

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

Washington State Economic and Revenue Forecast

September 2022
Volume XLVI, No. 3



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Preface

ERFC forecasting structure and schedule

The Economic and Revenue Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year. The Washington State GF-S revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Council consists of 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 October 1, 2022.

Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

September 2022
Volume XLVI, No. 3

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Executive Summary

- **The economy has reopened and economic growth has resumed. However, with strong demand combined with ongoing supply issues, inflation has increased and remains high.**
- **The forecast for real GDP growth in 2022 is now 1.6%, down from 2.5% in the June forecast. For 2023, real GDP growth is 0.6%, down from 1.9% in the June forecast. From 2024-27 GDP growth is unchanged from the previous forecast.**
- **Headline inflation remains high.**
- **The Washington economy continues to expand but inflation remains high and housing has weakened.**
- **Washington employment growth during the three months since the June forecast was released was much more than expected**
- **Seattle home prices fell 2.5% in July following a 1.5% decline in June.**
- **The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast.**
- **Though tracked collections since June have come in above their forecasted amounts, forecasted reductions in housing activity and personal income have lowered expected revenue for the remainder of the forecast period.**
- **The total forecast for funds subject to the budget outlook process was decreased by \$43 million in the 2021-23 biennium, \$495 million in the 2023-25 biennium and \$66 million in the 2025-27 biennium.**
- **Some of the forecast reductions stemmed from an administrative decision that increased tax exemptions for businesses engaged in research and development and allowed for refunds of past taxes. These changes reduced expected revenue by \$29 million in the 2021-23 biennium, \$117 million in the 2023-25 biennium and \$53 million in 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. While the initial surge from the Omicron variant has ended, there remains a significant number of new cases (see Figure 1.1). With the virus here to stay, the economy has reopened and economic growth has resumed. However, with strong demand combined with ongoing supply issues, inflation has increased and remains high. As the Federal Reserve has raised interest rates to combat inflation, the economy has slowed.

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

This forecast is based on a modified version of IHS Markit's September 2022 Control forecast for the U.S. economy. The forecast for GDP growth in 2022 is now 1.6%, down from 2.5% in the June forecast. For 2023, real GDP growth is 0.6%, down from 1.9% in the June forecast. For 2024, real GDP growth is 2.1%, unchanged from the June forecast. We do not have a new long term forecast from Blue Chip since the March 2022 forecast. For 2025-27, we assume the same growth rates as in the March Blue Chip long term forecast. We expect growth rates of 2.0%, 2.0%, and 1.9% in 2025 through 2027, unchanged from the June forecast.

Inflation is expected to be slightly higher than in the previous forecast

Inflation (as measured by the price index for personal consumption expenditures) is expected to peak at 6.1% this year. Inflation has surged as demand recovered faster than could be accommodated by supplies of commodities and labor disrupted by the pandemic. Inflation is expected to moderate throughout the forecast, although we expect it to be slightly higher than in June. Inflation is expected to decline to 3.2% in 2023. Inflation is expected to average 1.9% from 2024 through 2027. Core inflation (excluding food and energy) is expected to be 4.8% this year and then trend down and average 2.0% in 2025 through 2027.

Washington Economic Forecast

The Washington economy continues to expand but inflation remains high and housing has weakened

The Washington economy continues to expand but inflation remains high and housing has weakened. Washington employment growth during the three months since the June forecast was released was much more than expected. Washington's unemployment rate was 3.7% in August which was a record low in the series that dates to 1976. Washington housing construction slowed in the second quarter of 2022 and again in the first two months of the third quarter. Seattle home prices fell 2.5% in July following a 1.5% decline in June. Washington exports increased 28% from the second quarter of 2021 to the second quarter of 2022. Washington personal income grew 6.0% in the second quarter compared to 5.8% for the nation. The annual personal income revision added \$14.2 billion (2.6%) to the estimate for 2021, mostly because of a large increase in the estimate for property income. Seattle

consumer price inflation of 9.0% outpaced the national average of 8.2% in the year ending in August 2022.

The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast.

The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast. We expect a 5.0% increase in Washington employment this year up from the 4.8% growth rate expected in the June forecast. The increase in growth this year is due to stronger than previously expected employment growth through August. We expect slower growth during the remainder of the forecast as the U.S economy slows. We expect employment growth to average 0.9% per year in 2023 through 2027 which is the same average rate as in the June forecast. Our forecast for nominal personal income growth this year is 3.0%, which is the same rate as in the June forecast. Real personal income is expected to decline 3.0% this year, which is also the same rate as in the June forecast. Real personal income growth this year will be undermined by the surge in inflation and the withdrawal of the extraordinary stimulus of the previous two years. Our new forecast for nominal personal income growth in 2023 through 2027 averages 5.0% per year which is slightly less than the 5.3% average rate in the June forecast. We expect permits to total 53,200 units this year, up from 52,200 units in the June forecast. However, we expect permits to average 46,500 units in 2023 through 2027, down from 47,800 units in the June forecast. We expect headline inflation to reach 8.7% this year, up from 7.8% in the June forecast. We expect Seattle headline inflation to average 2.4% per year in 2023 through 2027 which is slightly higher than the 2.2% average rate in the June forecast.

Revenue Forecast

Though collections have come in above the forecast, projections have decreased, mainly due to lower forecasted construction activity and real estate sales

Since the June forecast, taxable activity has been stronger than expected, with tracked collections coming in above the forecast. While sales and business taxes exceeded expectations, however, real estate excise tax collections came in well below the forecast. The reduction in real estate activity is expected to continue for the next several years, mainly due to higher mortgage rates. The higher rates are also forecasted to reduce construction activity, which will also lower collections. In addition, forecasted state personal income is slightly lower than the previous forecast. As a result of these changes, forecasted revenue has been reduced for the rest of the biennium through the end of the forecast period. An administrative decision has also contributed to the reduction by increasing certain sales tax exemptions.

*Total forecast
change by
biennium
(millions):*

21-23: \$43
23-25: -\$495
25-27: -\$66

In the 2021-23 biennium, the surplus in collections since June, lessened by future decreases, added \$72.2 million to expected total revenue for the biennium while the increased exemptions and associated refunds subtracted \$28.8 million, resulting in a total forecast increase of \$43.4 million. In the 2023-25 biennium, the forecasted decrease in taxable activity subtracted \$378.4 million from expected revenue while the tax exemption decision reduced the forecast by \$117.0 million, resulting in a total forecast decrease of \$495.4 million. In the 2025-27 biennium, the forecasted decrease in taxable activity subtracted \$12.7 million from expected revenue while the tax exemption decision reduced the forecast by \$53.3 million, resulting in a total forecast decrease of \$66.0 million. The September 2022 forecast for these funds total \$63,190.8 million in the 2021-23 biennium, \$65,503.7 million in the 2023-25 biennium and \$70,135.8 million in the 2025-27 biennium.



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

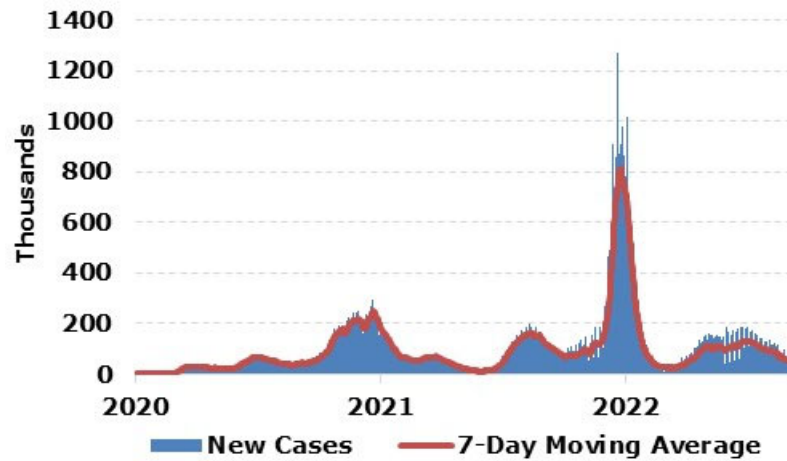
- **The economy has reopened and economic growth has resumed. However, with strong demand combined with ongoing supply issues, inflation has increased and remains high.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **Real GDP decreased by 0.6% (SAAR) in the second quarter of 2022 after declining 1.6% (SAAR) in the first quarter.**
- **Employment has increased and unemployment has trended downward.**
- **Headline inflation remains high.**
- **The housing market has recovered but is slowing; manufacturing growth is slowing but remains positive.**
- **Oil prices appear to have peaked.**
- **The forecast for real GDP growth in 2022 is now 1.6%, down from 2.5% in the June forecast. For 2023, real GDP growth is 0.6%, down from 1.9% in the June forecast. From 2024-27 GDP growth is unchanged from the previous forecast.**
- **We expect the Federal Reserve to increase the federal funds by the end of the year with rates reaching 3.75% to 4.0%.**
- **Due to the high degree of uncertainty regarding the extent to which the COVID-19 pandemic will continue, and the possibility of a recession, 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. While the initial surge from the Omicron variant has ended, there remains a significant number of new cases (see figure 1.1). With the virus here to stay, the economy has reopened and economic growth has resumed. However, with strong demand combined with ongoing supply issues, inflation has increased and remains high. As the Federal Reserve has raised interest rates to combat inflation, the economy has slowed.

Figure 1.1: New COVID-19 Cases



Source: Source: U.S. Centers for Disease Control; data through September 29, 2022

Policymakers have approved trillions of dollars in stimulus

Policymakers approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic. Stimulus related to the pandemic has been over \$6.0 trillion in five major categories. Loan and grant programs (\$1.56 trillion), income support (\$925 billion), state and local government funding (\$904 billion), direct payments (\$869 billion), and health spending (\$742 billion). The remainder of the spending is comprised of tax policy and other spending such as disaster support, higher education, and housing.

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 29.9% (SAAR) in the second quarter of 2020 followed by a record 35.3% (SAAR) gain in the third quarter of 2020. GDP has since recovered and reached the pre-pandemic peak in the second quarter of 2021.

GDP declined in each of the last two quarters

Real GDP decreased by 0.6% (SAAR) in the second quarter of 2022 after declining 1.6% (SAAR) in the first quarter. Inventories were a major drag on growth in the second quarter, subtracting 1.9 points to overall GDP growth. Fixed investment fell 5.0% (SAAR) led by a 17.8% (SAAR) decline in residential construction. The decline in fixed investment reduced topline growth by 2.8 points. Government spending declined 1.6% (SAAR) reducing GDP by 0.3 points. Consumer spending growth improved to 2.0% after growing 1.3% (SAAR) in the first quarter. Consumption added 1.4 points to GDP growth in the second quarter. Exports outpaced imports resulting in a net increase of 1.2 points to overall GDP growth. Imports fell 4.8% (SAAR) while exports increased 18.9% (SAAR) leading to net exports subtracting 3.2 points from overall GDP growth.

Employment has now recovered and surpassed 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 August with an increase of 315,000. It appears supply chain issues are resolving at least in terms of their impact on goods producing industries, with autos being an exception. The manufacturing sector gained 22,000 jobs in August. Construction employment (+16,000) continues to hold up even as the housing market weakens. Private services providing employment increased by 263,000. Employment increases in the service sector were led by a 68,000 increase in professional and business services. Health care gained 61,500 jobs. Retail trade remained strong, gaining 44,000 jobs. Leisure and hospitality continues to recover from deep declines related to the shutdowns, gaining 31,000 jobs in August. Government payrolls increased by 7,000. With the strong employment gains in recent months, total nonfarm employment has now recovered and surpassed the pre-pandemic February 2020 level.

The unemployment rate continues to trend downward

The unemployment rate remains low. After spiking in April 2020 at 14.8%, the unemployment rate has steadily declined to 3.5% in July 2022, matching the historic low reaching prior to the pandemic in February 2020. In August, the unemployment rate increased to 3.7%. The labor force participation rate increased to 62.4% in August, up from 61.7% a year ago but down from a pre-pandemic high of 63.4% in January 2020. Average hourly earnings are up \$1.60 from a year ago to \$32.36 while the average workweek fell 0.2 hours from last year to 34.5 hours in August.

Consumer confidence has inched up recently

Consumer confidence has inched up in recent months. Consumer confidence as measured by the Conference Board improved 4.4 points in September and is up from 98.4 in June. The increase was from both an improvement in expectations and present conditions. A sturdy labor market and falling gas prices drove the increase. The University of Michigan Consumer Sentiment index shows a similar improvement, albeit off a more depressed level. The index increased 0.4 points in September to 58.6 and is up from a record low 50.0 in June. The increase was due to an increase in current conditions while expectations were unchanged. Inflation expectations remain elevated by moderated in September.

Oil prices have fallen

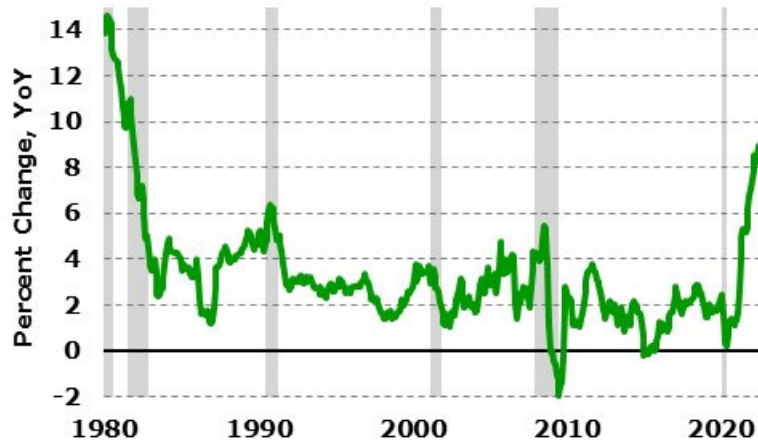
Oil prices have fallen the past few months. Brent spot crude prices are now at \$89 per barrel in the fourth week of September, down from \$127 in early June. West Texas Intermediate (WTI) prices have declined to \$83 per barrel from \$120 per barrel over the same time period. OPEC+ continues to try to keep prices elevated by keeping supplies tight. The oil cartel is considering an output cut of more than a million barrels per day to try and stop the recent decline in prices. The invasion of Ukraine and subsequent sanctions against Russian oil have kept oil prices elevated. U.S. oil production has increased over the year. U.S. production increased to 11.800 million bpd in July

up from 11.788 million bpd in June and 11.347 million bpd a year ago. 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 increasing since reaching a trough in August 2020. As of September 30th the rig count was 765, up 237 since last year.

Inflation remains high

Headline inflation has moderated but remains high. Supply has not been able to meet the surge in demand. Supply chain issues due to the pandemic contributed to the disconnect. Shortages of commodities have also pushed prices higher. Rents have now accelerated in lagged response to soaring home prices. Wage increases in response to higher consumer inflation have kept overall inflation more persistent. Year-over-year, the Consumer Price Index (CPI) was up 8.3% in August, down from the peak of 9.1% in June (see Figure 1.2). The disruption in the auto market which resulted in significant car price inflation appears to be easing. Other sectors affected by earlier stay-at-home orders have seen some of the largest impacts. Energy prices, particularly gasoline (+25.6%), have remained stubbornly high. Food costs have accelerated and are up 11.4% over the year. Shelter cost inflation (+6.2%) has been relatively in check, despite the recent surge in home prices. Core consumer prices, which exclude food and energy, were up 6.3% over the year.

Figure 1.2: Consumer Price Index



Source: Bureau of Labor Statistics; data through August 2022

Home prices appear to have peaked

Home prices appear to have peaked. Tight supply and strong demand for housing had led to surging prices. With inflation remaining persistently high, the Federal Reserve has raised interest rates substantially. This has led to a rapid rise in mortgage rates which has caused affordability to plummet. The seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index declined 0.4% in July. Home prices remain 16.1% higher than a year ago but have reached an inflection point (see Figure 1.3). Lumber prices, which had been at historic highs,

have come down. The random length lumber price reached an all-time high \$1,671 per 110,000 board feet in May 2021. Prices came down to \$423 at the end of September, in line with prices prior to the pandemic. Homebuilder confidence has fallen for eight consecutive months. In August, confidence fell six points to 49, the first decline below the break-even 50 mark since May 2020. The rate on a 30-year mortgage increased to 6.70% as of September 29th, up from 3.01% a year ago.

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



Source: S&P CoreLogic Case-Shiller; data through July 2022

The housing market has recovered, but is slowing

The housing market has recovered and is now above pre-pandemic levels, but is beginning to slow. Record high home prices have incentivized the construction of new homes. However, rising interest rates, lower confidence, and declining affordability is starting to impact new construction. Housing starts increased 12.2% in August but are down 0.1% since last year. Single-family starts in August are down 14.6% since last year while multi-family starts are up 33.1%. The inventory of new homes on the market is trending up. In August there was 8.1 months' worth of supply, down from 10.4 in July but up from 6.5 a year ago. Housing permits declined 8.5% in August and are down 13% since last year. Single-family permits are down 15.2% since last year while multi-family permits are up 9.3%. New home sales increased 28.8% August to 685,000 (SAAR) but are down 0.1% since last year.

The manufacturing sector remains positive

Growth in the manufacturing sector remains positive but is starting to slow. Supply chain constraints continue to impact supply while demand remains positive. The Institute for Supply Management (ISM) Report on Business index fell to 50.9 (index values below 50 indicate contraction) in September from 52.8 in August. The new orders component declined 4.2 points to 47.1 once again indicating contraction. Production increased to 50.6 from 50.4 the month before. The employment component fell

into negative territory again, declining 5.5 points to 48.7. The latest G-17 report from the Federal Reserve indicates manufacturing output improved 0.1% in August and remains up 3.3% from a year ago. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 1.3% in August and are up 9.7% from a year ago.

U.S. exports have returned to growth

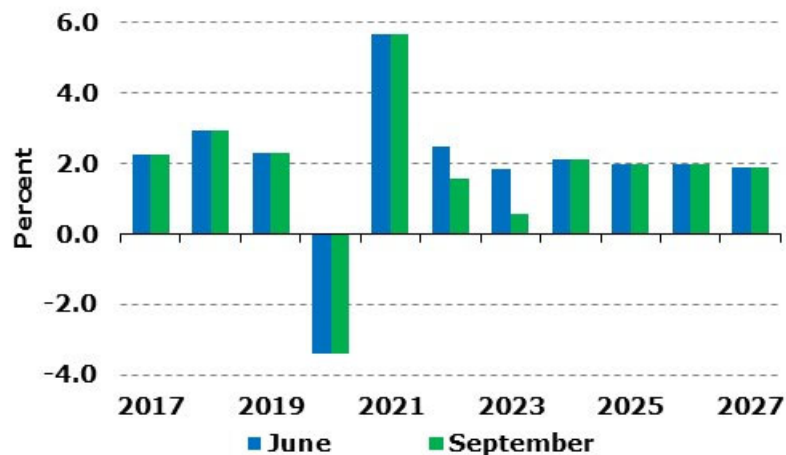
U.S. exports are growing again as the global economy continues to recover from pandemic related restrictions. Global containment measures to combat virus outbreaks have eased, with the exception of China. Total exports in the second quarter grew 22.1% year over year. Petroleum and coal exports have surged as demand picked up and prices rose, increasing 82.9% from a year ago. Oil and gas export are similarly growing, up 77.9% year over year. Exports to the rest of North America have remained strong. Year-over-year growth in exports to Canada increased to 22.0% while exports to Mexico are up 21.9%. Exports to China has slowed. Second quarter exports fell 3.4% from a year ago, down from a 3.9% increase the prior quarter.

Forecast

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

This forecast is based on a modified version of IHS Markit's September 2022 Control forecast for the U.S. economy. The forecast for GDP growth in 2022 is now 1.6%, down from 2.5% in the June forecast (see figure 1.4). For 2023, real GDP growth is 0.6%, down from 1.9% in the June forecast. For 2024, real GDP growth is 2.1%, unchanged from the June forecast. We do not have a new long term forecast from Blue Chip since the March 2022 forecast. For 2025-27, we assume the same growth rates as in the March Blue Chip long term forecast. We expect growth rates of 2.0%, 2.0%, and 1.9% in 2025 through 2027, unchanged from the June forecast.

Figure 1.4: Real GDP Growth



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

Key assumptions regarding the pandemic are included in the forecast

The forecast includes key assumptions related to the economic recovery and the pandemic. The transition from pandemic to endemic continues as the number of cases remain subdued and behavior adjusts to risks of living with the virus. The CDC extends the Public Health Emergency 90 days through mid-January.

All stimulus measures enacted are in the forecast

The September forecast includes all pandemic relief measures enacted to date. The forecast includes the Infrastructure Investment and Jobs Act (IIJA), the Consolidated Appropriations Act of 2022 funding federal government for this fiscal year, the Inflation Reduction Act, and assumes current tax policy. It also includes the presidents plan to forgive a portion of student debt. The forecast includes tariffs enacted by the U.S. and China since 2017 that are still in effect.

Oil prices have declined but remain high

Oil prices have declined since peaking in June but remain high. Recent economic sluggishness and pandemic restrictions in Asia have lowered demand. However, production restraint by OPEC+, and sanctions following the Russian invasion of Ukraine have limited supply. Saudi Arabia and the United Arab Emirates have been reluctant to pump more oil since they believe the market is balanced and there is no need for an increase in production. The refiner acquisition price of crude oil in 2022 is expected to average \$96 per barrel, down from \$104 in the June forecast (see Figure 1.5). The expected slowdown in economic growth should result in reduced demand. Going forward, supply constraints are expected to diminish, and increased U.S. production will keep prices somewhat in check as demand recovers. We expect oil prices to decline to \$82 per barrel in 2023 and decline throughout the forecast reaching \$66 per barrel in 2027.

Figure 1.5: Average Price of Crude Oil



Source: EIA, September 2022 ERFC forecast; historical data through 2022 Q2

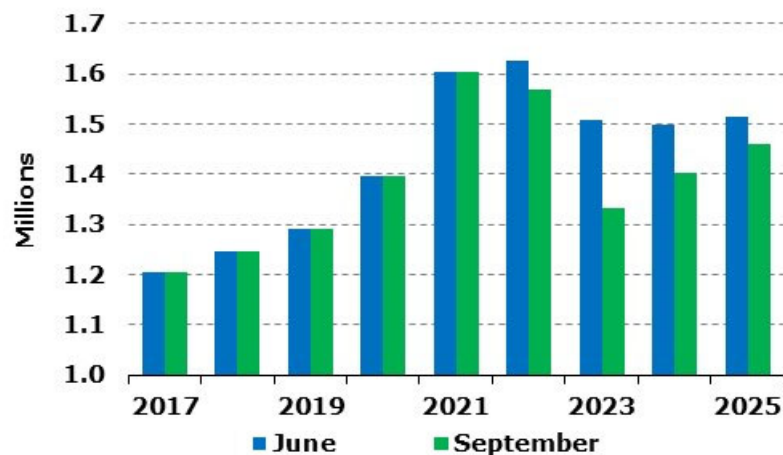
<i>Inflation is expected to be slightly higher than in the previous forecast</i>	Inflation (as measured by the price index for personal consumption expenditures) is expected to peak at 6.1% this year. Inflation has surged as demand recovered faster than could be accommodated by supplies of commodities and labor disrupted by the pandemic. Inflation is expected to moderate throughout the forecast, although we expect it to be slightly higher than in June. Inflation is expected to decline to 3.2% in 2023. Inflation is expected to average 1.9% from 2024 through 2027. Core inflation (excluding food and energy) is expected to be 4.8% this year and then trend down and average 2.0% in 2025 through 2027.
<i>Consumer spending growth is expected to slow</i>	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 2.4% this year, down from 7.9% growth in 2021. The June forecast expected growth of 3.2% this year. The forecast calls for growth to further soften in 2023 at 1.0%. Going forward, we expect spending growth to average 2.2% in 2024 through 2027.
<i>Employment growth is expected to slow</i>	Employment took a major hit from the COVID-19 pandemic. 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 4.0% growth this year. Job growth is expected to slow to 0.7% in 2023 and then to 0.1% in 2024. We then expect job growth to pick up slightly and reach 0.4% in 2027. The forecast calls for the unemployment rate to average 3.7% this year, down from 5.4% in 2021. Going forward, the forecast calls for the unemployment rate to slowly increase to 4.6% in 2025 before slowing to 4.2% in 2027.
<i>Labor force participation has been lowered</i>	In response to a recent flattening out of the path of the labor-force participation rate, and in light of demographic and economic trends that are weighing on participation, we lowered our projection for the labor-force participation rate. We expect labor force participation of 62.3% this year, trending down to 61.4% in 2027. The June forecast assumed a labor force participation rate of 62.5% this year trending down to 62.1%.
<i>Business investment is expected to be weaker than in June</i>	Real nonresidential fixed investment is expected to increase 4.1% this year after a 7.4% increase in 2021. The June forecast expected 5.8% growth this year. Demand is expected to soften in line with slower overall GDP growth, lessening the need to expand productivity capacity. Borrowing costs have moved up sharply, reflecting expectations of more aggressive monetary policy by the Federal Reserve. Office vacancy rates remain high however as Americans still work from home even after social

distancing requirements have eased. Real nonresidential fixed investment growth is forecasted to slow to 0.3% in 2023 and remain flat in 2024. The forecast then calls for growth to pick up and reach 2.0% in 2027. We expect real nonresidential construction to decline 6.4% this year after declining 8.0% in 2021. The forecast calls for nonresidential construction to decline another 2.2% in 2023 before returning to growth in 2024. Real nonresidential construction will not have fully recovered to its level before the pandemic by the end of 2027. Real equipment investment is expected to increase 4.5% this year after growing 13.1% in 2021. We expect growth in real equipment investment to decline slightly in 2023 and 2024 at -0.1% and -0.3%. We then expect real equipment investment growth to turn positive in 2025 and accelerate through the end of the forecast, reaching 2.8% growth in 2027.

The housing market outlook has quickly shifted

The housing market outlook has quickly shifted. Rising mortgage rates are lowering affordability and weighing down housing demand. Labor and material shortages remain, causing delays in finished construction. Material costs have come down but remain high. The September forecast calls for housing starts to decline 2.3% after strong growth of 15.1% in 2021. We expect single-family housing starts to decline 9.3% and the multi-family segment to increase 14.5% this year. We expect 2021 to be the peak in housing starts at 1.61 million units (see figure 1.6). The forecast assumes a sharp contraction in starts in 2023 of 15.1% with both single and multi-family declining. We expect total housing starts to reach a trough in 2023 of 1.33 million units. The forecast then calls for growth over the next two years before a slight decline in 2026 and 2027.

Figure 1.6: Housing Starts



Source: U.S. Census Bureau, September 2022 ERFC forecast; historical data through 2021

The COVID-19 pandemic has affected economies throughout the world. Economic growth of U.S. major trading partners is expected to be slightly stronger this year, but then weaker in

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

2023 compared to the June forecast. Economic growth of major U.S. trading partners is expected to be 3.0% this year after growth of 5.8% in 2021. The June forecast called for growth of 2.8% in 2022. We expect U.S. major trading partner growth to slow to 2.0% in 2023 compared to anticipated growth of 2.8% in the June forecast. We then expect growth of 2.6% in 2024 and 2.4% in 2025 through 2027. Real U.S. exports are forecasted to increase 7.1% this year, up from 6.3% growth in the previous forecast. The forecast calls for real exports to reach their pre-pandemic peak in the fourth quarter of next year. We expect real export growth to slow and average 3.9% in 2023 through 2027.

The fiscal response to the pandemic has been massive

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 (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 cost of \$5.7 trillion over ten years.

The Federal Reserve is raising rates

The Federal Reserve will continue to raise interest rates as it strives to lower inflation to 2%. The Federal Reserve raised the target for the federal funds another 75 basis points in September, the third consecutive rate hike of this magnitude. Inflation has remained high for longer than policymakers had anticipated. We expect the Federal Reserve to increase the federal funds by the end of the year with rates reaching 3.75% to 4.0%. We then expect the Federal Reserve to start cutting the rate in the December 2023 meeting. The rate cuts are expected to end in mid 2025 and then hold steady through 2027 at 2.5% to 2.75%. The forecast also calls for the Federal Reserve to continue removing stimulus tied to its balance sheet. We expect an eventual reduction of about \$2.5 to \$3.0 trillion over approximately three years.

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
- The war in Ukraine escalates
- Inflation increases

- Rising mortgage rates cause a sharp downturn in affordability
- Weak demand causes businesses to slow re-hiring of laid-off workers
- Increasing geopolitical tensions negatively affect consumer confidence
- The Federal Reserve rate increases lead to a recession
- Deficit fears limit fiscal policy
- A breakdown in trade relations
- Global growth weakens, pulling exports down

Upside Risks

- The Federal Reserve increases rates to slow inflation without causing a recession
- COVID-19 infections/deaths decline faster than anticipated
- The war in Ukraine ends
- 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	19,678.1	19,757.7	20,031.5	20,467.4	20,872.4	21,277.2
% Ch	-0.9	1.6	3.9	0.4	1.4	2.2	2.0	1.9
Real Consumption	12,803.0	13,174.2	13,840.8	14,012.4	14,235.5	14,577.3	14,884.2	15,196.8
% Ch	-1.4	2.9	5.1	1.2	1.6	2.4	2.1	2.1
Real Nonresidential Fixed Investment	2,748.1	2,764.1	2,935.2	2,999.7	2,993.6	3,003.6	3,045.5	3,102.3
% Ch	-0.7	0.6	6.2	2.2	-0.2	0.3	1.4	1.9
Real Residential Fixed Investment	612.2	701.2	689.8	582.9	589.6	617.5	636.2	646.4
% Ch	1.4	14.5	-1.6	-15.5	1.2	4.7	3.0	1.6
Real Personal Income	17,254.9	18,139.7	17,771.6	17,767.8	18,036.5	18,530.9	19,021.7	19,552.0
% Ch	4.0	5.1	-2.0	0.0	1.5	2.7	2.6	2.8
Real Per Capita Income (\$/Person)	52,081	54,637	53,435	53,238	53,798	55,003	56,182	57,464
% Ch	3.6	4.9	-2.2	-0.4	1.1	2.2	2.1	2.3
Price and Wage Indexes								
PCE Price Index (2012=100)	110.6	112.8	119.2	125.0	127.7	130.1	132.5	135.1
% Ch	1.3	2.0	5.6	4.9	2.1	1.8	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.573	2.632	2.820	2.998	3.070	3.130	3.192	3.257
% Ch	1.6	2.3	7.2	6.3	2.4	2.0	2.0	2.0
Employment Cost Index (Dec. 2005=1.0)	1.395	1.437	1.509	1.592	1.663	1.728	1.792	1.857
% Ch	3.0	3.0	5.0	5.5	4.5	3.9	3.7	3.6
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,039.6	21,848.8	24,118.7	25,617.4	26,631.9	27,752.1	28,903.6	30,099.8
% Ch	0.5	3.8	10.4	6.2	4.0	4.2	4.1	4.1
Personal Income	19,076.0	20,464.2	21,175.3	22,217.3	23,037.5	24,105.8	25,212.4	26,410.9
% Ch	5.4	7.3	3.5	4.9	3.7	4.6	4.6	4.8
Employment (Millions)								
U.S. Civilian Labor Force	162.6	160.6	162.9	165.1	165.9	166.5	167.2	167.9
Total U.S. Employment	152.9	149.5	156.1	158.9	158.7	158.9	159.6	160.6
Unemployment Rate (%)	6.00	6.92	4.18	3.75	4.33	4.60	4.50	4.30
Nonfarm Payroll Employment	147.08	142.96	149.36	153.12	152.98	153.34	153.73	154.25
% Ch	-1.9	-2.8	4.5	2.5	-0.1	0.2	0.3	0.3
Manufacturing	12.52	12.18	12.58	12.72	12.20	11.91	11.82	11.77
% Ch	-2.1	-2.7	3.3	1.1	-4.1	-2.4	-0.7	-0.5
Durable Manufacturing	7.82	7.57	7.82	7.88	7.49	7.30	7.25	7.24
% Ch	-2.6	-3.2	3.3	0.7	-4.8	-2.6	-0.6	-0.1
Nondurable Manufacturing	4.70	4.61	4.76	4.84	4.71	4.61	4.57	4.53
% Ch	-1.4	-1.9	3.2	1.8	-2.8	-2.1	-0.8	-1.0
Construction	7.39	7.32	7.54	7.59	7.34	7.31	7.39	7.49
% Ch	-0.3	-0.9	3.0	0.7	-3.4	-0.4	1.2	1.4
Service-Providing	126.50	122.90	128.65	132.17	132.78	133.44	133.84	134.32
% Ch	-1.9	-2.8	4.7	2.7	0.5	0.5	0.3	0.4
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	46.7	51.8	87.8	87.8	78.4	72.8	68.7	65.6
Personal Saving/Disposable Income (%)	12.6	15.3	7.0	6.0	8.1	8.9	8.8	9.1
Auto Sales (Millions)	3.8	3.7	2.9	3.0	3.2	3.2	3.2	3.1
% Ch	-24.3	-3.2	-23.0	5.9	4.4	2.0	-0.8	-1.8
Housing Starts (Millions)	1.315	1.549	1.656	1.399	1.342	1.448	1.461	1.442
% Ch	8.0	17.8	6.9	-15.5	-4.1	7.9	0.9	-1.3
Federal Budget Surplus (Billions)	-2,231.2	-3,264.5	-1,419.8	-1,027.6	-1,474.8	-1,684.4	-1,689.0	-1,706.4
Net Exports (Billions)	-556.7	-819.6	-1,044.8	-996.1	-904.8	-867.8	-826.3	-754.5
3-Month Treasury Bill Rate (%)	1.20	0.07	0.37	3.39	3.42	2.77	2.37	2.36
10-Year Treasury Note Yield (%)	1.41	1.11	1.93	3.21	3.21	3.18	3.07	3.07
Bond Index of 20 G.O. Munis. (%)	3.20	2.21	2.48	3.55	3.66	3.70	3.57	3.58
30-Year Fixed Mortgage Rate (%)	3.53	2.89	3.72	5.59	5.33	5.03	4.83	4.79

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
June	2.2	4.9	1.31	4.48
September	1.1	4.9	1.88	4.66

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
June	2.1	1.7	2.61	5.00
September	2.1	1.9	3.09	5.18

Table 1.4
Forecast Comparison
 Forecast 2022 to 2025

Fiscal Years

	2021	2022	2023	2024	2025	2026	2027
U.S.							
Real GDP							
September	18,938.1	19,678.1	19,757.7	20,031.5	20,467.4	20,872.4	21,277.2
% Ch	1.6	3.9	0.4	1.4	2.2	2.0	1.9
June	18,938.1	19,721.7	20,105.1	20,487.7	20,921.9	21,331.3	21,750.4
% Ch	1.6	4.1	1.9	1.9	2.1	2.0	2.0
PCE Price Index							
September	112.8	119.2	125.0	127.7	130.1	132.5	135.1
% Ch	2.0	5.6	4.9	2.1	1.8	1.9	1.9
June	112.8	119.2	125.0	127.6	129.6	132.0	134.5
% Ch	2.0	5.7	4.9	2.1	1.6	1.8	1.9
Unemployment Rate							
September	6.92	4.18	3.75	4.33	4.60	4.50	4.30
June	6.92	4.17	3.73	4.27	4.52	4.57	4.41
Mortgage Rate							
September	2.89	3.72	5.59	5.33	5.03	4.83	4.79
June	2.89	3.70	5.25	5.08	4.92	4.83	4.77
3 Month T-Bill Rate							
September	0.07	0.37	3.39	3.42	2.77	2.37	2.36
June	0.07	0.35	2.27	2.80	2.42	2.37	2.36



Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy continues to expand but inflation remains high and housing has weakened.**
- **Washington employment growth during the three months since the June forecast was released was much more than expected.**
- **Washington’s unemployment rate was 3.7% in August which was a record low in the series that dates to 1976.**
- **Washington housing construction slowed in the second quarter of 2022 and again in the first two months of the third quarter.**
- **Seattle home prices fell 2.5% in July following a 1.5% decline in June.**
- **Washington exports increased 28% from the second quarter of 2021 to the second quarter of 2022.**
- **Washington personal income grew 6.0% in the second quarter compared to 5.8% for the nation.**
- **The annual personal income revision added \$14.2 billion (2.6%) to the estimate for 2021, mostly because of a large increase in the estimate for property income.**
- **Seattle consumer price inflation of 9.0% outpaced the national average of 8.2% in the year ending in August 2022.**
- **The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast.**

Current Conditions

The Washington economy continues to expand but inflation remains high and housing has weakened

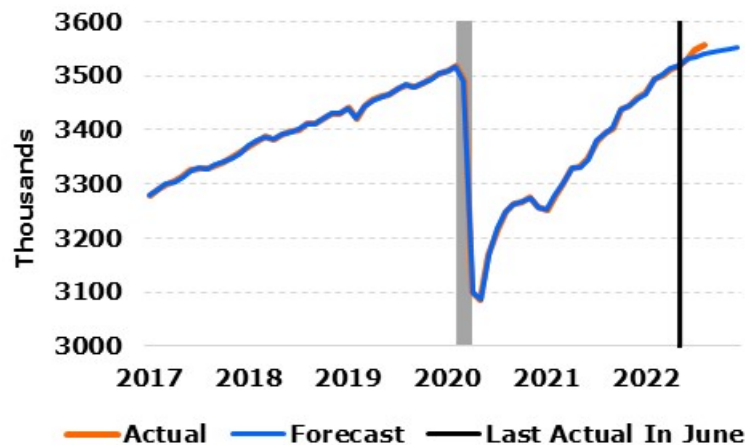
The Washington economy continues to expand but inflation remains high and housing has weakened. Washington employment growth during the three months since the June forecast was released was much more than expected. Washington's unemployment rate was 3.7% in August which was a record low in the series that dates to 1976. Washington housing construction slowed in the second quarter of 2022 and again in the first two months of the third quarter. Seattle home prices fell 2.5% in July following a 1.5% decline in June. Washington exports increased 28% from the second quarter of 2021 to the second quarter of 2022. Washington personal income grew 6.0% in the second quarter compared to 5.8% for the nation. The annual personal income revision added \$14.2 billion (2.6%) to the estimate for 2021, mostly because of a large increase in the estimate for property income. Seattle consumer price inflation of 9.0% outpaced the national average of 8.2% in the year ending in August 2022.

