0	10.5	1,559.7	10.5
Liquor Control Board					
Fees, Cannabis Excise Tax	700.2	0.0	8.7	708.9	8.7
Beer & Wine Surtax	60.3	0.0	0.3	60.6	0.3
Lottery Commission					
Lottery Revenue	54.3	0.0	1.3	55.6	1.3
State Treasurer					
Interest Earnings	35.4	0.0	35.3	70.7	35.3
Office of Financial Management					
Other Agencies	166.8	0.0	(4.4)	162.5	(4.4)
Washington Court System					
Court Fees, Fines & Forfeitures	85.0	0.0	(4.6)	80.5	(4.6)
Total General Fund-State *	\$60,863.6	\$0.0	\$1,311.2	\$62,174.8	\$1,311.2

¹ Forecast for the 2023-25 biennium adopted by the Economic and Revenue Forecast Council November 19, 2021² Forecast for the 2023-25 biennium, adopted February 16, 2022

*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

2023-25 biennium; GAAP basis

(millions of dollars)

Forecast by Agency	Nov 2021 Forecast¹	Legislative Changes	Forecast Revision	Feb 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$29,272.6	\$0.0	\$890.3	\$30,162.8	\$890.3
Business & Occupation	11,880.2	0.0	139.8	12,020.0	139.8
Use	1,734.9	0.0	38.4	1,773.3	38.4
Public Utility	1,053.5	0.0	39.9	1,093.4	39.9
Liquor Sales/Liter	684.0	0.0	1.6	685.5	1.6
Cigarette	567.7	0.0	0.8	568.5	0.8
Property (State Levy)	9,411.7	0.0	(15.5)	9,396.2	(15.5)
Real Estate Excise	2,456.8	0.0	93.3	2,550.1	93.3
Timber Excise	2.7	0.0	0.0	2.7	0.0
Other	1,148.6	0.0	75.3	1,223.9	75.3
Subtotal	58,212.7	0.0	1,263.9	59,476.6	1,263.9
Insurance Commissioner					
Insurance Premiums	1,549.3	0.0	10.5	1,559.7	10.5
Liquor Control Board					
Fees, Cannabis Excise Tax	700.2	0.0	8.7	708.9	8.7
Beer & Wine Surtax	60.3	0.0	0.3	60.6	0.3
Lottery Commission					
Lottery Revenue	54.1	0.0	1.7	55.9	1.7
State Treasurer					
Interest Earnings	35.0	0.0	35.7	70.7	35.7
Office of Financial Management					
Other Agencies	166.8	0.0	(4.4)	162.5	(4.4)
Washington Court System					
Court Fees, Fines & Forfeitures	85.0	0.0	(4.6)	80.5	(4.6)
Total General Fund-State *	\$60,863.4	\$0.0	\$1,311.9	\$62,175.3	\$1,311.9

¹ Forecast for the 2023-25 biennium adopted by the Economic and Revenue Forecast Council November 19, 2021² Forecast for the 2023-25 biennium, adopted February 16, 2022

*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

February 2022 General Fund-State forecast detail
2021-23 to 2025-27 Biennia; Cash Basis
(Millions of Dollars)

Forecast by Source	Fiscal 2022	Fiscal 2023	2021-23 Biennium	Fiscal 2024	Fiscal 2025	2023-25 Biennium	Fiscal 2026	Fiscal 2027	2025-27 Biennium
State Taxes									
Retail sales**	\$13,753.7	\$14,280.1	\$28,033.8	\$14,812.1	\$15,350.7	\$30,162.8	\$15,911.2	\$16,511.6	\$32,422.8
Business & occupation Use**	5,477.7	5,562.0	11,039.7	5,858.1	6,161.9	12,020.0	6,469.2	6,777.0	13,246.2
Public Utility	870.1	848.7	1,718.9	869.5	903.8	1,773.3	944.3	987.7	1,932.0
Liquor sales/liter	493.2	520.3	1,013.5	537.8	555.7	1,093.4	575.9	595.3	1,171.2
Beer & wine surtax	352.3	341.9	694.3	341.3	344.2	685.5	348.6	354.6	703.2
Cigarette	29.8	30.0	59.9	30.2	30.4	60.6	30.6	30.8	61.4
Tobacco products	318.1	308.2	626.3	298.3	288.0	586.2	279.8	272.5	552.4
Cannabis Excise Taxes	54.3	55.0	109.3	55.5	56.1	111.6	56.6	57.1	113.7
Property (state school levy)	193.4	190.8	384.2	199.6	208.8	408.4	218.3	228.5	446.8
Leasehold Excise Tax	4,360.2	4,511.8	8,872.0	4,638.8	4,757.4	9,396.2	4,867.3	4,980.7	9,848.0
Public utility district	35.9	37.6	73.5	38.5	39.2	77.7	39.9	40.5	80.4
Brokered Natural Gas	61.8	63.7	125.5	65.6	67.3	132.8	68.8	70.3	139.2
Real estate excise***	33.6	30.6	64.2	30.8	31.3	62.1	31.8	32.3	64.2
Timber excise	1,849.4	1,330.5	3,179.9	1,255.4	1,294.7	2,550.1	1,280.7	1,299.9	2,580.7
Estate/inheritance	4.5	1.0	5.5	1.2	1.3	2.5	1.5	1.5	3.0
Boat excise	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	17.9	18.0	35.9	18.1	17.1	35.2	17.4	17.7	35.0
Penalties and interest on past due taxes	728.9	741.3	1,470.2	768.0	791.8	1,559.7	812.3	830.6	1,642.9
Other	124.2	137.0	261.2	145.8	152.5	298.3	158.7	165.2	323.9
Total Taxes	28,822.6	29,071.3	57,893.9	30,028.0	31,116.5	61,144.5	32,178.3	33,320.2	65,498.6
State Non-Tax Sources									
Licenses, permits, fees	166.5	167.8	334.3	170.8	174.2	345.1	177.2	180.2	357.4
Liquor & Cannabis fees	145.6	149.9	295.5	149.4	151.1	300.5	152.1	154.2	306.3
Earnings on investments	47.2	30.9	78.1	39.3	31.3	70.7	35.6	40.2	75.8
Washington Court System	44.7	42.3	87.0	40.8	39.6	80.5	38.7	38.0	76.7
Transfers of unclaimed property	177.6	155.9	333.5	157.4	159.0	316.4	160.6	162.1	322.7
Other revenue & transfers	(37.0)	(66.0)	(103.0)	(33.5)	(49.3)	(82.8)	(48.4)	(56.6)	(105.0)
Total Non-Tax	544.6	480.8	1,025.3	524.3	506.0	1,030.3	515.8	518.1	1,034.0
Total General Fund-State *	\$29,367.2	\$29,552.0	\$58,919.2	\$30,552.3	\$31,622.5	\$62,174.8	\$32,694.1	\$33,838.4	\$66,532.5

* 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 2021-23 General Fund-State Cash Forecast

February 2018 through February 2022

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total Fund-State Cash Basis</u>
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	2,187	59	2,246	0	2,246	52,181
November 2020	265	32	297	0	297	52,478
March 2021	1,807	88	1,894	0	1,894	54,372
June 2021	1,275	65	1,340	(101) #6	1,239	55,611
September 2021	889	(44)	845	0	845	56,457
November 2021	981	12	994	69 #7	1,062	57,519
February 2022	1,362	39	1,400	0	1,400	58,919
Total change***:						
From February 2018	6,133	121	6,255	732	6,987	
Percent change	12.4	5.1	12.0	1.4	13.5	

Table 3.11

Track Record for the 2023-25 General Fund-State Cash Forecast

February 2020 through February 2022

Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total Fund-State Cash Basis</u>
February 2020 #	\$49,551	\$2,381				\$57,930
Changes to Forecast						
June 2020	(4,557)	(125)	(4,682)	209 #5	(4,473)	53,457
September 2020	2,337	122	2,460	0	2,460	55,917
November 2020	(16)	32	16	0	16	55,933
March 2021	1,783	62	1,846	0	1,846	57,778
June 2021	1,384	35	1,419	(218) #6	1,200	58,979
September 2021	953	(61)	891	0	891	59,870
November 2021	833	(4)	828	165 #7	994	60,864
February 2022	1,264	47	1,311	0	1,311	62,175
Total change***:						
From February 2020	3,981	108	4,089	156	4,245	
Percent change	8.0	4.6	7.1	0.3	7.3	

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

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

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

First official forecast for the 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

#6 Legislative and budget-driven revenue changes from the 2021 legislative session

#7 Addition of financial services tax to forecast after court approval and expected refunds from DOR rule change on apportionment

Table 3.12

2021-23 Enacted Budget Balance Sheet
General Fund-State (GFS), Education Legacy Trust Account (ELTA),
Washington Opportunity Pathways Account (OPA),
Workforce Education Investment Account (WEIA), Fair Start for Kids Account (FSKA)
and Budget Stabilization Account (BSA)
Dollars in Millions

	2021-23		
	GFS	ELTA, OPA, WEIA, FSKA*	TOTAL
RESOURCES			
Beginning Fund Balance	3,673.7	487.0	4,160.7
November 2021 Revenue Forecast	57,518.9	2,719.2	60,238.1
February 2022 Revenue Forecast change	1,400.3	52.3	1,452.6
Current Revenue Totals	58,919.2	2,771.4	61,690.7
Transfer to Budget Stabilization Account (1% of GSR)	(574.2)		(574.2)
Transfer to Budget Stabilization Account (EGSR)	-		-
Enacted Fund Transfers	50.2	-	50.2
Assumed Prior Period Adjustments	40.8		40.8
Total Resources (including beginning fund balance)	62,109.7	3,258.4	65,368.1
EXPENDITURES			
Enacted Budgets			
2021-23 Biennium	56,187.8	2,878.8	59,066.6
Assumed Reversions**	(561.9)	-	(561.9)
Total Expenditures	55,625.9	2,878.8	58,504.7
RESERVES			
Projected Ending Balance	6,483.8	379.6	6,863.4
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	19.2		19.2
Transfers from General Fund (1% of GSR)	574.2		574.2
Transfers from GFS (EGSR)	-		-
Assumed 21-23 biennium-Interest Earnings	2.1		2.1
Projected Budget Stabilization Account Ending Balance	595.5		595.5
Total Reserves (Near General Fund plus Budget Stabilization)	7,079.3	379.6	7,458.9

* No revenue or expenditures for 25H-Fair Start for Kids Account (FSKA).

** Pursuant to Sec 753 of ESSB 5092 (Chapter 334, Laws of 2021), FY 22 reversions include \$266.161M GFS that has been placed in unallotted res

Acronyms

GSR- General State Revenues

EGSR- Extraordinary General State Revenues

ACFR- Annual Comprehensive Financial Report

Table 3.13
Alternative forecasts compared to the baseline forecast
2021-23 biennium
(cash basis, millions of dollars)

<u>Forecast by Source</u>	<u>Optimistic Forecast</u>	<u>Baseline Forecast</u>	<u>Pessimistic Forecast</u>
<i>Department of Revenue</i>			
Retail Sales	\$29,503.4	\$28,033.8	\$26,697.5
Business & Occupation	11,613.7	11,039.7	10,526.9
Use	1,826.4	1,718.9	1,631.1
Public Utility	1,064.8	1,013.5	969.1
Property (school levy)	8,917.3	8,872.0	8,837.3
Real Estate Excise	3,263.0	3,179.9	3,080.3
Other	2,547.5	2,492.8	2,434.2
Subtotal	58,736.1	56,350.6	54,176.4
<i>Insurance Commissioner¹</i>	1,544.5	1,470.2	1,396.0
<i>Lottery Commission</i>	60.9	58.6	56.4
<i>State Treasurer - Interest earnings</i>	122.5	78.1	43.0
<i>Liquor and Cannabis Surtaxes & Fees²</i>	761.2	739.6	717.3
<i>Office of Financial Management</i>			
Other agencies	137.8	135.1	132.4
<i>Washington Court System</i>			
Court Fees, Fines & Forfeitures	89.9	87.0	84.1
Total General Fund - State*	\$61,452.9	\$58,919.2	\$56,605.7
Difference from February 2022 Baseline	\$2,533.7		(\$2,313.5)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

Source: ERFC, 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
2023-25 biennium
(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$33,551.5	\$30,162.8	\$27,040.5
Business & Occupation	13,301.0	12,020.0	10,853.2
Use	2,007.1	1,773.3	1,566.8
Public Utility	1,195.1	1,093.4	990.6
Property (school levy)	9,460.4	9,396.2	9,321.6
Real Estate Excise	2,707.4	2,550.1	2,310.6
Other	2,618.4	2,480.5	2,339.0
Subtotal	64,840.9	59,476.3	54,422.2
Insurance Commissioner¹	1,638.5	1,559.7	1,481.0
Lottery Commission	58.4	55.6	52.8
State Treasurer - Interest earnings	119.9	70.7	34.9
Liquor and Cannabis Surtaxes & Fees²	810.4	769.5	728.0
Office of Financial Management			
Other agencies	167.4	162.5	157.6
Washington Court System			
Court Fees, Fines & Forfeitures	85.8	80.5	76.1
Total General Fund - State*	\$67,721.2	\$62,174.8	\$56,952.7
Difference from February 2022 Baseline	\$5,546.4		(\$5,222.1)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.15

Lottery transfers by fund

February 2022 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
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	231.6	27.7	0.0	14.2	0.0	0.0	0.5	4.8	184.4	0.0	0.0
2019-21 Biennium	418.0	44.4	0.0	27.9	0.0	0.0	0.8	8.0	336.9	0.0	0.0
2022	205.6	31.2	0.0	0.0	0.0	0.0	0.4	4.5	169.5	0.0	0.0
2023	207.2	27.4	0.0	0.0	0.0	0.0	0.4	4.3	175.0	0.0	0.0
2021-23 Biennium	412.7	58.6	0.0	0.0	0.0	0.0	0.9	8.8	344.5	0.0	0.0
2024	211.2	27.7	0.0	0.0	0.0	0.0	0.4	4.4	178.6	0.0	0.0
2025	210.4	28.0	0.0	0.0	0.0	0.0	0.4	4.4	177.6	0.0	0.0
2023-25 Biennium	421.6	55.6	0.0	0.0	0.0	0.0	0.9	8.9	356.2	0.0	0.0
2026	211.3	28.0	0.0	0.0	0.0	0.0	0.4	4.4	178.4	0.0	0.0
2027	211.7	28.4	0.0	0.0	0.0	0.0	0.4	4.4	178.5	0.0	0.0
2025-27 Biennium	423.0	56.3	0.0	0.0	0.0	0.0	0.9	8.9	356.9	0.0	0.0

Table 3.16

Lottery transfers by fund

February 2022 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
2016	175.5	31.9	0.0	11.7	0.0	0.0	0.3	2.8	128.7	0.0	0.0
2017	161.9	16.8	0.0	12.2	0.0	0.0	0.3	4.9	126.8	0.0	0.0
2015-17 Biennium	337.4	48.7	0.0	23.8	0.0	0.0	0.7	7.7	255.5	0.0	0.0
2018	183.0	31.2	0.0	12.6	0.0	0.0	0.4	4.6	134.2	0.0	0.0
2019	215.8	30.9	0.0	13.1	0.0	0.0	0.4	4.6	166.7	0.0	0.0
2017-19 Biennium	398.8	62.1	0.0	25.8	0.0	0.0	0.8	9.2	300.9	0.0	0.0
2020	180.9	16.2	0.0	13.7	0.0	0.0	0.4	3.4	147.3	0.0	0.0
2021	229.0	23.9	0.0	14.2	0.0	0.0	0.5	4.7	185.7	0.0	0.0
2019-21 Biennium	410.0	40.1	0.0	27.9	0.0	0.0	0.8	8.1	333.1	0.0	0.0
2022	210.4	31.4	0.0	0.0	0.0	0.0	0.4	4.4	174.1	0.0	0.0
2023	207.7	27.7	0.0	0.0	0.0	0.0	0.4	4.4	175.1	0.0	0.0
2021-23 Biennium	418.1	59.1	0.0	0.0	0.0	0.0	0.9	8.9	349.3	0.0	0.0
2024	209.5	27.9	0.0	0.0	0.0	0.0	0.4	4.4	176.8	0.0	0.0
2025	210.5	28.0	0.0	0.0	0.0	0.0	0.4	4.4	177.6	0.0	0.0
2023-25 Biennium	420.0	55.9	0.0	0.0	0.0	0.0	0.9	8.9	354.4	0.0	0.0
2026	211.3	28.0	0.0	0.0	0.0	0.0	0.4	4.4	178.5	0.0	0.0
2027	211.8	28.0	0.0	0.0	0.0	0.0	0.4	4.4	178.9	0.0	0.0
2025-27 Biennium	423.1	56.0	0.0	0.0	0.0	0.0	0.9	8.9	357.4	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)

February 2022 - 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 2003	\$11,721	0.8%							\$11,721	0.8%
FY 2004	\$12,358	5.4%							\$12,358	5.4%
FY 2005	\$13,036	5.5%							\$13,036	5.5%
FY 2006	\$14,318	9.8%	\$115						\$14,432	10.7%
FY 2007	\$15,467	8.0%	\$266	132.2%					\$15,734	9.0%
FY 2008	\$15,659	1.2%	\$213	-20.1%					\$15,872	0.9%
FY 2009	\$14,158	-9.6%	\$224	5.4%					\$14,382	-9.4%
FY 2010	\$13,571	-4.1%	\$157	-29.9%					\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$99				\$14,859	8.2%
FY 2012	\$14,874	1.5%	\$114	2.3%	\$118	19.1%			\$15,107	1.7%
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$126	5.9%			\$16,009	6.0%
FY 2014	\$16,383	3.8%	\$197	95.3%	\$114	-9.4%			\$16,694	4.3%
FY 2015	\$17,283	5.5%	\$207	5.0%	\$120	5.7%			\$17,611	5.5%
FY 2016	\$18,579	7.5%	\$215	3.6%	\$139	15.7%			\$18,933	7.5%
FY 2017	\$19,739	6.2%	\$252	17.5%	\$127	-9.0%			\$20,118	6.3%
FY 2018	\$21,712	10.0%	\$302	19.6%	\$129	1.5%			\$22,143	10.1%
FY 2019	\$22,430	3.3%	\$1,352	348.1%	\$156	21.1%			\$23,938	8.1%
FY 2020	\$23,817	6.2%	\$913	-32.5%	\$153	-2.0%	\$32		\$24,915	4.1%
FY 2021	\$26,986	13.3%	\$726	-20.5%	\$184	20.9%	\$320	905.5%	\$28,217	13.3%
Forecast:										
FY 2022	\$29,367	8.8%	\$812	11.9%	\$169	-8.1%	\$334	4.3%	\$30,683	8.7%
FY 2023	\$29,552	0.6%	\$930	14.6%	\$175	3.3%	\$350	4.8%	\$31,008	1.1%
FY 2024	\$30,552	3.4%	\$979	5.3%	\$179	2.1%	\$367	4.9%	\$32,078	3.5%
FY 2025	\$31,622	3.5%	\$1,104	12.7%	\$178	-0.6%	\$386	5.1%	\$33,290	3.8%
FY 2026	\$32,694	3.4%	\$1,134	2.7%	\$178	0.5%	\$405	5.1%	\$34,412	3.4%
FY 2027	\$33,838	3.5%	\$1,171	3.2%	\$178	0.0%	\$426	5.2%	\$35,614	3.5%
Biennial Totals										
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	\$50,803	15.1%	\$1,639	-0.9%	\$337	18.5%	\$352	NA	\$53,132	15.3%
21-23 Biennium	\$58,919	16.0%	\$1,743	6.3%	\$345	2.3%	\$684	94.2%	\$61,691	16.1%
23-25 Biennium	\$62,175	5.5%	\$2,084	19.6%	\$356	3.4%	\$753	10.0%	\$65,368	6.0%
25-27 Biennium	\$66,533	7.0%	\$2,305	10.6%	\$357	0.2%	\$831	10.4%	\$70,025	7.1%

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

Table 3.18
Forecasted distribution of excise tax and license fees from cannabis sales
 February 2022
 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						
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention	General Fund-State*
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	\$560,929	\$15,888	\$545,041	\$0	\$10,615	\$384	\$272,521	\$54,696	\$530	\$206,296
2022	\$539,779	\$17,422	\$522,357	\$0	\$10,538	\$381	\$261,178	\$52,304	\$520	\$197,435
2023	\$536,956	\$17,463	\$519,493	\$0	\$10,562	\$381	\$259,747	\$52,975	\$533	\$195,296
2024	\$554,281	\$17,463	\$536,818	\$0	\$10,562	\$381	\$268,409	\$52,975	\$533	\$203,958
2025	\$572,543	\$17,463	\$555,080	\$0	\$10,562	\$381	\$277,540	\$52,975	\$533	\$213,089
2026	\$591,869	\$17,463	\$574,406	\$0	\$10,562	\$381	\$287,203	\$52,975	\$533	\$222,752
2027	\$612,201	\$17,463	\$594,738	\$0	\$10,562	\$381	\$297,369	\$52,975	\$533	\$232,918
Biennial totals										
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	\$1,009,356	\$34,122	\$975,234	\$0	\$21,401	\$758	\$487,617	\$103,356	\$1,052	\$361,050
2021-23	\$1,076,735	\$34,885	\$1,041,850	\$0	\$21,100	\$762	\$520,925	\$105,279	\$1,053	\$392,731
2023-25	\$1,126,824	\$34,926	\$1,091,898	\$0	\$21,124	\$762	\$545,949	\$105,950	\$1,066	\$417,047
2025-27	\$1,204,070	\$34,926	\$1,169,144	\$0	\$21,124	\$762	\$584,572	\$105,950	\$1,066	\$455,670

*Before distributions to local governments

Table 3.19
Workforce Education Investment Account
 February 2022
 Thousands of dollars

	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium	FY26	FY27	2025-27 Biennium
November 2021 forecast	\$331,827	\$346,150	\$677,977	\$364,661	\$383,120	\$747,780	NA	NA	NA
Forecast change	\$2,279	\$3,938	\$6,217	\$2,517	\$2,612	\$5,129	NA	NA	NA
February 2022 forecast	\$334,106	\$350,088	\$684,194	\$367,178	\$385,732	\$752,909	\$405,217	\$426,094	\$831,312

