

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 2021  
Volume XLVII, No. 3**



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# **Washington State Economic and Revenue Forecast**

Prepared by the  
Economic and Revenue Forecast Council

September 2021  
Volume XLVII, 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 the GF-S share of court fees, fines, and forfeitures. The staff is also responsible for review and coordination of the revenue forecasts of other agencies that collect relatively large amounts of GF-S revenue. These are the Department of Licensing, the Office of the Insurance Commissioner, the Lottery Commission, the State Treasurer, the Liquor and Cannabis Board and the Office of Financial Management. The Office of Financial Management is responsible for summarizing the forecasts of all other state agencies that collect relatively smaller amounts of GF-S revenue.

## **Forecast Procedure**

For each quarterly update, the staff of the Economic and Revenue Forecast Council, under the direction of the Executive Director, reviews (and if warranted, modifies) a national economic forecast prepared by IHS Markit. A state economic forecast is then prepared using an econometric model that links Washington's economy to the national economy. After review by forecast workgroups; the Governor's Council of Economic Advisors; and the Economic and Revenue Forecast Council, this state economic forecast (updated for newly released data) is used to prepare a baseline revenue forecast for GF-S and the related funds. The forecasts are based on current law and administrative practices and do not reflect pending legal challenges to GF-S receipts until they are resolved. Additionally, at least two alternative forecasts are prepared for all GF-S and related fund sources and presented to the Forecast Council for approval. Once the Council approves the forecast, it becomes the official forecast of GF-S and related fund revenues.

Data in this publication are accurate through October 1, 2021.

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## Executive Summary

- **The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Delta variant has created more uncertainty just as new cases were reaching the lowest point since the pandemic started.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **The forecast for GDP growth in 2021 is now 6.2%, down from 6.7% in the June forecast. For 2022, real GDP growth is 4.3%, down from 4.4% in the previous forecast. We expect growth rates of 2.3%, 2.1%, and 2.0% in 2023 through 2025 compared to the previous forecast of 2.2%, 2.0%, and 1.9%**
- **The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy.**
- **Washington employment is 3.6% lower than at its February 2020 peak.**
- **The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%).**
- **Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker.**
- **General Fund-State (GF-S) revenue collections since the June forecast have come in \$162 million (2.6%) above the forecasted amount.**
- **The preliminary tally of GF-S revenue for the 2019-21 biennium was \$45 million lower than forecasted in June. The GF-S forecast was increased by \$845 million in the 2021-23 biennium and \$891 million in the 2023-25 biennium.**
- **The preliminary tally of total revenue for funds subject to the budget outlook process in the 2019-21 biennium was \$40 million lower than the previous forecast. The total forecast for these fund was increased by \$927 million in the 2021-23 biennium and \$931 million in the 2023-25 biennium.**

## U.S. Economic Forecast

*The economy has improved since the onset of the pandemic*

The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Delta variant has created more uncertainty just as new cases were reaching the lowest point since the pandemic started. It does appear that the latest surge in cases has peaked without the need for new restrictions to be implemented. With vaccinations increasing, the economy has largely reopened, and with the help of recent stimulus, economic growth has resumed. Even with the rapid improvement, however, economic activity remains below the pre-pandemic peak.

*Policymakers have approved trillions of dollars in stimulus*

Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic. Stimulus related to the pandemic has been over \$500 billion in five major categories. Loan and grant programs (\$1.03 trillion), income support (\$882 billion), state and local government funding (\$873 billion), direct payments (\$870 billion), and health spending (\$677 billion). The remainder of the spending is comprised of tax policy and other spending such as disaster support, higher education, and housing. The Federal Reserve has engaged in asset purchases, liquidity measures, and loan programs to assist the economy.

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

This forecast is based on a modified version of IHS Markit's September 2021 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. The forecast for GDP growth in 2021 is now 6.2%, down from 6.7% in the June forecast. For 2022, real GDP growth is 4.3%, down from 4.4% in the previous forecast. We do not have a new long term forecast from Blue Chip since the March 2021 forecast. For 2023-25, we assume the same growth rates as the March Blue Chip long term forecast. We expect growth rates of 2.3%, 2.1%, and 2.0% in 2023 through 2025 compared to the previous forecast of 2.2%, 2.0%, and 1.9%.

## Washington Economic Forecast

*The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy*

The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy. Employment growth during the last three months was slightly less than expected in the June forecast. Washington employment is 3.6% lower than at its February 2020 peak. Washington's unemployment rate was unchanged in August at 5.1%. Washington housing construction moderated in the second quarter after reaching its highest level in nearly 43 years. Seattle-area home price growth was the highest ever in July. Exports of transportation equipment increased for the first time in two and a half years. Washington personal income declined 16.5% (SAAR) in the second quarter because of a reduction in

direct payments to individuals. The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%). Seattle-area consumer price inflation matched the national average in the year ending in August 2021.

*The Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker*

The Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker. We expect a 2.4% increase in Washington employment this year which is up from the 2.0% increase in the June forecast. We expect employment growth to average 2.2% per year in 2022 through 2025 compared to 2.3% per year in the June forecast. Our forecast for nominal personal income growth this year is 6.5%, up from 6.0% in the June forecast. Personal income growth will slow next year as the extraordinary stimulus of the last two years is withdrawn. We expect personal income growth of only 1.7% in 2022 compared to 1.5% in the June forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.3% per year compared to the 4.8% rate in the June forecast. We expect 53,500 housing units authorized by building permits this year, down from 54,200 in the June forecast. We expect permits to average 44,600 units in 2022 through 2025, also down from 45,300 units in the June forecast. We expect the Seattle CPI to rise 4.2% this year, up from 3.0% in the June forecast. We expect Seattle inflation to average 2.1% per year in 2022 through 2025 compared to 2.0% per year in the June forecast.

## Revenue Forecast

*The revenue forecast has been increased due to stronger-than-expected taxable activity and a forecasted increase in state personal income*

Since the June forecast, taxable activity has been moderately stronger than expected, with tracked collections coming in \$162 million (2.6%) above the June forecast. Most of the surplus in collections stemmed from real estate excise taxes, which saw a large increase in commercial sales on top of continued strength in residential sales. Other taxable activity such as retail trade was also stronger than forecasted. The combination of a higher base level of activity and an increase in state personal income in the September economic forecast has resulted in an increase in forecasted revenue for the current 2021-23 biennium as well as the subsequent 2023-25 biennium.

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

19-21: -\$45  
21-23: \$845  
23-25: \$891

In the 2019-21 biennium, which concluded on June 30, 2021, General Fund-State (GF-S) revenue collections that are tracked monthly came in \$42.6 million lower than forecasted in June. The preliminary tabulation of revenue from other sources came in \$2.2 million lower than forecasted, resulting in a total revenue reduction of \$44.9 million. Tracked revenue collections through September 10 for the current 2021-23 biennium came in \$204.7 million higher than forecasted. The forecasted increase in taxable activity adds \$640.8 million to expected revenue for the remainder of the biennium, resulting in a total forecast increase

of \$845 million. The forecast for the 2023-25 biennium was increased by \$891.1 million. The September 2021 forecast for GF-S revenue totals \$50.803 billion in the 2019-21 biennium, \$56.457 billion in the 2021-23 biennium and \$59.870 billion in the 2023-25 biennium.

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

*2019-21:  
-\$40.2*

*2021-23:  
\$927.4*

*2023-25:  
\$930.9*

By law, enacted biennial budgets must balance not only in the initial biennium of the budget but in the subsequent biennium as well, given assumptions of growth in spending from one biennium to the next and the current revenue forecast. The budget outlook that determines this balance looks at not only GF-S revenue and spending but also that of the Education Legacy Trust Account, the Opportunity Pathways Account and the Workforce Education Investment Account. The preliminary tally of total revenue for funds subject to the budget outlook for the 2019-21 biennium is \$53,131.7 million, \$40.2 million less than the June forecast. The forecast of total revenue for the 2021-23 biennium is \$59,340.5 million, \$927.4 million more than the June forecast. The forecast for the 2023-25 biennium is \$63,082.1 million, \$930.9 million more than the June forecast.



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

- **The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Delta variant has created more uncertainty just as new cases were reaching the lowest point since the pandemic started.**
- **Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic.**
- **U.S. real GDP increased 6.3% (SAAR) in the first quarter of 2021 and increased another 6.7% (SAAR) in the second quarter. The growth in the past four quarters has now been sufficient to reach the previous peak in GDP in the fourth quarter of 2019.**
- **Employment has increased and unemployment has trended down but neither are at pre-pandemic levels.**
- **Headline inflation has risen rapidly but the increase is likely to be temporary.**
- **The housing market has recovered as home prices surge; manufacturing has been strong.**
- **Oil prices are increasing after an unprecedented drop due to the pandemic. U.S. production has fallen.**
- **The forecast for GDP growth in 2021 is now 6.2%, down from 6.7% in the June forecast. For 2022, real GDP growth is 4.3%, down from 4.4% in the previous forecast. We expect growth rates of 2.3%, 2.1%, and 2.0% in 2023 through 2025 compared to the previous forecast of 2.2%, 2.0%, and 1.9%**
- **Due to the high degree of uncertainty regarding the extent to which the COVID-19 pandemic will continue, the uncertainty in the baseline forecast is elevated.**

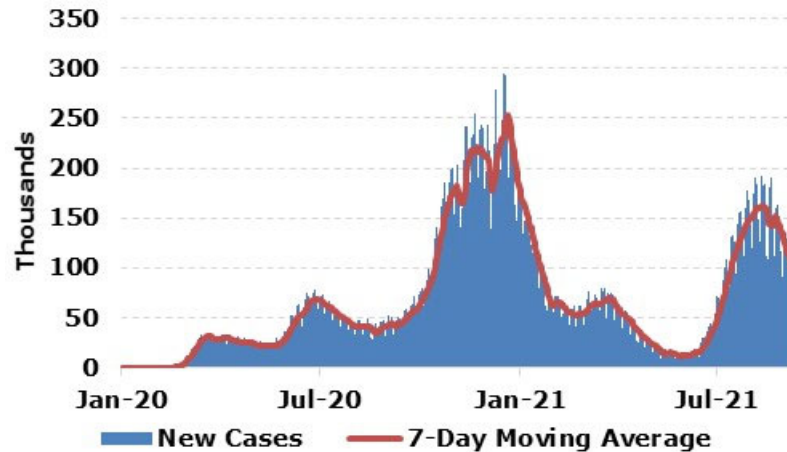
### Current Conditions

*The economy has improved since the onset of the pandemic*

The COVID-19 pandemic and resulting social distancing and business shutdowns severely weakened the economy. The rapid spread of the Delta variant has created more uncertainty just as new cases were reaching the lowest point since the pandemic started. It does appear that the latest surge in cases has peaked (see figure 1.1) without the need for new restrictions to be implemented. With vaccinations increasing, the economy has largely reopened, and with the help of recent stimulus, economic

growth has resumed. Even with the rapid improvement, however, economic activity remains below the pre-pandemic peak.

**Figure 1.1: New COVID-19 Cases**



Source: Source: U.S. Centers for Disease Control; data through October 1, 2021

*Policymakers have approved trillions of dollars in stimulus*

Policymakers have approved trillions of dollars of fiscal and monetary support in response to the COVID-19 pandemic. Stimulus related to the pandemic has been over \$500 billion in five major categories. Loan and grant programs (\$1.03 trillion), income support (\$882 billion), state and local government funding (\$873 billion), direct payments (\$870 billion), and health spending (\$677 billion). The remainder of the spending is comprised of tax policy and other spending such as disaster support, higher education, and housing. The Federal Reserve has engaged in asset purchases, liquidity measures, and loan programs to assist the economy.

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

The COVID-19 crisis, efforts taken to contain it, and the subsequent stimulus programs and other responses have created unprecedented volatility in economic growth. U.S. real GDP plummeted a record 31.4% (SAAR) in the second quarter of 2020 followed by a record 33.4% (SAAR) gain in the third quarter of 2020. GDP growth has since continued to recover on a more sustainable path. Real GDP increased 6.3% (SAAR) in the first quarter of 2021 and increased another 6.7% (SAAR) in the second quarter. The growth in the past four quarters has now been sufficient to reach the previous peak in GDP in the fourth quarter of 2019. Consumer spending increased a strong 12.0% (SAAR) in the second quarter helped by stimulus payments to individuals and added 7.9 points to topline GDP growth. Growth in fixed investment slowed to 3.3% (SAAR) in the second quarter as residential construction declined 11.7% (SAAR). Government spending declined 2.0% (SAAR) due primarily to a 10.7% (SAAR) decline in federal nondefense spending related to stimulus measures in the prior quarter.

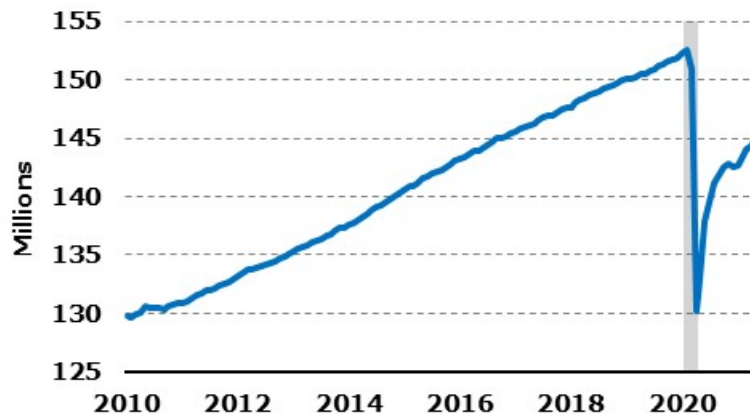


Exports increased 7.6% (SAAR) while imports increased 7.1% (SAAR) as trade is still recovering from shutdowns. Net exports resulted in a net negative to GDP growth of 0.2 points.

*Employment remains 5.3 million lower than the pre-pandemic level*

Nonfarm payroll employment has continued to grow after the unprecedented 20.7 million job decline in April of last year due to the pandemic. Job growth slowed to 235,000 in August as the Delta variant surged and limited hiring. The leisure and hospitality sector once again felt the impact of the virus, posting no job gains in August. Retail trade employment declined by 28,500 jobs, mostly due to a 23,220 job decline in food and beverage stores. The construction sector lost 3,000 jobs despite the strong housing market. Government payrolls declined by 8,000. The manufacturing sector added 37,000 jobs with most of the gains in motor vehicles (+24,100) due to the recent surge in car purchases. Even with the recent job gains, total nonfarm employment remains 5.3 million lower than the pre-pandemic February 2020 level (see Figure 1.2).

**Figure 1.1: Nonfarm Payroll Employment**



Source: U.S. Bureau of Labor Statistics; data through September 2021

*The unemployment rate continues to trend downward*

The unemployment rate has continued to trend downward as shutdowns have been lifted and the economy has recovered. After spiking in April 2020 at 14.8%, the unemployment rate has steadily declined to 5.2% in August 2021. Prior to the pandemic, the unemployment rate was at a historic low of 3.5% in February 2020. The labor force participation rate was at 61.7% in August, the same as a year ago but down from a pre-pandemic high of 63.4% in January 2020. Average hourly earnings rose 17 cents to \$30.73 while the average workweek held steady at 34.7 hours in August.

*Consumer confidence is declining*

Consumer confidence has declined due to the recent wave of COVID-19 cases. The rise in inflation over the past few months has also taken a toll on consumer attitudes. The Conference Board's Consumer Confidence Index declined 5.9 points to 109.3

in September. The present conditions component fell 5.5 points while expectations declined 6.2 points. The University of Michigan Consumer Sentiment index increased in September by 2.5 points to 72.8, but remains near its lowest reading since 2011 of 70.3. Present conditions increased 1.6 points and expectations increased 3.0 points. Even with the increase in September, consumer sentiment has declined 12.7 points the past three months, driven mostly by a 15.4 point decline in future expectations.

*Oil prices have increased*

Oil prices have increased sharply since reaching a trough at the onset of the pandemic. The damage to oil platforms and infrastructure from Hurricane Ida in late August appears to be fixed. Brent spot crude prices are now at \$75 per barrel at the end of September after a trough of \$14 in April of last year. West Texas Intermediate (WTI) prices were hit harder as oil markets fully took account of the pandemic. WTI prices reached a weekly low of \$3 per barrel in April 2020 and even posted a single day price of an unheard of -\$40 per barrel. WTI prices have since increased to \$72 per barrel at the end of September. The rise of the Delta variant has slowed the recovery in oil demand. Travel restrictions from mainland China to reduce the spread of the disease have limited demand in Asia. OPEC+ continues to try manipulate prices with supply changes. The organization removed nearly 10 million barrels per day of production in April 2020 in an effort to support prices as demand plummeted. Since then, the group has been slowly returning barrels to the market. Prior to the pandemic, U.S. production was at an all-time high at 12.866 million barrels per day (bpd) in November 2019. Production then hit a trough of 10.019 bpd as the pandemic caused demand to plummet. The latest data from July show an increase to 11.307 million bpd. The Baker Hughes rig count has been increasing as prices have risen. As of October 1<sup>st</sup>, the rig count was 528, up 262 since last year.

*Inflation has risen rapidly but the increase is likely temporary*

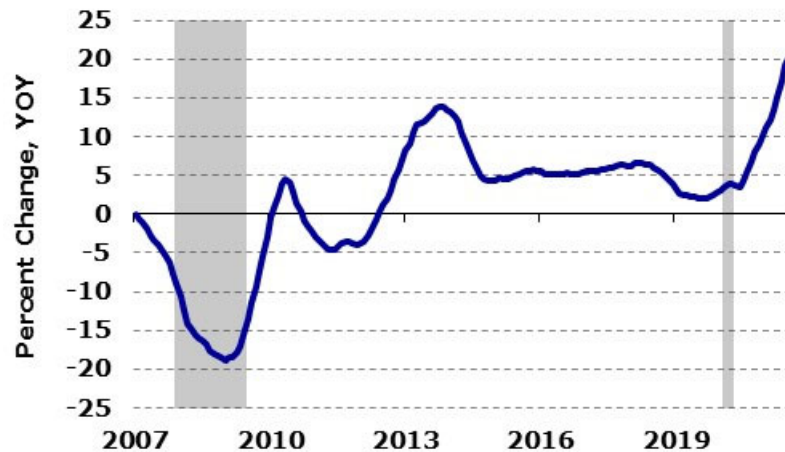
Headline inflation has risen rapidly but the increase is likely to be temporary. With the economy reopening, supply has not been able to meet the surge in demand. The recent surge of the Delta variant has further caused supply chain issues that were not resolved from the onset of the pandemic. Shortages of commodities have also temporarily pushed prices higher. Year-over-year, the Consumer Price Index (CPI) was up 5.2% in August, just down from 5.3% the month before and the highest level of inflation since 2008. A year ago, headline inflation was 1.3% as the economy was under shutdown orders due to the pandemic. Lean inventories for cars, combined with increased demand helped by recent stimulus, have pushed prices in the auto sector up significantly. Other sectors affected by stay-at-home orders have seen some of the largest impacts. Energy prices, particularly gasoline (+42.7%), have surged as workers have returned to the office and began commuting again. It does appear, however, that some of the recent increases in prices are moderating. Shelter cost inflation has remained relatively

steady and is now 2.8% over the year. Core consumer prices, which exclude food and energy, were up 4.0% over the year.

*Home prices are surging*

Home prices are surging due to tight supply and strong demand for housing. The seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index increased 1.5% in July following a 1.8% gain the month before. Home prices are now 20.0% higher than a year ago (see figure 1.2). Lumber prices skyrocketed over the past year, adding to the cost of new homes and causing projects to be delayed. The random length lumber price reached \$1,671 per 100,000 board feet in May, over four times the price of \$336 from May 2020. Prices have since come down to \$625 as of October 1<sup>st</sup>. Homebuilder confidence remains high and well above pre-pandemic levels, but has been cooling the past several months. In September, confidence increased one point to 76, but remains 7 points lower than a year ago. In May 2020, confidence was at 37 as the worst of the pandemic was unfolding. Expansionary monetary policy is supporting home prices by keeping interest rates low which allows buyers to purchase more expensive homes. The rate on a 30-year mortgage has remained low after reaching a historic low of 2.65% in January. The rate on a 30-year mortgage is now at 3.01%, up from 2.88% 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 2021

*The housing market has recovered*

The housing market has recovered to pre-pandemic levels, and has been strong since reaching a peak early in the year. Housing starts increased 3.9% in August and are 6.7% above a year ago. Single-family starts in August declined 2.8% while volatile multi-family starts increased 20.6%. Low inventory should help keep new construction strong despite high material costs. Housing permits increased 5.6% in August. Single-family permits increased 0.2% and multi-family permits increased 15.3%. Total permits are up 13.1% from a year ago. New

home sales increased 1.5% in May to a four-month high of 769,000 (SAAR), but are down 24.3% since last year.

*The manufacturing sector has been strong*

The manufacturing sector has been strong after contracting sharply in April and May of last year. The Institute for Supply Management (ISM) Report on Business index increased to 61.1 (index values below 50 indicate contraction) in September from 59.9 in August. Supply chain disruptions appear to be resolving. The new orders component remained at 66.7 as demand remains strong. Production fell to 59.4 from 60 the month before. The employment component moved back into positive territory, increasing 1.2 points to 50.2. According to the survey, an overwhelming majority of the companies are attempting to hire, but are having trouble filling positions. The latest G-17 report from the Federal Reserve indicates manufacturing output advanced 0.2% in August and is now up 5.9% from a year ago. Manufacturing output is now 1.0% above its pre-pandemic level. New orders for core capital goods (nondefense capital goods excluding aircraft) increased 0.5% in August and are up 16.4% from a year ago.

*U.S. exports have returned to growth*

U.S. exports are growing again as the global economy begins to emerge from pandemic related restrictions. However, virus outbreaks in the Asia Pacific region have led to new containment measures, disrupting production and trade in a region that accounts for 37% of global merchandise exports. Total exports in the second quarter surged 50.7% year over year. Transportation equipment exports rebounded 80.3% year over year after declining for six consecutive quarters. Growth was boosted from Boeing 737 Max airplanes being recertified by most countries with the exception of China. Oil and gas exports more than doubled since last year as demand picked up due to more commuting and travel. Exports to the rest of North America have surged. Year over year growth in exports to Canada was up 55.4% while exports to Mexico are up 80.4%. Export growth to China remain strong, up 31.7% from a year ago despite the ongoing trade war.

## 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 2021 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. The forecast for GDP growth in 2021 is now 6.2%, down from 6.7% in the June forecast (see Figure 1.4). For 2022, real GDP growth is 4.3%, down from 4.4% in the previous forecast. We do not have a new long term forecast from Blue Chip since the March 2021 forecast. For 2023-25, we assume the same growth rates as the March Blue Chip long term forecast. We expect growth rates of 2.3%, 2.1%, and 2.0% in 2023 through 2025 compared to the previous forecast of 2.2%, 2.0%, and 1.9%.

**Figure 1.4: U.S. Real GDP Growth**



Source: U.S. Bureau of Economic Analysis, September 2021 ERFC forecast; historical data through 2020

*Key assumptions regarding the pandemic are included in the forecast*

The forecast includes key assumptions related to the economic recovery and the pandemic. The forecast assumes the current outbreak will moderate the recovery in consumer spending on services and exacerbate supply issues, including labor force participation. However, we do not expect a recurrence of the national lockdown that precipitated the 2020 recession.

*The forecast includes the stimulus and tariffs*

The September forecast includes all pandemic relief measures enacted in 2020 and the \$1.9 trillion American Rescue Plan enacted in March. This forecast assumes the Infrastructure Investment and Jobs Act which increases federal spending by \$293 billion through FY 2026 relative to June forecast. The forecast does not include \$3.5 trillion reconciliation bill on social infrastructure. The forecast includes tariffs enacted by the U.S. and China since 2017 that are still in effect.

*The previous expansion was the longest on record*

The U.S. economy entered recession in February 2020. This marked the end of the longest economic recovery on record. The recovery lasted 128 months from the 2007-09 recession through February, surpassing the 120 months from the 1990 recession. The recession proved to be the shortest recorded. According to the National Bureau of Economic Research, the recession ended in April 2020, just two months after the peak in February 2020.

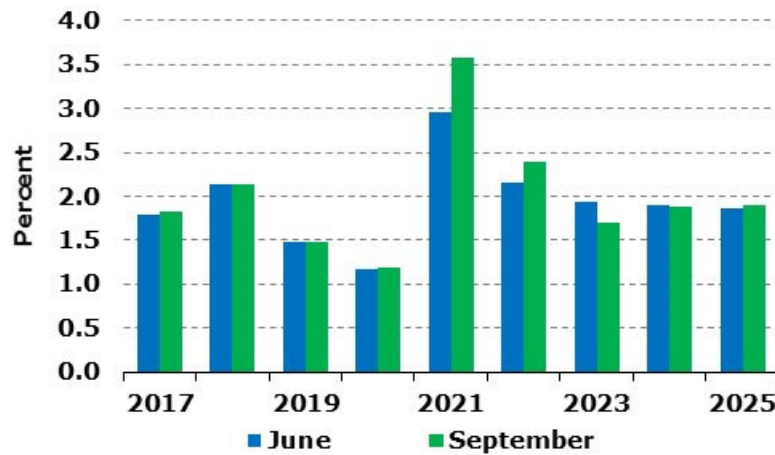
*Oil prices are higher than in June*

Oil prices have increased due to strong demand and continued production restraint by OPEC. The COVID-19 Delta variant has renewed some travel restrictions, particularly in Asia, potentially limiting oil demand. However, successful vaccine programs around the world are leading countries to reopen their economies. The refiner acquisition price of crude oil in 2021 is expected to average \$66 per barrel in 2021, up from \$65 in the June forecast. We expect oil prices to peak at \$68 in 2022. The firming of prices will result in increased U.S. production, keeping prices in check even as demand continues to grow.

*Inflation is expected to moderate*

Inflation (as measured by the price index for personal consumption expenditures) is expected to be higher this year than in the June forecast (see Figure 1.5). We expect inflation to be 3.6% this year, up from 2.9% in the previous forecast. The increase in inflation this year is expected to be temporary. Much of the recent increase in prices is due to the recovery of prices of services driven down during the pandemic. Constraints on supply chains have also impacted prices. Inflation is expected to decline to 2.4% in 2022. Inflation is expected to reach a trough of 1.7% in 2023 and then increase to 1.9% in 2024 and 2025. Core inflation (minus food and energy) is expected to be 3.1% this year and then trend down to 2.0% in 2025.

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



Source: U.S. Bureau of Economic Analysis, September 2021 ERFC forecast; historical data through 2020

*Consumer spending growth is expected to accelerate*

Consumer spending is expected to accelerate this year due to the reopening of the economy after various measures taken in 2020 to combat the spread of COVID-19. Fiscal stimulus measures have also given a boost to consumers. Consumer service industries, hit hardest by the pandemic and subsequent social distancing measures, have rebounded sharply. Real consumer spending is expected to grow 7.9% this year, up from a 3.8% decline in 2020. The forecast calls for growth of 3.7% in 2022 trending downward as the recovery continues, reaching 2.3% in 2024 and 2025.

*Employment will take time to recover*

Employment took a major hit from the COVID-19 pandemic but is now in the process of recovering. 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. The employment forecast calls for growth of 2.7% this year, unchanged from the June forecast. We expect average annual employment of 146.1 million jobs in 2021; less than the pre-pandemic annual average of 150.9 million jobs in 2019. We don't expect to reach the pre-pandemic peak of 151.9 million

jobs until the fourth quarter of 2022. Job growth is expected to continue as the recovery continues but to trend downward throughout the forecast, reaching 0.6% in 2025. We expect the unemployment rate to average 5.6% this year, up from 5.4% forecasted in June. Going forward, the forecast calls for the unemployment rate to decline to 3.7% in 2023 through 2025.

*Business investment is expected to rebound this year*

Real nonresidential fixed investment is expected to increase 8.1% this year after declining 5.3% in 2020. The continuing recovery is motivating businesses to expand capacity to keep pace with recovering sales. The increase in oil prices has led to rising drilling activity. Supply chain bottlenecks have led to order backlogs, which in turn, have caused inventories to hit an all-time low. The capital-intensive manufacturing sector is expanding to meet demand. After an extended grounding, Boeing resumed delivery of the 737 MAX in December, although China still has a ban on the plane. Office vacancy rates remain high however as Americans still work from home even after social distancing requirements have eased. We expect real nonresidential construction to decline 6.9% this year after declining 12.5% in 2020. The forecast calls for another 1.1% decline in 2022 before returning to growth in 2023 at 0.7%. We expect growth to increase and reach 3.5% in 2025. Real nonresidential construction will not have fully recovered to its levels before the pandemic by the end of 2025. Real equipment investment is expected to rebound this year, growing 12.7% after declining 8.3% in 2020. We expect growth in real equipment investment to average 5.6% from 2022 to 2025. We expect real nonresidential fixed investment growth to average 4.5% from 2022 through 2025.

*The housing market has been surging*

The housing market has been surging. Record low interest rates and inventories have helped the market. There has also been an increase in demand from people working remotely and wanting to relocate. The outlook for housing is slightly lower compared to June, but remains strong for 2021. The September forecast calls for housing starts to increase 10.6% this year. The June forecast expected an increase of 12.8%. We expect single-family housing starts to increase 9.5% and the multi-family segment to increase 13.5% this year. We expect 2021 to be the peak in housing starts at 1.55 million units. We expect a decline through the remainder of the forecast, with housing starts reaching 1.27 million in 2025.

*Growth in major U.S. trading partners has been revised up*

The COVID-19 pandemic has affected economies throughout the world. The Delta variant has led to new containment measures, particularly in places where vaccination rates are lagging. Even with the impact of the new variant, economic growth of U.S. major trading partners is expected to be stronger than in June. Economic growth of major U.S. trading partners is expected to rebound to 6.0% this year after a 4.5% decline in 2020. The June forecast called for growth of 5.6% in 2021. We expect U.S. major trading partner growth of 4.0% next year and then average growth of 2.7% from 2023 through 2025. Real U.S.

exports are forecasted to increase 4.9% this year after declining 13.6% in 2020. Exports are receiving a boost from resumed deliveries of the Boeing 737 MAX. We expect real export growth of 6.9% in 2022 as the global economy recovers. Real export growth is then expected to trend downward and reach 4.6% in 2025.

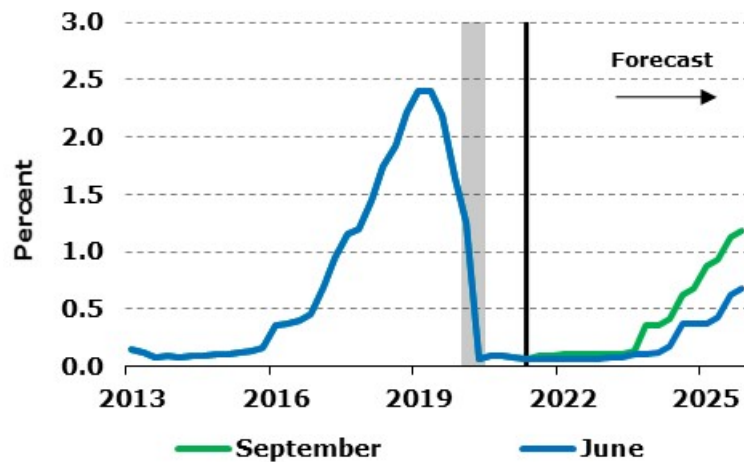
*The fiscal response to COVID has been massive*

The six COVID-19 relief measures have been far more substantial than the fiscal response to the Great Recession. Both episodes had their highest one year cost, or peak cost, in the third year after the initial stimulus. The American Recovery and Reinvestment Act of 2009 had a peak cost to the federal government of \$1.0 trillion and ended up costing \$787 billion over ten years. The combination of COVID-19 stimulus to date is expected to peak at \$5.4 trillion and total \$5.3 trillion over ten years.

*We expect the first Federal Reserve rate hike in the second half of 2023*

The Federal Reserve lowered the federal funds rate to near zero in response to the pandemic. The Federal Reserve has also brought back several credit facilities from the previous recession and created new ones to support the economy and ensure normal functioning of credit markets. The recent rise in inflation is expected to be transitory as much of the increase is related to the initial impact of the pandemic the previous year. Since the June forecast, the Federal Reserve Chair asserted that “substantial further progress” (a precondition to taper asset purchases) had been achieved with respect to inflation but not with maximum employment. We expect the Federal Reserve to reduce asset purchases in the next several months beginning in November and lasting through much of 2022. We now expect the first hike in the target for the federal funds rate to occur in the second half of 2023 (see Figure 1.6). The June forecast assumed the first rate hike would occur in June of 2024.

**Figure 1.6: Effective Rate on Federal Funds**



Source: Board of Governors of the Federal Reserve, September 2021 ERFC forecast; historical data through 2021 Q3



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**

- Rising COVID-19 virus infections among the unvaccinated
- The re-imposition of some social restrictions
- New variants of COVID-19 causes another wave of cases
- The increase in inflation is not temporary
- Weak demand causes businesses to slow re-hiring of laid-off workers
- Increasing geopolitical tensions negatively affect consumer confidence
- Monetary policy is ineffective
- Deficit fears limit fiscal policy
- A breakdown in trade relations
- Global growth weakens, pulling exports down

### **Upside Risks**

- COVID-19 infections/deaths decline faster than anticipated
- COVID-19 vaccines are distributed more quickly than expected
- 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 2025

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Real National Income Accounts (Billions of Chained 2012 Dollars)</b>								
Real Gross Domestic Product	18,362.3	18,804.2	18,631.3	18,936.2	19,938.7	20,563.1	21,021.5	21,471.9
% Ch	2.8	2.4	-0.9	1.6	5.3	3.1	2.2	2.1
Real Consumption	12,664.1	12,980.0	12,803.0	13,172.9	13,904.1	14,310.8	14,637.0	14,976.1
% Ch	2.7	2.5	-1.4	2.9	5.6	2.9	2.3	2.3
Real Nonresidential Fixed Investment	2,620.3	2,768.1	2,748.1	2,764.2	2,966.5	3,096.1	3,227.4	3,374.6
% Ch	5.2	5.6	-0.7	0.6	7.3	4.4	4.2	4.6
Real Residential Fixed Investment	618.5	603.9	612.2	701.3	672.7	643.0	641.2	651.2
% Ch	2.5	-2.4	1.4	14.6	-4.1	-4.4	-0.3	1.6
Real Personal Income	16,119.2	16,588.2	17,254.9	18,116.8	17,635.9	18,102.6	18,623.6	19,135.5
% Ch	3.1	2.9	4.0	5.0	-2.7	2.6	2.9	2.7
Real Per Capita Income (\$/Person)	49,153	50,320	52,110	54,609	53,043	54,216	55,510	56,741
% Ch	2.4	2.4	3.6	4.8	-2.9	2.2	2.4	2.2
<b>Price and Wage Indexes</b>								
PCE Price Index (2012=100)	107.2	109.1	110.6	112.8	117.0	118.9	121.1	123.4
% Ch	2.0	1.8	1.3	2.0	3.7	1.6	1.8	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.481	2.533	2.573	2.631	2.748	2.791	2.843	2.899
% Ch	2.2	2.1	1.6	2.3	4.4	1.6	1.9	2.0
Employment Cost Index (Dec. 2005=1.0)	1.314	1.354	1.395	1.437	1.499	1.564	1.619	1.672
% Ch	2.8	3.1	3.0	3.0	4.4	4.3	3.5	3.3
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	20,019.5	20,940.8	21,039.6	21,846.4	23,952.4	25,186.5	26,296.9	27,463.7
% Ch	5.1	4.6	0.5	3.8	9.6	5.2	4.4	4.4
Personal Income	17,278.4	18,100.9	19,076.0	20,437.9	20,637.7	21,526.8	22,548.6	23,611.1
% Ch	5.1	4.8	5.4	7.1	1.0	4.3	4.7	4.7
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	161.2	162.7	162.6	160.6	163.0	165.7	167.6	169.1
Total U.S. Employment	154.5	156.5	152.9	149.5	155.3	159.4	161.4	162.8
Unemployment Rate (%)	4.11	3.77	6.00	6.92	4.73	3.80	3.69	3.72
Nonfarm Payroll Employment	147.73	149.92	147.10	142.97	149.10	152.55	154.15	155.21
% Ch	1.5	1.5	-1.9	-2.8	4.3	2.3	1.0	0.7
Manufacturing	12.55	12.79	12.52	12.21	12.51	12.57	12.45	12.23
% Ch	1.4	1.9	-2.1	-2.5	2.5	0.5	-0.9	-1.8
Durable Manufacturing	7.83	8.03	7.82	7.58	7.82	7.87	7.78	7.62
% Ch	1.7	2.5	-2.6	-3.0	3.1	0.7	-1.1	-2.1
Nondurable Manufacturing	4.72	4.76	4.70	4.62	4.69	4.70	4.67	4.61
% Ch	1.1	0.9	-1.3	-1.6	1.5	0.2	-0.6	-1.2
Construction	7.12	7.41	7.39	7.35	7.39	7.39	7.40	7.44
% Ch	4.0	4.1	-0.2	-0.5	0.5	0.1	0.1	0.4
Service-Providing	127.36	128.98	126.50	122.81	128.54	131.91	133.61	134.86
% Ch	1.4	1.3	-1.9	-2.9	4.7	2.6	1.3	0.9
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	58.6	60.8	46.7	51.8	70.7	65.4	60.7	57.2
Personal Saving/Disposable Income (%)	7.4	7.9	12.6	15.1	6.4	5.9	6.6	7.2
Auto Sales (Millions)	5.7	5.1	3.8	3.7	3.5	3.7	3.7	3.5
% Ch	-11.6	-11.1	-24.3	-3.3	-5.9	4.5	0.1	-3.9
Housing Starts (Millions)	1.251	1.218	1.317	1.550	1.461	1.354	1.320	1.284
% Ch	4.2	-2.6	8.1	17.7	-5.8	-7.3	-2.5	-2.8
Federal Budget Surplus (Billions)	-832.4	-980.6	-2,231.2	-3,271.7	-1,500.6	-951.1	-884.8	-936.3
Net Exports (Billions)	-547.3	-625.9	-556.7	-820.3	-789.9	-828.1	-803.5	-802.1
3-Month Treasury Bill Rate (%)	1.41	2.26	1.20	0.07	0.08	0.08	0.27	0.68
10-Year Treasury Note Yield (%)	2.57	2.74	1.41	1.11	1.53	1.96	2.16	2.47
Bond Index of 20 G.O. Munis. (%)	3.67	4.01	3.20	2.21	2.35	2.67	2.89	3.17
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	2.89	3.13	3.64	3.87	4.16

Table 1.2

**Forecast Analysis**

Comparison of Forecasts for 2019-21

<b>U.S.</b>	Average Annual Rate of Growth (Percent) 2019:2-2021:2		Average Rate (Percent) 2019:3 to 2021:2	
	<b>Real GDP</b>	<b>PCE Price Index</b>	<b>3 Month T-Bill Rate</b>	<b>Mortgage Rate</b>
<b>2016</b>				
February	2.2	1.7	2.79	5.60
June	2.2	1.9	2.81	5.67
September	2.2	1.9	2.79	5.77
November	2.1	2.0	2.55	5.57
<b>2017</b>				
March	2.0	1.9	2.80	5.96
June	2.0	2.0	2.81	5.97
September	2.0	1.9	2.83	6.00
November	2.1	2.0	2.56	5.08
<b>2018</b>				
February	2.0	2.0	3.00	5.26
June	1.9	2.1	3.09	5.28
September	1.9	2.0	3.09	5.11
November	1.8	2.0	3.10	5.17
<b>2019</b>				
March	1.8	2.1	2.66	4.77
June	1.8	1.8	2.23	4.26
September	1.7	2.1	1.70	3.86
November	1.8	1.9	1.64	3.97
<b>2020</b>				
February	1.9	1.6	1.59	3.84
June	-1.2	1.0	0.69	3.41
September	-0.5	1.4	0.65	3.29
November	0.1	1.5	0.65	3.24
<b>2021</b>				
March	0.8	1.7	0.64	3.20
June	1.3	2.1	0.64	3.21
September	1.0	2.2	0.64	3.21

Table 1.3

**Forecast Analysis**

Comparison of Forecasts for 2021-23

<b>U.S.</b>	Average Annual Rate of Growth (Percent) 2021:2-2023:2		Average Rate (Percent) 2021:3 to 2023:2	
	<b>Real GDP</b>	<b>PCE Price Index</b>	<b>3 Month T-Bill Rate</b>	<b>Mortgage Rate</b>
<b>2018</b>				
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
<b>2019</b>				
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
<b>2020</b>				
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
<b>2021</b>				
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

Table 1.4  
**Forecast Comparison**  
 Forecast 2021 to 2025

Fiscal Years

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>U.S.</b>							
<b>Real GDP</b>							
September	18,804.2	18,631.3	18,936.2	19,938.7	20,563.1	21,021.5	21,471.9
% Ch	2.4	-0.9	1.6	5.3	3.1	2.2	2.1
June	18,884.3	18,677.3	19,002.7	20,197.3	20,765.8	21,192.7	21,601.7
% Ch	2.5	-1.1	1.7	6.3	2.8	2.1	1.9
<b>PCE Price Index</b>							
September	109.1	110.6	112.8	117.0	118.9	121.1	123.4
% Ch	1.8	1.3	2.0	3.7	1.6	1.8	1.9
June	109.0	110.5	112.6	115.8	118.0	120.3	122.5
% Ch	1.8	1.3	1.9	2.8	1.9	1.9	1.9
<b>Unemployment Rate</b>							
September	3.77	6.00	6.92	4.73	3.80	3.69	3.72
June	3.77	6.00	6.87	4.61	3.72	3.51	3.61
<b>Mortgage Rate</b>							
September	4.43	3.53	2.89	3.13	3.64	3.87	4.16
June	4.43	3.53	2.89	3.30	3.62	3.75	3.98
<b>3 Month T-Bill Rate</b>							
September	2.26	1.20	0.07	0.08	0.08	0.27	0.68
June	2.26	1.20	0.07	0.00	0.07	0.12	0.33



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

- **The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy.**
- **Employment growth during the last three months was slightly less than expected in the June forecast.**
- **Washington employment is 3.6% lower than at its February 2020 peak.**
- **Washington’s unemployment rate was unchanged in August at 5.1%.**
- **Washington housing construction moderated in the second quarter after reaching its highest level in nearly 43 years.**
- **Seattle-area home price growth was the highest ever in July.**
- **Exports of transportation equipment increased for the first time in two and a half years.**
- **Washington personal income declined 16.5% (SAAR) in the second quarter because of a reduction in direct payments to individuals.**
- **The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%).**
- **Seattle-area consumer price inflation matched the national average in the year ending in August 2021.**
- **Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker.**

### Current Conditions

*The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy*

The Washington economy continues to recover but growth has been hampered by the Delta variant and vaccine hesitancy. Employment growth during the last three months was slightly less than expected in the June forecast. Washington employment is 3.6% lower than at its February 2020 peak Washington’s unemployment rate was unchanged in August at 5.1%. Washington housing construction moderated in the second quarter after reaching its highest level in nearly 43 years. Seattle-area home price growth was the highest ever in July.