Total seasonally adjusted nonfarm payroll employment increased 38,600 in June, July, and August

We have three months of new Washington employment data since the June forecast was released. Total seasonally adjusted nonfarm payroll employment increased 38,600 in June, July, and August which was 17,700 more than the increase of 21,000 expected in the forecast (see Figure 2.1). Washington employment is now 38,200 (1.1%) higher than at its February 2020 peak. Private services-providing sectors added 19,400 jobs in the three-month period. The manufacturing sector added 5,000 jobs, including 2,400 jobs in aerospace manufacturing, and construction employment increased by 2,300 jobs. State and local government employment increased by 13,100 jobs in June, July, and August but the federal government lost 1,200 jobs.

Figure 2.1: Washington Nonfarm Paroll Employment

Washington employment grew much more than expected in the June forecast



Source: Source: Employment Security Department, ERFC; data through August 2022

<i>Revisions slightly lowered employment</i>	Revisions to employment data subtracted 1,300 (0.0%) from the estimated level of total employment in May 2022. The combined effect of the small downward revision to historical data and the much stronger growth in the last three months is that August employment is 16,400 (0.5%) higher than expected in the June forecast.
<i>Washington's unemployment rate remained at a record low 3.7% in August</i>	Washington's unemployment rate was 3.7% in August which was unchanged since July. The August rate was a record low in the series that dates to 1976. The unemployment rate is down significantly from the 16.8% rate reached in April 2020 which was an all-time high.
<i>Washington initial claims remain close to the all-time low in the series</i>	Washington initial claims for unemployment insurance have fully recovered after rising to unprecedented levels in the spring of 2020. The four-week moving average of the seasonally adjusted number of claims in Washington edged down to 4,132 in the week ending October 1, 2022 from 4,332 in the previous week. Washington initial claims have declined 97% from the April 2020 peak and remain close to the all-time low in the series recorded in early April.
<i>Permits continued to decline in the first two months of the third quarter</i>	Washington housing construction slowed in the second quarter of 2022. The number of housing units authorized by building permits declined to 56,300 (SAAR) in the second quarter from 60,500 in the first quarter. Second quarter permits consisted of 23,300 single-family permits and 32,900 multi-family permits. The June forecast expected 51,800 units (SAAR) in the second quarter, consisting of 24,300 single-family units and 27,500 multi-family units. Permits continued to decline in the first two months of the third quarter. A total of 48,700 units were permitted in July and August (SAAR) consisting of 19,100 single-family units and 29,700 multi-family units. The June forecast expected 48,700 units (SAAR) for the third quarter as a whole consisting of 26,500 single-family units and 22,200 multi-family units.
<i>Seattle-area home prices may have peaked for now</i>	Seattle-area home prices may have peaked for now. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices fell 2.5% in July following a 1.5% decline in June (see Figure 2.2). The composite-20 index declined 0.4% in July following a 0.2% increase in June. July Seattle home prices were still up 14.6% over the year, however. In comparison, the composite-20 index was up 16.1% over the year in July. July Seattle home prices were up 193% since the December 2011 trough and exceeded the May 2007 peak by 104%.

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

Seasonally adjusted Seattle home prices fell 2.5% in July following a 1.5% decline in June



Source: S&P/Case-Shiller Home Price Indices; data through July 2022

Washington exports increased 28% from the second quarter of 2021 to the second quarter of 2022

According to the World Institute for Strategic Economic Research (WISER), Washington exports increased 28% from the second quarter of 2021 to the second quarter of 2022. After more than two years of year-over-year declines, Washington exports of transportation equipment (mostly Boeing planes) increased over the year for a fifth consecutive quarter, rising 60%. Agricultural exports increased 15% 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 18% over the year.

Washington car and truck sales declined

Washington car and truck sales declined in August. The seasonally adjusted number of new vehicle registrations decreased 4.4% in August following a 7.4% increase in July. Monthly sales have been uneven, but the trend has been generally negative in recent years. The number of registrations was down 5.9% over the year in August. This was the 12th consecutive over-the-year decline in Washington car and truck sales.

Washington personal income growth slightly outpaced the national average in the second quarter of 2022

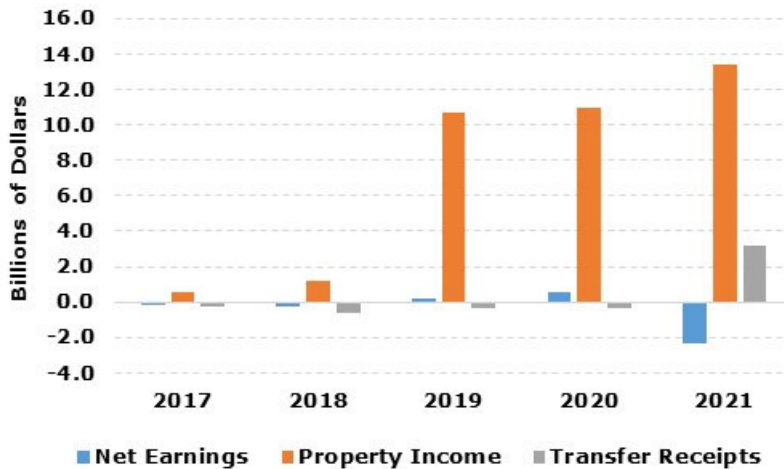
In September, after the forecast was complete, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the second quarter of 2022. Washington personal income increased from \$574.8 billion (SAAR) in the first quarter of 2022 to \$583.2 billion in the second quarter of 2022. The 6.0% increase (SAAR) in Washington personal income was the 16th highest among the states and District of Columbia and exceeded the 5.8% rate of increase for the U.S. as a whole. At 4.8% (SAAR), growth in Washington net earnings trailed the 6.3% national average rate, however, both property income (dividends, interest, and rent) and transfer receipts grew faster in Washington than in the U.S.

The 8.2% growth rate in Washington personal income was the 10th highest among the states and District of Columbia and exceeded the 7.5% growth rate for the nation

The BEA also released revised annual personal income estimates in September for 2017 through 2021 as part of its annual revision of the National Income and Product Accounts (NIPAs). Washington personal income rose to \$570.9 billion in 2021 from \$527.6 billion in 2020. The 8.2% growth rate in Washington personal income was the 10th highest among the states and District of Columbia and exceeded the 7.5% growth rate for the nation. The annual revision added \$14.2 billion (2.6%) to the estimate for 2021 personal income, mostly because of a large increase in the estimate for property income (dividends, interest, and rent). The annual revision raised the estimate of property income by a whopping 13.3% in 2021, adding \$13.4 billion to the estimated level of personal income (see Figure 2.3). The estimate for transfer receipts was revised up by \$3.2 billion (3.2%) while the estimate for net earnings by place of residence was revised down by \$2.3 billion (0.7%).

Figure 2.3: Revisions to Washington Personal Income

The annual revision added \$14.2 billion (2.6%) to the estimate for 2021 personal income, mostly because of a large increase in the estimate for property income



Source: BEA; data through 2021

Seattle consumer price inflation outpaced the national average in the year ending in August 2022

Seattle-area consumer price inflation outpaced the national average in the year ending in August 2022. From August 2021 to August 2022, the seasonally adjusted Seattle CPI rose 9.0% compared to the 8.2% 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 8.1% in Seattle and 6.3% in the national index. Seattle shelter cost inflation exceeded the national average at 8.5% compared to 6.3%. Seattle inflation excluding shelter slightly exceeded the national average at 9.3% compared to 9.2%.

Washington State Forecast

The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast

The Washington forecast features higher inflation but lower personal income growth, housing construction, and construction employment than in the June forecast. We expect a 5.0% increase in Washington employment this year up from the 4.8% growth rate expected in the June forecast. The increase in growth this year is due to stronger than previously expected employment growth through August. We expect slower growth during the remainder of the forecast as the U.S economy slows. We expect employment growth to average 0.9% per year in 2023 through 2027 which is the same average rate as in the June forecast. Our forecast for nominal personal income growth this year is 3.0%, which is the same rate as in the June forecast. Real personal income is expected to decline 3.0% this year, which is also the same rate as in the June forecast. Real personal income growth this year will be undermined by the surge in inflation and the withdrawal of the extraordinary stimulus of the previous two years. Our new forecast for nominal personal income growth in 2023 through 2027 averages 5.0% per year which is slightly less than the 5.3% average rate in the June forecast. We expect permits to total 53,200 units this year, up from 52,200 units in the June forecast. However, we expect permits to average 46,500 units in 2023 through 2027, down from 47,800 units in the June forecast. We expect headline inflation to reach 8.7% this year, up from 7.8% in the June forecast. We expect Seattle headline inflation to average 2.4% per year in 2023 through 2027 which is slightly higher than the 2.2% average rate in the June forecast.

Washington Payroll Employment

We expect a 5.0% increase in Washington employment this year up from 4.8% in June

The September Washington employment forecast is similar to the the June forecast. We expect a 5.0% increase in Washington employment this year up from the 4.8% growth rate expected in the June forecast. The increase in growth this year is due to stronger than previously expected employment growth through August. We expect slower growth during the remainder of the forecast as the U.S economy slows. We expect employment growth to average 0.9% per year in 2023 through 2027 which is the same average rate as in the June forecast. On an annual basis, we expect 1.1% employment growth in 2023, 0.7% in 2024, and 0.8% in 2025, 1.0% in 2026, and 0.9% in 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 August 2021, a loss of 22,800 jobs. Since August 2021, the industry added back 4,900 jobs, bringing the level to 71,600 in August 2022. We expect aerospace employment to continue to expand in Washington, adding 3,200 jobs from the third quarter of 2022 to the fourth quarter of 2024 and another 1,300 jobs by the end of 2027. On an annual average basis, we expect aerospace employment to grow 4.0% this year and 4.3% in 2023, slowing to 1.7% in 2024, 0.5% in 2025, 0.5% in 2026, and 0.8% in 2027.

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

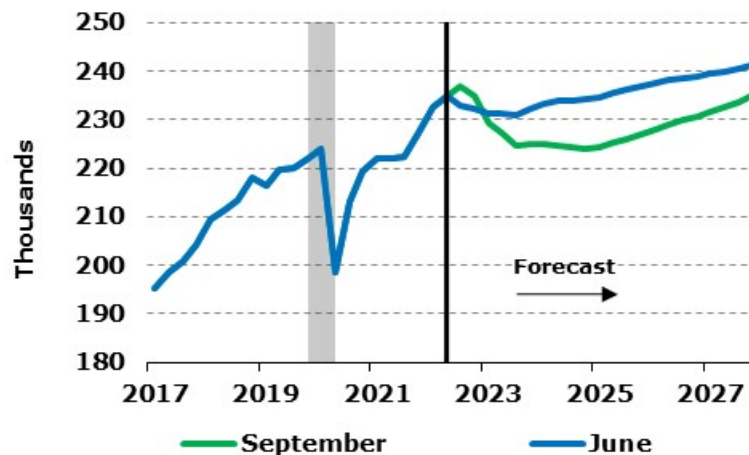
The software sector in Washington did not experience a significant decline during the recession as most software jobs are amenable to remote work. As of August 2022, Washington software employment was 13.8% higher than at the business cycle peak of February 2020. Based on actual growth through August, we are increasing our calendar year forecast for 2022 to 5.6% from 4.7% in the June forecast. We expect slower growth during the remainder of the forecast with growth rates of 2.1% in 2023, 1.6% in 2024, 1.7% in 2025, 1.1% in 2026, and 1.2% in 2027.

Construction employment is expected to decline because of a decline in home building

Construction has recovered more than all the jobs lost in the recession because of a surge in home building. After an initial drop in employment in March and April of 2020, construction employment came roaring back. As of August 2022, construction employment was 5.0% 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 14,800 higher than at the business cycle peak while all other construction employment is 3,400 lower. We expect construction to peak in the third quarter of 2022 (see Figure 2.4). The expected decline of 12,800 construction jobs from the third quarter of this year through the end of 2024 is also due to residential building and residential special trades which is expected to decline by 12,600 while all other construction employment is expected to fall by just 200 jobs. We expect construction employment to grow 5.1% in calendar year 2022 followed by a 3.5% decline in 2023 and a 0.9% decline in 2024. We expect construction to grow 0.5% in 2025, 1.7% in 2026, and 1.6% in 2027.

Figure 2.4: Washington Construction Employment

We expect construction to peak in the third quarter of 2022



Source: Employment Security Department, ERFC; historical data through 2022 Q2

Washington Personal Income

Personal income was slightly lower than previously thought

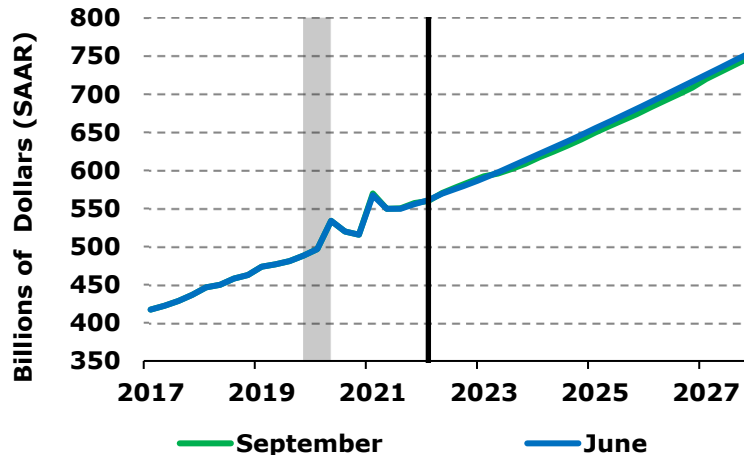
In June, after the forecast was complete, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the first quarter of 2022. Washington personal income in the first quarter of 2022 was \$1.0 billion (0.2%) lower than in the June forecast. Wages and salaries were \$0.9 billion (0.3%) higher than expected but nonwage income was \$1.8 billion (0.7%) lower than expected.

Our forecast for nominal personal income growth this year is 3.0%

Our forecast for nominal personal income growth this year is 3.0%, which is the same rate as in the June forecast. Real personal income is expected to decline 3.0% this year, which is also the same rate as in the June forecast. Real personal income growth this year will be undermined by the surge in inflation and the withdrawal of the extraordinary stimulus of the previous two years. Our new forecast for nominal personal income growth in 2023 through 2027 averages 5.0% per year which is slightly less than the 5.3% average rate in the June forecast (see Figure 2.5). On an annual basis, we expect personal income to grow 4.6% in 2023, 4.8% in 2024, 5.3% in 2025, 5.1% in 2026, and 5.4% in 2027.

Figure 2.5: Washington Personal Income

Personal income growth will be slightly less than in the June forecast



Source: Bureau of Economic Analysis, ERFC; historical data through 2021 Q4

Washington Building Permits

The Washington housing construction forecast is lower than in June

The Washington housing construction forecast is lower than in June. The number of authorized housing units jumped to 56,900 in 2021 from 44,100 in 2020. This was the highest annual total since 1978. As in June, we expect housing construction to decline from the recent highs. We expect permits to total 53,200 units this year, up from 52,200 units in the June forecast. However, we expect permits to average 46,500 units in 2023 through 2027, down from 47,800 units in the June forecast. On a calendar year basis, we expect 45,200 units in 2023, 47,100 units in 2024, 47,500 in 2025, 46,600 units in 2026, and 46,000 units in 2027.

Consumer Price Index

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

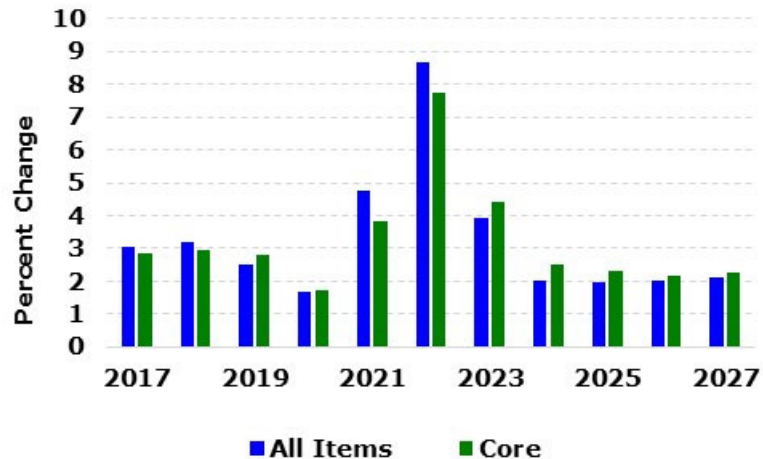
The near-term inflation outlook has increased since the June forecast but we expect price pressures to diminish over the remainder of 2022 and in 2023. The Seattle core CPI index rose 3.8% in 2021 which was the highest rate since 1997. On an annual average basis, core inflation will rise further to 7.7% this year, up from 6.2% in the June forecast. While near term inflation is higher, we believe longer term inflation is still well-anchored. We expect Seattle core inflation to average 2.7% per year in 2023 through 2027, which is slightly higher than the 2.5% average rate in the June forecast. Our forecast calls for annual Seattle core inflation rates of 4.4% in 2023, 2.5% 2024, 2.3% in 2025, 2.2% in 2026, and 2.2% in 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 8.7% this year, up from 7.8% in the June forecast. Energy costs are expected to fall every year from 2023 through 2027. This will result in all-items inflation dropping below core inflation (see Figure 2.6). We expect Seattle headline inflation to average 2.4% per year in 2023 through 2027 which is slightly higher than the 2.2% average rate in the June forecast. On a calendar year basis, we expect inflation rates of 3.9% 2023, 2.0% in 2024, 2.0% in 2025, 2.0% in 2026, and 2.1% in 2027.

Figure 2.6: Seattle Consumer Price Inflation

Headline inflation will drop below core inflation in 2023-27



Source: Bureau of Labor Statistics, 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

The optimistic scenario assumes stronger growth of consumer spending and stronger productivity relative to the baseline

The optimistic scenario assumes stronger growth 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 quicker resolution to the Russia-Ukraine conflict allows for a lower path of energy prices. Moreover, we assume firms return to being able to effect the kinds of large productivity gains they achieved early in the pandemic, which improves corporate profitability. GDP rises at a 2.2% annual rate over the second half of 2022 and rises 1.8% for the year, compared to increases of 0.5% and 1.6% in the baseline. As a result of faster GDP growth, the unemployment rate falls to 3.4% by early-2023 rather than rising to 3.8% as in the baseline.

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 late 2022 and 2023, construction employment grows more rapidly in 2024-27 than in the baseline forecast. By the end of 2027, Washington nonfarm payroll employment is higher by 75,600 jobs (2.0%) than in the baseline forecast and Washington personal income is \$48.2 billion (6.5%) higher.

Pessimistic

Recovery stumbles as Russia-Ukraine conflict intensifies and supply chain problems persist

The pessimistic scenario assumes the Russia-Ukraine conflict intensifies and drags on, leading to higher price paths for energy commodities, other industrial commodities and grains, wider risk spreads, and a more pronounced slowdown in foreign growth. In addition, a slower correction of supply-chain issues prolongs delays in the production of consumer durable goods. The result is a five quarters of negative GDP growth, including the first two quarters of 2022, with a peak-to-trough decline of 1.0%. On an annual basis, GDP rises 1.3% in 2022 and declines 0.3% in 2023, versus growth of 1.6% and 0.6% in the baseline forecast. The unemployment rate in this scenario rises from 3.6% in the third quarter of this year to 6.6% by the end of 2024, before declining to 4.8% by the end of the forecast horizon.

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, aerospace employment begins to decline again in mid-2023. 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 175,600 (4.7%) lower than in the baseline forecast and Washington personal income is \$59.8 billion (8.0%) 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’ (GCEA) national forecast has higher inflation than does our baseline forecast

The Governor’s Council of Economic Advisors’ (GCEA) national forecast has higher inflation than does our baseline forecast but their real forecast is similar. The GCEA real GDP growth forecast averages 1.7% per year in 2022 through 2027 as does the baseline forecast. Their forecast of 2.1% average real consumer spending growth is slightly higher than our 2.0% average growth rate. The GCEA members’ personal consumption expenditures (PCE) inflation forecast averages 3.2% per year which is higher than the 2.8% average rate in the baseline forecast. The Council members’ mortgage rate forecast averages 5.1% over the six-year forecast horizon, which is slightly higher than the 5.0% average rate in our forecast. The GCEA oil price forecast averages \$88 per barrel which is also higher than the \$82 average price in the baseline forecast.

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

The Governor’s Council of Economic Advisors’ Washington forecast is higher than the baseline forecast primarily because of their higher inflation assumption. The GCEA scenario for Washington real personal income growth averages 2.0% per year in 2022 through 2027 which is slightly higher than the 1.9% average growth rate in the baseline forecast. Because their inflation forecast is also higher than ours, however, their implied average nominal income growth is 5.2% compared to our 4.7%. The Council members’ forecast for total employment growth over the five-year period averages 1.6% per year, which is the same rate as in the baseline forecast. The GCEA forecasts for average manufacturing employment growth and average construction employment growth are both very close to their counterparts in the baseline forecast. The GCEA housing permit forecast is also very close to the baseline, averaging 47,700 units per year compared to 47,600 in the baseline forecast. At the end of 2027, the GCEA forecast for Washington nonfarm payroll employment is 3,900 (0.1%) higher than in the baseline forecast and Washington personal income is \$21.7 billion (2.9%) 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	477.572	469.563	470.060	480.024	495.834	511.797	528.762
% Ch	5.5	5.6	-1.7	0.1	2.1	3.3	3.2	3.3
Real Wage and Salary Disb.	232.968	245.826	257.024	260.641	265.867	272.061	279.920	288.591
% Ch	3.4	5.5	4.6	1.4	2.0	2.3	2.9	3.1
Real Nonwage Income	219.204	231.745	212.539	209.419	214.158	223.773	231.876	240.171
% Ch	7.7	5.7	-8.3	-1.5	2.3	4.5	3.6	3.6
Real Per Capita Income (\$/Person)	58,847	61,791	60,541	60,162	60,854	62,239	63,608	65,067
% Ch	4.3	5.0	-2.0	-0.6	1.1	2.3	2.2	2.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.105	1.128	1.191	1.250	1.277	1.301	1.325	1.351
% Ch	1.3	2.0	5.6	4.9	2.1	1.8	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.803	2.871	3.089	3.299	3.377	3.444	3.512	3.584
% Ch	2.1	2.4	7.6	6.8	2.4	2.0	2.0	2.0
Average Nonfarm Annual Wage	73,822	82,256	86,163	89,054	92,361	95,465	99,187	103,241
% Ch	6.0	11.4	4.8	3.4	3.7	3.4	3.9	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.92	27.87	29.08	30.97	32.33	33.54	34.73	35.93
% Ch	0.0	-3.6	4.3	6.5	4.4	3.8	3.5	3.5
Current Dollar Income (Billions of Dollars)								
Personal Income	499.856	538.701	559.393	587.777	613.127	645.006	678.367	714.259
% Ch	6.9	7.8	3.8	5.1	4.3	5.2	5.2	5.3
Disposable Personal Income	442.414	476.912	482.896	508.934	543.789	574.989	601.419	631.074
% Ch	7.3	7.8	1.3	5.4	6.8	5.7	4.6	4.9
Per Capita Income (\$/Person)	65,053	69,700	72,121	75,227	77,726	80,962	84,309	87,892
% Ch	5.6	7.1	3.5	4.3	3.3	4.2	4.1	4.2
Employment (Thousands)								
Washington Civilian Labor Force	3,968.2	3,882.3	3,972.2	4,044.2	4,083.3	4,122.3	4,163.0	4,204.3
Total Washington Employment	3,706.3	3,617.5	3,795.9	3,883.4	3,893.9	3,920.0	3,963.1	4,010.7
Unemployment Rate (%)	6.59	6.82	4.44	3.97	4.64	4.91	4.80	4.60
Nonfarm Payroll Employment	3,399.9	3,280.4	3,461.7	3,565.1	3,581.7	3,611.7	3,644.9	3,680.0
% Ch	-1.0	-3.5	5.5	3.0	0.5	0.8	0.9	1.0
Manufacturing	287.3	260.4	264.2	273.9	268.2	266.8	268.1	269.4
% Ch	-1.6	-9.4	1.5	3.7	-2.1	-0.5	0.5	0.5
Durable Manufacturing	202.5	178.3	177.8	184.5	180.4	180.6	182.0	183.5
% Ch	-1.5	-11.9	-0.3	3.7	-2.2	0.1	0.8	0.8
Aerospace	87.7	71.0	68.0	72.4	74.1	74.8	75.1	75.6
% Ch	1.3	-19.0	-4.2	6.5	2.4	1.0	0.3	0.7
Nondurable Manufacturing	84.9	82.0	86.4	89.5	87.7	86.2	86.1	85.8
% Ch	-1.7	-3.3	5.3	3.5	-1.9	-1.7	-0.2	-0.3
Construction	216.2	219.2	229.2	232.1	224.9	224.5	227.5	231.2
% Ch	-0.3	1.3	4.6	1.3	-3.1	-0.2	1.3	1.6
Service-Providing	2,890.7	2,795.3	2,962.6	3,053.7	3,084.1	3,116.0	3,144.7	3,174.9
% Ch	-0.9	-3.3	6.0	3.1	1.0	1.0	0.9	1.0
Software Publishers	73.6	77.6	81.7	85.2	86.4	87.9	89.1	90.1
% Ch	8.7	5.4	5.3	4.3	1.4	1.8	1.4	1.1
Electronic Shopping and Mail-Order	69.3	77.3	76.0	80.6	82.6	84.4	86.2	88.0
% Ch	19.1	11.6	-1.7	6.1	2.4	2.2	2.1	2.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	47.445	49.765	58.283	46.492	45.974	47.703	47.034	46.214
% Ch	3.1	4.9	17.1	-20.2	-1.1	3.8	-1.4	-1.7
Single-Family	22.804	25.978	23.811	22.246	23.189	25.402	25.975	25.945
% Ch	1.8	13.9	-8.3	-6.6	4.2	9.5	2.3	-0.1
Multi-Family	24.641	23.787	34.473	24.246	22.784	22.302	21.059	20.269
% Ch	4.3	-3.5	44.9	-29.7	-6.0	-2.1	-5.6	-3.8
30-Year Fixed Mortgage Rate (%)	3.53	2.89	3.72	5.59	5.33	5.03	4.83	4.79

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2022	2023	2024	2025	2026	2027
U.S.						
Real GDP, Percent Change						
Optimistic	3.9	1.4	1.4	1.6	2.0	1.7
Baseline	3.9	0.4	1.4	2.2	2.0	1.9
Pessimistic	3.9	-0.3	0.3	1.4	2.1	2.1
PCE Price Index, Percent Change						
Optimistic	5.6	4.9	2.6	2.1	2.1	2.1
Baseline	5.6	4.9	2.1	1.8	1.9	1.9
Pessimistic	5.6	5.4	2.7	1.6	1.5	1.4
Mortgage Rate, Percent						
Optimistic	3.72	5.54	5.33	5.05	4.91	4.86
Baseline	3.72	5.59	5.33	5.03	4.83	4.79
Pessimistic	3.72	5.59	4.98	4.35	4.07	3.98
3 Month T-Bill Rate, Percent						
Optimistic	0.37	3.37	3.52	2.86	2.58	2.41
Baseline	0.37	3.39	3.42	2.77	2.37	2.36
Pessimistic	0.37	3.31	1.97	0.83	0.58	0.57
Washington						
Real Personal Income, Percent Change						
Optimistic	-1.7	2.6	3.2	3.5	3.7	3.8
Baseline	-1.7	0.1	2.1	3.3	3.2	3.3
Pessimistic	-1.7	-1.8	-0.4	2.2	2.9	2.4
Personal Income, Percent Change						
Optimistic	3.8	7.6	6.0	5.7	5.9	6.0
Baseline	3.8	5.1	4.3	5.2	5.2	5.3
Pessimistic	3.8	3.6	2.3	3.8	4.4	3.9
Employment, Percent Change						
Optimistic	5.5	3.4	0.8	1.0	1.4	1.4
Baseline	5.5	3.0	0.5	0.8	0.9	1.0
Pessimistic	5.5	2.3	-1.4	-0.7	0.6	0.7
Housing Permits, Thousands of Authorized Units						
Optimistic	58.3	47.5	48.0	49.8	49.9	49.5
Baseline	58.3	46.5	46.0	47.7	47.0	46.2
Pessimistic	58.3	45.4	42.4	42.1	40.4	38.9

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2022	2023	2024	2025	2026	2027
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	1.6	0.6	2.1	2.0	2.0	1.9
GCEA Average	1.2	1.0	2.2	2.0	2.0	2.0
Real Consumption						
<i>Growth</i>						
ERFC	2.4	1.0	2.3	2.2	2.1	2.1
GCEA Average	2.4	1.0	2.7	2.2	2.2	2.2
PCE Price Index						
<i>Growth</i>						
ERFC	6.1	3.2	1.8	1.9	1.9	2.0
GCEA Average	6.1	3.5	2.4	2.4	2.3	2.4
Mortgage Rate						
<i>Percent</i>						
ERFC	5.0	5.5	5.1	4.9	4.8	4.8
GCEA Average	5.1	5.5	5.2	5.1	4.8	4.6
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	102.3	86.9	80.6	76.3	73.3	71.2
GCEA Average	104.1	93.3	86.7	84.1	82.1	80.6
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	-3.0	1.3	2.9	3.3	3.2	3.4
GCEA Average	-2.3	1.8	3.2	3.2	3.0	3.1
Wage and Salary Employment						
<i>Growth</i>						
ERFC	5.0	1.1	0.7	0.8	1.0	0.9
GCEA Average	4.7	1.5	0.9	0.9	0.9	0.9
Manufacturing Employment						
<i>Growth</i>						
ERFC	4.9	-0.4	-1.5	0.3	0.5	0.5
GCEA Average	5.0	0.9	-0.5	-0.4	-0.3	0.0
Construction Employment						
<i>Growth</i>						
ERFC	5.1	-3.5	-0.9	0.5	1.7	1.6
GCEA Average	4.2	-2.6	0.3	0.6	0.6	0.6
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	53.2	45.2	47.1	47.5	46.6	46.0
GCEA Average	53.2	45.3	48.3	47.1	46.4	46.1
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	3.1	3.9	3.4	3.6	4.0	4.1
GCEA Average	4.4	4.4	4.3	4.2	3.9	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
June	3.4	4.3	-0.6	52.4
September	3.5	4.1	-0.7	52.4

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
June	0.7	5.4	3.6	48.8
September	0.7	5.1	3.1	46.8

Table 2.6
Forecast Comparison
 Forecast 2022 to 2025

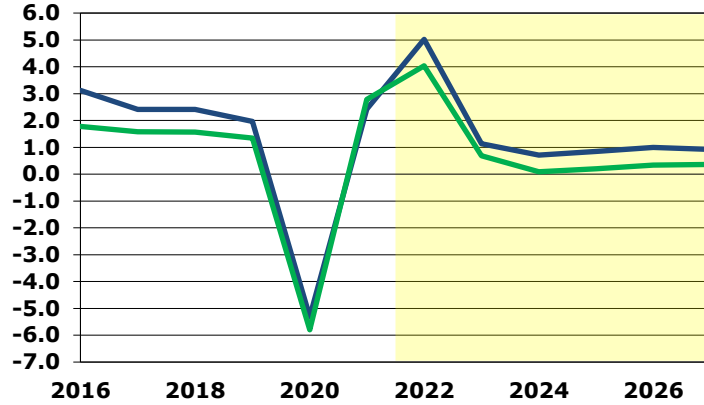
Fiscal Years

	2021	2022	2023	2024	2025	2026	2027
Washington							
Real Personal Income							
September	477.572	469.563	470.060	480.024	495.834	511.797	528.762
% Ch	5.6	-1.7	0.1	2.1	3.3	3.2	3.3
June	477.066	469.098	469.325	484.107	502.024	519.147	536.087
% Ch	5.5	-1.7	0.0	3.1	3.7	3.4	3.3
Personal Income							
September	538.701	559.393	587.777	613.127	645.006	678.367	714.259
% Ch	7.8	3.8	5.1	4.3	5.2	5.2	5.3
June	538.130	558.939	586.533	617.627	650.725	685.290	721.080
% Ch	7.7	3.9	4.9	5.3	5.4	5.3	5.2
Employment							
September	3280.4	3461.7	3565.1	3581.7	3611.7	3644.9	3680.0
% Ch	-3.5	5.5	3.0	0.5	0.8	0.9	1.0
June	3280.4	3462.1	3552.6	3578.6	3604.5	3634.9	3670.8
% Ch	-3.5	5.5	2.6	0.7	0.7	0.8	1.0
Housing Permits							
September	49.765	58.283	46.492	45.974	47.703	47.034	46.214
% Ch	4.9	17.1	-20.2	-1.1	3.8	-1.4	-1.7
June	49.402	56.751	48.142	48.798	48.771	47.784	46.700
% Ch	4.1	14.9	-15.2	1.4	-0.1	-2.0	-2.3

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

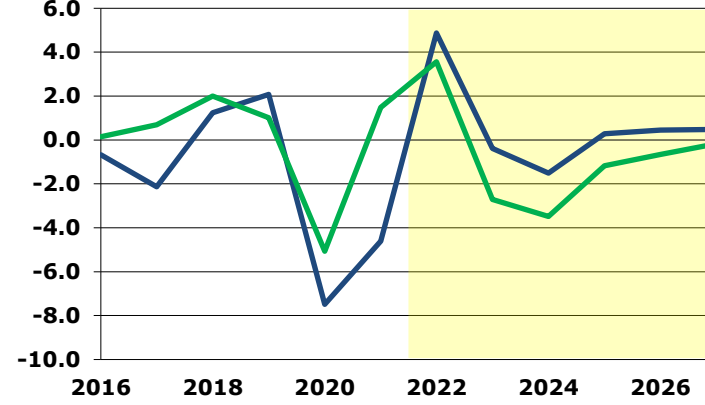
Forecast

Total Nonfarm Payroll Employment



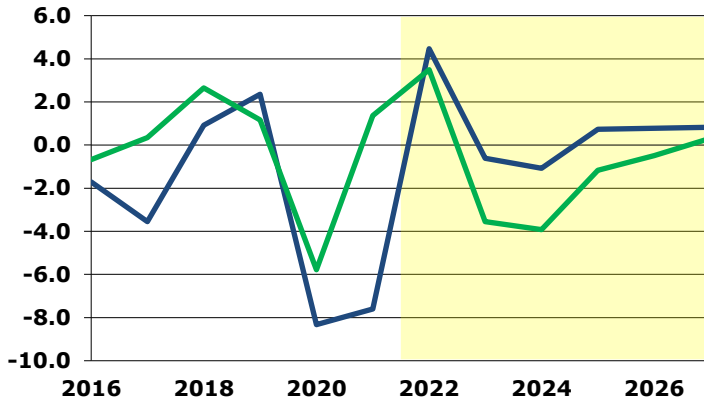
Source: WA State Employment Security Dept. 2021, ERFC 2027

Manufacturing Employment



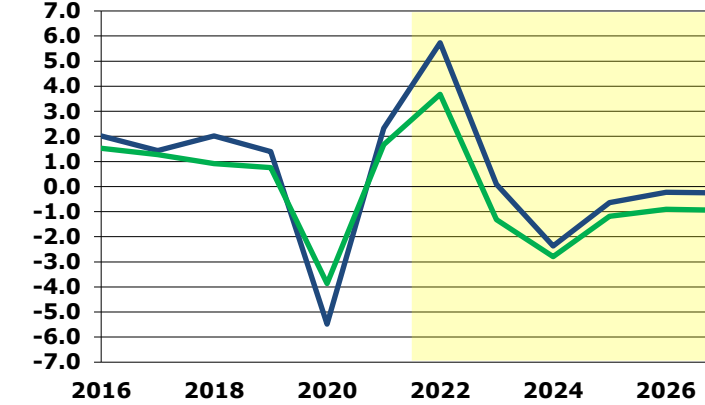
Source: WA State Employment Security Dept. 2021, ERFC 2027

Durable Manufacturing Employment



Source: WA State Employment Security Dept. 2021, ERFC 2027

Nondurable Manufacturing Employment



Source: WA State Employment Security Dept. 2021, ERFC 2027

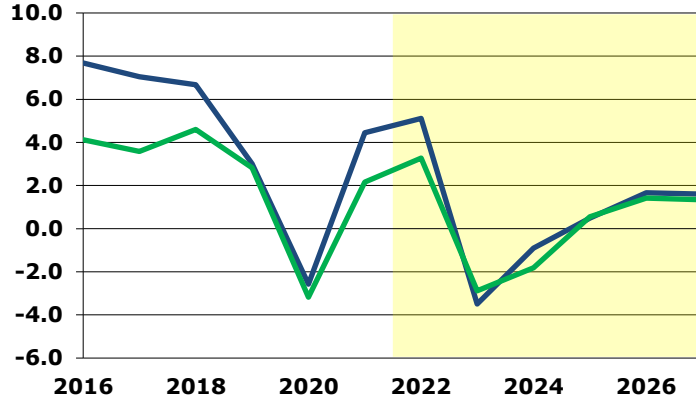
Washington

U.S.

