

Washington State Economic and Revenue Forecast

June 2020
Volume XLIV, No. 2



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Washington State Economic and Revenue Forecast

Prepared by the
Economic and Revenue Forecast Council

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Preface

ERFC forecasting structure and schedule

The Economic and Revenue Forecast Council is required by Chapter 231, Section 34, Laws of 1992 (RCW 82.33.020) to prepare a quarterly state economic and revenue forecast and submit it to the Forecast Council. This report presents the state's economic and General Fund-State revenue forecast. It is issued four times a year. The Washington State GF-S revenue forecast is prepared quarterly in conjunction with the state economic forecast for the Economic and Revenue Forecast Council. The Council consists of six members, two appointed by the Governor and four appointed by the Legislature – one from each caucus of the Senate and House of Representatives. Current members of the Economic and Revenue Forecast Council are listed inside the front cover of this publication. The GF-S revenue forecast is updated four times per year: March (February in even-numbered years), June, September, and November. The staff of the Economic and Revenue Forecast Council is responsible for the preparation of the state's economic forecast and the forecast of the Department of Revenue's GF-S revenue sources as well as GF-S revenue from fines and forfeitures collected by the Administrative Office of the Courts. 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 Global Insight, Inc. 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 June 25, 2020.

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Executive Summary

- The COVID-19 pandemic and resulting social distancing have severely weakened the economy. The United States officially entered recession in February 2020.
- The forecast for GDP growth in 2020 is now -6.1%, down from 1.9% in the February forecast. For 2021, growth is 4.0%, up from 2.0% in the previous forecast. GDP growth is forecasted to be 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025. This compares to GDP growth rates in the February forecast of 1.9% in 2022 and 2.0% each year thereafter.
- The Washington economy has entered a severe recession because of extreme social distancing in response to COVID-19.
- The decline in Washington employment in April was unprecedented and unemployment reached an all-time high.
- Compared to February, the Washington economic forecast features lower employment, personal income, housing, and inflation.
- General Fund-State (GF-S) revenue collections since the February forecast have come in \$893 million (11.1%) below the forecasted amount. About half of the shortfall, however, is due to deferred payment of Revenue Act and property taxes that will still be received during the current biennium.
- The large drops in forecasted employment and income due to the COVID-19 pandemic will mean large drops in state revenue collections that will persist for years.
- The GF-S forecast was decreased by \$4.5 billion in the 2019-21 biennium, \$4.4 billion in the 2021-23 biennium and \$4.5 billion in the 2023-25 biennium.
- Forecasted Near General Fund revenue was decreased by \$4.5 billion in the 2019-21 biennium, \$4.3 billion in the 2021-23 biennium and \$4.5 billion in the 2023-25 biennium.

U.S. Economic Forecast

The United States officially entered recession in February 2020

The COVID-19 pandemic and resulting social distancing have severely weakened the economy. The Business Cycle Dating Committee of the National Bureau of Economic Research has determined that the United States entered recession in February 2020. The peak marks the end of the expansion that began in

June 2009. The expansion lasted 128 months, the longest on record.

Our forecast was based on the June IHS Markit forecast

The economic forecast is based on a modified version of IHS Markit's June 2020 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. Since our last forecast in February, the economic outlook has changed dramatically due to the COVID-19 pandemic. The forecast for GDP growth in 2020 is now -6.1%, down from +1.9% in the February forecast. For 2021, real GDP growth is 4.0%, up from 2.0% in the previous forecast. The Blue Chip long-range forecast has not changed since early March and does not reflect impacts from the pandemic. Instead of using the long-range forecast from Blue Chip, we extended the short-term Blue Chip 2021 forecast to approach IHS GDP levels by 2025. Our forecast for GDP growth is 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025. This compares to GDP growth rates in the February forecast of 1.9% in 2022 and 2.0% each year thereafter.

The forecast includes key assumptions related to the recovery and pandemic

The forecast includes key assumptions related to the economic recovery and the pandemic. The forecast assumes U.S. daily rates of new infections and deaths of COVID-19 taper over the summer. States continue to cautiously reopen their economies through the summer, although social distancing still creates a drag on personal consumption through late 2022.

Washington Economic Forecast

The Washington economy has entered a severe recession

The Washington economy has entered a severe recession because of extreme social distancing in response to COVID-19. The decline in Washington employment in April was unprecedented and unemployment reached an all-time high. Washington initial claims for unemployment insurance rose to unprecedented levels. Washington housing construction has declined but Seattle-area home prices rose over the year. Washington exports continue to decline and Washington manufacturing activity is contracting. Core Seattle consumer price inflation remains slightly above the national average.