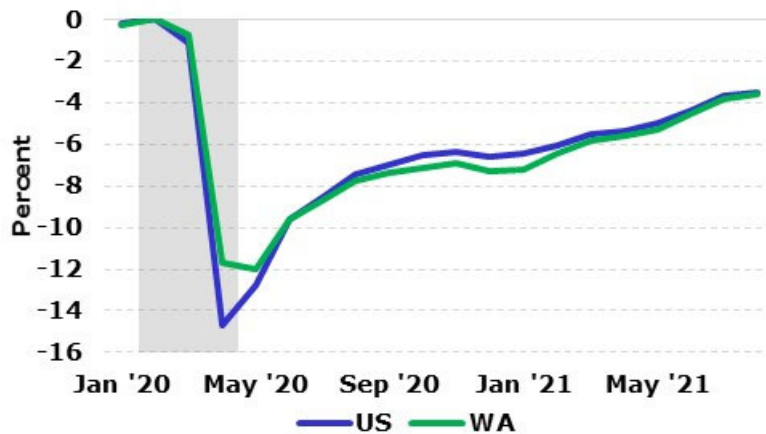
Exports of transportation equipment increased for the first time in two and a half years. Washington personal income declined 16.5% (SAAR) in the second quarter because of a reduction in direct payments to individuals. The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%). Seattle-area consumer price inflation matched the national average in the year ending in August 2021.

*Washington employment grew less than expected*

We have three months of new Washington employment data since the June forecast was released. Total nonfarm payroll employment increased 60,700 in June, July, and August which was 5,700 less than the increase of 66,400 expected in the forecast. Washington employment is now 125,400 (3.6%) lower than at its February 2020 peak (see Figure 2.1). Private services-providing sectors added 48,000 jobs in June, July, and August. The manufacturing sector added 2,100 jobs despite the loss of 200 jobs in aerospace manufacturing. Construction employment increased by 1,900 jobs. State and local government employment increased by 9,500 jobs in the three-month period but federal government employment decreased by 800 jobs.

**Figure 2.1: Employment Relative to the Peak**

*Washington employment is 3.6% lower than at its February 2020 peak*



Source: Employment Security Department, ERFC, Bureau of Labor Statistics; data through August 2021

*New QCEW data raised employment*

We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions added 13,900 (0.4%) to the estimated level of total employment in May 2021. Because employment growth in June, July, and August was slightly less than expected, employment is 8,200 (0.2%) higher in August than expected in the June forecast.

*Unemployment is down significantly*

Washington's unemployment rate was unchanged in August at 5.1%. The unemployment rate is down significantly from the 16.3% rate reached in April 2020 which was an all-time high in

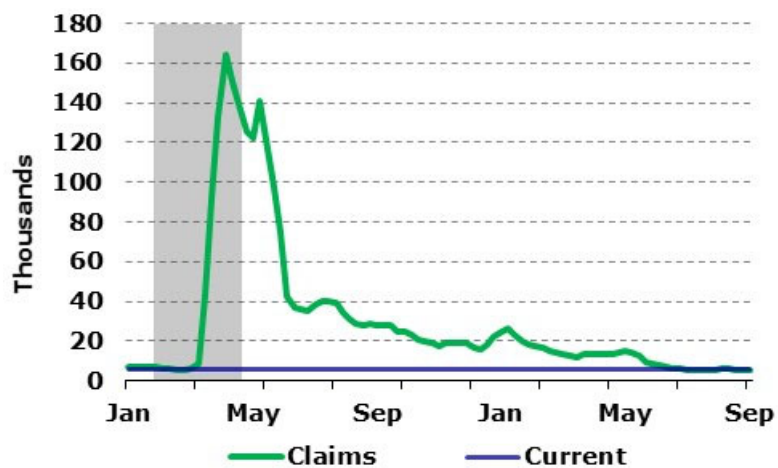
the series that dates back to 1976. At the business cycle peak in February 2020 the Washington unemployment rate was 4.1%.

*Washington initial claims have declined 97% from the peak*

Washington initial claims for unemployment insurance have fully recovered after rising to unprecedented levels in the spring of 2020. The seasonally adjusted number of claims in Washington increased slightly to 5,100 in the week ending September 25, 2021 from 5,000 in the previous week but the four-week moving average declined to 5,400 from 5,600. Washington initial claims have declined 97% from the April 2020 peak and are lower now than before the 2020 recession (see Figure 2.2).

**Figure 2.2: Washington Initial Claims for Unemployment Insurance, 4-Week Moving Average**

*Washington initial claims are lower now than before the 2020 recession*



Source: Washington Department of Employment Security; data through September 25, 2021

*Washington housing construction moderated in second quarter but the third quarter got off to a very strong start*

Washington housing construction moderated in second quarter of 2021 after reaching its highest level in nearly 43 years. The number of housing units authorized by building permits fell to 47,600 (SAAR) in the second quarter from 63,700 in the first quarter. First quarter permits were their highest since the second quarter of 1978. Second quarter permits consisted of 24,300 single-family permits and 23,300 multi-family permits. The June forecast expected 52,100 units (SAAR) in the second quarter as a whole, consisting of 29,800 single-family units and 22,400 multi-family units. The third quarter got off to a very strong start with 63,900 (SAAR) units permitted in July and August consisting of 23,200 single-family units and 40,700 multi-family units.

*Seattle-area home price growth was the highest ever in July*

Seattle-area home prices continue to rise rapidly. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 1.4% in July compared to a 1.5% increase in the composite-20 index. July Seattle home prices were up 25.5% over the year. This was the highest year-over-year growth in the series with data back to 1990-91 growth. In



comparison, the composite-20 index was up 20.0% over the year. July Seattle home prices were up 155% since the December 2011 trough and exceeded the May 2007 peak by 77%.

*Exports of transportation equipment increased for the first time in two and a half years*

According to the World Institute for Strategic Economic Research (WISER), Washington exports increased 54% from the second quarter of 2020 to the second quarter of 2021. Exports of transportation equipment (mostly Boeing planes) increased for the first time in two and a half years, rising 241% over the year. Agricultural exports increased 45% over the year but this is misleading as the data include soybean and corn exports which receive only minimal processing in Washington. Excluding likely transshipments of soybeans and corn, agricultural exports probably increased slightly over the year. Exports from all other sectors (mostly manufacturing) increased 20% over the year.

*Washington car and truck sales declined*

Washington car and truck sales declined in August after increasing in July. The seasonally adjusted number of new vehicle registrations fell 7.1% in August following a 4.3% increase in July. August sales were up 4.7% over the year.

*Washington personal income declined 16.5% (SAAR) in the second quarter because of a reduction in direct payments to individuals*

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 2021. According to these estimates, Washington personal income declined from \$571.5 billion (SAAR) in the first quarter of 2021 to \$546.3 billion in the second quarter. The 16.5% decline (SAAR) in Washington personal income was the 6th best performance among the states and District of Columbia and was significantly better than the 21.8% rate of the decline for the U.S. as a whole. Once again, changes to personal income from Covid-19 relief programs dominated overall personal income growth, more than accounting for the declines in Washington and national personal income growth rates in the second quarter. Most of this was because of a reduction in direct payments to individuals. Washington's above below average decline in personal income growth was due to transfer receipts which subtracted 27.7 percentage points from U.S. personal income growth but only 22.2 percentage points from Washington personal income growth.

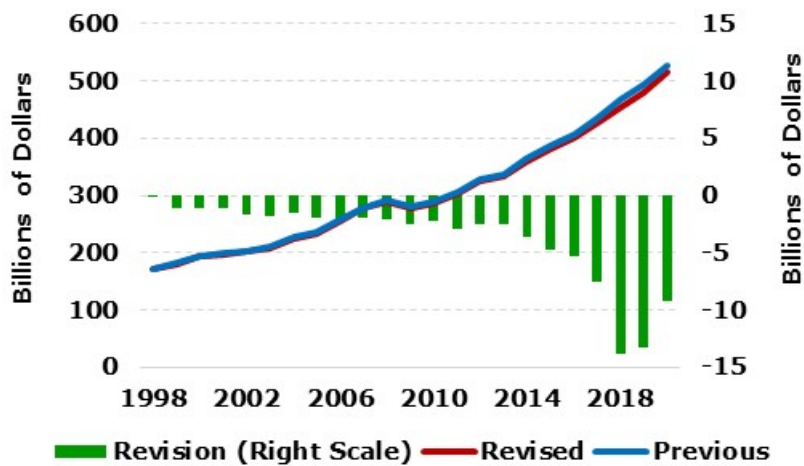
*Washington's revised 7.6% 2020 personal income growth rate was the 12th highest among the states and District of Columbia and exceeded the 6.6% national growth rate*

The September state personal income release also incorporated the results of the BEA's annual update of state personal income which revised personal income estimates from 1998 through 2020. The BEA reduced its estimates of Washington personal income in each year covered by the revision (see Figure 2.3). The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%) compared to the preliminary annual estimate released in March. The downward revision was more than accounted for by the estimate for property income (dividends, interest, and rent) which was lowered by \$11.2 billion (10.1%).

The estimate for earnings by place of work was increased by \$2.0 billion (0.6%) while the estimate for transfer receipts was virtually unchanged. Washington’s revised 7.6% 2020 personal income growth rate was the 12th highest among the states and District of Columbia and exceeded the 6.6% national growth rate.

**Figure 2.3: Washington Personal Income Revision**

*The 2020 Washington personal income estimate was reduced by \$9.2 billion (1.8%).*



Source: BEA, ERFC Calculations; data through 2020

*Seattle consumer price inflation matched the national average*

Seattle-area consumer price inflation matched the national average in the year ending in August 2021. From August 2020 to August 2021, the seasonally adjusted Seattle CPI rose 5.2% which was the same as the increase in the U.S. City Average index. These relatively high rates were partially due to much higher energy prices this year compared to last year. Core prices, which exclude food and energy, increased 4.0% in Seattle which was also the same as the increase in the U.S. City Average index. Seattle shelter cost inflation trailed the national average at 1.6% compared to 2.8%. Seattle inflation excluding shelter exceeded the national average at 7.2% compared to 6.4%.

## Washington State Forecast

*The Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker*

The Washington forecast features higher personal income and inflation than did the forecast adopted in June but employment is similar and housing construction is weaker. We expect a 2.4% increase in Washington employment this year which is up from the 2.0% increase in the June forecast. We expect employment growth to average 2.2% per year in 2022 through 2025 compared to 2.3% per year in the June forecast. Our forecast for nominal personal income growth this year is 6.5%, up from 6.0% in the June forecast. Personal income growth will slow next year as the extraordinary stimulus of the last two years is withdrawn. We expect personal income growth of only 1.7% in 2022 compared to 1.5% in the June forecast. Our new forecast for

nominal personal income growth in 2023 through 2025 averages 5.3% per year compared to the 4.8% rate in the June forecast. We expect 53,500 housing units authorized by building permits this year, down from 54,200 in the June forecast. We expect permits to average 44,600 units in 2022 through 2025, also down from 45,300 units in the June forecast. We expect the Seattle CPI to rise 4.2% this year, up from 3.0% in the June forecast. We expect Seattle inflation to average 2.1% per year in 2022 through 2025 compared to 2.0% per year in the June forecast.

## Washington Payroll Employment

*The September Washington employment forecast is close to the June forecast*

The September Washington employment forecast is close to the June forecast with slightly higher growth in 2021 offset by slightly slower growth in 2022 through 2025. We expect a 2.4% increase in Washington employment this year which is up from the 2.0% increase in the June forecast. We expect above-average growth through the remainder of the forecast as the economy continues to recover from the recession. We expect employment growth to average 2.2% per year in 2022 through 2025 compared to 2.3% per year in the June forecast. On an annual basis, we expect 3.9% employment growth in 2022, 2.4% in 2023, 1.3% in 2024, and 1.2% in 2025.

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

As in June, this forecast incorporates Boeing's announcement of deep cuts to company-wide employment continuing through 2021 as well as the consolidation of 787 production in South Carolina. Boeing indicated they plan to reduce employment from 161,000 at the beginning of 2020 to about 130,000 by the end of 2021, a reduction of 31,000 jobs. We assume that Boeing is currently about three quarters of the way through this process. We also assume that the vast majority of cuts will continue to be made in Washington State and that non-Boeing aerospace employment will also decline as a result of lower production rates. Specifically, the forecast assumes that Washington aerospace employment will be 29,100 lower in January 2022 than in January 2020. We have already lost about 22,300 aerospace jobs as of August 2021 and expect a further decline of 6,800 by January 2022. On an annual average basis, we expect aerospace employment to decline 17.3% this year and 7.6% in 2022. We expect aerospace employment to grow 4.6% in 2023, 3.8% in 2024, and 3.0% in 2025.

*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. After a large increase in the second quarter of 2020, Washington software employment declined slightly in the third quarter of 2020 but growth resumed in the fourth quarter and accelerated in the first quarter of 2021 only to decline again in the second and third quarters. We believe the erratic quarterly pattern is due to abnormal seasonality during the pandemic. As of August 2021, Washington software employment was 4.0% higher than at the business cycle peak of

February 2020. We expect quarterly growth to continue in 2021 and then to accelerate in 2022. On an annual average basis, we expect growth rates of 3.0% in 2021, 2.0% in 2022, 1.6% in 2023, 1.5% in 2024, and 1.4% in 2025.

*Electronic shopping employment has benefitted from social distancing*

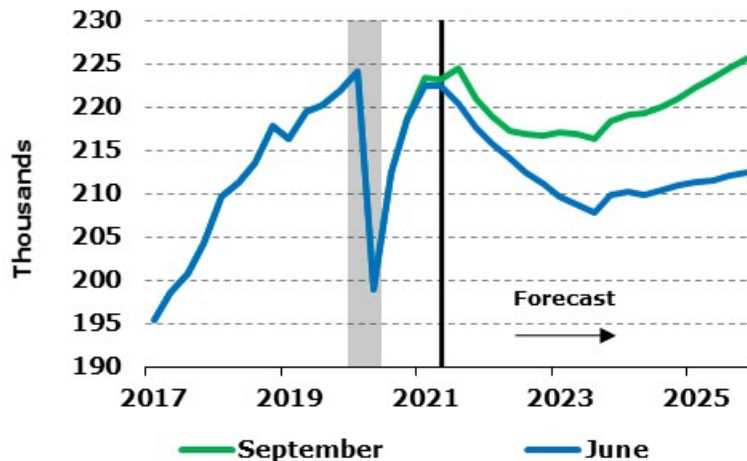
Washington’s electronic shopping and mail order sector has benefited from the social distancing caused by the pandemic as customers substituted online for in-person shopping. In Washington, this sector consists almost entirely of electronic shopping employment. We have lowered our forecast for employment growth in 2021 and 2022 from 22.3% to 12.6% in 2021 and from 4.2% to 4.1% in 2022 due to a large downward revision in the historical data for the first half of 2021. The forecast for growth during the remainder of the forecast is similar to the June forecast. On an annual basis, electronic shopping and mail order employment will grow 2.5% in 2023, 2.3% in 2024, and 2.2% in 2025.

*Construction has recovered nearly all the jobs lost in the recession*

Construction has recovered nearly all the jobs lost in the recession. After an initial drop in employment in March and April of 2020, construction employment came roaring back. As of August 2021, construction employment was only 0.6% lower than at its peak in February 2020. We have revised our forecast for growth this year up from 3.4% to 4.4% based on monthly data through August. We still expect declining employment over the next couple of years. On a calendar year basis, we expect construction employment to decline 2.5% in 2022 and 0.1% in 2023. We expect 1.2% growth in 2024 and 1.9% growth in 2025 (see Figure 2.4).

**Figure 2.4: Washington Construction Employment**

*The construction employment forecast is higher than expected in the June forecast*



Source: Employment Security Department, ERFC; historical data through 2021 Q2

## Washington Personal Income

*Personal income was slightly higher than previously thought*

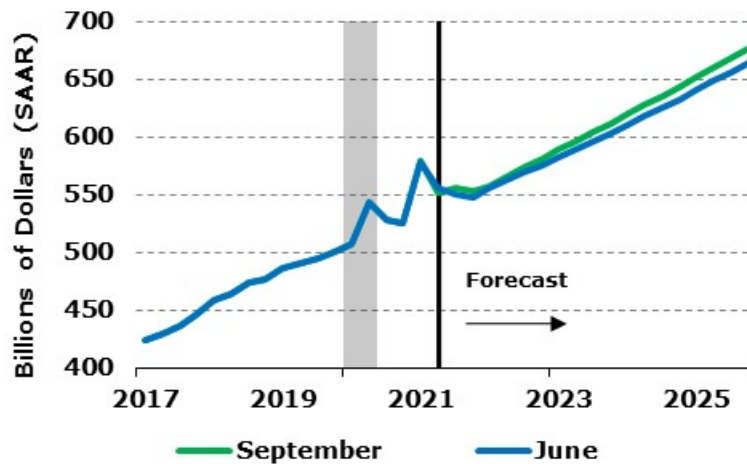
In June, after the forecast was complete, the Bureau of Economic Analysis released estimates for state personal income through the first quarter of 2021. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) data. Our current estimate of Washington personal income in the first quarter of 2021 is \$1.5 billion (0.3%) higher than in the June forecast. Wages and salaries are \$2.9 billion (1.1%) higher than expected but nonwage income is \$1.4 billion (0.5%) lower than expected.

*Personal income growth will slow next year*

Our forecast for nominal personal income growth this year is 6.5%, up from 6.0% in the June forecast. Personal income growth will slow next year as the extraordinary stimulus of the last two years is withdrawn. We expect personal income growth of only 1.7% in 2022 compared to 1.5% in the June forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.3% per year compared to the 4.8% rate in the June forecast (see Figure 2.5). On an annual basis, we expect personal income to grow 5.4% in 2023, 5.2% in 2024, and 5.1% in 2025.

**Figure 2.5: Washington Personal Income**

*Personal income growth is stronger than expected in the June forecast*



Source: Bureau of Economic Analysis, ERFC; historical data through 2021 Q1

## Washington Building Permits

*Washington housing construction is slightly weaker than expected in the June forecast*

The outlook for Washington housing construction as measured by units authorized by building permits is slightly weaker than expected in the June forecast. Unlike the last several years in which housing has been pretty evenly split between single-family and multi-family, we expect most housing units will be single-family in the forecast. We expect 53,500 housing units authorized by building permits this year, down from 54,200 in the June forecast. If so, this will still be the highest annual total since 1978. We expect permits to average 44,600 units in 2022

through 2025, also down from 45,300 units in the June forecast. On a calendar year basis, we expect 46,200 units in 2022, 44,300 units in 2023, 44,200 in 2024, and 43,700 in 2025.

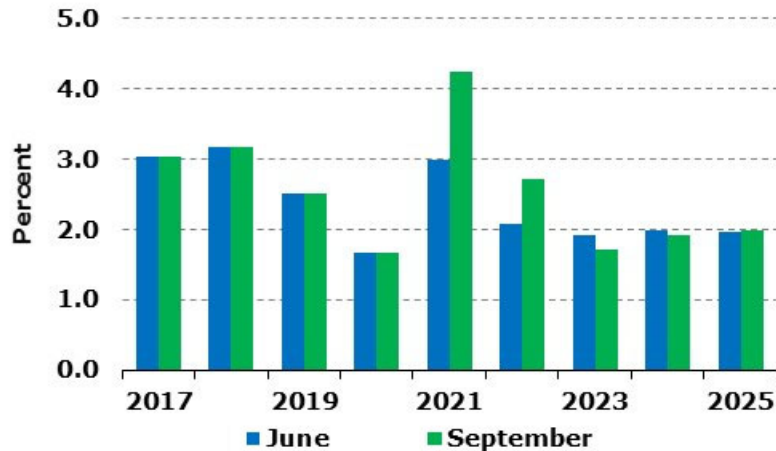
## Consumer Price Index

*We expect price pressures to diminish by the end of the year*

The near-term inflation outlook has increased since the June forecast (see Figure 2.6) but we expect price pressures to diminish by the end of the year. With actual data through August, we expect the Seattle core index to rise 3.4% this year compared to 2.6% in the June forecast. We now expect Seattle core inflation to average 2.5% per year in 2022 through 2025, up from 2.4% per year in the June forecast. Our forecast calls for annual Seattle core inflation rates of 3.1% in 2022 and 2.3% per year in 2023, 2024, and 2025.

**Figure 2.6: Seattle Consumer Price Index**

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



Source: Bureau of Labor Statistics, ERFC; historical data through 2020

*Energy costs have rebounded*

Energy costs have rebounded since the large decline last year. This will add to headline inflation this year. We expect the Seattle CPI to rise 4.2% this year, up from 3.0% in the June forecast and higher than the 3.4% core inflation rate. Energy costs are expected to fall during the remainder of the forecast, holding headline inflation below core inflation through 2025. We expect Seattle inflation to average 2.1% per year in 2022 through 2025 compared to 2.0% per year in the June forecast. On a calendar year basis, we expect inflation rates of 2.7% in 2022, 1.7% in 2023, 1.9% in 2024, and 2.0% in 2025.

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

## Alternative Scenarios

*Alternative forecasts are required by law*

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

### Optimistic

*Return to "normal" and still more stimulus drive faster growth*

The optimistic scenario assumes a quicker recovery than in the baseline. In this scenario, the consumer and business response to the prior and upcoming fiscal stimulus packages is more robust than in the baseline. In addition, despite the spread of the delta variant, accelerated vaccinations and greater adherence to guidelines for social distancing and masks allows continued strong growth in consumer spending. As a result, consumers approach pre-pandemic spending patterns more quickly than in the baseline. GDP rises at a 5.8% annual rate in the third quarter and at a 9.2% pace in the fourth, compared to 4.9% and 5.5% rates of increase, respectively, in the baseline. Because of the faster growth of GDP, the unemployment rate quickly falls to below 4.0% in the second quarter of 2022

*The optimistic scenario also assumes a stronger Washington economy*

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast assumes that aerospace employment bottoms out in the first quarter of 2022 as in the baseline, but 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. Construction employment declines less through mid-2022 than in the baseline and then begins to rise more rapidly than in the baseline. By the end of 2025, Washington nonfarm payroll employment is higher by 107,600 jobs (2.9%) than in the baseline forecast and Washington personal income is \$58.4 billion (8.6%) higher.

### Pessimistic

*Recovery stumbles as consumers slow spending splurge*

The pessimistic scenario assumes a weaker recovery in consumer spending than in the baseline forecast. A resurgent virus and an alarming rise in cases and hospitalizations leads to more caution on the part of consumers, as they increasingly refrain from what we term as socially-dense consumer activities. In addition, the potential delay in opening daycare centers and difficulties maintaining in-person learning could directly affect employment and make it difficult for others to return to work. GDP increases at a 2.0% annualized rate in the third quarter and at a 2.1% annualized rate in the fourth quarter, compared to 4.9% and 5.5% rates of increase, respectively, in the baseline. The unemployment rate peaked at 13.0% in the second quarter of 2020 and declined to 5.9% in the second quarter of 2021. It is

expected to continue to decline, but at a slower pace than in the baseline, reaching 3.7% by early 2025, where it remains through 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 flattens after the steep declines of 2020 and 2021 rather than recovering as in the baseline. Software employment declines rather than continuing to grow as in the baseline forecast. After an initial rebound due to a partial lifting of restrictions, construction employment declines faster than in the baseline and the decline continues through 2025. The relatively weak local economy also puts downward pressure on Washington wages and the Seattle CPI. By the end of 2025, Washington nonfarm payroll employment is 66,500 (1.8%) lower than in the baseline forecast and Washington personal income is \$42.0 billion (6.2%) lower.

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

### **Governor’s Council of Economic Advisors (GCEA)**

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

*The GCEA members expect more inflation than assumed in the baseline forecast*

The Governor’s Council of Economic Advisors’ (GCEA) forecast for real growth is similar to the baseline forecast but their inflation forecast is higher. The GCEA real GDP growth forecast averages 3.5% per year in 2021 through 2025 compared to 3.4% in the baseline forecast. Their forecast of 3.8% average real consumer spending growth is also slightly higher than the baseline forecast of 3.7%. The GCEA members’ personal consumption expenditures (PCE) inflation forecast averages 2.7% per year compared to 2.3% per year in the baseline forecast. The Council members’ mortgage rate forecast averages 3.8% over the five-year forecast horizon, which is slightly higher than the 3.7% average mortgage rate in the baseline forecast and their oil price forecast averages \$69 per barrel compared to \$66 in the baseline forecast.

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

The Governor’s Council of Economic Advisors’ Washington forecast is also higher than the baseline forecast. The GCEA scenario for Washington real personal income growth averages 2.7% per year in 2021 through 2025, compared to the 2.4% average rate in the baseline forecast. Because their inflation forecast is also higher than ours is, however, their implied average nominal income growth is 5.4% compared to our 4.8%. The Council members’ forecast for total employment growth over the five-year period averages 2.5% per year, which is stronger than the 2.2% rate in the baseline forecast. The GCEA forecasts for average manufacturing employment growth and average construction employment growth are both slightly higher than their counterparts in the baseline forecast. The GCEA housing permit forecast is also slightly higher, averaging 47,800 units per



year compared to 46,400 in the baseline forecast. At the end of 2025, the GCEA forecast for Washington nonfarm payroll employment is 49,300 (1.3%) higher than in the baseline forecast and Washington personal income is \$20.0 billion (3.0%) higher.

Table 2.1

Fiscal Years

**Washington Economic Forecast Summary**  
Forecast 2022 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Real Income (Billions of Chained 2012 Dollars)</b>								
Real Personal Income	420.932	441.494	462.680	484.339	476.568	492.108	508.689	524.678
% Ch	5.5	4.9	4.8	4.7	-1.6	3.3	3.4	3.1
Real Wage and Salary Disb.	212.902	225.572	232.444	242.720	253.774	264.810	273.658	281.835
% Ch	6.6	6.0	3.0	4.4	4.6	4.3	3.3	3.0
Real Nonwage Income	208.030	215.922	230.236	241.619	222.794	227.298	235.031	242.842
% Ch	4.4	3.8	6.6	4.9	-7.8	2.0	3.4	3.3
Real Per Capita Income (\$/Person)	56,285	58,310	60,418	62,678	61,226	62,643	64,098	65,395
% Ch	3.9	3.6	3.6	3.7	-2.3	2.3	2.3	2.0
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.072	1.091	1.105	1.128	1.170	1.189	1.211	1.234
% Ch	2.0	1.8	1.3	2.0	3.8	1.6	1.8	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.671	2.745	2.803	2.871	3.003	3.050	3.107	3.168
% Ch	3.1	2.8	2.1	2.4	4.6	1.6	1.9	2.0
Average Nonfarm Annual Wage	65,778	69,623	73,439	80,983	83,944	86,430	89,488	92,785
% Ch	6.3	5.8	5.5	10.3	3.7	3.0	3.5	3.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.93	28.91	28.93	27.87	28.12	29.30	30.29	31.24
% Ch	4.2	3.5	0.0	-3.6	0.9	4.2	3.4	3.1
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	451.213	481.750	511.470	546.310	557.685	585.197	615.900	647.397
% Ch	7.6	6.8	6.2	6.8	2.1	4.9	5.2	5.1
Disposable Personal Income	396.971	424.717	452.680	483.454	484.375	507.315	534.802	563.394
% Ch	7.7	7.0	6.6	6.8	0.2	4.7	5.4	5.3
Per Capita Income (\$/Person)	60,333	63,626	66,789	70,695	71,647	74,492	77,606	80,689
% Ch	5.9	5.5	5.0	5.8	1.3	4.0	4.2	4.0
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,767.0	3,860.6	3,935.8	3,873.0	3,951.7	4,031.6	4,095.1	4,151.6
Total Washington Employment	3,597.5	3,692.0	3,683.7	3,612.3	3,760.5	3,860.0	3,921.6	3,973.5
Unemployment Rate (%)	4.50	4.37	6.41	6.73	4.84	4.26	4.24	4.29
Nonfarm Payroll Employment	3,362.6	3,433.0	3,403.3	3,284.9	3,440.3	3,544.0	3,602.3	3,647.2
% Ch	2.4	2.1	-0.9	-3.5	4.7	3.0	1.6	1.2
Manufacturing	284.1	291.9	287.4	260.0	257.6	261.2	263.6	264.2
% Ch	-1.1	2.7	-1.5	-9.6	-0.9	1.4	0.9	0.2
Durable Manufacturing	199.4	205.5	202.4	178.3	173.1	174.7	177.0	178.3
% Ch	-2.1	3.1	-1.5	-11.9	-2.9	1.0	1.3	0.7
Aerospace	82.5	86.6	87.6	70.9	62.5	62.6	65.3	67.4
% Ch	-5.9	4.9	1.2	-19.1	-11.9	0.1	4.4	3.3
Nondurable Manufacturing	84.6	86.3	85.0	81.7	84.5	86.5	86.6	85.9
% Ch	1.5	2.0	-1.6	-3.9	3.5	2.3	0.2	-0.8
Construction	206.5	216.8	216.3	219.4	220.5	216.9	218.3	221.7
% Ch	6.7	5.0	-0.2	1.4	0.5	-1.6	0.6	1.6
Service-Providing	2,865.8	2,918.1	2,893.9	2,799.9	2,956.0	3,060.1	3,114.8	3,155.6
% Ch	2.5	1.8	-0.8	-3.2	5.6	3.5	1.8	1.3
Software Publishers	63.1	67.7	73.6	77.0	78.3	80.2	81.3	82.5
% Ch	4.7	7.4	8.6	4.7	1.6	2.4	1.4	1.6
Electronic Shopping and Mail-Order	53.5	58.1	69.3	81.6	87.7	90.1	92.2	94.3
% Ch	21.7	8.7	19.1	17.8	7.5	2.7	2.4	2.2
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	48.873	46.042	47.547	49.603	49.215	44.994	44.109	43.994
% Ch	9.8	-5.8	3.3	4.3	-0.8	-8.6	-2.0	-0.3
Single-Family	24.216	22.439	22.863	26.227	27.116	26.006	25.765	25.735
% Ch	9.5	-7.3	1.9	14.7	3.4	-4.1	-0.9	-0.1
Multi-Family	24.657	23.603	24.684	23.376	22.099	18.988	18.344	18.259
% Ch	10.1	-4.3	4.6	-5.3	-5.5	-14.1	-3.4	-0.5
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.53	2.89	3.13	3.64	3.87	4.16

Table 2.2  
**Comparison of Alternative Forecasts**

Fiscal Years

	2020	2021	2022	2023	2024	2025
<b>U.S.</b>						
<b>Real GDP, Percent Change</b>						
Optimistic	-0.9	1.6	6.7	4.5	2.9	2.5
Baseline	-0.9	1.6	5.3	3.1	2.2	2.1
Pessimistic	-0.9	1.6	3.7	2.9	3.1	2.9
<b>PCE Price Index, Percent Change</b>						
Optimistic	1.3	2.0	3.7	1.9	2.0	2.2
Baseline	1.3	2.0	3.7	1.6	1.8	1.9
Pessimistic	1.3	2.0	3.3	0.6	0.8	1.3
<b>Mortgage Rate, Percent</b>						
Optimistic	3.53	2.89	3.17	3.72	4.00	4.26
Baseline	3.53	2.89	3.13	3.64	3.87	4.16
Pessimistic	3.53	2.89	3.10	3.33	3.43	3.67
<b>3 Month T-Bill Rate, Percent</b>						
Optimistic	1.20	0.07	0.19	0.44	0.78	1.25
Baseline	1.20	0.07	0.08	0.08	0.27	0.68
Pessimistic	1.20	0.07	0.07	0.08	0.08	0.09
<b>Washington</b>						
<b>Real Personal Income, Percent Change</b>						
Optimistic	4.8	4.7	0.7	5.0	4.7	4.3
Baseline	4.8	4.7	-1.6	3.3	3.4	3.1
Pessimistic	4.8	4.7	-3.7	2.6	3.5	3.1
<b>Personal Income, Percent Change</b>						
Optimistic	6.2	6.8	4.5	6.9	6.8	6.6
Baseline	6.2	6.8	2.1	4.9	5.2	5.1
Pessimistic	6.2	6.8	-0.6	3.2	4.3	4.4
<b>Employment, Percent Change</b>						
Optimistic	-0.9	-3.5	5.4	3.3	2.3	2.0
Baseline	-0.9	-3.5	4.7	3.0	1.6	1.2
Pessimistic	-0.9	-3.5	4.2	2.5	1.3	1.0
<b>Housing Permits, Thousands of Authorized Units</b>						
Optimistic	47.5	49.6	50.0	47.0	47.2	48.6
Baseline	47.5	49.6	49.2	45.0	44.1	44.0
Pessimistic	47.5	49.6	46.9	41.9	40.8	40.7

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

Calendar Years

	2021	2022	2023	2024	2025
<b><u>U.S.</u></b>					
<b>Real GDP</b>					
<i>Growth</i>					
ERFC	5.9	4.3	2.4	2.2	2.1
GCEA Average	6.3	4.3	2.3	2.1	2.3
<b>Real Consumption</b>					
<i>Growth</i>					
ERFC	7.9	3.7	2.4	2.3	2.3
GCEA Average	8.0	4.2	2.6	2.1	2.3
<b>PCE Price Index</b>					
<i>Growth</i>					
ERFC	3.6	2.4	1.7	1.9	1.9
GCEA Average	4.0	2.8	2.3	2.2	2.1
<b>Mortgage Rate</b>					
<i>Percent</i>					
ERFC	2.9	3.4	3.8	4.0	4.3
GCEA Average	3.0	3.4	3.7	4.3	4.5
<b>Oil Price (Brent)</b>					
<i>Dollars per barrel</i>					
ERFC	69.6	71.2	66.7	63.1	60.3
GCEA Average	70.1	71.4	69.0	67.0	65.4
<b><u>Washington State</u></b>					
<b>Real Personal Income</b>					
<i>Growth</i>					
ERFC	2.8	-0.7	3.7	3.2	3.2
GCEA Average	3.6	0.4	3.1	3.1	3.1
<b>Wage and Salary Employment</b>					
<i>Growth</i>					
ERFC	2.4	3.9	2.4	1.3	1.2
GCEA Average	3.5	4.1	2.2	1.5	1.2
<b>Manufacturing Employment</b>					
<i>Growth</i>					
ERFC	-5.1	0.2	1.9	0.3	0.3
GCEA Average	-4.8	0.6	1.3	0.7	0.6
<b>Construction Employment</b>					
<i>Growth</i>					
ERFC	4.4	-2.5	-0.1	1.2	1.9
GCEA Average	4.3	-0.1	0.0	1.5	2.3
<b>Housing Permits</b>					
<i>Thousands of authorized units</i>					
ERFC	53.5	46.2	44.3	44.2	43.7
GCEA Average	54.2	48.4	45.6	45.7	45.2
<b>Washington Average Annual Wage</b>					
<i>Growth</i>					
ERFC	6.3	3.1	3.3	3.6	3.8
GCEA Average	5.9	3.0	3.5	4.0	4.1

Table 2.4  
**Forecast Analysis**  
 Comparison of Forecasts for 2019-21

<b>Washington</b>	Average Annual Rate of Growth (Percent) 2019:2-2021:2			Average Annual Rate (Thousands) 2019:3 to 2021:2
	<b>Employment</b>	<b>Personal Income</b>	<b>Real Personal Income</b>	<b>Housing Units Authorized</b>
<b>2016</b>				
February	1.1	4.7	3.0	44.3
June	1.1	5.0	3.1	44.3
September	1.1	5.1	3.0	44.3
November	1.2	5.0	3.0	41.5
<b>2017</b>				
March	1.1	4.9	2.9	40.7
June	1.2	5.1	3.0	42.0
September	1.2	5.3	3.3	42.0
November	1.2	5.3	3.2	42.6
<b>2018</b>				
February	1.4	5.2	3.1	42.8
June	1.2	5.0	2.9	43.2
September	1.2	5.0	2.9	44.0
November	1.3	4.9	2.8	43.5
<b>2019</b>				
March	1.3	4.8	2.7	42.1
June	1.4	4.9	3.0	41.8
September	1.5	4.7	2.6	43.3
November	1.3	4.0	2.1	43.8
<b>2020</b>				
February	1.5	4.3	2.7	46.8
June	-0.4	3.0	1.9	40.9
September	-0.4	2.8	1.3	46.0
November	-0.8	3.1	1.5	46.7
<b>2021</b>				
March	-2.0	8.5	6.7	48.1
June	-2.1	6.4	4.2	49.1
September	-1.8	6.1	3.8	48.6

Table 2.5  
**Forecast Analysis**  
 Comparison of Forecasts for 2021-23

<b>Washington</b>	Average Annual Rate of Growth (Percent) 2021:2-2023:2			Average Annual Rate (Thousands) 2021:3 to 2023:2
	<b>Employment</b>	<b>Personal Income</b>	<b>Real Personal Income</b>	<b>Housing Units Authorized</b>
<b>2018</b>				
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
<b>2019</b>				
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
<b>2020</b>				
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
<b>2021</b>				
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

Table 2.6  
**Forecast Comparison**  
 Forecast 2021 to 2025

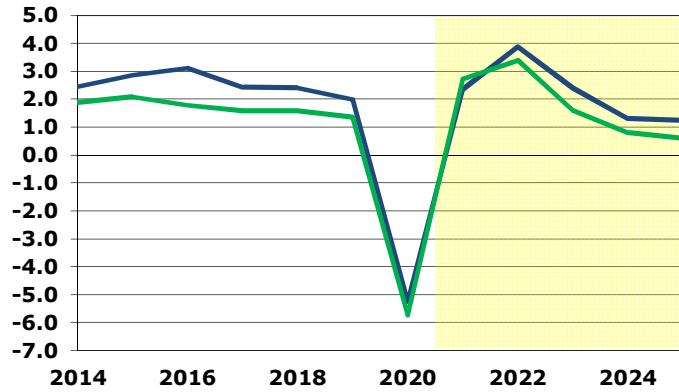
Fiscal Years

	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Washington</b>							
<b>Real Personal Income</b>							
September	441.494	462.680	484.339	476.568	492.108	508.689	524.678
% Ch	4.9	4.8	4.7	-1.6	3.3	3.4	3.1
June	441.810	462.876	485.251	478.439	490.709	504.486	519.577
% Ch	4.9	4.8	4.8	-1.4	2.6	2.8	3.0
<b>Personal Income</b>							
September	481.750	511.470	546.310	557.685	585.197	615.900	647.397
% Ch	6.8	6.2	6.8	2.1	4.9	5.2	5.1
June	481.750	511.408	546.546	553.995	579.086	606.812	636.733
% Ch	6.8	6.2	6.9	1.4	4.5	4.8	4.9
<b>Employment</b>							
September	3433.0	3403.3	3284.9	3440.3	3544.0	3602.3	3647.2
% Ch	2.1	-0.9	-3.5	4.7	3.0	1.6	1.2
June	3433.0	3403.3	3277.0	3437.7	3542.3	3601.7	3649.8
% Ch	2.1	-0.9	-3.7	4.9	3.0	1.7	1.3
<b>Housing Permits</b>							
September	46.042	47.547	49.603	49.215	44.994	44.109	43.994
% Ch	-5.8	3.3	4.3	-0.8	-8.6	-2.0	-0.3
June	46.042	47.547	50.735	48.814	45.228	45.246	45.173
% Ch	-5.8	3.3	6.7	-3.8	-7.3	0.0	-0.2

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

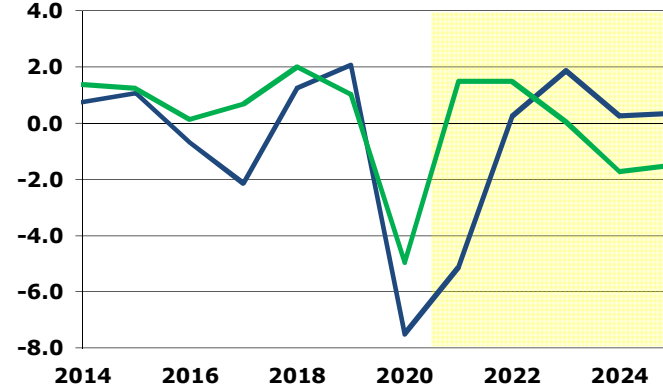
Forecast

Total Nonfarm Payroll Employment



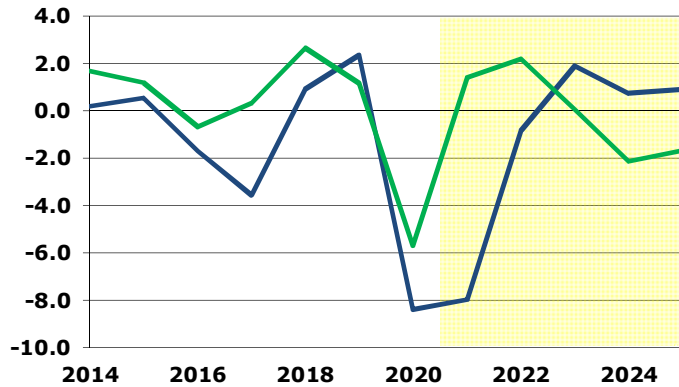
Source: WA State Employment Security Dept. 2020, ERFC 2025

Manufacturing Employment



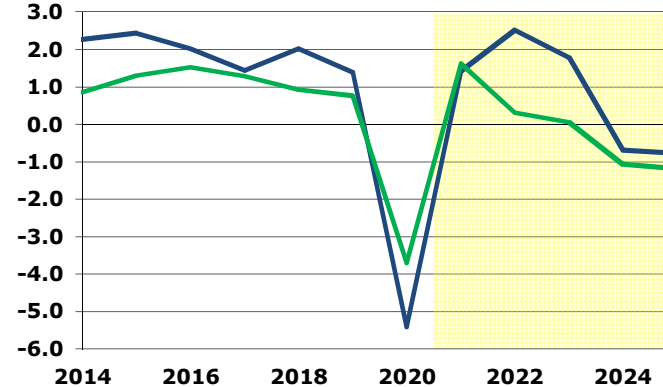
Source: WA State Employment Security Dept. 2020, ERFC 2025

Durable Manufacturing Employment



Source: WA State Employment Security Dept. 2020, ERFC 2025

Nondurable Manufacturing Employment



Source: WA State Employment Security Dept. 2020, ERFC 2025

Washington

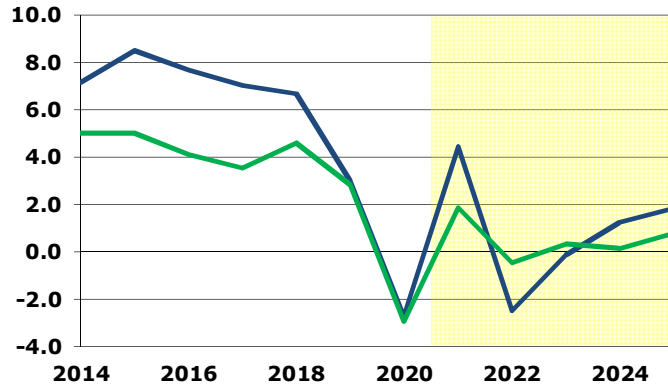
U.S.