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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 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,384.7	19,427.2	20,152.0	20,692.7	21,156.2	21,579.3	22,010.9	22,429.1
% Ch	-3.4	5.7	3.7	2.7	2.2	2.0	2.0	1.9
Real Consumption	12,629.9	13,630.8	14,066.0	14,451.6	14,829.9	15,156.2	15,489.6	15,830.4
% Ch	-3.8	7.9	3.2	2.7	2.6	2.2	2.2	2.2
Real Nonresidential Fixed Investment	2,671.1	2,866.9	3,047.0	3,181.8	3,305.2	3,436.7	3,572.4	3,708.9
% Ch	-5.3	7.3	6.3	4.4	3.9	4.0	4.0	3.8
Real Residential Fixed Investment	648.0	706.5	678.9	644.2	639.2	641.2	641.7	631.9
% Ch	6.8	9.0	-3.9	-5.1	-0.8	0.3	0.1	-1.5
Real Personal Income	17,647.9	18,236.8	17,830.0	18,402.0	18,937.3	19,434.8	19,922.4	20,386.3
% Ch	5.3	3.3	-2.2	3.2	2.9	2.6	2.5	2.3
Real Per Capita Income (\$/Person)	53,229	54,931	53,519	54,983	56,301	57,474	58,603	59,648
% Ch	4.9	3.2	-2.6	2.7	2.4	2.1	2.0	1.8
Price and Wage Indexes								
PCE Price Index (2012=100)	111.2	115.5	120.6	123.1	125.6	128.2	130.9	133.7
% Ch	1.2	3.9	4.4	2.0	2.1	2.1	2.1	2.1
U.S. Consumer Price Index (1982-84=1.0)	2.588	2.710	2.839	2.900	2.963	3.026	3.093	3.163
% Ch	1.2	4.7	4.8	2.1	2.2	2.1	2.2	2.3
Employment Cost Index (Dec. 2005=1.0)	1.414	1.471	1.557	1.634	1.703	1.771	1.840	1.910
% Ch	2.9	4.0	5.9	5.0	4.2	4.0	3.9	3.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,893.7	22,993.5	24,989.1	26,322.9	27,592.9	28,841.5	30,112.6	31,379.7
% Ch	-2.2	10.0	8.7	5.3	4.8	4.5	4.4	4.2
Personal Income	19,627.6	21,059.8	21,503.1	22,645.0	23,782.1	24,921.9	26,088.6	27,259.9
% Ch	6.5	7.3	2.1	5.3	5.0	4.8	4.7	4.5
Employment (Millions)								
U.S. Civilian Labor Force	160.8	161.2	165.0	167.2	168.8	170.1	171.1	172.1
Total U.S. Employment	147.8	152.6	159.1	161.4	162.5	163.2	163.9	164.6
Unemployment Rate (%)	8.10	5.35	3.57	3.49	3.74	4.02	4.19	4.33
Nonfarm Payroll Employment	142.15	146.10	151.54	153.95	155.02	155.52	155.89	156.25
% Ch	-5.8	2.8	3.7	1.6	0.7	0.3	0.2	0.2
Manufacturing	12.17	12.35	12.65	12.70	12.67	12.51	12.35	12.20
% Ch	-5.1	1.5	2.5	0.4	-0.2	-1.3	-1.3	-1.2
Durable Manufacturing	7.57	7.68	7.89	7.97	7.98	7.88	7.78	7.69
% Ch	-5.8	1.4	2.8	1.0	0.1	-1.3	-1.2	-1.2
Nondurable Manufacturing	4.59	4.67	4.76	4.73	4.70	4.63	4.57	4.51
% Ch	-3.9	1.7	1.9	-0.5	-0.8	-1.4	-1.4	-1.2
Construction	7.26	7.41	7.55	7.55	7.50	7.52	7.58	7.63
% Ch	-3.2	2.1	1.9	0.0	-0.6	0.2	0.9	0.6
Service-Providing	122.12	125.77	130.73	133.04	134.18	134.83	135.30	135.76
% Ch	-6.0	3.0	3.9	1.8	0.9	0.5	0.4	0.3
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	39.2	68.0	85.1	76.9	72.3	69.5	67.5	66.4
Personal Saving/Disposable Income (%)	16.4	12.1	6.0	6.3	6.6	7.2	7.7	8.1
Auto Sales (Millions)	3.4	3.3	3.1	3.4	3.6	3.6	3.5	3.4
% Ch	-27.9	-1.8	-6.8	10.4	4.6	-0.1	-2.6	-1.4
Housing Starts (Millions)	1.397	1.598	1.484	1.330	1.321	1.311	1.267	1.219
% Ch	8.1	14.4	-7.1	-10.4	-0.7	-0.8	-3.4	-3.8
Federal Budget Surplus (Billions)	-3,110.0	-2,802.6	-1,106.7	-811.4	-825.2	-917.5	-1,029.6	-1,140.9
Net Exports (Billions)	-651.2	-916.0	-930.4	-836.1	-807.8	-782.9	-782.4	-793.5
3-Month Treasury Bill Rate (%)	0.37	0.04	0.58	1.23	1.65	1.93	2.16	2.36
10-Year Treasury Note Yield (%)	0.89	1.44	2.03	2.61	2.83	2.99	3.11	3.18
Bond Index of 20 G.O. Munis. (%)	2.65	2.19	2.53	2.96	3.15	3.34	3.52	3.67
30-Year Fixed Mortgage Rate (%)	3.12	2.95	3.66	4.29	4.55	4.72	4.85	4.92

Table A1.2

U.S. Economic Forecast Summary
 Forecast 2022 to 2027

	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	19,886.2	20,094.7	20,242.8	20,384.4	20,509.5	20,631.9	20,753.0	20,876.3
% Ch , Annual Rate	1.6	4.3	3.0	2.8	2.5	2.4	2.4	2.4
Real Consumption	13,914.1	14,038.2	14,111.3	14,200.6	14,298.8	14,401.8	14,503.2	14,602.6
% Ch , Annual Rate	2.1	3.6	2.1	2.6	2.8	2.9	2.8	2.8
Real Nonresidential Fixed Investment	2,978.8	3,033.7	3,070.2	3,105.3	3,137.0	3,166.5	3,196.3	3,227.3
% Ch , Annual Rate	11.4	7.6	4.9	4.6	4.2	3.8	3.8	3.9
Real Residential Fixed Investment	692.2	682.3	676.2	664.8	654.0	645.3	639.4	638.2
% Ch , Annual Rate	-0.3	-5.6	-3.5	-6.6	-6.3	-5.2	-3.7	-0.7
Real Personal Income	17,576.7	17,766.2	17,930.2	18,047.1	18,197.0	18,336.7	18,473.4	18,600.9
% Ch , Annual Rate	-2.7	4.4	3.7	2.6	3.4	3.1	3.0	2.8
Real Per Capita Income (\$/Person)	52,844	53,358	53,792	54,082	54,468	54,822	55,164	55,477
% Ch , Annual Rate	-3.1	4.0	3.3	2.2	2.9	2.6	2.5	2.3
Price and Wage Indexes								
PCE Price Index (2012=100)	119.5	120.3	121.0	121.5	122.1	122.7	123.4	124.0
% Ch , Annual Rate	4.8	2.8	2.2	1.8	2.0	2.0	2.0	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.819	2.834	2.846	2.858	2.876	2.892	2.908	2.923
% Ch , Annual Rate	4.8	2.1	1.8	1.7	2.5	2.2	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.523	1.546	1.569	1.589	1.607	1.626	1.643	1.660
% Ch , Annual Rate	6.6	6.0	6.1	5.3	4.7	4.7	4.3	4.3
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	24,353.7	24,849.4	25,214.3	25,539.0	25,849.9	26,161.6	26,476.4	26,803.6
% Ch , Annual Rate	6.2	8.4	6.0	5.3	5.0	4.9	4.9	5.0
Personal Income	21,006.3	21,379.4	21,693.9	21,932.5	22,226.2	22,507.7	22,786.9	23,059.3
% Ch , Annual Rate	2.0	7.3	6.0	4.5	5.5	5.2	5.1	4.9
Employment (Millions)								
U.S. Civilian Labor Force	163.9	164.7	165.4	166.0	166.5	167.0	167.5	167.9
Total U.S. Employment	157.6	158.8	159.7	160.4	160.9	161.3	161.6	161.9
Unemployment Rate (%)	3.86	3.59	3.44	3.38	3.40	3.45	3.52	3.59
Nonfarm Payroll Employment	150.04	151.19	152.11	152.84	153.39	153.81	154.15	154.44
% Ch , Annual Rate	3.9	3.1	2.5	1.9	1.5	1.1	0.9	0.8
Manufacturing	12.59	12.65	12.65	12.71	12.66	12.70	12.72	12.72
% Ch , Annual Rate	2.7	1.9	-0.1	2.1	-1.6	1.3	0.5	0.0
Durable Manufacturing	7.84	7.89	7.87	7.95	7.91	7.97	7.99	8.00
% Ch , Annual Rate	2.9	2.6	-0.9	4.0	-1.9	2.8	1.2	0.2
Nondurable Manufacturing	4.75	4.76	4.77	4.76	4.75	4.73	4.73	4.72
% Ch , Annual Rate	2.3	0.7	1.2	-1.0	-1.1	-1.1	-0.5	-0.2
Construction	7.53	7.54	7.56	7.57	7.57	7.56	7.54	7.53
% Ch , Annual Rate	2.0	0.5	1.3	0.1	0.3	-0.8	-0.7	-0.9
Service-Providing	129.33	130.39	131.28	131.92	132.51	132.90	133.22	133.52
% Ch , Annual Rate	4.1	3.3	2.8	2.0	1.8	1.2	1.0	0.9
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	87.5	87.3	84.0	81.4	79.2	77.5	76.0	74.8
Personal Saving/Disposable Income (%)	5.9	5.8	6.1	6.1	6.2	6.3	6.3	6.3
Auto Sales (Millions)	2.9	3.0	3.2	3.3	3.4	3.4	3.5	3.5
% Ch , Annual Rate	40.1	19.1	22.7	19.6	2.4	6.8	6.5	6.7
Housing Starts (Millions)	1.593	1.503	1.448	1.392	1.349	1.327	1.318	1.327
% Ch , Annual Rate	-11.8	-20.7	-14.0	-14.5	-11.8	-6.2	-2.8	2.7
Federal Budget Surplus (Billions)	-1,065.7	-1,587.8	-956.0	-817.2	-822.9	-819.1	-818.3	-785.5
Net Exports (Billions)	-979.1	-952.6	-913.2	-876.5	-858.4	-843.3	-826.9	-815.5
3-Month Treasury Bill Rate (%)	0.19	0.44	0.74	0.95	1.01	1.21	1.24	1.45
10-Year Treasury Note Yield (%)	1.80	1.88	2.13	2.33	2.50	2.59	2.66	2.71
Bond Index of 20 G.O. Munis. (%)	2.35	2.43	2.60	2.74	2.86	2.94	3.00	3.05
30-Year Fixed Mortgage Rate (%)	3.46	3.47	3.74	3.96	4.13	4.27	4.35	4.42

Table A1.2 (continued)
U.S. Economic Forecast Summary
Forecast 2022 to 2027

	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	20,992.1	21,103.8	21,212.1	21,316.8	21,419.2	21,522.9	21,631.5	21,743.6
% Ch , Annual Rate	2.2	2.1	2.1	2.0	1.9	2.0	2.0	2.1
Real Consumption	14,699.0	14,788.0	14,875.7	14,957.1	15,033.9	15,113.1	15,196.6	15,281.2
% Ch , Annual Rate	2.7	2.4	2.4	2.2	2.1	2.1	2.2	2.2
Real Nonresidential Fixed Investment	3,256.9	3,288.7	3,321.2	3,353.9	3,387.7	3,419.8	3,452.9	3,486.3
% Ch , Annual Rate	3.7	4.0	4.0	4.0	4.1	3.9	3.9	3.9
Real Residential Fixed Investment	638.4	639.1	638.6	640.6	641.1	641.1	640.5	642.3
% Ch , Annual Rate	0.1	0.4	-0.3	1.2	0.3	0.0	-0.4	1.1
Real Personal Income	18,751.2	18,877.3	19,000.7	19,120.0	19,257.1	19,374.7	19,494.2	19,613.3
% Ch , Annual Rate	3.3	2.7	2.6	2.5	2.9	2.5	2.5	2.5
Real Per Capita Income (\$/Person)	55,857	56,161	56,454	56,734	57,064	57,335	57,612	57,886
% Ch , Annual Rate	2.8	2.2	2.1	2.0	2.4	1.9	1.9	1.9
Price and Wage Indexes								
PCE Price Index (2012=100)	124.6	125.3	125.9	126.5	127.2	127.9	128.6	129.2
% Ch , Annual Rate	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
U.S. Consumer Price Index (1982-84=1.0)	2.939	2.955	2.970	2.986	3.002	3.018	3.034	3.051
% Ch , Annual Rate	2.2	2.2	2.0	2.1	2.1	2.1	2.2	2.3
Employment Cost Index (Dec. 2005=1.0)	1.678	1.694	1.711	1.728	1.745	1.762	1.780	1.797
% Ch , Annual Rate	4.2	4.0	4.0	4.0	4.0	4.0	4.0	3.9
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	27,125.4	27,438.8	27,749.6	28,057.7	28,369.3	28,680.2	28,997.3	29,319.3
% Ch , Annual Rate	4.9	4.7	4.6	4.5	4.5	4.5	4.5	4.5
Personal Income	23,368.2	23,644.2	23,920.4	24,195.4	24,498.6	24,777.8	25,062.1	25,348.9
% Ch , Annual Rate	5.5	4.8	4.8	4.7	5.1	4.6	4.7	4.7
Employment (Millions)								
U.S. Civilian Labor Force	168.3	168.7	169.0	169.3	169.6	169.9	170.2	170.5
Total U.S. Employment	162.2	162.4	162.6	162.8	163.0	163.1	163.3	163.5
Unemployment Rate (%)	3.65	3.71	3.77	3.84	3.92	3.99	4.06	4.10
Nonfarm Payroll Employment	154.71	154.94	155.13	155.30	155.40	155.47	155.55	155.65
% Ch , Annual Rate	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.2
Manufacturing	12.71	12.69	12.66	12.62	12.58	12.53	12.48	12.44
% Ch , Annual Rate	-0.2	-0.7	-0.9	-1.2	-1.4	-1.5	-1.5	-1.5
Durable Manufacturing	8.00	7.98	7.97	7.95	7.92	7.89	7.86	7.83
% Ch , Annual Rate	0.0	-0.6	-0.7	-1.0	-1.4	-1.6	-1.5	-1.4
Nondurable Manufacturing	4.72	4.71	4.69	4.67	4.66	4.64	4.63	4.61
% Ch , Annual Rate	-0.7	-0.9	-1.2	-1.5	-1.4	-1.3	-1.4	-1.6
Construction	7.51	7.50	7.50	7.50	7.50	7.51	7.52	7.54
% Ch , Annual Rate	-0.8	-0.6	-0.2	0.1	0.2	0.4	0.6	1.0
Service-Providing	133.81	134.08	134.31	134.51	134.65	134.77	134.89	135.01
% Ch , Annual Rate	0.9	0.8	0.7	0.6	0.4	0.4	0.3	0.4
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	73.7	72.7	71.8	71.1	70.4	69.7	69.1	68.6
Personal Saving/Disposable Income (%)	6.5	6.5	6.6	6.7	7.0	7.1	7.3	7.4
Auto Sales (Millions)	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.5
% Ch , Annual Rate	4.0	3.4	3.0	1.9	-0.9	-1.6	-1.7	-4.9
Housing Starts (Millions)	1.330	1.322	1.320	1.313	1.316	1.317	1.309	1.301
% Ch , Annual Rate	1.2	-2.6	-0.6	-2.0	1.1	0.3	-2.7	-2.2
Federal Budget Surplus (Billions)	-807.0	-816.8	-829.0	-847.8	-881.2	-903.2	-924.7	-961.0
Net Exports (Billions)	-813.2	-810.1	-806.6	-801.2	-791.0	-783.1	-779.0	-778.6
3-Month Treasury Bill Rate (%)	1.50	1.68	1.69	1.74	1.92	1.92	1.92	1.97
10-Year Treasury Note Yield (%)	2.76	2.81	2.86	2.90	2.94	2.97	3.01	3.04
Bond Index of 20 G.O. Munis. (%)	3.09	3.13	3.17	3.22	3.27	3.32	3.36	3.42
30-Year Fixed Mortgage Rate (%)	4.48	4.54	4.58	4.62	4.68	4.71	4.74	4.77

Table A1.2 (continued)
U.S. Economic Forecast Summary
Forecast 2022 to 2027

	2026:1	2026:2	2026:3	2026:4	2027:1	2027:2	2027:3	2027:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	21,853.8	21,959.3	22,063.1	22,167.4	22,264.2	22,365.3	22,481.4	22,605.6
% Ch , Annual Rate	2.0	1.9	1.9	1.9	1.8	1.8	2.1	2.2
Real Consumption	15,365.6	15,449.2	15,531.9	15,611.9	15,688.0	15,775.1	15,874.1	15,984.3
% Ch , Annual Rate	2.2	2.2	2.2	2.1	2.0	2.2	2.5	2.8
Real Nonresidential Fixed Investment	3,520.3	3,554.4	3,589.1	3,626.0	3,662.7	3,694.9	3,725.1	3,752.7
% Ch , Annual Rate	4.0	3.9	4.0	4.2	4.1	3.6	3.3	3.0
Real Residential Fixed Investment	642.9	641.6	641.0	641.3	637.8	631.1	630.0	628.7
% Ch , Annual Rate	0.4	-0.8	-0.4	0.2	-2.2	-4.1	-0.7	-0.8
Real Personal Income	19,751.1	19,866.4	19,979.4	20,092.9	20,220.8	20,326.4	20,439.5	20,558.7
% Ch , Annual Rate	2.8	2.4	2.3	2.3	2.6	2.1	2.2	2.4
Real Per Capita Income (\$/Person)	58,216	58,477	58,732	58,986	59,283	59,513	59,764	60,032
% Ch , Annual Rate	2.3	1.8	1.8	1.7	2.0	1.6	1.7	1.8
Price and Wage Indexes								
PCE Price Index (2012=100)	129.9	130.6	131.3	132.0	132.7	133.4	134.1	134.7
% Ch , Annual Rate	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1
U.S. Consumer Price Index (1982-84=1.0)	3.068	3.084	3.101	3.118	3.137	3.154	3.171	3.189
% Ch , Annual Rate	2.2	2.2	2.2	2.2	2.4	2.2	2.2	2.2
Employment Cost Index (Dec. 2005=1.0)	1.814	1.831	1.849	1.866	1.884	1.901	1.919	1.937
% Ch , Annual Rate	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	29,639.1	29,954.9	30,269.8	30,586.5	30,895.2	31,206.1	31,537.2	31,880.2
% Ch , Annual Rate	4.4	4.3	4.3	4.3	4.1	4.1	4.3	4.4
Personal Income	25,660.5	25,946.0	26,230.6	26,517.4	26,828.9	27,108.6	27,400.3	27,701.9
% Ch , Annual Rate	5.0	4.5	4.5	4.4	4.8	4.2	4.4	4.5
Employment (Millions)								
U.S. Civilian Labor Force	170.7	171.0	171.2	171.4	171.7	171.9	172.2	172.4
Total U.S. Employment	163.6	163.8	164.0	164.2	164.3	164.5	164.7	164.9
Unemployment Rate (%)	4.14	4.18	4.21	4.24	4.29	4.32	4.35	4.36
Nonfarm Payroll Employment	155.75	155.85	155.94	156.03	156.11	156.19	156.28	156.40
% Ch, Annual Rate	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Manufacturing	12.40	12.37	12.33	12.30	12.27	12.23	12.18	12.13
% Ch, Annual Rate	-1.2	-1.1	-1.0	-1.0	-1.0	-1.2	-1.6	-1.7
Durable Manufacturing	7.81	7.79	7.77	7.75	7.73	7.71	7.68	7.64
% Ch, Annual Rate	-1.1	-1.0	-0.9	-0.9	-1.0	-1.3	-1.7	-1.7
Nondurable Manufacturing	4.59	4.58	4.56	4.55	4.54	4.52	4.51	4.49
% Ch, Annual Rate	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.5	-1.7
Construction	7.56	7.57	7.60	7.61	7.62	7.62	7.63	7.64
% Ch, Annual Rate	0.9	0.9	1.1	0.7	0.4	0.1	0.7	0.5
Service-Providing	135.13	135.25	135.36	135.47	135.58	135.69	135.81	135.98
% Ch, Annual Rate	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	68.1	67.7	67.3	67.0	66.7	66.4	66.3	66.1
Personal Saving/Disposable Income (%)	7.6	7.7	7.8	7.9	8.1	8.1	8.1	8.0
Auto Sales (Millions)	3.5	3.5	3.5	3.5	3.5	3.4	3.5	3.4
% Ch, Annual Rate	-2.6	-1.4	-2.9	-1.8	-1.5	-0.8	0.3	-1.2
Housing Starts (Millions)	1.285	1.272	1.261	1.248	1.235	1.220	1.213	1.207
% Ch, Annual Rate	-4.9	-4.1	-3.4	-3.9	-4.3	-4.7	-2.3	-1.8
Federal Budget Surplus (Billions)	-995.3	-1,014.4	-1,032.3	-1,076.4	-1,111.5	-1,129.0	-1,141.2	-1,181.9
Net Exports (Billions)	-779.7	-781.3	-783.3	-785.4	-787.4	-789.8	-794.3	-802.6
3-Month Treasury Bill Rate (%)	2.15	2.15	2.15	2.19	2.36	2.36	2.36	2.37
10-Year Treasury Note Yield (%)	3.07	3.10	3.12	3.14	3.16	3.17	3.18	3.20
Bond Index of 20 G.O. Munis. (%)	3.46	3.50	3.55	3.58	3.62	3.65	3.68	3.71
30-Year Fixed Mortgage Rate (%)	4.82	4.84	4.86	4.88	4.91	4.92	4.93	4.94