Compared to February, the Washington economic forecast features lower employment, personal income, housing, and inflation

This forecast is the first to incorporate the devastating impact of COVID-19 on the economy. Virtually every aspect of the forecast is significantly lower than in the February forecast. We expect a 5.5% decline in Washington employment this year compared to the 1.8% increase in the February forecast. We expect above-average growth through the remainder of the forecast as the economy recovers from this deep recession. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 0.9% average rate expected in

February. Our forecast for nominal personal income growth this year is 3.8%, down from 4.7% in the February forecast. The adverse effects of the recession on personal income this year are mitigated by substantial income support through the CARES Act. Our new forecast for nominal personal income growth in 2021 through 2025 averages 3.5% per year, which is down from the 4.7% rate expected in the February forecast. The effect of the recovery on growth in 2021-25 is offset by the loss of CARES Act support. We expect 37,100 housing units authorized by building permits this year, down from 45,500 units in the February forecast. We expect permits to average 39,000 in 2021 through 2025, down from 42,900 in the February forecast. We expect the Seattle CPI to rise 1.4% this year compared to 1.6% in the February forecast. We expect Seattle inflation to average 1.9% per year in 2021 through 2025, down from 2.2% in February.

Revenue Forecast

The economic disruption caused by the COVID-19 pandemic will affect state revenues for years

Though the existence of the SARS-CoV-2 was known at the time of the February 2020 forecast, how far or fast it would spread was still an open question. Now the disease caused by the virus, Coronavirus Disease 2019 (COVID-19), is pandemic. The mandated closure of non-essential businesses and stay-at-home orders that began in March have had a large impact on state revenue collections. Even though those restrictions are starting to be lifted, the June forecast does not show the national and state economies returning to their pre-pandemic levels until late 2021. The net result is the negation of almost two years of economic growth. Though growth will resume in the current biennium, the next two biennia will start off at much lower levels of economic activity than assumed in February, which will reduce their forecasted tax revenue generation accordingly.

Deferred tax payments have increased the revenue shortfall since February

Since the February forecast, General Fund – State (GF-S) revenue collections have come in far lower than forecasted. Only about half of the shortfall, however, was directly related to the shutdowns that began in early-to-mid March. The rest of the shortfall was due to the extension of certain tax payment due dates and payment deferrals that were granted by the Department of Revenue and county governments to help people and companies cope with the pandemic. While some of the deferred payments will arrive in FY 2020, most will not arrive until FY 2021.

GF-S forecast change by biennium (billions):

19-21: *-\$4.5*
 21-23: *-\$4.4*
 23-25: *-\$4.5*

For the current biennium, GF-S revenue collections that are tracked monthly came in \$893 million lower than forecasted. New legislation from the 2020 legislative session added \$125 million to expected revenue. The forecasted decline in economic activity for the rest of the biennium subtracted \$3.714 billion, resulting in a total forecast reduction of \$4.482 billion. The forecast for the 2021-23 biennium was decreased by \$4.357 billion, net of \$213 million in revenue from new legislation. The

forecast for the 2023-25 biennium was decreased by \$4.473 billion, net of \$209 million in revenue from new legislation. The June 2020 forecast for GF-S revenue totals \$46.129 billion in the 2019-21 biennium, \$49.935 billion in the 2021-23 biennium and \$53.457 billion in the 2023-25 biennium.

*Near GF-S
forecast
change by
biennium
(billions):*

19-21: *-\$4.5*
21-23: *-\$4.3*
23-25: *-\$4.5*

The forecast of NGF revenue for the 2019-21 biennium is \$47,800.4 million, \$4,539.1 million less than the February forecast. The forecast of Near General Fund revenue for the 2021-23 biennium is \$51,347.0 million, \$4,342.8 million less than the February forecast. The forecast for the 2023-25 biennium is \$54,702.4 million, \$4,473.4 million less than the February forecast.