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

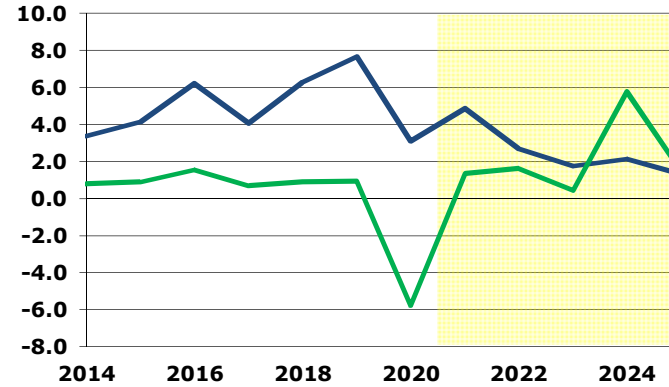
Forecast

Construction Employment



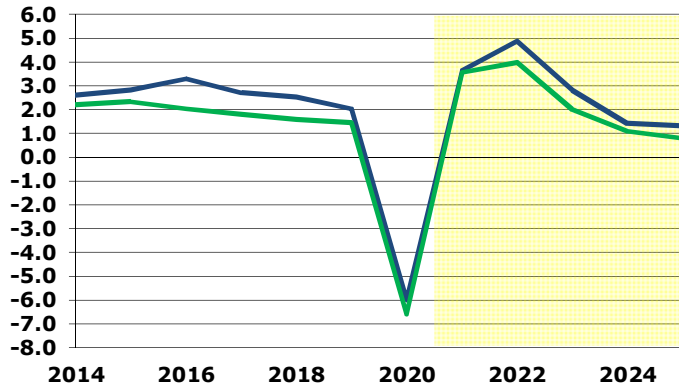
Source: WA State Employment Security Dept. 2020, ERFC 2025

Information Employment



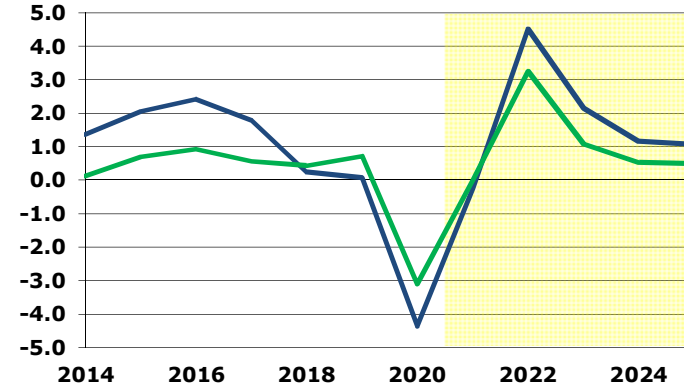
Source: WA State Employment Security Dept. 2020, ERFC 2025

Other Private Employment



Source: WA State Employment Security Dept. 2020, ERFC 2025

Government Employment



Source: WA State Employment Security Dept. 2020, ERFC 2025

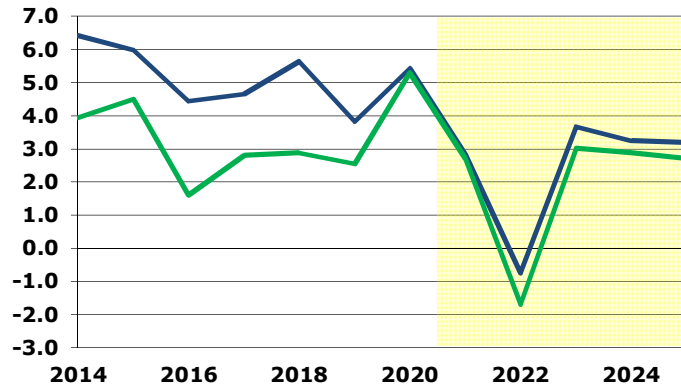
Washington

U.S.

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

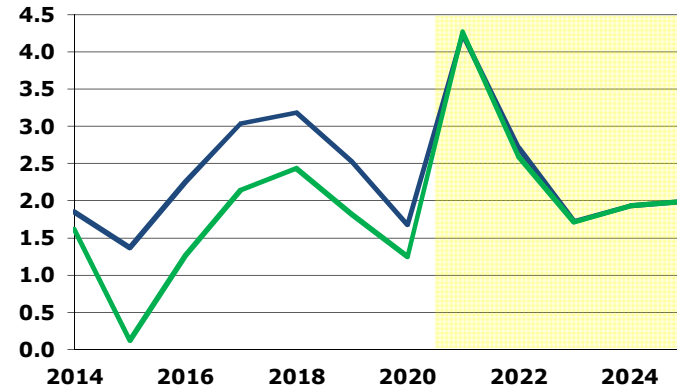
Forecast

Real Personal Income



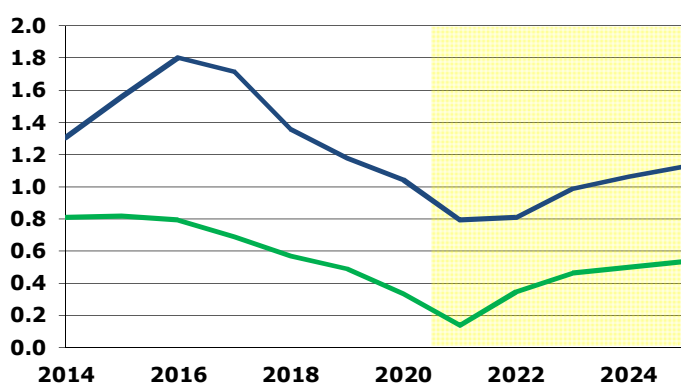
Source: Bureau of Economic Analysis 2019, ERFC 2025

Consumer Price Indices



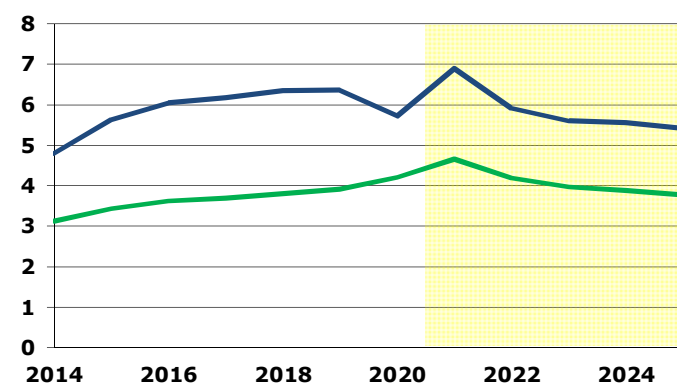
Source: Bureau of Labor Statistics 2020, ERFC 2025

Population



Source: Census Bureau 2019, ERFC 2025

New Housing Units Per 1,000 Population (Level)



Source: Census Bureau 2020, ERFC 2025

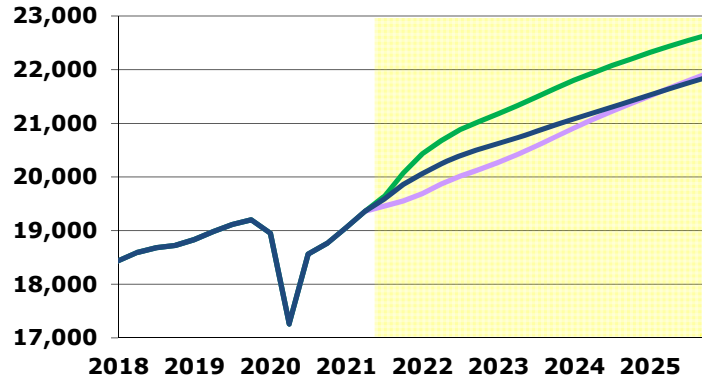
Washington

U.S.

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

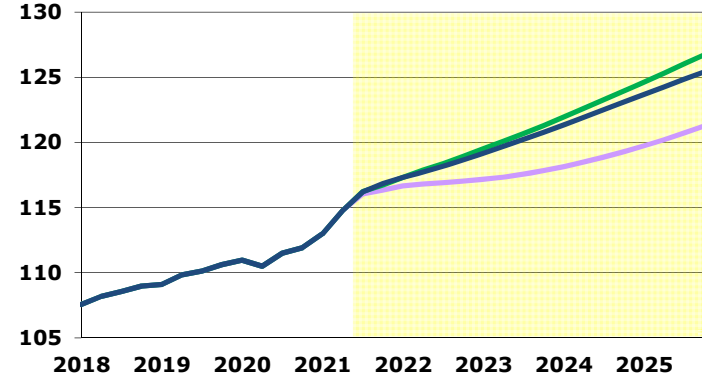
Forecast

Real GDP, Billions of 2012 Dollars



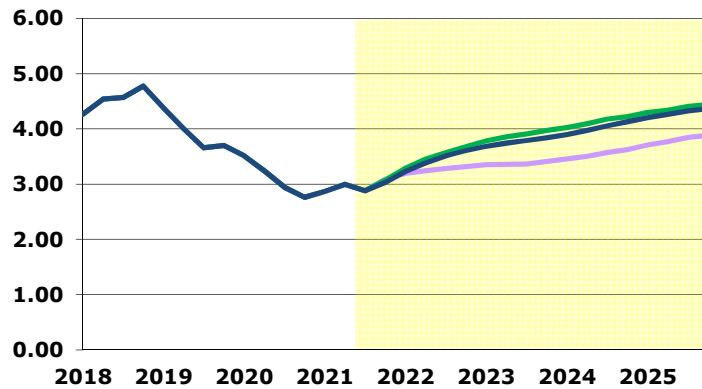
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2025

PCE Price Index, 2012 = 100



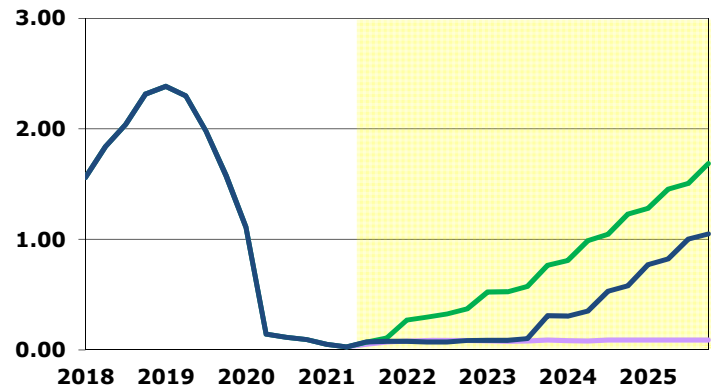
Source: Bureau of Economic Analysis 2020 Q4, ERFC 2025

Mortgage Rate, Percent



Source: Freddie Mac 2020 Q4, ERFC 2025

Three Month T-Bill Rate, Percent



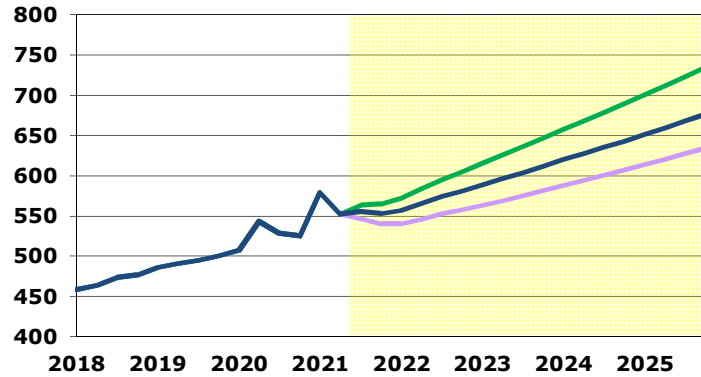
Source: Federal Reserve Board 2020 Q4, ERFC 2025

■ Baseline      ■ Optimistic      ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

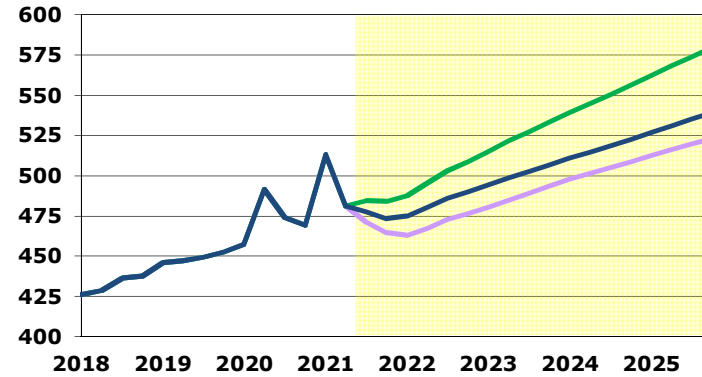
Forecast

Personal Income, Billions of Dollars



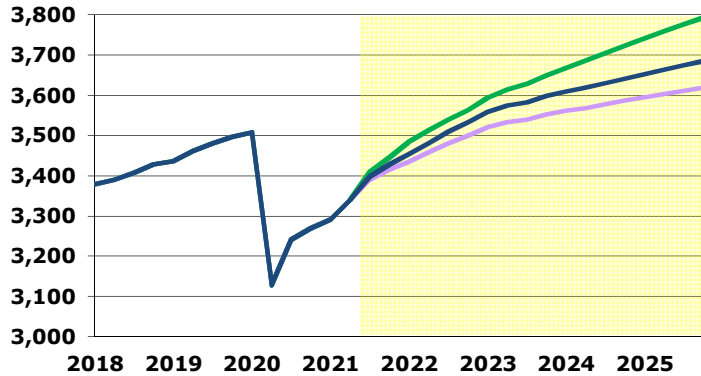
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Real Personal Income, Billions of 2012 Dollars



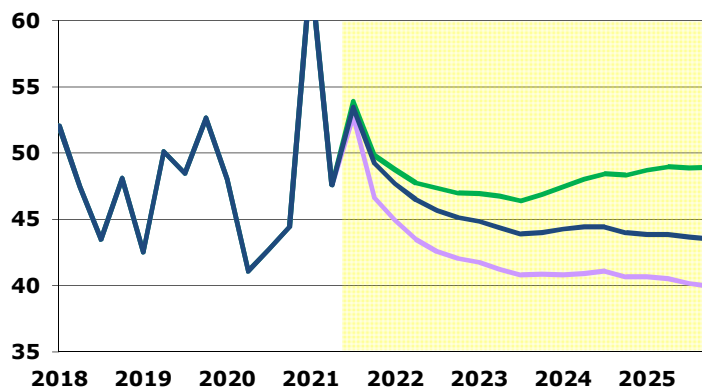
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2020 Q4, ERFC 2025

Housing Permits, Thousands



Source: Census Bureau 2020 Q4, ERFC 2025

■ Baseline      ■ Optimistic      ■ Pessimistic



## Chapter 3: Washington State Revenue Forecast Summary

- **General Fund-State (GF-S) revenue collections since the June forecast have come in \$162 million (2.6%) above the forecasted amount.**
- **The preliminary tally of GF-S revenue for the 2019-21 biennium was \$45 million lower than forecasted in June. The GF-S forecast was increased by \$845 million in the 2021-23 biennium and \$891 million in the 2023-25 biennium.**
- **The preliminary tally of total revenue for funds subject to the budget outlook process in the 2019-21 biennium was \$40 million lower than the previous forecast. The total forecast for these funds was increased by \$927 million in the 2021-23 biennium and \$931 million in the 2023-25 biennium.**

### Overview

*The revenue forecast has been increased due to stronger-than-expected taxable activity and a forecasted increase in state personal income*

Since the June forecast, taxable activity has been moderately stronger than expected, with tracked collections coming in \$162 million (2.6%) above the June forecast. Most of the surplus in collections stemmed from real estate excise taxes, which saw a large increase in commercial sales on top of continued strength in residential sales. Other taxable activity such as retail trade was also stronger than forecasted. The combination of a higher base level of activity and an increase in state personal income in the September economic forecast has resulted in an increase in forecasted revenue for the current 2021-23 biennium as well as the subsequent 2023-25 biennium.

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

*19-21: -\$45  
21-23: \$845  
23-25: \$891*

Table 3.1 summarizes the changes to the forecasts of General Fund-State (GF-S) revenue for the 2019-21 through the 2023-25 biennia. For the 2019-21 biennium, which concluded on June 30, 2021, revenue collections that are tracked monthly came in \$42.6 million lower than forecasted in June. The preliminary tabulation of revenue from other sources came in \$2.2 million lower than forecasted, resulting in a total revenue reduction of \$44.9 million. Tracked revenue collections through September 10 for the current 2021-23 biennium came in \$204.7 million higher than forecasted. The forecasted increase in taxable activity adds \$640.8 million to expected revenue for the remainder of the biennium, resulting in a total forecast increase

of \$845 million. The forecast for the 2023-25 biennium was increased by \$891.1 million. The September 2021 forecast for GF-S revenue totals \$50.803 billion in the 2019-21 biennium, \$56.457 billion in the 2021-23 biennium and \$59.870 billion in the 2023-25 biennium.

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

*GF-S forecast (\$billions):*

2019-21:  
\$50.803

2021-23:  
\$56.457

2023-25:  
\$59.870

	<b>2019-21 Biennium</b>	<b>2021-23 Biennium</b>	<b>2023-25 Biennium</b>
Collection Experience	(\$42.6)	\$204.7	NA
Non-Economic Change	\$0.0	\$0.0	\$0.0
Forecast Change	(\$2.2)	\$640.8	\$891.1
<b>Total Change</b>	<b>(\$44.9)</b>	<b>\$845.4</b>	<b>\$891.1</b>

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

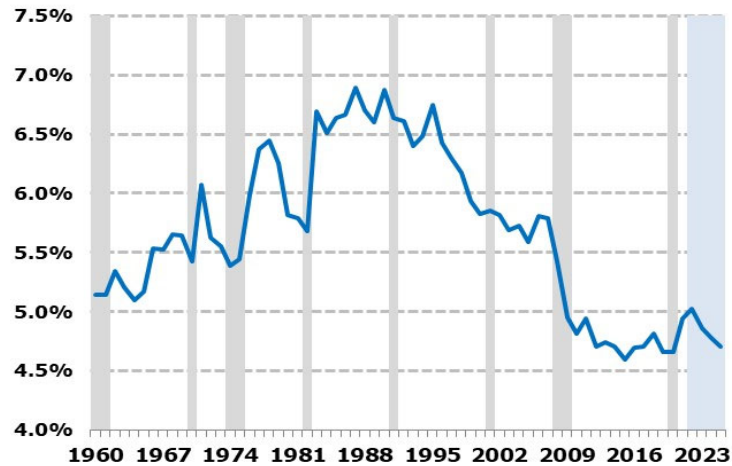
As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income had been on an increasing trend after reaching a trough in FY 2015. The ratio of revenue to income had been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 to mid-2008, and by temporary taxes and transfers of funds from non-GF-S sources into the GF-S that again boosted the ratio in fiscal years 2011 and 2013. The ratio increased slightly in FY 2014 due to low personal income growth and then decreased slightly in FY 2015. The ratio then increased in FY 2016 and 2017, largely due to revenue increases stemming from legislative changes. Additional legislative changes enacted in June of 2017 boosted the FY 2018 ratio, but legislative changes from the 2018 session reduced the ratio in FY 2019. While revenue increased in FY 2020, income increased at the same rate due to federal pandemic relief payments, keeping the ratio of revenue to income constant. While pandemic relief payments boosted income in FY 2021, GF-S revenue grew faster, causing the ratio of revenue to income to increase. Slower growth in income relative to revenue increases the ratio further in FY 2022 but the ratio then continues its downward trend through FY 2025.

*Forecast details are at the end of the chapter*

The history of nominal and real GF-S revenue by biennium can be found in Table 3.3. GF-S forecast changes by agency and major revenue classification for the 2019-21 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2021-23 biennium can be found in Table 3.7 (cash) and Table 3.8 (GAAP). The GF-S forecast by fiscal year and major source category through FY 2025 can be found in Table 3.9.

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

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



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

## Recent Collection Experience

*Collections were \$162 million (2.6%) more than forecasted in June*

Revenue collections from the Department of Revenue (DOR) and the Washington court system are tracked monthly. In the period since the June forecast, total revenue from the above sources came in \$162.0 million (2.6%) higher than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$64.4 million (1.3%) higher than forecasted. Revenue from other DOR tax sources was \$94.2 million (9.2%) above the forecast.

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

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	\$64.4	1.3%
Non-Revenue Act	\$94.2	9.2%
Subtotal	\$158.7	2.6%
Washington court system	\$3.4	32.8%
<b>Total*</b>	<b>\$162.0</b>	<b>2.6%</b>

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

Source: ERFC; Period: June 11 - September 10, 2021

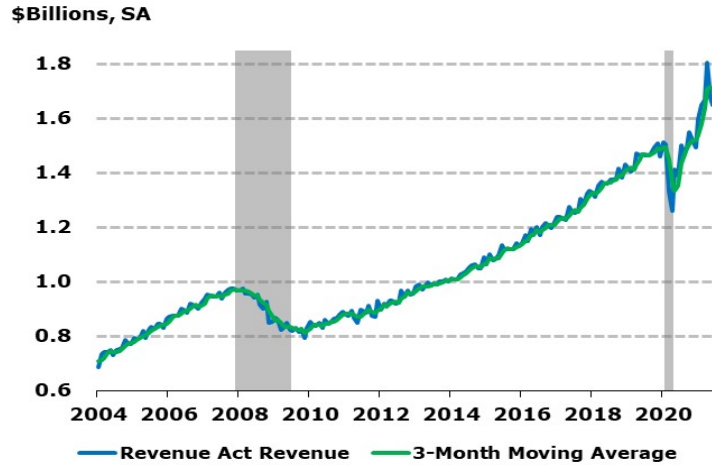
*REET collections were much higher than forecasted*

The largest contributor to the surplus in non-Revenue Act collections was real estate excise tax (REET), which came in \$130.8 million (31.8%) higher than forecasted. Liquor sales and liter tax receipts came in \$6.1 million (7.1%) higher than forecasted. Cigarette tax collections came in \$2.0 million (2.4%)

higher than forecasted. Property tax collections came in \$53.0 million (12.7%) lower than forecasted. Net deposits of unclaimed property into the GF-S were \$2.0 million higher than forecasted. Revenue from all other DOR revenue sources came in \$6.4 million (16.8%) higher than forecasted. Revenue from the Washington court system was \$3.4 million (32.8%) higher than forecasted.

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

*Revenue Act collections have been on an upward trend since the trough in collections that represented April 2020 activity*



Source: ERFC; Data through September 10, 2021

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

*Adjusted Revenue Act collections were up 26.0% year over year for second quarter 2021 activity after 14.6% growth in the first quarter*

Figure 3.2 shows seasonally adjusted Revenue Act receipts excluding payments received under the tax amnesty program in early 2011 and other large payments. It is also adjusted for past changes in payment patterns and deferred payments in the first half of 2020. As shown in the figure, collections dropped precipitously 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 have since strengthened, with exceptional growth in the early spring. Adjusted collections for July activity (August 11 – September 10 collections) were up 12.6% year over year and collections for June activity were up 19.7% year over year. Adjusted collections representing second quarter 2021 activity (May 11 – August 10, 2021 collections) were up 26.0% year over year, while collections representing first quarter 2021 activity (February 11 – May 10, 2021 collections) were up 14.6%. Adjusted year-over-year collections representing fourth quarter 2020 activity grew 2.9% year over year and collections representing third quarter 2020 activity were up 1.8% year over year.

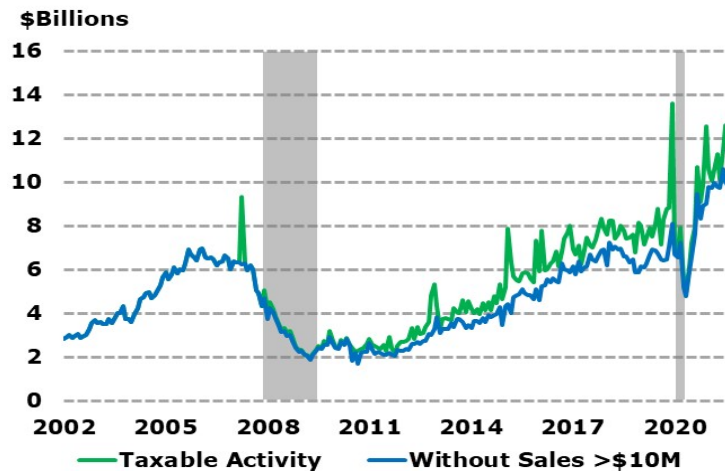


*Real estate activity was much higher than expected in June*

Taxable real estate activity was much higher than previously forecasted. The residential market has been especially strong due to both low mortgage rates and people re-assessing their living situations in light of their newfound ability to work from home. Residential activity has held steady at record-high levels since January 2021 (see Figure 3.3). Most of the recent increase in activity has been due to higher prices rather than an increase in the number of transactions. While the strength in residential activity was expected, a spike in large commercial sales (sales greater than \$10 million) in July and August was not. The \$2.2 billion per month average level of these sales in July and August was more than triple the \$670 million per month average of May and June.

**Figure 3.3: Taxable Real Estate Excise Activity, SA**

*On top of continued strength in residential sales, large commercial sales jumped in July and August*



Source: ERFC; data through August 2021

## Revenue Forecasts by Source

### Department of Revenue

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

The Department of Revenue (DOR) collects and administers the majority of Washington’s GF-S revenue, accounting for 95.2% of total GF-S revenue in FY 2020. The largest tax sources administered by the DOR are the retail sales tax, business and occupation tax, property tax, use tax, cigarette tax and real estate excise tax. The revenue forecasts discussed below can be found in Tables 3.5-3.8.

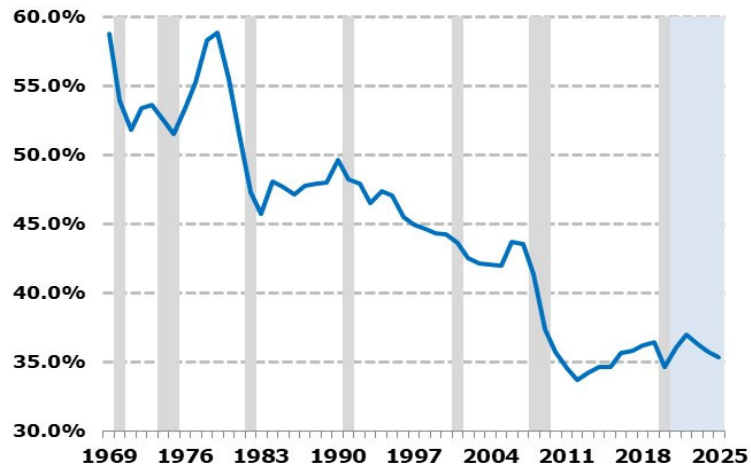
*Retail sales taxes are the largest source of GF-S revenue*

The retail sales tax is the largest source of GF-S revenue, accounting for 47.4% of GF-S revenue in FY 2020. The state’s share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other services are taxed, the tax does not apply to most services. Taxable sales as a share of

personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 33.7% of personal income was spent on taxable items and services, the lowest percentage on record. Increased spending on construction and autos, along with legislative changes to services and companies deemed taxable, caused the share to grow through FY 2017, reaching 36.1% of personal income. Legislation passed in 2017, 2018 and March 2019 that extends the tax to bottled water and online sales caused a continued increase in the ratio. The COVID-19-related collapse in late FY 2020, however, coupled with federal emergency income support, caused the ratio of sales to income to decline in FY 2020. Strong sales in FY 2021 caused the ratio to increase again. Continued strong sales coupled with a slowdown in income growth is expected to bring the ratio to a peak of 37.0% in FY 2022. The ratio is then forecasted to continue its historical downward trend through FY 2025. The historical and forecasted relationship between taxable sales and income is illustrated in Figure 3.4. Taxable retail sales by fiscal year can be found in Table 3.4.

**Figure 3.4: Taxable Sales\* as Percentage of State Personal Income**

*The ratio of taxable sales to state personal income has been on a declining trend*



\*Past tax base adjusted to represent current base. Gray shaded area indicates recession, blue shaded area indicates forecast.  
Source: ERFC; Data through FY 2020, estimate/forecast through FY 2025

*Retail sales tax receipt growth forecast:*

FY22: 6.9%  
FY23: 2.7%  
FY24: 3.7%  
FY25: 3.9%

Strong growth in construction and auto sales brought taxable retail sales growth of 8.1% in FY 2015. Legislative changes coupled with continued growth in construction and auto sales boosted growth in FY 2016 taxable activity to 8.4%. Slowing construction growth and flat auto sales lowered growth in FY 2017 activity to 6.3%. Growth increased to 8.6% in FY 2018, due largely to increased taxation of online sales. Growth in FY 2019 taxable activity stayed relatively strong at 7.6% despite slowing auto sales and construction because of continuing increases in the volume of taxable online sales. Taxable activity growth slowed to 1.0% in FY 2020 due to pandemic-related

shutdowns in the latter part of the year, but then rebounded by 11.1% in FY 2021. Sales are forecasted to grow an additional 4.9% above FY 2021's high level in FY 2022. Growth then eases to 2.8% in FY 2023 before increasing to 3.8% in FY 2024 and FY 2025 (see Table 3.4). Due to the lag between taxable activity and collections and the presence of tax deferrals, credits, refunds, and payments of past due taxes, the growth in actual collections differs from the growth in taxable activity. Growth in collections for FY 2020 was 1.7% and growth in FY 2021 was 10.3%. Collections are forecasted to increase by 6.9% in FY 2022, 2.7% in FY 2023, 3.7% in FY 2024 and 3.9% in FY 2025.

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

The business and occupation (B&O) tax is the second largest source of GF-S revenue, accounting for 19.3% of GF-S revenue in FY 2020. It is a tax on the gross receipts of all businesses operating in Washington. The state portion of the tax applies ten different rates according to various classifications of business activities. In FY 2019, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 43% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 24% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 19% of taxes due.

*B&O tax growth forecast:*

*FY22: 3.3%  
FY23: 3.1%  
FY24: 4.7%  
FY25: 5.0%*

In FY 2018, B&O tax receipts grew by 8.6% due to several large one-time payments of past due taxes and legislative expansion of the tax base. Growth slowed to a still-strong 6.9% in FY 2019. Despite a second quarter collapse in activity, FY 2020 growth remained positive at 3.6%. Collections increased by 7.9% in FY 2021. Collections are now forecasted to grow by 3.3% in FY 2022, 3.1% in FY 2023, 4.7% in FY 2024 and 5.0% in FY 2025.

*State property taxes are the third largest source of GF-S revenue*

The state property tax levy is the third largest source of GF-S revenue, accounting for 14.5% of total revenue in FY 2020. Although the tax goes into the GF-S, it is dedicated to the funding of basic education. As discussed in the [September 2017](#) forecast publication, the total amount of the state levy was increased by new legislation in June 2017, with the increases beginning in FY 2018.

*Property tax growth forecast:*

*FY22: -0.7%  
FY23: 3.3%  
FY24: 2.8%  
FY25: 2.7%*

Constrained by prior law to a levy growth rate of one percent on existing property (or the rate of inflation if less than one percent), property tax collections grew by 1.9% in FY 2017. The first payments of the additional state levy began to arrive in the latter half of FY 2018, bringing total GF-S property tax growth of 31.4% for the fiscal year. Collections fell by 12.4% in FY 2019 due to a temporary reduction in the levy rate for calendar year 2019 and a \$936 million transfer of collections from the levy to the Education Legacy Trust Account (ELTA). Collections rebounded by 44.2% in FY 2020 due to a smaller \$83.8 million

transfer to ELTA and the end of the temporary levy reduction in the second half of the year. FY 2021 collections grew by 27.3% due to a full year of collections at the unreduced levy rate along with the collection of some taxes that would have been collected in FY 2020 but were instead deferred due to the pandemic. The absence of the extra payments from deferrals is expected to cause collections to decline by 0.7% in FY 2022 before growth resumes at 3.3% in FY 2023, 2.8% in FY 2024 and 2.7% in FY 2025.

*REET rates and distributions changed on January 1, 2020*

The real estate excise tax (REET) was the fourth largest source of GF-S revenue in FY 2020, accounting for 4.6% 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 city-county assistance account increase to 5.2% and distributions to the Education Legacy Trust Account decrease to 14%. The new rates and distributions were designed to result in increased collections for both the GF-S and ELTA.

*GF-S REET growth forecast:*

*FY22: -1.2%  
FY23: -16.4%  
FY24: -0.4%  
FY25: 2.6%*

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. The sales boom that began in July 2020 has continued, with record high prices for residential property, bringing collections growth of 34.4% in FY 2021. A resurgence in large commercial sales that began in July 2021 is expected to keep collections near the FY 2021 high, with a decrease of only 1.2% in FY 2022. After the boom years of FY 2021 and FY 2022, the number of transactions is expected to fall and price increases are expected to moderate, bringing a decline in REET receipts of 16.4% in FY 2023 and 0.4% in FY 2024. Growth is then expected to resume at 2.6% in FY 2025.

*Use tax was the fifth largest GF-S source in FY 2020*

The state use tax was the fifth largest GF-S revenue source in FY 2020 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:*

*FY22: -0.2%  
FY23: -2.8%  
FY24: 3.0%  
FY25: 3.4%*

Use tax collections grew 9.0% in FY 2019, boosted by several large one-time purchases. Despite strong collections in the first half of the fiscal year, FY 2020 collections declined by 4.9%. Collections increased by 16.1% in FY 2021 due to record high used car sales. Continued strength in used car sales is expected to keep FY 2022 near FY 2021's strong level, declining by only 0.2%. Lower used car sales bring a forecasted decline of 2.8% in FY 2023 before growth continues at 3.0% in FY 2024 and 3.4% in FY 2025.

*Public utility taxes were the sixth largest GF-S source in FY 2020*

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2020, bringing in 1.7% of total receipts. The tax applies to the gross income of sales to consumers by public and privately owned utilities and is in lieu of the B&O tax. The largest source of public utility taxes is the 3.873% tax on the distribution and generation of electrical power, followed by the 3.852% tax on the distribution of natural gas.

*Growth forecast:*

*FY22: 11.2%  
FY23: 3.6%  
FY24: 2.8%  
FY25: 3.3%*

Public utility tax receipts grew by 0.3% in FY 2020. The expiration of a large tax credit plus increased natural gas and electricity use due to people working from home increased collections by 4.2% in FY 2021. The resumption of business activities plus increases in utility prices is forecasted to boost growth to 11.9% in FY 2022. Growth is then forecasted to slow to 3.6% in FY 2023, 2.8% in FY 2024 and 3.3% in FY 2025.

*The cigarette tax was the seventh largest GF-S source in FY 2020*

The state tax on cigarettes was the seventh largest DOR GF-S revenue source in FY 2020 at 1.4% of total receipts. Prior to FY 2010, the tax made up a much smaller portion of GF-S revenue because much of the tax was dedicated to non-GF-S accounts. In FY 2010, all of the tax except the portion dedicated to the Education Legacy Trust account was redirected to the GF-S, and in FY 2011 all of the cigarette tax was redirected to the GF-S. The current tax rate, which took effect May 1, 2010, is \$3.025 per pack of 20 cigarettes.

*Cigarette tax growth forecast:*

*FY22: 0.6%  
FY23: -6.3%  
FY24: -3.3%  
FY25: -3.5%*

The total number of taxed cigarettes has been on a downward trend due to a continuing decline in the number of smokers. Recently, the rate of decline has been increasing further. Collections decreased by 3.3% in FY 2019 after decreasing by 5.4% in FY 2018. The decrease in collections accelerated to 6.0% in FY 2020, partially due to a state increase in the legal age to purchase cigarettes from 18 to 21 that took effect on January 1, 2020. Collections declined 2.4% in FY 2021 but are

expected to increase by 0.6% in FY 2022. Collections are then forecasted to continue to decline by 6.3% in FY 2023, 3.3% in FY 2024 and 3.5% in FY 2025.