Table A1.3
Washington Economic Forecast Summary
Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	464.412	480.828	473.891	491.626	507.392	522.742	538.434	553.936
% Ch	6.4	3.5	-1.4	3.7	3.2	3.0	3.0	2.9
Real Wage and Salary Disb.	237.494	251.219	261.494	272.786	280.901	288.835	297.153	305.677
% Ch	2.8	5.8	4.1	4.3	3.0	2.8	2.9	2.9
Real Nonwage Income	226.919	229.609	212.397	218.840	226.491	233.907	241.281	248.260
% Ch	10.4	1.2	-7.5	3.0	3.5	3.3	3.2	2.9
Real Per Capita Income (\$/Person)	60,357	61,930	60,465	62,129	63,485	64,735	65,992	67,194
% Ch	5.3	2.6	-2.4	2.8	2.2	2.0	1.9	1.8
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.112	1.155	1.206	1.231	1.256	1.282	1.309	1.337
% Ch	1.2	3.9	4.4	2.0	2.1	2.1	2.1	2.1
Seattle Cons. Price Index (1982-84=1.0)	2.826	2.960	3.106	3.172	3.241	3.311	3.384	3.460
% Ch	1.7	4.7	5.0	2.1	2.2	2.1	2.2	2.3
Average Nonfarm Annual Wage	78,258	84,056	87,669	91,066	94,688	98,606	102,781	107,104
% Ch	9.9	7.4	4.3	3.9	4.0	4.1	4.2	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.32	27.97	29.17	30.60	31.85	33.08	34.32	35.58
% Ch	-2.9	-1.2	4.3	4.9	4.1	3.9	3.8	3.7
Current Dollar Income (Billions of Dollars)								
Personal Income	516.441	555.228	571.516	604.987	637.202	670.333	705.090	740.711
% Ch	7.6	7.5	2.9	5.9	5.3	5.2	5.2	5.1
Disposable Personal Income	458.665	487.409	494.632	522.864	550.898	580.742	612.281	644.227
% Ch	8.6	6.3	1.5	5.7	5.4	5.4	5.4	5.2
Per Capita Income (\$/Person)	67,118	71,510	72,920	76,454	79,726	83,011	86,417	89,849
% Ch	6.5	6.5	2.0	4.8	4.3	4.1	4.1	4.0
Employment (Thousands)								
Washington Civilian Labor Force	3,912.8	3,894.0	4,014.2	4,087.9	4,141.1	4,189.7	4,236.4	4,283.0
Total Washington Employment	3,584.0	3,691.8	3,851.3	3,922.5	3,961.6	3,997.3	4,035.5	4,075.3
Unemployment Rate (%)	8.41	5.20	4.06	4.05	4.34	4.59	4.74	4.85
Nonfarm Payroll Employment	3,286.4	3,363.8	3,506.7	3,594.3	3,633.2	3,663.5	3,693.1	3,723.3
% Ch	-5.3	2.4	4.2	2.5	1.1	0.8	0.8	0.8
Manufacturing	271.7	259.4	270.7	276.0	277.1	276.4	276.0	275.4
% Ch	-7.5	-4.5	4.4	2.0	0.4	-0.3	-0.1	-0.2
Durable Manufacturing	189.6	175.6	183.0	187.2	188.6	188.7	189.2	189.3
% Ch	-8.4	-7.3	4.2	2.3	0.7	0.1	0.2	0.1
Aerospace	80.0	67.9	71.1	73.7	74.4	74.4	74.6	75.2
% Ch	-9.6	-15.1	4.7	3.6	0.9	0.0	0.3	0.7
Nondurable Manufacturing	82.1	83.8	87.8	88.8	88.5	87.7	86.8	86.2
% Ch	-5.4	2.0	4.8	1.2	-0.3	-1.0	-1.0	-0.8
Construction	213.5	223.4	226.0	223.1	223.1	224.9	228.0	231.5
% Ch	-2.7	4.6	1.2	-1.3	0.0	0.8	1.4	1.5
Service-Providing	2,795.7	2,875.4	3,004.1	3,089.6	3,127.2	3,156.5	3,183.4	3,210.8
% Ch	-5.2	2.9	4.5	2.8	1.2	0.9	0.9	0.9
Software Publishers	75.6	78.9	81.9	83.0	84.5	85.7	86.6	87.6
% Ch	7.4	4.5	3.8	1.4	1.7	1.5	1.0	1.1
Electronic Shopping and Mail-Order	75.9	75.8	79.3	81.3	83.2	85.0	86.8	88.5
% Ch	19.5	-0.1	4.6	2.5	2.3	2.2	2.1	2.0
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	44.062	56.169	48.949	44.923	44.065	44.088	42.872	41.602
% Ch	-9.0	27.5	-12.9	-8.2	-1.9	0.1	-2.8	-3.0
Single-Family	23.044	24.922	24.992	23.498	23.761	24.037	23.622	23.175
% Ch	-1.1	8.1	0.3	-6.0	1.1	1.2	-1.7	-1.9
Multi-Family	21.018	31.247	23.957	21.425	20.305	20.050	19.250	18.428
% Ch	-16.3	48.7	-23.3	-10.6	-5.2	-1.3	-4.0	-4.3
30-Year Fixed Mortgage Rate (%)	3.12	2.95	3.66	4.29	4.55	4.72	4.85	4.92

Table A1.4
Washington Economic Forecast Summary
Forecast 2022 to 2027

	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	466.914	471.755	476.473	480.423	485.491	489.706	493.657	497.652
% Ch, Annual Rate	-1.9	4.2	4.1	3.4	4.3	3.5	3.3	3.3
Real Wage and Salary Disb.	256.089	260.279	263.259	266.348	269.430	271.797	273.838	276.081
% Ch, Annual Rate	2.7	6.7	4.7	4.8	4.7	3.6	3.0	3.3
Real Nonwage Income	210.825	211.476	213.214	214.075	216.061	217.909	219.819	221.572
% Ch, Annual Rate	-7.2	1.2	3.3	1.6	3.8	3.5	3.6	3.2
Real Per Capita Income (\$/Person)	59,784	60,266	60,726	61,084	61,580	61,964	62,312	62,661
% Ch, Annual Rate	-2.8	3.3	3.1	2.4	3.3	2.5	2.3	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.195	1.203	1.210	1.215	1.221	1.227	1.233	1.240
% Ch, Annual Rate	4.9	2.8	2.2	1.8	2.0	2.0	2.0	2.0
Seattle Cons. Price Index (1982-84=1.0)	3.084	3.100	3.114	3.127	3.147	3.164	3.181	3.198
% Ch, Annual Rate	4.9	2.1	1.8	1.7	2.5	2.2	2.2	2.2
Average Nonfarm Annual Wage	86,275	87,390	88,123	88,889	89,703	90,617	91,525	92,420
% Ch, Annual Rate	3.7	5.3	3.4	3.5	3.7	4.1	4.1	4.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.54	28.96	29.39	29.77	30.11	30.44	30.76	31.08
% Ch, Annual Rate	1.0	6.0	6.1	5.2	4.6	4.6	4.2	4.2
Current Dollar Income (Billions of Dollars)								
Personal Income	558.020	567.700	576.490	583.855	592.988	601.098	608.926	616.935
% Ch, Annual Rate	2.9	7.1	6.3	5.2	6.4	5.6	5.3	5.4
Disposable Personal Income	483.713	491.303	498.715	504.797	512.675	519.523	526.204	533.053
% Ch, Annual Rate	1.3	6.4	6.2	5.0	6.4	5.5	5.2	5.3
Per Capita Income (\$/Person)	71,449	72,523	73,473	74,236	75,215	76,059	76,861	77,681
% Ch, Annual Rate	2.0	6.1	5.3	4.2	5.4	4.6	4.3	4.3
Employment (Thousands)								
Washington Civilian Labor Force	3,980.8	4,004.5	4,025.5	4,045.9	4,066.4	4,081.4	4,094.6	4,109.3
Total Washington Employment	3,810.6	3,841.7	3,865.9	3,887.0	3,907.1	3,918.1	3,926.8	3,938.1
Unemployment Rate (%)	4.27	4.07	3.97	3.93	3.92	4.00	4.10	4.17
Nonfarm Payroll Employment	3,458.0	3,494.1	3,523.9	3,550.6	3,577.1	3,590.0	3,598.8	3,611.4
% Ch, Annual Rate	3.9	4.2	3.5	3.1	3.0	1.5	1.0	1.4
Manufacturing	266.6	270.1	272.0	274.1	275.0	275.8	276.4	276.8
% Ch, Annual Rate	5.1	5.4	2.8	3.2	1.3	1.1	0.9	0.6
Durable Manufacturing	179.9	182.7	183.7	185.5	186.1	187.0	187.6	188.0
% Ch, Annual Rate	5.0	6.4	2.2	4.1	1.3	1.9	1.3	0.8
Aerospace	69.3	70.7	71.8	72.6	73.2	73.6	73.9	74.1
% Ch, Annual Rate	4.4	8.2	6.4	4.2	3.4	2.1	2.1	1.1
Nondurable Manufacturing	86.7	87.4	88.3	88.6	88.9	88.8	88.8	88.8
% Ch, Annual Rate	5.2	3.3	4.0	1.5	1.4	-0.6	-0.1	0.3
Construction	228.0	226.4	225.3	224.3	224.1	223.2	222.0	223.1
% Ch, Annual Rate	3.5	-2.7	-1.9	-1.8	-0.4	-1.6	-2.2	2.0
Service-Providing	2,957.6	2,991.7	3,020.8	3,046.5	3,072.2	3,085.4	3,094.8	3,105.9
% Ch, Annual Rate	3.8	4.7	3.9	3.4	3.4	1.7	1.2	1.4
Software Publishers	81.4	81.6	82.2	82.4	82.7	82.8	83.1	83.5
% Ch, Annual Rate	4.4	1.1	2.8	1.1	1.5	0.6	1.5	1.7
Electronic Shopping and Mail-Order	78.5	79.1	79.6	80.1	80.6	81.1	81.6	82.0
% Ch, Annual Rate	1.7	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	51.212	49.870	48.041	46.672	45.863	45.097	44.418	44.313
% Ch, Annual Rate	-41.6	-10.1	-13.9	-10.9	-6.8	-6.5	-5.9	-0.9
Single-Family	24.850	25.711	25.080	24.328	23.845	23.370	23.245	23.531
% Ch, Annual Rate	37.0	14.6	-9.5	-11.5	-7.7	-7.7	-2.1	5.0
Multi-Family	26.362	24.159	22.961	22.344	22.018	21.727	21.173	20.782
% Ch, Annual Rate	-70.0	-29.5	-18.4	-10.3	-5.7	-5.2	-9.8	-7.2
30-Year Fixed Mortgage Rate (%)	3.46	3.47	3.74	3.96	4.13	4.27	4.35	4.42

Table A1.4 (continued)
Washington Economic Forecast Summary
 Forecast 2022 to 2027

	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	501.925	505.547	509.210	512.887	517.063	520.825	524.626	528.454
% Ch, Annual Rate	3.5	2.9	2.9	2.9	3.3	2.9	3.0	3.0
Real Wage and Salary Disb.	278.044	279.910	281.828	283.823	285.840	287.825	289.816	291.860
% Ch, Annual Rate	2.9	2.7	2.8	2.9	2.9	2.8	2.8	2.9
Real Nonwage Income	223.882	225.637	227.382	229.063	231.223	233.000	234.810	236.594
% Ch, Annual Rate	4.2	3.2	3.1	3.0	3.8	3.1	3.1	3.1
Real Per Capita Income (\$/Person)	63,042	63,337	63,634	63,928	64,282	64,582	64,885	65,190
% Ch, Annual Rate	2.5	1.9	1.9	1.9	2.2	1.9	1.9	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.246	1.253	1.259	1.265	1.272	1.279	1.286	1.292
% Ch, Annual Rate	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1
Seattle Cons. Price Index (1982-84=1.0)	3.216	3.233	3.250	3.267	3.284	3.302	3.320	3.338
% Ch, Annual Rate	2.2	2.2	2.1	2.1	2.1	2.2	2.2	2.3
Average Nonfarm Annual Wage	93,309	94,208	95,137	96,100	97,087	98,085	99,108	100,146
% Ch, Annual Rate	3.9	3.9	4.0	4.1	4.2	4.2	4.2	4.3
Avg. Hourly Earnings-Mfg. (\$/Hour)	31.39	31.69	32.00	32.30	32.61	32.92	33.23	33.54
% Ch, Annual Rate	4.1	3.9	3.9	3.8	3.9	3.9	3.9	3.7
Current Dollar Income (Billions of Dollars)								
Personal Income	625.511	633.209	641.055	649.034	657.798	666.070	674.471	682.992
% Ch, Annual Rate	5.7	5.0	5.0	5.1	5.5	5.1	5.1	5.2
Disposable Personal Income	540.578	547.345	554.273	561.395	569.353	576.863	584.503	592.251
% Ch, Annual Rate	5.8	5.1	5.2	5.2	5.8	5.4	5.4	5.4
Per Capita Income (\$/Person)	78,565	79,331	80,110	80,898	81,778	82,592	83,418	84,254
% Ch, Annual Rate	4.6	4.0	4.0	4.0	4.4	4.0	4.1	4.1
Employment (Thousands)								
Washington Civilian Labor Force	4,122.6	4,135.0	4,147.3	4,159.7	4,172.0	4,184.0	4,195.7	4,207.3
Total Washington Employment	3,948.2	3,957.0	3,966.0	3,975.2	3,984.1	3,992.8	4,001.5	4,011.0
Unemployment Rate (%)	4.23	4.31	4.37	4.43	4.51	4.57	4.63	4.67
Nonfarm Payroll Employment	3,621.3	3,629.2	3,637.0	3,645.1	3,652.9	3,660.2	3,666.8	3,674.1
% Ch, Annual Rate	1.1	0.9	0.9	0.9	0.9	0.8	0.7	0.8
Manufacturing	277.1	277.2	277.1	277.0	276.7	276.5	276.3	276.1
% Ch, Annual Rate	0.5	0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3
Durable Manufacturing	188.3	188.5	188.7	188.8	188.8	188.7	188.7	188.7
% Ch, Annual Rate	0.8	0.4	0.3	0.2	0.0	0.0	0.0	0.0
Aerospace	74.3	74.4	74.5	74.4	74.4	74.4	74.4	74.4
% Ch, Annual Rate	0.8	0.6	0.2	-0.1	-0.2	-0.1	0.0	0.2
Nondurable Manufacturing	88.8	88.7	88.5	88.2	88.0	87.8	87.6	87.3
% Ch, Annual Rate	-0.2	-0.5	-0.8	-1.1	-1.0	-0.9	-1.0	-1.1
Construction	223.4	223.1	222.9	223.2	224.0	224.6	225.1	225.9
% Ch, Annual Rate	0.6	-0.5	-0.5	0.6	1.4	1.2	0.9	1.4
Service-Providing	3,115.2	3,123.2	3,131.3	3,139.2	3,146.5	3,153.3	3,159.7	3,166.4
% Ch, Annual Rate	1.2	1.0	1.0	1.0	0.9	0.9	0.8	0.8
Software Publishers	83.9	84.3	84.7	85.0	85.4	85.7	85.9	86.1
% Ch, Annual Rate	2.0	2.0	1.6	1.6	1.7	1.4	1.1	1.0
Electronic Shopping and Mail-Order	82.5	83.0	83.4	83.9	84.3	84.8	85.2	85.6
% 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	44.272	43.967	43.995	44.027	44.307	44.257	44.005	43.782
% Ch, Annual Rate	-0.4	-2.7	0.3	0.3	2.6	-0.5	-2.3	-2.0
Single-Family	23.666	23.679	23.823	23.875	23.985	24.086	24.047	24.032
% Ch, Annual Rate	2.3	0.2	2.5	0.9	1.9	1.7	-0.6	-0.3
Multi-Family	20.605	20.288	20.172	20.152	20.322	20.171	19.958	19.750
% Ch, Annual Rate	-3.4	-6.0	-2.3	-0.4	3.4	-2.9	-4.2	-4.1
30-Year Fixed Mortgage Rate (%)	4.48	4.54	4.58	4.62	4.68	4.71	4.74	4.77

Table A1.4 (continued)
Washington Economic Forecast Summary
Forecast 2022 to 2027

	2026:1	2026:2	2026:3	2026:4	2027:1	2027:2	2027:3	2027:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	532.737	536.527	540.323	544.148	548.293	551.942	555.773	559.738
% Ch, Annual Rate	3.3	2.9	2.9	2.9	3.1	2.7	2.8	2.9
Real Wage and Salary Disb.	293.968	296.064	298.207	300.371	302.477	304.585	306.730	308.915
% Ch, Annual Rate	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.9
Real Nonwage Income	238.769	240.463	242.116	243.776	245.816	247.357	249.043	250.823
% Ch, Annual Rate	3.7	2.9	2.8	2.8	3.4	2.5	2.8	2.9
Real Per Capita Income (\$/Person)	65,549	65,845	66,140	66,436	66,769	67,040	67,331	67,636
% Ch, Annual Rate	2.2	1.8	1.8	1.8	2.0	1.6	1.7	1.8
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.299	1.306	1.313	1.320	1.327	1.334	1.341	1.347
% Ch, Annual Rate	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1
Seattle Cons. Price Index (1982-84=1.0)	3.356	3.375	3.393	3.412	3.432	3.451	3.470	3.489
% Ch, Annual Rate	2.2	2.2	2.2	2.2	2.4	2.2	2.2	2.2
Average Nonfarm Annual Wage	101,190	102,244	103,304	104,385	105,467	106,549	107,647	108,754
% Ch, Annual Rate	4.2	4.2	4.2	4.3	4.2	4.2	4.2	4.2
Avg. Hourly Earnings-Mfg. (\$/Hour)	33.85	34.16	34.48	34.80	35.11	35.42	35.74	36.06
% Ch, Annual Rate	3.7	3.8	3.8	3.7	3.7	3.6	3.6	3.6
Current Dollar Income (Billions of Dollars)								
Personal Income	692.129	700.719	709.379	718.134	727.473	736.105	745.046	754.221
% Ch, Annual Rate	5.5	5.1	5.0	5.0	5.3	4.8	4.9	5.0
Disposable Personal Income	600.591	608.351	616.154	624.028	632.461	640.158	648.096	656.192
% Ch, Annual Rate	5.8	5.3	5.2	5.2	5.5	5.0	5.1	5.1
Per Capita Income (\$/Person)	85,161	85,995	86,833	87,678	88,589	89,409	90,261	91,136
% Ch, Annual Rate	4.4	4.0	4.0	3.9	4.2	3.8	3.9	3.9
Employment (Thousands)								
Washington Civilian Labor Force	4,218.9	4,230.5	4,242.2	4,253.8	4,265.6	4,277.2	4,288.8	4,300.3
Total Washington Employment	4,020.6	4,030.4	4,040.6	4,050.6	4,060.3	4,070.1	4,080.1	4,090.7
Unemployment Rate (%)	4.70	4.73	4.75	4.78	4.81	4.84	4.87	4.87
Nonfarm Payroll Employment	3,681.5	3,689.0	3,697.1	3,704.9	3,712.3	3,719.6	3,726.9	3,734.6
% Ch, Annual Rate	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8
Manufacturing	276.0	276.0	276.0	276.0	276.0	275.7	275.3	274.7
% Ch, Annual Rate	-0.1	0.0	0.0	0.0	-0.1	-0.3	-0.7	-0.8
Durable Manufacturing	188.9	189.1	189.3	189.5	189.5	189.4	189.2	188.9
% Ch, Annual Rate	0.3	0.4	0.4	0.4	0.1	-0.2	-0.5	-0.6
Aerospace	74.5	74.5	74.7	74.8	75.0	75.1	75.2	75.3
% Ch, Annual Rate	0.3	0.5	0.7	0.9	0.8	0.7	0.6	0.4
Nondurable Manufacturing	87.1	86.9	86.8	86.6	86.4	86.3	86.1	85.8
% Ch, Annual Rate	-1.0	-0.9	-0.8	-0.8	-0.7	-0.6	-1.0	-1.2
Construction	226.6	227.4	228.5	229.5	230.3	230.9	231.9	232.7
% Ch, Annual Rate	1.3	1.3	2.1	1.7	1.3	1.1	1.7	1.4
Service-Providing	3,173.2	3,180.0	3,186.8	3,193.6	3,200.4	3,207.2	3,214.0	3,221.5
% Ch, Annual Rate	0.9	0.9	0.9	0.9	0.8	0.9	0.9	0.9
Software Publishers	86.3	86.5	86.8	87.0	87.2	87.5	87.8	88.1
% Ch, Annual Rate	1.0	1.0	1.0	0.9	1.2	1.2	1.3	1.2
Electronic Shopping and Mail-Order	86.1	86.5	87.0	87.4	87.9	88.3	88.8	89.2
% Ch, Annual Rate	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	43.366	43.008	42.717	42.397	42.052	41.682	41.449	41.226
% Ch, Annual Rate	-3.7	-3.3	-2.7	-3.0	-3.2	-3.5	-2.2	-2.1
Single-Family	23.815	23.648	23.566	23.461	23.334	23.183	23.125	23.057
% Ch, Annual Rate	-3.6	-2.8	-1.4	-1.8	-2.1	-2.6	-1.0	-1.2
Multi-Family	19.551	19.360	19.151	18.936	18.719	18.499	18.324	18.169
% Ch, Annual Rate	-4.0	-3.8	-4.3	-4.4	-4.5	-4.6	-3.7	-3.4
30-Year Fixed Mortgage Rate (%)	4.82	4.84	4.86	4.88	4.91	4.92	4.93	4.94

Table A2.1

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Nonfarm Payroll Employment	142.15	146.10	151.54	153.95	155.02	155.52	155.89	156.25
% Ch	-5.8	2.8	3.7	1.6	0.7	0.3	0.2	0.2
Manufacturing	12.17	12.35	12.65	12.70	12.67	12.51	12.35	12.20
% Ch	-5.1	1.5	2.5	0.4	-0.2	-1.3	-1.3	-1.2
Durable Manufacturing	7.57	7.68	7.89	7.97	7.98	7.88	7.78	7.69
% Ch	-5.8	1.4	2.8	1.0	0.1	-1.3	-1.2	-1.2
Wood Products	0.40	0.41	0.42	0.40	0.39	0.39	0.39	0.38
% Ch	-3.2	3.6	2.5	-5.7	-1.2	0.0	0.2	-3.2
Primary and Fabricated Metals	1.74	1.73	1.78	1.81	1.84	1.83	1.82	1.80
% Ch	-7.1	-0.3	2.9	1.5	1.5	-0.5	-0.7	-1.0
Computer and Electronic Products	1.06	1.06	1.07	1.08	1.09	1.09	1.09	1.08
% Ch	-1.1	-0.4	1.1	0.6	0.8	0.5	-0.2	-0.6
Machinery and Electrical Equipment	1.44	1.45	1.48	1.47	1.46	1.45	1.45	1.44
% Ch	-5.9	0.6	2.2	-0.4	-0.9	-0.8	-0.1	-0.3
Transportation Equipment	1.59	1.64	1.72	1.84	1.85	1.79	1.73	1.69
% Ch	-8.0	3.0	5.1	6.7	0.5	-3.0	-3.7	-2.3
Other Durables	1.34	1.39	1.41	1.37	1.35	1.32	1.31	1.30
% Ch	-5.5	3.1	2.0	-3.0	-1.4	-2.2	-1.0	-0.6
Nondurable Manufacturing	4.59	4.67	4.76	4.73	4.70	4.63	4.57	4.51
% Ch	-3.9	1.7	1.9	-0.5	-0.8	-1.4	-1.4	-1.2
Food Manufacturing	1.62	1.64	1.68	1.70	1.71	1.72	1.72	1.73
% Ch	-1.8	1.4	2.8	0.7	1.0	0.3	0.2	0.2
Paper and Paper Products	0.35	0.35	0.35	0.35	0.35	0.35	0.34	0.34
% Ch	-2.9	-1.7	1.3	-0.2	-0.2	-1.3	-1.4	-1.1
Other Nondurables	2.62	2.68	2.72	2.68	2.63	2.57	2.50	2.45
% Ch	-5.2	2.3	1.5	-1.4	-2.0	-2.5	-2.4	-2.2
Natural Resources and Mining	0.60	0.57	0.61	0.66	0.67	0.66	0.65	0.65
% Ch	-17.6	-5.7	8.4	7.4	1.7	-1.1	-1.2	-0.6
Construction	7.26	7.41	7.55	7.55	7.50	7.52	7.58	7.63
% Ch	-3.2	2.1	1.9	0.0	-0.6	0.2	0.9	0.6
Trade, Transportation, and Utilities	26.69	27.72	28.42	27.99	27.57	27.31	27.29	27.21
% Ch	-3.7	3.9	2.5	-1.5	-1.5	-0.9	-0.1	-0.3
Wholesale Trade	5.63	5.68	5.92	6.12	6.28	6.41	6.48	6.52
% Ch	-4.3	0.8	4.3	3.5	2.5	2.1	1.0	0.7
Retail Trade	14.87	15.41	15.45	14.71	14.02	13.50	13.33	13.17
% Ch	-4.7	3.6	0.3	-4.8	-4.7	-3.7	-1.3	-1.2
Trans., Warehousing, and Utilities	6.18	6.63	7.05	7.16	7.27	7.40	7.48	7.52
% Ch	-0.6	7.3	6.3	1.7	1.5	1.8	1.2	0.4
Information	2.72	2.83	2.93	2.96	2.99	3.08	3.11	3.13
% Ch	-5.0	4.0	3.6	0.8	1.2	3.1	0.8	0.8
Publishing Industries	0.77	0.79	0.80	0.79	0.79	0.78	0.76	0.74
% Ch	0.5	3.0	1.3	-1.5	-0.1	-0.9	-2.9	-2.4
Other Information	1.95	2.04	2.13	2.17	2.20	2.30	2.35	2.39
% Ch	-7.0	4.5	4.5	1.7	1.6	4.6	2.0	1.8
Financial Activities	8.70	8.78	8.95	8.92	8.95	8.99	8.93	8.85
% Ch	-0.6	0.8	2.0	-0.4	0.4	0.4	-0.7	-0.9
Professional and Business Services	20.31	21.24	22.29	22.64	22.83	22.96	23.10	23.22
% Ch	-4.5	4.6	4.9	1.6	0.8	0.6	0.6	0.5
Education and Health Services	23.27	23.67	24.05	24.12	24.55	24.76	24.90	25.11
% Ch	-3.7	1.7	1.6	0.3	1.8	0.9	0.6	0.8
Leisure and Hospitality	13.13	14.09	15.92	17.76	18.33	18.52	18.54	18.59
% Ch	-20.8	7.4	12.9	11.6	3.2	1.0	0.1	0.2
Other Services	5.33	5.45	5.76	5.87	5.99	6.12	6.23	6.34
% Ch	-9.6	2.4	5.6	1.8	2.0	2.2	1.8	1.8
Federal Government	2.93	2.89	2.88	2.88	2.88	2.88	2.88	2.88
% Ch	3.6	-1.6	-0.4	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.05	19.11	19.53	19.91	20.09	20.21	20.32	20.44
% Ch	-3.7	0.3	2.2	2.0	0.9	0.6	0.6	0.6