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

- The COVID-19 pandemic and resulting social distancing have severely weakened the economy. The United States officially entered recession in February 2020.
- The federal government passed a \$2.3 trillion stimulus package to address the impacts of the COVID-19 pandemic. The Federal Reserve lowered the fed funds rate to near zero.
- U.S. real GDP growth declined 5.0% (SAAR) in the first quarter as the economy entered recession.
- Employment plummeted and unemployment skyrocketed as pandemic related shutdowns went into effect.
- The construction sector appears to have hit bottom; manufacturing remains depressed.
- Oil prices plummeted and will remain lower compared to the February forecast.
- The forecast for GDP growth in 2020 is now -6.1%, down from 1.9% in the February forecast. For 2021, growth is 4.0%, up from 2.0% in the previous forecast. GDP growth is forecasted to be 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025. This compares to GDP growth rates in the February forecast of 1.9% in 2022 and 2.0% each year thereafter.
- Due to the high degree of uncertainty regarding the extent to which the COVID-19 pandemic will continue, the uncertainty in the baseline forecast is elevated.

Current Conditions

The United States officially entered recession in February 2020

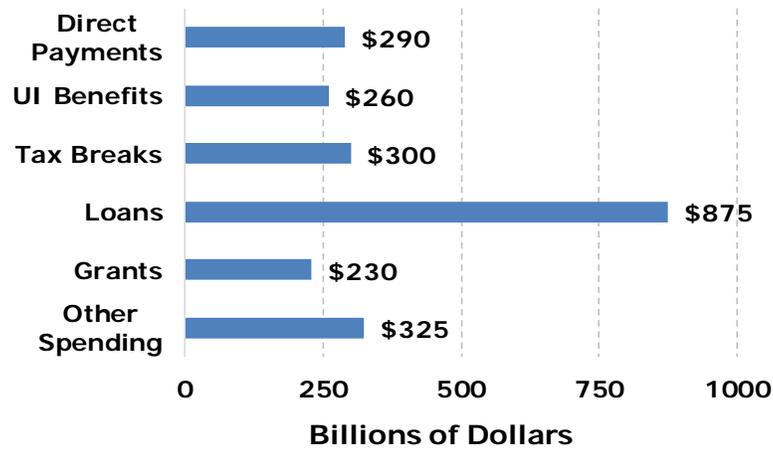
The COVID-19 pandemic and resulting social distancing have severely weakened the economy. The Business Cycle Dating Committee of the National Bureau of Economic Research has determined that the United States entered recession in February 2020. The peak marks the end of the expansion that began in June 2009. The expansion lasted 128 months, the longest on record.

The federal govt. passed a \$2.3 trillion stimulus

The federal government passed a \$2.3 trillion stimulus package to address the impacts of the COVID-19 pandemic. The Coronavirus Aid, Relief and Economic Security (CARES) Act consisted of direct payments to households (\$290 billion),

expanded unemployment benefits (\$260 billion), tax breaks (\$300 billion), loans to businesses (\$875 billion), grants primarily to states and municipalities (\$230 billion), and other spending (\$325 billion) (see Figure 1.1). Despite the size of the stimulus, it was not nearly enough to offset the massive contraction caused by the spread of COVID-19 and the subsequent adoption of policies of social distancing across most of the nation.

Figure 1.1: The Coronavirus Aid, Relief and Economic Security (CARES) Act



Source: The Joint Committee on Taxation, ERFC

U.S. real GDP declined 5.0% (SAAR) in the first quarter

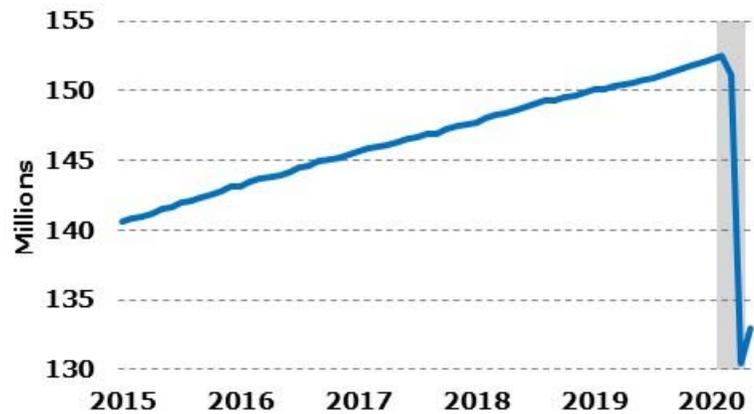
U.S. real GDP growth declined 5.0% (SAAR) in the first quarter as the economy entered recession. The first quarter reading only partially reflects the impact of the pandemic since most shutdowns and social distancing measures didn't occur until partway through the quarter. Weakness was widespread across sectors. Final sales, which exclude the impact from inventories, fell 3.5% (SAAR). Consumer spending declined 6.8% (SAAR), subtracting 4.7 points from topline GDP. Consumer spending on services fell 9.8% (SAAR) due to many nonessential business closures. Consumer spending on goods grew 0.2% (SAAR) with growth in nondurable spending (+8.0%) offsetting the loss on spending on durable goods (-13.8%). Fixed investment declined 1.3% (SAAR) in the first quarter, due to a sharp decline in nonresidential equipment (-16.6%). Residential construction increased 18.2% (SAAR) in the first quarter. Many construction companies were able to continue work on projects they had already started even as social distancing rules were put in place. Government spending increased 1.1% (SAAR). Exports declined 9.0% (SAAR), although imports declined further at 15.7% (SAAR) resulting in a net positive to GDP growth of 1.3 points.