## Forecasted Revenue from Cannabis-Related Sales

*Sales of cannabis products in state-licensed stores began in July 2014*

Initiative 502, approved by voters in the November 2012 election, legalized the sale and use of recreational cannabis and cannabis products in Washington. The first legal sales of cannabis products in state-licensed stores occurred in July 2014. During the 2015 regular and special sessions, legislation was passed that substantially altered the market rules set up by the initiative. 2SSB 5052, passed during the regular session, brought previously unregulated medical marijuana dispensaries into the same regulatory regime as licensed recreational cannabis outlets. This legislation was outlined in our [June 2015](#) forecast publication. Subsequent to the June 2015 forecast, 2E2SHB 2136, passed in the second special session, changed the cannabis excise tax from a 25 percent tax collected from growers, processors and retailers to a 37 percent tax on retail sales only. The law also made changes to the distribution of tax and fee revenue. Cannabis taxes and license fees are collected by the Liquor and Cannabis Board and are placed into a dedicated fund with annual appropriations to various other accounts including the GF-S.

*Change in GF-S forecast of total cannabis-related revenue by biennium (millions):*

19-21: \$0.0  
21-23: -\$6.7  
23-25: -\$3.6

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. The final tally of GF-S distributions in the 2019-21 biennium was \$361.0 million, unchanged from the June forecast. The forecast of GF-S distributions for the 2021-23 biennium has been decreased of \$6.7 million to 393.7 million and the forecast for the 2023-25 biennium has been decreased \$3.6 million to \$416.8 million. Details of the forecasted distributions from the account can be found in Table 3.18.

## The Office of Financial Management (Other Agencies)

*Forecast change by biennium (millions):*

19-21: -\$11.8  
21-23: -\$67.7  
23-25: -\$75.5

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 preliminary revenue tally for the 2019-21 biennium is \$252.8 million, \$11.8 million less than expected in June. The forecast for the 2021-23 biennium was decreased \$67.7 million to \$142.6 million and the forecast of revenue for the 2023-25 biennium was decreased \$75.5 million to \$197.3 million. The forecast decreases in the 2021-23 and 2023-25 biennia were mainly due to decreases in expected payments from the Tobacco Master

Settlement Agreement stemming from a recent arbitration decision.

## State Treasurer

*Forecast  
change by  
biennium  
(millions):*

19-21: *-\$0.2*  
21-23: *\$33.1*  
23-25: *\$13.4*

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The preliminary tally of GF-S revenue for the 2019-21 biennium is \$21.3 million, \$0.2 million less than forecasted in June. The forecast for the 2021-23 biennium has been increased \$33.1 million to \$54.0 million and the forecast of revenue for the 2023-25 biennium has been increased \$13.4 million to \$22.4 million. The increases were mainly due to increases in the forecasted daily balances in interest-earning accounts.

## Insurance Commissioner

*Forecast  
change by  
biennium  
(millions):*

19-21: *\$0.8*  
21-23: *-\$5.6*  
23-25: *-\$4.2*

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 preliminary tally of GF-S revenue for the 2019-21 biennium is \$1,299.4 million, \$0.8 million higher than the June forecast. The forecast of GF-S revenue for the 2021-23 biennium has been decreased \$5.6 million to \$1,464.4 million and the forecast for the 2023-25 biennium has been decreased \$4.2 million to \$1,543.7 million.

## Liquor and Cannabis Board

*Forecast  
change by  
biennium  
(millions):*

19-21: *\$6.4*  
21-23: *\$0.8*  
23-25: *\$5.0*

The Liquor and Cannabis Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis discussed previously. The preliminary tally of GF-S distributions for the 2019-21 biennium is \$656.3 million, \$6.4 million higher than forecasted in June. The forecast of GF-S distributions for the 2021-23 biennium has been increased \$0.8 million to \$713.6 million and the forecast of for the 2023-25 biennium has been increased \$5.0 million to \$752.1 million. The forecast changes were a combination of increases in expected fees and taxes associated with beer, wine, and liquor distribution and the increases in expected distributions of cannabis excise taxes to the GF-S discussed above.

## Lottery Commission

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions

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

19-21: \$2.5  
21-23: -\$6.3  
23-25: -\$1.3

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 preliminary tally of GF-S transfers for the 2019-21 biennium is \$44.4 million, \$2.5 million higher than the June forecast. The forecast of transfers for the 2021-23 biennium has been decreased \$6.3 million to \$46.5 million and the forecast for the 2023-25 biennium has been decreased \$1.3 million to \$51.5 million.

*OPA forecast change by biennium (millions):*

19-21: \$1.1  
21-23: \$0.8  
23-25: -\$0.8

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The preliminary tally of OPA revenue for the 2019-21 biennium is \$336.9 million, \$1.1 million higher than the June forecast. The forecast for the 2021-23 biennium has been increased \$0.8 million to \$349.4 million and the forecast for the 2023-25 biennium has been decreased \$0.8 million to \$349.7 million.

## Washington Court System

*Forecast change by biennium (millions):*

19-21: \$2.9  
21-23: \$2.1  
23-25: \$1.2

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 preliminary tally of GF-S transfers for the 2019-21 biennium is \$118.0 million, \$2.9 million higher than forecasted in June. The forecast of transfers for the 2021-23 biennium has been increased \$2.1 million to \$96.3 million and the forecast for the 2023-25 biennium has been increased \$1.2 million to \$88.3 million.

## Track Record for the 2019-21 Biennium

*The preliminary final tally of GF-S revenue is \$1.09 billion (2.2%) higher than the forecasted revenue at the time of the initial 2019-21 budget*

Table 3.10 summarizes the historical changes to the GF-S revenue forecast for the 2019-21 biennium. The February 2016 forecast was the initial forecast for the biennium. The preliminary tally of GF-S revenue is \$7.36 billion (16.9%) higher than the initial forecast. Non-economic changes have increased the forecast by \$3.4 billion (7.8%). Excluding non-economic changes, the current forecast is \$3.97 billion (9.1%) higher than the initial forecast. The March 2019 forecast, coupled with \$109 million in legislative and budget-driven revenue changes passed in the 2019 legislative session after the March forecast, was the basis for the initial budget for the 2019-21 biennium. The preliminary tally of biennial revenue is \$1.09 billion (2.2%) higher than that sum.



## Track Record for the 2021-23 Biennium

*The current forecast is \$2.08 (3.8%) billion higher than the forecasted revenue at the time of the initial 2021-23 budget*

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2021-23 biennium. The February 2018 forecast was the initial forecast for the biennium. The September 2021 forecast is \$4.52 billion (8.7%) higher than the initial forecast. Non-economic changes have increased the forecast by \$0.66 billion (1.3%). Excluding non-economic changes, the current forecast is \$3.86 billion (7.4%) higher than the initial forecast. The March 2021 forecast, coupled with a \$101 million revenue reduction from legislative and budget-driven revenue changes passed in the 2021 legislative session after the March forecast, was the basis for the initial budget for the 2021-23 biennium. The September forecast of biennial revenue is \$2.08 billion (3.8%) higher than that sum.

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

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

Legislation enacted in 1987 requires that the state's biennial budget be in conformance with Generally Accepted Accounting Principles (GAAP). It also requires a GF-S revenue forecast on both a cash and GAAP basis. The GAAP forecasts of GF-S revenue for the 2017-19 and 2019-21 biennia are presented in Tables 3.6 and 3.8 and the GAAP forecast of Lottery revenue transfers for those biennia is in Table 3.15. The primary difference between the cash and GAAP forecasts is the timing of the receipt of revenue. On a GAAP basis, revenue is credited to the biennium in which it is earned even though it may not have been received. The cash forecast, on the other hand, reflects expected cash receipts during a fiscal period. The forecast on a GAAP, or accrual, basis is primarily used for financial reporting. The cash forecast is used for cash flow management and revenue tracking. The cash forecast is also the forecast used in the state's budgetary balance sheet, which is the principal tool for assessing the General Fund's current surplus or deficit position. References to the GF-S forecast in the text of this chapter refer to the cash forecast unless otherwise noted. Likewise, figures from revenue tables other than Tables 3.6, 3.8 and 3.16 are projected on a cash basis.

## Budgetary Balance Sheet for the 2019-21 and 2021-23 Biennia

*The forecast implies total reserves of \$4.457 billion at the end of the 2021-23 biennium for GF-S, ELTA, OPA and WEIA*

Table 3.12 shows the budgetary balance sheets for the 2019-21 and 2021-23 biennia as prepared by the Office of Financial Management and the House and Senate fiscal committees. The balance sheet shows not only projected GF-S spending and resources but also total projected spending and resources for the GF-S plus the other main non-transportation state-funded accounts: the Education Legacy Trust Account (ELTA), the Washington Opportunity Pathways Account (OPA) and the

Workforce Education Investment Account (WEIA). As shown in the table, the GF-S beginning fund balance for the 2019-21 biennium was \$999.3 million and the total beginning balance for GF-S, ELTA, OPA and WEIA combined was \$1,981.2 million. The preliminary summation of total GF-S reserves at the end of the 2019-21 biennium was \$3,319.8 million and total reserves for GF-S, ELTA, OPA and WEIA accounts was \$3,794.9 million. Based on the current enacted budget, the balance sheet projects total GF-S reserves of \$3,976.6 million at the end for the 2021-23 biennium and total reserves for the GF-S, ELTA, OPA and WEIA accounts of \$4,456.8 million.

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

*Optimistic scenario (billions):*  
 21-23: +\$2.96  
 23-25: +\$5.64

*Pessimistic scenario:*  
 21-23: -\$3.05  
 23-25: -\$5.75

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 50% to the baseline forecast, 20% to the optimistic scenario and 30% to the pessimistic scenario. The revenue implications of these alternative scenarios for the 2021-23 biennium are shown in Table 3.13 and those of the 2023-25 biennium are shown in Table 3.14. For the 2021-23 biennium, the optimistic forecast generates \$56.457 billion in GF-S revenue, \$2.962 billion (5.2%) more than the baseline scenario, while the pessimistic forecast produces \$53.411 billion in revenue, \$3.046 billion (5.4%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$65.512 billion in GF-S revenue, \$5.642 billion (9.4%) more than the baseline scenario, while the pessimistic forecast produces \$54.120 billion in revenue, \$5.750 billion (9.6%) less than the baseline.

## Education Legacy Trust Account

*ELTA forecast change by biennium (millions):*  
 19-21: \$9.0  
 21-23: \$73.5  
 23-25: \$31.3

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 preliminary tally of ELTA revenue for the 2019-21 biennium is \$1,639.1 million, \$9.0 million more than the June forecast. The forecast has been increased by \$73.5 million for

the 2021-23 biennium and \$31.3 million for the 2023-25 biennium. Forecasted ELTA receipts are now \$1,866.0 million for the 2021-23 biennium and \$2,125.4 million for the 2023-25 biennium.

## Workforce Education Investment Account

*WEIA  
forecast  
change by  
biennium  
(millions):*

19-21: -\$5.4  
21-23: \$7.7  
23-25: \$9.3

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 preliminary tally of WEIA revenue for the 2019-21 biennium is \$352.2 million, \$5.4 million less than forecasted in June. The forecast of WEIA revenue has been increased by \$7.7 million in the 2021-23 biennium and \$6.9 million in the 2023-25 biennium. WEIA revenue is now forecasted at \$668.3 million in the 2021-23 biennium and \$736.9 million in the 2023-25 biennium. The WEIA forecast by fiscal year is presented in Table 3.19.

## Funds Subject to the Budget Outlook

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

2019-21:  
-\$40.2  
  
2021-23:  
\$927.4  
  
2023-25:  
\$930.9

By law, enacted biennial budgets must balance not only in the initial biennium of the budget but in the subsequent biennium as well, given assumptions of growth in spending from one biennium to the next and the current revenue forecast. The budget outlook that determines this balance looks at not only GF-S revenue and spending but also that of the ELTA, OPA and the WEIA. The preliminary tally of total revenue for funds subject to the budget outlook for the 2019-21 biennium is \$53,131.7 million, \$40.2 million less than the June forecast. The forecast of total revenue for the 2021-23 biennium is \$59,340.5 million, \$927.4 million more than the June forecast. The forecast for the 2023-25 biennium is \$63,082.1 million, \$930.9 million more than the June forecast. The forecast of total GF-S, ELTA, OPA and WEIA revenue and recent history by fiscal year is presented in Table 3.17.

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

<b>Biennium</b>	<b>Current Dollars</b>	<b>Percent Change</b>	<b>2012</b>	
			<b>Chained Dollars</b>	<b>Percent Change</b>
1961-63	\$817.1		\$4,300.0	
1963-65	866.2	6.0%	4,439.3	3.2%
1965-67	1,128.6	30.3%	5,565.5	25.4%
1967-69	1,440.5	27.6%	6,658.6	19.6%
1969-71	1,732.7	20.3%	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%	45,497.1	11.5%
2021-23 <sup>F</sup>	56,456.8	11.1%	47,858.7	5.2%
2023-25 <sup>F</sup>	59,870.0	6.0%	48,982.7	2.3%

<sup>F</sup> September 2021 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 2021 forecast.

Table 3.4  
**Taxable retail sales\***  
(millions of dollars)

<b>Fiscal Year</b>	<b>Amount</b>	<b>Percent Change</b>
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 <sup>E</sup>	196,614	11.1%
2022 <sup>F</sup>	206,293	4.9%
2023 <sup>F</sup>	212,111	2.8%
2024 <sup>F</sup>	220,146	3.8%
2025 <sup>F</sup>	228,595	3.8%

<sup>E</sup> September 2021 preliminary estimate

<sup>F</sup> September 2021 forecast

Source: ERFC

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

Table 3.5

**Comparison of the General Fund-State forecast by agency**

2019-21 biennium; cash basis

(millions of dollars)

<b>Forecast by Agency</b>	<b>June 2021 Forecast<sup>1</sup></b>	<b>Legislative Changes</b>	<b>Forecast Revision</b>	<b>Sept 2021 Estimate<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$23,783.2	\$0.0	(\$32.1)	\$23,751.1	(\$32.1)
Business & Occupation	9,557.5	0.0	(2.2)	9,555.2	(2.2)
Use	1,574.3	0.0	(19.8)	1,554.6	(19.8)
Public Utility	831.5	0.0	(11.4)	820.1	(11.4)
Liquor Sales/Liter	654.0	0.0	(0.1)	653.9	(0.1)
Cigarette	645.5	0.0	(3.6)	641.9	(3.6)
Property (State Levy)	7,873.6	0.0	1.5	7,875.2	1.5
Real Estate Excise	2,528.3	0.0	17.5	2,545.8	17.5
Timber Excise	(0.0)	0.0	0.0	(0.0)	0.0
Other	1,008.7	0.0	4.6	1,013.3	4.6
Subtotal	48,456.7	0.0	(45.5)	48,411.1	(45.5)
<b>Insurance Commissioner</b>					
Insurance Premiums	1,298.6	0.0	0.8	1,299.4	0.8
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	592.7	0.0	6.1	598.8	6.1
Beer & Wine Surtax	57.2	0.0	0.3	57.5	0.3
<b>Lottery Commission</b>					
Lottery Revenue	41.9	0.0	2.5	44.4	2.5
<b>State Treasurer</b>					
Interest Earnings	21.5	0.0	(0.2)	21.3	(0.2)
<b>Office of Financial Management</b>					
Other Agencies	264.6	0.0	(11.8)	252.8	(11.8)
<b>Washington Court System</b>					
Court Fees, Fines & Forfeitures	115.1	0.0	2.9	118.0	2.9
<b>Total General Fund-State *</b>	<b>\$50,848.3</b>	<b>\$0.0</b>	<b>(\$44.9)</b>	<b>\$50,803.4</b>	<b>(\$44.9)</b>

<sup>1</sup> Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council June 23, 2021<sup>2</sup> Preliminary estimate for the 2019-21 biennium, adopted September 24, 2021

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

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

Table 3.6

**Comparison of the General Fund-State forecast by agency**

2019-21 biennium; GAAP basis

(millions of dollars)

<b>Forecast by Agency</b>	<b>June 2021 Forecast<sup>1</sup></b>	<b>Legislative Changes</b>	<b>Forecast Revision</b>	<b>Sept 2021 Estimate<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$23,754.6	\$0.0	\$157.5	\$23,912.1	\$157.5
Business & Occupation	9,557.2	0.0	52.3	9,609.5	52.3
Use	1,569.9	0.0	(19.5)	1,550.4	(19.5)
Public Utility	831.0	0.0	(9.8)	821.3	(9.8)
Liquor Sales/Liter	665.3	0.0	(4.3)	661.0	(4.3)
Cigarette	648.5	0.0	3.7	652.2	3.7
Property (State Levy)	8,127.3	0.0	(80.4)	8,046.9	(80.4)
Real Estate Excise	2,530.3	0.0	16.3	2,546.7	16.3
Timber Excise	(0.4)	0.0	(0.0)	(0.4)	(0.0)
Other	1,048.9	0.0	1.2	1,050.2	1.2
Subtotal	48,732.8	0.0	117.1	48,849.8	117.1
<b>Insurance Commissioner</b>					
Insurance Premiums	1,298.6	0.0	0.8	1,299.4	0.8
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	592.7	0.0	6.1	598.8	6.1
Beer & Wine Surtax	57.2	0.0	0.3	57.5	0.3
<b>Lottery Commission</b>					
Lottery Revenue	42.7	0.0	(2.6)	40.1	(2.6)
<b>State Treasurer</b>					
Interest Earnings	21.2	0.0	0.0	21.3	0.0
<b>Office of Financial Management</b>					
Other Agencies	264.6	0.0	(11.8)	252.8	(11.8)
<b>Washington Court System</b>					
Court Fees, Fines & Forfeitures	115.1	0.0	2.9	118.0	2.9
<b>Total General Fund-State *</b>	<b>\$51,124.9</b>	<b>\$0.0</b>	<b>\$112.8</b>	<b>\$51,237.8</b>	<b>\$112.8</b>

<sup>1</sup> Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council June 23, 2021<sup>2</sup> Preliminary estimate for the 2019-21 biennium, adopted September 24, 2021

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

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

Table 3.7

**Comparison of the General Fund-State forecast by agency**

2021-23 biennium; cash basis

(millions of dollars)

<b>Forecast by Agency</b>	<b>June 2021 Forecast<sup>1</sup></b>	<b>Legislative Changes</b>	<b>Forecast Revision</b>	<b>Sept 2021 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$26,598.3	\$0.0	\$399.2	\$26,997.6	\$399.2
Business & Occupation	10,277.3	0.0	127.6	10,404.9	127.6
Use	1,574.5	0.0	68.6	1,643.0	68.6
Public Utility	938.0	0.0	15.0	952.9	15.0
Liquor Sales/Liter	650.7	0.0	23.6	674.4	23.6
Cigarette	601.6	0.0	16.5	618.1	16.5
Property (State Levy)	8,950.4	0.0	(52.2)	8,898.2	(52.2)
Real Estate Excise	2,354.7	0.0	293.6	2,648.4	293.6
Timber Excise	1.7	0.0	(0.1)	1.6	(0.1)
Other	1,103.0	0.0	(2.9)	1,100.1	(2.9)
Subtotal	53,050.2	0.0	889.0	53,939.2	889.0
<b>Insurance Commissioner</b>					
Insurance Premiums	1,470.0	0.0	(5.6)	1,464.4	(5.6)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	654.5	0.0	0.1	654.6	0.1
Beer & Wine Surtax	58.4	0.0	0.7	59.1	0.7
<b>Lottery Commission</b>					
Lottery Revenue	52.8	0.0	(6.3)	46.5	(6.3)
<b>State Treasurer</b>					
Interest Earnings	21.0	0.0	33.1	54.0	33.1
<b>Office of Financial Management</b>					
Other Agencies	210.3	0.0	(67.7)	142.6	(67.7)
<b>Washington Court System</b>					
Court Fees, Fines & Forfeitures	94.2	0.0	2.1	96.3	2.1
<b>Total General Fund-State *</b>	<b>\$55,611.3</b>	<b>\$0.0</b>	<b>\$845.4</b>	<b>\$56,456.8</b>	<b>\$845.4</b>

<sup>1</sup> Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 23, 2021<sup>2</sup> Forecast for the 2021-23 biennium, adopted September 24, 2021

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

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



Table 3.8  
**Comparison of the General Fund-State forecast by agency**  
 2021-23 biennium; GAAP basis  
 (millions of dollars)

<b>Forecast by Agency</b>	<b>June 2021 Forecast<sup>1</sup></b>	<b>Legislative Changes</b>	<b>Forecast Revision</b>	<b>Sept 2021 Forecast<sup>2</sup></b>	<b>Total Change</b>
<b>Department of Revenue</b>					
Retail Sales	\$26,598.3	\$0.0	\$399.2	\$26,997.6	\$399.2
Business & Occupation Use	10,277.3	0.0	127.6	10,404.9	127.6
Public Utility	938.0	0.0	15.0	952.9	15.0
Liquor Sales/Liter	650.7	0.0	30.6	681.3	30.6
Cigarette	601.6	0.0	16.5	618.1	16.5
Property (State Levy)	8,950.4	0.0	(52.2)	8,898.2	(52.2)
Real Estate Excise	2,354.7	0.0	293.6	2,648.4	293.6
Timber Excise	1.8	0.0	(0.1)	1.7	(0.1)
Other	1,103.0	0.0	(2.8)	1,100.1	(2.8)
Subtotal	53,050.3	0.0	895.9	53,946.2	895.9
<b>Insurance Commissioner</b>					
Insurance Premiums	1,470.0	0.0	(5.6)	1,464.4	(5.6)
<b>Liquor Control Board</b>					
Fees, Cannabis Excise Tax	654.5	0.0	0.1	654.6	0.1
Beer & Wine Surtax	58.4	0.0	0.7	59.1	0.7
<b>Lottery Commission</b>					
Lottery Revenue	52.6	0.0	(1.2)	51.4	(1.2)
<b>State Treasurer</b>					
Interest Earnings	20.2	0.0	18.2	38.4	18.2
<b>Office of Financial Management</b>					
Other Agencies	210.3	0.0	(67.7)	142.6	(67.7)
<b>Washington Court System</b>					
Court Fees, Fines & Forfeitures	94.2	0.0	2.1	96.3	2.1
<b>Total General Fund-State *</b>	<b>\$55,610.5</b>	<b>\$0.0</b>	<b>\$842.6</b>	<b>\$56,453.0</b>	<b>\$842.6</b>

<sup>1</sup> Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council June 23, 2021

<sup>2</sup> Forecast for the 2021-23 biennium, adopted September 24, 2021

\*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 2021 General Fund-State forecast detail  
2019-21 to 2023-25 biennia; cash basis**

(Millions of Dollars)

<b>Forecast by Source</b>	<b>Fiscal 2020</b>	<b>Fiscal 2021</b>	<b>2019-21 Biennium</b>	<b>Fiscal 2022</b>	<b>Fiscal 2023</b>	<b>2021-23 Biennium</b>	<b>Fiscal 2024</b>	<b>Fiscal 2025</b>	<b>2023-25 Biennium</b>
<b>State Taxes</b>									
Retail sales**	\$11,296.2	\$12,454.9	\$23,751.1	\$13,319.6	\$13,678.0	\$26,997.6	\$14,181.0	\$14,730.0	\$28,910.9
Business & occupation Use**	4,596.8	4,958.5	9,555.2	5,123.2	5,281.7	10,404.9	5,531.0	5,805.9	11,336.9
Public Utility	719.2	835.3	1,554.6	833.3	809.7	1,643.0	834.3	862.9	1,697.2
Liquor sales/liter	401.7	418.4	820.1	468.1	484.8	952.9	498.3	514.6	1,012.8
Beer & wine surtax	311.6	342.4	653.9	339.6	334.7	674.4	336.4	340.0	676.4
Cigarette	28.2	29.3	57.5	29.5	29.6	59.1	29.8	30.0	59.8
Tobacco products	331.3	328.1	659.4	327.7	307.6	635.3	297.9	287.9	585.8
Cannabis Excise Taxes	53.1	51.7	104.7	55.7	57.1	112.8	57.5	58.1	115.6
Property (state school levy)	149.9	202.0	352.0	193.8	190.8	384.6	199.2	208.5	407.6
Leasehold Excise Tax	3,464.9	4,410.3	7,875.2	4,377.3	4,520.9	8,898.2	4,646.8	4,774.3	9,421.1
Public utility district	36.3	37.2	73.5	37.7	38.4	76.1	39.1	39.7	78.8
Brokered Natural Gas	58.4	58.6	116.9	60.5	62.2	122.7	64.0	65.5	129.4
Real estate excise***	23.1	23.1	46.2	25.6	26.2	51.8	26.6	27.0	53.5
Timber excise	1,086.2	1,459.6	2,545.8	1,442.8	1,205.6	2,648.4	1,201.2	1,232.6	2,433.7
Estate/inheritance	0.2	(0.3)	(0.0)	0.7	0.9	1.6	1.1	1.3	2.4
Boat excise	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	18.1	17.1	35.2	17.4	17.7	35.0	17.1	19.8	36.9
Penalties and interest on past due taxes	652.3	647.1	1,299.4	732.3	732.1	1,464.4	758.9	784.8	1,543.7
Other	140.7	100.4	241.0	132.0	147.0	279.0	151.9	157.2	309.1
<b>Total Taxes</b>	<b>23,392.4</b>	<b>26,452.4</b>	<b>49,844.8</b>	<b>27,581.0</b>	<b>27,987.7</b>	<b>55,568.7</b>	<b>28,935.2</b>	<b>30,004.1</b>	<b>58,939.3</b>
<b>State Non-Tax Sources</b>									
Licenses, permits, fees	152.4	166.0	318.5	161.3	163.4	324.7	167.0	159.2	326.2
Liquor & Cannabis fees	104.7	142.2	246.9	128.9	141.0	270.0	141.2	143.5	284.7
Earnings on investments	4.2	17.1	21.3	38.5	15.6	54.0	12.6	9.8	22.4
Washington Court System	62.5	55.6	118.0	49.5	46.9	96.3	45.0	43.3	88.3
Transfers of unclaimed property	110.4	143.7	254.1	123.6	124.9	248.5	126.1	127.4	253.5
Other revenue & transfers	(9.3)	9.1	(0.2)	(66.5)	(39.0)	(105.5)	(20.0)	(24.5)	(44.5)
<b>Total Non-Tax</b>	<b>424.9</b>	<b>533.7</b>	<b>958.6</b>	<b>435.3</b>	<b>452.7</b>	<b>888.1</b>	<b>471.9</b>	<b>458.7</b>	<b>930.7</b>
<b>Total General Fund-State *</b>	<b>\$23,817.3</b>	<b>\$26,986.1</b>	<b>\$50,803.4</b>	<b>\$28,016.3</b>	<b>\$28,440.4</b>	<b>\$56,456.8</b>	<b>\$29,407.2</b>	<b>\$30,462.9</b>	<b>\$59,870.0</b>

\* Detail may not add to totals due to rounding

\*\*GFS portion after Initiative 900 transfer

\*\*\*Includes penalties and interest

Table 3.10  
**Track Record for the 2019-21 General Fund-State Cash Forecast**  
 February 2016 through September 2021  
 Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis</u>
<b>February 2016 #</b>	\$36,887	\$1,823				\$43,441
<b>Changes to Forecast</b>						
June 2016	172	(31)	141	(7) #1	134	43,575
September 2016	86	(31)	55	0	55	43,630
November 2016	21	4	26	0	26	43,656
March 2017	241	(55)	186	0	186	43,842
June 2017	47	(13)	34	(1) #2	34	43,875
September 2017	245	(3)	243	3,278 #3	3,521	47,396
November 2017	188	(2)	186	0	186	47,582
February 2018	655	16	671	0	671	48,253
June 2018	426	22	448	(181) #4	267	48,520
September 2018	295	22	317	38 #5	355	48,875
November 2018	186	3	189	0	189	49,064
March 2019	465	(35)	430	115 #6	545	49,609
June 2019	57	29	86	109 #7	195	49,804
September 2019	307	3	310	(84) #8	226	50,030
November 2019	283	(8)	274	0	274	50,304
February 2020	309	(2)	307	0	307	50,611
June 2020	(4,422)	(185)	(4,607)	125 #9	(4,482)	46,129
September 2020	1,990	69	2,060	0	2,060	48,189
November 2020	577	31	607	0	607	48,796
March 2021	1086	158	1,244	0	1,244	50,041
June 2021	772	38	810	(2) #10	808	50,848
September 2021	(46)	1	(45)	0	(45)	50,803
<b>Total change***:</b>						
From February 2016	3,942	30	3,972	3,391	7,362	
Percent change	10.7	1.6	9.1	7.8	16.9	

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

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

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

# First official forecast for the 2019-21 biennium.

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

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

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

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

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

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

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

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

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

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

Table 3.11  
**Track Record for the 2021-23 General Fund-State Cash Forecast**  
 February 2018 through September 2021  
 Cash Basis - Millions of Dollars

<u>Date of Forecast</u>	<u>Department of Revenue*</u>	<u>Other Agencies</u>	<u>Subtotal*</u>	<u>Non-Economic Changes**</u>	<u>Total Change</u>	<u>Total General Fund-State Cash Basis</u>
<b>February 2018 #</b>	\$49,551	\$2,381				\$51,932
<b>Changes to Forecast</b>						
June 2018	324	33	357	(7) #1	350	52,282
September 2018	248	1	249	46 #2	295	52,577
November 2018	228	(27)	201	0	201	52,778
March 2019	402	(33)	369	190 #3	559	53,337
June 2019	17	8	24	322 #4	347	53,683
September 2019	(89)	10	(79)	0	(79)	53,604
November 2019	169	6	175	0	175	53,779
February 2020	501	12	512	0	512	54,291
June 2020	(4,431)	(139)	(4,570)	213 #5	(4,357)	49,935
September 2020	2187	59	2,246	0	2,246	52,181
November 2020	265	32	297	0	297	52,478
March 2021	1,807	88	1,894	0	1,894	54,372
June 2021	1,275	65	1,340	(101) #6	1,239	55,611
September 2021	889	(44)	845	0	845	56,457
<b>Total change***:</b>						
From February 2018	3,791	70	3,861	664	4,525	
Percent change	7.7	3.0	7.4	1.3	8.7	

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

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

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

# First official forecast for the 2021-23 biennium.

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

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

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

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

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

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

Table 3.12

**2019-21 and 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) and Budget Stabilization Account (BSA)**  
Dollars in Millions

	2019-21			2021-23		
	GFS	ELTA, OPA and WEIA	TOTAL	GFS	ELTA, OPA and WEIA*	TOTAL
<b>RESOURCES</b>						
<b>Beginning Fund Balance</b>	<b>999.3</b>	<b>981.9</b>	<b>1,981.2</b>	<b>3,313.0</b>	<b>475.2</b>	<b>3,788.2</b>
June 2021 Revenue Forecast	50,848.3	2,323.6	53,171.9	55,611.3	2,801.8	58,413.1
September 2021 Revenue Forecast change	(44.9)	4.6	(40.2)	845.4	82.0	927.4
<b>Current Revenue Totals</b>	<b>50,803.4</b>	<b>2,328.3</b>	<b>53,131.7</b>	<b>56,456.8</b>	<b>2,883.8</b>	<b>59,340.5</b>
Transfer to Budget Stabilization Account (1% of GSR)	(506.3)		(506.3)	(554.9)		(554.9)
Transfer to Budget Stabilization Account (EGSR)	-		-	-		-
Enacted Fund Transfers	35.2	160.0	195.2	50.2	-	50.2
ACFR Adjustments Actual- FY 20	(3.9)	28.2	24.2	-	-	-
Actual/Assumed Prior Period Adjustments	59.7		59.7	40.8		40.8
Fund Transfers	(1,100.2)	45.0	(1,055.2)			-
Fund Transfer- ESSB 5092 Section 1802- From BSA	1,820.4		1,820.4			-
<b>Total Resources (including beginning fund balance)</b>	<b>52,107.6</b>	<b>3,543.3</b>	<b>55,650.9</b>	<b>59,305.9</b>	<b>3,359.0</b>	<b>62,664.8</b>
<b>EXPENDITURES</b>						
<b>Enacted Budgets</b>						
2019-21 Biennium	49,494.2	3,068.1	52,562.3	-	-	-
2021-23 Biennium			-	56,187.8	2,878.8	59,066.6
Actual/Assumed Reversions	(699.6)	-	(699.6)	(295.7)	-	(295.7)
<b>Total Expenditures</b>	<b>48,794.6</b>	<b>3,068.1</b>	<b>51,862.8</b>	<b>55,892.0</b>	<b>2,878.8</b>	<b>58,770.9</b>
<b>RESERVES</b>						
<b>Projected Ending Balance</b>	<b>3,313.0</b>	<b>475.2</b>	<b>3,788.2</b>	<b>3,413.8</b>	<b>480.1</b>	<b>3,894.0</b>
<b>Budget Stabilization Account</b>						
Budget Stabilization Account Beginning Balance	1,618.4		1,618.4	6.8		6.8
Transfers from General Fund (1% of GSR)	506.3		506.3	554.9		554.9
Transfers from GFS (EGSR)	-		-	-		-
Prior Period Adjustment-FY 20	0.9		0.9	-		-
Actual/Assumed Interest Earnings	40.7		40.7	1.2		1.2
Fund Transfer- EHB 2965- ESD transfer back to BSA	25.0		25.0	-		-
Fund Transfer- ESSB 5092 Section 1802- To GFS	(1,820.4)		(1,820.4)			-
Less 2020 Supplemental Approp from BSA-Coronavirus	(200.0)		(200.0)	-		-
Less Approp from BSA-Covid-19- HB 1367	(164.3)		(164.3)	-		-
<b>Projected Budget Stabilization Account Ending Balance</b>	<b>6.8</b>		<b>6.8</b>	<b>562.8</b>		<b>562.8</b>
<b>Total Reserves (Near General Fund plus Budget Stabilization)</b>	<b>3,319.8</b>	<b>475.2</b>	<b>3,794.9</b>	<b>3,976.6</b>	<b>480.1</b>	<b>4,456.8</b>

\* Account 25H-Fair Start for Kids Account will be added when revenue and expenditures are enacted.

Acronyms

GSR- General State Revenues  
EGSR- Extraordinary General State Revenues  
ACFR- Annual Comprehensive Financial Report

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

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$28,674.8	\$26,997.6	\$25,237.6
Business & Occupation Use	11,052.0	10,404.9	9,723.5
Public Utility	1,771.3	1,643.0	1,519.7
Property (school levy)	1,005.7	952.9	897.7
Real Estate Excise	8,950.2	8,898.2	8,828.1
Other	2,813.0	2,648.4	2,507.2
Subtotal	2,474.3	2,394.2	2,313.1
	56,741.2	53,939.2	51,027.0
<b>Insurance Commissioner<sup>1</sup></b>	1,537.7	1,464.4	1,391.2
<b>Lottery Commission</b>	48.9	46.5	44.2
<b>State Treasurer - Interest earnings</b>	100.8	54.0	32.3
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>	742.8	713.6	684.3
<b>Office of Financial Management</b>			
Other agencies	146.9	142.6	138.3
<b>Washington Court System</b>			
Court Fees, Fines & Forfeitures	100.7	96.3	93.6
<b>Total General Fund - State*</b>	<b>\$59,418.9</b>	<b>\$56,456.8</b>	<b>\$53,410.9</b>
<b>Difference from September 2021 Baseline</b>	<b>\$2,962.2</b>		<b>(\$3,045.9)</b>

1 Insurance premiums, General Fund-State portion.

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

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

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

Table 3.14  
**Alternative forecasts compared to the baseline forecast**  
**2023-25 biennium**  
(cash basis, millions of dollars)

<b>Forecast by Source</b>	<b>Optimistic Forecast</b>	<b>Baseline Forecast</b>	<b>Pessimistic Forecast</b>
<b>Department of Revenue</b>			
Retail Sales	\$32,244.2	\$28,910.9	\$25,442.9
Business & Occupation Use	12,594.0	11,336.9	10,063.4
Public Utility Property (school levy)	1,936.6	1,697.2	1,469.3
Real Estate Excise	1,102.9	1,012.8	889.1
Other	9,499.4	9,421.1	9,314.4
Subtotal	2,745.6	2,433.7	2,162.3
	2,561.7	2,402.1	2,272.8
	62,684.5	57,214.7	51,614.2
<b>Insurance Commissioner<sup>1</sup></b>	1,620.9	1,543.7	1,466.5
<b>Lottery Commission</b>	54.1	51.5	49.0
<b>State Treasurer - Interest earnings</b>	56.4	22.4	4.9
<b>Liquor and Cannabis Surtaxes &amp; Fees<sup>2</sup></b>	796.6	752.1	712.8
<b>Office of Financial Management</b>			
Other agencies	205.2	197.3	189.4
<b>Washington Court System</b>			
Court Fees, Fines & Forfeitures	94.3	88.3	83.2
<b>Total General Fund - State*</b>	<b>\$65,511.9</b>	<b>\$59,870.0</b>	<b>\$54,120.0</b>
<b>Difference from September 2021 Baseline</b>	<b>\$5,641.9</b>		<b>(\$5,750.1)</b>

1 Insurance premiums, General Fund-State portion.

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

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

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

Table 3.15

**Lottery transfers by fund**

September 2021 Forecast  
(cash basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>General Fund</b>	<b>Mariners Stadium</b>	<b>Exhibition Center &amp; Stadium</b>	<b>Student Achievement Account</b>	<b>School Construction Account</b>	<b>Problem Gambling Account</b>	<b>Economic Development Account</b>	<b>Opportunity Pathways Account</b>	<b>Veteran's VIP Account</b>	<b>Education Legacy Trust Account</b>
2014	147.9	9.3	0.0	10.8	0.0	0.0	0.3	3.7	113.7	0.0	10.1
2015	143.1	0.6	0.0	11.2	0.0	0.0	0.3	4.7	120.2	0.0	6.1
2013-15 Biennium	291.0	9.9	0.0	22.0	0.0	0.0	0.6	8.4	233.9	0.0	16.1
2016	171.6	17.1	0.0	11.7	0.0	0.0	0.3	3.3	139.1	0.0	0.0
2017	159.7	14.8	0.0	12.2	0.0	0.0	0.3	4.8	126.6	0.0	0.0
2015-17 Biennium	331.2	31.9	0.0	23.8	0.0	0.0	0.7	8.0	265.7	0.0	0.0
2018	183.6	38.5	0.0	12.6	0.0	0.0	0.3	3.5	128.5	0.0	0.0
2019	213.8	38.7	0.0	13.1	0.0	0.0	0.4	5.8	155.7	0.0	0.0
2017-19 Biennium	397.3	77.3	0.0	25.8	0.0	0.0	0.8	9.3	284.2	0.0	0.0
2020	186.4	16.7	0.0	13.7	0.0	0.0	0.4	3.1	152.5	0.0	0.0
2021	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	201.0	20.8	0.0	0.0	0.0	0.0	0.4	4.3	175.4	0.0	0.0
2023	204.6	25.7	0.0	0.0	0.0	0.0	0.4	4.4	174.0	0.0	0.0
2021-23 Biennium	405.6	46.5	0.0	0.0	0.0	0.0	0.8	8.8	349.4	0.0	0.0
2024	205.4	25.8	0.0	0.0	0.0	0.0	0.4	4.4	174.7	0.0	0.0
2025	205.6	25.7	0.0	0.0	0.0	0.0	0.4	4.4	175.0	0.0	0.0
2023-25 Biennium	411.0	51.5	0.0	0.0	0.0	0.0	0.9	8.9	349.7	0.0	0.0

Table 3.16

**Lottery transfers by fund**

September 2021 Forecast  
(GAAP basis, millions of dollars)

	<b>Lottery: Total Transfers:*</b>	<b>General Fund</b>	<b>Mariners Stadium</b>	<b>Exhibition Center &amp; Stadium</b>	<b>Student Achievement Account</b>	<b>School Construction Account</b>	<b>Problem Gambling Account</b>	<b>Economic Development Account</b>	<b>Opportunity Pathways Account</b>	<b>Veteran's VIP Account</b>	<b>Education Legacy Trust Account</b>
2014	147.7	0.6	0.0	10.8	0.0	0.0	0.3	4.0	121.9	0.0	10.1
2015	141.3	0.0	0.0	11.2	0.0	0.0	0.3	4.7	119.0	0.0	6.1
2013-15 Biennium	288.9	0.6	0.0	22.0	0.0	0.0	0.6	8.7	240.9	0.0	16.1
2016	175.5	31.9	0.0	11.7	0.0	0.0	0.3	2.8	128.7	0.0	0.0
2017	161.9	16.8	0.0	12.2	0.0	0.0	0.3	4.9	126.8	0.0	0.0
2015-17 Biennium	337.4	48.7	0.0	23.8	0.0	0.0	0.7	7.7	255.5	0.0	0.0
2018	183.0	31.2	0.0	12.6	0.0	0.0	0.4	4.6	134.2	0.0	0.0
2019	215.8	30.9	0.0	13.1	0.0	0.0	0.4	4.6	166.7	0.0	0.0
2017-19 Biennium	398.8	62.1	0.0	25.8	0.0	0.0	0.8	9.2	300.9	0.0	0.0
2020	180.9	16.2	0.0	13.7	0.0	0.0	0.4	3.4	147.3	0.0	0.0
2021	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	203.9	25.7	0.0	0.0	0.0	0.0	0.4	4.4	173.3	0.0	0.0
2023	204.7	25.7	0.0	0.0	0.0	0.0	0.4	4.4	174.1	0.0	0.0
2021-23 Biennium	408.5	51.4	0.0	0.0	0.0	0.0	0.9	8.9	347.4	0.0	0.0
2024	205.4	25.8	0.0	0.0	0.0	0.0	0.4	4.4	174.8	0.0	0.0
2025	205.6	25.9	0.0	0.0	0.0	0.0	0.4	4.4	174.9	0.0	0.0
2023-25 Biennium	411.1	51.7	0.0	0.0	0.0	0.0	0.9	8.9	349.7	0.0	0.0