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

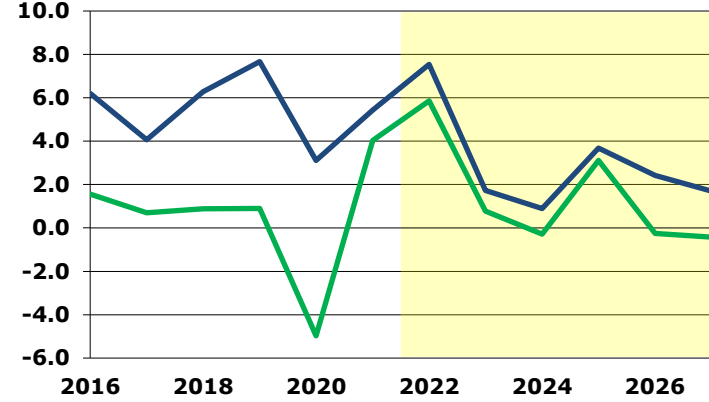
Forecast

Construction Employment



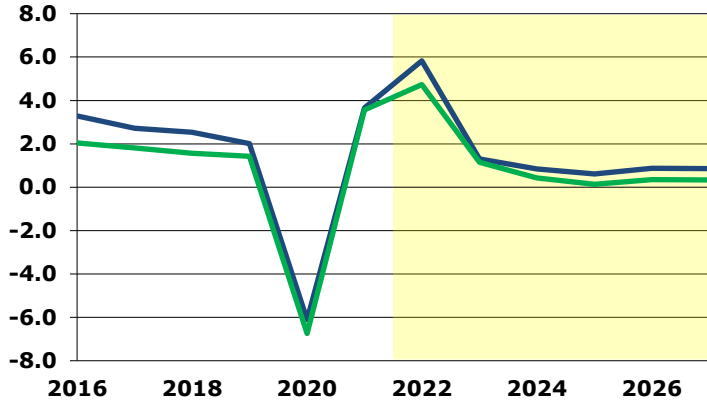
Source: WA State Employment Security Dept. 2021, ERFC 2027

Information Employment



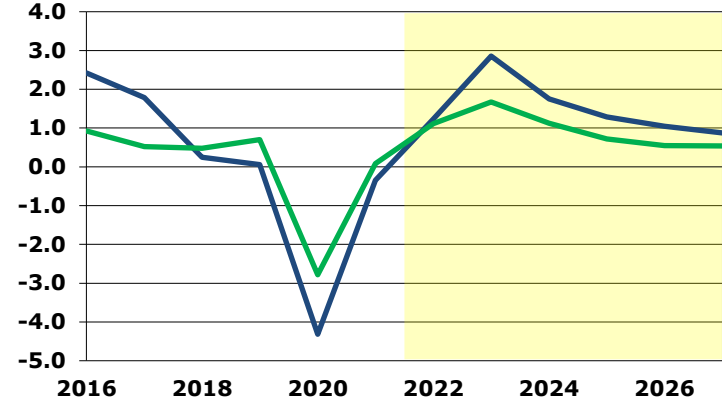
Source: WA State Employment Security Dept. 2021, ERFC 2027

Other Private Employment



Source: WA State Employment Security Dept. 2021, ERFC 2027

Government Employment



Source: WA State Employment Security Dept. 2021, ERFC 2027

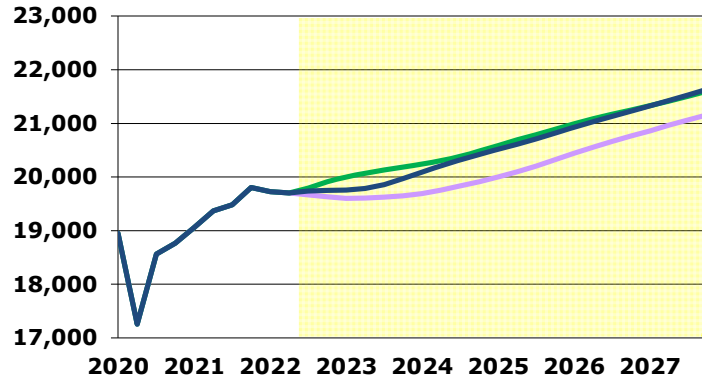
Washington

U.S.

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

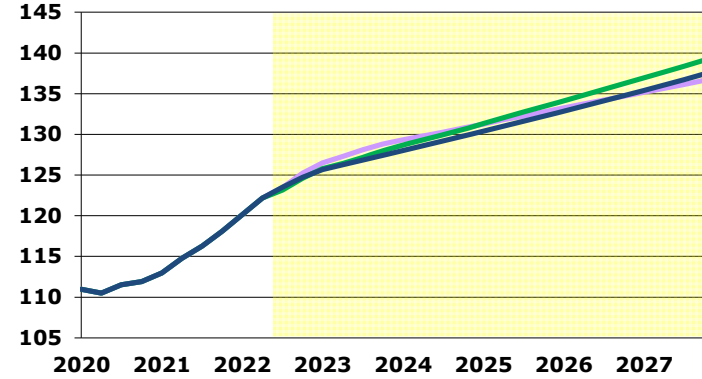
Forecast

Real GDP, Billions of 2012 Dollars



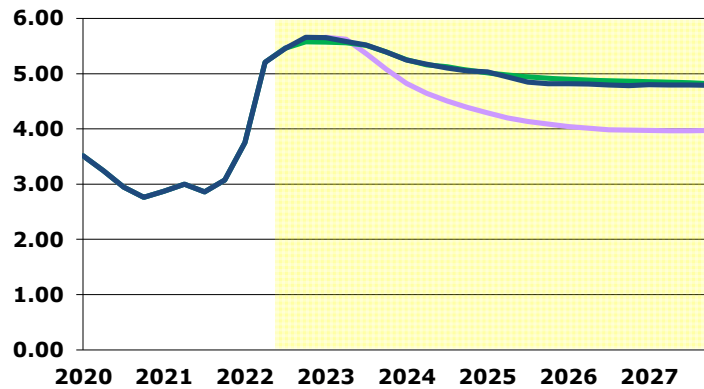
Source: Bureau of Economic Analysis 2022 Q1, ERFC 2027 Q4

PCE Price Index, 2012 = 100



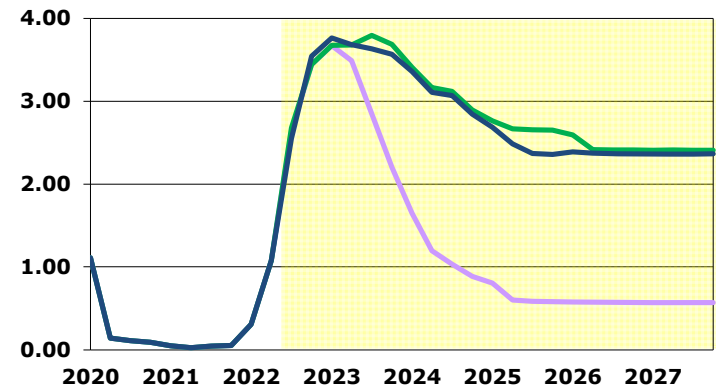
Source: Bureau of Economic Analysis 2022 Q1, ERFC 2027 Q4

Mortgage Rate, Percent



Source: Freddie Mac 2022 Q1, ERFC 2027 Q4

Three Month T-Bill Rate, Percent



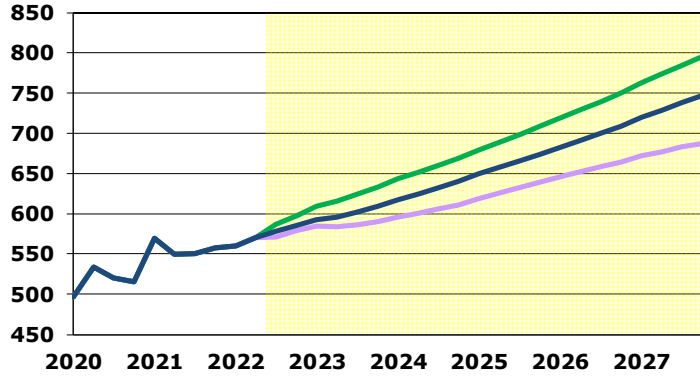
Source: Federal Reserve Board 2022 Q1, ERFC 2027 Q4

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

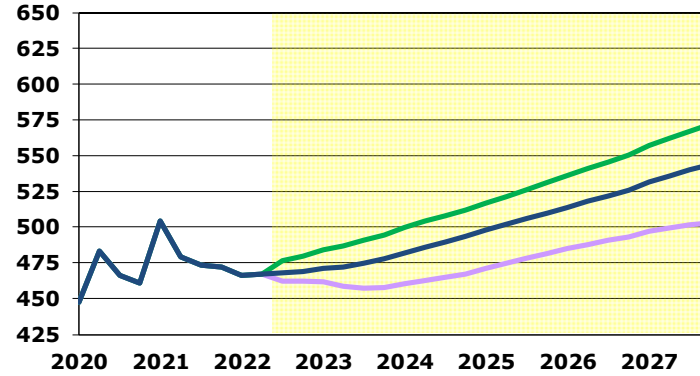
Forecast

Personal Income, Billions of Dollars



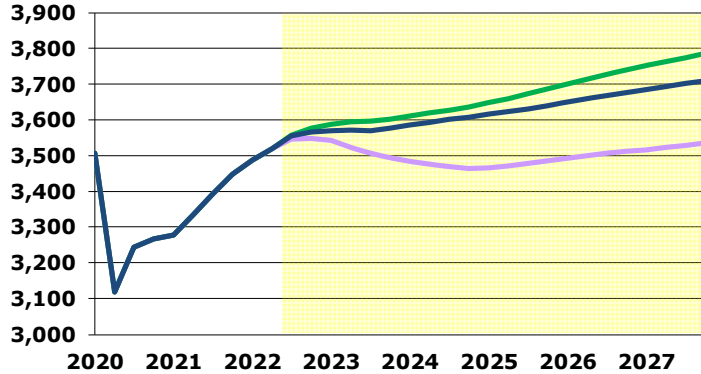
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2027 Q4

Real Personal Income, Billions of 2012 Dollars



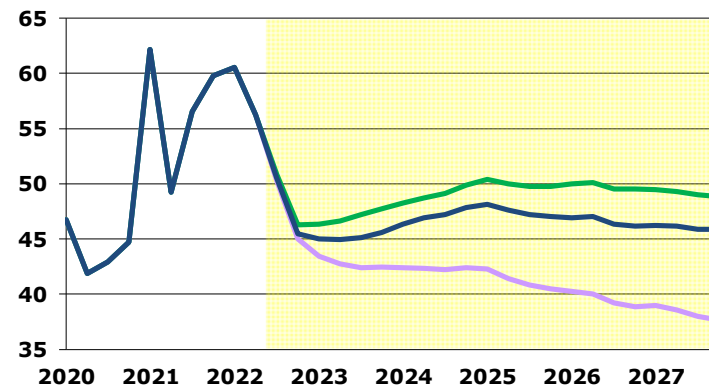
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2027 Q4

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2022 Q1, ERFC 2027 Q4

Housing Permits, Thousands



Source: Census Bureau 2022 Q1, ERFC 2027 Q4

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **Though tracked collections since June have come in above their forecasted amounts, forecasted reductions in housing activity and personal income have lowered expected revenue for the remainder of the forecast period.**
- **The total forecast for funds subject to the budget outlook process was decreased by \$43 million in the 2021-23 biennium, \$495 million in the 2023-25 biennium and \$66 million in the 2025-27 biennium.**
- **Some of the forecast reductions stemmed from an administrative decision that increased tax exemptions for businesses engaged in research and development and allowed for refunds of past taxes. These changes reduced expected revenue by \$29 million in the 2021-23 biennium, \$117 million in the 2023-25 biennium and \$53 million in the 2025-27 biennium.**

Overview

Though collections have come in above the forecast, projections have decreased, mainly due to lower forecasted construction activity and real estate sales

Since the June forecast, taxable activity has been stronger than expected, with tracked collections coming in above the forecast. While sales and business taxes exceeded expectations, however, real estate excise tax collections came in well below the forecast. The reduction in real estate activity is expected to continue for the next several years, mainly due to higher mortgage rates. The higher rates are also forecasted to reduce construction activity, which will also lower collections. In addition, forecasted state personal income is slightly lower than the previous forecast. As a result of these changes, forecasted revenue has been reduced for the rest of the biennium through the end of the forecast period. An administrative decision has also contributed to the reduction by increasing certain sales tax exemptions.

Total forecast change by biennium (millions):

21-23: \$43
23-25: -\$495
25-27: -\$66

Table 3.1 summarizes the changes to forecasted revenue in funds subject to the budget outlook process for the 2021-23 through the 2025-27 biennia. In the 2021-23 biennium, the surplus in collections since June, lessened by future decreases, adds \$72.2 million to expected total revenue for the biennium while non-economic revenue changes subtract \$28.8 million, resulting in a total forecast increase of \$43.4 million. In the 2023-25 biennium, the forecasted decrease in taxable activity subtracted \$378.4 million from expected revenue while non-economic changes reduced the forecast by \$117.0 million,

resulting in a total forecast decrease of \$495.4 million. In the 2025-27 biennium, the forecasted decrease in taxable activity subtracted \$12.7 million from expected revenue while non-economic changes reduced the forecast by \$53.3 million, resulting in a total forecast decrease of \$66.0 million. The September 2022 forecast for these funds total \$63,190.8 million in the 2021-23 biennium, \$65,503.7 million in the 2023-25 biennium and \$70,135.8 million in the 2025-27 biennium.

September forecast by biennium (\$billions):

2021-23: \$63.191

2023-25: \$65.504

2025-27: \$70.136

The budget outlook process ensures the current biennial budget will be sustainable in the next biennium

Though the ratio of total collections to income has increased from the FY 2015 trough, it is expected to peak in FY 2022

Table 3.1: Revisions to the forecast of funds subject to the budget outlook*

	2021-23 Biennium	2023-25 Biennium	2025-27 Biennium
Non-Economic Change	(\$28.8)	(\$117.0)	(\$53.3)
Forecast Change	\$72.2	(\$378.4)	(\$12.7)
Total Change	\$43.4	(\$495.4)	(\$66.0)

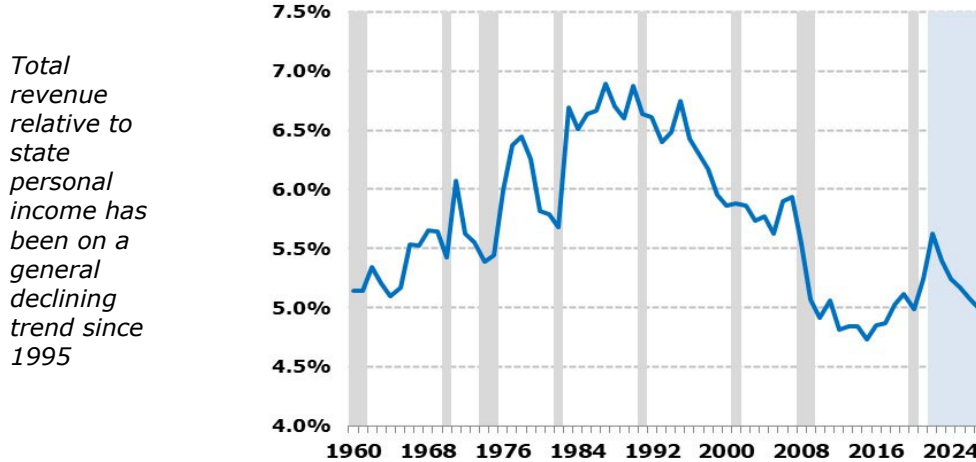
(*cash basis, millions of dollars)

The budget outlook process ensures that the budget adopted for the current biennium will also be sustainable in the next biennium given forecasted revenue. The funds that are currently included when establishing the outlook are the General Fund-State, the Education Legacy Trust Account, the Washington Opportunity Pathways Account and the Workforce Education Investment Account. Once funded, the planned Fair Start for Kids Account will also be subject to the outlook. The recent history and forecast of these funds can be found in Table 3.17.

Figure 3.1 shows the ratio of revenue collected for funds subject to the budget outlook relative to state personal income. Through FY 2005, the revenue represented in the chart is what is currently defined as General Fund-State (GF-S) revenue. From FY 2006 onward the revenue includes the Education Legacy Trust Account (ELTA), which in its early years was wholly funded by the estate tax and a portion of the cigarette tax. From FY 2011 onward, the total includes the Washington Opportunity Pathways account (OPA), which is funded by Lottery receipts. From FY 2020 onward the total includes the Workforce Education Investment Account (WEIA), funded by a surtax on large service providers and companies that involve advanced computing. As can be seen in the chart, the ratio of revenue to income followed a downward trend from FY 1995 to FY 2015, 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 FY 2011. While the ratio grew slightly in FY 2016 and FY 2017, it increased rapidly in FY2018 and FY 2019 when the state property tax levy increased to partially displace local levies and increased further in FY 2020 with the establishment of the graduated real estate

excise tax. The pandemic-related booms in real estate and spending on goods, coupled with the new WEIA surtax, increased the ratio further in FY 2021 and FY 2022. From FY 2023 onward, however, total revenues are expected to grow at a rate lower than the rate of income growth, causing the ratio to continue its pre-FY 2015 downward trend through FY 2027.

Figure 3.1: Funds subject to the budget outlook as a Percentage of State Personal Income (Fiscal Years)



Source: ERFC, data through fiscal year 2021. Gray shaded area indicates recession; blue shaded area indicates forecast.

Track Record for the 2021-23 Biennium

The current forecast is \$6.18 billion higher than the forecasted revenue at the time of the initial 2021-23 budget

Table 3.10 summarizes the historical changes to the forecast of funds subject to the budget outlook for the 2021-23 biennium. The February 2018 forecast was the initial forecast for the biennium. The September 2022 forecast is \$10.40 billion (19.7%) higher than the initial forecast. Non-economic changes have increased the forecast by \$2.02 billion (3.8%). Excluding non-economic changes, the current forecast is \$8.38 billion (15.9%) higher than the initial forecast. The March 2021 forecast, coupled with a \$399 million revenue increase 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 September forecast of biennial revenue is \$6.18 billion (10.8%) higher than that sum.

Track Record for the 2023-25 Biennium

The current forecast is \$5.66 billion higher than the initial forecast in February 2020

Table 3.11 summarizes the historical changes to the forecast of funds subject to the budget outlook for the 2023-25 biennium. The February 2020 forecast was the initial forecast for the biennium. The September forecast of GF-S revenue is \$5.66 billion (9.5%) higher than the initial forecast. Non-economic changes have increased the forecast by \$0.59 billion (1.0%).

Excluding non-economic changes, the current forecast is \$5.07 billion (8.5%) higher than the initial forecast.

Non-Economic Revenue Changes to the Forecast

Non-economic forecast change by biennium (millions):

21-23: -\$29
23-25: -\$117
25-27: -\$53

In July 2022, the Board of Tax Appeals ruled that the existing manufacturing machinery and equipment sales and use tax exemption could also apply to machinery and equipment purchased for research and development purposes by manufacturers. The decision will decrease future sales and use tax collections and will also allow refunds of past taxes paid by those who apply for them. In the current biennium, collections going forward are expected to be reduced by \$16.2 million and \$12.6 million in refunds are expected, for a total forecast reduction of \$28.8 million. In the 2023-25 biennium, refunds are expected to total \$67.7 million while collections are reduced by \$49.3 million, for a total forecast reduction of \$117.0 million. No increase in refunds from the ruling is expected in the 2025-27 biennium, but collections are expected to decrease by \$53.3 million.

Recent Collection Experience

Collections were \$113 million (1.7%) higher than forecasted in June

GF-S revenue collections from the Department of Revenue (DOR) and the Washington court system are tracked monthly. In the period since the June forecast, total revenue from the above sources came in \$113.4 million (1.7%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$162.7 million (2.9%) higher than forecasted and revenue from other DOR tax sources was \$49.9 million (4.6%) less than forecasted.

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

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$162.7	2.9%
Non-Revenue Act	(\$49.9)	-4.6%
Subtotal	\$112.8	1.7%
Washington court system	\$0.6	6.5%
Total*	\$113.4	1.7%

* Detail may not add to total due to rounding.

Source: ERF; Period: June 11 - September 10, 2022

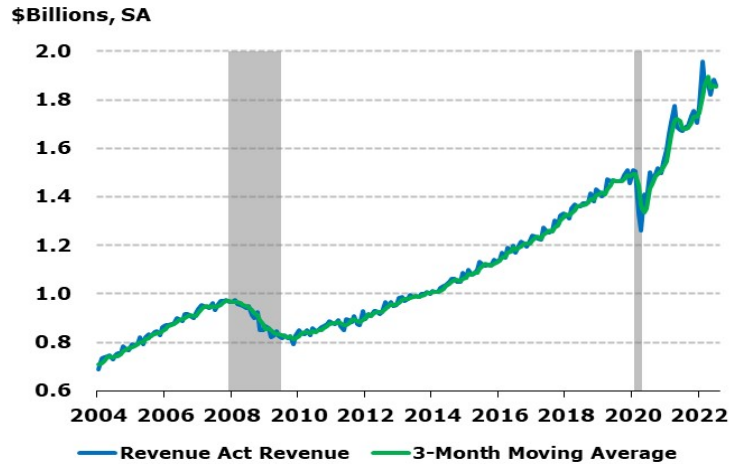
Non-Revenue Act tax collections were lower than forecasted

Real estate excise tax (REET) came in \$18.7 million (4.1%) lower than forecasted. Property tax collections came in \$27.4 million (6.3%) lower than forecasted. Cigarette tax collections came in \$3.6 million (4.4%) lower than forecasted, while liquor sales and liter tax receipts came in \$29,000 (0.0%) higher than forecasted.

Net refunds of unclaimed property from the GF-S were \$3.9 million higher than forecasted. Revenue from all other DOR revenue sources came in \$3.6 million (8.6%) higher than forecasted. Revenue from the Washington court system was \$0.6 million (6.5%) higher than forecasted.

Figure 3.2: Revenue Act Collections*

The spring and summer inflation-powered boost in Revenue Act collections has leveled off



Source: ERFC; Data through September 10, 2022

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

Adjusted Revenue Act collections were up 8.5% year over year for second quarter 2022 activity and up 12.4% year over year for first quarter activity

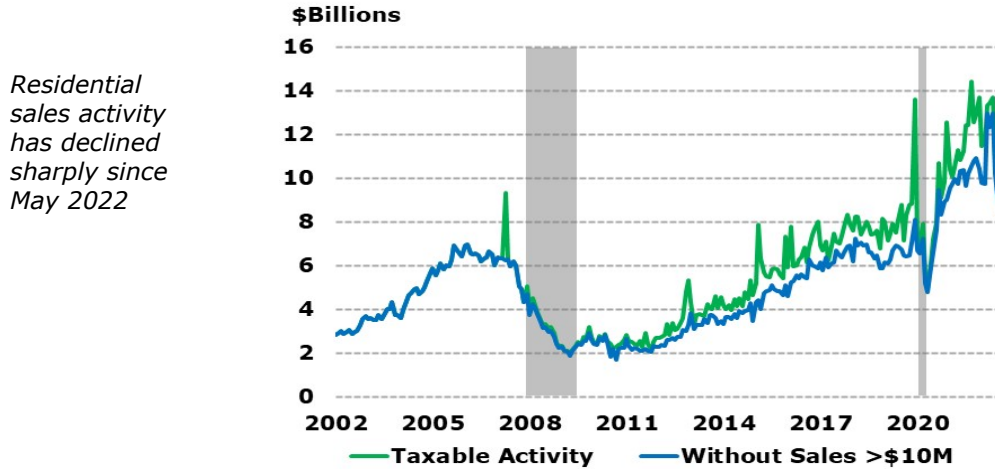
Figure 3.2 shows seasonally adjusted Revenue Act receipts excluding payments received under the tax amnesty program in early 2011 and other large payments. It is also adjusted for past changes in payment patterns and deferred payments in the first half of 2020. As shown in the figure, collections dropped 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 first quarter 2022 activity were up 12.4% year over year and adjusted collections for second quarter 2022 activity (May 11 - August 10 collections) were up 8.5% year over year. Adjusted collections for July 2022 activity (August 11 - September 10 collections) were up 10.0% year over year and collections for June 2022 activity were up 12.2% year over year.

Real estate activity was lower than expected in June

Though the June forecast expected taxable real estate activity to decrease from May's high level, the decrease that occurred exceeded expectations. Sales of property valued below \$10 million reached a record high in March 2022 and remained near

that level in May (see Figure 3.3) but have since fallen sharply. Most of the decrease in activity has been due to a drop in the number of transactions rather than a decrease in the price per transaction. While large commercial sales (sales greater than \$10 million) are down from their high levels of last year, they remain moderately strong, averaging \$1.1 billion per month over the last three months.

Figure 3.3: Taxable Real Estate Excise Activity, SA



Source: ERFC; data through August 2022

General Fund-State Revenue Forecast by Source

The GF-S is the largest of the funds subject to the budget outlook

The General Fund-State (GF-S) is the largest of the funds subject to the budget outlook, consisting of most of the commonly paid state taxes. The history and forecast 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.

Department of Revenue

Taxes collected by DOR are most of GF-S taxes

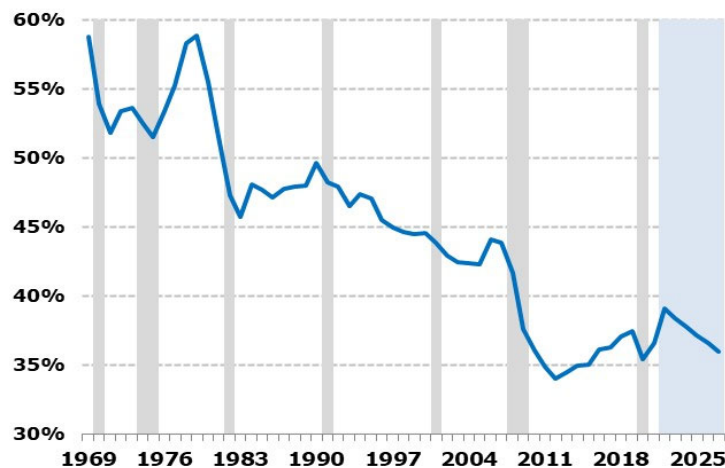
The Department of Revenue (DOR) collects and administers most of Washington’s GF-S revenue, accounting for 95.3% of total GF-S revenue in FY 2021. The largest tax sources administered by the DOR are the retail sales tax, business and occupation tax, property tax, use tax, cigarette tax and real estate 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 46.6% of GF-S revenue in FY 2022. 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. As can be seen in Figure 3.4, taxable sales as a share of personal income has long been on a declining trend. The share fell even more sharply than the previous trend from the 2008 recession through FY 2012. In that year, 34.0% 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 extended the tax to bottled water and online sales caused a continued increase in the ratio. The COVID-19-related collapse in late FY 2020, coupled with federal emergency income support, caused the ratio of sales to income to dip 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 and construction activity also increased. These trends have continued into FY 2022, which, coupled with a slowdown in FY 2022 income growth after the stimulus-boosted income levels of FY 2021, is expected to bring the ratio of sales to income to a peak of 38.9% in that year. The ratio is then forecasted to continue its historical downward trend through FY 2027. Forecasted and historical 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 historically



*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:

FY23: 4.0%
FY24: 2.1%
FY25: 3.7%
FY26: 3.5%
FY27: 3.6%

Growth in FY 2019 taxable activity was relatively strong at 7.6%. 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 and an estimated 11.1% in FY 2022 as well. Growth is forecasted at 3.2% in FY 2023 but slows to 2.6% in FY 2024. Growth is forecasted to increase to 3.4% in FY 2025, 3.5% in FY 2026 and 3.6% 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 increased by 12.4% 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 4.0% in FY 2023, 2.1% in FY 2024, 3.7% in FY 2025, 3.5% in FY 2026 and 3.6% 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 18.9% of GF-S revenue in FY 2022. 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:

FY23: 2.5%
FY24: 2.1%
FY25: 4.7%
FY26: 4.9%
FY27: 4.4%

In FY 2019, B&O tax receipts grew by 6.9%. Despite a second quarter collapse in activity, FY 2020 growth remained positive at 3.6% followed by growth of 7.9% in FY 2021. Collections grew 14.5% 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 2.5% in FY 2023, 2.1% in FY 2024 and 4.7% in FY 2025, Growth is forecasted at 4.9% in FY 2026 and 4.4% 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 14.7% of total revenue in FY 2022. 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.

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

Property tax growth forecast:

FY23: 2.1%
FY24: 2.6%
FY25: 2.6%
FY26: 2.5%
FY27: 2.5%

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. Absent the extra payments from deferrals, growth slowed to 0.4% in FY 2022. Growth is expected to increase to 2.1% in FY 2023, 2.6% in FY 2024 and FY 2025, and 2.5% in FY 2026 and FY 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 2022, accounting for 6.6% 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 Public Works 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:

FY23: -35.4%
FY24: -6.5%
FY25: 6.8%
FY26: 3.9%
FY27: 7.6%

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. Sales then began to boom in July 2020, with strength in both the residential and commercial markets, bringing collections growth of 34.4% in FY 2021 and 35.9% in FY 2022. Due to the forecasted increase in mortgage rates and unaffordable high prices in many areas,

the number of transactions is expected to fall and price increases are expected to moderate, bringing a decline in REET receipts of 35.4% in FY 2023 and 6.5% in FY 2024. Growth is then expected to resume at 6.8% in FY 2025, 3.9% in FY 2026 and 7.6% 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 2022 at 3.0% 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:

*FY23: -2.5%
FY24: -0.8%
FY25: 4.3%
FY26: 4.0%
FY27: 4.9%*

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 and 7.4% in FY 2022 due to record high used car sales. Forecasted lower used car sales bring declines of 2.5% in FY 2023 and 0.8% in FY 2024. Growth then continues at 4.3% in FY 2025, 4.0% in FY 2026 and 4.9% 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 2022, 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:

*FY23: 12.0%
FY24: -2.3%
FY25: 0.4%
FY26: 3.0%
FY27: 2.8%*

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 boosted growth to 16.3% in FY 2022. Further increases in utility prices, led by increased prices for natural gas, is expected to bring growth of 12.0% in FY 2023. Natural gas prices are then expected to decrease, causing collections to decrease by 2.3% in FY 2024 before growing by 0.4% in FY 2025, 3.0% in FY 2026 and 2.8% 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 2022 at 1.2% 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:*

*FY23: -1.9%
FY24: 0.2%
FY25: 0.6%
FY26: 0.9%
FY27: 1.5%*

Total tax collections on spirits sales grew 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 increased a further 1.8% in FY 2022 but are expected to decrease by 1.9% in FY 2023 as the pandemic fades. Collections are forecasted to increase by 0.2% in FY 2024, 0.6% in FY 2025, 0.9% in FY 2026 and 1.5% 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 2022 at 1.0% 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:*

*FY23: -5.7%
FY24: -1.5%
FY25: -3.8%
FY26: -3.2%
FY27: -3.0%*

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 2.1% in FY 2022. Collections are now expected to decline by 5.7% in FY 2023, 1.5% in FY 2024 and 3.8% in FY 2025. Collections are expected to decline by 3.2% in FY 2026 and 3.0% 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 (LCB) 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: *-\$2.8*
23-25: *-\$3.7*
25-27: *-\$4.8*

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 decreased \$2.8 million to \$332.7 million and the forecast for the 2023-25 biennium has been decreased \$3.7 million to \$337.1 million. The forecast of GF-S distributions for the 2025-27 biennium has been decreased \$4.8 million to \$358.3 million. Details of the forecasted distributions from the account can be found in Table 3.18.

The Office of Financial Management (Other Agencies)

Forecast change by biennium (millions):

21-23: *-\$17.8*
23-25: *\$15.5*
25-27: *\$12.6*

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The Office's forecast for the 2021-23 biennium was decreased \$17.8 million to \$98.9 million, mainly due to lower-than-expected transfers of funds from the multimodal account to the GF-S for electric vehicle incentives in FY 2022. The forecast of revenue for the 2023-25 biennium was increased \$15.5 million to \$2.7 million and the forecast for the 2025-27 biennium was increased \$12.6 million to *-\$97.6 million* due to updated forecast modeling. The negative number for the 2025-27 biennium indicates that more funds will be transferred out of the GF-S by the agencies overseen by the OFM than will be transferred into the GF-S from those agencies.

State Treasurer

Forecast change by biennium (millions):

21-23: *\$39.3*
23-25: *\$73.5*
25-27: *\$45.4*

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 \$39.3 million to \$177.3 million and the forecast of revenue for the 2023-25 biennium has been increased \$73.5 million to \$274.6 million. The forecast of GF-S revenue for the 2025-27 biennium has been increased \$45.4 million to \$221.4 million. The increases were mainly due to a forecasted rise in interest rates.

Insurance Commissioner

Forecast change by biennium (millions):

21-23: *\$0.8*
23-25: *-\$19.0*
25-27: *-\$28.6*

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 \$0.8 million to \$1,566.1 million and the forecast for the 2023-25 biennium has been decreased \$19.0 million to \$1,593.5 million. The forecast of GF-S revenue for the

2025-27 biennium has been decreased \$28.6 million to \$1,659.8 million.

Liquor and Cannabis Board

Forecast change by biennium (millions):

21-23: \$12.2
23-25: -\$0.3
25-27: -\$2.7

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 \$12.2 million to \$670.7 million due to recent transfers above the previously forecasted amounts. The forecast for the 2023-25 biennium has been decreased \$0.3 million to \$676.4 million and the forecast of GF-S distributions for the 2025-27 biennium has been decreased \$2.7 million to \$704.3 million.

Lottery Commission

GF-S forecast change by biennium (millions):

21-23: \$0.1
23-25: \$0.9
25-27: \$1.0

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions are also made to 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 \$0.1 million to \$62.1 million and the forecast for the 2023-25 biennium has been increased \$0.9 million to \$58.1 million. The forecast of GF-S transfers for the 2025-27 biennium is has been increased \$1.0 million to \$59.7 million.

Washington Court System

Forecast change by biennium (millions):

21-23: -\$1.6
23-25: -\$3.3
25-27: -\$3.2

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 \$1.6 million to \$79.3 million and the forecast for the 2023-25 biennium has been decreased \$3.3 million to \$68.8 million. The forecast of transfers for the 2025-27 biennium has been reduced \$3.2 million to \$64.8 million.

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

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

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

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.