Employment declined 20.7 million jobs in April

After declining an unprecedented 20.7 million jobs in April, nonfarm payrolls surprisingly grew by 2.5 million in May (see figure 1.2). States re-opening their economies and support from

the Paycheck Protection Program likely led to a large number of workers being recalled to their jobs. Some of these workers may be being counted as employed due to the pay they are receiving from the program and may not actually be at work. There is risk that some of these workers will once again be unemployed once the program ends in July if social distancing programs drag through the summer.

Figure 1.2: U.S. Total Nonfarm Employment Growth



Source: U.S. Bureau of Labor Statistics; data through May 2020

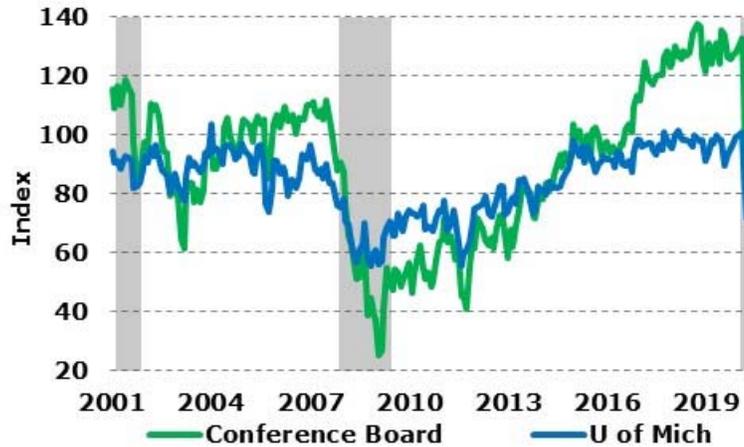
The unemployment rate spiked

The unemployment rate spiked in April to 14.7% as shutdowns caused mass layoffs. Along with the positive increase in employment in May, the unemployment rate dropped as well to 13.3%. Prior to the pandemic, the unemployment rate was at a historic low of 3.5% in February. The labor force participation rate was at 60.8% in May, down from a cyclical high of 63.4% in February. Average hourly earnings rose in April 4.7% as low-income workers lost their jobs, but then declined 1.0% as some were called back.

Consumer attitudes have stabilized after falling in April

Consumer confidence stabilized in May after plummeting in April as the pandemic weighed heavily on consumer attitudes. The Conference Board measure rose 0.9 points to 86.6 after dropping a record 33.1 points in April. The increase was due to a small uptick in expectations while the present conditions component dropped further. The University of Michigan Consumer Sentiment index increased in both May and June after a sharp drop in April. Sentiment is now at 78.9 compared to the recent high of 101.0 in February. In June both the current conditions component and future expectations increased. Despite the sharp drop in consumer attitudes in both measures, confidence remains higher than in the previous recession (see figure 1.3). Consumers are anticipating that employment will bounce back as states reopen nonessential businesses.

Figure 1.3: Consumer Confidence and Sentiment



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

Oil prices have recovered after plunging in April

Oil prices are recovering after plunging in April. Brent spot crude prices are now at \$40 for the second week of June after a trough of \$14 in the third week of April. West Texas Intermediate (WTI) prices were hit harder as oil markets fully took account of the pandemic. WTI prices reached a weekly low of \$3 per barrel in April and even posted a single day price of an unheard of -\$40 per barrel. WTI prices have since recovered to \$38 per barrel in the second week of June. A price war between Saudi Arabia and Russia increased supply just as the pandemic and social distancing measures sharply reduced demand. OPEC and Russia have now agreed to retain a tight lid on output through July. With states reopening their economies, demand has stabilized. Prior to the pandemic, U.S. production was at an all-time high at 12.866 million barrels per day (bpd) in November. The latest data from March show a decline to 12.716 million bpd. As an early indication that U.S. production may have slowed, the Baker Hughes rig count has declined sharply recently. In the third week of June, the rig count was 255, a sharp decline from 939 a year ago.