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

Source: Lottery Commission, ERFC



Table 3.17

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

History and Forecast by Fiscal Year (Cash basis)

September 2021 - Millions of Dollars

	General Fund-State (GF-S) (current definition)		Education Legacy Trust Account* (ELTA)		WA Opportunity Pathways Account (OPA)		Workforce Ed. Investment Acct. (WEIA)		Total GF-S, ELTA, OPA and WEIA		
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	
History:											
FY 2001	\$11,560	4.4%								\$11,560	4.4%
FY 2002	\$11,632	0.6%								\$11,632	0.6%
FY 2003	\$11,721	0.8%								\$11,721	0.8%
FY 2004	\$12,358	5.4%								\$12,358	5.4%
FY 2005	\$13,036	5.5%								\$13,036	5.5%
FY 2006	\$14,318	9.8%	\$115							\$14,432	10.7%
FY 2007	\$15,467	8.0%	\$266	132.2%						\$15,734	9.0%
FY 2008	\$15,659	1.2%	\$213	-20.1%						\$15,872	0.9%
FY 2009	\$14,158	-9.6%	\$224	5.4%						\$14,382	-9.4%
FY 2010	\$13,571	-4.1%	\$157	-29.9%						\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$99					\$14,859	8.2%
FY 2012	\$14,874	1.5%	\$114	2.3%	\$118	19.1%				\$15,107	1.7%
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$126	5.9%				\$16,009	6.0%
FY 2014	\$16,383	3.8%	\$197	95.3%	\$114	-9.4%				\$16,694	4.3%
FY 2015	\$17,283	5.5%	\$207	5.0%	\$120	5.7%				\$17,611	5.5%
FY 2016	\$18,579	7.5%	\$215	3.6%	\$139	15.7%				\$18,933	7.5%
FY 2017	\$19,739	6.2%	\$252	17.5%	\$127	-9.0%				\$20,118	6.3%
FY 2018	\$21,712	10.0%	\$302	19.6%	\$129	1.5%				\$22,143	10.1%
FY 2019	\$22,430	3.3%	\$1,352	348.1%	\$156	21.1%				\$23,938	8.1%
FY 2020	\$23,817	6.2%	\$913	-32.5%	\$153	-2.0%	\$32			\$24,915	4.1%
FY 2021	\$26,986	13.3%	\$726	-20.5%	\$184	20.9%	\$320	905.5%		\$28,217	13.3%
Forecast:											
FY 2022	\$28,016	3.8%	\$705	-2.9%	\$175	-4.8%	\$328	2.5%		\$29,225	3.6%
FY 2023	\$28,440	1.5%	\$1,161	64.8%	\$174	-0.8%	\$340	3.6%		\$30,116	3.0%
FY 2024	\$29,407	3.4%	\$1,046	-10.0%	\$175	0.4%	\$359	5.5%		\$30,986	2.9%
FY 2025	\$30,463	3.6%	\$1,080	3.3%	\$175	0.2%	\$378	5.4%		\$32,096	3.6%
<b>Biennial Totals</b>											
<b>07-09 Biennium</b>	<b>\$29,817</b>	<b>0.1%</b>	<b>\$437</b>	<b>14.8%</b>	<b>\$0</b>	<b>NA</b>	<b>\$0</b>	<b>NA</b>		<b>\$30,254</b>	<b>0.3%</b>
<b>09-11 Biennium</b>	<b>\$28,218</b>	<b>-5.4%</b>	<b>\$269</b>	<b>-38.5%</b>	<b>\$99</b>	<b>NA</b>	<b>\$0</b>	<b>NA</b>		<b>\$28,586</b>	<b>-5.5%</b>
<b>11-13 Biennium</b>	<b>\$30,657</b>	<b>8.6%</b>	<b>\$215</b>	<b>-19.9%</b>	<b>\$244</b>	<b>145.2%</b>	<b>\$0</b>	<b>NA</b>		<b>\$31,116</b>	<b>8.8%</b>
<b>13-15 Biennium</b>	<b>\$33,666</b>	<b>9.8%</b>	<b>\$405</b>	<b>88.0%</b>	<b>\$234</b>	<b>-4.1%</b>	<b>\$0</b>	<b>NA</b>		<b>\$34,305</b>	<b>10.2%</b>
<b>15-17 Biennium</b>	<b>\$38,317</b>	<b>13.8%</b>	<b>\$467</b>	<b>15.4%</b>	<b>\$266</b>	<b>13.6%</b>	<b>\$0</b>	<b>NA</b>		<b>\$39,050</b>	<b>13.8%</b>
<b>17-19 Biennium</b>	<b>\$44,143</b>	<b>15.2%</b>	<b>\$1,654</b>	<b>254.1%</b>	<b>\$284</b>	<b>6.9%</b>	<b>\$0</b>	<b>NA</b>		<b>\$46,081</b>	<b>18.0%</b>
<b>19-21 Biennium</b>	<b>\$50,803</b>	<b>15.1%</b>	<b>\$1,639</b>	<b>-0.9%</b>	<b>\$337</b>	<b>18.5%</b>	<b>\$352</b>	<b>NA</b>		<b>\$53,132</b>	<b>15.3%</b>
<b>21-23 Biennium</b>	<b>\$56,457</b>	<b>11.1%</b>	<b>\$1,866</b>	<b>13.8%</b>	<b>\$349</b>	<b>3.7%</b>	<b>\$668</b>	<b>89.7%</b>		<b>\$59,341</b>	<b>11.7%</b>
<b>23-25 Biennium</b>	<b>\$59,870</b>	<b>6.0%</b>	<b>\$2,125</b>	<b>13.9%</b>	<b>\$350</b>	<b>0.1%</b>	<b>\$737</b>	<b>10.3%</b>		<b>\$63,082</b>	<b>6.3%</b>

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

Table 3.18

**Forecasted distribution of excise tax and license fees from cannabis sales**

September 2021

Thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	LCB administration and pre-distribution allotments	Total to distribute	Distribution of remaining funds						
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority community health centers	OSPI dropout prevention	General Fund-State*
2015	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2016	\$168,051	\$8,551	\$159,500	\$12,814	\$7,500	\$345	\$79,750	\$7,791	\$251	\$51,049
2017	\$300,635	\$9,201	\$291,434	\$27,786	\$7,500	\$345	\$145,717	\$12,979	\$511	\$96,596
2018	\$360,608	\$13,772	\$346,836	\$27,786	\$9,761	\$365	\$173,418	\$17,616	\$513	\$117,377
2019	\$391,191	\$14,558	\$376,633	\$0	\$9,764	\$365	\$188,317	\$46,191	\$515	\$131,482
2020	\$448,427	\$18,234	\$430,193	\$0	\$10,786	\$374	\$215,096	\$48,660	\$522	\$154,754
2021	\$560,929	\$15,888	\$545,041	\$0	\$10,615	\$384	\$272,521	\$54,696	\$530	\$206,296
2022	\$541,514	\$17,422	\$524,092	\$0	\$10,538	\$381	\$262,046	\$52,304	\$520	\$198,303
2023	\$537,245	\$17,463	\$519,782	\$0	\$10,562	\$381	\$259,891	\$52,975	\$533	\$195,440
2024	\$553,763	\$17,463	\$536,300	\$0	\$10,562	\$381	\$268,150	\$52,975	\$533	\$203,699
2025	\$572,566	\$17,463	\$555,103	\$0	\$10,562	\$381	\$277,552	\$52,975	\$533	\$213,101
<b>Biennial totals</b>										
2013-15	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2015-17	\$468,686	\$17,752	\$450,934	\$40,600	\$15,000	\$690	\$225,467	\$20,770	\$762	\$147,645
2017-19	\$751,799	\$28,330	\$723,469	\$27,786	\$19,525	\$730	\$361,735	\$63,807	\$1,028	\$248,859
2019-21	\$1,009,356	\$34,122	\$975,234	\$0	\$21,401	\$758	\$487,617	\$103,356	\$1,052	\$361,050
2021-23	\$1,078,759	\$34,885	\$1,043,874	\$0	\$21,100	\$762	\$521,937	\$105,279	\$1,053	\$393,743
2023-25	\$1,126,329	\$34,926	\$1,091,403	\$0	\$21,124	\$762	\$545,702	\$105,950	\$1,066	\$416,800

\*Before distributions to local governments

Table 3.19

**Workforce Education Investment Account**

September 2021

Thousands of dollars

	FY20	FY21	2019-21 Biennium	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium
<b>June 2021 forecast</b>	31,863	325,820	<b>357,684</b>	324,577	335,986	<b>660,563</b>	354,281	373,345	<b>727,626</b>
Forecast change	-	(5,445)	<b>(5,445)</b>	3,651	4,067	<b>7,719</b>	4,478	4,800	<b>9,278</b>
<b>September 2021 forecast</b>	31,863	320,376	<b>352,239</b>	328,228	340,053	<b>668,281</b>	358,759	378,145	<b>736,904</b>

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

Calendar Years

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

Table A1.1

**U.S. Economic Forecast Summary**

Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Real National Income Accounts (Billions of Chained 2012 Dollars)</b>								
Real Gross Domestic Product	18,606.8	19,032.7	18,384.7	19,465.7	20,303.1	20,790.4	21,247.8	21,694.0
% Ch	2.9	2.3	-3.4	5.9	4.3	2.4	2.2	2.1
Real Consumption	12,845.0	13,126.3	12,629.9	13,622.5	14,132.9	14,472.1	14,805.0	15,145.5
% Ch	2.9	2.2	-3.8	7.9	3.7	2.4	2.3	2.3
Real Nonresidential Fixed Investment	2,704.4	2,822.0	2,671.1	2,886.4	3,033.4	3,159.2	3,300.8	3,446.7
% Ch	6.4	4.3	-5.3	8.1	5.1	4.1	4.5	4.4
Real Residential Fixed Investment	612.3	606.7	648.0	703.6	652.1	638.9	646.7	654.7
% Ch	-0.6	-0.9	6.8	8.6	-7.3	-2.0	1.2	1.2
Real Personal Income	16,345.7	16,761.1	17,647.9	18,125.5	17,818.9	18,355.2	18,882.2	19,393.3
% Ch	2.9	2.5	5.3	2.7	-1.7	3.0	2.9	2.7
Real Per Capita Income (\$/Person)	49,709	50,724	53,229	54,595	53,485	54,843	56,137	57,352
% Ch	2.3	2.0	4.9	2.6	-2.0	2.5	2.4	2.2
<b>Price and Wage Indexes</b>								
PCE Price Index (2012=100)	108.3	109.9	111.2	115.2	118.0	120.0	122.2	124.5
% Ch	2.1	1.5	1.2	3.6	2.4	1.7	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.511	2.557	2.588	2.699	2.769	2.816	2.871	2.928
% Ch	2.4	1.8	1.2	4.3	2.6	1.7	1.9	2.0
Employment Cost Index (Dec. 2005=1.0)	1.334	1.374	1.414	1.467	1.532	1.592	1.645	1.699
% Ch	3.0	3.0	2.9	3.8	4.5	3.9	3.4	3.2
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	20,527.2	21,372.6	20,893.7	22,974.1	24,633.5	25,725.8	26,880.7	28,046.5
% Ch	5.4	4.1	-2.2	10.0	7.2	4.4	4.5	4.3
Personal Income	17,706.0	18,424.4	19,627.6	20,870.6	21,020.4	22,019.6	23,079.1	24,154.6
% Ch	5.1	4.1	6.5	6.3	0.7	4.8	4.8	4.7
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	162.1	163.5	160.7	161.4	164.5	166.7	168.4	169.7
Total U.S. Employment	155.8	157.5	147.8	152.4	157.6	160.5	162.2	163.4
Unemployment Rate (%)	3.90	3.67	8.10	5.55	4.15	3.71	3.70	3.74
Nonfarm Payroll Employment	148.89	150.90	142.25	146.12	151.07	153.49	154.72	155.62
% Ch	1.6	1.3	-5.7	2.7	3.4	1.6	0.8	0.6
Manufacturing	12.69	12.82	12.18	12.36	12.55	12.55	12.34	12.15
% Ch	2.0	1.0	-4.9	1.5	1.5	0.1	-1.7	-1.5
Durable Manufacturing	7.95	8.04	7.58	7.69	7.86	7.86	7.69	7.56
% Ch	2.7	1.2	-5.7	1.4	2.2	0.1	-2.1	-1.7
Nondurable Manufacturing	4.74	4.78	4.60	4.68	4.69	4.69	4.64	4.59
% Ch	0.9	0.8	-3.7	1.6	0.3	0.0	-1.1	-1.2
Construction	7.29	7.49	7.27	7.41	7.38	7.40	7.41	7.47
% Ch	4.6	2.8	-2.9	1.9	-0.4	0.3	0.1	0.8
Service-Providing	128.19	129.86	122.18	125.71	130.47	132.85	134.29	135.32
% Ch	1.3	1.3	-5.9	2.9	3.8	1.8	1.1	0.8
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	64.9	57.0	39.2	66.7	68.3	62.9	58.8	55.8
Personal Saving/Disposable Income (%)	7.6	7.7	16.4	11.4	5.6	6.2	6.9	7.5
Auto Sales (Millions)	5.3	4.7	3.4	3.5	3.7	3.7	3.6	3.5
% Ch	-12.8	-11.1	-27.9	4.3	3.6	-0.3	-2.1	-2.7
Housing Starts (Millions)	1.247	1.292	1.397	1.545	1.398	1.329	1.303	1.275
% Ch	3.5	3.6	8.1	10.6	-9.5	-4.9	-2.0	-2.2
Federal Budget Surplus (Billions)	-928.1	-1,047.5	-3,110.0	-2,652.4	-1,206.4	-891.6	-898.7	-988.0
Net Exports (Billions)	-596.2	-596.3	-651.2	-827.2	-819.1	-813.0	-803.4	-799.5
3-Month Treasury Bill Rate (%)	1.94	2.06	0.37	0.06	0.08	0.15	0.44	0.91
10-Year Treasury Note Yield (%)	2.91	2.14	0.89	1.43	1.77	2.07	2.30	2.62
Bond Index of 20 G.O. Munis. (%)	3.96	3.60	2.65	2.23	2.54	2.78	3.02	3.32
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.12	2.95	3.44	3.76	4.01	4.29

Table A1.2

**U.S. Economic Forecast Summary**

Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
<b>Real National Income Accounts (Billions of Chained 2012 Dollars)</b>								
Real Gross Domestic Product	18,952.0	17,258.2	18,560.8	18,767.8	19,055.7	19,360.6	19,591.6	19,855.0
% Ch , Annual Rate	-5.1	-31.2	33.8	4.5	6.3	6.6	4.9	5.5
Real Consumption	13,014.5	11,756.4	12,820.8	12,927.9	13,282.7	13,660.2	13,707.6	13,839.5
% Ch , Annual Rate	-6.9	-33.4	41.4	3.4	11.4	11.9	1.4	3.9
Real Nonresidential Fixed Investment	2,775.5	2,535.7	2,646.9	2,726.2	2,810.4	2,873.3	2,901.0	2,960.9
% Ch , Annual Rate	-8.1	-30.3	18.7	12.5	12.9	9.3	3.9	8.5
Real Residential Fixed Investment	641.2	584.9	657.8	708.2	730.6	708.7	697.2	677.8
% Ch , Annual Rate	20.4	-30.7	59.9	34.4	13.3	-11.5	-6.3	-10.7
Real Personal Income	16,981.4	18,414.3	17,736.5	17,459.4	19,353.5	17,917.6	17,693.5	17,537.3
% Ch , Annual Rate	2.9	38.3	-13.9	-6.1	51.0	-26.5	-4.9	-3.5
Real Per Capita Income (\$/Person)	51,257	55,545	53,480	52,634	58,334	53,989	53,285	52,774
% Ch , Annual Rate	2.5	37.9	-14.1	-6.2	50.9	-26.6	-5.1	-3.8
<b>Price and Wage Indexes</b>								
PCE Price Index (2012=100)	111.0	110.5	111.5	111.9	113.0	114.8	116.2	116.8
% Ch , Annual Rate	1.3	-1.6	3.7	1.5	3.8	6.5	5.1	2.2
U.S. Consumer Price Index (1982-84=1.0)	2.585	2.565	2.594	2.610	2.634	2.688	2.730	2.744
% Ch , Annual Rate	1.0	-3.1	4.7	2.4	3.7	8.4	6.4	2.0
Employment Cost Index (Dec. 2005=1.0)	1.402	1.408	1.416	1.428	1.444	1.458	1.473	1.491
% Ch , Annual Rate	3.8	1.7	2.3	3.4	4.6	3.9	4.3	4.8
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	21,481.4	19,477.4	21,138.6	21,477.6	22,038.2	22,731.4	23,311.5	23,815.2
% Ch , Annual Rate	-3.9	-32.4	38.7	6.6	10.9	13.2	10.6	8.9
Personal Income	18,842.2	20,348.7	19,777.4	19,542.0	21,867.3	20,564.9	20,561.6	20,488.8
% Ch , Annual Rate	4.2	36.0	-10.8	-4.7	56.8	-21.8	-0.1	-1.4
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	163.9	158.2	160.3	160.6	160.3	161.0	161.6	162.6
Total U.S. Employment	157.6	137.6	146.2	149.8	150.4	151.5	153.3	154.6
Unemployment Rate (%)	3.80	13.02	8.81	6.75	6.20	5.92	5.18	4.92
Nonfarm Payroll Employment	151.87	133.67	140.86	142.62	143.36	145.06	147.42	148.64
% Ch , Annual Rate	0.3	-40.0	23.3	5.1	2.1	4.8	6.7	3.3
Manufacturing	12.77	11.69	12.08	12.19	12.25	12.30	12.40	12.50
% Ch , Annual Rate	-0.9	-29.8	13.9	4.0	2.0	1.5	3.4	3.3
Durable Manufacturing	7.99	7.25	7.51	7.58	7.61	7.63	7.72	7.79
% Ch , Annual Rate	-0.9	-32.4	15.7	3.4	1.7	1.3	4.6	3.9
Nondurable Manufacturing	4.78	4.45	4.56	4.62	4.65	4.67	4.68	4.71
% Ch , Annual Rate	-1.0	-25.2	11.0	4.9	2.4	1.8	1.5	2.3
Construction	7.61	6.90	7.23	7.36	7.41	7.42	7.43	7.38
% Ch , Annual Rate	3.1	-32.2	20.0	7.7	2.4	0.9	0.6	-2.7
Service-Providing	130.81	114.47	120.97	122.47	123.09	124.71	126.94	128.09
% Ch , Annual Rate	0.4	-41.4	24.7	5.1	2.1	5.4	7.3	3.6
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	45.8	27.8	40.9	42.5	57.8	66.1	70.7	72.3
Personal Saving/Disposable Income (%)	9.7	26.1	16.0	13.6	20.5	10.3	8.4	6.4
Auto Sales (Millions)	3.8	2.5	3.6	3.7	3.7	3.9	3.2	3.4
% Ch , Annual Rate	-44.8	-81.8	316.0	20.2	-3.6	21.8	-52.4	20.8
Housing Starts (Millions)	1.485	1.086	1.440	1.575	1.599	1.586	1.510	1.485
% Ch , Annual Rate	24.8	-71.4	209.8	43.1	6.1	-3.2	-17.8	-6.4
Federal Budget Surplus (Billions)	-1,158.0	-5,625.6	-3,516.3	-2,140.1	-4,088.9	-3,341.4	-1,836.0	-1,343.4
Net Exports (Billions)	-541.7	-538.9	-725.7	-798.4	-872.5	-884.7	-812.4	-739.4
3-Month Treasury Bill Rate (%)	1.11	0.14	0.11	0.09	0.05	0.03	0.07	0.08
10-Year Treasury Note Yield (%)	1.38	0.69	0.65	0.86	1.32	1.59	1.34	1.45
Bond Index of 20 G.O. Munis. (%)	3.45	2.79	2.15	2.22	2.26	2.22	2.14	2.32
30-Year Fixed Mortgage Rate (%)	3.51	3.24	2.95	2.76	2.87	3.00	2.88	3.03

Table A1.2 (continued)  
**U.S. Economic Forecast Summary**  
Forecast 2021 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
<b>Real National Income Accounts (Billions of Chained 2012 Dollars)</b>								
Real Gross Domestic Product	20,061.1	20,247.1	20,392.7	20,511.6	20,619.8	20,728.4	20,846.6	20,966.8
% Ch , Annual Rate	4.2	3.8	2.9	2.4	2.1	2.1	2.3	2.3
Real Consumption	13,973.0	14,096.3	14,192.2	14,270.3	14,350.8	14,429.8	14,512.3	14,595.5
% Ch , Annual Rate	3.9	3.6	2.7	2.2	2.3	2.2	2.3	2.3
Real Nonresidential Fixed Investment	2,987.8	3,016.3	3,046.4	3,083.3	3,113.0	3,141.7	3,173.5	3,208.6
% Ch , Annual Rate	3.7	3.9	4.1	4.9	3.9	3.7	4.1	4.5
Real Residential Fixed Investment	663.1	652.7	647.3	645.1	641.2	638.3	637.0	639.3
% Ch , Annual Rate	-8.4	-6.1	-3.3	-1.3	-2.4	-1.8	-0.8	1.4
Real Personal Income	17,562.1	17,750.8	17,927.7	18,034.8	18,157.3	18,290.8	18,422.3	18,550.5
% Ch , Annual Rate	0.6	4.4	4.0	2.4	2.7	3.0	2.9	2.8
Real Per Capita Income (\$/Person)	52,800	53,312	53,785	54,045	54,349	54,684	55,012	55,327
% Ch , Annual Rate	0.2	3.9	3.6	1.9	2.3	2.5	2.4	2.3
<b>Price and Wage Indexes</b>								
PCE Price Index (2012=100)	117.3	117.7	118.2	118.7	119.2	119.7	120.2	120.8
% Ch , Annual Rate	1.6	1.5	1.5	1.7	1.7	1.8	1.8	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.755	2.763	2.773	2.785	2.797	2.810	2.823	2.836
% Ch , Annual Rate	1.7	1.2	1.4	1.8	1.8	1.8	1.9	1.8
Employment Cost Index (Dec. 2005=1.0)	1.508	1.524	1.541	1.557	1.571	1.585	1.599	1.612
% Ch , Annual Rate	4.6	4.4	4.5	4.1	3.8	3.6	3.5	3.3
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	24,176.9	24,506.0	24,791.4	25,059.8	25,316.5	25,578.4	25,858.5	26,149.9
% Ch , Annual Rate	6.2	5.6	4.7	4.4	4.2	4.2	4.5	4.6
Personal Income	20,601.8	20,898.5	21,183.0	21,398.3	21,635.1	21,890.7	22,148.0	22,404.6
% Ch , Annual Rate	2.2	5.9	5.6	4.1	4.5	4.8	4.8	4.7
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	163.4	164.1	164.8	165.4	166.0	166.5	167.0	167.4
Total U.S. Employment	155.9	157.2	158.3	159.1	159.8	160.4	160.8	161.2
Unemployment Rate (%)	4.57	4.24	3.99	3.81	3.72	3.70	3.70	3.70
Nonfarm Payroll Employment	149.67	150.67	151.59	152.34	152.90	153.37	153.69	153.99
% Ch , Annual Rate	2.8	2.7	2.5	2.0	1.5	1.2	0.8	0.8
Manufacturing	12.59	12.53	12.47	12.59	12.61	12.59	12.54	12.48
% Ch , Annual Rate	2.8	-1.8	-1.8	3.9	0.5	-0.7	-1.4	-2.0
Durable Manufacturing	7.89	7.86	7.78	7.90	7.90	7.89	7.85	7.80
% Ch , Annual Rate	5.3	-1.9	-3.6	5.9	0.5	-0.9	-1.7	-2.5
Nondurable Manufacturing	4.69	4.68	4.69	4.70	4.71	4.70	4.69	4.68
% Ch , Annual Rate	-1.3	-1.5	1.3	0.6	0.6	-0.5	-1.0	-1.1
Construction	7.38	7.36	7.38	7.39	7.40	7.40	7.40	7.40
% Ch , Annual Rate	-0.2	-1.1	1.3	0.5	0.6	0.0	0.0	0.0
Service-Providing	129.03	130.10	131.06	131.67	132.21	132.70	133.06	133.42
% Ch , Annual Rate	3.0	3.4	3.0	1.9	1.6	1.5	1.1	1.1
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	70.7	69.1	67.5	66.1	64.7	63.4	62.2	61.2
Personal Saving/Disposable Income (%)	5.3	5.4	5.7	5.8	5.9	6.1	6.3	6.4
Auto Sales (Millions)	3.7	3.7	3.7	3.7	3.6	3.7	3.7	3.7
% Ch , Annual Rate	44.4	-3.1	-2.0	-0.6	-0.8	1.6	2.0	-1.2
Housing Starts (Millions)	1.439	1.408	1.384	1.362	1.341	1.328	1.323	1.326
% Ch , Annual Rate	-11.9	-8.3	-6.7	-6.3	-6.1	-3.9	-1.3	0.8
Federal Budget Surplus (Billions)	-1,124.8	-1,697.9	-1,074.4	-928.6	-902.2	-899.1	-899.0	-866.3
Net Exports (Billions)	-786.9	-820.8	-837.9	-830.8	-826.3	-817.3	-805.9	-802.3
3-Month Treasury Bill Rate (%)	0.08	0.07	0.07	0.09	0.09	0.09	0.10	0.31
10-Year Treasury Note Yield (%)	1.59	1.72	1.84	1.93	2.02	2.06	2.08	2.12
Bond Index of 20 G.O. Munis. (%)	2.41	2.53	2.59	2.64	2.70	2.76	2.83	2.85
30-Year Fixed Mortgage Rate (%)	3.23	3.38	3.52	3.61	3.69	3.75	3.79	3.84

Table A1.2 (continued)  
**U.S. Economic Forecast Summary**  
Forecast 2021 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
<b>Real National Income Accounts (Billions of Chained 2012 Dollars)</b>								
Real Gross Domestic Product	21,079.8	21,193.0	21,303.8	21,414.5	21,528.7	21,640.7	21,750.5	21,856.1
% Ch , Annual Rate	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0
Real Consumption	14,678.3	14,761.8	14,846.9	14,933.0	15,019.7	15,104.9	15,188.2	15,269.2
% Ch , Annual Rate	2.3	2.3	2.3	2.3	2.3	2.3	2.2	2.1
Real Nonresidential Fixed Investment	3,244.9	3,282.7	3,319.5	3,356.3	3,393.5	3,429.1	3,464.7	3,499.5
% Ch , Annual Rate	4.6	4.7	4.6	4.5	4.5	4.3	4.2	4.1
Real Residential Fixed Investment	642.6	646.0	647.7	650.5	652.4	654.4	655.4	656.8
% Ch , Annual Rate	2.1	2.1	1.1	1.7	1.2	1.2	0.6	0.9
Real Personal Income	18,698.3	18,823.5	18,943.8	19,063.1	19,203.9	19,331.4	19,457.7	19,580.3
% Ch , Annual Rate	3.2	2.7	2.6	2.5	3.0	2.7	2.6	2.5
Real Per Capita Income (\$/Person)	55,699	56,001	56,285	56,565	56,906	57,207	57,504	57,789
% Ch , Annual Rate	2.7	2.2	2.0	2.0	2.4	2.1	2.1	2.0
<b>Price and Wage Indexes</b>								
PCE Price Index (2012=100)	121.3	121.9	122.5	123.1	123.7	124.3	124.8	125.4
% Ch , Annual Rate	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.849	2.864	2.878	2.892	2.906	2.920	2.935	2.949
% Ch , Annual Rate	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Employment Cost Index (Dec. 2005=1.0)	1.625	1.639	1.652	1.666	1.679	1.693	1.705	1.718
% Ch , Annual Rate	3.3	3.3	3.3	3.3	3.2	3.3	3.1	3.0
<b>Current Dollar National Income (Billions of Dollars)</b>								
Gross Domestic Product	26,442.1	26,737.2	27,026.8	27,316.6	27,610.0	27,901.3	28,193.4	28,481.4
% Ch , Annual Rate	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.1
Personal Income	22,689.8	22,952.1	23,208.7	23,465.5	23,750.4	24,019.7	24,290.7	24,557.6
% Ch , Annual Rate	5.2	4.7	4.5	4.5	4.9	4.6	4.6	4.5
<b>Employment (Millions)</b>								
U.S. Civilian Labor Force	167.8	168.2	168.6	168.9	169.3	169.6	169.9	170.2
Total U.S. Employment	161.6	162.0	162.4	162.7	163.0	163.2	163.5	163.8
Unemployment Rate (%)	3.69	3.68	3.69	3.72	3.72	3.73	3.75	3.76
Nonfarm Payroll Employment	154.30	154.61	154.88	155.11	155.33	155.54	155.73	155.89
% Ch, Annual Rate	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.4
Manufacturing	12.42	12.36	12.31	12.25	12.20	12.16	12.13	12.10
% Ch, Annual Rate	-1.8	-1.9	-1.7	-1.9	-1.5	-1.3	-1.1	-1.0
Durable Manufacturing	7.76	7.71	7.67	7.63	7.60	7.57	7.55	7.54
% Ch, Annual Rate	-2.2	-2.4	-2.1	-2.2	-1.6	-1.4	-1.0	-0.9
Nondurable Manufacturing	4.66	4.65	4.64	4.62	4.61	4.59	4.58	4.57
% Ch, Annual Rate	-1.1	-1.1	-1.1	-1.4	-1.2	-1.1	-1.2	-1.2
Construction	7.40	7.41	7.41	7.43	7.44	7.46	7.48	7.50
% Ch, Annual Rate	0.1	0.2	0.4	0.7	0.9	1.0	1.0	1.2
Service-Providing	133.79	134.15	134.47	134.75	135.00	135.24	135.44	135.61
% Ch, Annual Rate	1.1	1.1	0.9	0.8	0.8	0.7	0.6	0.5
<b>Miscellaneous Indicators</b>								
Oil-WTI (\$ per barrel)	60.1	59.2	58.3	57.5	56.8	56.1	55.4	54.9
Personal Saving/Disposable Income (%)	6.7	6.9	7.0	7.1	7.3	7.5	7.6	7.8
Auto Sales (Millions)	3.7	3.6	3.6	3.5	3.5	3.5	3.5	3.5
% Ch, Annual Rate	0.4	-5.6	-7.0	-5.4	1.2	-2.7	-1.0	-1.1
Housing Starts (Millions)	1.325	1.308	1.299	1.279	1.276	1.281	1.274	1.267
% Ch, Annual Rate	-0.2	-5.2	-2.7	-5.9	-1.0	1.5	-2.0	-2.3
Federal Budget Surplus (Billions)	-881.5	-892.5	-908.6	-912.2	-948.0	-976.2	-1,005.3	-1,022.4
Net Exports (Billions)	-802.2	-803.4	-804.5	-803.3	-801.1	-799.5	-798.3	-798.9
3-Month Treasury Bill Rate (%)	0.30	0.35	0.53	0.58	0.77	0.82	1.00	1.05
10-Year Treasury Note Yield (%)	2.18	2.26	2.35	2.43	2.52	2.59	2.66	2.72
Bond Index of 20 G.O. Munis. (%)	2.91	2.98	3.05	3.13	3.21	3.27	3.36	3.43
30-Year Fixed Mortgage Rate (%)	3.90	3.97	4.06	4.13	4.20	4.26	4.32	4.37



Table A1.3  
**Washington Economic Forecast Summary**  
Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
<b>Real Income (Billions of Chained 2012 Dollars)</b>								
Real Personal Income	432.104	448.622	472.999	486.328	482.708	500.452	516.651	533.060
% Ch	5.6	3.8	5.4	2.8	-0.7	3.7	3.2	3.2
Real Wage and Salary Disb.	219.176	231.168	236.134	248.150	259.312	269.569	277.655	286.281
% Ch	6.5	5.5	2.1	5.1	4.5	4.0	3.0	3.1
Real Nonwage Income	212.928	217.454	236.864	238.178	223.396	230.883	238.996	246.779
% Ch	4.8	2.1	8.9	0.6	-6.2	3.4	3.5	3.3
Real Per Capita Income (\$/Person)	57,412	58,913	61,473	62,712	61,742	63,388	64,752	66,065
% Ch	4.2	2.6	4.3	2.0	-1.5	2.7	2.2	2.0
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.083	1.099	1.112	1.152	1.180	1.200	1.222	1.245
% Ch	2.1	1.5	1.2	3.6	2.4	1.7	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	2.711	2.779	2.826	2.945	3.026	3.077	3.137	3.199
% Ch	3.2	2.5	1.7	4.2	2.7	1.7	1.9	2.0
Average Nonfarm Annual Wage	67,735	71,161	77,705	82,612	85,138	87,917	91,091	94,574
% Ch	6.5	5.1	9.2	6.3	3.1	3.3	3.6	3.8
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.42	29.16	28.32	27.80	28.74	29.81	30.76	31.70
% Ch	3.8	2.6	-2.9	-1.8	3.4	3.8	3.2	3.1
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	468.055	493.128	525.988	559.991	569.440	600.365	631.489	663.937
% Ch	7.9	5.4	6.7	6.5	1.7	5.4	5.2	5.1
Disposable Personal Income	413.170	434.108	467.140	490.891	493.658	520.807	548.899	578.474
% Ch	8.4	5.1	7.6	5.1	0.6	5.5	5.4	5.4
Per Capita Income (\$/Person)	62,188	64,757	68,359	72,209	72,835	76,042	79,143	82,284
% Ch	6.5	4.1	5.6	5.6	0.9	4.4	4.1	4.0
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,811.7	3,910.1	3,912.8	3,894.3	3,992.5	4,065.5	4,123.7	4,179.3
Total Washington Employment	3,644.5	3,747.7	3,584.0	3,690.2	3,812.7	3,894.4	3,947.9	3,999.2
Unemployment Rate (%)	4.39	4.15	8.41	5.24	4.50	4.21	4.26	4.31
Nonfarm Payroll Employment	3,401.1	3,468.5	3,286.5	3,364.1	3,494.5	3,578.3	3,625.1	3,669.3
% Ch	2.4	2.0	-5.2	2.4	3.9	2.4	1.3	1.2
Manufacturing	287.7	293.7	271.7	257.7	258.4	263.2	263.9	264.8
% Ch	1.2	2.1	-7.5	-5.1	0.2	1.9	0.3	0.3
Durable Manufacturing	202.2	206.9	189.6	174.5	173.0	176.3	177.6	179.2
% Ch	0.9	2.4	-8.4	-8.0	-0.8	1.9	0.7	0.9
Aerospace	83.9	88.5	80.0	66.2	61.1	64.0	66.4	68.4
% Ch	-0.3	5.5	-9.6	-17.3	-7.6	4.6	3.8	3.0
Nondurable Manufacturing	85.6	86.8	82.1	83.2	85.3	86.9	86.3	85.6
% Ch	2.0	1.4	-5.4	1.4	2.5	1.8	-0.7	-0.8
Construction	213.1	219.5	213.5	223.0	217.5	217.2	219.9	224.0
% Ch	6.7	3.0	-2.7	4.4	-2.5	-0.1	1.2	1.9
Service-Providing	2,894.0	2,949.4	2,795.7	2,877.5	3,012.4	3,092.3	3,135.6	3,174.8
% Ch	2.2	1.9	-5.2	2.9	4.7	2.7	1.4	1.2
Software Publishers	65.3	70.4	75.6	77.9	79.4	80.7	81.9	83.1
% Ch	6.4	7.7	7.4	3.0	2.0	1.6	1.5	1.4
Electronic Shopping and Mail-Order	54.8	63.5	75.9	85.4	88.9	91.2	93.3	95.3
% Ch	10.1	15.9	19.5	12.6	4.1	2.5	2.3	2.2
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	47.746	48.424	44.062	53.485	46.244	44.255	44.243	43.682
% Ch	4.3	1.4	-9.0	21.4	-13.5	-4.3	0.0	-1.3
Single-Family	23.676	23.300	23.044	27.140	26.931	25.672	25.814	25.664
% Ch	2.4	-1.6	-1.1	17.8	-0.8	-4.7	0.6	-0.6
Multi-Family	24.070	25.124	21.018	26.345	19.312	18.583	18.429	18.018
% Ch	6.1	4.4	-16.3	25.3	-26.7	-3.8	-0.8	-2.2
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.12	2.95	3.44	3.76	4.01	4.29

Table A1.4  
**Washington Economic Forecast Summary**  
Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
<b>Real Income (Billions of Chained 2012 Dollars)</b>								
Real Personal Income	457.292	491.526	473.991	469.185	512.833	481.349	477.772	473.359
% Ch, Annual Rate	4.4	33.5	-13.5	-4.0	42.7	-22.4	-2.9	-3.6
Real Wage and Salary Disb.	237.487	226.655	236.943	243.451	244.179	246.307	249.469	252.646
% Ch, Annual Rate	6.0	-17.0	19.4	11.4	1.2	3.5	5.2	5.2
Real Nonwage Income	219.805	264.871	237.048	225.734	268.654	235.042	228.303	220.713
% Ch, Annual Rate	2.7	110.9	-35.8	-17.8	100.6	-41.4	-11.0	-12.6
Real Per Capita Income (\$/Person)	59,631	63,953	61,535	60,773	66,285	62,117	61,562	60,883
% Ch, Annual Rate	3.3	32.3	-14.3	-4.9	41.5	-22.9	-3.5	-4.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.109	1.105	1.115	1.119	1.130	1.148	1.162	1.168
% Ch, Annual Rate	1.2	-1.6	3.7	1.5	3.8	6.5	5.2	2.2
Seattle Cons. Price Index (1982-84=1.0)	2.817	2.804	2.836	2.847	2.871	2.930	2.983	2.998
% Ch, Annual Rate	2.7	-1.8	4.6	1.5	3.5	8.5	7.4	2.0
Average Nonfarm Annual Wage	72,992	77,660	79,192	80,975	81,464	82,301	82,958	83,725
% Ch, Annual Rate	6.0	28.1	8.1	9.3	2.4	4.2	3.2	3.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.79	28.58	28.27	27.64	27.98	27.60	27.65	27.97
% Ch, Annual Rate	-4.3	-3.0	-4.2	-8.7	5.0	-5.3	0.8	4.7
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	507.348	543.091	528.451	525.064	579.347	552.377	555.217	553.023
% Ch, Annual Rate	5.7	31.3	-10.4	-2.5	48.2	-17.4	2.1	-1.6
Disposable Personal Income	446.990	487.069	470.154	464.347	515.442	483.872	483.863	480.387
% Ch, Annual Rate	5.8	41.0	-13.2	-4.8	51.8	-22.3	0.0	-2.8
Per Capita Income (\$/Person)	66,159	70,662	68,605	68,011	74,882	71,283	71,541	71,129
% Ch, Annual Rate	4.6	30.1	-11.1	-3.4	47.0	-17.9	1.5	-2.3
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,950.3	3,923.6	3,892.2	3,885.1	3,841.0	3,873.9	3,919.4	3,943.1
Total Washington Employment	3,774.7	3,403.7	3,530.3	3,627.2	3,622.7	3,669.2	3,721.7	3,747.2
Unemployment Rate (%)	4.45	13.25	9.30	6.64	5.68	5.29	5.04	4.97
Nonfarm Payroll Employment	3,507.7	3,128.5	3,240.2	3,269.5	3,291.1	3,338.8	3,398.1	3,428.6
% Ch, Annual Rate	1.4	-36.7	15.1	3.7	2.7	5.9	7.3	3.6
Manufacturing	292.4	269.7	264.4	260.2	258.6	256.7	258.1	257.5
% Ch, Annual Rate	-1.2	-27.7	-7.6	-6.2	-2.4	-2.9	2.2	-0.9
Durable Manufacturing	205.2	190.7	183.8	178.6	176.3	174.4	174.3	172.9
% Ch, Annual Rate	-2.2	-25.3	-13.7	-10.8	-5.0	-4.3	-0.2	-3.3
Aerospace	88.9	83.1	76.6	71.4	68.6	67.1	66.3	62.7
% Ch, Annual Rate	-0.6	-23.3	-28.0	-24.3	-15.1	-8.5	-4.3	-20.0
Nondurable Manufacturing	87.3	79.0	80.6	81.5	82.3	82.3	83.8	84.7
% Ch, Annual Rate	1.2	-32.9	8.3	4.9	3.6	0.2	7.5	4.3
Construction	224.1	198.9	212.4	218.8	223.3	223.1	224.6	221.0
% Ch, Annual Rate	3.9	-38.0	30.1	12.6	8.6	-0.3	2.6	-6.2
Service-Providing	2,985.5	2,654.5	2,758.0	2,784.9	2,803.6	2,853.4	2,909.7	2,943.4
% Ch, Annual Rate	1.4	-37.5	16.5	4.0	2.7	7.3	8.1	4.7
Software Publishers	74.6	76.0	75.6	76.1	78.3	78.0	77.4	77.8
% Ch, Annual Rate	11.1	7.8	-1.8	2.2	12.3	-1.6	-3.1	2.3
Electronic Shopping and Mail-Order	71.2	73.5	77.2	81.5	82.7	84.9	86.7	87.4
% Ch, Annual Rate	22.5	13.6	21.6	23.8	6.3	11.2	8.8	3.1
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	48.031	41.079	42.691	44.447	63.679	47.597	53.430	49.235
% Ch, Annual Rate	-30.5	-46.5	16.6	17.5	321.3	-68.8	58.8	-27.9
Single-Family	24.091	18.309	24.056	25.720	30.874	24.259	24.735	28.694
% Ch, Annual Rate	-21.1	-66.6	198.0	30.7	107.6	-61.9	8.1	81.1
Multi-Family	23.940	22.770	18.636	18.726	32.804	23.338	28.695	20.542
% Ch, Annual Rate	-38.5	-18.2	-55.1	2.0	841.7	-74.4	128.5	-73.7
30-Year Fixed Mortgage Rate (%)	3.51	3.24	2.95	2.76	2.87	3.00	2.88	3.03