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

Optimistic scenario (billions):

21-23: +\$1.46
23-25: +\$4.56

Pessimistic scenario (billions):

21-23: -\$1.67
23-25: -\$5.57

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, 15% to the optimistic scenario and 35% 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 \$61.689 billion in GF-S revenue, \$1.455 billion (2.4%) more than the baseline scenario, while the pessimistic forecast produces \$58.567 billion in revenue, \$1.668 billion (2.8%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$66.845 billion in GF-S revenue, \$4.562 billion (7.3%) more than the baseline scenario, while the pessimistic forecast produces \$56.712 billion in revenue, \$5.571 billion (8.9%) less than the baseline.

Washington Opportunity Pathways Account

OPA forecast change by biennium (millions):

21-23: \$18.2
23-25: -\$7.7
25-27: -\$7.2

The Washington Opportunity Pathways Account (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 increased \$18.2 million to \$360.1 million due to higher-than-expected FY 2022 transfers. The forecast of OPA revenue for the 2023-25 biennium has been decreased \$7.7 million to \$346.9 million and the forecast for the 2025-27 biennium has been decreased \$7.2 million to \$349.4 million.

Education Legacy Trust Account

*ELTA forecast
change by
biennium
(millions):*

21-23: \$26.8
23-25: -\$17.8
25-27: \$8.0

The Education Legacy Trust Account (ELTA) was created in the 2005 legislative session, with revenue collection beginning in FY 2006. Funds from the account may only be used for support of the common schools, expanding access to higher education through funding for new enrollments and financial aid, and other educational improvement efforts. The ELTA is primarily funded by a tax on estates of over \$2 million. Legislation from the 2013 special session, however, added revenue from public utility and real estate excise taxes (REET), which had previously gone into non-GF-S accounts. Subsequent legislation also added revenue from solid waste taxes 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 \$26.8 million for the 2021-23 biennium due to higher-than-expected estate tax receipts. The forecast has been reduced by \$17.8 million for the 2023-25 biennium, mainly due to reduced REET receipts, but increased by \$8.0 million for the 2025-27 biennium due to a forecasted recovery in REET activity and increased capital gains tax collections. Forecasted ELTA receipts are now \$1,849.1 million for the 2021-23 biennium, \$2,087.0 million for the 2023-25 biennium and \$2,331.5 million for the 2025-27 biennium.

Workforce Education Investment Account

*WEIA forecast
change by
biennium
(millions):*

21-23: -\$18.8
23-25: -\$21.5
25-27: -\$17.7

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 decreased by \$18.8 million in the 2021-23 biennium, \$21.5 million in the 2023-25 biennium and \$17.7 million in the 2025-27 biennium. The forecast reductions were mainly due to recent collections falling short of the June projections but also due to lower forecasted state personal income. WEIA revenue is now forecasted at

\$746.8 million in the 2021-23 biennium, \$787.3 million in the 2023-25 biennium and \$833.6 million in the 2025-27 biennium. The WEIA forecast by fiscal year is presented in Table 3.19.

Budgetary Balance Sheet for the 2021-23 Biennium

The forecast implies total reserves of \$4.533 billion at the end of the 2021-23 biennium for GF-S, ELTA, OPA and WEIA

Table 3.12 shows the budgetary balance sheet 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 \$4,288.8 million at the end for the 2021-23 biennium and total reserves for the GF-S, ELTA, OPA and WEIA accounts of \$4,532.9 million.

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	60,234.7	18.6%	49,335.7	8.4%
2023-25 ^F	62,282.6	3.4%	48,318.4	-2.1%
2025-27 ^F	66,621.3	7.0%	49,789.1	3.0%

^F September 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 September 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	218,456	11.1%
2023 ^F	225,552	3.2%
2024 ^F	231,507	2.6%
2025 ^F	239,399	3.4%
2026 ^F	247,829	3.5%
2027 ^F	256,860	3.6%

^F September 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	June 2022 Forecast¹	Legislative Changes	Forecast Revision	Sept 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$28,518.6	(\$28.8)	\$68.8	\$28,558.6	\$40.0
Business & Occupation	11,416.9	0.0	78.5	11,495.4	78.5
Use	1,774.5	0.0	(2.5)	1,772.0	(2.5)
Public Utility	1,041.7	0.0	(9.7)	1,032.0	(9.7)
Liquor Sales/Liter	692.7	0.0	(2.2)	690.5	(2.2)
Cigarette	612.2	0.0	(8.8)	603.4	(8.8)
Property (State Levy)	8,962.9	0.0	(17.0)	8,946.0	(17.0)
Real Estate Excise	3,356.9	0.0	(93.8)	3,263.1	(93.8)
Timber Excise	6.5	0.0	0.6	7.2	0.6
Other	1,213.2	0.0	(0.9)	1,212.3	(0.9)
Subtotal	57,596.1	(28.8)	13.1	57,580.4	(15.7)
Insurance Commissioner					
Insurance Premiums	1,565.3	0.0	0.8	1,566.1	0.8
Liquor Control Board					
Fees, Cannabis Excise Tax	599.5	0.0	12.9	612.4	12.9
Beer & Wine Surtax	59.0	0.0	(0.7)	58.3	(0.7)
Lottery Commission					
Lottery Revenue	62.0	0.0	0.1	62.1	0.1
State Treasurer					
Interest Earnings	138.0	0.0	39.3	177.3	39.3
Office of Financial Management					
Other Agencies	116.7	0.0	(17.8)	98.9	(17.8)
Washington Court System					
Court Fees, Fines & Forfeitures	80.9	0.0	(1.6)	79.3	(1.6)
Total General Fund-State *	\$60,217.5	(\$28.8)	\$46.0	\$60,234.7	\$17.2

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 22, 2022² Forecast for the 2021-23 biennium, adopted September 21, 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	June 2022 Forecast¹	Legislative Changes	Forecast Revision	Sept 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$28,518.6	(\$28.8)	\$207.6	\$28,697.4	\$178.8
Business & Occupation	11,416.9	0.0	172.2	11,589.1	172.2
Use	1,774.5	0.0	17.0	1,791.5	17.0
Public Utility	1,041.7	0.0	(6.4)	1,035.3	(6.4)
Liquor Sales/Liter	705.4	0.0	(9.2)	696.1	(9.2)
Cigarette	612.2	0.0	(16.8)	595.4	(16.8)
Property (State Levy)	8,955.7	0.0	(60.0)	8,895.7	(60.0)
Real Estate Excise	3,356.9	0.0	(89.8)	3,267.1	(89.8)
Timber Excise	6.7	0.0	0.6	7.3	0.6
Other	1,213.2	0.0	10.8	1,224.0	10.8
Subtotal	57,601.7	(28.8)	226.0	57,798.9	197.2
Insurance Commissioner					
Insurance Premiums	1,565.3	0.0	0.8	1,566.1	0.8
Liquor Control Board					
Fees, Cannabis Excise Tax	599.5	0.0	12.9	612.4	12.9
Beer & Wine Surtax	59.0	0.0	(0.7)	58.3	(0.7)
Lottery Commission					
Lottery Revenue	62.4	0.0	0.3	62.7	0.3
State Treasurer					
Interest Earnings	131.9	0.0	55.3	187.3	55.3
Office of Financial Management					
Other Agencies	116.7	0.0	(17.8)	98.9	(17.8)
Washington Court System					
Court Fees, Fines & Forfeitures	80.9	0.0	(1.6)	79.3	(1.6)
Total General Fund-State *	\$60,217.4	(\$28.8)	\$275.3	\$60,464.0	\$246.5

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 22, 2022² Forecast for the 2021-23 biennium, adopted September 21, 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	June 2022 Forecast¹	Legislative Changes	Forecast Revision	Sept 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$30,519.0	(\$117.0)	(\$145.0)	\$30,257.0	(\$262.0)
Business & Occupation Use	12,226.7		(75.3)	12,151.4	(75.3)
Public Utility	1,802.8	0.0	(29.9)	1,772.9	(29.9)
Liquor Sales/Liter	1,072.8	0.0	(4.5)	1,068.3	(4.5)
Cigarette	686.6	0.0	0.7	687.3	0.7
Property (State Levy)	572.7	0.0	(6.9)	565.7	(6.9)
Real Estate Excise	9,404.1	0.0	(15.3)	9,388.8	(15.3)
Timber Excise	2,609.3		(134.8)	2,474.5	(134.8)
Other	2.6	0.0	0.3	2.8	0.3
Subtotal	1,227.7		11.9	1,239.6	11.9
Insurance Commissioner	60,124.3	(117.0)	(398.9)	59,608.4	(515.9)
Insurance Premiums	1,612.5	0.0	(19.0)	1,593.5	(19.0)
Liquor Control Board					
Fees, Cannabis Excise Tax	616.9	0.0	0.1	617.1	0.1
Beer & Wine Surtax	59.8	0.0	(0.5)	59.4	(0.5)
Lottery Commission					
Lottery Revenue	57.2	0.0	0.9	58.1	0.9
State Treasurer					
Interest Earnings	201.1	0.0	73.5	274.6	73.5
Office of Financial Management					
Other Agencies	(12.8)	0.0	15.5	2.7	15.5
Washington Court System					
Court Fees, Fines & Forfeitures	72.0	0.0	(3.3)	68.8	(3.3)
Total General Fund-State *	\$62,731.2	(\$117.0)	(\$331.5)	\$62,282.6	(\$448.5)

¹ Forecast for the 2023-25 biennium adopted by the Economic and Revenue Forecast Council June 22, 2022² Forecast for the 2023-25 biennium, adopted September 21, 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	June 2022 Forecast¹	Legislative Changes	Forecast Revision	Sept 2022 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$30,519.0	(\$117.0)	(\$145.0)	\$30,257.0	(\$262.0)
Business & Occupation	12,226.7	0.0	(75.3)	12,151.4	(75.3)
Use	1,802.8	0.0	(29.9)	1,772.9	(29.9)
Public Utility	1,072.8	0.0	(4.5)	1,068.3	(4.5)
Liquor Sales/Liter	686.6	0.0	0.7	687.3	0.7
Cigarette	572.7	0.0	(6.9)	565.7	(6.9)
Property (State Levy)	9,404.1	0.0	(15.3)	9,388.8	(15.3)
Real Estate Excise	2,609.3	0.0	(134.8)	2,474.5	(134.8)
Timber Excise	2.9	0.0	0.2	3.2	0.2
Other	1,227.7	0.0	11.9	1,239.6	11.9
Subtotal	60,124.7	(117.0)	(398.9)	59,608.8	(515.9)
Insurance Commissioner					
Insurance Premiums	1,612.5	0.0	(19.0)	1,593.5	(19.0)
Liquor Control Board					
Fees, Cannabis Excise Tax	616.9	0.0	0.1	617.1	0.1
Beer & Wine Surtax	59.8	0.0	(0.5)	59.4	(0.5)
Lottery Commission					
Lottery Revenue	57.6	0.0	0.7	58.3	0.7
State Treasurer					
Interest Earnings	200.9	0.0	72.4	273.3	72.4
Office of Financial Management					
Other Agencies	(12.8)	0.0	15.5	2.7	15.5
Washington Court System					
Court Fees, Fines & Forfeitures	72.0	0.0	(3.3)	68.8	(3.3)
Total General Fund-State *	\$62,731.7	(\$117.0)	(\$332.8)	\$62,281.9	(\$449.8)

¹ Forecast for the 2023-25 biennium adopted by the Economic and Revenue Forecast Council June 22, 2022² Forecast for the 2023-25 biennium, adopted September 21, 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 3.9

**September 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**	\$14,001.0	\$14,557.6	\$28,558.6	\$14,856.4	\$15,400.6	\$30,257.0	\$15,945.5	\$16,519.9	\$32,465.4
Business & occupation Use**	5,677.3	5,818.1	11,495.4	5,937.5	6,213.9	12,151.4	6,520.9	6,808.8	13,329.7
Public Utility	897.0	875.0	1,772.0	867.8	905.1	1,772.9	950.4	997.0	1,947.4
Liquor sales/liter	486.7	545.3	1,032.0	533.0	535.3	1,068.3	551.2	566.6	1,117.8
Beer & wine surtax	348.5	342.0	690.5	342.7	344.6	687.3	347.9	352.9	700.8
Cigarette	28.9	29.4	58.3	29.6	29.8	59.4	29.9	30.1	60.0
Tobacco products	318.9	301.4	620.2	296.9	285.9	582.7	277.0	269.1	546.1
Cannabis Excise Taxes	45.9	54.5	100.4	51.9	52.5	104.4	53.0	53.4	106.4
Property (state school levy)	173.0	151.4	324.4	162.0	166.7	328.6	172.0	177.7	349.7
Leasehold Excise Tax	4,426.9	4,519.1	8,946.0	4,635.0	4,753.8	9,388.8	4,872.8	4,995.7	9,868.5
Public utility district	40.7	34.7	75.4	38.5	39.3	77.8	40.1	40.7	80.8
Brokered Natural Gas	59.6	61.6	121.3	63.7	65.5	129.2	67.0	68.5	135.4
Real estate excise***	40.7	37.1	77.8	37.4	37.9	75.4	38.5	39.2	77.7
Timber excise	1,982.9	1,280.2	3,263.1	1,196.3	1,278.2	2,474.5	1,328.3	1,428.6	2,756.9
Estate/inheritance	5.5	1.7	7.2	1.4	1.5	2.8	1.6	1.6	3.2
Boat excise	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	18.4	13.1	31.5	13.3	13.3	26.6	13.4	13.5	26.9
Penalties and interest on past due taxes	784.4	781.6	1,566.1	788.2	805.3	1,593.5	821.8	838.0	1,659.8
Other	118.0	160.4	278.4	152.5	159.5	311.9	166.0	172.7	338.7
Total Taxes	62.2	56.8	119.0	58.4	59.1	117.6	59.8	64.4	124.3
Total Taxes	29,516.8	29,620.9	59,137.7	30,062.4	31,147.7	61,210.1	32,257.1	33,438.6	65,695.6
State Non-Tax Sources									
Licenses, permits, fees	180.9	182.3	363.2	184.5	185.9	370.3	187.3	188.7	376.0
Liquor & Cannabis fees	160.9	127.2	288.1	143.3	145.1	288.4	145.9	148.7	294.6
Earnings on investments	36.7	140.6	177.3	142.9	131.7	274.6	113.6	107.8	221.4
Washington Court System	42.7	36.7	79.3	35.0	33.7	68.8	32.8	32.0	64.8
Transfers of unclaimed property	154.3	186.4	340.8	158.8	155.7	314.5	158.0	159.4	317.4
Other revenue & transfers	(62.6)	(88.9)	(151.5)	(106.2)	(138.0)	(244.2)	(168.5)	(180.0)	(348.5)
Total Non-Tax	512.9	584.2	1,097.1	558.4	514.1	1,072.5	469.1	456.6	925.7
Total General Fund-State *	\$30,029.6	\$30,205.1	\$60,234.7	\$30,620.8	\$31,661.8	\$62,282.6	\$32,726.2	\$33,895.1	\$66,621.3

* 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 biennial forecast of funds subject to the budget outlook

February 2018 through September 2022

Cash Basis - Millions of Dollars

Date of Forecast	General Fund-State	Education Legacy Trust Acct.	Washington Opportunity Pathways Acct.	Workforce Education Investment Acct.	Subtotal	Non-economic changes	Total change	Total of funds
February 2018*	\$51,932	\$593	\$266	NA				\$52,790
Changes to Forecast								
June 2018	357	26	4	NA	387	(7) #1	380	53,170
September 2018	249	94	27	NA	369	46 #2	415	53,585
November 2018	201	2	7	NA	209	0	209	53,795
March 2019	369	0	5	NA	374	190 #3	564	54,358
June 2019	64	5	3	NA	73	605 #4	678	55,036
September 2019	(79)	21	(5)	NA	(63)	0	(63)	54,973
November 2019	175	(2)	8	NA	181	0	181	55,154
February 2020	512	25	(1)	NA	536	627 #5	1,163	56,317
June 2020	(4,570)	6	8	(56)	(4,612)	213 #6	(4,399)	51,919
September 2020	2,246	149	(5)	30	2,419	0	2,419	54,338
November 2020	297	22	6	4	328	0	328	54,666
March 2021	1,894	24	10	21	1,949	0	1,949	56,615
June 2021	1,340	6	18	35	1,399	399 #7	1,798	58,413
September 2021	845	73	1	8	927	0	927	59,341
November 2021	994	(179)	5	10	829	69 #8	898	60,238
February 2022	1,400	56	(10)	6	1,453	0	1,453	61,691
June 2022	1,392	80	(2)	83	1,552	(95) #9	1,457	63,147
September 2022	46	27	18	(19)	72	(29) #10	43	63,191
Total change:								
From February 2018**	7,732	434	95	121	8,382	2,018	10,401	
Percent change	14.9	73.3	35.8	19.2	15.9	3.8	19.7	
Change in forecast since initial 2123 biennial budget***	6,017	63	30	122	6,232	344	6,177	
Percent change	11.1	3.5	9.0	19.5	10.9	0.6	10.8	

Table 3.11

Track Record for the 2023-25 Forecast of Funds Subject to the Budget Outlook

February 2020 through September 2022

Cash Basis - Millions of Dollars

Date of Forecast	General Fund-State	Education Legacy Trust Acct.	Washington Opportunity Pathways Acct.	Workforce Education Investment Acct.	Subtotal	Non-Economic Changes	Total Change	Total of Funds
February 2020*	\$57,930	\$925	\$321	\$667				\$59,843
Changes to Forecast								
June 2020	(4,682)	(9)	8	(3)	(4,685)	209 #6	(4,476)	55,367
September 2020	2,460	125	(7)	35	2,612	0	2,612	57,979
November 2020	16	14	2	(4)	28	0	28	58,007
March 2021	1,846	17	10	25	1,899	0	1,899	59,906
June 2021	1,419	(6)	16	7	1,436	810 #7	2,246	62,151
September 2021	891	31	(1)	9	931	0	931	63,082
November 2021	828	(44)	5	11	800	165 #8	965	64,047
February 2022	1,311	2	2	5	1,320	0	1,320	65,368
June 2022	1,036	21	(1)	55	1,112	(480) #9	632	65,999
September 2022	(332)	(18)	(8)	(21)	(378)	(117) #10	(495)	65,504
Total change:								
From February 2020	4,793	134	27	120	5,074	587	5,661	
Percent change	8.3	14.5	8.3	17.9	8.5	1.0	9.5	

*First official forecast for the 2021-23 biennium

**Change in Workforce Education Investment Account forecast represents change from the initial fiscal note estimate of \$627 million first recorded in February 2020 forecast

***Resources for the initial 2021-23 budget include forecasted March 2021 revenue plus legislative revenue changes from 2021 session subsequent to the March forecast

#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 Establishment of Workforce Education Investment Account

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

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

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

#9 Legislative and budget-driven revenue changes from the 2022 legislative session

#10 July 2022 BTA decision that allows machinery and equipment sales tax exemption for R&D equipment purchases

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),
Budget Stabilization Account (BSA) and Washington Rescue Plan Transition Account
Dollars in Millions

	2021-23		
	GFS	ELTA , OPA, WEIA, FSKA*	TOTAL
RESOURCES			
Beginning Fund Balance	3,673.7	487.0	4,160.7
June 2022 Revenue Forecast	60,217.5	2,929.9	63,147.4
September 2022 Revenue Forecast Change	17.2	26.2	43.4
Current Revenue Totals	60,234.7	2,956.0	63,190.8
Transfer to Budget Stabilization Account (1% of GSR)	(603.1)		(603.1)
Transfer to Budget Stabilization Account (EGSR)**	-		-
Enacted Fund Transfers	(1,181.6)	-	(1,181.6)
Assumed Prior Period Adjustments	40.8		40.8
Total Resources (Including Beginning Fund Balance)	62,164.5	3,443.0	65,607.5
EXPENDITURES			
Enacted Budgets			
2021-23 Biennium	56,187.8	2,878.8	59,066.6
2022 Supplemental Budget	4,738.0	320.1	5,058.0
Assumed Reversions	(321.7)	-	(321.7)
Total Expenditures	60,604.0	3,198.9	63,802.9
RESERVES			
Projected Ending Balance	1,560.5	244.1	1,804.6
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	19.2		19.2
Transfers from General Fund (1% of GSR)	603.1		603.1
Transfers from GFS (EGSR)**	-		-
Assumed 21-23 Biennium-Interest Earnings	5.9		5.9
Projected Budget Stabilization Account Ending Balance	628.3		628.3
Washington Rescue Plan Transition Account			
Beginning Balance	1,000.0		1,000.0
Transfers	1,100.0		1,100.0
Projected Wash Rescue Plan Transition Account Ending Balance	2,100.0		2,100.0
Total Reserves Including Budget Stabilization and Wa Rescue Plan	4,288.8	244.1	4,532.9

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

** Based on the state constitution, no transfer of extraordinary revenue will occur in the 21-23 biennium because annual average state employment growth averaged less than one percent per fiscal year in the 19-21 biennium.

Acronyms

GSR- General State Revenues

EGSR- Extraordinary General State Revenues

ACFR- Annual Comprehensive Financial Report

Table 3.13

**Alternative General Fund-State 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	\$29,421.7	\$28,558.6	\$27,539.3
Business & Occupation	11,843.5	11,495.4	11,110.9
Use	1,831.7	1,772.0	1,702.3
Public Utility	1,063.1	1,032.0	989.5
Property (school levy)	8,941.7	8,946.0	8,917.0
Real Estate Excise	3,294.3	3,263.1	3,223.8
Other	2,544.5	2,513.3	2,495.4
Subtotal	58,940.4	57,580.4	55,978.2
<i>Insurance Commissioner¹</i>	1,605.5	1,566.1	1,526.6
<i>Lottery Commission</i>	64.4	62.1	59.7
<i>State Treasurer - Interest earnings</i>	220.0	177.3	137.4
<i>Liquor and Cannabis Surtaxes & Fees²</i>	679.5	670.7	687.4
<i>Office of Financial Management</i>			
Other agencies	99.2	98.9	98.5
<i>Washington Court System</i>			
Court Fees, Fines & Forfeitures	80.2	79.3	78.8
Total General Fund - State*	\$61,689.3	\$60,234.7	\$58,566.7
Difference from September 2022 Baseline	\$1,454.6		(\$1,668.0)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.14

**Alternative General Fund-State forecasts compared to the baseline forecast
2023-25 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	\$32,980.8	\$30,257.0	\$26,829.0
Business & Occupation	13,202.6	12,151.4	10,936.5
Use	1,961.5	1,772.9	1,548.0
Public Utility	1,165.8	1,068.3	967.1
Property (school levy)	9,439.0	9,388.8	9,342.5
Real Estate Excise	2,609.1	2,474.5	2,206.2
Other	2,602.5	2,495.5	2,397.1
Subtotal	63,961.2	59,608.4	54,226.3
<i>Insurance Commissioner¹</i>	1,674.0	1,593.5	1,513.0
<i>Lottery Commission</i>	61.0	58.1	55.2
<i>State Treasurer - Interest earnings</i>	362.1	274.6	198.6
<i>Liquor and Cannabis Surtaxes & Fees²</i>	711.7	676.4	649.7
<i>Office of Financial Management</i>			
Other agencies	2.8	2.7	2.7
<i>Washington Court System</i>			
Court Fees, Fines & Forfeitures	71.7	68.8	66.1
Total General Fund - State*	\$66,844.6	\$62,282.6	\$56,711.5
Difference from September 2022 Baseline	\$4,562.0		(\$5,571.1)

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

September 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	228.9	32.8	0.0	0.0	0.0	0.0	0.4	6.0	189.7	0.0	0.0
2023	205.0	29.3	0.0	0.0	0.0	0.0	0.4	4.8	170.5	0.0	0.0
2021-23 Biennium	433.9	62.1	0.0	0.0	0.0	0.0	0.9	10.8	360.1	0.0	0.0
2024	208.0	28.9	0.0	0.0	0.0	0.0	0.4	4.7	173.9	0.0	0.0
2025	207.3	29.2	0.0	0.0	0.0	0.0	0.4	4.7	172.9	0.0	0.0
2023-25 Biennium	415.2	58.1	0.0	0.0	0.0	0.0	0.9	9.4	346.9	0.0	0.0
2026	208.9	29.3	0.0	0.0	0.0	0.0	0.4	4.7	174.5	0.0	0.0
2027	210.4	30.3	0.0	0.0	0.0	0.0	0.4	4.7	174.9	0.0	0.0
2025-27 Biennium	419.3	59.7	0.0	0.0	0.0	0.0	0.9	9.4	349.4	0.0	0.0

Table 3.16

Lottery transfers by fund

September 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	216.8	33.6	0.0	0.0	0.0	0.0	0.4	6.2	176.6	0.0	0.0
2023	203.8	29.1	0.0	0.0	0.0	0.0	0.4	4.7	169.7	0.0	0.0
2021-23 Biennium	420.7	62.7	0.0	0.0	0.0	0.0	0.9	10.9	346.2	0.0	0.0
2024	205.8	29.1	0.0	0.0	0.0	0.0	0.4	4.7	171.6	0.0	0.0
2025	207.4	29.2	0.0	0.0	0.0	0.0	0.4	4.7	173.1	0.0	0.0
2023-25 Biennium	413.2	58.3	0.0	0.0	0.0	0.0	0.9	9.4	344.6	0.0	0.0
2026	209.1	29.3	0.0	0.0	0.0	0.0	0.4	4.7	174.6	0.0	0.0
2027	210.5	29.5	0.0	0.0	0.0	0.0	0.4	4.7	175.8	0.0	0.0
2025-27 Biennium	419.6	58.9	0.0	0.0	0.0	0.0	0.9	9.4	350.4	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)

September 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	\$30,030	11.3%	\$890	22.6%	\$190	2.9%	\$369	15.1%	\$31,478	11.6%
FY 2023	\$30,205	0.6%	\$959	7.8%	\$170	-10.1%	\$378	2.6%	\$31,713	0.7%
FY 2024	\$30,621	1.4%	\$982	2.4%	\$174	2.0%	\$388	2.6%	\$32,165	1.4%
FY 2025	\$31,662	3.4%	\$1,105	12.4%	\$173	-0.6%	\$399	2.9%	\$33,339	3.6%
FY 2026	\$32,726	3.4%	\$1,141	3.3%	\$174	0.9%	\$411	2.9%	\$34,453	3.3%
FY 2027	\$33,895	3.6%	\$1,190	4.3%	\$175	0.2%	\$423	2.8%	\$35,683	3.6%
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	\$60,235	18.6%	\$1,849	12.8%	\$360	6.9%	\$747	112.0%	\$63,191	18.9%
23-25 Biennium	\$62,283	3.4%	\$2,087	12.9%	\$347	-3.7%	\$787	5.4%	\$65,504	3.7%
25-27 Biennium	\$66,621	7.0%	\$2,331	11.7%	\$349	0.7%	\$834	5.9%	\$70,136	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

September 2022

Cash forecast, thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	LCB administration and pre-distribution allotments	Total to distribute	Distribution of remaining funds							General Fund-State*
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention	Local governments	
2016	\$168,051	\$16,342	\$151,709	\$12,814	\$7,500	\$345	\$79,750	\$0	\$251	\$0	\$51,049
2017	\$300,635	\$22,180	\$278,455	\$27,786	\$7,500	\$345	\$145,717	\$0	\$511	\$0	\$96,596
2018	\$360,608	\$31,388	\$329,220	\$27,786	\$9,761	\$365	\$173,418	\$0	\$513	\$0	\$117,377
2019	\$391,191	\$60,749	\$330,442	\$0	\$9,764	\$365	\$188,317	\$0	\$515	\$0	\$131,482
2020	\$448,427	\$66,894	\$381,533	\$0	\$10,786	\$374	\$215,096	\$0	\$522	\$0	\$154,754
2021	\$560,929	\$70,584	\$490,345	\$0	\$10,615	\$384	\$272,521	\$0	\$530	\$0	\$206,296
2022	\$527,090	\$18,493	\$508,597	\$0	\$10,584	\$401	\$264,470	\$55,556	\$520	\$0	\$177,066
2023	\$518,526	\$20,073	\$498,453	\$0	\$11,000	\$475	\$252,943	\$53,507	\$550	\$24,321	\$155,657
2024	\$549,432	\$17,108	\$532,324	\$0	\$11,817	\$510	\$270,091	\$57,135	\$591	\$25,970	\$166,210
2025	\$564,907	\$17,522	\$547,385	\$0	\$12,103	\$523	\$277,760	\$58,757	\$605	\$26,707	\$170,930
2026	\$582,258	\$17,809	\$564,449	\$0	\$12,302	\$531	\$286,521	\$60,610	\$615	\$27,550	\$176,320
2027	\$600,643	\$18,139	\$582,504	\$0	\$12,529	\$541	\$295,780	\$62,569	\$626	\$28,440	\$182,019
Biennial totals											
2015-17	\$468,686	\$38,522	\$430,164	\$40,600	\$15,000	\$690	\$225,467	\$0	\$762	\$0	\$147,645
2017-19	\$751,799	\$92,137	\$659,662	\$27,786	\$19,525	\$730	\$361,735	\$0	\$1,028	\$0	\$248,859
2019-21	\$1,009,356	\$137,478	\$871,878	\$0	\$21,401	\$758	\$487,617	\$0	\$1,052	\$0	\$361,050
2021-23	\$1,045,616	\$38,566	\$1,007,050	\$0	\$21,584	\$876	\$517,413	\$109,063	\$1,070	\$24,321	\$332,723
2023-25	\$1,114,339	\$34,630	\$1,079,709	\$0	\$23,920	\$1,033	\$547,851	\$115,892	\$1,196	\$52,677	\$337,140
2025-27	\$1,182,901	\$35,948	\$1,146,953	\$0	\$24,831	\$1,072	\$582,301	\$123,179	\$1,242	\$55,990	\$358,339

*Before distributions to local governments FY 2016-FY2022

Table 3.19

Workforce Education Investment Account

September 2022

Cash forecast, thousands of dollars

	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium	FY26	FY27	2025-27 Biennium
June 2022 forecast	\$377,059	\$388,553	\$765,613	\$399,176	\$409,570	\$808,746	\$420,147	\$431,126	\$851,273
Forecast change	-\$8,429	-\$10,390	-\$18,819	-\$11,169	-\$10,310	-\$21,480	-\$9,129	-\$8,524	-\$17,653
September 2022 forecast	\$368,630	\$378,163	\$746,794	\$388,007	\$399,259	\$787,266	\$411,018	\$422,602	\$833,621

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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	19,427.3	19,728.8	19,843.1	20,259.8	20,665.0	21,078.3	21,478.8
% Ch	-3.4	5.7	1.6	0.6	2.1	2.0	2.0	1.9
Real Consumption	12,629.9	13,624.8	13,950.0	14,088.9	14,413.0	14,730.1	15,039.4	15,355.2
% Ch	-3.8	7.9	2.4	1.0	2.3	2.2	2.1	2.1
Real Nonresidential Fixed Investment	2,671.1	2,868.5	2,987.2	2,996.4	2,996.4	3,020.2	3,073.5	3,136.4
% Ch	-5.3	7.4	4.1	0.3	0.0	0.8	1.8	2.0
Real Residential Fixed Investment	648.0	707.7	638.2	578.5	603.0	628.4	641.9	652.3
% Ch	6.8	9.2	-9.8	-9.4	4.2	4.2	2.2	1.6
Real Personal Income	17,647.9	18,266.2	17,704.1	17,868.0	18,276.7	18,780.2	19,268.2	19,840.8
% Ch	5.3	3.5	-3.1	0.9	2.3	2.8	2.6	3.0
Real Per Capita Income (\$/Person)	53,194	54,982	53,149	53,421	54,382	55,606	56,770	58,169
% Ch	4.9	3.4	-3.3	0.5	1.8	2.3	2.1	2.5
Price and Wage Indexes								
PCE Price Index (2012=100)	111.2	115.5	122.6	126.6	128.9	131.3	133.8	136.4
% Ch	1.2	3.9	6.1	3.2	1.8	1.9	1.9	2.0
U.S. Consumer Price Index (1982-84=1.0)	2.588	2.710	2.928	3.038	3.100	3.161	3.224	3.292
% Ch	1.2	4.7	8.1	3.7	2.0	2.0	2.0	2.1
Employment Cost Index (Dec. 2005=1.0)	1.414	1.471	1.551	1.629	1.696	1.760	1.824	1.890
% Ch	2.9	4.0	5.5	5.0	4.1	3.8	3.6	3.6
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,893.7	22,996.1	24,997.8	26,110.7	27,195.3	28,317.5	29,496.9	30,729.5
% Ch	-2.2	10.1	8.7	4.5	4.2	4.1	4.2	4.2
Personal Income	19,627.6	21,092.8	21,710.8	22,612.8	23,555.6	24,661.7	25,779.5	27,063.3
% Ch	6.5	7.5	2.9	4.2	4.2	4.7	4.5	5.0
Employment (Millions)								
U.S. Civilian Labor Force	160.8	161.2	164.4	165.6	166.2	166.8	167.5	168.2
Total U.S. Employment	147.8	152.6	158.4	158.9	158.7	159.2	160.1	161.1
Unemployment Rate (%)	8.10	5.35	3.68	4.01	4.54	4.58	4.40	4.23
Nonfarm Payroll Employment	142.15	146.10	152.00	153.04	153.18	153.49	154.00	154.56
% Ch	-5.8	2.8	4.0	0.7	0.1	0.2	0.3	0.4
Manufacturing	12.17	12.35	12.79	12.44	12.01	11.87	11.79	11.77
% Ch	-5.1	1.5	3.6	-2.7	-3.5	-1.2	-0.7	-0.2
Durable Manufacturing	7.57	7.68	7.94	7.66	7.36	7.28	7.24	7.26
% Ch	-5.8	1.4	3.5	-3.6	-3.9	-1.2	-0.5	0.3
Nondurable Manufacturing	4.59	4.67	4.84	4.78	4.64	4.59	4.55	4.51
% Ch	-3.9	1.7	3.7	-1.3	-2.8	-1.2	-0.9	-0.9
Construction	7.26	7.41	7.65	7.43	7.30	7.34	7.44	7.54
% Ch	-3.2	2.2	3.3	-2.9	-1.8	0.5	1.4	1.3
Service-Providing	122.12	125.78	130.94	132.52	133.19	133.60	134.09	134.57
% Ch	-6.0	3.0	4.1	1.2	0.5	0.3	0.4	0.4
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	39.2	68.0	96.4	82.3	75.4	70.6	67.0	64.3
Personal Saving/Disposable Income (%)	16.4	12.2	5.1	7.4	8.6	8.9	8.9	9.3
Auto Sales (Millions)	3.4	3.3	2.9	3.1	3.2	3.2	3.2	3.1
% Ch	-27.9	-1.8	-13.1	7.8	2.5	0.7	-1.7	-1.7
Housing Starts (Millions)	1.395	1.605	1.569	1.331	1.402	1.460	1.451	1.445
% Ch	8.1	15.1	-2.3	-15.1	5.3	4.2	-0.6	-0.5
Federal Budget Surplus (Billions)	-3,110.0	-2,783.8	-921.3	-1,279.7	-1,617.7	-1,698.8	-1,691.9	-1,721.5
Net Exports (Billions)	-651.2	-918.2	-1,072.1	-951.9	-877.5	-853.9	-791.6	-713.5
3-Month Treasury Bill Rate (%)	0.37	0.04	1.87	3.66	3.10	2.48	2.37	2.36
10-Year Treasury Note Yield (%)	0.89	1.44	2.79	3.26	3.19	3.11	3.08	3.06
Bond Index of 20 G.O. Munis. (%)	2.65	2.19	3.16	3.61	3.72	3.61	3.58	3.59
30-Year Fixed Mortgage Rate (%)	3.12	2.95	5.02	5.54	5.14	4.91	4.80	4.80