Inflation has dropped

Headline inflation has dropped considerably in the past few months. The Consumer Price Index (CPI) has declined on a seasonally adjusted monthly basis in each of the past three months. Year-over-year, the CPI was up just 0.1% in May. A year ago, headline inflation was 1.8%. Most of the decline in inflation has come from a drop in energy prices (-18.9%), particularly gasoline (-33.8%). Other sectors affected by stay-at-home orders have declined as well. Apparel prices are down 7.9% and transportation service prices are down 8.7%. Food prices are up 4.0% annually, partially due to supply disruptions caused by the pandemic. Shelter cost inflation has remained

steady and is now up 2.5% over the year. Core consumer prices, which exclude food and energy, were up 1.2% over the year.

Home prices do not yet reflect the impact of the pandemic

Home prices have continued to rise although they do not yet reflect the impact of the pandemic. The seasonally adjusted S&P CoreLogic Case-Shiller 20-city Home Price Index increased 0.5% in March. Home prices are now 3.9% higher than a year ago. The Federal Housing Finance Agency house price index showed a similar increase for April, rising 0.2% on a monthly basis and up 5.5% from a year ago. Homebuilder confidence fell in April from 72 points to 30, but has since bounced back to 58 in June. Index levels above 50 indicate positive sentiment. Mortgage rates have recently dropped, providing support for the housing market. The average rate on the 30 year fixed rate loan was 3.13% in the third week of June, down from 3.84% a year ago.

The housing market appears to have stabilized

The housing market declined in April but stabilized in May. Housing starts fell 26.4% in April but returned to growth in May at 4.3%. Single-family starts in May increased 0.1% while multi-family starts increased 8.5%. Housing starts remain down 23.2% from a year ago. Housing permits increased 14.1% in May after falling 21.4% in April. Single-family permits increased 12.0% while multi-family permits increased 27.3%. Total permits remain down 9.1% from a year ago. New home sales jumped 16.6% in May, returning to pre-pandemic levels. New home sales were 676,000 in May, up 12.7% from a year ago.

The manufacturing sector has been hit hard

The manufacturing sector has been severely weakened. The Institute for Supply Management (ISM) Report on Business index improved to 43.1 (index values below 50 indicate contraction) in May from 41.5 in April. The current reading is even worse than it appears. Slower supplier deliveries are lifting the index. Slower deliveries add to the index with the assumption that suppliers are having a hard time meeting demand. In this case, supply chain disruptions due to the closure of nonessential businesses are causing the slowdown in deliveries. The new orders, production, and employment components all increased in May, but all three remain depressed at readings below 34. The latest G-17 report from the Federal Reserve indicates manufacturing output rose 3.8% in May but is still 16.9% below its pre-pandemic level in February. New orders for core capital goods (nondefense capital goods excluding aircraft) declined 5.8% in April. New orders are now 1.3% below year-ago levels.

U.S. exports are declining

The global recession due to COVID-19, ongoing trade tensions, and the grounding of the 737 Max are contributing to declining U.S. exports. Total exports in the first quarter, which do not reflect the full impact of the pandemic, declined 3.0% year over year. Transportation equipment exports declined 10.7% year over year. Oil and gas exports continue to surge, up 25.4% since last year. While monthly export data tend to be volatile,

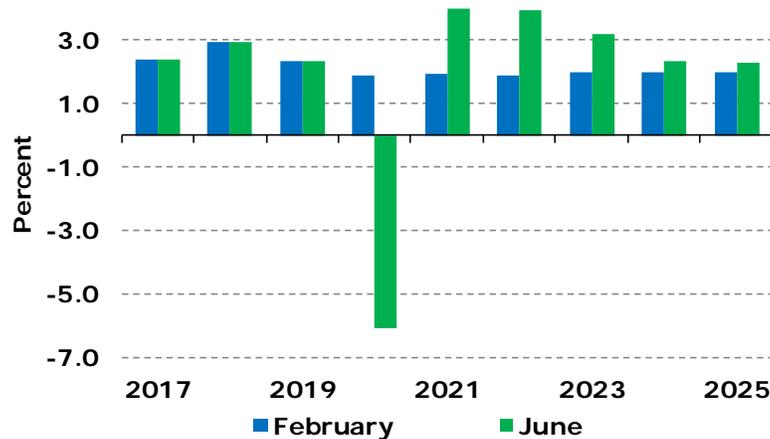
April data point to a greater slowdown in exports. Total exports were down 29.0% year over year in April with every industry declining since last year. Transportation equipment exports led the drop, declining 61.7% from a year ago. Oil and gas exports, which have been surging recently, were down 34.2%. The trade war with China, which was beginning to thaw, has seen no movement recently as it has taken a back seat to the pandemic.