Table A1.4 (continued)  
**Washington Economic Forecast Summary**  
Forecast 2021 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
<b>Real Income (Billions of Chained 2012 Dollars)</b>								
Real Personal Income	474.727	480.415	485.958	489.732	494.212	498.531	502.451	506.616
% Ch, Annual Rate	1.2	4.9	4.7	3.1	3.7	3.5	3.2	3.4
Real Wage and Salary Disb.	255.063	257.918	260.788	263.477	266.343	268.633	270.537	272.762
% Ch, Annual Rate	3.9	4.6	4.5	4.2	4.4	3.5	2.9	3.3
Real Nonwage Income	219.664	222.496	225.170	226.255	227.869	229.898	231.914	233.853
% Ch, Annual Rate	-1.9	5.3	4.9	1.9	2.9	3.6	3.6	3.4
Real Per Capita Income (\$/Person)	60,934	61,526	62,089	62,421	62,836	63,227	63,564	63,924
% Ch, Annual Rate	0.3	3.9	3.7	2.2	2.7	2.5	2.1	2.3
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.173	1.177	1.182	1.187	1.192	1.197	1.202	1.208
% Ch, Annual Rate	1.6	1.5	1.5	1.7	1.7	1.8	1.8	1.8
Seattle Cons. Price Index (1982-84=1.0)	3.010	3.019	3.030	3.043	3.056	3.070	3.085	3.099
% Ch, Annual Rate	1.7	1.2	1.4	1.8	1.8	1.8	1.9	1.8
Average Nonfarm Annual Wage	84,254	84,841	85,394	86,064	86,758	87,505	88,310	89,096
% Ch, Annual Rate	2.6	2.8	2.6	3.2	3.3	3.5	3.7	3.6
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.29	28.59	28.89	29.18	29.44	29.70	29.94	30.18
% Ch, Annual Rate	4.5	4.3	4.4	4.0	3.7	3.5	3.3	3.2
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	556.893	565.605	574.196	581.068	588.873	596.651	604.067	611.870
% Ch, Annual Rate	2.8	6.4	6.2	4.9	5.5	5.4	5.1	5.3
Disposable Personal Income	482.943	490.308	497.761	503.622	510.471	517.408	524.161	531.187
% Ch, Annual Rate	2.1	6.2	6.2	4.8	5.6	5.5	5.3	5.5
Per Capita Income (\$/Person)	71,480	72,437	73,363	74,062	74,872	75,671	76,419	77,205
% Ch, Annual Rate	2.0	5.5	5.2	3.9	4.4	4.3	4.0	4.2
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	3,962.2	3,982.2	4,003.2	4,022.3	4,042.4	4,058.7	4,072.4	4,088.4
Total Washington Employment	3,772.8	3,800.2	3,827.4	3,850.6	3,873.2	3,888.8	3,900.2	3,915.4
Unemployment Rate (%)	4.78	4.57	4.39	4.27	4.19	4.19	4.23	4.23
Nonfarm Payroll Employment	3,453.7	3,481.0	3,509.8	3,533.4	3,558.3	3,574.3	3,583.2	3,597.5
% Ch, Annual Rate	3.0	3.2	3.4	2.7	2.9	1.8	1.0	1.6
Manufacturing	257.0	257.7	258.1	260.7	262.8	263.2	263.3	263.4
% Ch, Annual Rate	-0.8	1.1	0.6	4.2	3.3	0.6	0.2	0.2
Durable Manufacturing	172.3	172.9	172.5	174.4	175.8	176.2	176.5	176.8
% Ch, Annual Rate	-1.3	1.3	-1.0	4.6	3.3	0.8	0.7	0.6
Aerospace	60.0	60.9	61.6	62.0	62.9	63.7	64.3	65.0
% Ch, Annual Rate	-16.2	5.9	4.7	2.8	5.9	4.8	4.4	4.1
Nondurable Manufacturing	84.7	84.8	85.6	86.3	87.0	87.0	86.8	86.7
% Ch, Annual Rate	0.1	0.5	3.7	3.3	3.3	0.0	-0.7	-0.7
Construction	218.9	217.3	217.0	216.7	217.1	217.0	216.4	218.3
% Ch, Annual Rate	-3.7	-2.9	-0.6	-0.4	0.6	-0.2	-1.1	3.7
Service-Providing	2,971.1	2,999.7	3,028.8	3,050.2	3,072.7	3,088.5	3,097.9	3,110.2
% Ch, Annual Rate	3.8	3.9	3.9	2.9	3.0	2.1	1.2	1.6
Software Publishers	78.7	79.2	79.7	80.0	80.4	80.5	80.8	81.1
% Ch, Annual Rate	4.5	2.6	3.0	1.3	1.7	0.9	1.3	1.3
Electronic Shopping and Mail-Order	88.0	88.6	89.2	89.8	90.4	90.9	91.4	92.0
% Ch, Annual Rate	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	47.707	46.488	45.663	45.116	44.834	44.363	43.868	43.953
% Ch, Annual Rate	-11.8	-9.8	-6.9	-4.7	-2.5	-4.1	-4.4	0.8
Single-Family	27.885	27.151	26.594	26.096	25.806	25.530	25.514	25.836
% Ch, Annual Rate	-10.8	-10.1	-8.0	-7.3	-4.4	-4.2	-0.3	5.1
Multi-Family	19.823	19.337	19.069	19.020	19.029	18.833	18.353	18.117
% Ch, Annual Rate	-13.3	-9.5	-5.4	-1.0	0.2	-4.1	-9.8	-5.1
30-Year Fixed Mortgage Rate (%)	3.23	3.38	3.52	3.61	3.69	3.75	3.79	3.84

Table A1.4 (continued)  
**Washington Economic Forecast Summary**  
Forecast 2021 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
<b>Real Income (Billions of Chained 2012 Dollars)</b>								
Real Personal Income	510.997	514.693	518.529	522.385	526.810	530.987	535.158	539.284
% Ch, Annual Rate	3.5	2.9	3.0	3.0	3.4	3.2	3.2	3.1
Real Wage and Salary Disb.	274.761	276.573	278.611	280.675	282.896	285.159	287.407	289.660
% Ch, Annual Rate	3.0	2.7	3.0	3.0	3.2	3.2	3.2	3.2
Real Nonwage Income	236.236	238.120	239.918	241.710	243.914	245.828	247.750	249.624
% Ch, Annual Rate	4.1	3.2	3.1	3.0	3.7	3.2	3.2	3.1
Real Per Capita Income (\$/Person)	64,306	64,597	64,901	65,203	65,571	65,904	66,233	66,553
% Ch, Annual Rate	2.4	1.8	1.9	1.9	2.3	2.0	2.0	1.9
<b>Price and Wage Indexes</b>								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.213	1.219	1.225	1.231	1.237	1.243	1.248	1.254
% Ch, Annual Rate	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	3.114	3.129	3.145	3.160	3.176	3.191	3.207	3.223
% Ch, Annual Rate	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Average Nonfarm Annual Wage	89,874	90,670	91,487	92,334	93,212	94,106	95,024	95,954
% Ch, Annual Rate	3.5	3.6	3.7	3.8	3.9	3.9	4.0	4.0
Avg. Hourly Earnings-Mfg. (\$/Hour)	30.41	30.64	30.88	31.12	31.36	31.60	31.82	32.04
% Ch, Annual Rate	3.1	3.1	3.1	3.2	3.1	3.1	2.9	2.8
<b>Current Dollar Income (Billions of Dollars)</b>								
Personal Income	620.080	627.583	635.268	643.025	651.532	659.762	668.082	676.371
% Ch, Annual Rate	5.5	4.9	5.0	5.0	5.4	5.1	5.1	5.1
Disposable Personal Income	538.532	545.328	552.330	559.405	567.168	574.670	582.256	589.801
% Ch, Annual Rate	5.6	5.1	5.2	5.2	5.7	5.4	5.4	5.3
Per Capita Income (\$/Person)	78,034	78,766	79,513	80,261	81,095	81,887	82,684	83,471
% Ch, Annual Rate	4.4	3.8	3.8	3.8	4.2	4.0	4.0	3.9
<b>Employment (Thousands)</b>								
Washington Civilian Labor Force	4,103.0	4,116.5	4,130.7	4,144.7	4,158.6	4,172.5	4,186.2	4,199.8
Total Washington Employment	3,929.3	3,941.4	3,954.4	3,966.6	3,979.9	3,993.0	4,005.6	4,018.2
Unemployment Rate (%)	4.23	4.25	4.27	4.30	4.30	4.30	4.31	4.33
Nonfarm Payroll Employment	3,609.5	3,619.0	3,630.5	3,641.3	3,652.8	3,664.3	3,675.0	3,685.4
% Ch, Annual Rate	1.3	1.1	1.3	1.2	1.3	1.3	1.2	1.1
Manufacturing	263.7	263.8	264.0	264.0	264.2	264.6	265.0	265.4
% Ch, Annual Rate	0.3	0.2	0.3	0.1	0.3	0.5	0.6	0.6
Durable Manufacturing	177.2	177.5	177.8	178.1	178.4	178.9	179.5	180.1
% Ch, Annual Rate	0.9	0.7	0.7	0.6	0.9	1.0	1.3	1.3
Aerospace	65.6	66.2	66.7	67.2	67.7	68.2	68.7	69.2
% Ch, Annual Rate	3.8	3.6	3.2	2.9	2.8	2.9	3.0	3.2
Nondurable Manufacturing	86.5	86.3	86.2	86.0	85.8	85.7	85.5	85.3
% Ch, Annual Rate	-0.8	-0.8	-0.7	-1.0	-0.8	-0.7	-0.8	-0.8
Construction	219.1	219.3	220.1	221.0	222.2	223.4	224.5	225.7
% Ch, Annual Rate	1.5	0.3	1.5	1.8	2.1	2.2	2.0	2.1
Service-Providing	3,121.1	3,130.2	3,140.7	3,150.5	3,160.5	3,170.5	3,179.7	3,188.4
% Ch, Annual Rate	1.4	1.2	1.3	1.3	1.3	1.3	1.2	1.1
Software Publishers	81.4	81.8	82.1	82.4	82.7	83.0	83.2	83.5
% Ch, Annual Rate	1.6	1.8	1.5	1.5	1.6	1.4	1.1	1.1
Electronic Shopping and Mail-Order	92.5	93.0	93.5	94.0	94.5	95.0	95.5	96.0
% Ch, Annual Rate	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
<b>Housing Indicators (Thousands)</b>								
Housing Units Authorized by Bldg. Permit	44.232	44.382	44.401	43.955	43.813	43.807	43.624	43.484
% Ch, Annual Rate	2.6	1.4	0.2	-4.0	-1.3	-0.1	-1.7	-1.3
Single-Family	25.917	25.792	25.823	25.724	25.689	25.703	25.640	25.624
% Ch, Annual Rate	1.3	-1.9	0.5	-1.5	-0.5	0.2	-1.0	-0.2
Multi-Family	18.314	18.591	18.578	18.231	18.124	18.104	17.984	17.860
% Ch, Annual Rate	4.4	6.2	-0.3	-7.3	-2.3	-0.4	-2.6	-2.7
30-Year Fixed Mortgage Rate (%)	3.90	3.97	4.06	4.13	4.20	4.26	4.32	4.37

Table A2.1

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

Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	148.89	150.90	142.25	146.12	151.07	153.49	154.72	155.62
% Ch	1.6	1.3	-5.7	2.7	3.4	1.6	0.8	0.6
Manufacturing	12.69	12.82	12.18	12.36	12.55	12.55	12.34	12.15
% Ch	2.0	1.0	-4.9	1.5	1.5	0.1	-1.7	-1.5
Durable Manufacturing	7.95	8.04	7.58	7.69	7.86	7.86	7.69	7.56
% Ch	2.7	1.2	-5.7	1.4	2.2	0.1	-2.1	-1.7
Wood Products	0.41	0.41	0.40	0.41	0.40	0.36	0.36	0.36
% Ch	2.3	0.7	-3.3	3.0	-2.0	-8.8	-1.4	0.9
Primary and Fabricated Metals	1.85	1.87	1.75	1.77	1.82	1.81	1.77	1.75
% Ch	3.0	1.2	-6.5	0.9	3.3	-0.7	-2.1	-1.5
Computer and Electronic Products	1.05	1.08	1.07	1.09	1.07	1.06	1.06	1.06
% Ch	1.5	2.0	-0.3	1.2	-1.2	-1.2	0.0	0.1
Machinery and Electrical Equipment	1.52	1.53	1.44	1.45	1.49	1.47	1.44	1.41
% Ch	3.5	0.9	-5.8	0.8	2.3	-0.9	-2.5	-1.5
Transportation Equipment	1.70	1.73	1.58	1.59	1.66	1.77	1.73	1.69
% Ch	3.6	1.6	-8.6	0.7	4.1	6.5	-2.2	-2.3
Other Durables	1.42	1.42	1.34	1.39	1.42	1.39	1.34	1.29
% Ch	1.3	0.4	-5.7	3.2	2.2	-2.1	-3.7	-3.4
Nondurable Manufacturing	4.74	4.78	4.60	4.68	4.69	4.69	4.64	4.59
% Ch	0.9	0.8	-3.7	1.6	0.3	0.0	-1.1	-1.2
Food Manufacturing	1.62	1.64	1.62	1.64	1.62	1.65	1.66	1.68
% Ch	1.4	1.5	-1.6	1.2	-0.8	1.5	0.9	0.8
Paper and Paper Products	0.37	0.37	0.36	0.35	0.35	0.35	0.35	0.35
% Ch	-0.1	-0.1	-2.4	-0.8	-0.6	0.7	-0.9	-1.4
Other Nondurables	2.76	2.77	2.63	2.69	2.71	2.69	2.63	2.56
% Ch	0.8	0.4	-5.1	2.2	1.1	-0.9	-2.3	-2.4
Natural Resources and Mining	0.73	0.73	0.62	0.63	0.68	0.68	0.69	0.68
% Ch	7.6	0.0	-14.7	2.4	6.8	0.9	0.2	-0.8
Construction	7.29	7.49	7.27	7.41	7.38	7.40	7.41	7.47
% Ch	4.6	2.8	-2.9	1.9	-0.4	0.3	0.1	0.8
Trade, Transportation, and Utilities	27.60	27.72	26.59	27.32	27.08	26.80	26.37	26.21
% Ch	0.8	0.4	-4.1	2.7	-0.9	-1.0	-1.6	-0.6
Wholesale Trade	5.84	5.89	5.64	5.70	5.97	6.20	6.34	6.49
% Ch	0.5	0.8	-4.2	1.0	4.7	3.9	2.3	2.4
Retail Trade	15.78	15.62	14.86	15.29	14.46	13.83	13.19	12.74
% Ch	-0.4	-1.0	-4.9	3.0	-5.4	-4.4	-4.6	-3.4
Trans., Warehousing, and Utilities	5.98	6.21	6.09	6.32	6.65	6.77	6.84	6.98
% Ch	4.3	3.9	-2.0	3.8	5.1	1.9	1.1	2.0
Information	2.84	2.86	2.70	2.73	2.78	2.79	2.95	3.00
% Ch	0.9	0.9	-5.8	1.4	1.6	0.4	5.8	1.5
Publishing Industries	0.74	0.76	0.76	0.77	0.81	0.80	0.79	0.78
% Ch	1.3	3.5	-0.4	1.4	4.4	-0.8	-1.2	-1.4
Other Information	2.10	2.10	1.94	1.96	1.97	1.99	2.16	2.22
% Ch	0.7	0.0	-7.8	1.3	0.5	1.0	8.6	2.5
Financial Activities	8.59	8.75	8.73	8.82	9.27	9.32	9.35	9.37
% Ch	1.7	1.9	-0.3	1.1	5.1	0.6	0.3	0.2
Professional and Business Services	20.95	21.28	20.25	20.99	22.54	22.86	23.29	23.85
% Ch	2.2	1.6	-4.8	3.6	7.4	1.4	1.9	2.4
Education and Health Services	23.64	24.16	23.23	23.58	24.31	24.39	24.72	24.94
% Ch	1.9	2.2	-3.8	1.5	3.1	0.4	1.4	0.9
Leisure and Hospitality	16.30	16.59	13.37	14.69	15.71	17.49	18.20	18.32
% Ch	1.5	1.8	-19.4	9.9	6.9	11.4	4.0	0.7
Other Services	5.83	5.89	5.40	5.66	6.17	6.32	6.42	6.54
% Ch	1.1	1.0	-8.4	4.9	8.9	2.5	1.5	1.8
Federal Government	2.80	2.83	2.93	2.89	2.89	2.89	2.89	2.89
% Ch	-0.2	1.1	3.5	-1.5	0.1	0.0	0.0	0.0
State and Local Government	19.65	19.78	18.98	19.03	19.73	19.98	20.10	20.21
% Ch	0.5	0.7	-4.0	0.2	3.7	1.2	0.6	0.6

Table A2.2

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

Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	151.87	133.67	140.86	142.62	143.36	145.06	147.42	148.64
% Ch, Annual Rate	0.3	-40.0	23.3	5.1	2.1	4.8	6.7	3.3
Manufacturing	12.77	11.69	12.08	12.19	12.25	12.30	12.40	12.50
% Ch, Annual Rate	-0.9	-29.8	13.9	4.0	2.0	1.5	3.4	3.3
Durable Manufacturing	7.99	7.25	7.51	7.58	7.61	7.63	7.72	7.79
% Ch, Annual Rate	-0.9	-32.4	15.7	3.4	1.7	1.3	4.6	3.9
Wood Products	0.41	0.38	0.39	0.40	0.40	0.40	0.41	0.42
% Ch, Annual Rate	-0.2	-24.8	8.0	10.5	4.1	-1.0	4.0	10.5
Primary and Fabricated Metals	1.84	1.71	1.71	1.73	1.74	1.75	1.77	1.80
% Ch, Annual Rate	-3.3	-25.9	1.3	4.1	0.9	3.5	5.4	6.7
Computer and Electronic Products	1.08	1.07	1.07	1.07	1.08	1.08	1.09	1.09
% Ch, Annual Rate	0.2	-5.0	0.4	1.1	2.1	2.8	1.8	0.6
Machinery and Electrical Equipment	1.51	1.41	1.42	1.43	1.43	1.44	1.46	1.48
% Ch, Annual Rate	-3.2	-23.8	2.3	3.2	-0.2	4.9	5.1	3.6
Transportation Equipment	1.73	1.42	1.59	1.59	1.60	1.58	1.60	1.58
% Ch, Annual Rate	2.3	-54.4	57.8	0.4	3.6	-6.7	6.1	-4.2
Other Durables	1.42	1.26	1.33	1.35	1.36	1.37	1.39	1.42
% Ch, Annual Rate	0.2	-38.6	26.1	6.0	1.6	4.1	3.8	10.9
Nondurable Manufacturing	4.78	4.45	4.56	4.62	4.65	4.67	4.68	4.71
% Ch, Annual Rate	-1.0	-25.2	11.0	4.9	2.4	1.8	1.5	2.3
Food Manufacturing	1.66	1.57	1.61	1.63	1.64	1.63	1.64	1.64
% Ch, Annual Rate	-1.0	-18.5	9.4	4.6	2.0	-0.5	0.2	0.9
Paper and Paper Products	0.36	0.35	0.35	0.36	0.36	0.35	0.35	0.35
% Ch, Annual Rate	-1.5	-10.9	1.3	1.3	0.9	-4.5	1.0	0.1
Other Nondurables	2.76	2.52	2.60	2.63	2.65	2.68	2.69	2.72
% Ch, Annual Rate	-0.9	-30.8	13.5	5.6	2.8	4.1	2.3	3.5
Natural Resources and Mining	0.68	0.61	0.59	0.60	0.60	0.62	0.64	0.67
% Ch, Annual Rate	-12.1	-38.2	-9.7	3.2	4.3	14.2	14.5	15.7
Construction	7.61	6.90	7.23	7.36	7.41	7.42	7.43	7.38
% Ch, Annual Rate	3.1	-32.2	20.0	7.7	2.4	0.9	0.6	-2.7
Trade, Transportation, and Utilities	27.82	25.13	26.47	26.94	27.10	27.22	27.45	27.49
% Ch, Annual Rate	0.4	-33.4	23.2	7.2	2.4	1.9	3.4	0.7
Wholesale Trade	5.89	5.52	5.55	5.60	5.64	5.68	5.74	5.72
% Ch, Annual Rate	-0.3	-23.1	2.7	3.6	2.9	2.9	3.7	-0.8
Retail Trade	15.57	13.79	14.92	15.14	15.20	15.28	15.34	15.35
% Ch, Annual Rate	-0.9	-38.3	36.9	6.0	1.6	2.1	1.6	0.2
Trans., Warehousing, and Utilities	6.36	5.82	6.00	6.20	6.25	6.26	6.37	6.42
% Ch, Annual Rate	4.5	-30.2	13.2	13.8	3.7	0.2	7.6	3.0
Information	2.91	2.61	2.62	2.65	2.68	2.71	2.76	2.79
% Ch, Annual Rate	2.9	-35.1	2.0	4.7	3.8	5.1	7.2	4.7
Publishing Industries	0.79	0.76	0.75	0.76	0.77	0.77	0.78	0.78
% Ch, Annual Rate	4.9	-13.7	-4.1	4.5	4.6	2.8	2.2	1.8
Other Information	2.12	1.85	1.87	1.90	1.91	1.94	1.98	2.01
% Ch, Annual Rate	2.2	-41.9	4.6	4.8	3.4	6.1	9.2	5.9
Financial Activities	8.86	8.61	8.68	8.76	8.78	8.81	8.84	8.86
% Ch, Annual Rate	1.7	-10.6	3.0	3.8	1.0	1.1	1.6	0.9
Professional and Business Services	21.41	19.30	19.90	20.41	20.73	20.78	21.13	21.33
% Ch, Annual Rate	0.2	-34.0	12.9	10.8	6.3	1.1	6.8	3.8
Education and Health Services	24.48	22.17	23.04	23.25	23.31	23.47	23.70	23.84
% Ch, Annual Rate	1.4	-32.7	16.7	3.8	0.9	2.9	3.8	2.5
Leisure and Hospitality	16.64	10.33	13.05	13.46	13.47	14.43	15.26	15.61
% Ch, Annual Rate	-3.2	-85.1	154.4	13.3	0.2	31.8	25.1	9.4
Other Services	5.90	4.82	5.38	5.48	5.51	5.61	5.74	5.79
% Ch, Annual Rate	-0.7	-55.6	55.6	7.5	1.9	7.7	9.7	3.6
Federal Government	2.86	2.88	3.06	2.92	2.88	2.88	2.89	2.89
% Ch, Annual Rate	3.3	2.0	27.0	-16.8	-4.9	0.2	0.5	0.1
State and Local Government	19.93	18.62	18.77	18.59	18.65	18.79	19.18	19.49
% Ch, Annual Rate	1.3	-23.9	3.3	-3.8	1.2	3.1	8.5	6.5

Table A2.2 (continued)

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

Forecast 2021 to 2025

	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4
Nonfarm Payroll Employment	149.67	150.67	151.59	152.34	152.90	153.37	153.69	153.99
% Ch, Annual Rate	2.8	2.7	2.5	2.0	1.5	1.2	0.8	0.8
Manufacturing	12.59	12.53	12.47	12.59	12.61	12.59	12.54	12.48
% Ch, Annual Rate	2.8	-1.8	-1.8	3.9	0.5	-0.7	-1.4	-2.0
Durable Manufacturing	7.89	7.86	7.78	7.90	7.90	7.89	7.85	7.80
% Ch, Annual Rate	5.3	-1.9	-3.6	5.9	0.5	-0.9	-1.7	-2.5
Wood Products	0.42	0.41	0.39	0.38	0.37	0.36	0.36	0.36
% Ch, Annual Rate	6.5	-15.5	-18.1	-5.1	-9.3	-7.4	-4.6	-2.4
Primary and Fabricated Metals	1.84	1.83	1.80	1.82	1.82	1.82	1.81	1.80
% Ch, Annual Rate	8.4	-1.8	-6.1	4.6	-0.7	-1.0	-1.4	-2.2
Computer and Electronic Products	1.09	1.08	1.06	1.06	1.06	1.06	1.06	1.06
% Ch, Annual Rate	0.1	-5.0	-5.2	-1.4	-0.1	0.4	0.3	-0.3
Machinery and Electrical Equipment	1.50	1.49	1.47	1.49	1.49	1.48	1.47	1.46
% Ch, Annual Rate	5.7	-1.6	-5.8	6.6	-0.6	-2.5	-3.1	-3.3
Transportation Equipment	1.61	1.63	1.67	1.73	1.76	1.77	1.77	1.76
% Ch, Annual Rate	6.2	4.8	9.8	16.7	7.0	2.8	-0.3	-2.6
Other Durables	1.44	1.42	1.40	1.41	1.40	1.39	1.38	1.37
% Ch, Annual Rate	3.6	-3.2	-7.2	3.5	-1.6	-2.9	-3.2	-3.8
Nondurable Manufacturing	4.69	4.68	4.69	4.70	4.71	4.70	4.69	4.68
% Ch, Annual Rate	-1.3	-1.5	1.3	0.6	0.6	-0.5	-1.0	-1.1
Food Manufacturing	1.63	1.61	1.63	1.64	1.65	1.65	1.65	1.65
% Ch, Annual Rate	-3.2	-4.1	4.2	2.9	2.1	0.5	0.3	0.8
Paper and Paper Products	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
% Ch, Annual Rate	-3.1	0.3	1.6	0.7	1.6	0.5	-0.7	-0.9
Other Nondurables	2.72	2.72	2.71	2.71	2.71	2.70	2.69	2.67
% Ch, Annual Rate	0.1	-0.1	-0.4	-0.7	-0.5	-1.2	-1.8	-2.2
Natural Resources and Mining	0.68	0.68	0.68	0.68	0.68	0.68	0.69	0.69
% Ch, Annual Rate	5.0	1.9	-0.3	-2.2	2.4	1.8	1.8	1.4
Construction	7.38	7.36	7.38	7.39	7.40	7.40	7.40	7.40
% Ch, Annual Rate	-0.2	-1.1	1.3	0.5	0.6	0.0	0.0	0.0
Trade, Transportation, and Utilities	27.26	27.10	27.15	26.79	26.66	26.92	26.80	26.81
% Ch, Annual Rate	-3.3	-2.3	0.7	-5.2	-1.9	3.9	-1.7	0.0
Wholesale Trade	5.79	5.87	6.08	6.13	6.19	6.19	6.20	6.22
% Ch, Annual Rate	4.5	5.9	14.7	3.7	4.2	-0.2	0.4	1.3
Retail Trade	14.98	14.65	14.33	13.90	13.67	13.96	13.85	13.84
% Ch, Annual Rate	-9.4	-8.4	-8.5	-11.5	-6.5	8.8	-3.0	-0.5
Trans., Warehousing, and Utilities	6.50	6.58	6.74	6.76	6.80	6.77	6.75	6.75
% Ch, Annual Rate	5.2	4.9	10.4	1.2	2.3	-1.9	-0.9	0.1
Information	2.80	2.76	2.79	2.76	2.76	2.77	2.79	2.85
% Ch, Annual Rate	2.0	-5.9	4.6	-5.1	-0.2	1.8	2.9	9.9
Publishing Industries	0.80	0.80	0.81	0.81	0.81	0.80	0.80	0.79
% Ch, Annual Rate	10.8	2.7	4.4	-2.1	-0.4	-3.5	-2.2	-1.9
Other Information	2.01	1.96	1.98	1.95	1.95	1.97	1.99	2.06
% Ch, Annual Rate	-1.3	-9.2	4.6	-6.3	-0.1	4.0	5.1	14.9
Financial Activities	9.05	9.25	9.40	9.38	9.40	9.32	9.29	9.28
% Ch, Annual Rate	8.8	9.2	6.5	-0.6	0.8	-3.2	-1.3	-0.5
Professional and Business Services	22.11	22.48	22.71	22.86	23.00	22.82	22.76	22.86
% Ch, Annual Rate	15.5	6.9	4.2	2.6	2.5	-3.1	-1.1	1.8
Education and Health Services	23.88	24.46	24.53	24.35	24.41	24.35	24.38	24.44
% Ch, Annual Rate	0.6	10.1	1.1	-2.9	0.9	-0.9	0.5	1.0
Leisure and Hospitality	15.46	15.33	15.55	16.49	16.84	17.35	17.84	17.94
% Ch, Annual Rate	-3.8	-3.3	5.9	26.6	8.7	12.7	11.7	2.4
Other Services	5.96	6.13	6.27	6.30	6.34	6.31	6.31	6.32
% Ch, Annual Rate	12.2	11.6	9.8	2.1	2.4	-1.8	-0.1	0.6
Federal Government	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.62	19.70	19.77	19.85	19.92	19.97	20.00	20.03
% Ch, Annual Rate	2.8	1.6	1.4	1.6	1.4	1.0	0.7	0.5



Table A2.2 (continued)

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

Forecast 2021 to 2025

	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Nonfarm Payroll Employment	154.30	154.61	154.88	155.11	155.33	155.54	155.73	155.89
% Ch, Annual Rate	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.4
Manufacturing	12.42	12.36	12.31	12.25	12.20	12.16	12.13	12.10
% Ch, Annual Rate	-1.8	-1.9	-1.7	-1.9	-1.5	-1.3	-1.1	-1.0
Durable Manufacturing	7.76	7.71	7.67	7.63	7.60	7.57	7.55	7.54
% Ch, Annual Rate	-2.2	-2.4	-2.1	-2.2	-1.6	-1.4	-1.0	-0.9
Wood Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	0.3	0.5	0.1	-0.2	0.6	1.9	2.1	1.9
Primary and Fabricated Metals	1.79	1.78	1.77	1.76	1.75	1.75	1.75	1.74
% Ch, Annual Rate	-2.1	-2.6	-2.2	-2.1	-1.6	-1.1	-0.4	-0.6
Computer and Electronic Products	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
% Ch, Annual Rate	-0.1	-0.1	0.3	0.4	0.3	-0.1	-0.3	-0.6
Machinery and Electrical Equipment	1.45	1.44	1.43	1.42	1.42	1.41	1.41	1.41
% Ch, Annual Rate	-2.2	-2.1	-2.0	-2.2	-1.5	-1.4	-0.6	-0.3
Transportation Equipment	1.75	1.73	1.72	1.71	1.70	1.69	1.68	1.68
% Ch, Annual Rate	-2.9	-3.1	-2.7	-3.0	-2.2	-1.9	-1.4	-2.0
Other Durables	1.36	1.34	1.33	1.32	1.30	1.30	1.29	1.28
% Ch, Annual Rate	-3.5	-4.2	-3.8	-4.0	-3.4	-2.9	-3.1	-1.6
Nondurable Manufacturing	4.66	4.65	4.64	4.62	4.61	4.59	4.58	4.57
% Ch, Annual Rate	-1.1	-1.1	-1.1	-1.4	-1.2	-1.1	-1.2	-1.2
Food Manufacturing	1.66	1.66	1.67	1.67	1.67	1.68	1.68	1.68
% Ch, Annual Rate	1.1	1.1	1.3	0.8	0.6	0.7	0.6	0.5
Paper and Paper Products	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.34
% Ch, Annual Rate	-1.1	-1.0	-0.9	-1.6	-1.6	-1.4	-1.4	-1.4
Other Nondurables	2.65	2.64	2.62	2.60	2.59	2.57	2.56	2.54
% Ch, Annual Rate	-2.5	-2.6	-2.6	-2.7	-2.3	-2.2	-2.3	-2.3
Natural Resources and Mining	0.69	0.69	0.69	0.68	0.68	0.68	0.68	0.68
% Ch, Annual Rate	-1.3	0.2	-0.3	-0.9	-0.9	-1.2	-0.5	-0.7
Construction	7.40	7.41	7.41	7.43	7.44	7.46	7.48	7.50
% Ch, Annual Rate	0.1	0.2	0.4	0.7	0.9	1.0	1.0	1.2
Trade, Transportation, and Utilities	26.64	26.33	26.28	26.25	26.23	26.21	26.21	26.20
% Ch, Annual Rate	-2.5	-4.6	-0.7	-0.5	-0.2	-0.4	0.1	-0.2
Wholesale Trade	6.26	6.32	6.37	6.41	6.45	6.48	6.50	6.52
% Ch, Annual Rate	2.8	4.1	2.8	2.7	2.6	1.8	1.5	1.2
Retail Trade	13.59	13.17	13.05	12.95	12.84	12.76	12.71	12.66
% Ch, Annual Rate	-6.9	-11.8	-3.5	-3.2	-3.2	-2.7	-1.4	-1.7
Trans., Warehousing, and Utilities	6.78	6.83	6.86	6.89	6.94	6.97	7.00	7.02
% Ch, Annual Rate	1.8	3.0	1.6	1.6	2.8	2.0	1.7	1.4
Information	2.91	2.96	2.97	2.97	2.98	3.00	3.00	3.00
% Ch, Annual Rate	8.8	6.2	1.2	0.0	1.9	2.2	0.5	0.2
Publishing Industries	0.79	0.79	0.79	0.79	0.79	0.78	0.78	0.77
% Ch, Annual Rate	-0.6	0.2	-1.1	-1.2	-0.9	-1.5	-2.7	-2.8
Other Information	2.12	2.17	2.18	2.18	2.20	2.22	2.22	2.23
% Ch, Annual Rate	12.6	8.4	2.1	0.4	2.9	3.5	1.6	1.2
Financial Activities	9.30	9.35	9.36	9.37	9.38	9.37	9.36	9.35
% Ch, Annual Rate	1.1	1.9	0.6	0.5	0.1	-0.1	-0.3	-0.5
Professional and Business Services	23.03	23.24	23.38	23.52	23.69	23.82	23.92	23.99
% Ch, Annual Rate	3.1	3.6	2.4	2.4	3.0	2.1	1.7	1.3
Education and Health Services	24.55	24.70	24.79	24.85	24.90	24.93	24.94	24.98
% Ch, Annual Rate	1.9	2.4	1.5	1.0	0.8	0.4	0.3	0.6
Leisure and Hospitality	18.05	18.20	18.25	18.29	18.26	18.31	18.34	18.37
% Ch, Annual Rate	2.3	3.4	1.2	0.9	-0.6	1.0	0.6	0.5
Other Services	6.36	6.41	6.44	6.47	6.50	6.52	6.55	6.57
% Ch, Annual Rate	2.3	3.3	1.9	1.7	1.9	1.5	1.5	1.4
Federal Government	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.06	20.08	20.11	20.14	20.17	20.20	20.22	20.25
% Ch, Annual Rate	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6



Table A2.3

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

Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	3,401.1	3,468.5	3,286.5	3,364.1	3,494.5	3,578.3	3,625.1	3,669.3
% Ch	2.4	2.0	-5.2	2.4	3.9	2.4	1.3	1.2
Manufacturing	287.7	293.7	271.7	257.7	258.4	263.2	263.9	264.8
% Ch	1.2	2.1	-7.5	-5.1	0.2	1.9	0.3	0.3
Durable Manufacturing	202.2	206.9	189.6	174.5	173.0	176.3	177.6	179.2
% Ch	0.9	2.4	-8.4	-8.0	-0.8	1.9	0.7	0.9
Wood Products	13.0	12.9	12.5	13.5	13.4	12.3	11.9	11.7
% Ch	0.9	-0.5	-3.4	8.6	-0.9	-8.0	-3.6	-1.7
Primary and Fabricated Metals	26.1	26.9	24.3	22.6	23.6	23.9	23.4	23.0
% Ch	4.3	2.9	-9.6	-7.2	4.6	1.1	-2.0	-1.5
Computer and Electronic Products	19.8	19.9	18.9	17.9	17.9	18.1	18.3	18.6
% Ch	0.9	0.2	-4.8	-5.2	-0.1	0.9	1.3	1.5
Machinery and Electrical Equipment	21.3	21.2	19.2	19.4	21.1	21.8	21.6	21.8
% Ch	3.0	-0.8	-9.1	1.0	8.7	3.2	-0.8	0.7
Aerospace	83.9	88.5	80.0	66.2	61.1	64.0	66.4	68.4
% Ch	-0.3	5.5	-9.6	-17.3	-7.6	4.6	3.8	3.0
Other Transportation Equip.	9.9	9.7	9.0	9.0	9.1	9.1	8.9	8.7
% Ch	-3.0	-1.8	-6.8	-0.5	1.2	-0.2	-1.8	-1.8
Other Durables	28.1	27.8	25.6	25.8	26.7	27.2	27.1	26.9
% Ch	1.5	-0.8	-8.0	0.9	3.5	1.7	-0.5	-0.4
Nondurable Manufacturing	85.6	86.8	82.1	83.2	85.3	86.9	86.3	85.6
% Ch	2.0	1.4	-5.4	1.4	2.5	1.8	-0.7	-0.8
Food Manufacturing	39.1	39.4	37.8	38.0	38.0	38.6	38.6	38.5
% Ch	2.8	0.8	-4.1	0.5	0.0	1.7	-0.1	-0.2
Paper and Paper Products	7.7	7.8	7.5	7.4	7.5	7.5	7.4	7.2
% Ch	-1.2	1.5	-3.1	-1.4	0.5	1.0	-2.0	-2.6
Other Nondurables	38.9	39.6	36.8	37.9	39.9	40.7	40.3	39.9
% Ch	1.9	2.0	-7.1	2.9	5.4	2.0	-1.1	-1.0
Natural Resources and Mining	6.3	5.9	5.6	5.9	6.2	5.6	5.7	5.8
% Ch	1.1	-6.3	-5.6	6.1	4.3	-8.6	0.5	2.8
Construction	213.1	219.5	213.5	223.0	217.5	217.2	219.9	224.0
% Ch	6.7	3.0	-2.7	4.4	-2.5	-0.1	1.2	1.9
Trade, Transportation, and Utilities	636.0	643.2	629.8	653.6	654.1	655.1	651.0	652.2
% Ch	1.8	1.1	-2.1	3.8	0.1	0.2	-0.6	0.2
Wholesale Trade	135.7	136.3	131.0	136.0	143.0	149.0	153.6	158.3
% Ch	1.8	0.5	-3.9	3.8	5.2	4.2	3.1	3.1
Retail Trade	385.8	390.5	386.7	407.1	394.3	384.4	374.3	368.2
% Ch	1.9	1.2	-1.0	5.3	-3.1	-2.5	-2.6	-1.6
Electronic Shopping and Mail-Order	54.8	63.5	75.9	85.4	88.9	91.2	93.3	95.3
% Ch	10.1	15.9	19.5	12.6	4.1	2.5	2.3	2.2
Other Retail Trade	331.0	327.0	310.8	321.6	305.4	293.3	281.1	273.0
% Ch	0.6	-1.2	-4.9	3.5	-5.1	-4.0	-4.2	-2.9
Trans., Warehousing, and Utilities	114.5	116.4	112.1	110.5	116.8	121.7	123.1	125.6
% Ch	1.8	1.6	-3.7	-1.4	5.7	4.2	1.1	2.1
Information	134.2	144.5	149.0	156.3	160.5	163.3	166.8	169.0
% Ch	6.3	7.7	3.1	4.9	2.7	1.8	2.1	1.3
Software Publishers	65.3	70.4	75.6	77.9	79.4	80.7	81.9	83.1
% Ch	6.4	7.7	7.4	3.0	2.0	1.6	1.5	1.4
Other Publishing Industries	5.1	4.8	4.1	4.0	4.3	4.0	3.7	3.3
% Ch	-6.8	-6.2	-14.6	-2.6	7.8	-7.3	-8.8	-10.1
Other Information	63.7	69.3	69.3	74.4	76.8	78.6	81.2	82.6
% Ch	7.4	8.7	0.0	7.3	3.2	2.4	3.3	1.7
Financial Activities	157.7	160.4	158.5	161.5	170.1	170.8	171.3	171.7
% Ch	2.4	1.7	-1.2	1.9	5.4	0.4	0.3	0.2
Professional and Business Services	424.3	434.7	425.0	440.0	469.3	478.6	490.0	504.0
% Ch	2.6	2.4	-2.2	3.5	6.6	2.0	2.4	2.9
Education and Health Services	490.2	502.4	488.5	502.2	516.9	520.9	530.8	539.0
% Ch	3.1	2.5	-2.8	2.8	2.9	0.8	1.9	1.6
Leisure and Hospitality	341.9	347.4	264.2	281.7	323.9	367.5	380.4	384.6
% Ch	3.1	1.6	-23.9	6.6	15.0	13.4	3.5	1.1
Other Services	122.4	129.3	118.7	121.7	131.7	137.7	140.0	142.5
% Ch	2.2	5.7	-8.2	2.5	8.3	4.5	1.7	1.8
Federal Government	74.8	75.8	78.5	77.2	77.2	77.5	77.9	78.2
% Ch	0.0	1.3	3.6	-1.6	0.0	0.4	0.4	0.5
State and Local Government	512.5	511.8	483.5	483.5	508.7	520.9	527.5	533.6
% Ch	0.3	-0.1	-5.5	0.0	5.2	2.4	1.3	1.1