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	19,727.9	19,699.5	19,736.6	19,751.2	19,757.8	19,785.1	19,858.0	19,971.4
% Ch , Annual Rate	-1.6	-0.6	0.8	0.3	0.1	0.6	1.5	2.3
Real Consumption	13,881.1	13,931.5	13,979.7	14,007.8	14,015.4	14,046.8	14,105.5	14,188.1
% Ch , Annual Rate	1.8	1.5	1.4	0.8	0.2	0.9	1.7	2.4
Real Nonresidential Fixed Investment	2,975.4	2,975.1	2,987.8	3,010.6	3,003.4	2,997.0	2,991.6	2,993.7
% Ch , Annual Rate	10.0	0.0	1.7	3.1	-0.9	-0.9	-0.7	0.3
Real Residential Fixed Investment	698.7	668.6	608.2	577.2	571.4	574.8	580.6	587.1
% Ch , Annual Rate	0.4	-16.2	-31.5	-18.9	-4.0	2.4	4.1	4.6
Real Personal Income	17,697.8	17,686.8	17,677.8	17,753.8	17,839.4	17,800.3	17,871.2	17,961.3
% Ch , Annual Rate	-2.1	-0.2	-0.2	1.7	1.9	-0.9	1.6	2.0
Real Per Capita Income (\$/Person)	53,198	53,123	53,049	53,225	53,426	53,251	53,402	53,607
% Ch , Annual Rate	-2.4	-0.6	-0.6	1.3	1.5	-1.3	1.1	1.6
Price and Wage Indexes								
PCE Price Index (2012=100)	120.1	122.2	123.5	124.7	125.7	126.3	126.8	127.4
% Ch , Annual Rate	7.1	7.1	4.4	4.0	3.1	1.8	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.846	2.918	2.960	2.988	3.015	3.029	3.045	3.062
% Ch , Annual Rate	9.2	10.5	5.8	3.9	3.6	2.0	2.1	2.2
Employment Cost Index (Dec. 2005=1.0)	1.517	1.541	1.563	1.583	1.601	1.621	1.638	1.656
% Ch , Annual Rate	5.2	6.5	5.7	5.2	4.9	4.9	4.4	4.3
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	24,386.7	24,882.9	25,188.2	25,533.5	25,771.9	25,976.2	26,210.9	26,483.7
% Ch , Annual Rate	6.6	8.4	5.0	5.6	3.8	3.2	3.7	4.2
Personal Income	21,257.2	21,610.3	21,831.6	22,144.0	22,420.4	22,473.3	22,668.8	22,888.7
% Ch , Annual Rate	4.8	6.8	4.2	5.8	5.1	0.9	3.5	3.9
Employment (Millions)								
U.S. Civilian Labor Force	164.0	164.1	164.5	165.1	165.3	165.5	165.7	165.8
Total U.S. Employment	157.8	158.2	158.6	159.0	159.1	159.0	158.9	158.8
Unemployment Rate (%)	3.81	3.62	3.60	3.70	3.77	3.93	4.11	4.24
Nonfarm Payroll Employment	150.35	151.58	152.75	153.31	153.31	153.09	152.87	152.90
% Ch , Annual Rate	4.7	3.3	3.1	1.5	0.0	-0.6	-0.6	0.1
Manufacturing	12.63	12.77	12.86	12.88	12.62	12.51	12.39	12.25
% Ch , Annual Rate	4.0	4.4	2.9	0.5	-7.9	-3.4	-3.9	-4.3
Durable Manufacturing	7.85	7.93	7.99	8.01	7.79	7.71	7.62	7.53
% Ch , Annual Rate	3.3	3.9	3.3	0.7	-10.3	-4.2	-4.4	-5.1
Nondurable Manufacturing	4.78	4.84	4.87	4.87	4.82	4.80	4.76	4.73
% Ch , Annual Rate	5.0	5.3	2.3	0.1	-3.8	-2.1	-3.0	-3.1
Construction	7.60	7.65	7.69	7.68	7.53	7.46	7.39	7.35
% Ch , Annual Rate	5.1	2.9	2.1	-0.2	-7.7	-3.6	-4.0	-2.1
Service-Providing	129.53	130.54	131.56	132.12	132.53	132.48	132.44	132.63
% Ch , Annual Rate	4.7	3.2	3.2	1.7	1.2	-0.1	-0.1	0.6
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	94.4	108.7	94.3	88.0	85.6	83.2	81.0	79.2
Personal Saving/Disposable Income (%)	5.6	5.1	4.7	5.1	7.1	7.0	7.5	7.9
Auto Sales (Millions)	2.9	2.8	2.8	3.1	3.1	3.1	3.1	3.2
% Ch , Annual Rate	37.8	-11.5	5.8	37.1	3.9	0.9	3.1	2.9
Housing Starts (Millions)	1.720	1.655	1.465	1.436	1.369	1.328	1.313	1.315
% Ch , Annual Rate	10.0	-14.1	-38.7	-7.8	-17.2	-11.5	-4.5	0.6
Federal Budget Surplus (Billions)	-979.7	-965.9	-860.1	-879.5	-1,142.7	-1,227.9	-1,327.0	-1,421.2
Net Exports (Billions)	-1,177.9	-1,082.8	-1,025.9	-1,001.8	-997.2	-959.5	-934.3	-916.6
3-Month Treasury Bill Rate (%)	0.31	1.08	2.55	3.54	3.77	3.69	3.63	3.57
10-Year Treasury Note Yield (%)	1.94	2.93	3.00	3.29	3.29	3.26	3.27	3.22
Bond Index of 20 G.O. Munis. (%)	2.40	3.25	3.39	3.62	3.61	3.60	3.61	3.64
30-Year Fixed Mortgage Rate (%)	3.75	5.21	5.46	5.66	5.65	5.59	5.52	5.39

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	20,087.9	20,208.7	20,319.7	20,422.9	20,515.7	20,611.4	20,712.8	20,820.1
% Ch , Annual Rate	2.4	2.4	2.2	2.0	1.8	1.9	2.0	2.1
Real Consumption	14,277.6	14,370.8	14,462.0	14,541.5	14,615.6	14,690.2	14,768.3	14,846.2
% Ch , Annual Rate	2.5	2.6	2.6	2.2	2.1	2.1	2.1	2.1
Real Nonresidential Fixed Investment	2,993.7	2,995.6	2,996.5	2,999.7	3,005.1	3,013.3	3,024.5	3,037.9
% Ch , Annual Rate	0.0	0.3	0.1	0.4	0.7	1.1	1.5	1.8
Real Residential Fixed Investment	591.3	599.5	606.5	614.8	621.5	627.0	630.1	634.8
% Ch , Annual Rate	2.9	5.7	4.7	5.6	4.4	3.6	2.0	3.0
Real Personal Income	18,099.7	18,213.8	18,333.6	18,459.6	18,607.0	18,723.5	18,839.2	18,951.0
% Ch , Annual Rate	3.1	2.5	2.7	2.8	3.2	2.5	2.5	2.4
Real Per Capita Income (\$/Person)	53,955	54,228	54,518	54,825	55,195	55,472	55,746	56,008
% Ch , Annual Rate	2.6	2.0	2.2	2.3	2.7	2.0	2.0	1.9
Price and Wage Indexes								
PCE Price Index (2012=100)	128.0	128.6	129.2	129.8	130.4	131.0	131.6	132.2
% Ch , Annual Rate	1.9	1.6	1.8	1.9	2.0	2.0	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	3.078	3.092	3.107	3.122	3.137	3.153	3.168	3.184
% Ch , Annual Rate	2.1	1.8	2.0	1.8	2.0	2.1	1.9	2.1
Employment Cost Index (Dec. 2005=1.0)	1.672	1.688	1.704	1.720	1.736	1.752	1.768	1.783
% Ch , Annual Rate	3.9	3.9	4.0	3.8	3.7	3.7	3.7	3.5
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	26,774.6	27,058.3	27,336.2	27,612.2	27,888.2	28,171.8	28,454.4	28,755.4
% Ch , Annual Rate	4.5	4.3	4.2	4.1	4.1	4.1	4.1	4.3
Personal Income	23,175.9	23,416.7	23,678.1	23,951.7	24,261.3	24,531.9	24,794.4	25,059.0
% Ch , Annual Rate	5.1	4.2	4.5	4.7	5.3	4.5	4.3	4.3
Employment (Millions)								
U.S. Civilian Labor Force	166.0	166.1	166.3	166.4	166.6	166.8	166.9	167.1
Total U.S. Employment	158.6	158.6	158.7	158.8	158.9	159.1	159.3	159.5
Unemployment Rate (%)	4.42	4.56	4.59	4.61	4.61	4.60	4.58	4.53
Nonfarm Payroll Employment	153.03	153.13	153.24	153.30	153.38	153.43	153.51	153.63
% Ch , Annual Rate	0.4	0.3	0.3	0.1	0.2	0.1	0.2	0.3
Manufacturing	12.14	12.03	11.95	11.91	11.90	11.88	11.86	11.83
% Ch , Annual Rate	-3.5	-3.7	-2.6	-1.3	-0.4	-0.6	-0.8	-1.1
Durable Manufacturing	7.45	7.38	7.32	7.30	7.29	7.29	7.27	7.25
% Ch , Annual Rate	-3.9	-4.0	-2.8	-1.3	-0.3	-0.5	-0.7	-1.1
Nondurable Manufacturing	4.69	4.65	4.63	4.61	4.60	4.60	4.59	4.57
% Ch , Annual Rate	-2.9	-3.2	-2.3	-1.3	-0.6	-0.7	-0.8	-1.0
Construction	7.31	7.30	7.29	7.30	7.31	7.33	7.35	7.38
% Ch , Annual Rate	-1.9	-1.0	-0.2	0.2	0.6	1.1	1.1	1.6
Service-Providing	132.90	133.13	133.32	133.41	133.49	133.54	133.63	133.75
% Ch , Annual Rate	0.8	0.7	0.6	0.3	0.3	0.1	0.3	0.4
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	77.5	76.0	74.6	73.3	72.2	71.1	70.0	69.2
Personal Saving/Disposable Income (%)	8.4	8.6	8.7	8.8	9.0	8.9	8.8	8.7
Auto Sales (Millions)	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
% Ch , Annual Rate	1.9	3.3	2.1	2.4	0.0	0.3	-1.5	-1.0
Housing Starts (Millions)	1.349	1.393	1.419	1.446	1.462	1.466	1.454	1.459
% Ch , Annual Rate	10.9	13.5	7.7	8.0	4.5	1.0	-3.0	1.3
Federal Budget Surplus (Billions)	-1,539.9	-1,610.9	-1,646.4	-1,673.8	-1,707.5	-1,710.1	-1,690.8	-1,686.6
Net Exports (Billions)	-891.8	-876.5	-872.0	-869.8	-867.8	-861.5	-850.5	-835.7
3-Month Treasury Bill Rate (%)	3.36	3.11	3.07	2.85	2.69	2.48	2.37	2.36
10-Year Treasury Note Yield (%)	3.20	3.17	3.20	3.21	3.20	3.12	3.04	3.05
Bond Index of 20 G.O. Munis. (%)	3.70	3.69	3.74	3.73	3.71	3.62	3.55	3.56
30-Year Fixed Mortgage Rate (%)	5.25	5.17	5.10	5.05	5.03	4.94	4.85	4.82

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	20,926.0	21,030.8	21,128.8	21,227.6	21,325.8	21,426.6	21,529.4	21,633.2
% Ch , Annual Rate	2.1	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Real Consumption	14,922.6	14,999.9	15,078.4	15,156.7	15,236.6	15,315.4	15,395.0	15,473.9
% Ch , Annual Rate	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Real Nonresidential Fixed Investment	3,052.7	3,066.9	3,080.1	3,094.5	3,109.1	3,125.6	3,144.9	3,166.0
% Ch , Annual Rate	2.0	1.9	1.7	1.9	1.9	2.1	2.5	2.7
Real Residential Fixed Investment	638.0	641.7	642.9	645.0	647.1	650.4	654.3	657.2
% Ch , Annual Rate	2.1	2.3	0.7	1.3	1.3	2.1	2.4	1.8
Real Personal Income	19,084.4	19,212.4	19,327.9	19,448.2	19,652.7	19,779.2	19,906.8	20,024.5
% Ch , Annual Rate	2.8	2.7	2.4	2.5	4.3	2.6	2.6	2.4
Real Per Capita Income (\$/Person)	56,333	56,641	56,912	57,195	57,725	58,025	58,327	58,599
% Ch , Annual Rate	2.3	2.2	1.9	2.0	3.8	2.1	2.1	1.9
Price and Wage Indexes								
PCE Price Index (2012=100)	132.9	133.5	134.1	134.7	135.4	136.1	136.7	137.4
% Ch , Annual Rate	1.9	1.8	1.9	2.0	2.0	2.0	1.9	2.0
U.S. Consumer Price Index (1982-84=1.0)	3.200	3.216	3.232	3.248	3.266	3.283	3.300	3.318
% Ch , Annual Rate	2.1	1.9	2.0	2.1	2.2	2.2	2.1	2.2
Employment Cost Index (Dec. 2005=1.0)	1.800	1.816	1.832	1.848	1.865	1.882	1.899	1.916
% Ch , Annual Rate	3.7	3.7	3.6	3.6	3.6	3.7	3.7	3.7
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	29,056.0	29,348.7	29,640.6	29,942.2	30,250.9	30,565.5	30,884.4	31,217.3
% Ch , Annual Rate	4.2	4.1	4.0	4.1	4.2	4.2	4.2	4.4
Personal Income	25,355.7	25,640.5	25,916.7	26,205.2	26,610.3	26,911.5	27,215.6	27,515.7
% Ch , Annual Rate	4.8	4.6	4.4	4.5	6.3	4.6	4.6	4.5
Employment (Millions)								
U.S. Civilian Labor Force	167.3	167.4	167.6	167.8	167.9	168.1	168.3	168.4
Total U.S. Employment	159.8	160.0	160.3	160.5	160.7	161.0	161.2	161.4
Unemployment Rate (%)	4.48	4.42	4.37	4.32	4.28	4.24	4.21	4.17
Nonfarm Payroll Employment	153.82	153.97	154.04	154.18	154.32	154.47	154.63	154.81
% Ch, Annual Rate	0.5	0.4	0.2	0.4	0.4	0.4	0.4	0.5
Manufacturing	11.82	11.80	11.78	11.76	11.77	11.77	11.77	11.76
% Ch, Annual Rate	-0.4	-0.7	-0.6	-0.5	0.2	0.0	-0.1	-0.1
Durable Manufacturing	7.25	7.24	7.24	7.23	7.25	7.26	7.27	7.28
% Ch, Annual Rate	-0.2	-0.5	-0.3	-0.1	0.8	0.5	0.4	0.5
Nondurable Manufacturing	4.57	4.55	4.54	4.53	4.52	4.51	4.50	4.49
% Ch, Annual Rate	-0.7	-1.0	-1.1	-1.1	-0.8	-0.9	-1.0	-1.0
Construction	7.40	7.43	7.46	7.48	7.50	7.53	7.56	7.59
% Ch, Annual Rate	1.5	1.7	1.3	1.1	1.2	1.4	1.5	1.6
Service-Providing	133.92	134.07	134.13	134.26	134.37	134.50	134.63	134.79
% Ch, Annual Rate	0.5	0.4	0.2	0.4	0.3	0.4	0.4	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	68.2	67.4	66.6	66.0	65.2	64.5	63.9	63.5
Personal Saving/Disposable Income (%)	8.8	8.9	8.9	8.9	9.3	9.3	9.4	9.4
Auto Sales (Millions)	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1
% Ch, Annual Rate	-2.9	-1.6	-1.5	-1.8	-2.1	-1.8	-1.2	-1.2
Housing Starts (Millions)	1.460	1.471	1.439	1.435	1.445	1.449	1.441	1.445
% Ch, Annual Rate	0.2	3.3	-8.4	-1.3	2.8	1.1	-2.1	1.1
Federal Budget Surplus (Billions)	-1,690.5	-1,688.1	-1,681.8	-1,707.1	-1,722.7	-1,714.0	-1,713.2	-1,736.0
Net Exports (Billions)	-818.2	-800.9	-782.8	-764.6	-745.5	-725.1	-703.4	-679.9
3-Month Treasury Bill Rate (%)	2.39	2.37	2.37	2.36	2.36	2.36	2.36	2.37
10-Year Treasury Note Yield (%)	3.10	3.08	3.07	3.07	3.06	3.06	3.06	3.05
Bond Index of 20 G.O. Munis. (%)	3.60	3.58	3.57	3.58	3.59	3.58	3.58	3.59
30-Year Fixed Mortgage Rate (%)	4.82	4.81	4.80	4.78	4.80	4.80	4.79	4.79

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	482.128	467.552	473.857	487.753	503.872	519.903	537.715
% Ch	6.4	3.8	-3.0	1.3	2.9	3.3	3.2	3.4
Real Wage and Salary Disb.	237.494	253.317	258.430	263.001	268.831	275.746	284.291	292.952
% Ch	2.8	6.7	2.0	1.8	2.2	2.6	3.1	3.0
Real Nonwage Income	226.919	228.811	209.121	210.856	218.923	228.126	235.612	244.763
% Ch	10.4	0.8	-8.6	0.8	3.8	4.2	3.3	3.9
Real Per Capita Income (\$/Person)	60,201	62,293	60,095	60,365	61,529	62,935	64,296	65,840
% Ch	5.4	3.5	-3.5	0.4	1.9	2.3	2.2	2.4
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.112	1.155	1.226	1.266	1.289	1.313	1.338	1.364
% Ch	1.2	3.9	6.2	3.2	1.8	1.9	1.9	2.0
Seattle Cons. Price Index (1982-84=1.0)	2.826	2.960	3.216	3.342	3.411	3.478	3.548	3.622
% Ch	1.7	4.7	8.7	3.9	2.0	2.0	2.0	2.1
Average Nonfarm Annual Wage	78,331	84,742	87,393	90,778	93,841	97,266	101,185	105,353
% Ch	9.9	8.2	3.1	3.9	3.4	3.6	4.0	4.1
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.32	28.05	30.20	31.68	32.94	34.13	35.32	36.55
% Ch	-2.9	-1.0	7.7	4.9	4.0	3.6	3.5	3.5
Current Dollar Income (Billions of Dollars)								
Personal Income	516.441	556.692	573.331	599.695	628.638	661.677	695.599	733.461
% Ch	7.6	7.8	3.0	4.6	4.8	5.3	5.1	5.4
Disposable Personal Income	458.665	488.434	490.763	527.306	560.360	588.215	615.608	646.940
% Ch	8.6	6.5	0.5	7.4	6.3	5.0	4.7	5.1
Per Capita Income (\$/Person)	66,946	71,925	73,689	76,394	79,300	82,644	86,022	89,807
% Ch	6.6	7.4	2.5	3.7	3.8	4.2	4.1	4.4
Employment (Thousands)								
Washington Civilian Labor Force	3,929.2	3,910.5	4,020.3	4,064.2	4,102.7	4,142.4	4,184.0	4,224.1
Total Washington Employment	3,595.7	3,704.3	3,861.1	3,889.0	3,903.8	3,940.2	3,987.5	4,032.7
Unemployment Rate (%)	8.47	5.28	3.96	4.31	4.85	4.88	4.69	4.53
Nonfarm Payroll Employment	3,283.5	3,363.1	3,531.9	3,571.8	3,596.9	3,627.2	3,663.3	3,696.9
% Ch	-5.3	2.4	5.0	1.1	0.7	0.8	1.0	0.9
Manufacturing	271.7	259.2	271.8	270.8	266.7	267.5	268.7	270.0
% Ch	-7.5	-4.6	4.9	-0.4	-1.5	0.3	0.5	0.5
Durable Manufacturing	189.7	175.3	183.1	182.0	180.0	181.4	182.8	184.3
% Ch	-8.3	-7.6	4.5	-0.6	-1.1	0.7	0.8	0.8
Aerospace	80.1	67.6	70.3	73.3	74.6	75.0	75.3	75.9
% Ch	-9.6	-15.6	4.0	4.3	1.7	0.5	0.5	0.8
Nondurable Manufacturing	82.0	83.9	88.7	88.8	86.7	86.2	86.0	85.7
% Ch	-5.5	2.3	5.7	0.1	-2.4	-0.6	-0.2	-0.3
Construction	213.8	223.4	234.8	226.6	224.6	225.7	229.4	233.1
% Ch	-2.6	4.5	5.1	-3.5	-0.9	0.5	1.7	1.6
Service-Providing	2,792.3	2,874.8	3,019.6	3,069.6	3,101.2	3,129.5	3,160.6	3,189.2
% Ch	-5.3	3.0	5.0	1.7	1.0	0.9	1.0	0.9
Software Publishers	76.0	79.5	83.9	85.7	87.1	88.6	89.6	90.6
% Ch	8.0	4.6	5.6	2.1	1.6	1.7	1.1	1.2
Electronic Shopping and Mail-Order	75.9	75.4	78.2	81.6	83.5	85.3	87.1	88.8
% Ch	19.5	-0.6	3.6	4.4	2.3	2.2	2.1	2.0
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	44.062	56.941	53.198	45.163	47.070	47.488	46.604	46.033
% Ch	-9.0	29.2	-6.6	-15.1	4.2	0.9	-1.9	-1.2
Single-Family	23.044	25.076	22.977	22.747	24.265	25.889	25.942	26.061
% Ch	-1.1	8.8	-8.4	-1.0	6.7	6.7	0.2	0.5
Multi-Family	21.018	31.865	30.221	22.416	22.805	21.599	20.662	19.972
% Ch	-16.3	51.6	-5.2	-25.8	1.7	-5.3	-4.3	-3.3
30-Year Fixed Mortgage Rate (%)	3.12	2.95	5.02	5.54	5.14	4.91	4.80	4.80

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	466.181	466.920	468.006	469.099	471.267	471.869	474.508	477.783
% Ch, Annual Rate	-4.8	0.6	0.9	0.9	1.9	0.5	2.3	2.8
Real Wage and Salary Disb.	256.866	257.507	259.439	259.908	260.768	262.449	263.652	265.133
% Ch, Annual Rate	-3.0	1.0	3.0	0.7	1.3	2.6	1.8	2.3
Real Nonwage Income	209.315	209.412	208.567	209.191	210.499	209.419	210.856	212.650
% Ch, Annual Rate	-7.0	0.2	-1.6	1.2	2.5	-2.0	2.8	3.4
Real Per Capita Income (\$/Person)	60,090	60,078	60,103	60,110	60,250	60,185	60,377	60,646
% Ch, Annual Rate	-5.1	-0.1	0.2	0.0	0.9	-0.4	1.3	1.8
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.201	1.222	1.235	1.247	1.257	1.263	1.268	1.274
% Ch, Annual Rate	7.1	7.1	4.4	4.0	3.1	1.8	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	3.107	3.213	3.256	3.288	3.317	3.333	3.351	3.369
% Ch, Annual Rate	8.0	14.3	5.6	3.9	3.6	2.0	2.1	2.2
Average Nonfarm Annual Wage	86,146	87,055	87,797	88,575	89,452	90,391	91,255	92,014
% Ch, Annual Rate	-1.0	4.3	3.5	3.6	4.0	4.3	3.9	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	29.59	30.00	30.41	30.79	31.15	31.52	31.86	32.19
% Ch, Annual Rate	11.6	5.6	5.5	5.1	4.8	4.8	4.3	4.2
Current Dollar Income (Billions of Dollars)								
Personal Income	559.846	570.401	577.974	585.102	592.287	595.745	601.892	608.854
% Ch, Annual Rate	1.9	7.8	5.4	5.0	5.0	2.4	4.2	4.7
Disposable Personal Income	479.231	487.864	494.506	501.451	517.497	522.282	530.087	539.361
% Ch, Annual Rate	-4.0	7.4	5.6	5.7	13.4	3.7	6.1	7.2
Per Capita Income (\$/Person)	72,163	73,393	74,225	74,975	75,722	75,986	76,586	77,283
% Ch, Annual Rate	1.6	7.0	4.6	4.1	4.0	1.4	3.2	3.7
Employment (Thousands)								
Washington Civilian Labor Force	3,981.7	4,032.7	4,025.9	4,041.0	4,050.2	4,059.8	4,068.4	4,078.4
Total Washington Employment	3,811.8	3,873.8	3,876.4	3,882.5	3,886.3	3,888.5	3,888.7	3,892.7
Unemployment Rate (%)	4.27	3.94	3.71	3.92	4.05	4.22	4.42	4.55
Nonfarm Payroll Employment	3,487.3	3,519.9	3,555.0	3,565.4	3,568.9	3,570.9	3,570.0	3,577.2
% Ch, Annual Rate	4.7	3.8	4.1	1.2	0.4	0.2	-0.1	0.8
Manufacturing	266.4	270.1	274.6	276.3	273.4	271.5	269.8	268.6
% Ch, Annual Rate	6.7	5.7	6.9	2.4	-4.1	-2.8	-2.3	-1.8
Durable Manufacturing	178.9	181.8	185.3	186.4	183.9	182.3	181.3	180.6
% Ch, Annual Rate	6.1	6.8	7.9	2.3	-5.3	-3.3	-2.3	-1.5
Aerospace	68.1	69.3	71.6	72.1	72.7	73.1	73.6	74.0
% Ch, Annual Rate	3.1	7.7	13.7	3.0	2.9	2.4	2.6	2.3
Nondurable Manufacturing	87.5	88.3	89.3	89.9	89.5	89.1	88.6	88.0
% Ch, Annual Rate	7.7	3.5	4.9	2.6	-1.6	-1.6	-2.5	-2.5
Construction	232.6	234.8	237.0	234.8	229.4	227.3	224.7	225.0
% Ch, Annual Rate	9.9	4.0	3.7	-3.5	-9.0	-3.5	-4.6	0.6
Service-Providing	2,982.7	3,009.2	3,037.6	3,048.9	3,061.1	3,067.3	3,070.9	3,079.1
% Ch, Annual Rate	4.2	3.6	3.8	1.5	1.6	0.8	0.5	1.1
Software Publishers	82.3	83.7	84.7	85.0	85.4	85.5	85.9	86.2
% Ch, Annual Rate	2.2	7.3	4.8	1.5	1.6	0.7	1.6	1.5
Electronic Shopping and Mail-Order	75.8	76.5	79.9	80.4	80.9	81.4	81.9	82.3
% Ch, Annual Rate	0.5	3.6	18.8	2.6	2.5	2.4	2.4	2.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	60.520	56.278	50.499	45.496	44.998	44.975	45.107	45.572
% Ch, Annual Rate	5.1	-25.2	-35.2	-34.1	-4.3	-0.2	1.2	4.2
Single-Family	25.008	23.343	20.254	23.301	22.711	22.718	22.700	22.859
% Ch, Annual Rate	28.6	-24.1	-43.3	75.2	-9.8	0.1	-0.3	2.8
Multi-Family	35.512	32.934	30.244	22.195	22.287	22.257	22.407	22.712
% Ch, Annual Rate	-8.2	-26.0	-28.9	-71.0	1.7	-0.5	2.7	5.6
30-Year Fixed Mortgage Rate (%)	3.75	5.21	5.46	5.66	5.65	5.59	5.52	5.39

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	482.045	485.762	489.578	493.628	498.130	502.001	505.825	509.531
% Ch, Annual Rate	3.6	3.1	3.2	3.4	3.7	3.1	3.1	3.0
Real Wage and Salary Disb.	266.594	268.088	269.513	271.127	272.864	274.741	276.696	278.682
% Ch, Annual Rate	2.2	2.3	2.1	2.4	2.6	2.8	2.9	2.9
Real Nonwage Income	215.451	217.674	220.065	222.501	225.266	227.260	229.129	230.849
% Ch, Annual Rate	5.4	4.2	4.5	4.5	5.1	3.6	3.3	3.0
Real Per Capita Income (\$/Person)	61,036	61,355	61,684	62,040	62,451	62,780	63,102	63,406
% Ch, Annual Rate	2.6	2.1	2.2	2.3	2.7	2.1	2.1	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.280	1.286	1.292	1.298	1.304	1.310	1.316	1.322
% Ch, Annual Rate	1.9	1.6	1.8	1.9	2.0	2.0	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	3.387	3.402	3.419	3.435	3.452	3.470	3.486	3.504
% Ch, Annual Rate	2.1	1.8	2.0	1.8	2.0	2.1	1.9	2.1
Average Nonfarm Annual Wage	92,731	93,444	94,180	95,008	95,871	96,801	97,721	98,671
% Ch, Annual Rate	3.2	3.1	3.2	3.6	3.7	3.9	3.9	3.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	32.49	32.79	33.10	33.40	33.69	33.99	34.29	34.57
% Ch, Annual Rate	3.8	3.8	3.8	3.7	3.6	3.5	3.6	3.4
Current Dollar Income (Billions of Dollars)								
Personal Income	617.238	624.524	632.299	640.492	649.502	657.731	665.721	673.755
% Ch, Annual Rate	5.6	4.8	5.1	5.3	5.7	5.2	4.9	4.9
Disposable Personal Income	548.839	556.871	564.317	571.413	578.837	585.390	591.234	597.400
% Ch, Annual Rate	7.2	6.0	5.5	5.1	5.3	4.6	4.1	4.2
Per Capita Income (\$/Person)	78,154	78,881	79,666	80,498	81,428	82,256	83,049	83,843
% Ch, Annual Rate	4.6	3.8	4.0	4.2	4.7	4.1	3.9	3.9
Employment (Thousands)								
Washington Civilian Labor Force	4,088.4	4,097.9	4,107.3	4,117.1	4,127.2	4,137.5	4,147.5	4,157.5
Total Washington Employment	3,895.4	3,898.7	3,906.2	3,914.8	3,924.3	3,934.7	3,945.3	3,956.5
Unemployment Rate (%)	4.72	4.86	4.90	4.91	4.92	4.90	4.88	4.83
Nonfarm Payroll Employment	3,586.1	3,593.3	3,600.6	3,607.5	3,615.5	3,623.1	3,631.0	3,639.2
% Ch, Annual Rate	1.0	0.8	0.8	0.8	0.9	0.8	0.9	0.9
Manufacturing	267.6	266.7	266.3	266.5	267.0	267.4	267.7	267.9
% Ch, Annual Rate	-1.5	-1.4	-0.6	0.3	0.8	0.6	0.5	0.2
Durable Manufacturing	180.1	179.9	179.9	180.3	180.8	181.2	181.6	181.8
% Ch, Annual Rate	-1.0	-0.6	0.1	0.9	1.2	0.9	0.7	0.5
Aerospace	74.3	74.5	74.7	74.8	74.9	74.9	75.0	75.0
% Ch, Annual Rate	1.6	1.2	1.0	0.6	0.3	0.2	0.2	0.3
Nondurable Manufacturing	87.5	86.8	86.4	86.2	86.2	86.2	86.2	86.1
% Ch, Annual Rate	-2.5	-3.0	-2.0	-0.9	0.0	0.0	-0.1	-0.4
Construction	225.1	224.8	224.2	224.1	224.4	225.3	226.0	226.9
% Ch, Annual Rate	0.1	-0.5	-1.0	-0.2	0.5	1.5	1.3	1.6
Service-Providing	3,088.9	3,097.5	3,105.8	3,112.5	3,119.6	3,125.9	3,132.7	3,139.9
% Ch, Annual Rate	1.3	1.1	1.1	0.9	0.9	0.8	0.9	0.9
Software Publishers	86.5	86.9	87.3	87.7	88.2	88.5	88.8	89.0
% Ch, Annual Rate	1.6	1.9	1.8	1.9	1.9	1.6	1.3	1.1
Electronic Shopping and Mail-Order	82.8	83.3	83.7	84.2	84.6	85.1	85.5	86.0
% 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	46.325	46.891	47.209	47.855	48.160	47.589	47.191	47.011
% Ch, Annual Rate	6.8	5.0	2.7	5.6	2.6	-4.7	-3.3	-1.5
Single-Family	23.240	23.959	24.615	25.245	25.797	25.950	25.876	25.933
% Ch, Annual Rate	6.8	13.0	11.4	10.6	9.0	2.4	-1.1	0.9
Multi-Family	23.085	22.932	22.594	22.610	22.362	21.640	21.314	21.078
% Ch, Annual Rate	6.7	-2.6	-5.8	0.3	-4.3	-12.3	-5.9	-4.4
30-Year Fixed Mortgage Rate (%)	5.25	5.17	5.10	5.05	5.03	4.94	4.85	4.82

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	513.820	518.012	521.900	525.880	531.590	535.678	539.843	543.749
% Ch, Annual Rate	3.4	3.3	3.0	3.1	4.4	3.1	3.1	2.9
Real Wage and Salary Disb.	280.997	283.307	285.389	287.472	289.658	291.846	294.087	296.217
% Ch, Annual Rate	3.4	3.3	3.0	3.0	3.1	3.1	3.1	2.9
Real Nonwage Income	232.823	234.705	236.512	238.407	241.932	243.832	245.755	247.532
% Ch, Annual Rate	3.5	3.3	3.1	3.2	6.0	3.2	3.2	2.9
Real Per Capita Income (\$/Person)	63,782	64,143	64,464	64,794	65,335	65,674	66,020	66,332
% Ch, Annual Rate	2.4	2.3	2.0	2.1	3.4	2.1	2.1	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.329	1.335	1.341	1.347	1.354	1.361	1.367	1.374
% Ch, Annual Rate	1.9	1.8	1.9	2.0	2.0	2.0	1.9	2.0
Seattle Cons. Price Index (1982-84=1.0)	3.522	3.539	3.556	3.574	3.593	3.613	3.632	3.652
% Ch, Annual Rate	2.1	1.9	2.0	2.1	2.2	2.2	2.1	2.2
Average Nonfarm Annual Wage	99,672	100,682	101,690	102,695	103,759	104,821	105,891	106,943
% Ch, Annual Rate	4.1	4.1	4.1	4.0	4.2	4.2	4.1	4.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	34.87	35.17	35.47	35.77	36.08	36.39	36.71	37.04
% Ch, Annual Rate	3.5	3.5	3.5	3.4	3.5	3.5	3.6	3.6
Current Dollar Income (Billions of Dollars)								
Personal Income	682.663	691.329	699.814	708.591	719.788	728.843	738.047	747.165
% Ch, Annual Rate	5.4	5.2	5.0	5.1	6.5	5.1	5.1	5.0
Disposable Personal Income	604.922	612.120	619.097	626.294	635.789	643.115	650.650	658.205
% Ch, Annual Rate	5.1	4.8	4.6	4.7	6.2	4.7	4.8	4.7
Per Capita Income (\$/Person)	84,741	85,604	86,439	87,306	88,466	89,356	90,259	91,147
% Ch, Annual Rate	4.4	4.1	4.0	4.1	5.4	4.1	4.1	4.0
Employment (Thousands)								
Washington Civilian Labor Force	4,168.2	4,178.9	4,189.2	4,199.5	4,209.3	4,219.1	4,229.1	4,239.1
Total Washington Employment	3,969.0	3,981.6	3,993.9	4,005.6	4,016.3	4,027.1	4,038.0	4,049.2
Unemployment Rate (%)	4.78	4.72	4.66	4.62	4.58	4.55	4.52	4.48
Nonfarm Payroll Employment	3,649.9	3,659.6	3,667.4	3,676.2	3,684.0	3,692.3	3,701.0	3,710.2
% Ch, Annual Rate	1.2	1.1	0.9	1.0	0.9	0.9	0.9	1.0
Manufacturing	268.3	268.6	268.9	269.1	269.5	269.9	270.2	270.5
% Ch, Annual Rate	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.5
Durable Manufacturing	182.2	182.6	183.0	183.3	183.7	184.1	184.4	184.8
% Ch, Annual Rate	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.9
Aerospace	75.1	75.2	75.4	75.6	75.7	75.9	76.0	76.1
% Ch, Annual Rate	0.4	0.6	0.8	1.0	0.9	0.8	0.6	0.5
Nondurable Manufacturing	86.1	86.0	85.9	85.8	85.8	85.8	85.7	85.7
% Ch, Annual Rate	0.0	-0.3	-0.4	-0.5	-0.1	-0.2	-0.3	-0.3
Construction	228.0	229.1	229.9	230.7	231.5	232.5	233.6	234.8
% Ch, Annual Rate	2.0	1.8	1.5	1.4	1.4	1.7	1.9	2.0
Service-Providing	3,149.0	3,157.4	3,164.1	3,171.8	3,178.4	3,185.4	3,192.6	3,200.3
% Ch, Annual Rate	1.2	1.1	0.8	1.0	0.8	0.9	0.9	1.0
Software Publishers	89.3	89.5	89.7	89.9	90.2	90.5	90.8	91.1
% Ch, Annual Rate	0.9	1.0	1.0	1.1	1.3	1.2	1.3	1.2
Electronic Shopping and Mail-Order	86.4	86.8	87.3	87.7	88.2	88.6	89.1	89.5
% 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	46.923	47.011	46.320	46.163	46.209	46.165	45.900	45.859
% Ch, Annual Rate	-0.8	0.8	-5.7	-1.4	0.4	-0.4	-2.3	-0.4
Single-Family	25.998	26.093	25.778	25.900	26.006	26.098	26.022	26.119
% Ch, Annual Rate	1.0	1.5	-4.7	1.9	1.7	1.4	-1.2	1.5
Multi-Family	20.925	20.918	20.543	20.263	20.202	20.067	19.878	19.740
% Ch, Annual Rate	-2.9	-0.1	-7.0	-5.3	-1.2	-2.7	-3.7	-2.7
30-Year Fixed Mortgage Rate (%)	4.82	4.81	4.80	4.78	4.80	4.80	4.79	4.79