Table A2.2

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2022 to 2027

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Nonfarm Payroll Employment	150.04	151.19	152.11	152.84	153.39	153.81	154.15	154.44
% Ch, Annual Rate	3.9	3.1	2.5	1.9	1.5	1.1	0.9	0.8
Manufacturing	12.59	12.65	12.65	12.71	12.66	12.70	12.72	12.72
% Ch, Annual Rate	2.7	1.9	-0.1	2.1	-1.6	1.3	0.5	0.0
Durable Manufacturing	7.84	7.89	7.87	7.95	7.91	7.97	7.99	8.00
% Ch, Annual Rate	2.9	2.6	-0.9	4.0	-1.9	2.8	1.2	0.2
Wood Products	0.42	0.42	0.42	0.42	0.40	0.40	0.39	0.39
% Ch, Annual Rate	5.7	1.2	-3.3	-2.8	-12.2	-5.1	-4.4	-2.3
Primary and Fabricated Metals	1.78	1.79	1.78	1.79	1.79	1.81	1.82	1.83
% Ch, Annual Rate	4.5	2.1	-3.0	3.3	-1.1	4.9	3.5	1.9
Computer and Electronic Products	1.07	1.07	1.07	1.07	1.07	1.07	1.08	1.08
% Ch, Annual Rate	1.1	1.5	-1.8	0.8	0.6	1.2	1.2	0.8
Machinery and Electrical Equipment	1.48	1.49	1.47	1.48	1.47	1.48	1.48	1.47
% Ch, Annual Rate	3.8	3.0	-3.8	2.1	-3.5	2.6	0.0	-1.3
Transportation Equipment	1.67	1.69	1.73	1.80	1.81	1.84	1.85	1.85
% Ch, Annual Rate	-0.8	5.5	10.0	15.7	3.7	5.5	2.3	0.9
Other Durables	1.43	1.43	1.41	1.40	1.37	1.37	1.37	1.37
% Ch, Annual Rate	5.0	0.7	-6.3	-2.2	-6.7	0.2	-0.5	-1.1
Nondurable Manufacturing	4.75	4.76	4.77	4.76	4.75	4.73	4.73	4.72
% Ch, Annual Rate	2.3	0.7	1.2	-1.0	-1.1	-1.1	-0.5	-0.2
Food Manufacturing	1.67	1.67	1.70	1.70	1.69	1.69	1.69	1.70
% Ch, Annual Rate	4.4	0.3	6.7	-0.1	-0.8	-0.5	0.5	2.3
Paper and Paper Products	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
% Ch, Annual Rate	1.9	2.4	-0.6	-1.0	-0.4	-0.1	0.4	0.0
Other Nondurables	2.73	2.73	2.72	2.71	2.70	2.69	2.68	2.67
% Ch, Annual Rate	1.1	0.8	-1.8	-1.5	-1.4	-1.6	-1.3	-1.9
Natural Resources and Mining	0.59	0.61	0.62	0.63	0.65	0.66	0.66	0.67
% Ch, Annual Rate	3.8	15.7	8.6	7.4	8.2	6.0	4.9	4.0
Construction	7.53	7.54	7.56	7.57	7.57	7.56	7.54	7.53
% Ch, Annual Rate	2.0	0.5	1.3	0.1	0.3	-0.8	-0.7	-0.9
Trade, Transportation, and Utilities	28.39	28.62	28.56	28.11	27.95	28.08	27.95	27.99
% Ch, Annual Rate	4.4	3.2	-0.8	-6.2	-2.2	1.8	-1.8	0.6
Wholesale Trade	5.78	5.82	6.01	6.06	6.13	6.11	6.12	6.15
% Ch, Annual Rate	3.5	2.8	13.8	3.2	4.3	-1.1	0.5	2.2
Retail Trade	15.69	15.81	15.41	14.90	14.63	14.82	14.69	14.68
% Ch, Annual Rate	3.3	3.1	-9.9	-12.5	-7.0	5.4	-3.5	-0.2
Trans., Warehousing, and Utilities	6.92	6.98	7.14	7.14	7.20	7.15	7.14	7.16
% Ch, Annual Rate	7.6	3.9	9.1	0.3	3.0	-2.6	-0.4	1.1
Information	2.93	2.93	2.92	2.95	2.97	2.99	2.95	2.92
% Ch, Annual Rate	3.3	0.2	-0.5	4.1	1.8	3.5	-5.8	-3.6
Publishing Industries	0.80	0.80	0.80	0.80	0.80	0.79	0.79	0.78
% Ch, Annual Rate	2.2	-2.9	4.0	-2.9	-0.9	-4.6	-1.2	-0.3
Other Information	2.12	2.13	2.12	2.15	2.17	2.20	2.16	2.14
% Ch, Annual Rate	3.7	1.4	-2.1	6.8	2.9	6.6	-7.4	-4.8
Financial Activities	8.87	8.90	9.04	9.01	9.01	8.90	8.87	8.88
% Ch, Annual Rate	1.3	1.3	6.2	-1.1	0.0	-4.7	-1.4	0.1
Professional and Business Services	21.96	22.17	22.46	22.56	22.74	22.60	22.58	22.64
% Ch, Annual Rate	4.5	3.8	5.3	1.9	3.2	-2.5	-0.3	1.0
Education and Health Services	23.97	24.06	24.15	24.04	24.08	24.04	24.12	24.23
% Ch, Annual Rate	1.7	1.5	1.6	-1.9	0.7	-0.6	1.2	1.9
Leisure and Hospitality	15.38	15.63	15.83	16.82	17.19	17.66	18.08	18.11
% Ch, Annual Rate	13.2	6.7	5.3	27.4	9.1	11.3	9.9	0.7
Other Services	5.63	5.72	5.84	5.86	5.89	5.85	5.85	5.87
% Ch, Annual Rate	4.2	6.1	8.8	1.3	2.2	-2.8	0.3	1.5
Federal Government	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
% Ch, Annual Rate	-0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.32	19.49	19.60	19.70	19.80	19.90	19.95	20.00
% Ch, Annual Rate	1.8	3.7	2.3	2.1	2.0	2.0	1.0	1.0

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2022 to 2027

	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Nonfarm Payroll Employment	154.71	154.94	155.13	155.30	155.40	155.47	155.55	155.65
% Ch, Annual Rate	0.7	0.6	0.5	0.4	0.3	0.2	0.2	0.2
Manufacturing	12.71	12.69	12.66	12.62	12.58	12.53	12.48	12.44
% Ch, Annual Rate	-0.2	-0.7	-0.9	-1.2	-1.4	-1.5	-1.5	-1.5
Durable Manufacturing	8.00	7.98	7.97	7.95	7.92	7.89	7.86	7.83
% Ch, Annual Rate	0.0	-0.6	-0.7	-1.0	-1.4	-1.6	-1.5	-1.4
Wood Products	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
% Ch, Annual Rate	0.5	0.1	-0.3	0.1	0.3	0.2	-0.7	0.3
Primary and Fabricated Metals	1.84	1.84	1.84	1.84	1.84	1.83	1.83	1.82
% Ch, Annual Rate	1.3	0.1	0.1	-0.1	-0.7	-0.8	-0.9	-1.0
Computer and Electronic Products	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.09
% Ch, Annual Rate	0.7	0.6	0.9	0.9	0.7	0.3	0.0	-0.3
Machinery and Electrical Equipment	1.47	1.46	1.46	1.46	1.45	1.45	1.45	1.45
% Ch, Annual Rate	-1.4	-1.5	-0.8	-0.9	-0.9	-0.9	-0.4	-0.4
Transportation Equipment	1.85	1.85	1.85	1.83	1.82	1.80	1.78	1.77
% Ch, Annual Rate	0.5	-0.2	-1.1	-2.7	-3.6	-3.9	-3.4	-4.0
Other Durables	1.36	1.36	1.35	1.34	1.33	1.33	1.32	1.31
% Ch, Annual Rate	-1.3	-2.3	-2.1	-2.1	-2.2	-2.6	-2.5	-1.2
Nondurable Manufacturing	4.72	4.71	4.69	4.67	4.66	4.64	4.63	4.61
% Ch, Annual Rate	-0.7	-0.9	-1.2	-1.5	-1.4	-1.3	-1.4	-1.6
Food Manufacturing	1.71	1.71	1.72	1.72	1.72	1.72	1.72	1.72
% Ch, Annual Rate	1.4	0.8	0.5	0.3	0.1	0.3	0.4	0.1
Paper and Paper Products	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
% Ch, Annual Rate	-0.1	-0.1	-0.6	-1.3	-1.6	-1.5	-1.4	-1.6
Other Nondurables	2.65	2.64	2.62	2.61	2.59	2.57	2.56	2.54
% Ch, Annual Rate	-2.1	-2.2	-2.4	-2.6	-2.4	-2.4	-2.5	-2.7
Natural Resources and Mining	0.67	0.67	0.67	0.67	0.67	0.66	0.66	0.66
% Ch, Annual Rate	0.1	0.3	-0.3	-1.1	-1.4	-1.9	-1.2	-1.2
Construction	7.51	7.50	7.50	7.50	7.50	7.51	7.52	7.54
% Ch, Annual Rate	-0.8	-0.6	-0.2	0.1	0.2	0.4	0.6	1.0
Trade, Transportation, and Utilities	27.85	27.55	27.46	27.41	27.35	27.30	27.30	27.30
% Ch, Annual Rate	-2.0	-4.2	-1.4	-0.8	-0.9	-0.7	0.0	0.0
Wholesale Trade	6.21	6.27	6.30	6.34	6.38	6.40	6.42	6.44
% Ch, Annual Rate	3.9	3.8	2.3	2.2	2.5	1.5	1.3	1.0
Retail Trade	14.43	14.02	13.87	13.76	13.61	13.51	13.46	13.42
% Ch, Annual Rate	-6.7	-10.8	-4.3	-3.2	-4.2	-3.0	-1.3	-1.1
Trans., Warehousing, and Utilities	7.21	7.26	7.29	7.31	7.36	7.39	7.41	7.43
% Ch, Annual Rate	2.8	2.8	1.3	1.3	2.7	1.7	1.3	1.1
Information	2.94	2.98	3.01	3.03	3.06	3.09	3.09	3.09
% Ch, Annual Rate	2.6	5.7	4.1	3.0	4.1	3.0	0.9	0.2
Publishing Industries	0.79	0.79	0.79	0.79	0.79	0.78	0.78	0.77
% Ch, Annual Rate	1.1	1.1	-0.4	-0.5	-0.2	-1.3	-2.7	-3.1
Other Information	2.15	2.19	2.22	2.24	2.28	2.30	2.31	2.32
% Ch, Annual Rate	3.1	7.4	5.7	4.3	5.6	4.5	2.2	1.3
Financial Activities	8.92	8.96	8.97	8.98	8.99	8.99	8.99	8.98
% Ch, Annual Rate	1.8	1.8	0.5	0.6	0.5	0.1	-0.2	-0.3
Professional and Business Services	22.76	22.83	22.85	22.87	22.94	22.95	22.96	22.99
% Ch, Annual Rate	2.3	1.2	0.2	0.5	1.2	0.2	0.2	0.4
Education and Health Services	24.39	24.53	24.61	24.66	24.72	24.75	24.77	24.81
% Ch, Annual Rate	2.7	2.3	1.3	0.9	1.0	0.4	0.3	0.6
Leisure and Hospitality	18.11	18.30	18.43	18.50	18.47	18.52	18.55	18.56
% Ch, Annual Rate	0.0	4.2	2.9	1.6	-0.7	1.2	0.5	0.3
Other Services	5.93	5.98	6.01	6.04	6.07	6.10	6.13	6.16
% Ch, Annual Rate	3.4	3.6	2.1	1.8	2.5	2.0	1.9	1.8
Federal Government	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.04	20.08	20.11	20.14	20.17	20.20	20.22	20.25
% Ch, Annual Rate	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6

Table A2.2 (continued)

U.S. Nonagricultural Employment by Industry (Millions)

Forecast 2022 to 2027

	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
Nonfarm Payroll Employment	155.75	155.85	155.94	156.03	156.11	156.19	156.28	156.40
% Ch, Annual Rate	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.3
Manufacturing	12.40	12.37	12.33	12.30	12.27	12.23	12.18	12.13
% Ch, Annual Rate	-1.2	-1.1	-1.0	-1.0	-1.0	-1.2	-1.6	-1.7
Durable Manufacturing	7.81	7.79	7.77	7.75	7.73	7.71	7.68	7.64
% Ch, Annual Rate	-1.1	-1.0	-0.9	-0.9	-1.0	-1.3	-1.7	-1.7
Wood Products	0.39	0.39	0.39	0.39	0.39	0.38	0.38	0.37
% Ch, Annual Rate	1.5	0.8	-1.5	-1.6	-3.2	-4.5	-6.3	-4.6
Primary and Fabricated Metals	1.82	1.82	1.82	1.81	1.81	1.80	1.79	1.79
% Ch, Annual Rate	-0.6	-0.5	-0.5	-0.7	-0.8	-1.3	-1.7	-1.8
Computer and Electronic Products	1.09	1.09	1.09	1.09	1.09	1.08	1.08	1.08
% Ch, Annual Rate	-0.2	-0.3	-0.2	-0.2	-0.9	-0.9	-0.9	-0.9
Machinery and Electrical Equipment	1.45	1.45	1.45	1.45	1.45	1.45	1.44	1.44
% Ch, Annual Rate	0.0	0.2	0.3	0.2	0.1	-0.7	-1.4	-1.6
Transportation Equipment	1.75	1.73	1.72	1.71	1.70	1.69	1.68	1.67
% Ch, Annual Rate	-4.0	-3.7	-3.0	-2.5	-2.0	-1.9	-2.1	-2.2
Other Durables	1.31	1.31	1.31	1.31	1.31	1.30	1.30	1.30
% Ch, Annual Rate	-0.7	-0.2	-0.5	-0.7	-0.4	-0.8	-0.9	-0.8
Nondurable Manufacturing	4.59	4.58	4.56	4.55	4.54	4.52	4.51	4.49
% Ch, Annual Rate	-1.4	-1.3	-1.2	-1.2	-1.1	-1.1	-1.5	-1.7
Food Manufacturing	1.72	1.72	1.72	1.73	1.73	1.73	1.73	1.72
% Ch, Annual Rate	0.1	0.3	0.4	0.3	0.3	0.4	-0.2	-0.7
Paper and Paper Products	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
% Ch, Annual Rate	-1.4	-1.2	-1.0	-1.1	-0.7	-0.9	-1.5	-1.9
Other Nondurables	2.53	2.51	2.50	2.48	2.47	2.45	2.44	2.43
% Ch, Annual Rate	-2.4	-2.4	-2.3	-2.3	-2.1	-2.1	-2.3	-2.4
Natural Resources and Mining	0.66	0.65	0.65	0.65	0.65	0.65	0.65	0.65
% Ch, Annual Rate	-1.3	-1.0	-0.9	-0.9	-0.7	-0.3	-0.3	-0.1
Construction	7.56	7.57	7.60	7.61	7.62	7.62	7.63	7.64
% Ch, Annual Rate	0.9	0.9	1.1	0.7	0.4	0.1	0.7	0.5
Trade, Transportation, and Utilities	27.30	27.30	27.29	27.29	27.25	27.23	27.21	27.16
% Ch, Annual Rate	0.0	0.0	0.0	-0.1	-0.5	-0.3	-0.4	-0.6
Wholesale Trade	6.46	6.47	6.48	6.50	6.51	6.53	6.53	6.52
% Ch, Annual Rate	1.1	0.8	0.7	0.8	1.2	0.9	-0.1	-0.5
Retail Trade	13.38	13.35	13.32	13.28	13.22	13.19	13.16	13.13
% Ch, Annual Rate	-1.3	-0.9	-0.9	-1.2	-1.8	-1.1	-0.9	-0.9
Trans., Warehousing, and Utilities	7.46	7.48	7.49	7.51	7.52	7.52	7.52	7.51
% Ch, Annual Rate	1.3	1.0	0.9	1.0	0.3	0.0	0.1	-0.3
Information	3.10	3.10	3.11	3.12	3.13	3.14	3.13	3.13
% Ch, Annual Rate	0.4	0.7	1.0	0.6	1.7	0.8	-0.2	-0.7
Publishing Industries	0.77	0.76	0.76	0.75	0.75	0.74	0.74	0.73
% Ch, Annual Rate	-2.9	-3.0	-3.1	-3.3	-2.0	-2.1	-1.9	-2.0
Other Information	2.33	2.34	2.36	2.37	2.38	2.39	2.40	2.39
% Ch, Annual Rate	1.6	2.0	2.4	1.8	2.9	1.7	0.3	-0.3
Financial Activities	8.97	8.94	8.91	8.90	8.88	8.86	8.84	8.83
% Ch, Annual Rate	-0.5	-1.4	-1.1	-0.9	-0.7	-0.9	-0.7	-0.8
Professional and Business Services	23.04	23.09	23.12	23.16	23.18	23.19	23.20	23.31
% Ch, Annual Rate	1.0	0.7	0.6	0.6	0.5	0.1	0.2	2.0
Education and Health Services	24.85	24.89	24.92	24.96	25.01	25.07	25.14	25.19
% Ch, Annual Rate	0.7	0.6	0.5	0.7	0.9	1.0	1.1	0.8
Leisure and Hospitality	18.53	18.54	18.55	18.55	18.55	18.57	18.61	18.62
% Ch, Annual Rate	-0.6	0.2	0.2	0.0	0.0	0.5	0.7	0.3
Other Services	6.19	6.22	6.24	6.27	6.30	6.33	6.36	6.38
% Ch, Annual Rate	2.0	1.7	1.7	1.7	2.1	1.8	2.0	1.5
Federal Government	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.28	20.31	20.34	20.37	20.39	20.42	20.45	20.48
% Ch, Annual Rate	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5