Table A2.4

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

Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	3,507.7	3,128.5	3,240.2	3,269.5	3,291.1	3,338.8	3,398.1	3,428.6
% Ch, Annual Rate	1.4	-36.7	15.1	3.7	2.7	5.9	7.3	3.6
Manufacturing	292.4	269.7	264.4	260.2	258.6	256.7	258.1	257.5
% Ch, Annual Rate	-1.2	-27.7	-7.6	-6.2	-2.4	-2.9	2.2	-0.9
Durable Manufacturing	205.2	190.7	183.8	178.6	176.3	174.4	174.3	172.9
% Ch, Annual Rate	-2.2	-25.3	-13.7	-10.8	-5.0	-4.3	-0.2	-3.3
Wood Products	12.9	12.0	12.3	12.7	13.3	13.4	13.6	13.9
% Ch, Annual Rate	-1.6	-24.4	12.2	13.3	19.0	4.7	3.4	9.7
Primary and Fabricated Metals	26.7	24.5	23.4	22.6	22.7	22.3	22.4	22.9
% Ch, Annual Rate	-4.5	-29.1	-17.1	-11.9	0.6	-6.4	0.9	10.3
Computer and Electronic Products	19.4	19.0	18.7	18.5	18.1	17.9	17.8	18.0
% Ch, Annual Rate	-3.6	-9.1	-5.4	-4.3	-9.5	-3.2	-3.3	5.4
Machinery and Electrical Equipment	20.2	19.2	18.8	18.8	19.0	18.8	19.7	20.2
% Ch, Annual Rate	-12.2	-18.2	-8.0	1.6	4.0	-3.9	18.5	11.3
Aerospace	88.9	83.1	76.6	71.4	68.6	67.1	66.3	62.7
% Ch, Annual Rate	-0.6	-23.3	-28.0	-24.3	-15.1	-8.5	-4.3	-20.0
Other Transportation Equip.	9.7	8.8	8.8	8.9	9.0	9.0	8.9	9.0
% Ch, Annual Rate	8.0	-34.5	0.2	4.8	6.0	0.8	-4.1	3.3
Other Durables	27.4	24.2	25.3	25.6	25.7	25.8	25.7	26.1
% Ch, Annual Rate	-0.1	-39.7	19.3	5.2	1.7	1.7	-1.3	6.6
Nondurable Manufacturing	87.3	79.0	80.6	81.5	82.3	82.3	83.8	84.7
% Ch, Annual Rate	1.2	-32.9	8.3	4.9	3.6	0.2	7.5	4.3
Food Manufacturing	39.5	36.7	37.0	37.8	38.3	37.6	37.9	38.1
% Ch, Annual Rate	1.4	-25.7	3.3	8.5	5.2	-6.7	3.1	1.9
Paper and Paper Products	7.8	7.5	7.2	7.5	7.4	7.4	7.4	7.5
% Ch, Annual Rate	2.4	-15.2	-13.8	14.4	-6.0	2.6	0.2	1.2
Other Nondurables	39.9	34.7	36.3	36.3	36.6	37.3	38.5	39.1
% Ch, Annual Rate	0.8	-42.5	19.4	-0.5	3.9	7.2	13.5	7.4
Natural Resources and Mining	5.7	5.4	5.5	5.6	5.7	5.6	5.7	6.6
% Ch, Annual Rate	-1.1	-15.9	2.3	11.5	3.1	-1.2	1.4	83.5
Construction	224.1	198.9	212.4	218.8	223.3	223.1	224.6	221.0
% Ch, Annual Rate	3.9	-38.0	30.1	12.6	8.6	-0.3	2.6	-6.2
Trade, Transportation, and Utilities	651.3	596.3	627.3	644.2	649.4	649.8	656.3	658.8
% Ch, Annual Rate	2.1	-29.7	22.5	11.2	3.3	0.2	4.0	1.5
Wholesale Trade	136.8	127.9	127.6	131.6	133.4	135.5	137.6	137.4
% Ch, Annual Rate	0.3	-23.5	-1.1	13.2	5.7	6.3	6.5	-0.7
Retail Trade	396.8	359.5	389.8	400.6	402.3	405.9	409.5	410.6
% Ch, Annual Rate	3.3	-32.6	38.2	11.5	1.7	3.6	3.7	1.1
Electronic Shopping and Mail-Order	71.2	73.5	77.2	81.5	82.7	84.9	86.7	87.4
% Ch	22.5	13.6	21.6	23.8	6.3	11.2	8.8	3.1
Other Retail Trade	325.5	286.0	312.6	319.1	319.6	320.9	322.8	323.2
% Ch	-0.4	-40.4	42.7	8.7	0.5	1.7	2.3	0.5
Trans., Warehousing, and Utilities	117.7	108.8	109.9	112.0	113.7	108.5	109.1	110.8
% Ch, Annual Rate	0.4	-27.1	4.0	8.1	6.3	-17.3	2.4	6.3
Information	149.8	147.8	147.3	151.1	154.8	155.1	156.5	158.8
% Ch, Annual Rate	6.1	-5.2	-1.5	10.8	10.1	0.8	3.6	6.0
Software Publishers	74.6	76.0	75.6	76.1	78.3	78.0	77.4	77.8
% Ch, Annual Rate	11.1	7.8	-1.8	2.2	12.3	-1.6	-3.1	2.3
Other Publishing Industries	4.6	4.1	3.9	3.9	3.9	3.9	4.1	4.1
% Ch, Annual Rate	-6.5	-38.4	-13.0	-8.5	1.6	5.8	23.2	-1.4
Other Information	70.6	67.8	67.7	71.2	72.6	73.2	75.0	76.9
% Ch, Annual Rate	2.1	-15.3	-0.5	22.4	8.1	3.2	10.2	10.4
Financial Activities	162.6	155.7	156.5	159.1	159.8	161.5	162.3	162.3
% Ch, Annual Rate	1.8	-15.9	2.0	6.7	1.9	4.3	2.0	0.1
Professional and Business Services	442.7	410.8	415.4	431.2	434.8	435.6	442.9	446.8
% Ch, Annual Rate	2.2	-25.8	4.5	16.1	3.4	0.7	6.9	3.6
Education and Health Services	508.1	467.8	486.4	491.6	494.7	499.9	505.9	508.4
% Ch, Annual Rate	0.6	-28.1	16.9	4.4	2.5	4.3	4.9	2.0
Leisure and Hospitality	347.5	216.5	246.4	246.5	247.4	274.4	296.8	308.0
% Ch, Annual Rate	-2.8	-84.9	67.6	0.3	1.4	51.5	36.8	15.9
Other Services	132.6	109.3	115.1	117.8	117.7	120.1	123.4	125.5
% Ch, Annual Rate	2.6	-53.7	22.9	9.7	-0.6	8.5	11.7	6.6
Federal Government	77.4	77.4	81.0	78.1	77.4	77.4	77.0	77.0
% Ch, Annual Rate	7.0	0.4	19.9	-13.8	-3.6	0.0	-2.2	0.5
State and Local Government	513.5	472.7	482.6	465.3	467.7	479.6	488.7	497.9
% Ch, Annual Rate	1.1	-28.2	8.6	-13.6	2.1	10.6	7.8	7.7

Table A2.4 (continued)

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

Forecast 2021 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Nonfarm Payroll Employment	3,453.7	3,481.0	3,509.8	3,533.4	3,558.3	3,574.3	3,583.2	3,597.5
% Ch, Annual Rate	3.0	3.2	3.4	2.7	2.9	1.8	1.0	1.6
Manufacturing	257.0	257.7	258.1	260.7	262.8	263.2	263.3	263.4
% Ch, Annual Rate	-0.8	1.1	0.6	4.2	3.3	0.6	0.2	0.2
Durable Manufacturing	172.3	172.9	172.5	174.4	175.8	176.2	176.5	176.8
% Ch, Annual Rate	-1.3	1.3	-1.0	4.6	3.3	0.8	0.7	0.6
Wood Products	14.1	13.6	13.1	12.9	12.7	12.4	12.2	12.1
% Ch, Annual Rate	6.3	-13.0	-15.2	-3.6	-7.3	-8.6	-6.3	-4.4
Primary and Fabricated Metals	23.6	23.6	23.4	23.8	24.0	23.9	23.8	23.7
% Ch, Annual Rate	12.1	0.7	-4.1	8.1	2.2	-1.0	-1.5	-1.8
Computer and Electronic Products	18.2	18.0	17.7	17.8	18.0	18.0	18.1	18.2
% Ch, Annual Rate	4.4	-5.0	-5.5	1.7	4.1	1.9	1.8	0.8
Machinery and Electrical Equipment	20.9	21.1	20.9	21.7	21.9	21.9	21.8	21.7
% Ch, Annual Rate	14.3	3.3	-2.8	15.7	4.6	-0.9	-1.8	-2.0
Aerospace	60.0	60.9	61.6	62.0	62.9	63.7	64.3	65.0
% Ch, Annual Rate	-16.2	5.9	4.7	2.8	5.9	4.8	4.4	4.1
Other Transportation Equip.	9.0	9.1	9.1	9.1	9.1	9.1	9.0	9.0
% Ch, Annual Rate	1.6	2.1	1.4	0.5	0.5	-1.9	-2.3	-1.8
Other Durables	26.5	26.7	26.7	27.0	27.2	27.2	27.2	27.2
% Ch, Annual Rate	5.8	2.5	0.8	5.1	2.8	-0.3	-0.5	-0.4
Nondurable Manufacturing	84.7	84.8	85.6	86.3	87.0	87.0	86.8	86.7
% Ch, Annual Rate	0.1	0.5	3.7	3.3	3.3	0.0	-0.7	-0.7
Food Manufacturing	37.9	37.6	38.0	38.4	38.7	38.6	38.6	38.6
% Ch, Annual Rate	-2.2	-3.1	5.2	3.9	3.1	-0.5	-0.6	-0.2
Paper and Paper Products	7.4	7.4	7.5	7.5	7.6	7.6	7.5	7.5
% Ch, Annual Rate	-2.5	1.4	2.8	1.8	2.8	-0.5	-1.7	-1.9
Other Nondurables	39.4	39.8	40.1	40.4	40.7	40.8	40.7	40.6
% Ch, Annual Rate	2.9	4.0	2.5	3.0	3.5	0.5	-0.5	-0.9
Natural Resources and Mining	6.6	6.2	5.9	5.8	5.7	5.6	5.6	5.6
% Ch, Annual Rate	2.2	-21.6	-17.9	-10.6	-4.0	-5.7	-4.2	-1.5
Construction	218.9	217.3	217.0	216.7	217.1	217.0	216.4	218.3
% Ch, Annual Rate	-3.7	-2.9	-0.6	-0.4	0.6	-0.2	-1.1	3.7
Trade, Transportation, and Utilities	655.5	653.9	656.0	650.9	650.4	657.0	655.8	657.3
% Ch, Annual Rate	-2.0	-1.0	1.3	-3.1	-0.3	4.1	-0.7	0.9
Wholesale Trade	138.9	140.9	145.3	146.9	148.6	148.5	148.9	149.8
% Ch, Annual Rate	4.5	5.8	13.2	4.5	4.7	-0.3	1.0	2.3
Retail Trade	403.7	397.8	391.9	383.7	379.7	386.8	385.4	385.9
% Ch, Annual Rate	-6.6	-5.7	-5.8	-8.1	-4.1	7.6	-1.4	0.5
Electronic Shopping and Mail-Order	88.0	88.6	89.2	89.8	90.4	90.9	91.4	92.0
% Ch	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	315.6	309.2	302.7	293.9	289.4	295.8	294.0	293.9
% Ch	-9.1	-8.0	-8.1	-11.1	-6.1	9.3	-2.5	0.0
Trans., Warehousing, and Utilities	112.9	115.2	118.8	120.2	122.1	121.7	121.4	121.6
% Ch, Annual Rate	8.1	8.1	13.1	4.9	6.5	-1.3	-0.8	0.6
Information	160.2	159.3	161.6	161.0	161.9	163.6	163.1	164.7
% Ch, Annual Rate	3.6	-2.3	5.9	-1.5	2.4	4.1	-1.1	4.1
Software Publishers	78.7	79.2	79.7	80.0	80.4	80.5	80.8	81.1
% Ch, Annual Rate	4.5	2.6	3.0	1.3	1.7	0.9	1.3	1.3
Other Publishing Industries	4.3	4.3	4.4	4.3	4.2	4.1	3.9	3.8
% Ch, Annual Rate	20.9	1.0	5.0	-9.8	-6.2	-13.4	-10.7	-10.3
Other Information	77.2	75.8	77.4	76.7	77.4	79.0	78.4	79.8
% Ch, Annual Rate	1.9	-7.3	9.1	-3.8	3.5	8.6	-3.0	7.8
Financial Activities	165.9	169.8	172.6	172.2	172.5	170.8	170.0	169.9
% Ch, Annual Rate	9.1	9.9	6.9	-1.1	0.7	-3.8	-1.9	-0.2
Professional and Business Services	460.7	467.8	472.6	476.0	479.4	477.4	477.4	480.1
% Ch, Annual Rate	13.0	6.3	4.2	2.9	2.9	-1.7	0.0	2.3
Education and Health Services	509.3	519.3	520.8	518.2	519.6	519.6	521.1	523.2
% Ch, Annual Rate	0.7	8.1	1.2	-2.0	1.1	0.1	1.1	1.6
Leisure and Hospitality	311.3	314.9	324.3	345.2	356.6	365.0	373.1	375.2
% Ch, Annual Rate	4.4	4.8	12.4	28.4	13.8	9.9	9.1	2.3
Other Services	128.0	130.6	133.1	135.1	137.1	137.4	137.9	138.4
% Ch, Annual Rate	8.5	8.3	7.9	6.1	6.1	0.9	1.2	1.5
Federal Government	77.1	77.2	77.3	77.3	77.4	77.5	77.6	77.6
% Ch, Annual Rate	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
State and Local Government	503.1	507.0	510.5	514.3	517.8	520.2	522.1	523.7
% Ch, Annual Rate	4.3	3.1	2.8	3.0	2.7	1.8	1.5	1.3

Table A2.4 (continued)

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

Forecast 2021 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Nonfarm Payroll Employment	3,609.5	3,619.0	3,630.5	3,641.3	3,652.8	3,664.3	3,675.0	3,685.4
% Ch, Annual Rate	1.3	1.1	1.3	1.2	1.3	1.3	1.2	1.1
Manufacturing	263.7	263.8	264.0	264.0	264.2	264.6	265.0	265.4
% Ch, Annual Rate	0.3	0.2	0.3	0.1	0.3	0.5	0.6	0.6
Durable Manufacturing	177.2	177.5	177.8	178.1	178.4	178.9	179.5	180.1
% Ch, Annual Rate	0.9	0.7	0.7	0.6	0.9	1.0	1.3	1.3
Wood Products	12.0	11.9	11.9	11.8	11.7	11.7	11.7	11.7
% Ch, Annual Rate	-2.2	-2.0	-2.4	-2.6	-1.9	-0.8	-0.7	-0.8
Primary and Fabricated Metals	23.6	23.4	23.3	23.2	23.1	23.0	23.0	23.0
% Ch, Annual Rate	-2.0	-2.7	-2.2	-2.1	-1.5	-1.0	-0.2	-0.4
Computer and Electronic Products	18.2	18.3	18.3	18.4	18.5	18.6	18.6	18.6
% Ch, Annual Rate	1.0	1.1	1.9	2.1	1.9	1.2	0.8	0.2
Machinery and Electrical Equipment	21.6	21.6	21.6	21.6	21.7	21.7	21.8	22.0
% Ch, Annual Rate	-0.4	-0.1	0.0	-0.3	0.8	0.9	2.2	2.6
Aerospace	65.6	66.2	66.7	67.2	67.7	68.2	68.7	69.2
% Ch, Annual Rate	3.8	3.6	3.2	2.9	2.8	2.9	3.0	3.2
Other Transportation Equip.	9.0	8.9	8.9	8.8	8.8	8.8	8.7	8.7
% Ch, Annual Rate	-1.9	-1.6	-1.6	-1.5	-1.7	-2.0	-2.2	-2.3
Other Durables	27.1	27.1	27.0	27.0	26.9	26.9	26.9	26.9
% Ch, Annual Rate	-0.2	-0.8	-0.8	-0.8	-0.5	-0.2	0.0	0.0
Nondurable Manufacturing	86.5	86.3	86.2	86.0	85.8	85.7	85.5	85.3
% Ch, Annual Rate	-0.8	-0.8	-0.7	-1.0	-0.8	-0.7	-0.8	-0.8
Food Manufacturing	38.6	38.6	38.6	38.6	38.6	38.5	38.5	38.5
% Ch, Annual Rate	0.1	0.1	0.3	-0.2	-0.4	-0.3	-0.4	-0.4
Paper and Paper Products	7.4	7.4	7.4	7.3	7.3	7.2	7.2	7.1
% Ch, Annual Rate	-2.2	-2.1	-2.1	-2.8	-2.8	-2.6	-2.5	-2.6
Other Nondurables	40.5	40.3	40.2	40.1	40.0	39.9	39.8	39.7
% Ch, Annual Rate	-1.3	-1.4	-1.3	-1.5	-0.8	-0.7	-0.9	-0.8
Natural Resources and Mining	5.6	5.6	5.7	5.7	5.8	5.8	5.8	5.8
% Ch, Annual Rate	1.7	3.9	3.1	3.1	3.2	2.9	1.3	1.1
Construction	219.1	219.3	220.1	221.0	222.2	223.4	224.5	225.7
% Ch, Annual Rate	1.5	0.3	1.5	1.8	2.1	2.2	2.0	2.1
Trade, Transportation, and Utilities	654.9	649.4	649.6	650.0	650.8	651.4	652.7	653.7
% Ch, Annual Rate	-1.5	-3.3	0.1	0.3	0.5	0.4	0.8	0.6
Wholesale Trade	151.2	153.1	154.4	155.6	156.9	157.9	158.8	159.5
% Ch, Annual Rate	3.8	5.1	3.4	3.3	3.3	2.6	2.2	1.9
Retail Trade	381.6	373.5	371.8	370.5	369.1	368.1	368.0	367.7
% Ch, Annual Rate	-4.4	-8.2	-1.8	-1.5	-1.4	-1.1	-0.1	-0.3
Electronic Shopping and Mail-Order	92.5	93.0	93.5	94.0	94.5	95.0	95.5	96.0
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	289.1	280.5	278.3	276.4	274.6	273.1	272.5	271.7
% Ch	-6.5	-11.4	-3.0	-2.7	-2.6	-2.2	-0.9	-1.1
Trans., Warehousing, and Utilities	122.1	122.9	123.4	123.9	124.7	125.4	126.0	126.5
% Ch, Annual Rate	1.7	2.5	1.7	1.7	2.7	2.1	1.8	1.6
Information	166.1	166.6	167.2	167.3	168.1	169.0	169.3	169.6
% Ch, Annual Rate	3.3	1.3	1.3	0.4	1.8	2.1	0.9	0.7
Software Publishers	81.4	81.8	82.1	82.4	82.7	83.0	83.2	83.5
% Ch, Annual Rate	1.6	1.8	1.5	1.5	1.6	1.4	1.1	1.1
Other Publishing Industries	3.8	3.7	3.6	3.5	3.5	3.4	3.2	3.1
% Ch, Annual Rate	-7.5	-5.5	-9.0	-9.4	-8.7	-10.6	-14.0	-14.8
Other Information	80.9	81.1	81.5	81.4	81.9	82.6	82.9	83.1
% Ch, Annual Rate	5.5	1.2	1.5	-0.3	2.6	3.5	1.3	0.9
Financial Activities	170.4	171.3	171.6	171.8	171.9	171.8	171.7	171.4
% Ch, Annual Rate	1.3	2.0	0.6	0.6	0.1	-0.1	-0.3	-0.6
Professional and Business Services	484.1	488.6	492.0	495.5	499.5	502.8	505.7	508.2
% Ch, Annual Rate	3.3	3.8	2.8	2.9	3.3	2.7	2.3	2.0
Education and Health Services	526.3	529.8	532.4	534.6	536.6	538.2	539.7	541.5
% Ch, Annual Rate	2.3	2.7	2.0	1.7	1.5	1.2	1.1	1.4
Leisure and Hospitality	377.3	380.2	381.5	382.7	382.8	384.1	385.2	386.2
% Ch, Annual Rate	2.3	3.0	1.5	1.2	0.1	1.4	1.1	1.1
Other Services	139.0	139.7	140.3	140.9	141.5	142.2	142.8	143.4
% Ch, Annual Rate	1.8	2.1	1.8	1.7	1.8	1.7	1.8	1.8
Federal Government	77.7	77.8	77.9	78.0	78.1	78.2	78.3	78.3
% Ch, Annual Rate	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
State and Local Government	525.3	526.8	528.3	529.7	531.3	532.8	534.3	536.0
% Ch, Annual Rate	1.3	1.1	1.1	1.1	1.2	1.1	1.2	1.3

Table A3.1

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

Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	17,706.0	18,424.4	19,627.6	20,870.6	21,020.4	22,019.6	23,079.1	24,154.6
% Ch	5.1	4.1	6.5	6.3	0.7	4.8	4.8	4.7
Total Wage and Salary Disbursements	8,900.5	9,323.5	9,444.1	10,203.0	10,937.3	11,514.2	12,043.1	12,581.2
% Ch	5.0	4.8	1.3	8.0	7.2	5.3	4.6	4.5
Nonwage Personal Income	8,805.5	9,100.8	10,183.5	10,667.6	10,083.1	10,505.4	11,036.0	11,573.4
% Ch	5.1	3.4	11.9	4.8	-5.5	4.2	5.1	4.9
Supplements to Wages and Salaries	2,059.0	2,124.2	2,128.0	2,244.3	2,368.7	2,499.0	2,634.0	2,770.2
% Ch	5.5	3.2	0.2	5.5	5.5	5.5	5.4	5.2
Proprietor's Income	1,580.4	1,598.9	1,650.0	1,776.0	1,754.9	1,842.6	1,984.5	2,102.6
% Ch	5.0	1.2	3.2	7.6	-1.2	5.0	7.7	6.0
Farm	38.9	38.4	70.2	94.6	60.9	61.0	67.9	68.6
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,541.5	1,560.5	1,579.9	1,681.4	1,694.0	1,781.5	1,916.6	2,034.0
% Ch	5.1	1.2	1.2	6.4	0.8	5.2	7.6	6.1
Less: Contribution For Govt. Soc. Ins.	1,360.5	1,421.4	1,459.5	1,573.9	1,667.6	1,746.7	1,821.8	1,899.5
% Ch	4.7	4.5	2.7	7.8	6.0	4.7	4.3	4.3
Dividends/Int./Rent	3,550.2	3,660.1	3,623.7	3,667.3	3,852.3	4,034.2	4,179.6	4,319.4
% Ch	5.6	3.1	-1.0	1.2	5.0	4.7	3.6	3.3
Transfer Payments	2,976.3	3,139.1	4,241.1	4,553.9	3,774.8	3,876.4	4,059.7	4,280.6
% Ch	4.2	5.5	35.1	7.4	-17.1	2.7	4.7	5.4

Table A3.2

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

Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	18,842.2	20,348.7	19,777.4	19,542.0	21,867.3	20,564.9	20,561.6	20,488.8
% Ch, Annual Rate	4.2	36.0	-10.8	-4.7	56.8	-21.8	-0.1	-1.4
Total Wage and Salary Disbursements	9,604.1	8,979.0	9,410.3	9,783.0	9,879.2	10,072.1	10,329.0	10,531.9
% Ch, Annual Rate	6.0	-23.6	20.6	16.8	4.0	8.0	10.6	8.1
Nonwage Personal Income	9,238.1	11,369.7	10,367.1	9,759.0	11,988.1	10,492.8	10,232.6	9,956.9
% Ch, Annual Rate	2.4	129.4	-30.9	-21.5	127.7	-41.3	-9.6	-10.3
Supplements to Wages and Salaries	2,151.4	2,050.2	2,129.4	2,181.1	2,209.7	2,229.2	2,256.5	2,281.8
% Ch, Annual Rate	1.9	-17.5	16.4	10.1	5.3	3.6	5.0	4.6
Proprietor's Income	1,638.3	1,471.1	1,760.7	1,730.0	1,714.0	1,838.2	1,822.7	1,729.2
% Ch, Annual Rate	2.9	-35.0	105.2	-6.8	-3.7	32.3	-3.3	-19.0
Farm	58.1	44.9	69.2	108.5	73.0	108.5	106.4	90.6
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,580.2	1,426.2	1,691.5	1,621.5	1,640.9	1,729.7	1,716.3	1,638.7
% Ch, Annual Rate	1.0	-33.6	97.9	-15.5	4.9	23.5	-3.1	-16.9
Less: Contribution For Govt. Soc. Ins.	1,472.0	1,405.9	1,458.7	1,501.3	1,533.8	1,558.6	1,592.8	1,610.5
% Ch, Annual Rate	8.8	-16.8	15.9	12.2	9.0	6.6	9.1	4.5
Dividends/Int./Rent	3,688.6	3,620.4	3,566.3	3,619.6	3,615.8	3,655.0	3,678.7	3,719.8
% Ch, Annual Rate	0.8	-7.2	-5.8	6.1	-0.4	4.4	2.6	4.5
Transfer Payments	3,231.8	5,633.9	4,369.4	3,729.5	5,982.5	4,329.1	4,067.5	3,836.6
% Ch, Annual Rate	7.3	823.5	-63.8	-46.9	562.1	-72.6	-22.1	-20.8

Table A3.2 (continued)

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

Forecast 2021 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	20,601.8	20,898.5	21,183.0	21,398.3	21,635.1	21,890.7	22,148.0	22,404.6
% Ch, Annual Rate	2.2	5.9	5.6	4.1	4.5	4.8	4.8	4.7
Total Wage and Salary Disbursements	10,698.5	10,862.3	11,018.9	11,169.5	11,312.7	11,449.5	11,581.4	11,713.2
% Ch, Annual Rate	6.5	6.3	5.9	5.6	5.2	4.9	4.7	4.6
Nonwage Personal Income	9,903.3	10,036.2	10,164.1	10,228.8	10,322.4	10,441.3	10,566.6	10,691.4
% Ch, Annual Rate	-2.1	5.5	5.2	2.6	3.7	4.7	4.9	4.8
Supplements to Wages and Salaries	2,319.0	2,352.4	2,385.5	2,417.8	2,452.6	2,483.0	2,514.1	2,546.3
% Ch, Annual Rate	6.7	5.9	5.8	5.5	5.9	5.1	5.1	5.2
Proprietor's Income	1,715.0	1,753.5	1,775.0	1,776.1	1,793.7	1,821.5	1,860.4	1,894.7
% Ch, Annual Rate	-3.3	9.3	5.0	0.2	4.0	6.3	8.8	7.6
Farm	68.1	61.0	57.7	56.7	57.9	59.8	62.1	64.4
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,646.9	1,692.6	1,717.3	1,719.3	1,735.8	1,761.7	1,798.3	1,830.3
% Ch, Annual Rate	2.0	11.6	6.0	0.5	3.9	6.1	8.6	7.3
Less: Contribution For Govt. Soc. Ins.	1,638.0	1,658.4	1,677.8	1,696.2	1,721.8	1,738.7	1,755.0	1,771.5
% Ch, Annual Rate	7.0	5.1	4.8	4.5	6.2	4.0	3.8	3.8
Dividends/Int./Rent	3,772.6	3,827.5	3,883.5	3,925.8	3,971.1	4,016.2	4,055.4	4,093.9
% Ch, Annual Rate	5.8	6.0	6.0	4.4	4.7	4.6	4.0	3.8
Transfer Payments	3,734.7	3,761.1	3,797.8	3,805.4	3,826.7	3,859.2	3,891.7	3,928.0
% Ch, Annual Rate	-10.2	2.9	4.0	0.8	2.3	3.4	3.4	3.8

Table A3.2 (continued)

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

Forecast 2021 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	22,689.8	22,952.1	23,208.7	23,465.5	23,750.4	24,019.7	24,290.7	24,557.6
% Ch, Annual Rate	5.2	4.7	4.5	4.5	4.9	4.6	4.6	4.5
Total Wage and Salary Disbursements	11,845.8	11,977.7	12,109.0	12,239.7	12,376.2	12,513.1	12,650.0	12,785.7
% Ch, Annual Rate	4.6	4.5	4.5	4.4	4.5	4.5	4.4	4.4
Nonwage Personal Income	10,844.1	10,974.4	11,099.7	11,225.8	11,374.2	11,506.6	11,640.7	11,771.9
% Ch, Annual Rate	5.8	4.9	4.6	4.6	5.4	4.7	4.7	4.6
Supplements to Wages and Salaries	2,583.7	2,617.8	2,651.0	2,683.7	2,720.5	2,753.5	2,786.8	2,819.9
% Ch, Annual Rate	6.0	5.4	5.2	5.0	5.6	4.9	4.9	4.8
Proprietor's Income	1,933.4	1,971.0	2,003.3	2,030.3	2,057.4	2,087.8	2,118.6	2,146.7
% Ch, Annual Rate	8.4	8.0	6.7	5.5	5.5	6.0	6.0	5.4
Farm	66.4	67.8	68.6	68.8	68.8	68.7	68.5	68.5
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,867.1	1,903.3	1,934.7	1,961.4	1,988.6	2,019.1	2,050.0	2,078.2
% Ch, Annual Rate	8.3	8.0	6.8	5.6	5.7	6.3	6.3	5.6
Less: Contribution For Govt. Soc. Ins.	1,796.6	1,813.5	1,830.2	1,846.8	1,873.0	1,890.7	1,908.4	1,925.9
% Ch, Annual Rate	5.8	3.8	3.7	3.7	5.8	3.8	3.8	3.7
Dividends/Int./Rent	4,129.7	4,162.9	4,196.0	4,229.7	4,263.6	4,300.0	4,337.7	4,376.5
% Ch, Annual Rate	3.5	3.3	3.2	3.2	3.2	3.5	3.6	3.6
Transfer Payments	3,993.8	4,036.2	4,079.6	4,129.0	4,205.7	4,256.0	4,306.1	4,354.7
% Ch, Annual Rate	6.9	4.3	4.4	4.9	7.6	4.9	4.8	4.6



Table A3.3

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

Forecast 2021 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	468.055	493.128	525.988	559.991	569.440	600.365	631.489	663.937
% Ch	7.9	5.4	6.7	6.5	1.7	5.4	5.2	5.1
Total Wage and Salary Disbursements	237.411	254.104	262.632	285.893	305.905	323.386	339.370	356.569
% Ch	8.8	7.0	3.4	8.9	7.0	5.7	4.9	5.1
Manufacturing	22.822	23.869	22.033	21.005	21.578	22.962	23.955	25.009
% Ch	5.3	4.6	-7.7	-4.7	2.7	6.4	4.3	4.4
Durable Manufacturing	17.971	18.794	17.015	15.885	16.123	17.181	18.010	18.897
% Ch	5.2	4.6	-9.5	-6.6	1.5	6.6	4.8	4.9
Nondurable Manufacturing	4.851	5.074	5.017	5.120	5.455	5.781	5.945	6.112
% Ch	5.4	4.6	-1.1	2.0	6.5	6.0	2.8	2.8
Nonmanufacturing	207.564	222.965	233.052	256.958	275.954	291.648	306.267	322.027
% Ch	9.5	7.4	4.5	10.3	7.4	5.7	5.0	5.1
Other Private Wages	1.311	1.343	1.400	1.441	1.548	1.639	1.715	1.795
% Ch	5.7	2.5	4.2	3.0	7.4	5.8	4.7	4.7
Farm Wages	1.455	1.548	1.642	1.778	1.956	2.113	2.251	2.396
% Ch	-3.5	6.4	6.1	8.3	10.0	8.0	6.5	6.5
Military Wages	4.259	4.379	4.506	4.711	4.869	5.025	5.182	5.342
% Ch	1.8	2.8	2.9	4.6	3.4	3.2	3.1	3.1
Nonwage Personal Income	230.644	239.024	263.356	274.098	263.535	276.979	292.119	307.368
% Ch	7.0	3.6	10.2	4.1	-3.9	5.1	5.5	5.2
Supplements to Wages and Salaries	53.261	56.367	57.254	60.129	63.470	67.151	70.884	74.803
% Ch	8.5	5.8	1.6	5.0	5.6	5.8	5.6	5.5
Proprietor's Income	36.464	38.357	39.230	42.964	42.204	44.158	47.290	49.964
% Ch	5.0	5.2	2.3	9.5	-1.8	4.6	7.1	5.7
Farm	1.591	1.798	2.457	2.562	1.544	1.501	1.614	1.626
% Ch	...	...	...	...	...	...	...	...
Nonfarm	34.873	36.558	36.774	40.402	40.660	42.658	45.676	48.337
% Ch	6.5	4.8	0.6	9.9	0.6	4.9	7.1	5.8
Less: Contribution For Govt. Soc. Ins.	38.315	40.387	41.903	45.107	47.688	50.063	52.250	54.634
% Ch	6.2	5.4	3.8	7.6	5.7	5.0	4.4	4.6
Plus: Residence Adjustment	4.579	4.668	4.647	5.074	5.504	5.841	6.151	6.465
% Ch	6.8	1.9	-0.4	9.2	8.5	6.1	5.3	5.1
Dividends/Int./Rent	109.949	111.772	110.698	112.283	118.491	124.735	129.955	135.097
% Ch	7.9	1.7	-1.0	1.4	5.5	5.3	4.2	4.0
Transfer Payments	64.707	68.247	93.429	98.755	81.554	85.157	90.091	95.672
% Ch	4.9	5.5	36.9	5.7	-17.4	4.4	5.8	6.2
State U.I. Benefits	1.005	1.059	14.254	8.892	1.539	1.263	1.218	1.227
% Ch	-1.2	5.3	1,246.2	-37.6	-82.7	-17.9	-3.5	0.7
Other Transfers	63.701	67.189	79.175	89.863	80.015	83.894	88.872	94.446
% Ch	5.0	5.5	17.8	13.5	-11.0	4.8	5.9	6.3

Table A3.4

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

Forecast 2021 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	507.348	543.091	528.451	525.064	579.347	552.377	555.217	553.023
% Ch, Annual Rate	5.7	31.3	-10.4	-2.5	48.2	-17.4	2.1	-1.6
Total Wage and Salary Disbursements	263.483	250.433	264.167	272.446	275.849	282.652	289.907	295.165
% Ch, Annual Rate	7.3	-18.4	23.8	13.1	5.1	10.2	10.7	7.5
Manufacturing	22.707	21.877	21.659	21.887	20.960	20.774	21.101	21.185
% Ch, Annual Rate	-10.9	-13.8	-3.9	4.3	-15.9	-3.5	6.4	1.6
Durable Manufacturing	17.623	17.032	16.712	16.693	16.004	15.747	15.916	15.874
% Ch, Annual Rate	-13.2	-12.7	-7.3	-0.5	-15.5	-6.3	4.4	-1.1
Nondurable Manufacturing	5.084	4.845	4.946	5.194	4.956	5.027	5.185	5.311
% Ch, Annual Rate	-2.2	-17.5	8.6	21.6	-17.1	5.8	13.2	10.1
Nonmanufacturing	233.327	221.082	234.941	242.856	247.148	254.016	260.797	265.870
% Ch, Annual Rate	9.4	-19.4	27.5	14.2	7.3	11.6	11.1	8.0
Other Private Wages	1.396	1.354	1.377	1.471	1.391	1.422	1.462	1.490
% Ch, Annual Rate	-4.3	-11.5	6.9	30.2	-20.0	9.2	11.7	8.0
Farm Wages	1.626	1.637	1.640	1.664	1.697	1.747	1.811	1.858
% Ch, Annual Rate	10.6	2.8	0.8	5.9	8.1	12.4	15.4	10.8
Military Wages	4.426	4.481	4.549	4.567	4.653	4.694	4.737	4.762
% Ch, Annual Rate	1.8	5.1	6.2	1.6	7.7	3.6	3.7	2.1
Nonwage Personal Income	243.865	292.658	264.284	252.618	303.498	269.725	265.310	257.858
% Ch, Annual Rate	4.0	107.4	-33.5	-16.5	108.3	-37.6	-6.4	-10.8
Supplements to Wages and Salaries	57.505	55.385	57.782	58.345	59.001	59.713	60.579	61.222
% Ch, Annual Rate	2.4	-13.9	18.5	4.0	4.6	4.9	5.9	4.3
Proprietor's Income	39.603	34.859	41.449	41.011	41.722	44.413	44.019	41.700
% Ch, Annual Rate	4.0	-40.0	99.9	-4.2	7.1	28.4	-3.5	-19.5
Farm	1.897	2.165	2.605	3.161	2.370	2.880	2.767	2.231
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	37.706	32.694	38.844	37.850	39.352	41.534	41.252	39.469
% Ch, Annual Rate	3.7	-43.5	99.3	-9.8	16.8	24.1	-2.7	-16.2
Less: Contribution For Govt. Soc. Ins.	41.643	40.509	42.453	43.007	43.852	44.678	45.728	46.171
% Ch, Annual Rate	6.5	-10.5	20.6	5.3	8.1	7.7	9.7	3.9
Plus: Residence Adjustment	4.794	4.456	4.519	4.821	4.884	4.997	5.147	5.266
% Ch, Annual Rate	2.4	-25.4	5.7	29.6	5.3	9.6	12.6	9.6
Dividends/Int./Rent	113.084	110.350	108.752	110.608	110.514	111.856	112.693	114.071
% Ch, Annual Rate	2.0	-9.3	-5.7	7.0	-0.3	4.9	3.0	5.0
Transfer Payments	70.522	128.117	94.236	80.840	131.229	93.423	88.599	81.769
% Ch, Annual Rate	10.5	989.2	-70.7	-45.8	594.4	-74.3	-19.1	-27.4
State U.I. Benefits	1.739	28.763	18.655	7.858	12.739	12.051	8.856	1.923
% Ch, Annual Rate	714.2	#####	-82.3	-96.9	590.7	-19.9	-70.8	-99.8
Other Transfers	68.784	99.354	75.581	72.982	118.490	81.373	79.743	79.846
% Ch, Annual Rate	6.2	335.3	-66.5	-13.1	594.8	-77.8	-7.8	0.5

Table A3.4 (continued)