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	152.00	153.04	153.18	153.49	154.00	154.56
% Ch	-5.8	2.8	4.0	0.7	0.1	0.2	0.3	0.4
Manufacturing	12.17	12.35	12.79	12.44	12.01	11.87	11.79	11.77
% Ch	-5.1	1.5	3.6	-2.7	-3.5	-1.2	-0.7	-0.2
Durable Manufacturing	7.57	7.68	7.94	7.66	7.36	7.28	7.24	7.26
% Ch	-5.8	1.4	3.5	-3.6	-3.9	-1.2	-0.5	0.3
Wood Products	0.40	0.41	0.43	0.31	0.27	0.29	0.31	0.34
% Ch	-3.2	3.6	4.8	-28.0	-13.2	9.1	7.2	7.1
Primary and Fabricated Metals	1.74	1.73	1.80	1.70	1.65	1.66	1.67	1.68
% Ch	-7.1	-0.3	3.6	-5.2	-3.0	0.6	0.5	0.4
Computer and Electronic Products	1.06	1.06	1.08	1.09	1.10	1.11	1.11	1.10
% Ch	-1.1	-0.4	2.1	0.6	1.2	0.8	-0.1	-0.6
Machinery and Electrical Equipment	1.44	1.45	1.50	1.46	1.38	1.35	1.35	1.34
% Ch	-5.9	0.6	3.7	-2.9	-5.3	-1.9	-0.6	-0.3
Transportation Equipment	1.59	1.64	1.70	1.74	1.66	1.58	1.54	1.54
% Ch	-8.0	3.0	3.7	2.4	-4.9	-4.4	-2.9	0.0
Other Durables	1.34	1.39	1.44	1.36	1.30	1.28	1.26	1.27
% Ch	-5.5	3.1	3.5	-5.1	-4.2	-2.3	-0.8	0.2
Nondurable Manufacturing	4.59	4.67	4.84	4.78	4.64	4.59	4.55	4.51
% Ch	-3.9	1.7	3.7	-1.3	-2.8	-1.2	-0.9	-0.9
Food Manufacturing	1.62	1.64	1.69	1.68	1.66	1.66	1.67	1.67
% Ch	-1.8	1.4	3.4	-0.5	-1.7	0.0	0.8	0.4
Paper and Paper Products	0.35	0.35	0.36	0.35	0.34	0.34	0.33	0.33
% Ch	-2.9	-1.7	2.8	-2.0	-3.2	-0.8	-0.8	-0.9
Other Nondurables	2.62	2.68	2.79	2.74	2.65	2.60	2.55	2.50
% Ch	-5.2	2.3	4.0	-1.7	-3.4	-2.0	-2.0	-1.8
Natural Resources and Mining	0.60	0.57	0.62	0.65	0.68	0.68	0.68	0.68
% Ch	-17.6	-5.6	9.7	4.4	5.0	-0.2	-0.4	-0.2
Construction	7.26	7.41	7.65	7.43	7.30	7.34	7.44	7.54
% Ch	-3.2	2.2	3.3	-2.9	-1.8	0.5	1.4	1.3
Trade, Transportation, and Utilities	26.69	27.72	28.75	28.92	28.54	28.14	28.11	28.07
% Ch	-3.7	3.9	3.7	0.6	-1.3	-1.4	-0.1	-0.2
Wholesale Trade	5.63	5.68	5.86	5.91	5.99	6.08	6.10	6.11
% Ch	-4.3	0.8	3.2	0.7	1.4	1.5	0.4	0.2
Retail Trade	14.87	15.41	15.84	15.93	15.43	14.84	14.74	14.70
% Ch	-4.7	3.6	2.8	0.6	-3.1	-3.9	-0.6	-0.3
Trans., Warehousing, and Utilities	6.18	6.63	7.04	7.08	7.12	7.23	7.26	7.26
% Ch	-0.6	7.3	6.2	0.5	0.6	1.5	0.5	-0.1
Information	2.72	2.83	3.00	3.02	3.01	3.10	3.10	3.08
% Ch	-5.0	4.0	5.9	0.8	-0.3	3.1	-0.3	-0.4
Publishing Industries	0.77	0.79	0.83	0.83	0.83	0.83	0.81	0.79
% Ch	0.5	3.0	4.7	0.2	-0.3	0.2	-2.4	-2.0
Other Information	1.95	2.04	2.17	2.19	2.18	2.28	2.29	2.29
% Ch	-7.0	4.4	6.3	1.0	-0.3	4.2	0.5	0.1
Financial Activities	8.70	8.78	8.95	8.93	9.11	9.26	9.24	9.18
% Ch	-0.6	0.8	2.0	-0.2	2.0	1.7	-0.2	-0.7
Professional and Business Services	20.31	21.24	22.23	21.88	21.71	21.80	22.18	22.57
% Ch	-4.5	4.6	4.7	-1.6	-0.8	0.4	1.8	1.8
Education and Health Services	23.27	23.67	24.41	24.63	24.98	25.18	25.24	25.32
% Ch	-3.7	1.7	3.1	0.9	1.4	0.8	0.3	0.3
Leisure and Hospitality	13.13	14.09	15.67	16.81	17.13	17.11	17.02	16.95
% Ch	-20.8	7.4	11.1	7.3	1.9	-0.1	-0.5	-0.4
Other Services	5.33	5.45	5.69	5.71	5.83	5.98	6.04	6.12
% Ch	-9.6	2.4	4.4	0.3	2.2	2.5	1.1	1.2
Federal Government	2.93	2.89	2.88	2.90	2.90	2.90	2.90	2.91
% Ch	3.6	-1.6	-0.4	0.7	0.0	0.0	0.0	0.5
State and Local Government	19.05	19.11	19.37	19.72	19.98	20.14	20.27	20.38
% Ch	-3.7	0.3	1.3	1.8	1.3	0.8	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	150.35	151.58	152.75	153.31	153.31	153.09	152.87	152.90
% Ch, Annual Rate	4.7	3.3	3.1	1.5	0.0	-0.6	-0.6	0.1
Manufacturing	12.63	12.77	12.86	12.88	12.62	12.51	12.39	12.25
% Ch, Annual Rate	4.0	4.4	2.9	0.5	-7.9	-3.4	-3.9	-4.3
Durable Manufacturing	7.85	7.93	7.99	8.01	7.79	7.71	7.62	7.53
% Ch, Annual Rate	3.3	3.9	3.3	0.7	-10.3	-4.2	-4.4	-5.1
Wood Products	0.42	0.43	0.43	0.43	0.36	0.32	0.29	0.27
% Ch, Annual Rate	7.8	6.9	1.9	-3.0	-49.4	-42.6	-33.2	-15.1
Primary and Fabricated Metals	1.78	1.79	1.81	1.81	1.74	1.71	1.69	1.67
% Ch, Annual Rate	4.6	2.8	3.3	-0.8	-13.6	-6.7	-4.5	-4.6
Computer and Electronic Products	1.07	1.08	1.09	1.09	1.08	1.09	1.09	1.09
% Ch, Annual Rate	1.3	4.0	3.7	-1.4	-1.1	1.2	1.4	1.2
Machinery and Electrical Equipment	1.48	1.50	1.51	1.51	1.48	1.47	1.45	1.43
% Ch, Annual Rate	6.0	4.7	2.0	-0.4	-7.7	-1.8	-4.6	-6.8
Transportation Equipment	1.66	1.69	1.71	1.74	1.74	1.76	1.75	1.72
% Ch, Annual Rate	-2.1	6.0	5.2	6.8	0.4	3.8	-1.8	-6.3
Other Durables	1.43	1.43	1.44	1.44	1.39	1.37	1.35	1.34
% Ch, Annual Rate	5.7	0.9	2.5	-0.5	-13.3	-5.4	-4.4	-4.8
Nondurable Manufacturing	4.78	4.84	4.87	4.87	4.82	4.80	4.76	4.73
% Ch, Annual Rate	5.0	5.3	2.3	0.1	-3.8	-2.1	-3.0	-3.1
Food Manufacturing	1.67	1.70	1.70	1.70	1.69	1.69	1.68	1.68
% Ch, Annual Rate	5.7	5.0	1.4	-0.2	-3.2	0.0	-0.9	-0.8
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.35	0.35	0.35
% Ch, Annual Rate	6.1	4.7	-0.8	-0.4	-4.0	-2.3	-3.7	-3.3
Other Nondurables	2.75	2.79	2.81	2.81	2.78	2.76	2.73	2.70
% Ch, Annual Rate	4.5	5.6	3.2	0.3	-4.1	-3.4	-4.1	-4.4
Natural Resources and Mining	0.60	0.62	0.64	0.63	0.63	0.64	0.65	0.66
% Ch, Annual Rate	10.7	15.5	10.9	-5.8	3.9	5.9	6.1	7.9
Construction	7.60	7.65	7.69	7.68	7.53	7.46	7.39	7.35
% Ch, Annual Rate	5.1	2.9	2.1	-0.2	-7.7	-3.6	-4.0	-2.1
Trade, Transportation, and Utilities	28.49	28.67	28.87	28.95	28.90	29.02	28.83	28.92
% Ch, Annual Rate	5.9	2.5	2.8	1.2	-0.7	1.6	-2.6	1.3
Wholesale Trade	5.79	5.85	5.90	5.91	5.95	5.89	5.87	5.90
% Ch, Annual Rate	4.0	4.7	2.9	0.7	2.8	-3.8	-1.3	1.9
Retail Trade	15.78	15.78	15.88	15.92	15.79	16.05	15.92	15.98
% Ch, Annual Rate	5.8	0.0	2.4	1.2	-3.2	6.6	-3.1	1.4
Trans., Warehousing, and Utilities	6.92	7.03	7.09	7.12	7.16	7.07	7.03	7.04
% Ch, Annual Rate	7.9	6.4	3.6	1.6	2.2	-4.7	-2.4	0.7
Information	2.92	2.98	3.04	3.04	3.05	3.04	3.01	2.97
% Ch, Annual Rate	3.2	8.3	7.4	0.7	1.7	-1.7	-3.6	-5.8
Publishing Industries	0.81	0.82	0.84	0.84	0.84	0.83	0.83	0.83
% Ch, Annual Rate	5.9	7.5	7.2	-0.8	-0.4	-4.0	-0.6	-0.8
Other Information	2.11	2.16	2.20	2.20	2.22	2.21	2.19	2.14
% Ch, Annual Rate	2.2	8.6	7.4	1.2	2.5	-0.9	-4.7	-7.6
Financial Activities	8.89	8.94	8.99	8.99	9.01	8.90	8.89	8.92
% Ch, Annual Rate	2.1	2.6	2.0	-0.1	1.0	-4.6	-0.6	1.5
Professional and Business Services	22.00	22.21	22.36	22.35	22.31	21.92	21.68	21.61
% Ch, Annual Rate	5.2	3.8	2.8	-0.2	-0.7	-6.8	-4.2	-1.3
Education and Health Services	24.06	24.27	24.56	24.76	24.72	24.56	24.57	24.68
% Ch, Annual Rate	3.1	3.6	4.9	3.2	-0.5	-2.7	0.3	1.8
Leisure and Hospitality	15.36	15.59	15.79	15.92	16.29	16.77	17.11	17.07
% Ch, Annual Rate	12.4	6.1	5.3	3.1	9.8	12.3	8.2	-1.0
Other Services	5.64	5.68	5.71	5.74	5.75	5.69	5.68	5.72
% Ch, Annual Rate	4.7	2.9	2.1	2.2	0.4	-4.1	-0.5	2.7
Federal Government	2.88	2.86	2.86	2.90	2.90	2.90	2.90	2.90
% Ch, Annual Rate	-0.3	-1.9	0.0	4.4	0.0	0.0	0.0	0.0
State and Local Government	19.29	19.33	19.38	19.48	19.59	19.69	19.77	19.84
% Ch, Annual Rate	1.0	0.9	1.0	2.2	2.3	1.9	1.7	1.4

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	153.03	153.13	153.24	153.30	153.38	153.43	153.51	153.63
% Ch, Annual Rate	0.4	0.3	0.3	0.1	0.2	0.1	0.2	0.3
Manufacturing	12.14	12.03	11.95	11.91	11.90	11.88	11.86	11.83
% Ch, Annual Rate	-3.5	-3.7	-2.6	-1.3	-0.4	-0.6	-0.8	-1.1
Durable Manufacturing	7.45	7.38	7.32	7.30	7.29	7.29	7.27	7.25
% Ch, Annual Rate	-3.9	-4.0	-2.8	-1.3	-0.3	-0.5	-0.7	-1.1
Wood Products	0.27	0.27	0.27	0.27	0.29	0.29	0.30	0.30
% Ch, Annual Rate	-7.8	-4.3	0.9	13.7	16.0	8.7	5.5	7.6
Primary and Fabricated Metals	1.66	1.65	1.65	1.65	1.66	1.66	1.66	1.66
% Ch, Annual Rate	-3.2	-1.8	-0.3	1.0	1.2	0.9	0.6	0.0
Computer and Electronic Products	1.10	1.10	1.10	1.11	1.11	1.11	1.11	1.11
% Ch, Annual Rate	1.1	1.1	1.2	1.0	0.9	0.7	0.3	-0.2
Machinery and Electrical Equipment	1.40	1.38	1.37	1.36	1.36	1.35	1.35	1.35
% Ch, Annual Rate	-6.6	-5.4	-4.1	-2.8	-1.0	-0.8	-0.5	-0.9
Transportation Equipment	1.70	1.67	1.64	1.62	1.60	1.59	1.58	1.56
% Ch, Annual Rate	-4.5	-8.0	-6.5	-5.0	-3.5	-3.2	-3.3	-4.5
Other Durables	1.32	1.31	1.30	1.29	1.28	1.28	1.27	1.27
% Ch, Annual Rate	-4.2	-3.9	-4.0	-2.7	-1.7	-1.6	-1.9	-1.0
Nondurable Manufacturing	4.69	4.65	4.63	4.61	4.60	4.60	4.59	4.57
% Ch, Annual Rate	-2.9	-3.2	-2.3	-1.3	-0.6	-0.7	-0.8	-1.0
Food Manufacturing	1.67	1.66	1.65	1.65	1.65	1.65	1.66	1.66
% Ch, Annual Rate	-1.9	-3.4	-2.1	-0.3	0.8	0.9	1.0	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	-3.9	-4.0	-1.9	-0.9	0.0	-0.1	-0.3	-0.9
Other Nondurables	2.68	2.66	2.64	2.63	2.62	2.60	2.59	2.58
% Ch, Annual Rate	-3.4	-3.0	-2.5	-2.0	-1.5	-1.8	-2.0	-2.2
Natural Resources and Mining	0.67	0.68	0.68	0.68	0.68	0.68	0.68	0.68
% Ch, Annual Rate	5.8	3.7	1.7	0.5	-0.6	-1.7	-1.2	-0.9
Construction	7.31	7.30	7.29	7.30	7.31	7.33	7.35	7.38
% Ch, Annual Rate	-1.9	-1.0	-0.2	0.2	0.6	1.1	1.1	1.6
Trade, Transportation, and Utilities	28.84	28.55	28.44	28.34	28.23	28.13	28.11	28.09
% Ch, Annual Rate	-1.2	-3.9	-1.6	-1.4	-1.5	-1.4	-0.3	-0.3
Wholesale Trade	5.94	5.98	6.00	6.03	6.05	6.07	6.08	6.09
% Ch, Annual Rate	2.2	3.1	1.6	1.6	1.8	1.0	1.0	0.7
Retail Trade	15.83	15.45	15.30	15.16	14.98	14.84	14.79	14.75
% Ch, Annual Rate	-3.7	-9.2	-3.9	-3.7	-4.6	-3.5	-1.5	-1.2
Trans., Warehousing, and Utilities	7.07	7.12	7.14	7.15	7.20	7.22	7.24	7.25
% Ch, Annual Rate	1.6	2.6	1.1	1.0	2.3	1.2	1.1	0.8
Information	2.97	3.00	3.03	3.05	3.08	3.11	3.12	3.11
% Ch, Annual Rate	0.1	4.5	3.1	2.9	4.7	3.3	1.1	-0.5
Publishing Industries	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.82
% Ch, Annual Rate	-0.6	1.0	0.6	0.9	1.2	-0.1	-1.7	-2.3
Other Information	2.15	2.18	2.20	2.22	2.25	2.28	2.29	2.29
% Ch, Annual Rate	0.3	5.9	4.1	3.7	6.0	4.6	2.1	0.2
Financial Activities	8.98	9.09	9.16	9.20	9.24	9.26	9.27	9.27
% Ch, Annual Rate	2.6	4.9	3.0	2.0	1.9	0.8	0.1	0.2
Professional and Business Services	21.74	21.73	21.68	21.70	21.76	21.77	21.80	21.86
% Ch, Annual Rate	2.5	-0.2	-0.9	0.2	1.2	0.2	0.6	1.1
Education and Health Services	24.81	24.97	25.05	25.10	25.14	25.16	25.18	25.22
% Ch, Annual Rate	2.1	2.5	1.4	0.8	0.7	0.3	0.4	0.6
Leisure and Hospitality	17.01	17.12	17.20	17.18	17.11	17.12	17.11	17.10
% Ch, Annual Rate	-1.4	2.7	1.9	-0.5	-1.6	0.2	-0.3	-0.2
Other Services	5.76	5.82	5.86	5.90	5.94	5.97	5.99	6.01
% Ch, Annual Rate	2.5	4.2	3.2	2.6	2.7	1.8	1.7	1.3
Federal Government	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.90	19.95	20.00	20.05	20.09	20.12	20.16	20.19
% Ch, Annual Rate	1.2	1.1	1.0	0.9	0.8	0.7	0.7	0.7

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	153.82	153.97	154.04	154.18	154.32	154.47	154.63	154.81
% Ch, Annual Rate	0.5	0.4	0.2	0.4	0.4	0.4	0.4	0.5
Manufacturing	11.82	11.80	11.78	11.76	11.77	11.77	11.77	11.76
% Ch, Annual Rate	-0.4	-0.7	-0.6	-0.5	0.2	0.0	-0.1	-0.1
Durable Manufacturing	7.25	7.24	7.24	7.23	7.25	7.26	7.27	7.28
% Ch, Annual Rate	-0.2	-0.5	-0.3	-0.1	0.8	0.5	0.4	0.5
Wood Products	0.31	0.31	0.32	0.32	0.33	0.33	0.34	0.35
% Ch, Annual Rate	8.6	7.3	5.5	6.0	7.9	7.4	7.8	8.6
Primary and Fabricated Metals	1.67	1.67	1.67	1.67	1.68	1.68	1.68	1.68
% Ch, Annual Rate	0.6	0.6	0.5	0.1	0.7	0.2	0.1	0.3
Computer and Electronic Products	1.11	1.11	1.11	1.11	1.11	1.10	1.10	1.10
% Ch, Annual Rate	-0.2	-0.2	-0.2	-0.3	-0.8	-0.8	-0.7	-0.7
Machinery and Electrical Equipment	1.35	1.35	1.34	1.34	1.34	1.34	1.34	1.34
% Ch, Annual Rate	-0.4	-0.6	-0.5	-0.6	-0.1	-0.2	0.0	0.4
Transportation Equipment	1.55	1.54	1.53	1.53	1.53	1.54	1.54	1.54
% Ch, Annual Rate	-2.3	-3.3	-1.9	-0.5	1.4	1.1	0.3	-0.2
Other Durables	1.27	1.27	1.26	1.26	1.26	1.27	1.27	1.27
% Ch, Annual Rate	-0.4	-0.3	-0.6	-0.6	0.8	0.6	0.6	0.8
Nondurable Manufacturing	4.57	4.55	4.54	4.53	4.52	4.51	4.50	4.49
% Ch, Annual Rate	-0.7	-1.0	-1.1	-1.1	-0.8	-0.9	-1.0	-1.0
Food Manufacturing	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67
% Ch, Annual Rate	1.0	0.7	0.5	0.3	0.6	0.3	0.1	0.0
Paper and Paper Products	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.33
% Ch, Annual Rate	-0.7	-1.1	-1.2	-1.2	-0.6	-0.8	-0.9	-1.0
Other Nondurables	2.57	2.55	2.54	2.53	2.52	2.51	2.49	2.48
% Ch, Annual Rate	-1.8	-2.0	-2.0	-2.0	-1.6	-1.7	-1.7	-1.7
Natural Resources and Mining	0.68	0.68	0.68	0.68	0.68	0.68	0.67	0.67
% Ch, Annual Rate	-0.3	0.4	0.3	0.3	0.0	-0.5	-1.0	-1.2
Construction	7.40	7.43	7.46	7.48	7.50	7.53	7.56	7.59
% Ch, Annual Rate	1.5	1.7	1.3	1.1	1.2	1.4	1.5	1.6
Trade, Transportation, and Utilities	28.10	28.11	28.11	28.11	28.09	28.08	28.07	28.03
% Ch, Annual Rate	0.2	0.1	0.0	0.1	-0.4	-0.1	-0.2	-0.5
Wholesale Trade	6.10	6.10	6.10	6.11	6.11	6.12	6.11	6.10
% Ch, Annual Rate	0.0	0.2	0.1	0.3	0.6	0.5	-0.5	-0.9
Retail Trade	14.76	14.75	14.74	14.73	14.71	14.70	14.69	14.68
% Ch, Annual Rate	0.3	-0.2	-0.2	-0.2	-0.7	-0.2	-0.1	-0.3
Trans., Warehousing, and Utilities	7.25	7.26	7.27	7.28	7.27	7.26	7.26	7.25
% Ch, Annual Rate	0.2	0.4	0.3	0.4	-0.4	-0.4	-0.2	-0.6
Information	3.11	3.10	3.09	3.09	3.09	3.08	3.08	3.08
% Ch, Annual Rate	-0.8	-0.5	-1.0	-1.1	0.0	-0.2	-0.1	-0.2
Publishing Industries	0.82	0.81	0.81	0.80	0.80	0.79	0.79	0.79
% Ch, Annual Rate	-3.0	-2.7	-2.7	-2.5	-1.6	-1.8	-1.6	-1.8
Other Information	2.29	2.29	2.29	2.28	2.29	2.29	2.29	2.29
% Ch, Annual Rate	0.0	0.2	-0.4	-0.6	0.6	0.4	0.4	0.4
Financial Activities	9.27	9.25	9.23	9.21	9.20	9.19	9.17	9.15
% Ch, Annual Rate	-0.1	-0.7	-1.0	-0.7	-0.4	-0.7	-0.7	-0.9
Professional and Business Services	22.03	22.14	22.22	22.32	22.42	22.50	22.59	22.76
% Ch, Annual Rate	3.2	2.0	1.3	1.9	1.7	1.5	1.6	3.0
Education and Health Services	25.22	25.24	25.24	25.26	25.29	25.31	25.34	25.35
% Ch, Annual Rate	0.0	0.4	-0.1	0.3	0.5	0.4	0.4	0.2
Leisure and Hospitality	17.05	17.03	17.02	16.99	16.96	16.96	16.96	16.94
% Ch, Annual Rate	-1.2	-0.4	-0.5	-0.5	-0.8	-0.1	0.1	-0.4
Other Services	6.02	6.04	6.05	6.07	6.09	6.11	6.13	6.14
% Ch, Annual Rate	0.7	0.9	0.9	1.1	1.4	1.1	1.3	1.1
Federal Government	2.90	2.90	2.90	2.90	2.91	2.91	2.91	2.91
% Ch, Annual Rate	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0
State and Local Government	20.22	20.25	20.28	20.31	20.34	20.37	20.39	20.42
% Ch, Annual Rate	0.6	0.6	0.6	0.6	0.5	0.5	0.5	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	3,283.5	3,363.1	3,531.9	3,571.8	3,596.9	3,627.2	3,663.3	3,696.9
% Ch	-5.3	2.4	5.0	1.1	0.7	0.8	1.0	0.9
Manufacturing	271.7	259.2	271.8	270.8	266.7	267.5	268.7	270.0
% Ch	-7.5	-4.6	4.9	-0.4	-1.5	0.3	0.5	0.5
Durable Manufacturing	189.7	175.3	183.1	182.0	180.0	181.4	182.8	184.3
% Ch	-8.3	-7.6	4.5	-0.6	-1.1	0.7	0.8	0.8
Wood Products	12.6	13.2	13.8	10.3	8.8	9.2	9.6	9.9
% Ch	-2.8	5.3	4.0	-25.5	-13.9	4.8	3.3	3.3
Primary and Fabricated Metals	24.4	23.0	23.8	22.7	22.0	22.1	22.2	22.3
% Ch	-9.1	-5.8	3.4	-4.8	-3.2	0.6	0.5	0.4
Computer and Electronic Products	18.8	17.9	17.9	18.4	19.0	19.6	19.8	19.9
% Ch	-5.3	-5.0	0.1	2.8	3.5	2.8	1.2	0.3
Machinery and Electrical Equipment	19.3	19.1	20.3	20.1	19.1	19.1	19.6	20.1
% Ch	-8.9	-0.9	6.3	-0.8	-5.1	0.2	2.3	2.8
Aerospace	80.1	67.6	70.3	73.3	74.6	75.0	75.3	75.9
% Ch	-9.6	-15.6	4.0	4.3	1.7	0.5	0.5	0.8
Other Transportation Equip.	9.1	9.1	10.2	10.5	10.3	10.1	9.9	9.6
% Ch	-6.2	-0.3	12.9	2.9	-2.5	-2.0	-1.2	-2.9
Other Durables	25.5	25.4	26.8	26.7	26.3	26.3	26.4	26.5
% Ch	-8.6	-0.1	5.5	-0.5	-1.6	0.1	0.3	0.6
Nondurable Manufacturing	82.0	83.9	88.7	88.8	86.7	86.2	86.0	85.7
% Ch	-5.5	2.3	5.7	0.1	-2.4	-0.6	-0.2	-0.3
Food Manufacturing	37.6	38.7	40.7	40.0	39.0	38.5	38.4	38.2
% Ch	-4.4	2.8	5.1	-1.6	-2.6	-1.1	-0.3	-0.7
Paper and Paper Products	7.5	7.4	7.5	7.2	6.8	6.7	6.6	6.4
% Ch	-3.5	-0.7	0.4	-3.9	-4.8	-2.0	-2.1	-2.2
Other Nondurables	36.9	37.8	40.6	41.6	40.9	40.9	41.0	41.2
% Ch	-6.9	2.5	7.4	2.5	-1.7	0.0	0.1	0.4
Natural Resources and Mining	5.6	5.7	5.6	4.8	4.4	4.5	4.6	4.6
% Ch	-5.1	2.1	-1.1	-15.3	-7.6	1.8	1.5	0.7
Construction	213.8	223.4	234.8	226.6	224.6	225.7	229.4	233.1
% Ch	-2.6	4.5	5.1	-3.5	-0.9	0.5	1.7	1.6
Trade, Transportation, and Utilities	630.0	653.7	677.1	683.7	680.3	675.9	679.4	682.8
% Ch	-2.0	3.8	3.6	1.0	-0.5	-0.7	0.5	0.5
Wholesale Trade	130.0	131.4	139.8	142.2	145.1	148.1	149.5	150.7
% Ch	-4.4	1.0	6.4	1.7	2.1	2.1	1.0	0.8
Retail Trade	387.7	403.4	416.3	421.7	414.4	405.0	406.0	408.0
% Ch	-0.7	4.0	3.2	1.3	-1.7	-2.3	0.3	0.5
Electronic Shopping and Mail-Order	75.9	75.4	78.2	81.6	83.5	85.3	87.1	88.8
% Ch	19.5	-0.6	3.6	4.4	2.3	2.2	2.1	2.0
Other Retail Trade	311.9	328.0	338.1	340.1	330.9	319.7	319.0	319.2
% Ch	-4.6	5.2	3.1	0.6	-2.7	-3.4	-0.2	0.1
Trans., Warehousing, and Utilities	112.2	118.9	120.9	119.7	120.8	122.7	123.8	124.1
% Ch	-3.5	5.9	1.7	-1.0	0.9	1.6	0.9	0.2
Information	149.0	157.1	168.9	171.8	173.4	179.8	184.1	187.2
% Ch	3.1	5.4	7.5	1.7	0.9	3.7	2.4	1.7
Software Publishers	76.0	79.5	83.9	85.7	87.1	88.6	89.6	90.6
% Ch	8.0	4.6	5.6	2.1	1.6	1.7	1.1	1.2
Other Publishing Industries	4.1	3.8	3.6	3.4	3.1	2.9	2.4	2.0
% Ch	-15.2	-7.5	-4.7	-6.8	-7.9	-6.7	-16.8	-18.3
Other Information	69.0	73.8	81.4	82.7	83.1	88.2	92.1	94.6
% Ch	-0.5	7.1	10.2	1.7	0.5	6.1	4.4	2.7
Financial Activities	158.4	160.5	165.1	164.0	167.5	170.3	169.5	167.9
% Ch	-1.3	1.3	2.9	-0.7	2.1	1.7	-0.5	-0.9
Professional and Business Services	425.3	448.3	475.9	473.1	474.0	479.1	489.4	499.9
% Ch	-2.1	5.4	6.1	-0.6	0.2	1.1	2.1	2.1
Education and Health Services	488.2	498.5	520.0	528.0	537.8	545.1	550.2	555.7
% Ch	-2.8	2.1	4.3	1.5	1.9	1.3	0.9	1.0
Leisure and Hospitality	262.9	282.8	325.4	343.6	350.1	351.5	351.7	352.1
% Ch	-24.3	7.6	15.1	5.6	1.9	0.4	0.1	0.1
Other Services	116.2	113.5	120.0	122.1	124.3	126.6	128.6	130.6
% Ch	-9.9	-2.3	5.7	1.8	1.8	1.9	1.5	1.6
Federal Government	78.5	76.8	75.5	75.8	76.1	76.4	76.7	77.4
% Ch	3.6	-2.2	-1.6	0.4	0.4	0.4	0.4	0.8
State and Local Government	483.7	483.5	491.7	507.6	517.5	524.9	530.9	535.6
% Ch	-5.5	0.0	1.7	3.2	2.0	1.4	1.1	0.9

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	3,487.3	3,519.9	3,555.0	3,565.4	3,568.9	3,570.9	3,570.0	3,577.2
% Ch, Annual Rate	4.7	3.8	4.1	1.2	0.4	0.2	-0.1	0.8
Manufacturing	266.4	270.1	274.6	276.3	273.4	271.5	269.8	268.6
% Ch, Annual Rate	6.7	5.7	6.9	2.4	-4.1	-2.8	-2.3	-1.8
Durable Manufacturing	178.9	181.8	185.3	186.4	183.9	182.3	181.3	180.6
% Ch, Annual Rate	6.1	6.8	7.9	2.3	-5.3	-3.3	-2.3	-1.5
Wood Products	13.8	13.7	13.8	13.7	11.9	10.5	9.5	9.1
% Ch, Annual Rate	14.3	-4.0	3.6	-1.9	-44.0	-39.7	-31.4	-15.6
Primary and Fabricated Metals	23.6	23.8	23.9	24.0	23.2	22.8	22.5	22.2
% Ch, Annual Rate	5.6	2.6	1.1	1.8	-12.1	-7.2	-4.9	-4.7
Computer and Electronic Products	17.8	17.7	18.0	18.0	18.1	18.3	18.5	18.6
% Ch, Annual Rate	-1.0	-1.8	5.5	1.6	2.2	3.5	4.0	3.6
Machinery and Electrical Equipment	19.9	20.3	20.4	20.6	20.3	20.3	20.1	19.7
% Ch, Annual Rate	13.0	8.3	0.9	5.2	-5.7	0.3	-4.0	-7.3
Aerospace	68.1	69.3	71.6	72.1	72.7	73.1	73.6	74.0
% Ch, Annual Rate	3.1	7.7	13.7	3.0	2.9	2.4	2.6	2.3
Other Transportation Equip.	9.5	10.2	10.6	10.6	10.7	10.6	10.5	10.4
% Ch, Annual Rate	10.4	31.7	18.9	0.4	1.3	-4.0	-3.4	-2.6
Other Durables	26.1	26.8	27.1	27.3	27.0	26.8	26.6	26.4
% Ch, Annual Rate	9.0	10.5	4.9	2.3	-4.0	-3.2	-2.7	-2.6
Nondurable Manufacturing	87.5	88.3	89.3	89.9	89.5	89.1	88.6	88.0
% Ch, Annual Rate	7.7	3.5	4.9	2.6	-1.6	-1.6	-2.5	-2.5
Food Manufacturing	40.9	41.0	40.4	40.4	40.2	40.1	39.9	39.8
% Ch, Annual Rate	14.8	0.8	-5.8	0.8	-2.1	-1.0	-1.9	-1.8
Paper and Paper Products	7.6	7.6	7.3	7.4	7.3	7.2	7.1	7.0
% Ch, Annual Rate	1.8	-1.3	-10.9	0.5	-3.6	-3.6	-5.2	-4.8
Other Nondurables	39.0	39.7	41.6	42.1	42.0	41.8	41.5	41.2
% Ch, Annual Rate	2.0	7.2	20.2	4.7	-0.8	-1.9	-2.5	-2.7
Natural Resources and Mining	5.6	5.8	5.8	5.3	5.1	4.9	4.6	4.5
% Ch, Annual Rate	-2.6	9.6	3.8	-28.3	-17.0	-15.7	-22.8	-6.8
Construction	232.6	234.8	237.0	234.8	229.4	227.3	224.7	225.0
% Ch, Annual Rate	9.9	4.0	3.7	-3.5	-9.0	-3.5	-4.6	0.6
Trade, Transportation, and Utilities	673.2	674.6	679.1	681.4	681.1	685.1	682.6	685.8
% Ch, Annual Rate	4.5	0.9	2.7	1.3	-0.2	2.4	-1.4	1.9
Wholesale Trade	136.3	139.5	141.7	141.9	142.9	141.8	141.7	142.5
% Ch, Annual Rate	7.3	9.7	6.4	0.6	2.9	-3.0	-0.4	2.5
Retail Trade	414.5	413.7	417.6	419.4	417.5	423.7	421.8	423.8
% Ch, Annual Rate	5.4	-0.7	3.8	1.7	-1.8	6.0	-1.7	1.9
Electronic Shopping and Mail-Order	75.8	76.5	79.9	80.4	80.9	81.4	81.9	82.3
% Ch	0.5	3.6	18.8	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	338.6	337.2	337.7	339.0	336.6	342.3	340.0	341.5
% Ch	6.6	-1.6	0.6	1.5	-2.8	6.9	-2.7	1.8
Trans., Warehousing, and Utilities	122.4	121.4	119.9	120.1	120.7	119.6	119.1	119.4
% Ch, Annual Rate	-1.6	-3.3	-4.8	0.7	1.9	-3.4	-1.8	1.1
Information	165.2	167.9	171.0	171.6	172.6	172.6	171.8	170.3
% Ch, Annual Rate	5.2	6.6	7.6	1.5	2.4	-0.2	-1.7	-3.4
Software Publishers	82.3	83.7	84.7	85.0	85.4	85.5	85.9	86.2
% Ch, Annual Rate	2.2	7.3	4.8	1.5	1.6	0.7	1.6	1.5
Other Publishing Industries	3.5	3.6	3.7	3.6	3.5	3.4	3.3	3.2
% Ch, Annual Rate	-25.0	7.2	11.8	-8.3	-7.4	-17.5	-8.6	-9.4
Other Information	79.4	80.5	82.6	83.0	83.7	83.6	82.6	80.9
% Ch, Annual Rate	10.2	5.8	10.3	2.0	3.6	-0.3	-4.7	-8.1
Financial Activities	163.9	165.4	165.8	165.4	165.7	163.4	163.0	163.8
% Ch, Annual Rate	2.0	3.7	0.9	-0.9	0.6	-5.4	-1.0	1.9
Professional and Business Services	471.1	475.9	477.9	478.5	478.7	473.3	470.3	470.0
% Ch, Annual Rate	6.8	4.1	1.7	0.4	0.2	-4.4	-2.5	-0.2
Education and Health Services	511.1	518.1	523.5	527.5	527.8	526.2	527.5	530.3
% Ch, Annual Rate	3.5	5.6	4.3	3.1	0.2	-1.2	1.0	2.2
Leisure and Hospitality	322.6	324.0	326.5	328.6	334.8	342.8	348.4	348.2
% Ch, Annual Rate	15.7	1.8	3.1	2.6	7.8	9.9	6.7	-0.2
Other Services	117.9	119.9	120.8	121.3	121.7	121.8	122.2	122.8
% Ch, Annual Rate	3.2	6.6	3.1	1.8	1.4	0.3	1.2	1.9
Federal Government	76.0	75.6	74.8	75.6	75.7	75.8	75.9	75.9
% Ch, Annual Rate	-1.2	-1.8	-4.2	4.5	0.4	0.4	0.4	0.4
State and Local Government	481.8	487.9	498.2	499.0	502.9	506.3	509.2	511.9
% Ch, Annual Rate	-3.5	5.2	8.7	0.6	3.2	2.7	2.4	2.1