Table A2.3

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Nonfarm Payroll Employment	3,286.4	3,363.8	3,506.7	3,594.3	3,633.2	3,663.5	3,693.1	3,723.3
% Ch	-5.3	2.4	4.2	2.5	1.1	0.8	0.8	0.8
Manufacturing	271.7	259.4	270.7	276.0	277.1	276.4	276.0	275.4
% Ch	-7.5	-4.5	4.4	2.0	0.4	-0.3	-0.1	-0.2
Durable Manufacturing	189.6	175.6	183.0	187.2	188.6	188.7	189.2	189.3
% Ch	-8.4	-7.3	4.2	2.3	0.7	0.1	0.2	0.1
Wood Products	12.5	13.3	13.9	13.2	12.7	12.4	12.1	11.5
% Ch	-3.4	6.8	4.4	-5.3	-3.4	-2.4	-2.2	-5.1
Primary and Fabricated Metals	24.3	22.7	23.9	24.8	25.2	25.2	25.0	24.8
% Ch	-9.6	-6.5	5.3	3.6	1.8	-0.3	-0.6	-0.8
Computer and Electronic Products	18.9	17.7	18.3	19.1	19.6	20.0	20.2	20.2
% Ch	-4.8	-6.3	3.4	4.1	2.7	2.2	0.9	0.1
Machinery and Electrical Equipment	19.2	19.4	20.5	21.4	21.7	22.1	22.7	23.3
% Ch	-9.1	0.6	6.2	4.0	1.5	1.8	3.0	2.7
Aerospace	80.0	67.9	71.1	73.7	74.4	74.4	74.6	75.2
% Ch	-9.6	-15.1	4.7	3.6	0.9	0.0	0.3	0.7
Other Transportation Equip.	9.0	9.1	9.3	9.2	9.0	8.7	8.5	8.2
% Ch	-6.8	0.4	2.9	-1.7	-2.1	-2.8	-3.0	-3.5
Other Durables	25.6	25.6	25.8	25.9	26.0	26.0	26.0	26.1
% Ch	-8.0	-0.2	1.1	0.4	0.2	0.0	0.1	0.2
Nondurable Manufacturing	82.1	83.8	87.8	88.8	88.5	87.7	86.8	86.2
% Ch	-5.4	2.0	4.8	1.2	-0.3	-1.0	-1.0	-0.8
Food Manufacturing	37.8	39.0	41.4	41.8	41.8	41.5	41.2	40.9
% Ch	-4.1	3.4	6.1	0.9	0.0	-0.7	-0.8	-0.8
Paper and Paper Products	7.5	7.4	7.5	7.5	7.4	7.3	7.1	6.9
% Ch	-3.1	-1.7	1.6	0.1	-1.2	-2.4	-2.6	-2.3
Other Nondurables	36.8	37.3	38.8	39.5	39.3	38.9	38.6	38.4
% Ch	-7.1	1.4	4.1	1.7	-0.5	-1.0	-0.9	-0.5
Natural Resources and Mining	5.6	5.7	5.8	5.7	5.7	5.8	5.7	5.7
% Ch	-5.6	2.7	2.1	-2.7	0.5	1.1	-0.2	-1.4
Construction	213.5	223.4	226.0	223.1	223.1	224.9	228.0	231.5
% Ch	-2.7	4.6	1.2	-1.3	0.0	0.8	1.4	1.5
Trade, Transportation, and Utilities	629.8	652.4	668.4	663.5	658.3	656.4	659.9	662.5
% Ch	-2.1	3.6	2.5	-0.7	-0.8	-0.3	0.5	0.4
Wholesale Trade	131.0	134.4	140.1	145.2	149.7	153.7	156.1	158.3
% Ch	-3.9	2.6	4.3	3.6	3.1	2.7	1.6	1.4
Retail Trade	386.7	399.2	403.7	391.2	379.8	371.7	371.0	370.5
% Ch	-1.0	3.2	1.1	-3.1	-2.9	-2.1	-0.2	-0.1
Electronic Shopping and Mail-Order	75.9	75.8	79.3	81.3	83.2	85.0	86.8	88.5
% Ch	19.5	-0.1	4.6	2.5	2.3	2.2	2.1	2.0
Other Retail Trade	310.8	323.4	324.4	309.9	296.6	286.7	284.2	281.9
% Ch	-4.9	4.0	0.3	-4.5	-4.3	-3.3	-0.9	-0.8
Trans., Warehousing, and Utilities	112.1	118.8	124.6	127.1	128.8	131.1	132.8	133.7
% Ch	-3.7	6.0	4.9	2.0	1.4	1.8	1.3	0.7
Information	149.0	158.3	166.3	168.8	172.4	176.5	177.8	179.5
% Ch	3.1	6.3	5.0	1.5	2.1	2.4	0.8	0.9
Software Publishers	75.6	78.9	81.9	83.0	84.5	85.7	86.6	87.6
% Ch	7.4	4.5	3.8	1.4	1.7	1.5	1.0	1.1
Other Publishing Industries	4.1	4.0	4.0	3.6	3.3	3.0	2.5	2.0
% Ch	-14.6	-3.9	-0.1	-9.8	-6.7	-9.7	-17.1	-18.7
Other Information	69.3	75.4	80.4	82.2	84.6	87.7	88.7	89.8
% Ch	0.0	8.8	6.6	2.2	2.9	3.7	1.1	1.2
Financial Activities	158.4	160.4	163.8	162.3	162.9	163.3	161.9	160.2
% Ch	-1.3	1.2	2.1	-0.9	0.4	0.3	-0.9	-1.1
Professional and Business Services	425.0	445.5	466.4	477.1	484.1	490.1	496.4	502.5
% Ch	-2.2	4.8	4.7	2.3	1.5	1.2	1.3	1.2
Education and Health Services	488.5	499.5	507.3	516.7	527.7	535.3	541.7	549.3
% Ch	-2.8	2.3	1.6	1.8	2.1	1.4	1.2	1.4
Leisure and Hospitality	264.2	279.2	326.2	371.9	382.3	386.8	388.8	391.2
% Ch	-23.9	5.7	16.8	14.0	2.8	1.2	0.5	0.6
Other Services	118.7	120.5	127.1	133.2	135.4	137.7	139.9	142.2
% Ch	-8.2	1.5	5.5	4.8	1.7	1.7	1.6	1.6
Federal Government	78.5	76.7	75.7	76.0	76.3	76.6	76.9	77.2
% Ch	3.6	-2.3	-1.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	483.5	482.7	503.0	520.1	527.9	533.7	540.0	546.3
% Ch	-5.5	-0.2	4.2	3.4	1.5	1.1	1.2	1.2

Table A2.4

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2022 to 2027

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Nonfarm Payroll Employment	3,458.0	3,494.1	3,523.9	3,550.6	3,577.1	3,590.0	3,598.8	3,611.4
% Ch, Annual Rate	3.9	4.2	3.5	3.1	3.0	1.5	1.0	1.4
Manufacturing	266.6	270.1	272.0	274.1	275.0	275.8	276.4	276.8
% Ch, Annual Rate	5.1	5.4	2.8	3.2	1.3	1.1	0.9	0.6
Durable Manufacturing	179.9	182.7	183.7	185.5	186.1	187.0	187.6	188.0
% Ch, Annual Rate	5.0	6.4	2.2	4.1	1.3	1.9	1.3	0.8
Wood Products	13.9	14.0	13.9	13.8	13.5	13.2	13.0	12.9
% Ch, Annual Rate	8.9	1.8	-2.2	-1.7	-10.0	-6.6	-6.1	-4.3
Primary and Fabricated Metals	23.6	23.9	23.9	24.3	24.4	24.7	24.9	25.1
% Ch, Annual Rate	8.9	5.0	-0.6	6.6	1.7	5.5	3.9	2.6
Computer and Electronic Products	18.0	18.3	18.3	18.6	18.8	19.0	19.1	19.3
% Ch, Annual Rate	7.5	7.1	0.8	5.6	5.3	3.3	3.3	2.7
Machinery and Electrical Equipment	20.0	20.6	20.6	21.0	21.0	21.4	21.5	21.6
% Ch, Annual Rate	5.1	10.8	0.1	9.1	0.5	6.6	2.7	0.8
Aerospace	69.3	70.7	71.8	72.6	73.2	73.6	73.9	74.1
% Ch, Annual Rate	4.4	8.2	6.4	4.2	3.4	2.1	2.1	1.1
Other Transportation Equip.	9.2	9.3	9.4	9.3	9.3	9.2	9.1	9.1
% Ch, Annual Rate	3.1	4.5	0.5	-0.8	-1.7	-4.3	-3.7	-2.2
Other Durables	25.7	25.9	25.8	25.9	25.9	25.9	25.9	25.9
% Ch, Annual Rate	-0.1	2.1	-0.8	1.7	0.0	0.1	-0.1	0.3
Nondurable Manufacturing	86.7	87.4	88.3	88.6	88.9	88.8	88.8	88.8
% Ch, Annual Rate	5.2	3.3	4.0	1.5	1.4	-0.6	-0.1	0.3
Food Manufacturing	40.9	41.0	41.8	41.9	41.9	41.7	41.7	41.8
% Ch, Annual Rate	6.5	1.3	7.3	0.9	0.2	-1.4	-0.5	1.2
Paper and Paper Products	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
% Ch, Annual Rate	-0.5	3.8	0.4	-0.1	0.6	-1.1	-0.6	-1.0
Other Nondurables	38.3	38.9	39.0	39.2	39.5	39.5	39.5	39.5
% Ch, Annual Rate	5.1	5.4	1.1	2.4	2.9	0.3	0.4	-0.3
Natural Resources and Mining	5.9	5.9	5.8	5.7	5.7	5.7	5.6	5.6
% Ch, Annual Rate	6.0	0.6	-5.1	-4.3	-1.3	-3.9	-1.9	0.1
Construction	228.0	226.4	225.3	224.3	224.1	223.2	222.0	223.1
% Ch, Annual Rate	3.5	-2.7	-1.9	-1.8	-0.4	-1.6	-2.2	2.0
Trade, Transportation, and Utilities	667.0	672.3	671.2	663.1	661.0	664.8	663.1	665.1
% Ch, Annual Rate	4.0	3.3	-0.7	-4.8	-1.3	2.4	-1.1	1.2
Wholesale Trade	137.2	137.9	142.0	143.4	145.0	144.7	145.0	146.0
% Ch, Annual Rate	4.4	2.2	12.3	3.9	4.5	-0.9	1.0	2.9
Retail Trade	407.4	410.8	403.2	393.3	388.4	393.3	391.3	391.9
% Ch, Annual Rate	3.6	3.4	-7.2	-9.4	-4.9	5.1	-2.0	0.6
Electronic Shopping and Mail-Order	78.5	79.1	79.6	80.1	80.6	81.1	81.6	82.0
% Ch	1.7	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	328.9	331.8	323.6	313.2	307.8	312.2	309.7	309.9
% Ch	4.1	3.5	-9.5	-12.2	-6.7	5.8	-3.1	0.2
Trans., Warehousing, and Utilities	122.4	123.6	126.1	126.4	127.6	126.9	126.8	127.2
% Ch, Annual Rate	4.7	3.9	8.3	1.1	3.7	-2.1	-0.4	1.3
Information	166.0	166.1	165.9	167.3	167.9	169.2	168.9	169.3
% Ch, Annual Rate	7.1	0.3	-0.4	3.3	1.6	3.0	-0.7	1.0
Software Publishers	81.4	81.6	82.2	82.4	82.7	82.8	83.1	83.5
% Ch, Annual Rate	4.4	1.1	2.8	1.1	1.5	0.6	1.5	1.7
Other Publishing Industries	4.1	3.9	4.0	3.8	3.8	3.6	3.5	3.4
% Ch, Annual Rate	3.2	-12.4	4.2	-12.7	-8.3	-17.5	-9.4	-7.2
Other Information	80.5	80.5	79.8	81.0	81.5	82.7	82.2	82.4
% Ch, Annual Rate	10.1	0.2	-3.8	6.6	2.1	6.5	-2.5	0.7
Financial Activities	162.5	162.8	165.3	164.5	164.4	162.1	161.2	161.4
% Ch, Annual Rate	1.4	0.8	6.3	-1.8	-0.3	-5.6	-2.0	0.3
Professional and Business Services	459.0	463.7	469.8	473.0	477.4	476.0	476.6	478.5
% Ch, Annual Rate	3.8	4.1	5.4	2.7	3.8	-1.2	0.5	1.6
Education and Health Services	501.9	506.0	510.3	511.1	514.6	514.9	517.1	520.0
% Ch, Annual Rate	0.5	3.3	3.4	0.7	2.8	0.2	1.7	2.3
Leisure and Hospitality	308.1	318.4	328.0	350.1	362.4	370.1	377.0	377.9
% Ch, Annual Rate	7.7	14.1	12.6	29.8	14.8	8.8	7.7	1.0
Other Services	123.4	125.8	128.5	130.6	132.7	132.9	133.3	133.9
% Ch, Annual Rate	1.7	8.1	8.6	6.7	6.8	0.6	1.3	1.5
Federal Government	75.6	75.6	75.7	75.8	75.9	75.9	76.0	76.1
% Ch, Annual Rate	-3.2	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	494.1	500.9	506.1	511.0	515.9	519.4	521.6	523.7
% Ch, Annual Rate	5.9	5.6	4.2	3.9	3.9	2.8	1.7	1.7

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2022 to 2027

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Nonfarm Payroll Employment	3,621.3	3,629.2	3,637.0	3,645.1	3,652.9	3,660.2	3,666.8	3,674.1
% Ch, Annual Rate	1.1	0.9	0.9	0.9	0.9	0.8	0.7	0.8
Manufacturing	277.1	277.2	277.1	277.0	276.7	276.5	276.3	276.1
% Ch, Annual Rate	0.5	0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3
Durable Manufacturing	188.3	188.5	188.7	188.8	188.8	188.7	188.7	188.7
% Ch, Annual Rate	0.8	0.4	0.3	0.2	0.0	0.0	0.0	0.0
Wood Products	12.8	12.8	12.7	12.6	12.5	12.5	12.4	12.3
% Ch, Annual Rate	-2.0	-2.3	-2.7	-2.3	-2.2	-2.2	-3.0	-2.1
Primary and Fabricated Metals	25.2	25.2	25.2	25.3	25.2	25.2	25.1	25.1
% Ch, Annual Rate	1.8	0.3	0.2	0.1	-0.5	-0.7	-0.8	-0.9
Computer and Electronic Products	19.4	19.5	19.6	19.8	19.9	20.0	20.1	20.1
% Ch, Annual Rate	2.5	2.4	2.8	2.9	2.5	1.8	1.3	0.7
Machinery and Electrical Equipment	21.6	21.6	21.7	21.8	21.9	22.0	22.1	22.3
% Ch, Annual Rate	0.6	0.7	1.7	1.7	1.7	1.7	2.4	2.5
Aerospace	74.3	74.4	74.5	74.4	74.4	74.4	74.4	74.4
% Ch, Annual Rate	0.8	0.6	0.2	-0.1	-0.2	-0.1	0.0	0.2
Other Transportation Equip.	9.0	9.0	9.0	8.9	8.8	8.8	8.7	8.6
% Ch, Annual Rate	-1.7	-0.5	-2.2	-2.7	-3.2	-3.3	-3.2	-2.8
Other Durables	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
% Ch, Annual Rate	0.7	0.0	-0.1	-0.1	0.0	0.0	0.0	-0.1
Nondurable Manufacturing	88.8	88.7	88.5	88.2	88.0	87.8	87.6	87.3
% Ch, Annual Rate	-0.2	-0.5	-0.8	-1.1	-1.0	-0.9	-1.0	-1.1
Food Manufacturing	41.8	41.8	41.8	41.7	41.6	41.5	41.5	41.4
% Ch, Annual Rate	0.3	-0.2	-0.5	-0.7	-0.9	-0.7	-0.6	-0.9
Paper and Paper Products	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2
% Ch, Annual Rate	-1.1	-1.2	-1.7	-2.4	-2.8	-2.7	-2.6	-2.9
Other Nondurables	39.5	39.4	39.3	39.2	39.1	39.0	38.9	38.8
% Ch, Annual Rate	-0.7	-0.8	-1.1	-1.2	-0.9	-0.9	-1.1	-1.0
Natural Resources and Mining	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8
% Ch, Annual Rate	1.7	1.9	0.9	1.5	1.8	1.0	-0.3	0.5
Construction	223.4	223.1	222.9	223.2	224.0	224.6	225.1	225.9
% Ch, Annual Rate	0.6	-0.5	-0.5	0.6	1.4	1.2	0.9	1.4
Trade, Transportation, and Utilities	662.9	657.5	656.4	656.2	655.8	655.7	656.7	657.6
% Ch, Annual Rate	-1.3	-3.2	-0.7	-0.1	-0.2	-0.1	0.6	0.5
Wholesale Trade	147.7	149.3	150.4	151.4	152.6	153.4	154.1	154.7
% Ch, Annual Rate	4.5	4.6	2.8	2.7	3.2	2.2	1.8	1.5
Retail Trade	387.3	379.5	376.9	375.3	372.9	371.4	371.2	371.1
% Ch, Annual Rate	-4.6	-7.9	-2.7	-1.7	-2.5	-1.6	-0.2	-0.1
Electronic Shopping and Mail-Order	82.5	83.0	83.4	83.9	84.3	84.8	85.2	85.6
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	304.8	296.5	293.5	291.4	288.6	286.7	286.0	285.5
% Ch	-6.4	-10.5	-4.0	-2.8	-3.9	-2.6	-0.9	-0.8
Trans., Warehousing, and Utilities	128.0	128.7	129.1	129.5	130.3	130.9	131.4	131.8
% Ch, Annual Rate	2.5	2.4	1.2	1.3	2.6	1.7	1.4	1.2
Information	170.2	171.9	173.2	174.2	175.5	176.5	176.9	177.0
% Ch, Annual Rate	2.3	4.1	3.0	2.2	3.1	2.4	0.8	0.3
Software Publishers	83.9	84.3	84.7	85.0	85.4	85.7	85.9	86.1
% Ch, Annual Rate	2.0	2.0	1.6	1.6	1.7	1.4	1.1	1.0
Other Publishing Industries	3.4	3.4	3.3	3.2	3.2	3.1	3.0	2.8
% Ch, Annual Rate	-3.4	-3.5	-7.9	-8.3	-7.6	-10.8	-15.4	-17.0
Other Information	82.9	84.2	85.2	85.9	87.0	87.8	88.0	88.1
% Ch, Annual Rate	2.7	6.6	4.8	3.3	4.9	3.8	1.2	0.3
Financial Activities	162.2	162.9	163.0	163.3	163.5	163.5	163.3	163.1
% Ch, Annual Rate	2.1	1.8	0.2	0.6	0.6	0.0	-0.4	-0.5
Professional and Business Services	481.6	483.7	484.8	486.2	488.3	489.4	490.6	492.0
% Ch, Annual Rate	2.6	1.8	0.9	1.2	1.7	0.9	0.9	1.2
Education and Health Services	523.7	526.9	529.2	531.1	533.1	534.5	535.9	537.5
% Ch, Annual Rate	2.8	2.5	1.7	1.5	1.5	1.1	1.0	1.2
Leisure and Hospitality	378.3	381.5	383.9	385.5	385.3	386.6	387.4	388.0
% Ch, Annual Rate	0.4	3.5	2.5	1.6	-0.1	1.3	0.8	0.6
Other Services	134.5	135.2	135.7	136.3	136.9	137.4	138.0	138.5
% Ch, Annual Rate	2.0	2.0	1.7	1.6	1.8	1.6	1.6	1.6
Federal Government	76.2	76.2	76.3	76.4	76.5	76.5	76.6	76.7
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	525.6	527.2	528.7	530.1	531.6	533.0	534.4	535.9
% Ch, Annual Rate	1.5	1.2	1.1	1.1	1.1	1.1	1.1	1.2

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2022 to 2027

	2026:1	2026:2	2026:3	2026:4	2027:1	2027:2	2027:3	2027:4
Nonfarm Payroll Employment	3,681.5	3,689.0	3,697.1	3,704.9	3,712.3	3,719.6	3,726.9	3,734.6
% Ch, Annual Rate	0.8	0.8	0.9	0.8	0.8	0.8	0.8	0.8
Manufacturing	276.0	276.0	276.0	276.0	276.0	275.7	275.3	274.7
% Ch, Annual Rate	-0.1	0.0	0.0	0.0	-0.1	-0.3	-0.7	-0.8
Durable Manufacturing	188.9	189.1	189.3	189.5	189.5	189.4	189.2	188.9
% Ch, Annual Rate	0.3	0.4	0.4	0.4	0.1	-0.2	-0.5	-0.6
Wood Products	12.3	12.2	12.1	12.0	11.8	11.6	11.4	11.2
% Ch, Annual Rate	-1.1	-1.8	-3.7	-3.8	-5.1	-6.3	-7.8	-6.4
Primary and Fabricated Metals	25.0	25.0	25.0	25.0	24.9	24.9	24.8	24.6
% Ch, Annual Rate	-0.5	-0.4	-0.3	-0.5	-0.7	-1.2	-1.6	-1.8
Computer and Electronic Products	20.1	20.2	20.2	20.3	20.3	20.2	20.2	20.2
% Ch, Annual Rate	0.8	0.8	0.8	0.9	-0.3	-0.3	-0.3	-0.3
Machinery and Electrical Equipment	22.4	22.6	22.8	23.0	23.2	23.3	23.4	23.4
% Ch, Annual Rate	3.2	3.4	3.5	3.4	3.2	2.1	1.1	0.7
Aerospace	74.5	74.5	74.7	74.8	75.0	75.1	75.2	75.3
% Ch, Annual Rate	0.3	0.5	0.7	0.9	0.8	0.7	0.6	0.4
Other Transportation Equip.	8.6	8.5	8.4	8.4	8.3	8.2	8.1	8.0
% Ch, Annual Rate	-2.9	-2.9	-3.0	-3.4	-3.7	-3.9	-3.7	-3.7
Other Durables	26.0	26.0	26.0	26.0	26.0	26.1	26.1	26.1
% Ch, Annual Rate	0.2	0.2	0.3	0.3	0.3	0.1	0.1	0.2
Nondurable Manufacturing	87.1	86.9	86.8	86.6	86.4	86.3	86.1	85.8
% Ch, Annual Rate	-1.0	-0.9	-0.8	-0.8	-0.7	-0.6	-1.0	-1.2
Food Manufacturing	41.3	41.2	41.2	41.1	41.0	40.9	40.8	40.6
% Ch, Annual Rate	-0.9	-0.7	-0.6	-0.7	-0.7	-0.6	-1.2	-1.6
Paper and Paper Products	7.1	7.1	7.0	7.0	7.0	6.9	6.9	6.8
% Ch, Annual Rate	-2.6	-2.4	-2.2	-2.3	-1.9	-2.1	-2.8	-3.2
Other Nondurables	38.7	38.6	38.6	38.5	38.5	38.4	38.4	38.3
% Ch, Annual Rate	-0.8	-0.8	-0.7	-0.7	-0.4	-0.3	-0.4	-0.5
Natural Resources and Mining	5.8	5.7	5.7	5.7	5.7	5.7	5.6	5.6
% Ch, Annual Rate	-0.2	-1.1	-0.7	-0.2	-1.5	-1.5	-3.0	-2.6
Construction	226.6	227.4	228.5	229.5	230.3	230.9	231.9	232.7
% Ch, Annual Rate	1.3	1.3	2.1	1.7	1.3	1.1	1.7	1.4
Trade, Transportation, and Utilities	658.4	659.4	660.4	661.3	661.6	662.4	662.9	663.1
% Ch, Annual Rate	0.5	0.6	0.6	0.5	0.2	0.4	0.3	0.2
Wholesale Trade	155.3	155.8	156.4	156.9	157.6	158.3	158.6	158.7
% Ch, Annual Rate	1.7	1.4	1.4	1.5	1.8	1.6	0.7	0.4
Retail Trade	370.9	371.0	371.1	371.0	370.4	370.4	370.5	370.6
% Ch, Annual Rate	-0.2	0.1	0.1	-0.1	-0.6	0.0	0.1	0.1
Electronic Shopping and Mail-Order	86.1	86.5	87.0	87.4	87.9	88.3	88.8	89.2
% Ch	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Other Retail Trade	284.8	284.5	284.1	283.5	282.5	282.1	281.8	281.4
% Ch	-0.9	-0.5	-0.5	-0.8	-1.4	-0.7	-0.5	-0.5
Trans., Warehousing, and Utilities	132.2	132.6	133.0	133.4	133.6	133.7	133.8	133.8
% Ch, Annual Rate	1.4	1.2	1.1	1.2	0.6	0.4	0.4	0.0
Information	177.3	177.6	178.1	178.4	179.1	179.5	179.6	179.6
% Ch, Annual Rate	0.5	0.8	1.0	0.7	1.6	1.0	0.2	-0.1
Software Publishers	86.3	86.5	86.8	87.0	87.2	87.5	87.8	88.1
% Ch, Annual Rate	1.0	1.0	1.0	0.9	1.2	1.2	1.3	1.2
Other Publishing Industries	2.7	2.6	2.4	2.3	2.2	2.1	2.0	1.9
% Ch, Annual Rate	-17.1	-18.1	-19.2	-21.0	-17.2	-18.2	-18.3	-19.8
Other Information	88.2	88.5	88.9	89.1	89.7	90.0	89.9	89.6
% Ch, Annual Rate	0.6	1.2	1.7	1.2	2.5	1.2	-0.4	-1.0
Financial Activities	162.8	162.1	161.5	161.1	160.8	160.3	160.0	159.6
% Ch, Annual Rate	-0.7	-1.8	-1.3	-1.0	-0.9	-1.1	-0.9	-0.9
Professional and Business Services	493.9	495.6	497.2	498.9	500.3	501.4	502.6	505.5
% Ch, Annual Rate	1.6	1.4	1.3	1.3	1.2	0.9	1.0	2.4
Education and Health Services	539.3	541.0	542.5	544.2	546.2	548.2	550.5	552.4
% Ch, Annual Rate	1.3	1.2	1.1	1.3	1.5	1.5	1.6	1.4
Leisure and Hospitality	388.0	388.5	389.1	389.6	390.0	390.8	391.7	392.4
% Ch, Annual Rate	0.0	0.6	0.6	0.5	0.4	0.9	1.0	0.7
Other Services	139.1	139.7	140.2	140.8	141.3	141.9	142.5	143.0
% Ch, Annual Rate	1.7	1.6	1.6	1.6	1.7	1.6	1.6	1.5
Federal Government	76.8	76.8	76.9	77.0	77.1	77.1	77.2	77.3
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	537.6	539.2	540.9	542.4	544.0	545.5	547.1	548.5
% Ch, Annual Rate	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1