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

Forecast 2021 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	556.893	565.605	574.196	581.068	588.873	596.651	604.067	611.870
% Ch, Annual Rate	2.8	6.4	6.2	4.9	5.5	5.4	5.1	5.3
Total Wage and Salary Disbursements	299.210	303.654	308.141	312.616	317.358	321.505	325.250	329.432
% Ch, Annual Rate	5.6	6.1	6.0	5.9	6.2	5.3	4.7	5.2
Manufacturing	21.159	21.434	21.620	22.098	22.515	22.827	23.136	23.372
% Ch, Annual Rate	-0.5	5.3	3.5	9.1	7.8	5.7	5.5	4.1
Durable Manufacturing	15.815	16.036	16.137	16.504	16.820	17.068	17.320	17.517
% Ch, Annual Rate	-1.5	5.7	2.6	9.4	7.9	6.0	6.0	4.6
Nondurable Manufacturing	5.344	5.398	5.483	5.594	5.695	5.758	5.815	5.855
% Ch, Annual Rate	2.5	4.1	6.5	8.3	7.5	4.5	4.0	2.7
Nonmanufacturing	269.826	273.895	278.092	282.001	286.202	289.944	293.291	297.154
% Ch, Annual Rate	6.1	6.2	6.3	5.7	6.1	5.3	4.7	5.4
Other Private Wages	1.512	1.536	1.560	1.584	1.609	1.630	1.648	1.668
% Ch, Annual Rate	6.0	6.5	6.4	6.2	6.4	5.3	4.5	5.1
Farm Wages	1.895	1.936	1.977	2.017	2.060	2.096	2.129	2.165
% Ch, Annual Rate	8.2	8.9	8.8	8.4	8.7	7.3	6.4	7.0
Military Wages	4.818	4.853	4.891	4.916	4.973	5.008	5.047	5.072
% Ch, Annual Rate	4.9	2.9	3.1	2.0	4.8	2.9	3.1	2.0
Nonwage Personal Income	257.683	261.951	266.055	268.452	271.514	275.146	278.816	282.439
% Ch, Annual Rate	-0.3	6.8	6.4	3.7	4.6	5.5	5.4	5.3
Supplements to Wages and Salaries	62.139	63.013	63.915	64.813	65.868	66.723	67.547	68.466
% Ch, Annual Rate	6.1	5.7	5.8	5.7	6.7	5.3	5.0	5.6
Proprietor's Income	41.339	42.167	42.646	42.664	43.090	43.701	44.535	45.307
% Ch, Annual Rate	-3.4	8.3	4.6	0.2	4.1	5.8	7.9	7.1
Farm	1.727	1.548	1.465	1.437	1.450	1.479	1.517	1.556
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	39.612	40.619	41.181	41.228	41.641	42.221	43.017	43.751
% Ch, Annual Rate	1.5	10.6	5.7	0.5	4.1	5.7	7.8	7.0
Less: Contribution For Govt. Soc. Ins.	46.859	47.410	47.966	48.515	49.336	49.839	50.283	50.794
% Ch, Annual Rate	6.1	4.8	4.8	4.7	6.9	4.1	3.6	4.1
Plus: Residence Adjustment	5.364	5.460	5.551	5.640	5.723	5.803	5.880	5.958
% Ch, Annual Rate	7.6	7.3	6.9	6.5	6.1	5.7	5.4	5.3
Dividends/Int./Rent	115.818	117.646	119.521	120.978	122.537	124.093	125.471	126.838
% Ch, Annual Rate	6.3	6.5	6.5	5.0	5.3	5.2	4.5	4.4
Transfer Payments	79.882	81.074	82.388	82.872	83.632	84.665	85.667	86.664
% Ch, Annual Rate	-8.9	6.1	6.6	2.4	3.7	5.0	4.8	4.7
State U.I. Benefits	1.763	1.557	1.459	1.377	1.288	1.263	1.266	1.235
% Ch, Annual Rate	-29.3	-39.2	-23.0	-20.5	-23.4	-7.5	0.7	-9.2
Other Transfers	78.119	79.517	80.929	81.495	82.344	83.402	84.401	85.428
% Ch, Annual Rate	-8.4	7.4	7.3	2.8	4.2	5.2	4.9	5.0

Table A3.4 (continued)

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

Forecast 2021 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	620.080	627.583	635.268	643.025	651.532	659.762	668.082	676.371
% Ch, Annual Rate	5.5	4.9	5.0	5.0	5.4	5.1	5.1	5.1
Total Wage and Salary Disbursements	333.415	337.235	341.336	345.494	349.872	354.316	358.794	363.292
% Ch, Annual Rate	4.9	4.7	5.0	5.0	5.2	5.2	5.2	5.1
Manufacturing	23.601	23.826	24.073	24.320	24.575	24.849	25.151	25.461
% Ch, Annual Rate	4.0	3.9	4.2	4.2	4.3	4.5	5.0	5.0
Durable Manufacturing	17.713	17.903	18.108	18.316	18.531	18.760	19.016	19.279
% Ch, Annual Rate	4.5	4.4	4.7	4.7	4.8	5.0	5.6	5.6
Nondurable Manufacturing	5.889	5.923	5.965	6.003	6.044	6.088	6.135	6.182
% Ch, Annual Rate	2.3	2.4	2.8	2.6	2.8	3.0	3.1	3.1
Nonmanufacturing	300.796	304.306	308.067	311.898	315.905	319.981	324.060	328.163
% Ch, Annual Rate	5.0	4.7	5.0	5.1	5.2	5.3	5.2	5.2
Other Private Wages	1.687	1.705	1.724	1.744	1.764	1.785	1.805	1.826
% Ch, Annual Rate	4.7	4.3	4.6	4.6	4.8	4.7	4.7	4.6
Farm Wages	2.200	2.233	2.267	2.303	2.340	2.377	2.415	2.452
% Ch, Annual Rate	6.5	6.1	6.4	6.4	6.6	6.5	6.5	6.4
Military Wages	5.130	5.166	5.204	5.230	5.288	5.325	5.364	5.390
% Ch, Annual Rate	4.6	2.8	3.0	2.0	4.5	2.8	3.0	2.0
Nonwage Personal Income	286.666	290.348	293.932	297.531	301.660	305.446	309.287	313.079
% Ch, Annual Rate	6.1	5.2	5.0	5.0	5.7	5.1	5.1	5.0
Supplements to Wages and Salaries	69.505	70.411	71.344	72.275	73.351	74.312	75.286	76.264
% Ch, Annual Rate	6.2	5.3	5.4	5.3	6.1	5.3	5.3	5.3
Proprietor's Income	46.164	46.981	47.703	48.312	48.931	49.625	50.327	50.972
% Ch, Annual Rate	7.8	7.3	6.3	5.2	5.2	5.8	5.8	5.2
Farm	1.589	1.612	1.625	1.630	1.630	1.628	1.625	1.624
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	44.575	45.369	46.077	46.682	47.301	47.998	48.702	49.349
% Ch, Annual Rate	7.7	7.3	6.4	5.4	5.4	6.0	6.0	5.4
Less: Contribution For Govt. Soc. Ins.	51.523	51.988	52.491	53.000	53.798	54.354	54.913	55.472
% Ch, Annual Rate	5.9	3.7	3.9	3.9	6.2	4.2	4.2	4.1
Plus: Residence Adjustment	6.035	6.112	6.189	6.266	6.345	6.425	6.505	6.585
% Ch, Annual Rate	5.3	5.2	5.1	5.0	5.2	5.1	5.1	5.0
Dividends/Int./Rent	128.126	129.340	130.558	131.796	133.048	134.384	135.768	137.190
% Ch, Annual Rate	4.1	3.8	3.8	3.8	3.9	4.1	4.2	4.3
Transfer Payments	88.360	89.491	90.630	91.882	93.783	95.053	96.313	97.540
% Ch, Annual Rate	8.1	5.2	5.2	5.6	8.5	5.5	5.4	5.2
State U.I. Benefits	1.221	1.223	1.216	1.213	1.217	1.223	1.231	1.236
% Ch, Annual Rate	-4.4	0.7	-2.6	-0.8	1.3	1.9	2.6	1.9
Other Transfers	87.138	88.267	89.414	90.669	92.566	93.831	95.083	96.303
% Ch, Annual Rate	8.3	5.3	5.3	5.7	8.6	5.6	5.4	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	2.557	1.8	2.779	2.5
2020	111.2	1.2	2.588	1.2	2.826	1.7
Forecast						
2021	115.2	3.6	2.699	4.3	2.945	4.2
2022	118.0	2.4	2.769	2.6	3.026	2.7
2023	120.0	1.7	2.816	1.7	3.077	1.7
2024	122.2	1.9	2.871	1.9	3.137	1.9
2025	124.5	1.9	2.928	2.0	3.199	2.0

\* 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
Forecast								
2021	124.1	3.2	110.8	2.6	72.0	20.2	83.5	30.0
2022	128.5	3.5	110.2	-0.5	69.9	-2.8	82.8	-0.9
2023	132.5	3.2	108.6	-1.5	67.8	-3.1	79.2	-4.3
2024	136.4	2.9	110.0	1.3	66.5	-1.9	76.7	-3.1
2025	140.2	2.8	111.5	1.4	65.6	-1.3	75.0	-2.2

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

\* As of April 1 of Each Year

Source: Office of Financial Management

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

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

\* As of April 1 of Each Year

Source: Office of Financial Management



Table A6.1

**Summary of National and State Indicators**

<b>Indicator</b>	<b>Latest Data</b>	<b>Indication*</b>
U.S. Leading Index	August 2021	+
U.S. Real GDP Growth	2nd quarter 2021	+
U.S. ISM Index	September 2021	+
U.S. Employment YOY%Δ	August 2021	-
U.S. Unemployment Rate	August 2021	+
U.S. Consumer Confidence	September 2021	-
U.S. Consumer Sentiment	September 2021	+
U.S. CPI YOY%Δ	August 2021	+
U.S. Home Prices YOY%Δ	July 2021	+
S&P 500 Index	October 2021	+
WA Leading Index	August 2021	+
WA Employment YOY%Δ	August 2021	-
WA Aerospace Empl. YOY%Δ	August 2021	+
WA Unemployment Rate	August 2021	unchanged
WA Help Wanted Index	September 2021	-
WA Business Cycle Indicator	August 2021	-
WA Initial Unemploy. Claims	August 2021	-
WA Housing Permits	August 2021	+
WA Weekly Hours in Mfg.	August 2021	unchanged
WA New Vehicle Registration	August 2021	-
WA In-Migration	August 2021	+
WA Exports-Total YOY%Δ	2nd quarter 2021	+
WA Exports- w/o Trans. Equip. YOY%Δ	2nd quarter 2021	+
Seattle CPI YOY%Δ	August 2021	+
Seattle Home Prices YOY%Δ	July 2021	+
WA Construction Activity Index	August 2021	+

\*Change from the previous reading

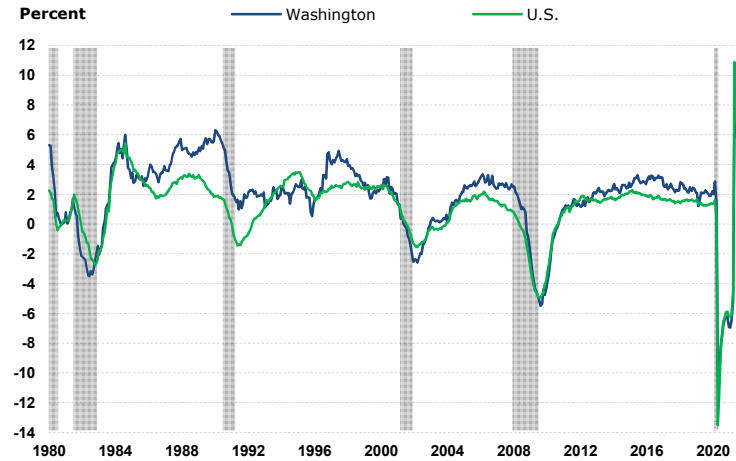
Table A6.2  
**Washington Business Indicators**  
 Historical Data

	<b>WA Index of Leading Indicators</b>	<b>U.S. Index of Leading Indicators</b>	<b>WA State Business Cycle Indicator</b>	<b>WA State Construction Index</b>	<b>WA State Help Wanted Index</b>	<b>U.S. Purchasing Management Index</b>
<b>2016:01</b>	118.5	99.3	63.4	105.9	128.7	48.2
<b>2016:02</b>	118.7	99.2	65.7	107.2	124.9	49.7
<b>2016:03</b>	119.2	99.2	62.8	106.8	128.9	51.7
<b>2016:04</b>	120.4	99.7	63.4	107.9	130.9	50.7
<b>2016:05</b>	121.1	99.5	65.5	108.2	148.2	51.0
<b>2016:06</b>	121.3	99.8	66.7	109.3	151.3	52.8
<b>2016:07</b>	121.9	100.2	67.7	108.7	156.3	52.3
<b>2016:08</b>	121.1	100.2	66.9	106.5	153.1	49.4
<b>2016:09</b>	121.8	100.4	67.5	111.2	143.4	51.7
<b>2016:10</b>	122.0	100.5	68.2	111.7	152.3	52.0
<b>2016:11</b>	121.4	100.7	69.2	111.6	148.8	53.5
<b>2016:12</b>	121.6	101.2	70.7	113.0	149.2	54.5
<b>2017:01</b>	122.1	101.8	69.0	111.0	152.5	56.0
<b>2017:02</b>	122.1	102.1	68.8	112.0	140.1	57.7
<b>2017:03</b>	122.7	102.6	70.5	111.5	143.4	57.2
<b>2017:04</b>	123.3	102.8	69.5	111.9	143.3	54.8
<b>2017:05</b>	123.8	103.2	71.2	112.8	149.2	54.9
<b>2017:06</b>	124.3	103.8	70.9	113.5	145.4	57.8
<b>2017:07</b>	124.6	104.1	71.0	113.8	139.5	56.3
<b>2017:08</b>	124.7	104.5	72.1	114.4	135.1	58.8
<b>2017:09</b>	125.0	104.5	73.3	113.7	140.4	60.8
<b>2017:10</b>	125.3	105.9	73.1	117.2	132.7	58.7
<b>2017:11</b>	125.4	106.3	75.0	116.8	134.7	58.2
<b>2017:12</b>	126.3	107.1	74.8	116.2	138.6	59.7
<b>2018:01</b>	126.7	107.8	74.4	115.8	136.8	59.1
<b>2018:02</b>	128.2	108.5	76.8	117.9	133.3	60.8
<b>2018:03</b>	128.7	108.8	77.7	119.8	137.4	59.3
<b>2018:04</b>	128.6	109.3	77.2	117.0	133.7	57.3
<b>2018:05</b>	127.6	109.4	77.8	115.6	128.0	58.7
<b>2018:06</b>	127.3	110.0	78.0	117.4	123.1	60.2
<b>2018:07</b>	127.1	110.4	77.5	115.9	124.8	58.1
<b>2018:08</b>	127.1	110.9	75.8	117.5	123.4	61.3
<b>2018:09</b>	127.7	111.5	76.4	116.5	131.5	59.8
<b>2018:10</b>	127.2	111.4	76.6	118.1	129.3	57.7
<b>2018:11</b>	126.6	111.5	75.6	118.4	117.4	59.3
<b>2018:12</b>	127.1	111.3	76.3	119.4	118.8	54.1
<b>2019:01</b>	128.1	111.3	75.9	119.0	120.5	56.6
<b>2019:02</b>	126.4	111.5	72.6	114.5	119.5	54.2
<b>2019:03</b>	129.5	111.7	76.4	119.8	125.6	55.3
<b>2019:04</b>	129.7	111.8	78.4	121.3	125.5	52.8
<b>2019:05</b>	129.4	111.8	78.0	120.2	124.0	52.1
<b>2019:06</b>	129.3	111.6	78.6	119.5	122.8	51.7
<b>2019:07</b>	130.0	112.0	78.4	121.8	123.8	51.2
<b>2019:08</b>	129.2	111.8	76.8	119.4	125.0	49.1
<b>2019:09</b>	128.4	111.6	77.3	120.6	118.9	47.8
<b>2019:10</b>	128.0	111.4	77.7	120.7	118.4	48.3
<b>2019:11</b>	128.7	111.6	77.4	123.2	119.5	48.1
<b>2019:12</b>	129.5	111.4	81.8	125.0	124.8	47.2
<b>2020:01</b>	129.6	112.0	77.8	119.8	125.3	50.9
<b>2020:02</b>	129.6	111.8	78.2	120.0	110.1	50.1
<b>2020:03</b>	118.7	103.5	71.7	120.9	88.3	49.1
<b>2020:04</b>	113.0	96.9	42.4	104.9	99.9	41.5
<b>2020:05</b>	118.3	99.8	46.6	113.9	112.7	43.1
<b>2020:06</b>	121.1	102.8	56.7	114.5	115.9	52.6
<b>2020:07</b>	123.1	104.9	62.0	117.0	109.6	54.2
<b>2020:08</b>	124.4	106.5	63.7	117.3	108.5	56.0
<b>2020:09</b>	124.2	107.5	68.6	121.0	108.7	55.4
<b>2020:10</b>	125.1	108.2	70.3	119.8	111.0	59.3
<b>2020:11</b>	126.3	109.2	71.7	120.3	111.6	57.5
<b>2020:12</b>	127.8	109.6	74.0	124.8	107.9	60.7
<b>2021:01</b>	128.9	110.1	73.5	124.1	111.0	58.7
<b>2021:02</b>	130.3	110.1	76.5	125.6	115.2	60.8
<b>2021:03</b>	130.5	111.5	76.5	125.5	116.7	64.7
<b>2021:04</b>	130.9	113.0	79.8	124.1	115.4	60.7
<b>2021:05</b>	131.5	114.4	78.4	123.4	123.9	61.2
<b>2021:06</b>	133.6	115.1	76.6	123.7	124.3	60.6
<b>2021:07</b>	136.0	116.0	78.6	126.0	129.1	59.5
<b>2021:08</b>	136.1	117.1	76.2	128.9	126.5	59.9
<b>2021:09</b>					124.7	61.1

# Figure A7.1: Washington State Economic Indicators

## Year-over-Year Employment Growth

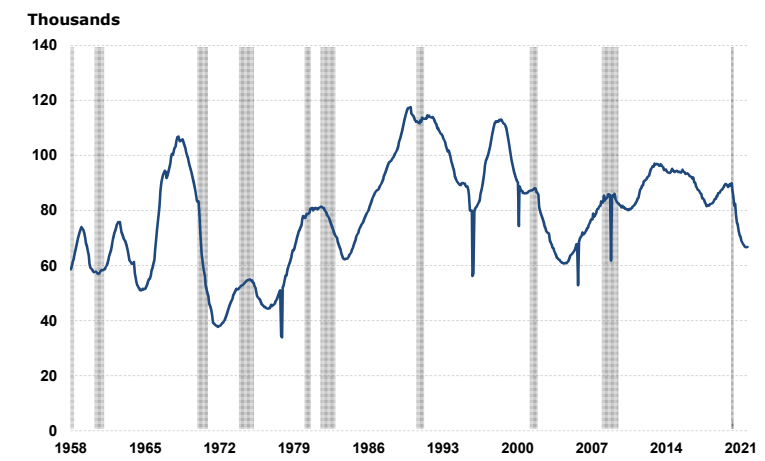
January 1980 to August 2021



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

## Washington Aircraft and Parts Employment

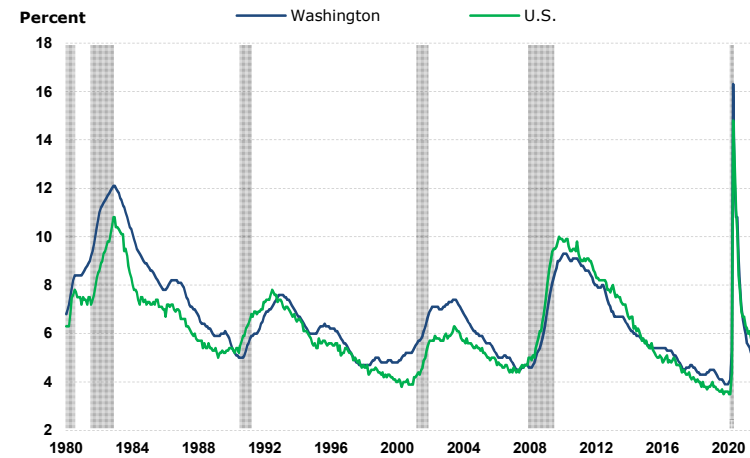
January 1958 to August 2021



\* Source: Bureau of Labor Statistics, ERFC

## Unemployment Rate, S.A.

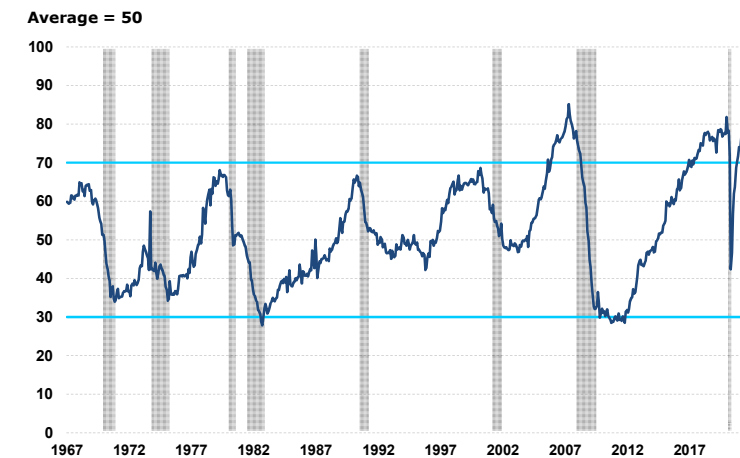
January 1980 to August 2021



\* Source: Bureau of Labor Statistics

## Washington Business Cycle Indicator

January 1968 to August 2021



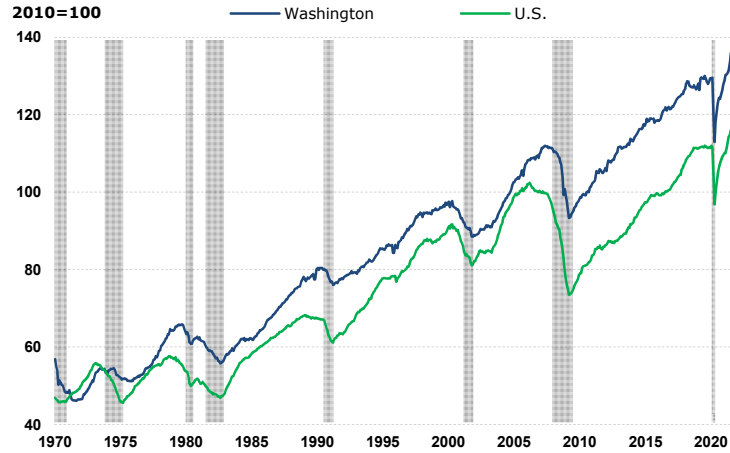
\* Source: ERFC

\* Shaded areas correspond with national recessions.

# Figure A7.2: Washington State Leading Indicators

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

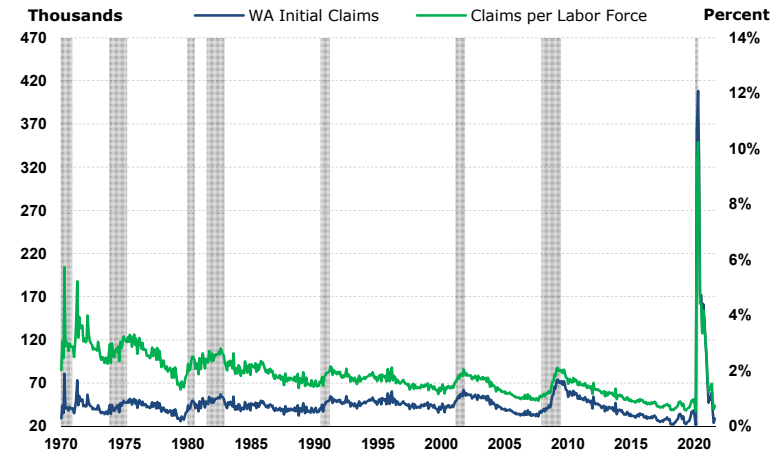
January 1970 to August 2021



\* The Conference Board, ERFC

## Washington Initial Claims for Unemployment Insurance

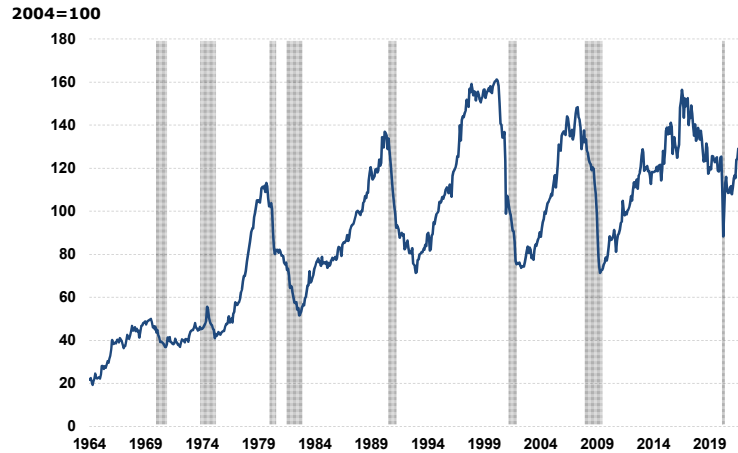
January 1970 to August 2021, S.A.



\* Source: WA State Employment Security, ERFC

## Washington State Help Wanted Index

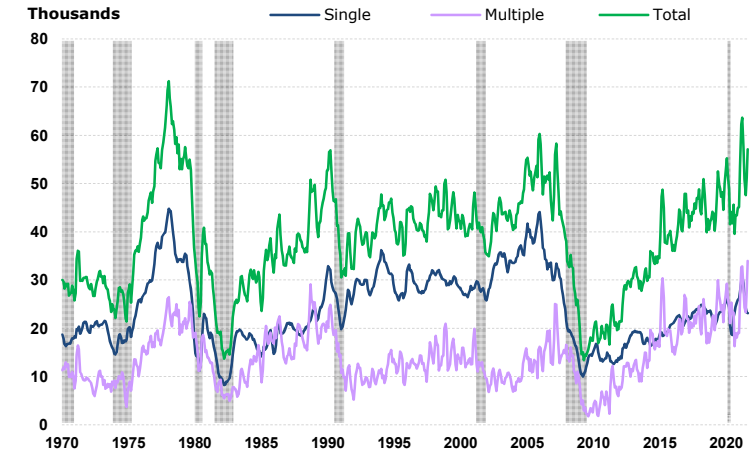
January 1964 to September 2021



\* Source: The Conference Board, ERFC

## Housing Units Authorized in Washington State

January 1970 to August 2021, 3mma, SAAR



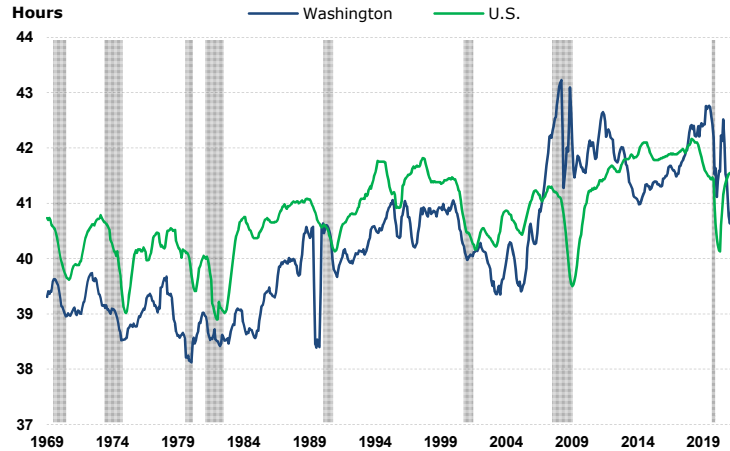
\* Source: Census Bureau, ERFC

\* Shaded areas correspond with national recessions.

# Figure A7.3: Other State Economic Indicators

## Average Weekly Hours in Manufacturing

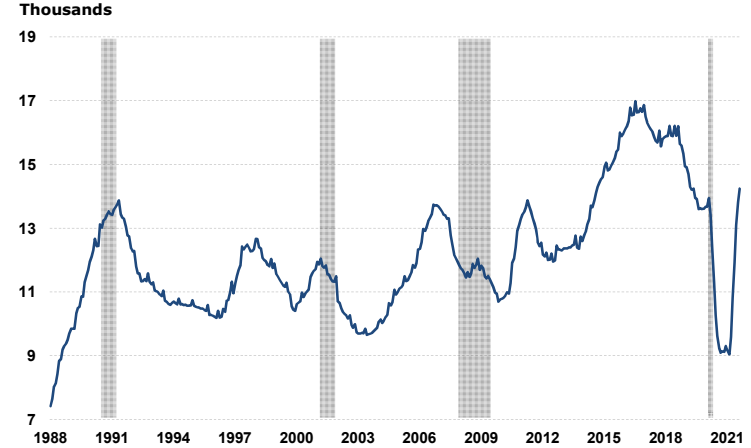
June 1969 to August 2021, 6-Mo. Moving Average, S.A.



\* Bureau of Labor Statistics, ERFC

## Washington Driver's License In-Migration

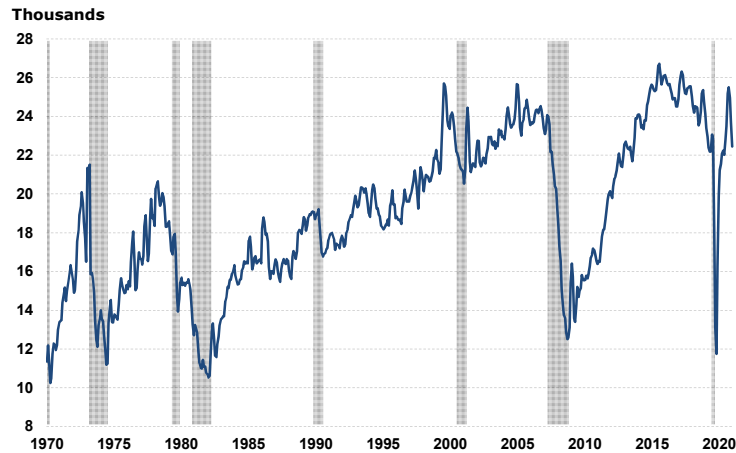
January 1988 to August 2021, 12-Month Moving Average



\* Source: WA State Department of Licensing, ERFC

## New Car and Truck Registrations in Washington

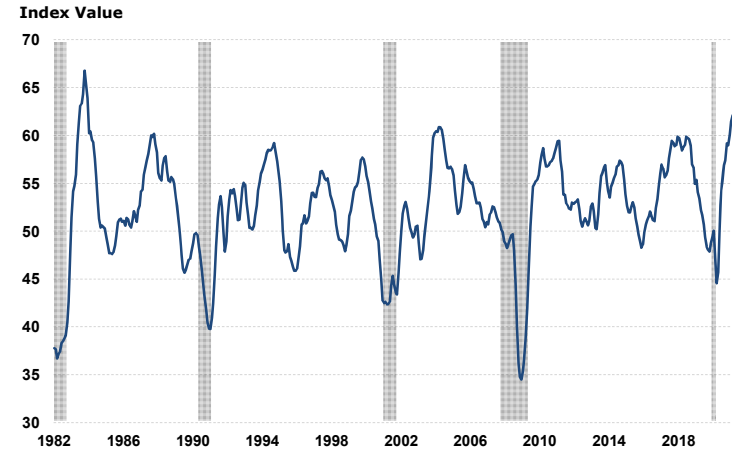
September 1970 to August 2021, 3-Month Moving Average, S.A.



\* Source: WA State Department of Licensing, ERFC

## U.S. Institute for Supply Management Index

March 1982 to September 2021, 3-Month Moving Average, S.A.



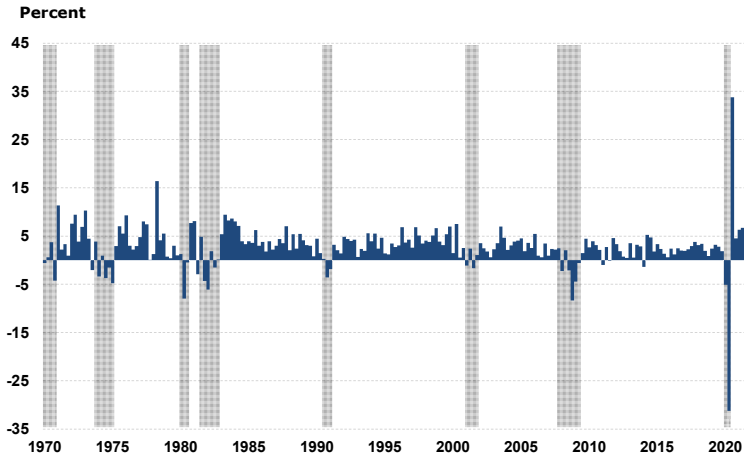
\* Source: Institute for Supply Management, ISM-WW, ERFC

\* Shaded areas correspond with national recessions.

# Figure A7.4: Other Economic Indicators

## Quarterly U.S. Real GDP Growth

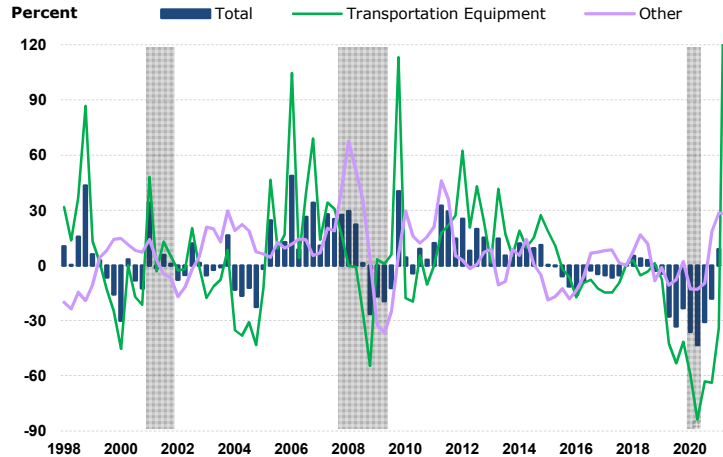
1970Q1 to 2021Q2, SAAR



\* Source: Bureau of Economic Analysis

## Washington State Export Composition

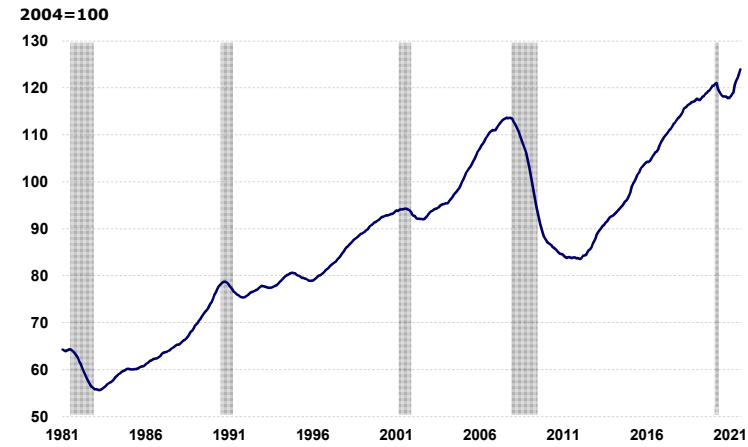
1998Q1 to 2021Q2, Year-over-year percent change



\* Source: WISER

## Washington State Construction Index

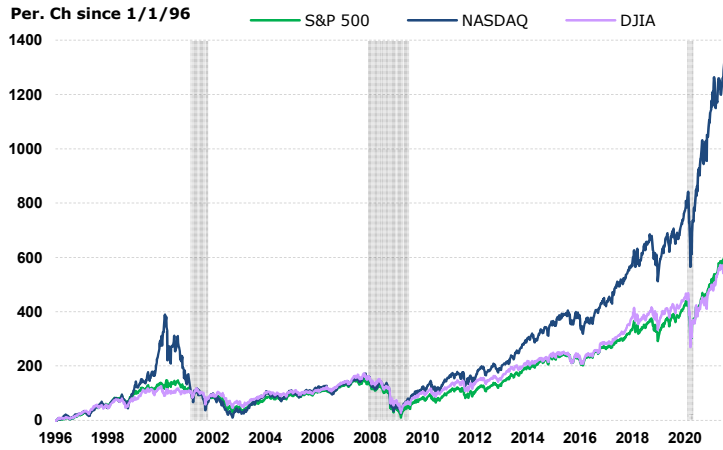
January 1981 to August 2021, 12mma



\* Source: ERFC

## National Stock Indexes

January 1, 1996 to October 1, 2021



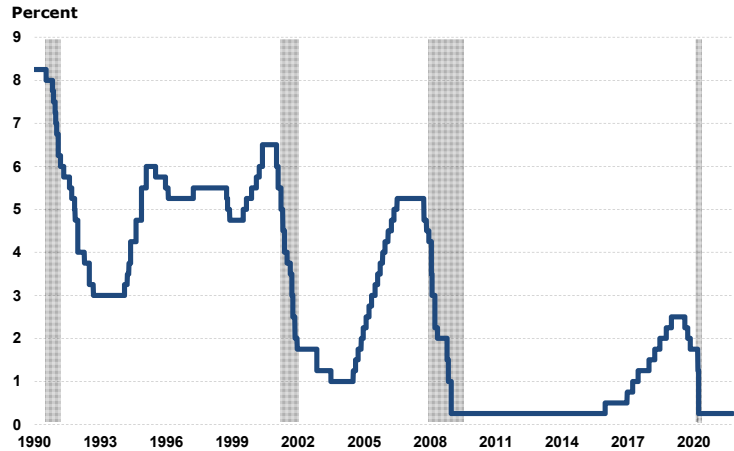
\* Source: ERFC

\* Shaded areas correspond with national recessions.

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

## Federal Funds Target Rate

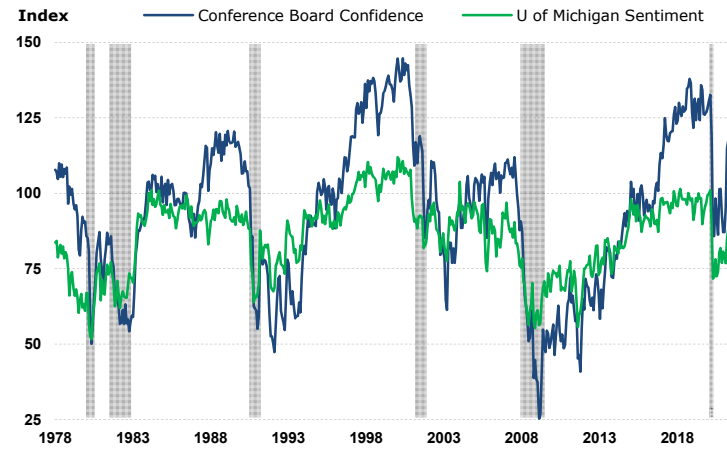
January 1, 1990 to October 1, 2021



\* Federal Reserve

## Consumer Confidence

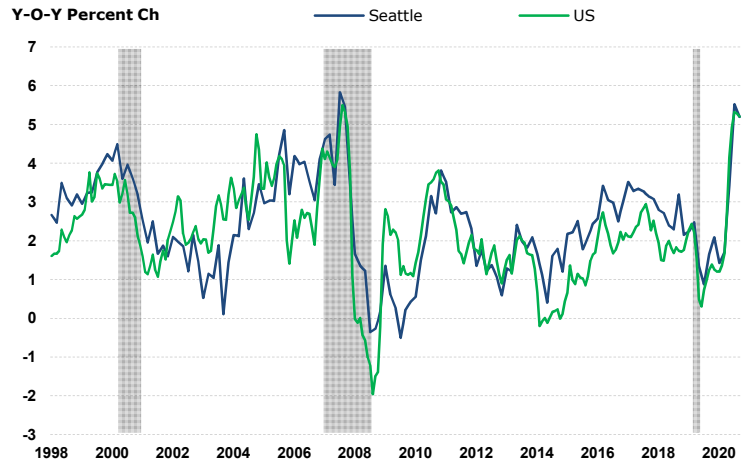
March 1978 to September 2021



\* Source: The Conference Board, University of Michigan

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

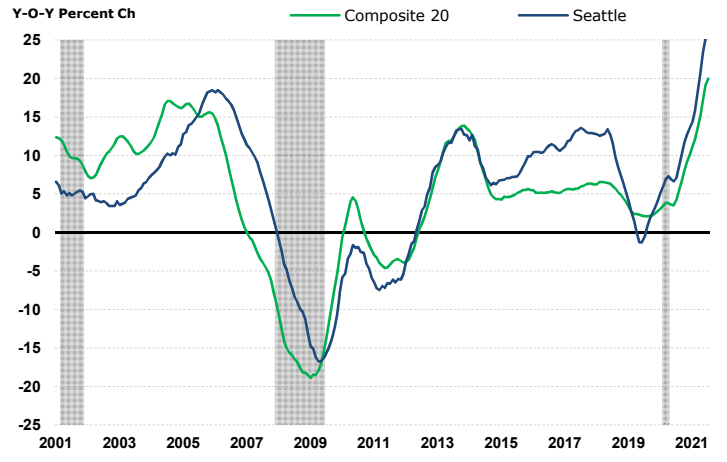
December 1998 to August 2021



\* Source: Bureau of Labor Statistics

## Case Shiller Home Price Index

January 2001 to July 2021, 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.