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	3,586.1	3,593.3	3,600.6	3,607.5	3,615.5	3,623.1	3,631.0	3,639.2
% Ch, Annual Rate	1.0	0.8	0.8	0.8	0.9	0.8	0.9	0.9
Manufacturing	267.6	266.7	266.3	266.5	267.0	267.4	267.7	267.9
% Ch, Annual Rate	-1.5	-1.4	-0.6	0.3	0.8	0.6	0.5	0.2
Durable Manufacturing	180.1	179.9	179.9	180.3	180.8	181.2	181.6	181.8
% Ch, Annual Rate	-1.0	-0.6	0.1	0.9	1.2	0.9	0.7	0.5
Wood Products	8.9	8.8	8.7	8.9	9.1	9.2	9.3	9.4
% Ch, Annual Rate	-9.4	-6.4	-2.1	8.6	10.6	4.5	1.9	3.6
Primary and Fabricated Metals	22.0	21.9	21.9	22.0	22.0	22.1	22.1	22.1
% Ch, Annual Rate	-3.3	-2.0	-0.4	1.0	1.3	1.0	0.6	-0.1
Computer and Electronic Products	18.8	19.0	19.1	19.3	19.4	19.5	19.6	19.7
% Ch, Annual Rate	3.3	3.4	3.6	3.3	3.0	2.7	2.0	1.0
Machinery and Electrical Equipment	19.4	19.1	19.0	18.9	19.0	19.1	19.2	19.3
% Ch, Annual Rate	-7.0	-5.2	-3.3	-1.2	1.6	2.0	2.5	1.8
Aerospace	74.3	74.5	74.7	74.8	74.9	74.9	75.0	75.0
% Ch, Annual Rate	1.6	1.2	1.0	0.6	0.3	0.2	0.2	0.3
Other Transportation Equip.	10.3	10.3	10.2	10.2	10.1	10.1	10.0	10.0
% Ch, Annual Rate	-1.8	-2.7	-2.1	-2.0	-2.1	-2.0	-1.4	-1.3
Other Durables	26.3	26.3	26.2	26.2	26.3	26.3	26.3	26.3
% Ch, Annual Rate	-1.3	-0.8	-0.7	-0.1	0.4	0.5	0.3	0.0
Nondurable Manufacturing	87.5	86.8	86.4	86.2	86.2	86.2	86.2	86.1
% Ch, Annual Rate	-2.5	-3.0	-2.0	-0.9	0.0	0.0	-0.1	-0.4
Food Manufacturing	39.5	39.0	38.7	38.6	38.6	38.6	38.5	38.5
% Ch, Annual Rate	-2.9	-4.4	-3.1	-1.3	-0.3	-0.2	-0.1	-0.4
Paper and Paper Products	6.9	6.8	6.8	6.7	6.7	6.7	6.7	6.7
% Ch, Annual Rate	-5.5	-5.7	-3.3	-2.1	-1.0	-1.1	-1.4	-2.2
Other Nondurables	41.1	40.9	40.9	40.8	40.9	40.9	40.9	40.9
% Ch, Annual Rate	-1.6	-1.3	-0.7	-0.2	0.5	0.3	0.1	-0.1
Natural Resources and Mining	4.5	4.4	4.3	4.4	4.4	4.5	4.5	4.5
% Ch, Annual Rate	0.3	-9.0	-5.1	2.7	6.5	4.1	0.0	2.8
Construction	225.1	224.8	224.2	224.1	224.4	225.3	226.0	226.9
% Ch, Annual Rate	0.1	-0.5	-1.0	-0.2	0.5	1.5	1.3	1.6
Trade, Transportation, and Utilities	685.0	680.1	678.7	677.6	676.2	675.2	675.7	676.3
% Ch, Annual Rate	-0.4	-2.9	-0.8	-0.6	-0.8	-0.6	0.3	0.3
Wholesale Trade	143.6	144.9	145.7	146.4	147.3	147.9	148.5	148.9
% Ch, Annual Rate	3.0	3.9	2.0	2.1	2.4	1.7	1.5	1.2
Retail Trade	421.5	414.4	412.0	409.7	406.8	404.7	404.3	404.1
% Ch, Annual Rate	-2.2	-6.5	-2.4	-2.2	-2.8	-2.0	-0.4	-0.2
Electronic Shopping and Mail-Order	82.8	83.3	83.7	84.2	84.6	85.1	85.5	86.0
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	338.7	331.2	328.3	325.6	322.2	319.7	318.8	318.2
% Ch	-3.2	-8.6	-3.5	-3.2	-4.1	-3.1	-1.1	-0.7
Trans., Warehousing, and Utilities	119.9	120.7	121.0	121.4	122.1	122.6	123.0	123.3
% Ch, Annual Rate	1.7	2.5	1.2	1.3	2.3	1.5	1.3	1.0
Information	170.8	172.7	174.2	175.7	177.8	179.5	180.6	181.1
% Ch, Annual Rate	1.1	4.5	3.6	3.4	4.9	3.9	2.3	1.1
Software Publishers	86.5	86.9	87.3	87.7	88.2	88.5	88.8	89.0
% Ch, Annual Rate	1.6	1.9	1.8	1.9	1.9	1.6	1.3	1.1
Other Publishing Industries	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.7
% Ch, Annual Rate	-8.8	-3.9	-5.2	-4.4	-3.4	-7.8	-13.2	-15.8
Other Information	81.1	82.7	83.8	84.9	86.6	88.1	88.9	89.3
% Ch, Annual Rate	1.1	7.7	5.7	5.4	8.3	6.8	3.9	1.7
Financial Activities	165.0	167.2	168.5	169.3	170.1	170.4	170.4	170.3
% Ch, Annual Rate	3.0	5.4	3.1	2.0	1.9	0.8	-0.1	0.0
Professional and Business Services	473.2	473.9	474.0	475.1	477.1	478.2	479.6	481.6
% Ch, Annual Rate	2.7	0.6	0.1	0.9	1.7	0.9	1.2	1.7
Education and Health Services	533.5	537.0	539.5	541.3	543.0	544.3	545.7	547.3
% Ch, Annual Rate	2.4	2.7	1.8	1.4	1.3	1.0	1.0	1.2
Leisure and Hospitality	347.7	349.8	351.5	351.6	350.9	351.4	351.6	351.9
% Ch, Annual Rate	-0.6	2.5	1.9	0.1	-0.8	0.6	0.3	0.3
Other Services	123.3	124.0	124.7	125.3	125.9	126.4	126.9	127.4
% Ch, Annual Rate	1.9	2.3	2.0	1.9	1.9	1.7	1.7	1.6
Federal Government	76.0	76.1	76.2	76.2	76.3	76.4	76.5	76.5
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	514.4	516.6	518.6	520.5	522.4	524.1	525.7	527.3
% Ch, Annual Rate	2.0	1.7	1.5	1.5	1.5	1.3	1.2	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	3,649.9	3,659.6	3,667.4	3,676.2	3,684.0	3,692.3	3,701.0	3,710.2
% Ch, Annual Rate	1.2	1.1	0.9	1.0	0.9	0.9	0.9	1.0
Manufacturing	268.3	268.6	268.9	269.1	269.5	269.9	270.2	270.5
% Ch, Annual Rate	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.5
Durable Manufacturing	182.2	182.6	183.0	183.3	183.7	184.1	184.4	184.8
% Ch, Annual Rate	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.9
Wood Products	9.5	9.5	9.6	9.6	9.7	9.8	9.9	10.0
% Ch, Annual Rate	4.5	3.4	1.9	2.3	3.9	3.5	3.9	4.6
Primary and Fabricated Metals	22.2	22.2	22.2	22.2	22.3	22.3	22.3	22.3
% Ch, Annual Rate	0.7	0.7	0.5	0.1	0.8	0.3	0.2	0.4
Computer and Electronic Products	19.7	19.8	19.8	19.9	19.9	19.9	19.9	19.9
% Ch, Annual Rate	1.1	1.1	1.0	0.8	-0.2	-0.1	0.0	0.1
Machinery and Electrical Equipment	19.4	19.5	19.6	19.7	19.9	20.0	20.2	20.4
% Ch, Annual Rate	2.6	2.2	2.5	2.3	3.0	3.0	3.2	3.8
Aerospace	75.1	75.2	75.4	75.6	75.7	75.9	76.0	76.1
% Ch, Annual Rate	0.4	0.6	0.8	1.0	0.9	0.8	0.6	0.5
Other Transportation Equip.	10.0	10.0	9.9	9.9	9.8	9.7	9.6	9.5
% Ch, Annual Rate	-0.5	-0.5	-1.8	-3.1	-3.4	-3.3	-3.1	-2.8
Other Durables	26.3	26.4	26.4	26.4	26.4	26.5	26.5	26.6
% Ch, Annual Rate	0.3	0.4	0.3	0.3	0.8	0.7	0.8	0.9
Nondurable Manufacturing	86.1	86.0	85.9	85.8	85.8	85.8	85.7	85.7
% Ch, Annual Rate	0.0	-0.3	-0.4	-0.5	-0.1	-0.2	-0.3	-0.3
Food Manufacturing	38.5	38.5	38.4	38.3	38.3	38.2	38.1	38.0
% Ch, Annual Rate	-0.1	-0.4	-0.6	-0.7	-0.5	-0.7	-0.9	-1.0
Paper and Paper Products	6.6	6.6	6.5	6.5	6.5	6.4	6.4	6.4
% Ch, Annual Rate	-1.9	-2.4	-2.5	-2.6	-1.9	-2.0	-2.3	-2.4
Other Nondurables	41.0	41.0	41.0	41.0	41.1	41.1	41.2	41.3
% Ch, Annual Rate	0.3	0.1	0.1	0.1	0.6	0.7	0.7	0.7
Natural Resources and Mining	4.5	4.6	4.5	4.6	4.6	4.6	4.6	4.6
% Ch, Annual Rate	2.0	1.1	-0.6	1.0	1.4	0.7	0.7	0.1
Construction	228.0	229.1	229.9	230.7	231.5	232.5	233.6	234.8
% Ch, Annual Rate	2.0	1.8	1.5	1.4	1.4	1.7	1.9	2.0
Trade, Transportation, and Utilities	677.7	678.8	679.9	681.0	681.6	682.5	683.3	683.7
% Ch, Annual Rate	0.8	0.7	0.6	0.7	0.3	0.5	0.5	0.3
Wholesale Trade	149.1	149.4	149.7	150.0	150.4	150.8	150.8	150.8
% Ch, Annual Rate	0.6	0.8	0.7	0.8	1.1	1.1	0.2	-0.1
Retail Trade	405.1	405.7	406.3	406.9	407.1	407.7	408.4	408.9
% Ch, Annual Rate	1.0	0.6	0.6	0.6	0.2	0.6	0.7	0.5
Electronic Shopping and Mail-Order	86.4	86.8	87.3	87.7	88.2	88.6	89.1	89.5
% Ch	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Other Retail Trade	318.7	318.9	319.1	319.2	318.9	319.1	319.3	319.4
% Ch	0.7	0.2	0.2	0.2	-0.3	0.2	0.3	0.1
Trans., Warehousing, and Utilities	123.5	123.7	123.9	124.1	124.1	124.1	124.1	124.0
% Ch, Annual Rate	0.6	0.8	0.7	0.7	-0.1	-0.1	0.1	-0.2
Information	182.3	183.6	184.7	185.9	186.4	186.9	187.5	188.1
% Ch, Annual Rate	2.6	2.9	2.5	2.5	1.2	1.1	1.2	1.2
Software Publishers	89.3	89.5	89.7	89.9	90.2	90.5	90.8	91.1
% Ch, Annual Rate	0.9	1.0	1.0	1.1	1.3	1.2	1.3	1.2
Other Publishing Industries	2.6	2.5	2.3	2.2	2.1	2.0	1.9	1.8
% Ch, Annual Rate	-18.6	-18.3	-19.3	-19.5	-16.7	-18.0	-18.0	-20.1
Other Information	90.4	91.6	92.7	93.7	94.1	94.4	94.8	95.2
% Ch, Annual Rate	5.0	5.4	4.7	4.6	1.6	1.4	1.6	1.7
Financial Activities	170.2	169.8	169.3	168.8	168.6	168.2	167.8	167.3
% Ch, Annual Rate	-0.2	-1.0	-1.3	-1.0	-0.6	-1.0	-0.9	-1.2
Professional and Business Services	485.5	488.3	490.5	493.3	495.8	498.2	500.7	504.6
% Ch, Annual Rate	3.3	2.3	1.8	2.3	2.0	2.0	2.0	3.1
Education and Health Services	548.3	549.8	550.7	552.1	553.5	555.0	556.5	557.7
% Ch, Annual Rate	0.8	1.0	0.7	1.0	1.1	1.1	1.1	0.9
Leisure and Hospitality	351.5	351.7	351.8	351.9	351.6	352.0	352.4	352.5
% Ch, Annual Rate	-0.4	0.2	0.1	0.1	-0.3	0.4	0.5	0.1
Other Services	127.9	128.4	128.8	129.3	129.9	130.4	130.9	131.4
% Ch, Annual Rate	1.5	1.5	1.5	1.6	1.6	1.5	1.6	1.5
Federal Government	76.6	76.7	76.8	76.8	77.3	77.3	77.4	77.5
% Ch, Annual Rate	0.4	0.4	0.4	0.4	2.2	0.4	0.4	0.4
State and Local Government	528.9	530.4	531.6	532.7	533.7	534.9	536.2	537.5
% Ch, Annual Rate	1.2	1.1	0.9	0.8	0.8	0.9	1.0	1.0

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	21,092.8	21,710.8	22,612.8	23,555.6	24,661.7	25,779.5	27,063.3
% Ch	6.5	7.5	2.9	4.2	4.2	4.7	4.5	5.0
Total Wage and Salary Disbursements	9,444.1	10,343.8	11,383.8	11,924.3	12,331.9	12,801.5	13,350.1	13,932.8
% Ch	1.3	9.5	10.1	4.7	3.4	3.8	4.3	4.4
Nonwage Personal Income	10,183.5	10,749.0	10,327.0	10,688.5	11,223.7	11,860.2	12,429.4	13,130.4
% Ch	11.9	5.6	-3.9	3.5	5.0	5.7	4.8	5.6
Supplements to Wages and Salaries	2,128.0	2,254.9	2,387.4	2,500.2	2,587.2	2,672.1	2,767.4	2,869.8
% Ch	0.2	6.0	5.9	4.7	3.5	3.3	3.6	3.7
Proprietor's Income	1,650.0	1,821.9	1,913.7	1,876.3	1,911.7	2,027.0	2,146.0	2,257.0
% Ch	3.2	10.4	5.0	-1.9	1.9	6.0	5.9	5.2
Farm	70.2	97.8	129.7	110.4	82.3	79.8	82.7	85.6
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,579.9	1,724.1	1,783.9	1,766.0	1,829.5	1,947.2	2,063.2	2,171.5
% Ch	1.2	9.1	3.5	-1.0	3.6	6.4	6.0	5.2
Less: Contribution For Govt. Soc. Ins.	1,459.5	1,593.4	1,741.1	1,808.0	1,854.3	1,917.8	1,995.1	2,060.3
% Ch	2.7	9.2	9.3	3.8	2.6	3.4	4.0	3.3
Dividends/Int./Rent	3,623.7	3,667.7	3,838.9	4,067.5	4,356.7	4,636.1	4,856.5	5,072.6
% Ch	-1.0	1.2	4.7	6.0	7.1	6.4	4.8	4.5
Transfer Payments	4,241.1	4,597.8	3,928.2	4,052.5	4,222.4	4,442.7	4,654.7	4,991.2
% Ch	35.1	8.4	-14.6	3.2	4.2	5.2	4.8	7.2

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	21,257.2	21,610.3	21,831.6	22,144.0	22,420.4	22,473.3	22,668.8	22,888.7
% Ch, Annual Rate	4.8	6.8	4.2	5.8	5.1	0.9	3.5	3.9
Total Wage and Salary Disbursements	11,084.7	11,298.3	11,496.4	11,655.6	11,776.9	11,879.9	11,970.9	12,069.4
% Ch, Annual Rate	9.8	7.9	7.2	5.7	4.2	3.5	3.1	3.3
Nonwage Personal Income	10,172.5	10,312.0	10,335.2	10,488.5	10,643.5	10,593.4	10,697.8	10,819.3
% Ch, Annual Rate	-0.4	5.6	0.9	6.1	6.0	-1.9	4.0	4.6
Supplements to Wages and Salaries	2,340.2	2,370.7	2,402.4	2,436.3	2,466.8	2,490.7	2,511.5	2,531.8
% Ch, Annual Rate	6.4	5.3	5.5	5.8	5.1	3.9	3.4	3.3
Proprietor's Income	1,878.2	1,924.7	1,919.6	1,932.2	1,901.7	1,871.5	1,865.1	1,867.1
% Ch, Annual Rate	4.3	10.3	-1.1	2.7	-6.2	-6.2	-1.4	0.4
Farm	109.1	135.3	138.0	136.6	125.9	114.8	104.7	95.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,769.1	1,789.4	1,781.6	1,795.6	1,775.8	1,756.7	1,760.4	1,771.2
% Ch, Annual Rate	-0.3	4.7	-1.7	3.2	-4.3	-4.2	0.8	2.5
Less: Contribution For Govt. Soc. Ins.	1,698.9	1,728.4	1,756.7	1,780.4	1,797.7	1,804.5	1,810.8	1,819.0
% Ch, Annual Rate	10.7	7.1	6.7	5.5	3.9	1.5	1.4	1.8
Dividends/Int./Rent	3,756.2	3,830.2	3,866.2	3,902.9	3,982.1	4,034.4	4,092.0	4,161.6
% Ch, Annual Rate	2.5	8.1	3.8	3.8	8.4	5.4	5.8	7.0
Transfer Payments	3,896.8	3,914.9	3,903.6	3,997.5	4,090.7	4,001.4	4,040.0	4,077.8
% Ch, Annual Rate	-4.5	1.9	-1.1	10.0	9.7	-8.4	3.9	3.8

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	23,175.9	23,416.7	23,678.1	23,951.7	24,261.3	24,531.9	24,794.4	25,059.0
% Ch, Annual Rate	5.1	4.2	4.5	4.7	5.3	4.5	4.3	4.3
Total Wage and Salary Disbursements	12,175.6	12,277.4	12,381.6	12,492.9	12,613.4	12,737.4	12,862.3	12,993.0
% Ch, Annual Rate	3.6	3.4	3.4	3.6	3.9	4.0	4.0	4.1
Nonwage Personal Income	11,000.3	11,139.3	11,296.5	11,458.8	11,648.0	11,794.5	11,932.2	12,066.0
% Ch, Annual Rate	6.9	5.1	5.8	5.9	6.8	5.1	4.8	4.6
Supplements to Wages and Salaries	2,556.5	2,577.4	2,597.7	2,617.4	2,642.3	2,662.2	2,681.6	2,702.5
% Ch, Annual Rate	4.0	3.3	3.2	3.1	3.9	3.0	3.0	3.2
Proprietor's Income	1,875.3	1,896.5	1,922.6	1,952.5	1,980.2	2,011.0	2,041.4	2,075.5
% Ch, Annual Rate	1.8	4.6	5.6	6.4	5.8	6.4	6.2	6.9
Farm	87.4	82.5	80.1	79.1	79.1	79.4	80.0	80.7
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,787.9	1,814.0	1,842.5	1,873.4	1,901.1	1,931.6	1,961.4	1,994.8
% Ch, Annual Rate	3.8	6.0	6.5	6.9	6.0	6.6	6.3	7.0
Less: Contribution For Govt. Soc. Ins.	1,838.1	1,848.3	1,859.3	1,871.7	1,895.0	1,909.8	1,925.1	1,941.3
% Ch, Annual Rate	4.3	2.2	2.4	2.7	5.1	3.2	3.2	3.4
Dividends/Int./Rent	4,236.7	4,315.1	4,396.7	4,478.4	4,549.8	4,611.1	4,664.8	4,718.8
% Ch, Annual Rate	7.4	7.6	7.8	7.6	6.5	5.5	4.7	4.7
Transfer Payments	4,170.0	4,198.6	4,238.8	4,282.1	4,370.6	4,420.1	4,469.5	4,510.5
% Ch, Annual Rate	9.4	2.8	3.9	4.2	8.5	4.6	4.5	3.7

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	25,355.7	25,640.5	25,916.7	26,205.2	26,610.3	26,911.5	27,215.6	27,515.7
% Ch, Annual Rate	4.8	4.6	4.4	4.5	6.3	4.6	4.6	4.5
Total Wage and Salary Disbursements	13,140.0	13,283.7	13,418.5	13,558.2	13,708.0	13,856.8	14,007.9	14,158.7
% Ch, Annual Rate	4.6	4.4	4.1	4.2	4.5	4.4	4.4	4.4
Nonwage Personal Income	12,215.7	12,356.8	12,498.2	12,647.0	12,902.3	13,054.8	13,207.7	13,357.0
% Ch, Annual Rate	5.1	4.7	4.7	4.8	8.3	4.8	4.8	4.6
Supplements to Wages and Salaries	2,730.5	2,755.4	2,780.3	2,803.5	2,831.8	2,857.7	2,881.2	2,908.7
% Ch, Annual Rate	4.2	3.7	3.7	3.4	4.1	3.7	3.3	3.9
Proprietor's Income	2,103.2	2,132.5	2,159.3	2,188.8	2,214.0	2,242.0	2,271.3	2,300.9
% Ch, Annual Rate	5.4	5.7	5.1	5.6	4.7	5.2	5.3	5.3
Farm	81.6	82.4	83.1	83.8	84.5	85.2	85.9	86.6
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	2,021.6	2,050.0	2,076.3	2,105.0	2,129.4	2,156.8	2,185.4	2,214.3
% Ch, Annual Rate	5.5	5.7	5.2	5.7	4.7	5.2	5.4	5.4
Less: Contribution For Govt. Soc. Ins.	1,969.6	1,988.0	2,005.3	2,017.4	2,037.9	2,054.2	2,064.8	2,084.2
% Ch, Annual Rate	6.0	3.8	3.5	2.4	4.1	3.2	2.1	3.8
Dividends/Int./Rent	4,774.3	4,829.3	4,883.4	4,938.8	4,992.7	5,045.5	5,098.8	5,153.4
% Ch, Annual Rate	4.8	4.7	4.6	4.6	4.4	4.3	4.3	4.4
Transfer Payments	4,577.3	4,627.7	4,680.5	4,733.3	4,901.7	4,963.8	5,021.2	5,078.3
% Ch, Annual Rate	6.1	4.5	4.6	4.6	15.0	5.2	4.7	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	556.692	573.331	599.695	628.638	661.677	695.599	733.461
% Ch	7.6	7.8	3.0	4.6	4.8	5.3	5.1	5.4
Total Wage and Salary Disbursements	264.145	292.689	316.908	332.845	346.477	362.104	380.364	399.596
% Ch	4.1	10.8	8.3	5.0	4.1	4.5	5.0	5.1
Manufacturing	22.291	21.973	23.729	24.771	25.329	26.207	27.315	28.530
% Ch	-6.6	-1.4	8.0	4.4	2.3	3.5	4.2	4.5
Durable Manufacturing	17.224	16.381	17.543	18.296	18.801	19.519	20.393	21.359
% Ch	-8.3	-4.9	7.1	4.3	2.8	3.8	4.5	4.7
Nondurable Manufacturing	5.067	5.592	6.186	6.475	6.528	6.688	6.922	7.172
% Ch	-0.3	10.4	10.6	4.7	0.8	2.5	3.5	3.6
Nonmanufacturing	234.597	263.100	284.962	299.471	312.213	326.606	343.364	360.960
% Ch	5.1	12.1	8.3	5.1	4.3	4.6	5.1	5.1
Other Private Wages	1.375	1.591	1.863	1.943	2.003	2.071	2.152	2.235
% Ch	3.5	15.7	17.1	4.3	3.1	3.4	3.9	3.9
Farm Wages	1.826	1.928	2.086	2.227	2.340	2.468	2.618	2.774
% Ch	16.7	5.6	8.2	6.7	5.1	5.5	6.0	6.0
Military Wages	4.057	4.097	4.268	4.434	4.591	4.752	4.917	5.096
% Ch	4.7	1.0	4.2	3.9	3.5	3.5	3.5	3.7
Nonwage Personal Income	252.296	264.003	256.423	266.850	282.162	299.573	315.235	333.865
% Ch	11.6	4.6	-2.9	4.1	5.7	6.2	5.2	5.9
Supplements to Wages and Salaries	56.559	60.195	63.237	66.367	68.950	71.593	74.599	77.729
% Ch	1.7	6.4	5.1	4.9	3.9	3.8	4.2	4.2
Proprietor's Income	39.554	43.033	44.536	42.871	43.851	46.513	49.241	51.768
% Ch	8.2	8.8	3.5	-3.7	2.3	6.1	5.9	5.1
Farm	3.644	3.706	4.076	2.837	2.357	2.315	2.365	2.413
% Ch	...	...	...	...	...	...	...	...
Nonfarm	35.910	39.327	40.461	40.034	41.494	44.198	46.876	49.355
% Ch	2.9	9.5	2.9	-1.1	3.6	6.5	6.1	5.3
Less: Contribution For Govt. Soc. Ins.	41.445	45.608	49.235	51.180	52.627	54.600	57.030	59.090
% Ch	4.1	10.0	8.0	4.0	2.8	3.7	4.5	3.6
Plus: Residence Adjustment	4.927	5.356	5.909	6.225	6.464	6.738	7.059	7.400
% Ch	4.7	8.7	10.3	5.4	3.8	4.2	4.8	4.8
Dividends/Int./Rent	99.518	100.690	105.603	112.434	121.032	129.439	136.270	143.048
% Ch	-0.3	1.2	4.9	6.5	7.6	6.9	5.3	5.0
Transfer Payments	93.183	100.337	86.373	90.133	94.492	99.890	105.097	113.010
% Ch	34.9	7.7	-13.9	4.4	4.8	5.7	5.2	7.5
State U.I. Benefits	12.258	8.170	0.560	0.826	0.969	1.004	0.990	1.003
% Ch	1,064.3	-33.4	-93.1	47.4	17.3	3.6	-1.3	1.3
Other Transfers	80.924	92.167	85.812	89.307	93.522	98.886	104.106	112.007
% Ch	19.0	13.9	-6.9	4.1	4.7	5.7	5.3	7.6

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	559.846	570.401	577.974	585.102	592.287	595.745	601.892	608.854
% Ch, Annual Rate	1.9	7.8	5.4	5.0	5.0	2.4	4.2	4.7
Total Wage and Salary Disbursements	308.475	314.578	320.399	324.180	327.733	331.348	334.430	337.868
% Ch, Annual Rate	3.9	8.2	7.6	4.8	4.5	4.5	3.8	4.2
Manufacturing	23.212	23.317	23.986	24.399	24.476	24.698	24.877	25.032
% Ch, Annual Rate	25.6	1.8	12.0	7.1	1.3	3.7	2.9	2.5
Durable Manufacturing	17.203	17.195	17.735	18.038	18.070	18.228	18.375	18.511
% Ch, Annual Rate	35.7	-0.2	13.2	7.0	0.7	3.5	3.3	3.0
Nondurable Manufacturing	6.009	6.122	6.252	6.361	6.406	6.470	6.502	6.522
% Ch, Annual Rate	1.3	7.7	8.7	7.2	2.9	4.1	2.0	1.2
Nonmanufacturing	277.205	283.109	288.133	291.402	294.772	298.083	300.908	304.122
% Ch, Annual Rate	2.0	8.8	7.3	4.6	4.7	4.6	3.8	4.3
Other Private Wages	1.820	1.849	1.882	1.902	1.920	1.936	1.950	1.965
% Ch, Annual Rate	20.4	6.3	7.5	4.3	3.7	3.6	2.8	3.2
Farm Wages	2.014	2.061	2.117	2.152	2.183	2.214	2.240	2.269
% Ch, Annual Rate	8.8	9.7	11.2	6.8	6.0	5.8	4.7	5.2
Military Wages	4.224	4.242	4.281	4.325	4.382	4.417	4.455	4.480
% Ch, Annual Rate	9.6	1.7	3.7	4.2	5.4	3.2	3.5	2.3
Nonwage Personal Income	251.371	255.823	257.574	260.921	264.554	264.397	267.461	270.986
% Ch, Annual Rate	-0.4	7.3	2.8	5.3	5.7	-0.2	4.7	5.4
Supplements to Wages and Salaries	61.857	62.762	63.761	64.569	65.384	66.090	66.688	67.305
% Ch, Annual Rate	3.9	6.0	6.5	5.2	5.1	4.4	3.7	3.8
Proprietor's Income	44.327	45.011	44.698	44.110	43.356	42.735	42.642	42.750
% Ch, Annual Rate	2.5	6.3	-2.8	-5.2	-6.7	-5.6	-0.9	1.0
Farm	4.237	4.421	4.243	3.403	3.112	2.910	2.737	2.588
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	40.090	40.590	40.455	40.708	40.244	39.825	39.905	40.162
% Ch, Annual Rate	-0.9	5.1	-1.3	2.5	-4.5	-4.1	0.8	2.6
Less: Contribution For Govt. Soc. Ins.	47.969	48.863	49.774	50.334	50.814	51.072	51.276	51.559
% Ch, Annual Rate	6.0	7.7	7.7	4.6	3.9	2.0	1.6	2.2
Plus: Residence Adjustment	5.734	5.859	5.975	6.068	6.139	6.199	6.253	6.310
% Ch, Annual Rate	14.6	9.0	8.1	6.4	4.8	4.0	3.5	3.7
Dividends/Int./Rent	103.165	105.301	106.401	107.543	109.863	111.445	113.179	115.248
% Ch, Annual Rate	1.9	8.5	4.2	4.4	8.9	5.9	6.4	7.5
Transfer Payments	84.258	85.754	86.514	88.964	90.626	89.000	89.976	90.932
% Ch, Annual Rate	-5.0	7.3	3.6	11.8	7.7	-7.0	4.5	4.3
State U.I. Benefits	0.526	0.508	0.529	0.679	0.746	0.798	0.860	0.900
% Ch, Annual Rate	-79.3	-13.0	17.7	171.0	45.7	31.2	35.2	19.8
Other Transfers	83.732	85.246	85.985	88.286	89.880	88.202	89.115	90.031
% Ch, Annual Rate	-3.8	7.4	3.5	11.1	7.4	-7.3	4.2	4.2

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	617.238	624.524	632.299	640.492	649.502	657.731	665.721	673.755
% Ch, Annual Rate	5.6	4.8	5.1	5.3	5.7	5.2	4.9	4.9
Total Wage and Salary Disbursements	341.363	344.670	348.081	351.793	355.782	359.971	364.162	368.503
% Ch, Annual Rate	4.2	3.9	4.0	4.3	4.6	4.8	4.7	4.9
Manufacturing	25.139	25.222	25.371	25.585	25.819	26.077	26.335	26.596
% Ch, Annual Rate	1.7	1.3	2.4	3.4	3.7	4.1	4.0	4.0
Durable Manufacturing	18.615	18.712	18.850	19.029	19.216	19.417	19.618	19.824
% Ch, Annual Rate	2.3	2.1	3.0	3.9	4.0	4.3	4.2	4.3
Nondurable Manufacturing	6.524	6.511	6.521	6.556	6.604	6.660	6.717	6.773
% Ch, Annual Rate	0.1	-0.8	0.7	2.1	3.0	3.5	3.5	3.4
Nonmanufacturing	307.407	310.553	313.734	317.159	320.805	324.646	328.488	332.485
% Ch, Annual Rate	4.4	4.2	4.2	4.4	4.7	4.9	4.8	5.0
Other Private Wages	1.981	1.995	2.010	2.026	2.043	2.062	2.080	2.099
% Ch, Annual Rate	3.2	2.9	3.0	3.3	3.5	3.7	3.6	3.7
Farm Wages	2.298	2.326	2.354	2.384	2.417	2.451	2.485	2.521
% Ch, Annual Rate	5.3	4.9	4.9	5.3	5.6	5.8	5.7	5.8
Military Wages	4.538	4.574	4.613	4.639	4.698	4.734	4.774	4.801
% Ch, Annual Rate	5.3	3.2	3.5	2.3	5.2	3.2	3.4	2.3
Nonwage Personal Income	275.876	279.854	284.218	288.699	293.720	297.760	301.559	305.253
% Ch, Annual Rate	7.4	5.9	6.4	6.5	7.1	5.6	5.2	5.0
Supplements to Wages and Salaries	68.043	68.649	69.251	69.859	70.633	71.272	71.900	72.565
% Ch, Annual Rate	4.5	3.6	3.6	3.6	4.5	3.7	3.6	3.7
Proprietor's Income	42.993	43.504	44.108	44.800	45.437	46.149	46.844	47.623
% Ch, Annual Rate	2.3	4.8	5.7	6.4	5.8	6.4	6.2	6.8
Farm	2.443	2.362	2.320	2.303	2.303	2.309	2.319	2.331
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	40.550	41.142	41.789	42.496	43.134	43.840	44.526	45.292
% Ch, Annual Rate	3.9	6.0	6.4	6.9	6.1	6.7	6.4	7.1
Less: Contribution For Govt. Soc. Ins.	52.134	52.440	52.773	53.163	53.871	54.350	54.834	55.345
% Ch, Annual Rate	4.5	2.4	2.6	3.0	5.4	3.6	3.6	3.8
Plus: Residence Adjustment	6.372	6.432	6.493	6.558	6.628	6.701	6.774	6.850
% Ch, Annual Rate	4.0	3.8	3.8	4.1	4.4	4.4	4.4	4.6
Dividends/Int./Rent	117.473	119.798	122.216	124.643	126.788	128.658	130.318	131.991
% Ch, Annual Rate	8.0	8.2	8.3	8.2	7.1	6.0	5.3	5.2
Transfer Payments	93.128	93.912	94.924	96.003	98.105	99.330	100.556	101.569
% Ch, Annual Rate	10.0	3.4	4.4	4.6	9.1	5.1	5.0	4.1
State U.I. Benefits	0.931	0.960	0.987	1.000	1.005	1.004	1.003	1.002
% Ch, Annual Rate	14.5	12.8	11.8	5.3	2.3	-0.6	-0.2	-0.3
Other Transfers	92.197	92.952	93.937	95.003	97.100	98.326	99.553	100.566
% Ch, Annual Rate	10.0	3.3	4.3	4.6	9.1	5.1	5.1	4.1

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	682.663	691.329	699.814	708.591	719.788	728.843	738.047	747.165
% Ch, Annual Rate	5.4	5.2	5.0	5.1	6.5	5.1	5.1	5.0
Total Wage and Salary Disbursements	373.334	378.096	382.677	387.351	392.205	397.086	402.062	407.031
% Ch, Annual Rate	5.3	5.2	4.9	5.0	5.1	5.1	5.1	5.0
Manufacturing	26.885	27.174	27.460	27.740	28.061	28.376	28.691	28.995
% Ch, Annual Rate	4.4	4.4	4.3	4.1	4.7	4.6	4.5	4.3
Durable Manufacturing	20.050	20.279	20.508	20.735	20.987	21.235	21.485	21.727
% Ch, Annual Rate	4.6	4.7	4.6	4.5	5.0	4.8	4.8	4.6
Nondurable Manufacturing	6.836	6.895	6.951	7.005	7.073	7.140	7.206	7.268
% Ch, Annual Rate	3.8	3.5	3.3	3.2	3.9	3.8	3.7	3.4
Nonmanufacturing	336.907	341.282	345.479	349.787	354.189	358.655	363.211	367.785
% Ch, Annual Rate	5.4	5.3	5.0	5.1	5.1	5.1	5.2	5.1
Other Private Wages	2.121	2.142	2.162	2.182	2.203	2.224	2.246	2.267
% Ch, Annual Rate	4.2	4.0	3.8	3.8	3.9	3.9	3.9	3.9
Farm Wages	2.560	2.599	2.637	2.674	2.714	2.754	2.794	2.834
% Ch, Annual Rate	6.5	6.2	5.9	5.9	6.0	6.0	6.0	5.9
Military Wages	4.861	4.899	4.940	4.968	5.039	5.078	5.120	5.149
% Ch, Annual Rate	5.1	3.1	3.4	2.3	5.8	3.1	3.4	2.3
Nonwage Personal Income	309.329	313.233	317.138	321.240	327.582	331.757	335.985	340.134
% Ch, Annual Rate	5.5	5.1	5.1	5.3	8.1	5.2	5.2	5.0
Supplements to Wages and Salaries	73.447	74.223	75.003	75.720	76.571	77.359	78.072	78.914
% Ch, Annual Rate	5.0	4.3	4.3	3.9	4.6	4.2	3.7	4.4
Proprietor's Income	48.260	48.930	49.550	50.224	50.790	51.425	52.092	52.765
% Ch, Annual Rate	5.5	5.7	5.2	5.6	4.6	5.1	5.3	5.3
Farm	2.346	2.360	2.371	2.383	2.395	2.408	2.419	2.430
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	45.914	46.571	47.179	47.841	48.395	49.018	49.673	50.335
% Ch, Annual Rate	5.6	5.8	5.3	5.7	4.7	5.2	5.5	5.4
Less: Contribution For Govt. Soc. Ins.	56.215	56.799	57.354	57.754	58.381	58.892	59.240	59.846
% Ch, Annual Rate	6.4	4.2	4.0	2.8	4.4	3.6	2.4	4.2
Plus: Residence Adjustment	6.936	7.020	7.099	7.181	7.268	7.355	7.444	7.532
% Ch, Annual Rate	5.1	4.9	4.6	4.7	5.0	4.9	4.9	4.8
Dividends/Int./Rent	133.710	135.421	137.110	138.839	140.529	142.191	143.874	145.597
% Ch, Annual Rate	5.3	5.2	5.1	5.1	5.0	4.8	4.8	4.9
Transfer Payments	103.191	104.437	105.729	107.030	110.805	112.319	113.742	115.173
% Ch, Annual Rate	6.5	4.9	5.0	5.0	14.9	5.6	5.2	5.1
State U.I. Benefits	0.994	0.991	0.988	0.988	0.995	1.001	1.005	1.011
% Ch, Annual Rate	-3.2	-1.3	-1.2	0.0	3.0	2.3	1.5	2.3
Other Transfers	102.196	103.446	104.741	106.042	109.810	111.318	112.737	114.162
% Ch, Annual Rate	6.6	5.0	5.1	5.1	15.0	5.6	5.2	5.2

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	2.556	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	122.6	6.1	2.928	8.1	3.216	8.7
2023	126.6	3.2	3.038	3.7	3.342	3.9
2024	128.9	1.8	3.100	2.0	3.411	2.0
2025	131.3	1.9	3.161	2.0	3.478	2.0
2026	133.8	1.9	3.224	2.0	3.548	2.0
2027	136.4	2.0	3.292	2.1	3.622	2.1

* GDP Price Index for Personal Consumption Expenditures

Consumer Price Index for all Urban Consumers

+ Consumer Price Index for the Seattle-Tacoma-Bremerton, WA CMSA

Consumer Price Index and PCE Price Index values shown here are annual averages of seasonally adjusted quarterly data and may differ slightly from the annual values published by the Bureau of Labor Statistics and Bureau of Economic Analysis.