Table A3.1

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

Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Personal Income	19,627.6	21,059.8	21,503.1	22,645.0	23,782.1	24,921.9	26,088.6	27,259.9
% Ch	6.5	7.3	2.1	5.3	5.0	4.8	4.7	4.5
Total Wage and Salary Disbursements	9,444.1	10,306.5	11,278.1	11,944.5	12,523.9	13,089.1	13,667.2	14,258.3
% Ch	1.3	9.1	9.4	5.9	4.9	4.5	4.4	4.3
Nonwage Personal Income	10,183.5	10,753.3	10,225.0	10,700.5	11,258.2	11,832.8	12,421.4	13,001.6
% Ch	11.9	5.6	-4.9	4.7	5.2	5.1	5.0	4.7
Supplements to Wages and Salaries	2,128.0	2,252.0	2,382.5	2,508.1	2,628.3	2,759.0	2,898.5	3,039.0
% Ch	0.2	5.8	5.8	5.3	4.8	5.0	5.1	4.8
Proprietor's Income	1,650.0	1,819.9	1,881.6	1,954.4	2,077.4	2,194.1	2,306.1	2,399.1
% Ch	3.2	10.3	3.4	3.9	6.3	5.6	5.1	4.0
Farm	70.2	97.3	72.7	63.7	63.5	62.8	64.3	67.1
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,579.9	1,722.6	1,808.9	1,890.7	2,013.9	2,131.3	2,241.8	2,332.0
% Ch	1.2	9.0	5.0	4.5	6.5	5.8	5.2	4.0
Less: Contribution For Govt. Soc. Ins.	1,459.5	1,588.4	1,721.2	1,805.4	1,883.1	1,962.3	2,045.5	2,131.7
% Ch	2.7	8.8	8.4	4.9	4.3	4.2	4.2	4.2
Dividends/Int./Rent	3,623.7	3,668.8	3,872.5	4,096.6	4,296.5	4,468.5	4,649.4	4,834.8
% Ch	-1.0	1.2	5.6	5.8	4.9	4.0	4.0	4.0
Transfer Payments	4,241.1	4,601.0	3,809.6	3,946.8	4,139.1	4,373.4	4,613.0	4,860.4
% Ch	35.1	8.5	-17.2	3.6	4.9	5.7	5.5	5.4

Table A3.2

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

Forecast 2022 to 2027

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	21,006.3	21,379.4	21,693.9	21,932.5	22,226.2	22,507.7	22,786.9	23,059.3
% Ch, Annual Rate	2.0	7.3	6.0	4.5	5.5	5.2	5.1	4.9
Total Wage and Salary Disbursements	10,945.8	11,207.2	11,395.8	11,563.5	11,720.9	11,874.0	12,019.3	12,163.8
% Ch, Annual Rate	9.2	9.9	6.9	6.0	5.6	5.3	5.0	4.9
Nonwage Personal Income	10,060.6	10,172.3	10,298.1	10,369.0	10,505.3	10,633.7	10,767.6	10,895.5
% Ch, Annual Rate	-5.3	4.5	5.0	2.8	5.4	5.0	5.1	4.8
Supplements to Wages and Salaries	2,330.5	2,365.7	2,401.3	2,432.6	2,465.9	2,494.7	2,522.0	2,549.7
% Ch, Annual Rate	6.4	6.2	6.2	5.3	5.6	4.8	4.4	4.5
Proprietor's Income	1,845.1	1,881.4	1,899.2	1,900.8	1,915.6	1,937.3	1,967.8	1,996.9
% Ch, Annual Rate	-1.2	8.1	3.9	0.3	3.2	4.6	6.5	6.0
Farm	80.2	73.8	70.0	66.8	64.9	63.5	63.1	63.2
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,764.9	1,807.6	1,829.3	1,834.0	1,850.7	1,873.8	1,904.7	1,933.7
% Ch, Annual Rate	0.1	10.0	4.9	1.0	3.7	5.1	6.8	6.2
Less: Contribution For Govt. Soc. Ins.	1,680.0	1,714.9	1,735.7	1,754.0	1,779.9	1,797.1	1,813.8	1,830.6
% Ch, Annual Rate	10.1	8.6	4.9	4.3	6.0	3.9	3.8	3.8
Dividends/Int./Rent	3,790.8	3,841.2	3,902.6	3,955.2	4,011.4	4,070.0	4,125.9	4,179.2
% Ch, Annual Rate	5.9	5.4	6.5	5.5	5.8	6.0	5.6	5.3
Transfer Payments	3,774.1	3,799.0	3,830.7	3,834.4	3,892.2	3,928.9	3,965.7	4,000.4
% Ch, Annual Rate	-17.1	2.7	3.4	0.4	6.2	3.8	3.8	3.5

Table A3.2 (continued)

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

Forecast 2022 to 2027

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	23,368.2	23,644.2	23,920.4	24,195.4	24,498.6	24,777.8	25,062.1	25,348.9
% Ch, Annual Rate	5.5	4.8	4.8	4.7	5.1	4.6	4.7	4.7
Total Wage and Salary Disbursements	12,309.7	12,453.0	12,595.2	12,737.7	12,879.1	13,017.6	13,158.2	13,301.5
% Ch, Annual Rate	4.9	4.7	4.6	4.6	4.5	4.4	4.4	4.4
Nonwage Personal Income	11,058.6	11,191.2	11,325.2	11,457.8	11,619.5	11,760.2	11,904.0	12,047.4
% Ch, Annual Rate	6.1	4.9	4.9	4.8	5.8	4.9	5.0	4.9
Supplements to Wages and Salaries	2,583.0	2,612.8	2,643.1	2,674.2	2,710.3	2,742.2	2,775.0	2,808.7
% Ch, Annual Rate	5.3	4.7	4.7	4.8	5.5	4.8	4.9	5.0
Proprietor's Income	2,032.7	2,063.9	2,093.7	2,119.4	2,147.4	2,177.8	2,209.9	2,241.2
% Ch, Annual Rate	7.4	6.3	5.9	5.0	5.4	5.8	6.0	5.8
Farm	63.8	63.7	63.5	63.2	62.9	62.7	62.7	62.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,968.9	2,000.3	2,030.3	2,056.2	2,084.5	2,115.1	2,147.2	2,178.3
% Ch, Annual Rate	7.5	6.5	6.1	5.2	5.6	6.0	6.2	5.9
Less: Contribution For Govt. Soc. Ins.	1,857.1	1,874.4	1,891.8	1,909.2	1,936.0	1,953.3	1,970.9	1,989.0
% Ch, Annual Rate	5.9	3.8	3.8	3.7	5.7	3.6	3.7	3.7
Dividends/Int./Rent	4,229.5	4,275.0	4,319.5	4,361.8	4,403.0	4,446.0	4,490.0	4,535.2
% Ch, Annual Rate	4.9	4.4	4.2	4.0	3.8	4.0	4.0	4.1
Transfer Payments	4,070.4	4,113.9	4,160.7	4,211.5	4,294.7	4,347.5	4,400.1	4,451.3
% Ch, Annual Rate	7.2	4.3	4.6	5.0	8.1	5.0	4.9	4.7

Table A3.2 (continued)

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

Forecast 2022 to 2027

	2026:1	2026:2	2026:3	2026:4	2027:1	2027:2	2027:3	2027:4
Personal Income	25,660.5	25,946.0	26,230.6	26,517.4	26,828.9	27,108.6	27,400.3	27,701.9
% Ch, Annual Rate	5.0	4.5	4.5	4.4	4.8	4.2	4.4	4.5
Total Wage and Salary Disbursements	13,447.7	13,593.6	13,740.0	13,887.6	14,035.7	14,181.6	14,331.0	14,485.1
% Ch, Annual Rate	4.5	4.4	4.4	4.4	4.3	4.2	4.3	4.4
Nonwage Personal Income	12,212.8	12,352.5	12,490.6	12,629.7	12,793.2	12,927.0	13,069.3	13,216.8
% Ch, Annual Rate	5.6	4.7	4.5	4.5	5.3	4.3	4.5	4.6
Supplements to Wages and Salaries	2,847.4	2,881.5	2,915.5	2,949.5	2,988.5	3,022.0	3,055.7	3,089.8
% Ch, Annual Rate	5.6	4.9	4.8	4.8	5.4	4.6	4.5	4.5
Proprietor's Income	2,267.3	2,293.4	2,318.9	2,344.8	2,364.3	2,384.7	2,410.5	2,437.0
% Ch, Annual Rate	4.7	4.7	4.5	4.5	3.4	3.5	4.4	4.5
Farm	63.3	63.9	64.6	65.3	66.1	66.8	67.5	68.0
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	2,203.9	2,229.5	2,254.3	2,279.4	2,298.2	2,317.9	2,343.1	2,368.9
% Ch, Annual Rate	4.8	4.7	4.5	4.5	3.3	3.5	4.4	4.5
Less: Contribution For Govt. Soc. Ins.	2,017.4	2,036.1	2,054.8	2,073.7	2,103.0	2,121.8	2,141.1	2,161.0
% Ch, Annual Rate	5.8	3.7	3.7	3.7	5.8	3.6	3.7	3.8
Dividends/Int./Rent	4,580.0	4,626.2	4,672.4	4,719.0	4,764.0	4,808.8	4,857.3	4,909.3
% Ch, Annual Rate	4.0	4.1	4.1	4.1	3.9	3.8	4.1	4.4
Transfer Payments	4,535.6	4,587.5	4,638.7	4,690.2	4,779.4	4,833.3	4,886.9	4,941.8
% Ch, Annual Rate	7.8	4.7	4.5	4.5	7.8	4.6	4.5	4.6

Table A3.3

Washington Personal Income by Component (Billions of Dollars)

Forecast 2022 to 2027

	2020	2021	2022	2023	2024	2025	2026	2027
Personal Income	516.441	555.228	571.516	604.987	637.202	670.333	705.090	740.711
% Ch	7.6	7.5	2.9	5.9	5.3	5.2	5.2	5.1
Total Wage and Salary Disbursements	264.145	290.275	315.371	335.685	352.766	370.384	389.128	408.744
% Ch	4.1	9.9	8.6	6.4	5.1	5.0	5.1	5.0
Manufacturing	22.291	21.693	23.860	25.570	26.723	27.720	28.863	30.028
% Ch	-6.6	-2.7	10.0	7.2	4.5	3.7	4.1	4.0
Durable Manufacturing	17.224	16.309	17.792	19.128	20.046	20.848	21.772	22.705
% Ch	-8.3	-5.3	9.1	7.5	4.8	4.0	4.4	4.3
Nondurable Manufacturing	5.067	5.384	6.069	6.441	6.677	6.872	7.091	7.324
% Ch	-0.3	6.3	12.7	6.1	3.7	2.9	3.2	3.3
Nonmanufacturing	234.597	261.129	283.600	301.763	317.303	333.534	350.730	368.767
% Ch	5.1	11.3	8.6	6.4	5.1	5.1	5.2	5.1
Other Private Wages	1.375	1.426	1.571	1.677	1.758	1.839	1.923	2.009
% Ch	3.5	3.7	10.2	6.7	4.9	4.6	4.6	4.5
Farm Wages	1.826	1.936	2.134	2.314	2.460	2.608	2.763	2.924
% Ch	16.7	6.0	10.2	8.5	6.3	6.0	5.9	5.8
Military Wages	4.057	4.091	4.206	4.362	4.521	4.683	4.849	5.017
% Ch	4.7	0.8	2.8	3.7	3.6	3.6	3.5	3.5
Nonwage Personal Income	252.296	264.953	256.145	269.301	284.437	299.949	315.962	331.967
% Ch	11.6	5.0	-3.3	5.1	5.6	5.5	5.3	5.1
Supplements to Wages and Salaries	56.559	60.431	64.142	67.804	71.159	74.903	78.985	83.184
% Ch	1.7	6.8	6.1	5.7	4.9	5.3	5.4	5.3
Proprietor's Income	39.554	43.127	43.787	45.338	48.077	50.724	53.275	55.402
% Ch	8.2	9.0	1.5	3.5	6.0	5.5	5.0	4.0
Farm	3.644	3.782	2.411	2.043	2.040	2.028	2.053	2.101
% Ch	...	...	...	...	...	...	...	...
Nonfarm	35.910	39.345	41.376	43.295	46.037	48.696	51.221	53.301
% Ch	2.9	9.6	5.2	4.6	6.3	5.8	5.2	4.1
Less: Contribution For Govt. Soc. Ins.	41.445	45.655	49.535	52.144	54.379	56.765	59.358	62.090
% Ch	4.1	10.2	8.5	5.3	4.3	4.4	4.6	4.6
Plus: Residence Adjustment	4.927	5.306	5.841	6.230	6.569	6.900	7.238	7.584
% Ch	4.7	7.7	10.1	6.7	5.4	5.0	4.9	4.8
Dividends/Int./Rent	99.518	100.763	106.995	113.756	119.902	125.329	131.055	136.966
% Ch	-0.3	1.3	6.2	6.3	5.4	4.5	4.6	4.5
Transfer Payments	93.183	100.980	84.916	88.317	93.107	98.858	104.768	110.922
% Ch	34.9	8.4	-15.9	4.0	5.4	6.2	6.0	5.9
State U.I. Benefits	12.258	8.547	1.032	1.098	1.229	1.304	1.342	1.371
% Ch	1,064.3	-30.3	-87.9	6.4	12.0	6.0	2.9	2.2
Other Transfers	80.924	92.433	83.884	87.219	91.878	97.554	103.426	109.550
% Ch	19.0	14.2	-9.2	4.0	5.3	6.2	6.0	5.9

Table A3.4

Washington Personal Income by Component (Billions of Dollars)

Forecast 2022 to 2027

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	558.020	567.700	576.490	583.855	592.988	601.098	608.926	616.935
% Ch, Annual Rate	2.9	7.1	6.3	5.2	6.4	5.6	5.3	5.4
Total Wage and Salary Disbursements	306.058	313.215	318.520	323.691	329.087	333.621	337.779	342.255
% Ch, Annual Rate	7.7	9.7	6.9	6.7	6.8	5.6	5.1	5.4
Manufacturing	22.924	23.710	24.160	24.647	25.016	25.406	25.773	26.084
% Ch, Annual Rate	10.6	14.4	7.8	8.3	6.1	6.4	5.9	4.9
Durable Manufacturing	17.066	17.687	18.010	18.403	18.681	19.003	19.295	19.535
% Ch, Annual Rate	10.5	15.4	7.5	9.0	6.2	7.1	6.3	5.1
Nondurable Manufacturing	5.858	6.023	6.149	6.243	6.335	6.404	6.477	6.549
% Ch, Annual Rate	10.9	11.8	8.6	6.3	6.0	4.4	4.7	4.5
Nonmanufacturing	275.415	281.641	286.379	290.965	295.858	299.906	303.604	307.683
% Ch, Annual Rate	7.5	9.4	6.9	6.6	6.9	5.6	5.0	5.5
Other Private Wages	1.518	1.560	1.589	1.617	1.645	1.667	1.687	1.708
% Ch, Annual Rate	9.1	11.5	7.9	7.2	7.1	5.5	4.8	5.2
Farm Wages	2.047	2.114	2.164	2.211	2.258	2.297	2.332	2.370
% Ch, Annual Rate	11.2	13.9	9.8	8.9	8.8	7.0	6.3	6.8
Military Wages	4.155	4.190	4.227	4.252	4.310	4.345	4.384	4.409
% Ch, Annual Rate	5.5	3.4	3.6	2.4	5.5	3.3	3.6	2.4
Nonwage Personal Income	251.962	254.486	257.970	260.164	263.902	267.476	271.147	274.680
% Ch, Annual Rate	-2.6	4.1	5.6	3.4	5.9	5.5	5.6	5.3
Supplements to Wages and Salaries	62.674	63.684	64.649	65.562	66.624	67.432	68.177	68.984
% Ch, Annual Rate	6.6	6.6	6.2	5.8	6.6	4.9	4.5	4.8
Proprietor's Income	43.427	43.647	44.001	44.074	44.480	44.961	45.624	46.287
% Ch, Annual Rate	-2.1	2.0	3.3	0.7	3.7	4.4	6.0	5.9
Farm	3.072	2.314	2.163	2.098	2.064	2.040	2.033	2.035
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	40.355	41.334	41.838	41.976	42.416	42.921	43.591	44.253
% Ch, Annual Rate	0.6	10.1	5.0	1.3	4.3	4.8	6.4	6.2
Less: Contribution For Govt. Soc. Ins.	48.326	49.345	49.944	50.527	51.405	51.911	52.372	52.888
% Ch, Annual Rate	10.0	8.7	4.9	4.8	7.1	4.0	3.6	4.0
Plus: Residence Adjustment	5.646	5.799	5.910	6.008	6.099	6.189	6.274	6.359
% Ch, Annual Rate	10.6	11.3	7.8	6.8	6.3	6.0	5.6	5.5
Dividends/Int./Rent	104.541	106.062	107.892	109.483	111.179	112.942	114.638	116.263
% Ch, Annual Rate	6.4	5.9	7.1	6.0	6.3	6.5	6.1	5.8
Transfer Payments	84.000	84.638	85.463	85.565	86.924	87.863	88.806	89.676
% Ch, Annual Rate	-13.3	3.1	4.0	0.5	6.5	4.4	4.4	4.0
State U.I. Benefits	0.989	1.031	1.056	1.053	1.028	1.075	1.133	1.155
% Ch, Annual Rate	-78.3	18.4	9.9	-1.0	-9.3	19.7	23.5	7.7
Other Transfers	83.012	83.607	84.407	84.511	85.896	86.787	87.672	88.521
% Ch, Annual Rate	-11.6	2.9	3.9	0.5	6.7	4.2	4.1	3.9

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2022 to 2027

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	625.511	633.209	641.055	649.034	657.798	666.070	674.471	682.992
% Ch, Annual Rate	5.7	5.0	5.0	5.1	5.5	5.1	5.1	5.2
Total Wage and Salary Disbursements	346.505	350.594	354.799	359.165	363.640	368.092	372.594	377.210
% Ch, Annual Rate	5.1	4.8	4.9	5.0	5.1	5.0	5.0	5.0
Manufacturing	26.353	26.592	26.847	27.098	27.331	27.580	27.847	28.121
% Ch, Annual Rate	4.2	3.7	3.9	3.8	3.5	3.7	3.9	4.0
Durable Manufacturing	19.749	19.940	20.145	20.350	20.537	20.735	20.949	21.170
% Ch, Annual Rate	4.5	3.9	4.2	4.1	3.7	3.9	4.2	4.3
Nondurable Manufacturing	6.604	6.652	6.702	6.749	6.794	6.845	6.898	6.951
% Ch, Annual Rate	3.4	2.9	3.0	2.8	2.7	3.0	3.2	3.1
Nonmanufacturing	311.548	315.308	319.163	323.194	327.319	331.429	335.566	339.821
% Ch, Annual Rate	5.1	4.9	5.0	5.1	5.2	5.1	5.1	5.2
Other Private Wages	1.729	1.748	1.768	1.788	1.809	1.829	1.849	1.870
% Ch, Annual Rate	4.9	4.5	4.6	4.7	4.7	4.5	4.5	4.6
Farm Wages	2.407	2.442	2.478	2.515	2.552	2.589	2.626	2.665
% Ch, Annual Rate	6.3	6.0	6.0	6.1	6.1	5.9	5.9	6.0
Military Wages	4.468	4.504	4.543	4.570	4.629	4.666	4.706	4.733
% Ch, Annual Rate	5.4	3.3	3.5	2.4	5.3	3.2	3.5	2.3
Nonwage Personal Income	279.007	282.615	286.256	289.869	294.158	297.978	301.877	305.783
% Ch, Annual Rate	6.5	5.3	5.3	5.1	6.1	5.3	5.3	5.3
Supplements to Wages and Salaries	69.918	70.721	71.558	72.439	73.491	74.415	75.364	76.342
% Ch, Annual Rate	5.5	4.7	4.8	5.0	5.9	5.1	5.2	5.3
Proprietor's Income	47.083	47.773	48.436	49.017	49.659	50.355	51.084	51.796
% Ch, Annual Rate	7.1	6.0	5.7	4.9	5.3	5.7	5.9	5.7
Farm	2.045	2.043	2.039	2.035	2.029	2.026	2.026	2.030
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	45.039	45.730	46.397	46.982	47.630	48.328	49.058	49.766
% Ch, Annual Rate	7.3	6.3	6.0	5.1	5.6	6.0	6.2	5.9
Less: Contribution For Govt. Soc. Ins.	53.645	54.121	54.615	55.134	55.947	56.485	57.032	57.597
% Ch, Annual Rate	5.9	3.6	3.7	3.9	6.0	3.9	3.9	4.0
Plus: Residence Adjustment	6.444	6.528	6.611	6.695	6.777	6.858	6.941	7.024
% Ch, Annual Rate	5.5	5.3	5.2	5.1	5.0	4.9	4.9	4.9
Dividends/Int./Rent	117.811	119.227	120.618	121.953	123.259	124.617	126.007	127.435
% Ch, Annual Rate	5.4	4.9	4.7	4.5	4.4	4.5	4.5	4.6
Transfer Payments	91.395	92.487	93.647	94.899	96.918	98.217	99.514	100.782
% Ch, Annual Rate	7.9	4.9	5.1	5.5	8.8	5.5	5.4	5.2
State U.I. Benefits	1.185	1.219	1.246	1.268	1.283	1.297	1.312	1.323
% Ch, Annual Rate	10.9	11.9	9.5	7.0	4.8	4.4	4.8	3.3
Other Transfers	90.211	91.268	92.401	93.631	95.635	96.921	98.202	99.460
% Ch, Annual Rate	7.9	4.8	5.1	5.4	8.8	5.5	5.4	5.2

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2022 to 2027

	2026:1	2026:2	2026:3	2026:4	2027:1	2027:2	2027:3	2027:4
Personal Income	692.129	700.719	709.379	718.134	727.473	736.105	745.046	754.221
% Ch, Annual Rate	5.5	5.1	5.0	5.0	5.3	4.8	4.9	5.0
Total Wage and Salary Disbursements	381.922	386.668	391.510	396.412	401.326	406.214	411.189	416.249
% Ch, Annual Rate	5.1	5.1	5.1	5.1	5.1	5.0	5.0	5.0
Manufacturing	28.410	28.709	29.012	29.321	29.614	29.898	30.171	30.432
% Ch, Annual Rate	4.2	4.3	4.3	4.3	4.1	3.9	3.7	3.5
Durable Manufacturing	21.405	21.648	21.892	22.144	22.378	22.601	22.816	23.025
% Ch, Annual Rate	4.5	4.6	4.6	4.7	4.3	4.0	3.9	3.7
Nondurable Manufacturing	7.005	7.061	7.119	7.177	7.236	7.297	7.355	7.407
% Ch, Annual Rate	3.1	3.3	3.3	3.3	3.3	3.4	3.2	2.8
Nonmanufacturing	344.125	348.473	352.910	357.414	361.912	366.417	371.016	375.723
% Ch, Annual Rate	5.2	5.2	5.2	5.2	5.1	5.1	5.1	5.2
Other Private Wages	1.891	1.912	1.934	1.955	1.977	1.998	2.019	2.041
% Ch, Annual Rate	4.6	4.6	4.6	4.6	4.5	4.4	4.4	4.4
Farm Wages	2.704	2.743	2.783	2.823	2.863	2.903	2.944	2.985
% Ch, Annual Rate	6.0	5.9	5.9	5.9	5.8	5.7	5.7	5.7
Military Wages	4.793	4.831	4.871	4.899	4.960	4.998	5.040	5.068
% Ch, Annual Rate	5.2	3.2	3.4	2.3	5.0	3.1	3.4	2.3
Nonwage Personal Income	310.207	314.051	317.869	321.721	326.148	329.891	333.857	337.972
% Ch, Annual Rate	5.9	5.0	5.0	4.9	5.6	4.7	4.9	5.0
Supplements to Wages and Salaries	77.478	78.476	79.485	80.500	81.668	82.674	83.687	84.705
% Ch, Annual Rate	6.1	5.3	5.2	5.2	5.9	5.0	5.0	5.0
Proprietor's Income	52.388	52.983	53.568	54.160	54.608	55.075	55.663	56.261
% Ch, Annual Rate	4.7	4.6	4.5	4.5	3.3	3.5	4.3	4.4
Farm	2.037	2.047	2.059	2.071	2.084	2.096	2.107	2.117
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	50.351	50.936	51.510	52.089	52.523	52.978	53.556	54.145
% Ch, Annual Rate	4.8	4.7	4.6	4.6	3.4	3.5	4.4	4.5
Less: Contribution For Govt. Soc. Ins.	58.466	59.053	59.653	60.260	61.171	61.775	62.392	63.020
% Ch, Annual Rate	6.2	4.1	4.1	4.1	6.2	4.0	4.1	4.1
Plus: Residence Adjustment	7.110	7.195	7.281	7.367	7.454	7.539	7.626	7.716
% Ch, Annual Rate	5.0	4.9	4.8	4.8	4.8	4.7	4.7	4.8
Dividends/Int./Rent	128.855	130.318	131.783	133.264	134.705	136.141	137.685	139.333
% Ch, Annual Rate	4.5	4.6	4.6	4.6	4.4	4.3	4.6	4.9
Transfer Payments	102.842	104.133	105.406	106.690	108.885	110.238	111.587	112.977
% Ch, Annual Rate	8.4	5.1	5.0	5.0	8.5	5.1	5.0	5.1
State U.I. Benefits	1.332	1.341	1.345	1.350	1.357	1.365	1.375	1.389
% Ch, Annual Rate	2.9	2.6	1.3	1.3	2.1	2.4	3.2	4.1
Other Transfers	101.510	102.792	104.061	105.341	107.528	108.873	110.212	111.588
% Ch, Annual Rate	8.5	5.1	5.0	5.0	8.6	5.1	5.0	5.1

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	22.5	3.4	0.418	3.3	0.393	2.9
1973	23.8	5.4	0.444	6.3	0.418	6.4
1974	26.2	10.4	0.493	11.0	0.464	11.0
1975	28.4	8.3	0.538	9.1	0.511	10.2
1976	30.0	5.5	0.569	5.8	0.540	5.5
1977	31.9	6.5	0.606	6.5	0.583	8.0
1978	34.1	7.0	0.652	7.6	0.640	9.9
1979	37.2	8.9	0.726	11.3	0.709	10.8
1980	41.2	10.8	0.824	13.5	0.827	16.7
1981	44.9	9.0	0.909	10.4	0.916	10.8
1982	47.4	5.6	0.965	6.2	0.978	6.7
1983	49.4	4.3	0.996	3.2	0.993	1.5
1984	51.2	3.8	1.039	4.4	1.030	3.8
1985	53.0	3.5	1.076	3.5	1.056	2.5
1986	54.2	2.2	1.097	1.9	1.066	1.0
1987	55.9	3.1	1.136	3.6	1.092	2.4
1988	58.0	3.9	1.183	4.1	1.128	3.3
1989	60.6	4.4	1.239	4.8	1.181	4.7
1990	63.2	4.4	1.307	5.4	1.268	7.3
1991	65.3	3.3	1.362	4.2	1.341	5.8
1992	67.1	2.7	1.403	3.0	1.390	3.7
1993	68.8	2.5	1.445	3.0	1.429	2.8
1994	70.2	2.1	1.482	2.6	1.478	3.4
1995	71.7	2.1	1.524	2.8	1.522	3.0
1996	73.2	2.1	1.569	2.9	1.575	3.4
1997	74.5	1.7	1.605	2.3	1.630	3.5
1998	75.1	0.8	1.630	1.5	1.677	2.9
1999	76.2	1.5	1.666	2.2	1.728	3.0
2000	78.1	2.5	1.722	3.4	1.792	3.7
2001	79.7	2.0	1.770	2.8	1.857	3.6
2002	80.7	1.3	1.799	1.6	1.893	2.0
2003	82.4	2.1	1.840	2.3	1.924	1.6
2004	84.4	2.5	1.889	2.7	1.947	1.2
2005	86.9	2.9	1.953	3.4	2.002	2.8
2006	89.3	2.8	2.016	3.2	2.076	3.7
2007	91.6	2.6	2.073	2.9	2.157	3.9
2008	94.3	3.0	2.153	3.8	2.247	4.2
2009	94.1	-0.3	2.146	-0.3	2.260	0.6
2010	95.7	1.8	2.181	1.6	2.267	0.3
2011	98.2	2.5	2.249	3.1	2.328	2.7
2012	100.0	1.9	2.296	2.1	2.387	2.5
2013	101.4	1.4	2.330	1.5	2.416	1.2
2014	102.9	1.5	2.367	1.6	2.460	1.8
2015	103.1	0.2	2.370	0.1	2.494	1.4
2016	104.1	1.0	2.400	1.3	2.550	2.3
2017	106.1	1.8	2.451	2.1	2.627	3.0
2018	108.3	2.1	2.511	2.4	2.711	3.2
2019	109.9	1.5	2.557	1.8	2.779	2.5
2020	111.2	1.2	2.588	1.2	2.826	1.7
2021	115.5	3.9	2.710	4.7	2.960	4.7
Forecast						
2022	120.6	4.4	2.839	4.8	3.106	5.0
2023	123.1	2.0	2.900	2.1	3.172	2.1
2024	125.6	2.1	2.963	2.2	3.241	2.2
2025	128.2	2.1	3.026	2.1	3.311	2.1
2026	130.9	2.1	3.093	2.2	3.384	2.2
2027	133.7	2.1	3.163	2.3	3.460	2.3

* 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	16.7	5.5	21.4	2.3	4.9	6.4	9.1	0.7
1972	17.4	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	19.8	8.5	29.0	15.2	9.0	58.9	13.6	35.1
1975	21.5	8.6	31.2	7.5	9.8	8.5	14.6	6.7
1976	23.0	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	26.7	7.7	36.9	9.6	12.6	5.7	16.8	4.3
1979	28.9	8.4	40.5	9.8	17.3	37.9	22.5	34.0
1980	31.9	10.4	43.9	8.4	24.3	40.4	31.2	38.8
1981	35.2	10.2	47.1	7.1	29.8	22.3	34.7	11.3
1982	37.9	7.8	48.3	2.6	29.2	-1.9	32.9	-5.1
1983	40.3	6.1	48.8	1.1	26.9	-7.8	31.9	-3.3
1984	42.4	5.2	50.3	3.0	27.5	2.2	31.4	-1.5
1985	44.4	4.9	50.9	1.1	26.4	-3.9	31.6	0.8
1986	46.3	4.1	52.1	2.4	20.7	-21.7	24.8	-21.5
1987	47.7	3.0	53.7	3.2	21.2	2.6	25.8	3.8
1988	49.9	4.8	55.3	3.0	21.2	0.0	26.0	0.8
1989	52.3	4.7	58.2	5.3	22.5	5.9	28.4	9.2
1990	54.7	4.6	61.1	4.9	27.1	20.4	32.3	13.8
1991	56.8	3.9	63.0	3.1	25.8	-4.8	31.9	-1.3
1992	58.8	3.6	63.5	0.8	24.7	-4.1	31.8	-0.4
1993	60.9	3.5	64.3	1.4	24.6	-0.7	31.5	-1.0
1994	62.5	2.7	65.4	1.7	24.1	-1.8	31.6	0.5
1995	64.3	2.8	66.8	2.2	23.9	-0.9	32.1	1.6
1996	66.1	2.7	68.9	3.1	27.1	13.3	34.1	6.1
1997	67.9	2.8	70.2	1.9	27.1	0.2	34.1	0.0
1998	69.4	2.1	71.1	1.3	24.0	-11.4	29.7	-12.9
1999	70.7	2.0	72.2	1.6	24.4	1.7	32.3	8.9
2000	72.7	2.8	73.9	2.3	35.8	46.6	41.3	27.8
2001	75.1	3.2	76.1	2.9	35.1	-2.0	39.8	-3.6
2002	77.0	2.6	77.2	1.5	31.3	-10.8	37.4	-6.0
2003	79.6	3.3	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	84.8	3.4	82.6	1.7	58.7	33.0	62.3	21.6
2006	87.8	3.6	84.0	1.7	66.7	13.7	70.3	12.9
2007	90.8	3.3	87.2	3.9	71.3	6.9	76.3	8.4
2008	93.5	2.9	92.6	6.1	96.8	35.7	88.8	16.5
2009	94.2	0.8	93.7	1.2	66.2	-31.6	65.2	-26.6
2010	96.0	1.9	93.9	0.3	77.5	16.9	76.9	18.0
2011	97.9	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	104.9	2.5	102.9	1.9	98.3	-0.5	93.5	-3.8
2015	106.8	1.8	104.1	1.1	69.9	-28.8	68.7	-26.5
2016	109.2	2.2	103.0	-1.0	58.1	-17.0	61.1	-11.1
2017	112.0	2.5	102.9	-0.1	66.8	15.1	68.9	12.8
2018	115.1	2.8	103.4	0.5	80.8	21.0	78.0	13.2
2019	117.8	2.4	104.4	1.0	77.1	-4.6	75.3	-3.4
2020	120.3	2.1	108.0	3.4	59.8	-22.4	64.2	-14.8
2021	124.2	3.2	111.4	3.1	78.1	30.6	86.3	34.5
Forecast								
2022	129.4	4.2	116.3	4.4	78.8	0.9	92.4	7.0
2023	134.2	3.6	117.6	1.1	71.7	-9.0	83.0	-10.2
2024	138.7	3.4	120.1	2.2	69.4	-3.3	79.0	-4.8
2025	142.9	3.1	122.9	2.3	68.1	-1.8	76.6	-3.0
2026	147.1	2.9	125.7	2.3	68.2	0.1	75.2	-1.8
2027	151.3	2.9	128.6	2.3	68.7	0.8	74.6	-0.8

Table A5.1

Washington Resident Population and Components of Change*

(Thousands)

	<u>Population</u>	<u>Change</u>	<u>Percent Change</u>	<u>Births</u>	<u>Deaths</u>	<u>Net Migration</u>
1970	3413.2	16.2	0.5	59.9	30.0	-13.7
1971	3436.3	23.1	0.7	60.0	29.8	-7.1
1972	3430.3	-6.0	-0.2	53.1	30.4	-28.7
1973	3444.3	14.0	0.4	47.7	30.4	-3.3
1974	3508.7	64.4	1.9	48.2	29.9	46.1
1975	3567.9	59.2	1.7	50.1	30.3	39.4
1976	3634.9	67.0	1.9	51.4	30.2	45.8
1977	3715.4	80.5	2.2	54.2	29.1	55.4
1978	3836.2	120.8	3.3	57.3	30.4	93.9
1979	3979.2	143.0	3.7	60.2	30.2	113.0
1980	4132.2	153.0	3.8	65.4	31.3	118.9
1981	4229.3	97.1	2.4	68.2	31.8	60.8
1982	4276.5	47.3	1.1	70.1	31.7	8.9
1983	4307.2	30.7	0.7	69.5	32.5	-6.2
1984	4354.1	46.8	1.1	68.5	33.2	11.6
1985	4415.8	61.7	1.4	69.1	34.0	26.6
1986	4462.2	46.4	1.1	70.2	34.0	10.2
1987	4527.1	64.9	1.5	69.3	34.4	30.0
1988	4616.9	89.8	2.0	71.0	36.0	54.8
1989	4728.1	111.2	2.4	73.0	36.0	74.2
1990	4866.7	138.6	2.9	76.4	36.2	98.5
1991	5000.4	133.7	2.7	79.1	36.6	91.2
1992	5091.1	90.8	1.8	80.2	37.2	47.7
1993	5188.0	96.9	1.9	79.1	39.4	57.1
1994	5291.6	103.6	2.0	78.2	39.5	64.9
1995	5396.6	105.0	2.0	77.5	40.0	67.5
1996	5483.1	86.5	1.6	77.0	41.2	50.7
1997	5579.1	96.0	1.8	78.0	42.6	60.6
1998	5685.5	106.3	1.9	78.8	41.6	69.1
1999	5792.2	106.8	1.9	79.8	43.1	70.1
2000	5894.1	101.9	1.8	79.9	43.7	65.8
2001	5970.5	76.3	1.3	80.7	43.9	39.5
2002	6059.7	89.2	1.5	79.3	44.9	54.9
2003	6126.9	67.2	1.1	79.1	44.7	32.9
2004	6208.5	81.6	1.3	81.0	46.0	46.7
2005	6298.8	90.3	1.5	81.8	45.6	54.0
2006	6420.2	121.4	1.9	83.2	45.3	83.5
2007	6525.1	104.9	1.6	87.8	46.2	63.3
2008	6608.2	83.1	1.3	89.6	47.9	41.5
2009	6672.3	64.0	1.0	89.8	48.1	22.3
2010	6724.5	52.3	0.8	88.4	47.7	11.5
2011	6767.9	43.4	0.6	86.4	48.8	5.8
2012	6817.8	49.9	0.7	87.1	49.2	12.0
2013	6882.4	64.6	0.9	87.3	51.1	28.5
2014	6968.2	85.8	1.2	87.0	50.7	49.5
2015	7061.4	93.2	1.3	88.5	52.8	57.6
2016	7183.7	122.3	1.7	89.8	54.7	87.1
2017	7310.3	126.6	1.8	89.7	56.1	93.0
2018	7427.6	117.3	1.6	87.3	56.4	86.3
2019	7546.4	118.8	1.6	85.7	57.2	90.3
2020	7656.2	109.8	1.5	85.2	59.1	83.7
Forecast						
2021	7714.7	58.5	0.8	85.6	61.1	33.9
2022	7776.1	61.4	0.8	86.4	60.4	35.5
2023	7839.7	63.6	0.8	86.9	61.5	38.3
2024	7904.4	64.7	0.8	87.3	62.8	40.2
2025	7969.8	65.5	0.8	87.5	64.1	42.1

* As of April 1 of Each Year

Source: Office of Financial Management, November 2020 Forecast

Table A5.2
Washington Population*
 (Thousands)

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

* As of April 1 of Each Year

Source: Office of Financial Management, November 2020 Forecast

Table A6.1

Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	January 2022	-
U.S. Real GDP Growth	4th quarter 2021	+
U.S. ISM Index	January 2022	-
U.S. Employment YOY%Δ	January 2022	-
U.S. Unemployment Rate	January 2022	-
U.S. Consumer Confidence	February 2022	-
U.S. Consumer Sentiment	February 2022	-
U.S. CPI YOY%Δ	January 2022	-
U.S. Home Prices YOY%Δ	December 2021	+
S&P 500 Index	February 2022	-
WA Leading Index	December 2021	-
WA Employment YOY%Δ	December 2021	+
WA Aerospace Empl. YOY%Δ	December 2021	-
WA Unemployment Rate	December 2021	+
WA Help Wanted Index	December 2021	-
WA Business Cycle Indicator	December 2021	unchanged
WA Initial Unemploy. Claims	January 2022	+
WA Housing Permits	January 2022	+
WA Weekly Hours in Mfg.	December 2021	unchanged
WA New Vehicle Registration	January 2022	+
WA In-Migration	January 2022	-
WA Exports-Total YOY%Δ	4th quarter 2021	+
WA Exports- w/o Trans. Equip. YOY%Δ	4th quarter 2021	+
Seattle CPI YOY%Δ	December 2021	-
Seattle Home Prices YOY%Δ	December 2021	+
WA Construction Activity Index	December 2021	+

*Change from the previous reading

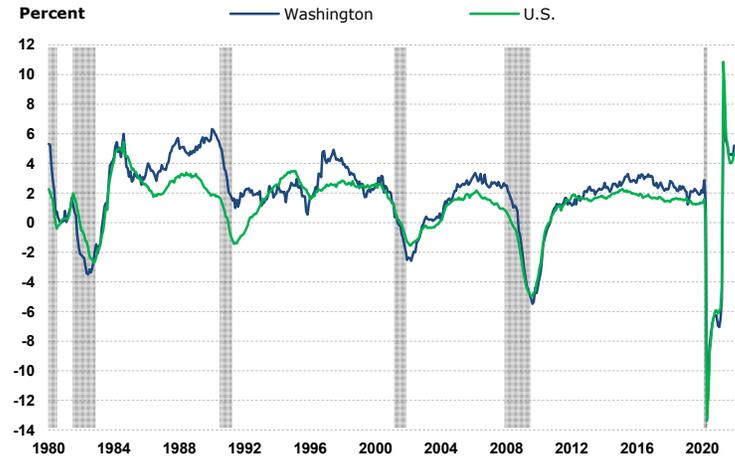
Table A6.2
Washington Business Indicators
 Historical Data

	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	U.S. Purchasing Management Index
2016:01	118.5	99.3	63.4	105.9	128.7	48.2
2016:02	118.7	99.2	65.7	107.3	124.9	49.7
2016:03	119.2	99.2	62.8	106.8	128.9	51.7
2016:04	120.4	99.7	63.4	107.9	130.9	50.7
2016:05	121.1	99.5	65.5	108.2	148.2	51.0
2016:06	121.3	99.8	66.7	109.3	151.3	52.8
2016:07	121.9	100.2	67.7	108.7	156.3	52.3
2016:08	121.1	100.2	66.9	106.5	153.1	49.4
2016:09	121.8	100.4	67.4	111.2	143.4	51.7
2016:10	122.0	100.5	68.2	111.7	152.3	52.0
2016:11	121.4	100.7	69.3	111.6	148.8	53.5
2016:12	121.6	101.2	70.7	113.0	149.2	54.5
2017:01	122.1	101.8	69.0	111.0	152.5	56.0
2017:02	122.1	102.1	68.8	112.0	140.1	57.7
2017:03	122.7	102.6	70.5	111.5	143.4	57.2
2017:04	123.3	102.8	69.5	111.9	143.3	54.8
2017:05	123.8	103.2	71.2	112.8	149.2	54.9
2017:06	124.3	103.8	70.9	113.5	145.4	57.8
2017:07	124.6	104.1	71.1	113.8	139.5	56.3
2017:08	124.7	104.5	72.0	114.3	135.1	58.8
2017:09	125.0	104.5	73.3	113.7	140.4	60.8
2017:10	125.3	105.9	73.0	117.1	132.7	58.7
2017:11	125.4	106.3	75.1	116.8	134.7	58.2
2017:12	126.3	107.1	74.8	116.2	138.6	59.7
2018:01	126.7	107.8	74.5	115.7	136.8	59.1
2018:02	128.2	108.5	76.9	117.8	133.3	60.8
2018:03	128.7	108.8	77.7	119.8	137.4	59.3
2018:04	128.6	109.3	76.9	117.0	133.7	57.3
2018:05	127.6	109.4	77.8	115.6	128.2	58.7
2018:06	127.6	110.0	78.5	117.5	128.0	60.2
2018:07	127.4	110.4	77.8	115.9	129.3	58.1
2018:08	127.4	110.9	76.3	117.5	129.2	61.3
2018:09	127.7	111.5	76.5	116.5	132.4	59.8
2018:10	127.4	111.4	76.9	118.0	133.0	57.7
2018:11	127.5	111.5	76.8	118.5	133.3	59.3
2018:12	128.4	111.3	78.0	119.4	140.1	54.1
2019:01	130.0	111.3	78.9	118.8	154.6	56.6
2019:02	128.4	111.5	75.8	114.4	156.5	54.2
2019:03	130.9	111.7	78.5	119.8	150.1	55.3
2019:04	131.3	111.8	80.3	121.3	154.0	52.8
2019:05	130.9	111.8	80.2	120.2	150.2	52.1
2019:06	130.9	111.6	81.0	119.6	149.9	51.7
2019:07	131.6	112.0	80.8	121.8	152.0	51.2
2019:08	130.8	111.8	79.1	119.4	153.3	49.1
2019:09	130.5	111.6	80.3	120.6	154.8	47.8
2019:10	129.6	111.4	79.9	120.7	147.2	48.3
2019:11	130.3	111.6	79.5	123.3	146.6	48.1
2019:12	130.8	111.4	83.6	125.1	147.9	47.2
2020:01	130.9	112.0	80.0	119.5	149.1	50.9
2020:02	131.9	111.8	81.7	119.9	149.4	50.1
2020:03	121.4	103.5	74.9	120.9	127.9	49.1
2020:04	112.9	96.9	42.0	104.9	97.5	41.5
2020:05	118.8	99.8	47.2	113.9	119.8	43.1
2020:06	122.3	102.8	58.5	114.7	136.5	52.6
2020:07	124.9	104.9	64.6	117.0	139.8	54.2
2020:08	126.0	106.5	65.8	117.3	134.3	56.0
2020:09	125.7	107.5	70.9	121.1	133.8	55.4
2020:10	126.7	108.2	72.3	119.8	137.7	59.3
2020:11	127.9	109.2	73.8	120.4	135.6	57.5
2020:12	129.6	109.6	77.0	124.8	136.0	60.7
2021:01	130.8	110.1	77.5	123.5	141.6	58.7
2021:02	132.4	110.1	82.0	125.3	150.6	60.8
2021:03	133.0	111.5	84.3	125.3	160.4	64.7
2021:04	134.2	113.1	89.3	124.2	175.3	60.7
2021:05	134.4	114.6	89.4	123.8	176.0	61.2
2021:06	137.3	116.2	88.8	123.1	189.5	60.6
2021:07	140.2	116.6	92.4	125.3	206.7	59.5
2021:08	139.7	117.4	89.8	128.7	187.9	59.9
2021:09	139.2	117.6	90.1	124.2	193.3	61.1
2021:10	139.8	118.3	89.1	126.8	196.3	60.8
2021:11	141.2	119.2	90.0	127.8	201.8	61.1
2021:12	140.7	120.0	90.0	127.9	201.5	58.7
2022:01		119.6				57.6