Table A4.2
Price Indexes for Gross Domestic Product
(2012=100)

	Services		Food		Fuels		Gasoline	
	Index	Percent Change	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	16.7	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	3.3	111.4	3.1	78.1	30.6	85.9	33.8
Forecast								
2022	130.1	4.8	123.9	11.3	122.3	56.5	114.4	33.2
2023	135.7	4.3	132.7	7.1	110.5	-9.7	102.2	-10.6
2024	140.1	3.2	133.1	0.2	107.2	-2.9	96.5	-5.6
2025	143.9	2.7	135.0	1.4	104.6	-2.5	93.6	-3.0
2026	147.7	2.6	137.5	1.8	103.3	-1.2	92.0	-1.7
2027	151.7	2.7	140.2	2.0	102.8	-0.5	90.8	-1.2

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	-7.2
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	46.2
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	94.0
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	70.3	31.7	8.7
1983	4307.2	30.7	0.7	69.6	32.6	-6.3
1984	4354.1	46.8	1.1	68.6	33.3	11.5
1985	4415.8	61.7	1.4	69.2	34.0	26.5
1986	4462.2	46.4	1.1	70.3	34.0	10.1
1987	4527.1	64.9	1.5	69.4	34.4	29.8
1988	4616.9	89.8	2.0	71.1	36.0	54.7
1989	4728.1	111.2	2.4	73.2	36.1	74.0
1990	4866.7	138.6	2.9	76.7	36.3	98.3
1991	5000.4	133.7	2.7	79.3	36.7	91.1
1992	5091.1	90.8	1.8	80.6	37.2	47.5
1993	5188.0	96.9	1.9	79.5	39.4	56.7
1994	5291.6	103.6	2.0	78.3	39.6	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	6781.6	57.0	0.8	86.4	48.8	19.4
2012	6835.4	53.8	0.8	87.1	49.2	15.9
2013	6909.7	74.3	1.1	87.3	51.1	38.1
2014	7005.5	95.8	1.4	87.0	50.7	59.5
2015	7107.0	101.5	1.4	88.5	52.8	65.9
2016	7237.7	130.7	1.8	89.8	54.7	95.5
2017	7344.6	106.9	1.5	89.7	56.1	73.3
2018	7464.1	119.5	1.6	87.3	56.4	88.5
2019	7582.5	118.4	1.6	85.7	57.2	89.9
2020	7707.0	124.6	1.6	84.8	58.5	98.2
2021	7767.0	59.9	0.8	82.8	65.0	42.1
Forecast						
2022	7828.1	61.2	0.8	84.6	67.7	44.3
2023	7899.0	70.9	0.9	85.3	59.9	45.4
2024	7970.3	71.3	0.9	86.1	61.3	46.5
2025	8041.7	71.4	0.9	86.7	62.8	47.6
2026	8113.1	71.4	0.9	87.2	64.4	48.6
2027	8184.8	71.6	0.9	87.8	66.0	49.9

* As of April 1 of Each Year

Source: Office of Financial Management, November 2021 Forecast

Table A5.2
Washington Population*
 (Thousands)

	Actual				Forecast					
	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
Total Population	7464.1	7582.5	7707.0	7767.0	7828.1	7899.0	7970.3	8041.7	8113.1	8184.8
Percent Change	1.6	1.6	1.6	0.8	0.8	0.9	0.9	0.9	0.9	0.9
Age 17 and Under			1681.0	1682.4	1684.3	1685.9	1687.5	1686.0	1683.7	1683.1
Percent of Total			21.8	21.7	21.5	21.3	21.2	21.0	20.8	20.6
Age 6-18			1234.5	1243.8	1255.6	1264.6	1268.9	1269.8	1265.8	1258.9
Percent of Total			16.0	16.0	16.0	16.0	15.9	15.8	15.6	15.4
Age 18 and Over			6026.1	6084.6	6143.8	6213.1	6282.8	6355.8	6429.5	6501.7
Percent of Total			78.2	78.3	78.5	78.7	78.8	79.0	79.2	79.4
Age 21 and Over			5737.3	5800.7	5862.3	5929.8	5995.0	6061.4	6128.5	6195.9
Percent of Total			74.4	74.7	74.9	75.1	75.2	75.4	75.5	75.7
Age 20-34			1593.5	1597.6	1602.0	1603.8	1604.7	1603.0	1601.0	1601.3
Percent of Total			20.7	20.6	20.5	20.3	20.1	19.9	19.7	19.6
Age 18-64			4730.2	4740.5	4752.9	4768.3	4787.0	4807.2	4830.2	4855.3
Percent of Total			61.4	61.0	60.7	60.4	60.1	59.8	59.5	59.3
Age 65 and Over			1295.9	1344.1	1390.9	1444.8	1495.9	1548.6	1599.2	1646.4
Percent of Total			16.8	17.3	17.8	18.3	18.8	19.3	19.7	20.1

Table A6.1

Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	August 2022	-
U.S. Real GDP Growth	2nd quarter 2022	+
U.S. ISM Index	September 2022	-
U.S. Employment YOY%Δ	August 2022	-
U.S. Unemployment Rate	August 2022	-
U.S. Consumer Confidence	September 2022	+
U.S. Consumer Sentiment	September 2022	+
U.S. CPI YOY%Δ	August 2022	+
U.S. Home Prices YOY%Δ	July 2022	-
S&P 500 Index	September 2022	-
WA Leading Index	August 2022	-
WA Employment YOY%Δ	August 2022	-
WA Aerospace Empl. YOY%Δ	August 2022	+
WA Unemployment Rate	August 2022	=
WA Help Wanted Index	August 2022	-
WA Business Cycle Indicator	August 2022	-
WA Initial Unemploy. Claims	August 2022	-
WA Housing Permits	August 2022	-
WA Weekly Hours in Mfg.	August 2022	-
WA New Vehicle Registration	September 2022	-
WA In-Migration	August 2022	+
WA Exports-Total YOY%Δ	2nd quarter 2022	-
WA Exports- w/o Trans. Equip. YOY%Δ	2nd quarter 2022	-
Seattle CPI YOY%Δ	August 2022	+
Seattle Home Prices YOY%Δ	July 2022	-
WA Construction Activity Index	August 2022	-

*Change from the previous reading

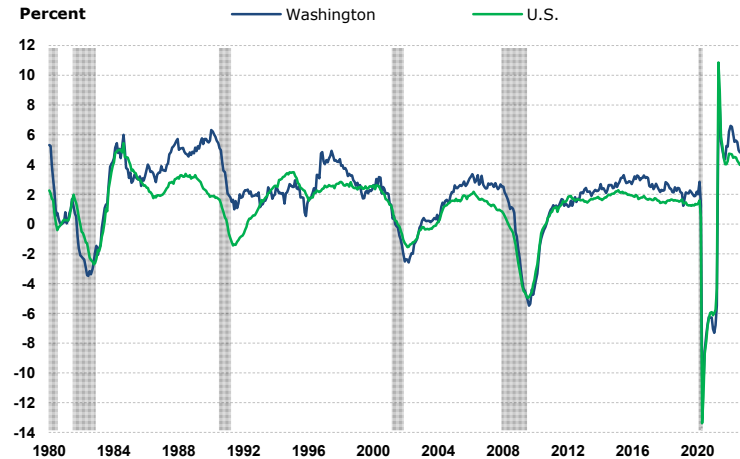
Table A6.2
Washington Business Indicators
 Historical Data

	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	118.8	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	121.4	99.8	66.7	109.3	151.3	52.8
2016:07	122.0	100.2	67.7	108.7	156.3	52.3
2016:08	121.2	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	122.1	100.5	68.2	111.7	152.3	52.0
2016:11	121.5	100.7	69.2	111.6	148.8	53.5
2016:12	121.5	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	124.0	103.2	71.2	112.8	149.2	54.9
2017:06	124.3	103.8	70.8	113.5	145.4	57.8
2017:07	124.6	104.1	71.0	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	126.2	107.1	74.8	116.2	138.6	59.7
2018:01	126.6	107.8	74.5	115.7	136.8	59.1
2018:02	128.1	108.5	76.9	117.8	133.3	60.8
2018:03	128.7	108.8	77.6	119.8	137.4	59.3
2018:04	128.7	109.3	76.9	116.9	133.7	57.3
2018:05	128.0	109.4	77.8	115.6	128.2	58.7
2018:06	127.7	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	127.8	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	128.3	111.3	78.0	119.3	140.1	54.1
2019:01	129.8	111.3	78.9	118.8	154.6	56.6
2019:02	128.2	111.5	75.8	114.4	156.5	54.2
2019:03	130.9	111.7	78.4	119.8	150.1	55.3
2019:04	131.5	111.8	80.3	121.3	154.0	52.8
2019:05	131.6	111.8	80.1	120.2	150.2	52.1
2019:06	131.0	111.6	81.0	119.6	149.9	51.7
2019:07	131.5	112.0	80.8	121.8	152.0	51.2
2019:08	130.7	111.8	79.1	119.3	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	130.1	111.6	79.5	123.3	146.6	48.1
2019:12	130.7	111.4	83.6	125.0	147.9	47.2
2020:01	130.7	112.0	80.0	119.5	149.1	50.9
2020:02	131.7	111.8	81.7	119.9	149.4	50.1
2020:03	121.2	103.5	74.9	120.9	127.9	49.1
2020:04	113.0	96.9	42.0	105.0	97.5	41.5
2020:05	119.4	99.8	47.2	113.8	119.8	43.1
2020:06	122.2	102.8	58.4	114.5	136.5	52.6
2020:07	124.5	104.9	64.7	117.2	139.8	54.2
2020:08	125.7	106.5	66.0	117.5	134.3	56.0
2020:09	125.5	107.5	71.1	121.3	133.8	55.4
2020:10	126.4	108.2	72.4	119.9	137.7	59.3
2020:11	127.3	109.2	73.9	120.5	135.6	57.5
2020:12	129.2	109.6	77.0	125.0	136.0	60.7
2021:01	130.4	110.1	76.9	123.3	141.6	58.7
2021:02	132.1	110.1	81.1	125.1	150.6	60.8
2021:03	132.9	111.5	83.6	125.1	160.4	64.7
2021:04	134.5	113.1	88.6	124.0	175.3	60.7
2021:05	135.4	114.6	88.8	123.7	176.0	61.2
2021:06	137.1	116.2	88.3	123.0	189.5	60.6
2021:07	139.6	116.6	92.3	125.4	206.7	59.5
2021:08	138.8	117.4	89.9	128.5	187.9	59.9
2021:09	138.1	117.6	91.0	124.1	193.3	61.1
2021:10	138.5	118.1	91.3	126.9	196.3	60.8
2021:11	139.5	118.8	93.1	128.1	201.8	61.1
2021:12	138.9	119.3	94.2	128.3	201.8	58.7
2022:01	139.9	118.5	94.6	126.4	201.5	57.6
2022:02	142.7	119.4	100.7	127.6	207.7	58.6
2022:03	143.4	119.3	100.7	131.0	218.4	57.1
2022:04	142.9	118.7	100.0	128.1	210.1	55.4
2022:05	142.9	117.9	100.2	129.5	207.5	56.1
2022:06	140.2	117.1	98.0	129.9	197.2	53.0
2022:07	139.6	116.5	99.8	126.4	207.1	52.8
2022:08	139.0	116.2	99.2	126.2	205.4	52.8
2022:09						50.9

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

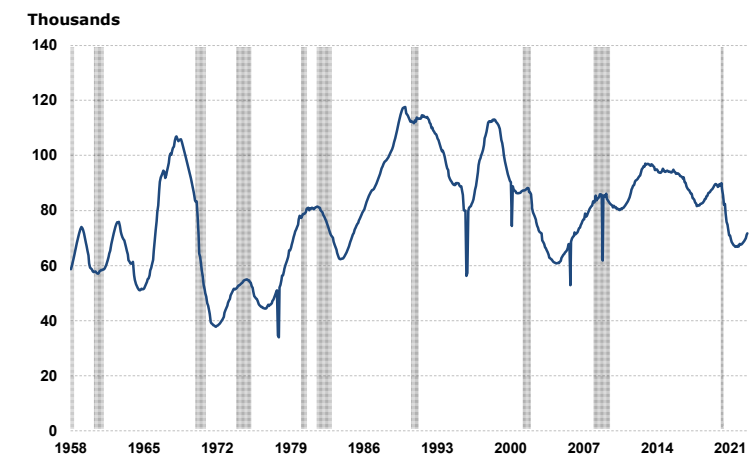
January 1980 to August 2022



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

Washington Aircraft and Parts Employment

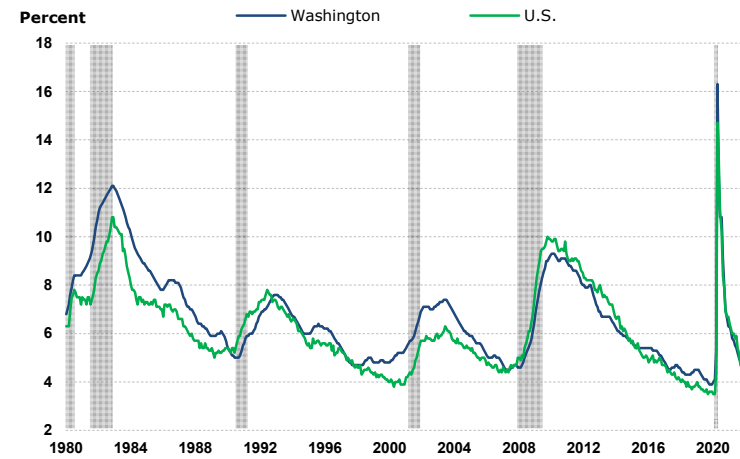
January 1958 to August 2022



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

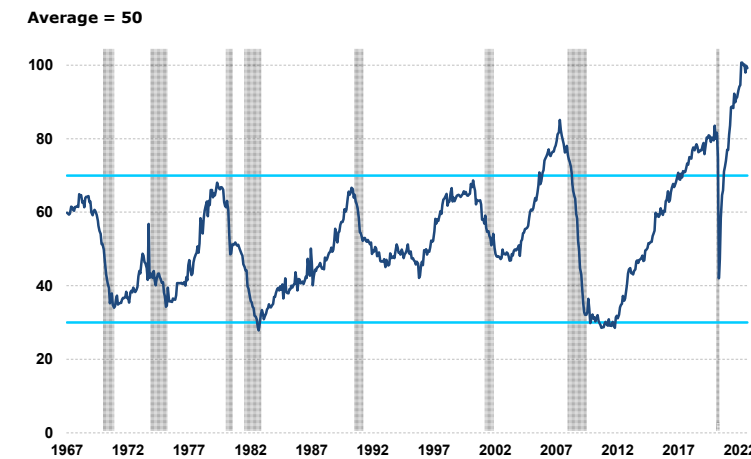
January 1980 to August 2022



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to August 2022



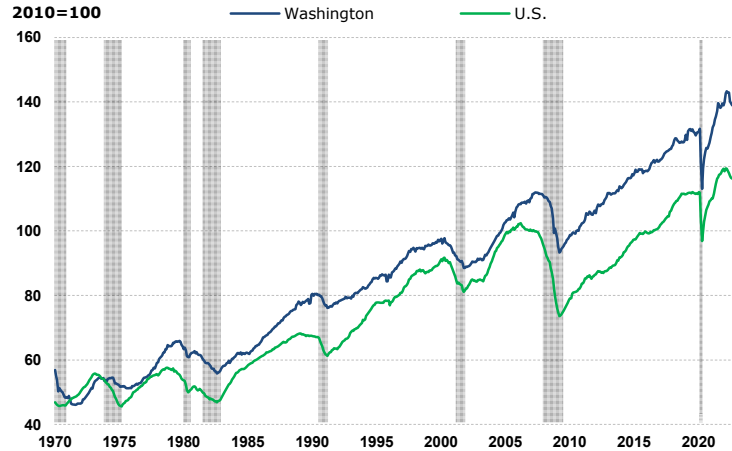
* Source: ERFC

* Shaded areas correspond with national recessions.

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

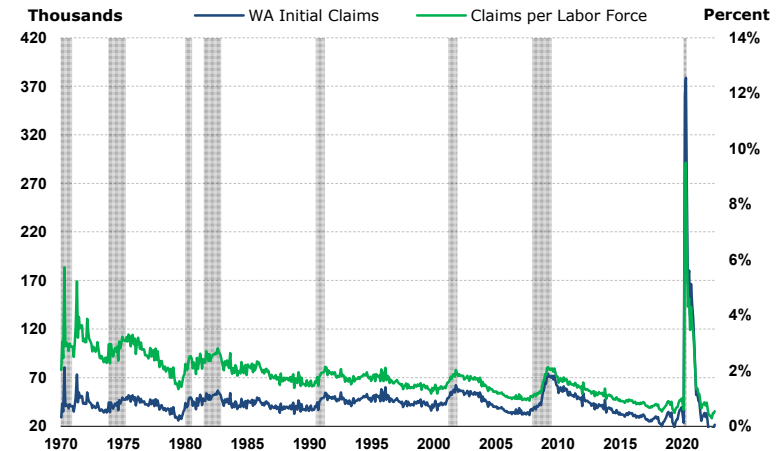
January 1970 to August 2022



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

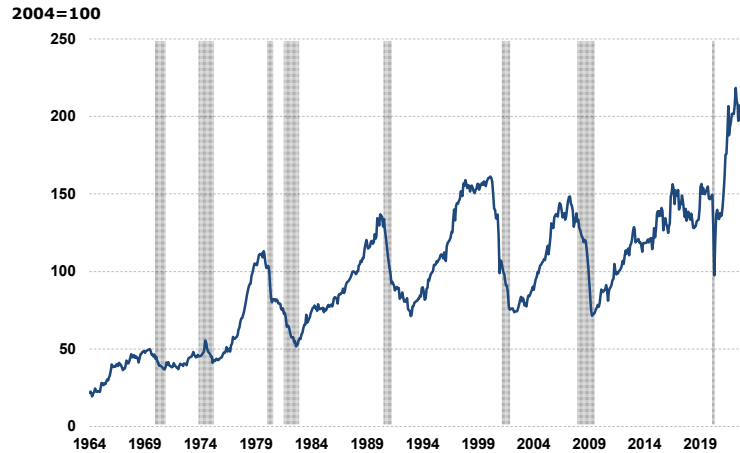
January 1970 to August 2022, S.A.



* Source: WA State Employment Security, ERFC

Washington State Help Wanted Index

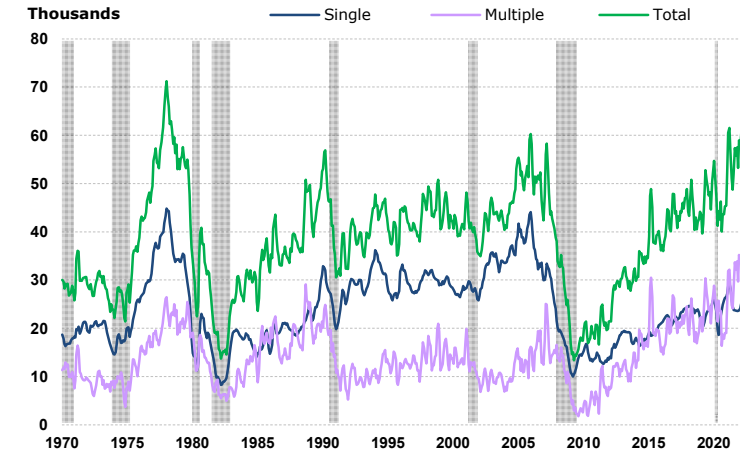
January 1964 to August 2022



* Source: The Conference Board, ERFC

Housing Units Authorized in Washington State

January 1970 to August 2022, 3mma, SAAR



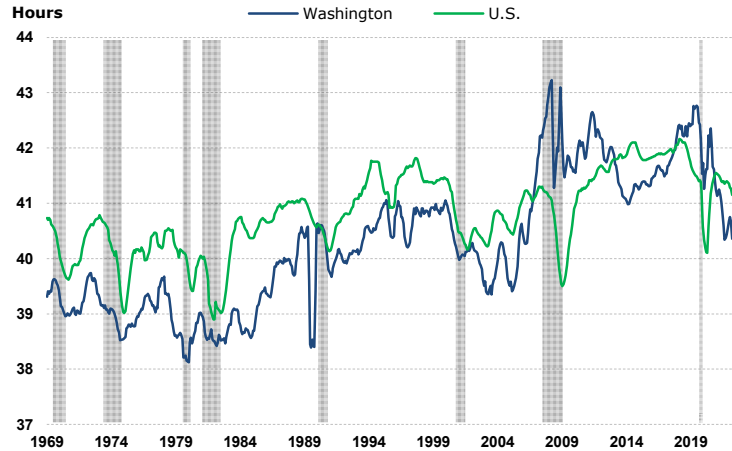
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

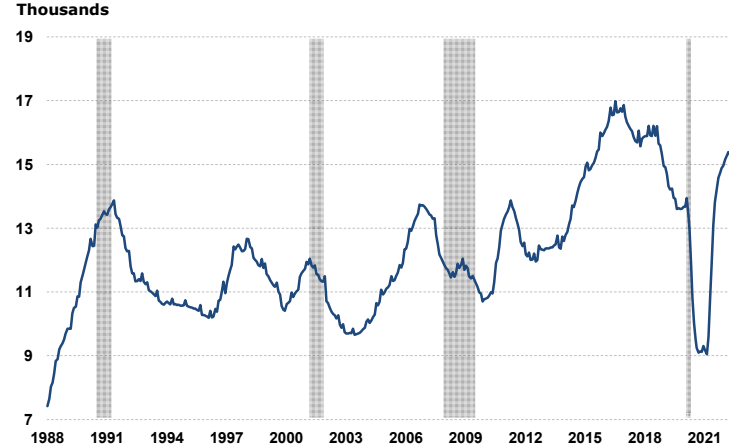
June 1969 to August 2022, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

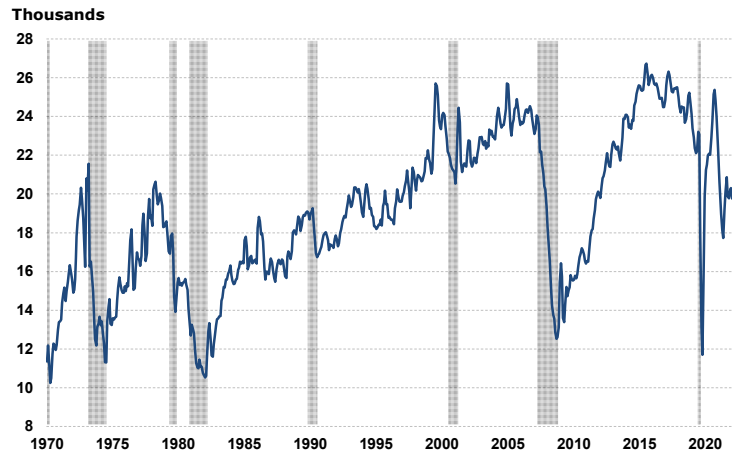
January 1988 to August 2022, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

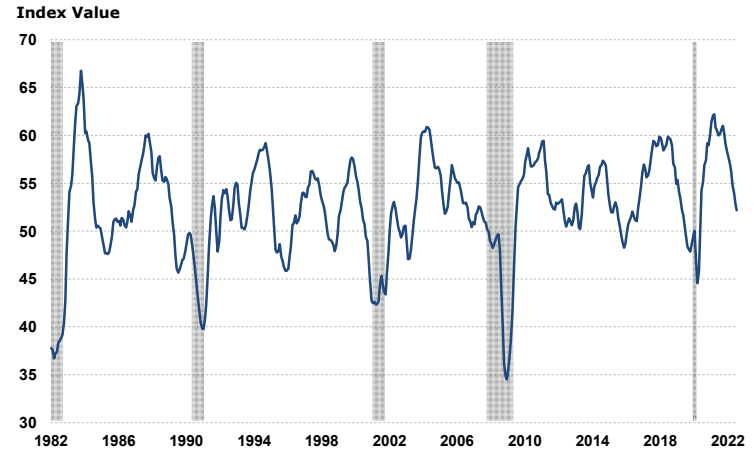
September 1970 to September 2022, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

U.S. Institute for Supply Management Index

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



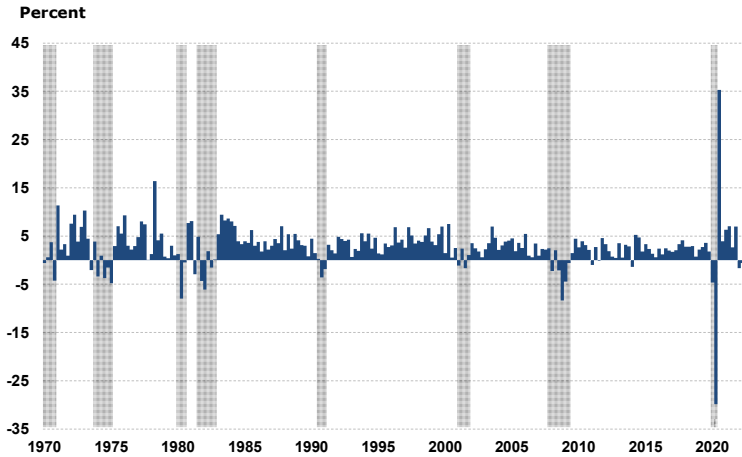
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

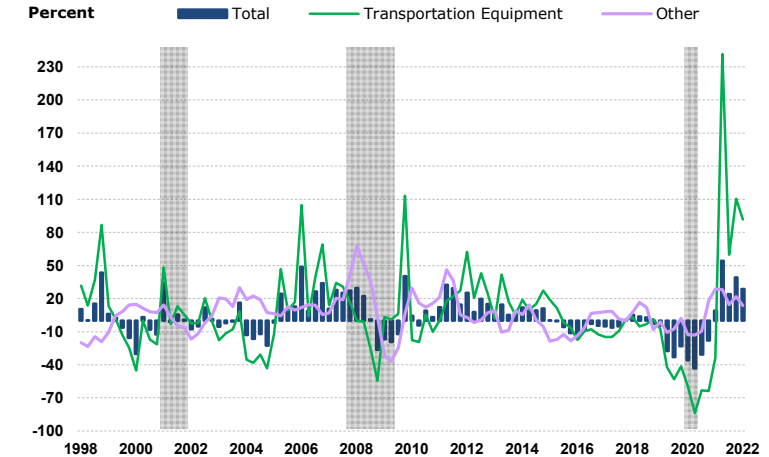
1970Q1 to 2022Q2, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

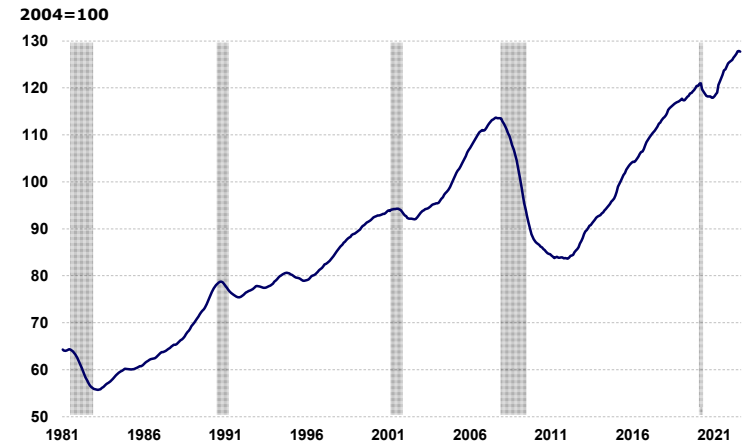
1998Q1 to 2022Q2, Year-over-year percent change



* Source: WISER

Washington State Construction Index

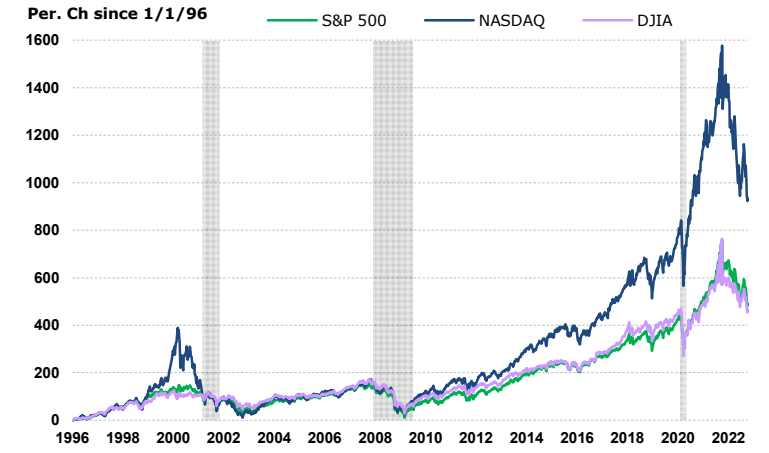
January 1981 to August 2015, 12mma



* Source: ERFC

National Stock Indexes

January 1, 1996 to October 3, 2022



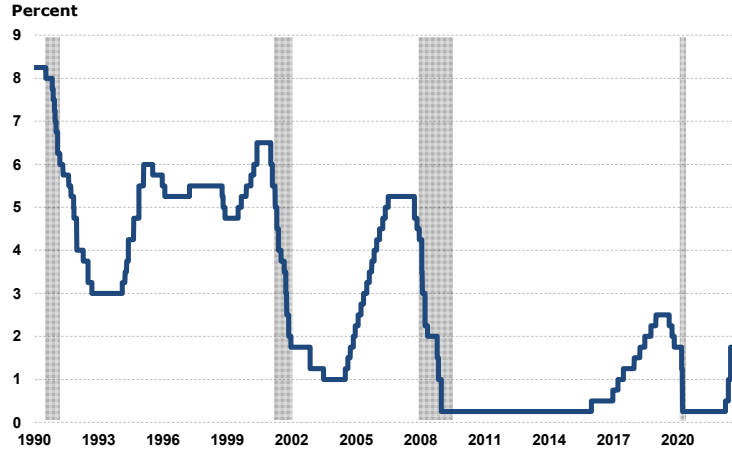
* Source: ERFC

* Shaded areas correspond with national recessions.

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

Federal Funds Target Rate

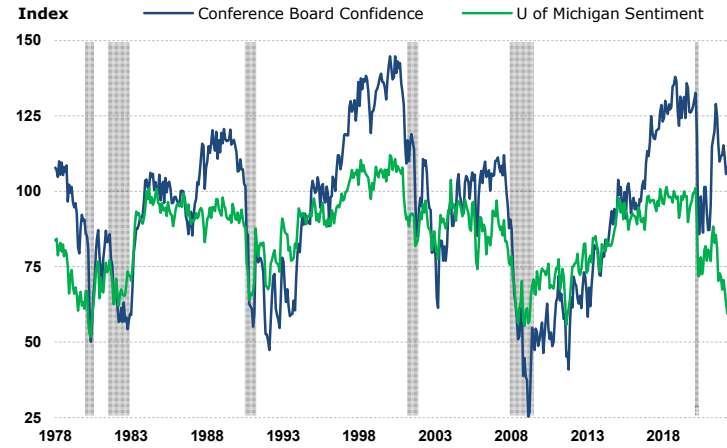
January 1, 1990 to October 3, 2022



* Federal Reserve

Consumer Confidence

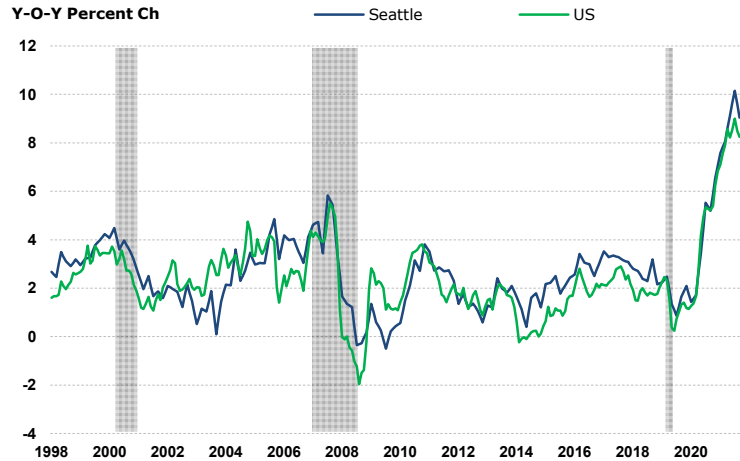
March 1978 to September 2022



* Source: The Conference Board, University of Michigan

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

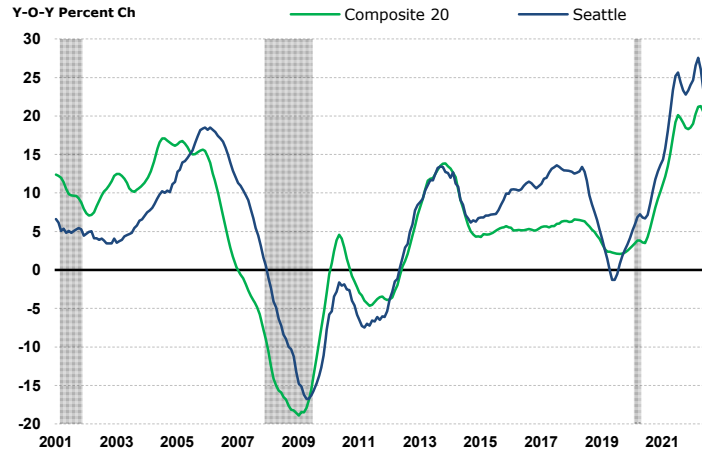
December 1998 to August 2022



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to July 2022, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.

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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.