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

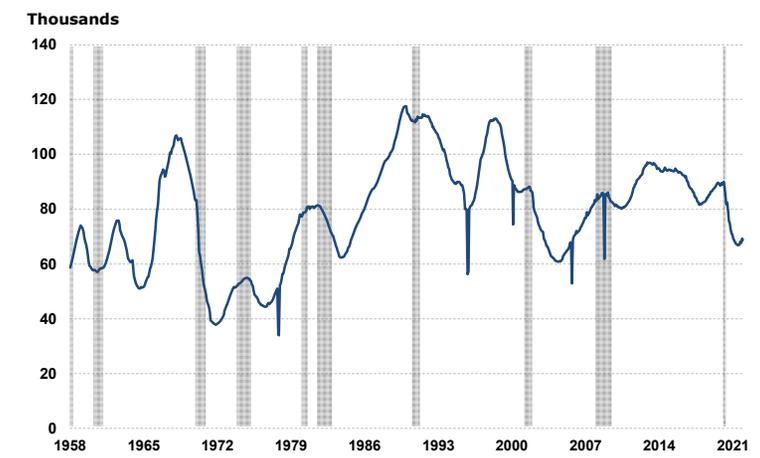
January 1980 to January 2022



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

Washington Aircraft and Parts Employment

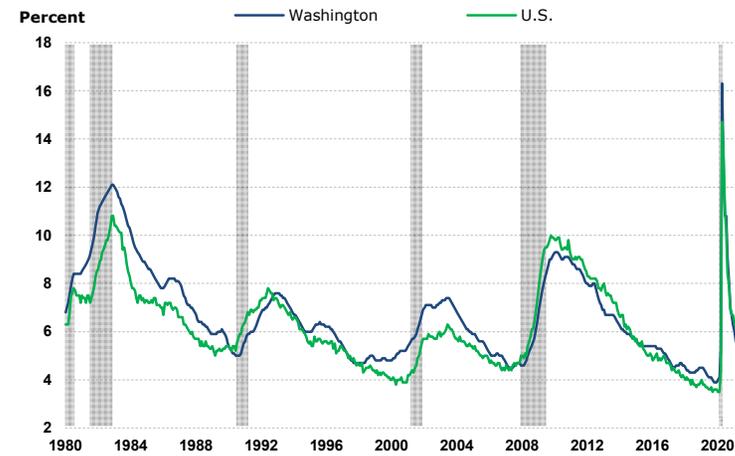
January 1958 to December 2021



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

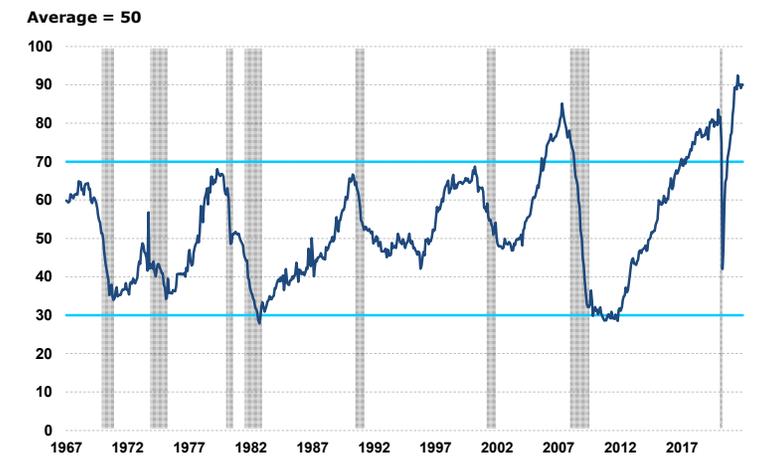
January 1980 to January 2022



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to December 2021



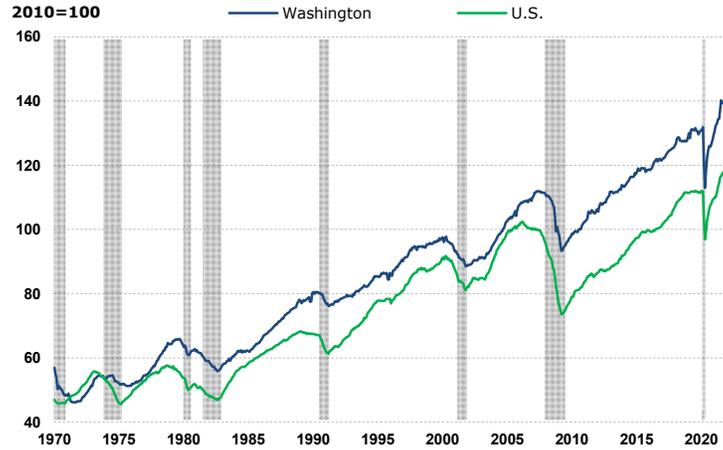
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

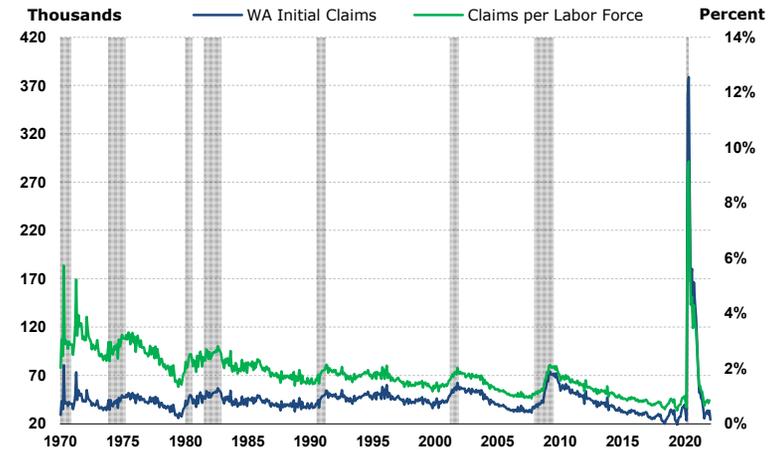
January 1970 to January 2022



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

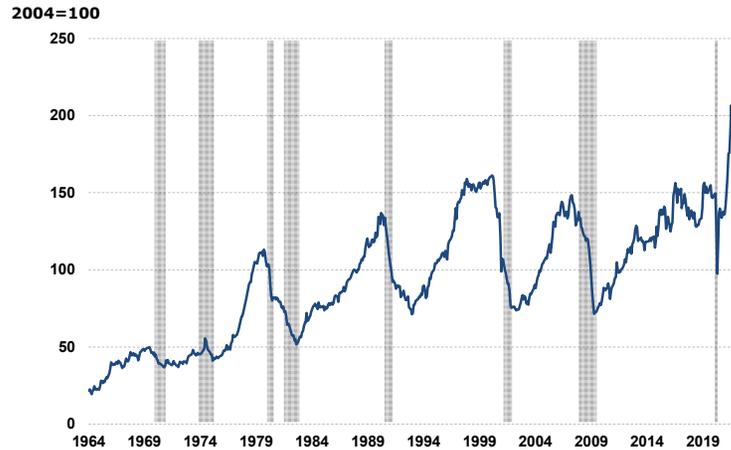
January 1970 to January 2022, S.A.



* Source: WA State Employment Security, ERFC

Washington State Help Wanted Index

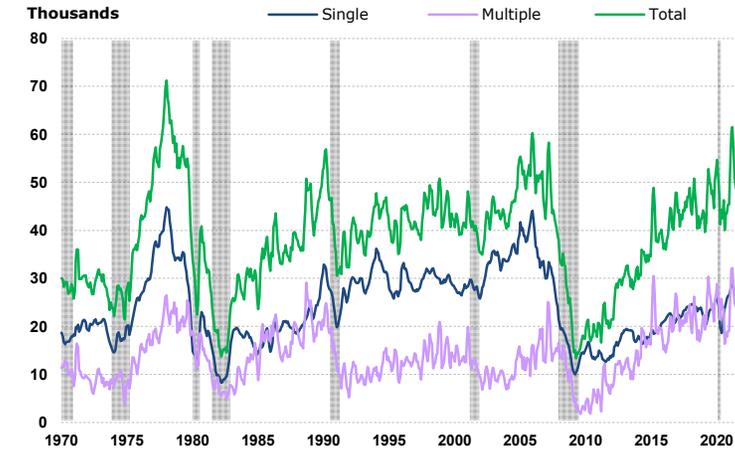
January 1964 to December 2021



* Source: The Conference Board, ERFC

Housing Units Authorized in Washington State

January 1970 to January 2022, 3mma, SAAR



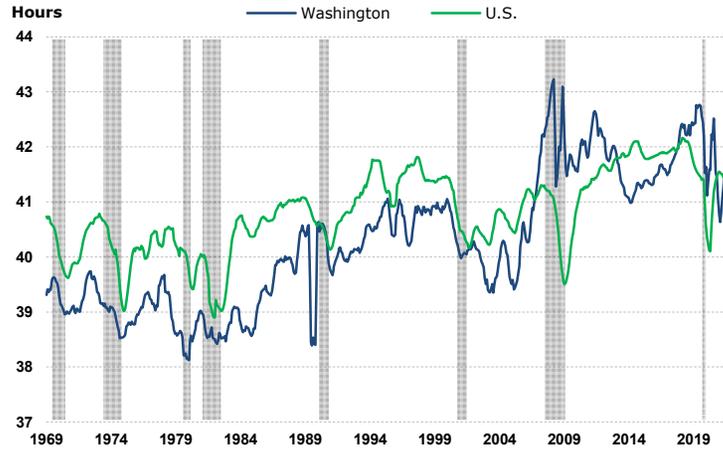
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

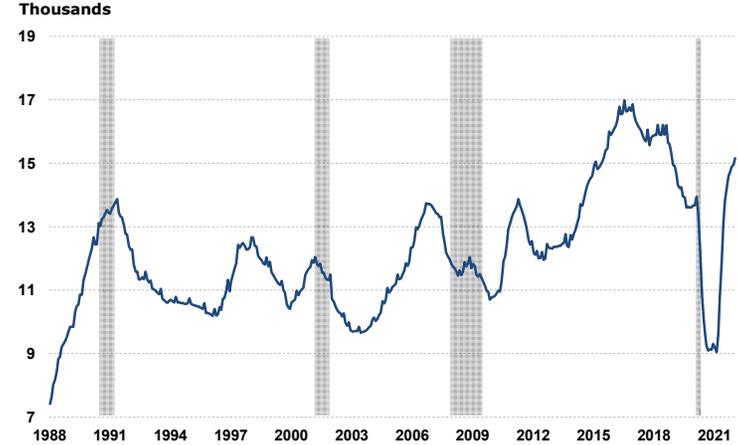
June 1969 to January 2022, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

January 1988 to January 2022, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

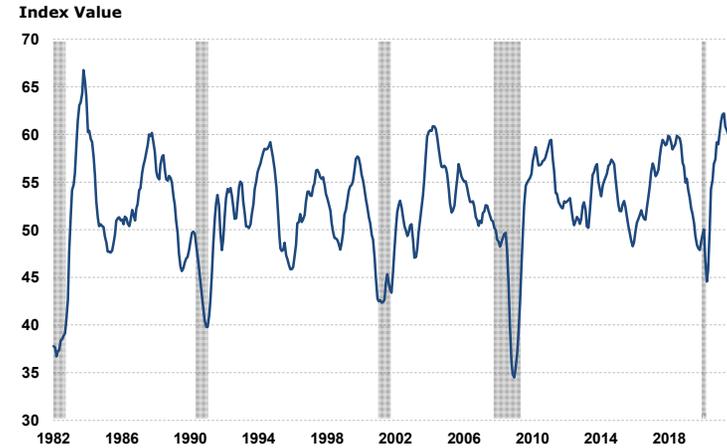
September 1970 to January 2022, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

U.S. Institute for Supply Management Index

March 1982 to January 2022, 3-Month Moving Average, S.A.



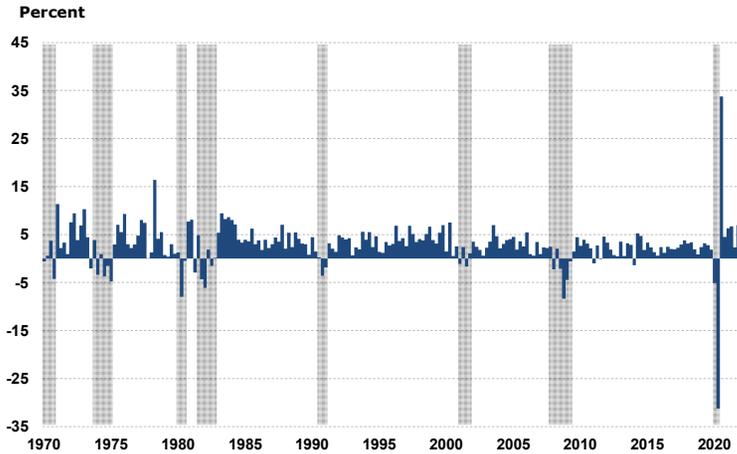
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.
Appendix

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

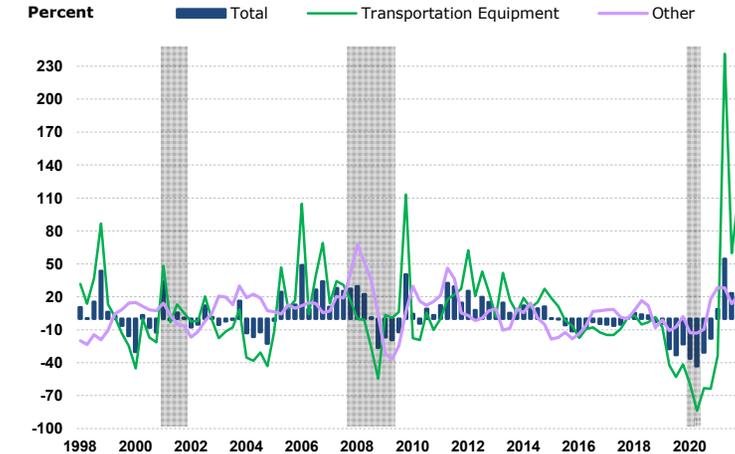
1970Q1 to 2021Q4, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

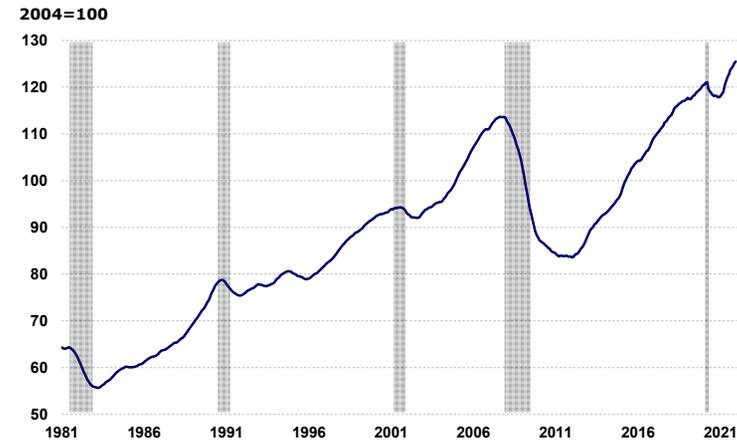
1998Q1 to 2021Q4, Year-over-year percent change



* Source: WISER

Washington State Construction Index

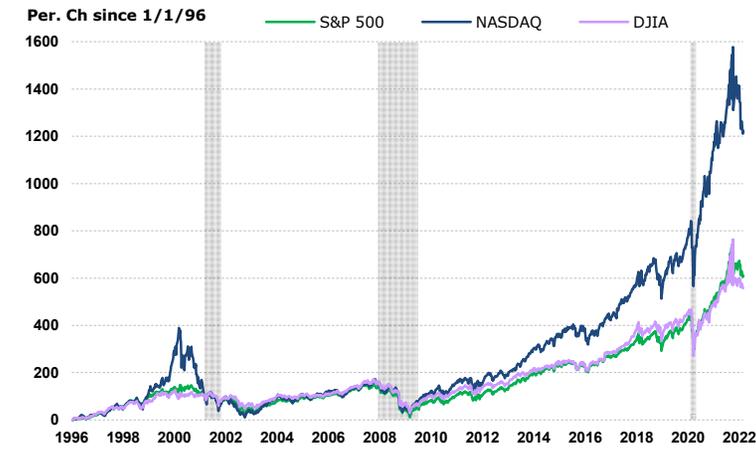
January 1981 to December 2021, 12mma



* Source: ERFC

National Stock Indexes

January 1, 1996 to February 25, 2022



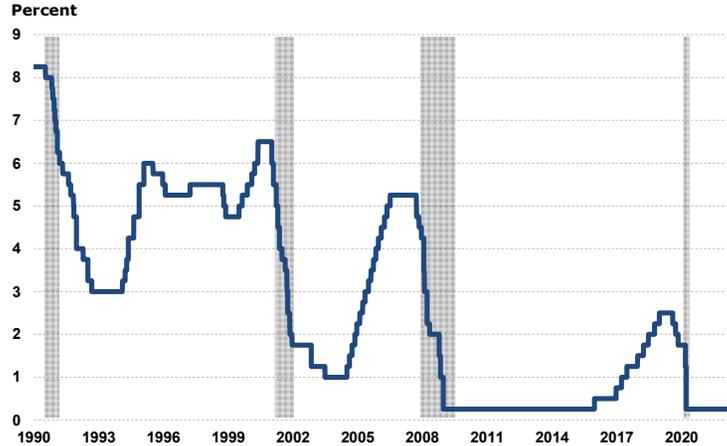
* Source: ERFC

* Shaded areas correspond with national recessions.
Appendix

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

Federal Funds Target Rate

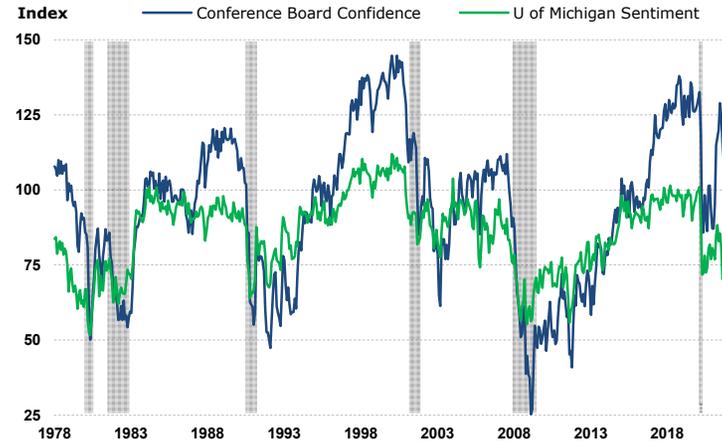
January 1, 1990 to February 25, 2022



* Federal Reserve

Consumer Confidence

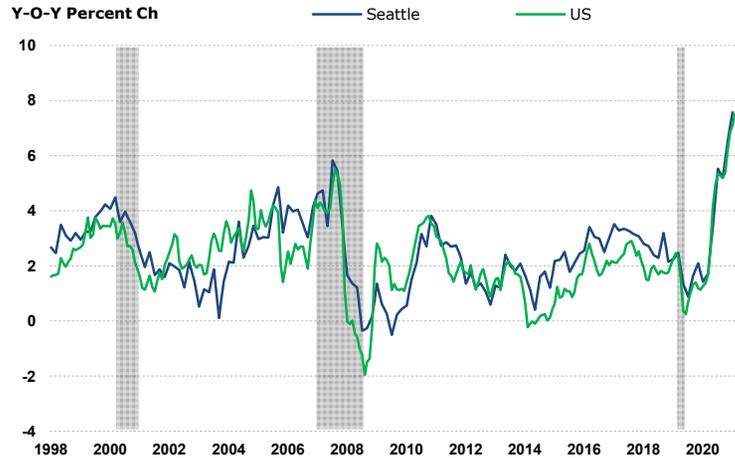
March 1978 to February 2022



* Source: The Conference Board, University of Michigan

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

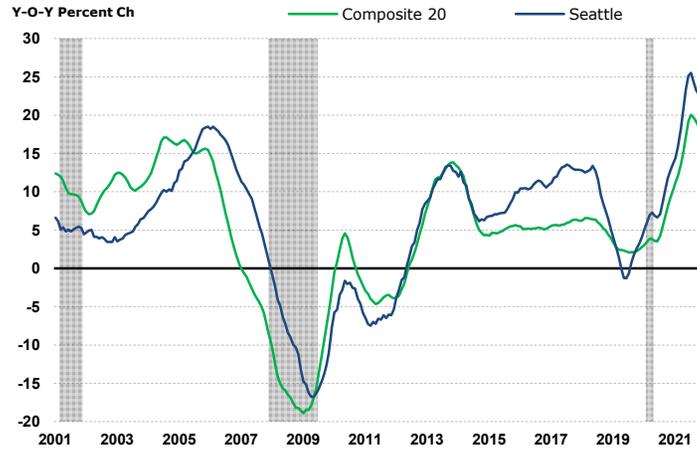
December 1998 to January 2022



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to December 2021, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.
Appendix

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Glossary

Biennium: The state's two years budget cycle.

Cash Basis: Cash receipts received during a period. The Forecast Council forecasts revenues on a Cash and GAAP (Generally Accepted Accounting Principles) basis.

CPI: The Consumer Price Index for All Urban Consumers. The Bureau of Labor Statistics (BLS) updates the CPI monthly, surveying over 60,000 goods in 85 urban areas.

Tax Elasticity: A measure of how tax revenues respond to changes in personal income. If tax revenue elasticity is greater than one, a one percent change in personal income will be associated with more than a one percent increase in tax revenues. If elasticity is less than one, a one percent increase in personal income will be associated with less than a one percent increase in tax revenues.

Fiscal Year: The state's budget year. Washington State's fiscal year runs from July 1 through June 30. Fiscal year 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.