Forecast

Our forecast was based on the June IHS Markit forecast

The economic forecast is based on a modified version of IHS Markit's June 2020 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. Since our last forecast in February, the economic outlook has changed dramatically due to the COVID-19 pandemic. The forecast for GDP growth in 2020 is now -6.1%, down from +1.9% in the February forecast. For 2021, real GDP growth is 4.0%, up from 2.0% in the previous forecast. The Blue Chip long-range forecast has not changed since early March and does not reflect impacts from the pandemic. Instead of using the long-range forecast from Blue Chip, we extended the short-term Blue Chip 2021 forecast to approach IHS GDP levels by 2025. Our forecast for GDP growth is 3.9% for 2022, 3.2% for 2023, and 2.3% for 2024 and 2025. This compares to GDP growth rates in the February forecast of 1.9% in 2022 and 2.0% each year thereafter (see Figure 1.4).

Figure 1.4: Real GDP Growth



Source: BEA, February ERFC forecast; historical data through 2019

The forecast includes key assumptions related to the economic recovery and pandemic

The forecast includes key assumptions related to the economic recovery and the pandemic. The forecast assumes U.S. daily rates of new infections and deaths of COVID-19 taper over the summer. States continue to cautiously reopen their economies

through the summer, although social distancing still creates a drag on personal consumption through late 2022.

The forecast includes the stimulus and tariffs

The June forecast includes the recently enacted \$2.3 trillion Coronavirus Aid, Relief and Economic Security (CARES) Act, including expanded unemployment benefits and direct payments to individuals. The forecast also includes tariffs enacted by the U.S. and China since 2017 that are still in effect.

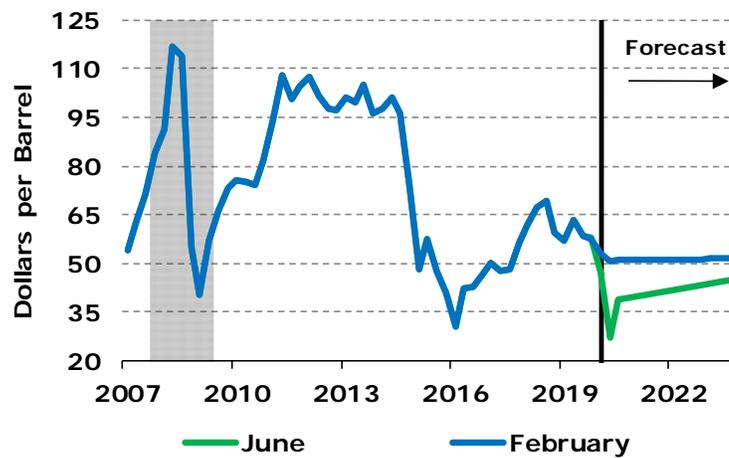
The U.S. just ended the longest recovery on record

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

Oil prices are expected to be lower

The global recession and price war between Saudi Arabia and Russia have caused oil prices to plummet. The refiner acquisition price of crude oil in 2020 is now expected to average \$38 per barrel in 2020 compared to \$52 in the February forecast. Oil prices are projected to increase to \$48 in 2025. The February forecast assumed prices would remain mostly flat, rising to \$53 in 2025 (see Figure 1.5). Oil prices have been under severe downward pressure since COVID-19 started influencing trading in late January. Social distancing and stay-at-home orders caused demand for gasoline to plummet. Inventories bought at depressed prices during the crisis will put downward pressure on prices as the recovery unfolds. The United States will soon be a consistent net exporter of oil as new pipelines continue to come online. Oil prices will remain well below the levels seen early in the previous recovery.

Figure 1.5: Average Price of Crude Oil



Source: DOE, ERFC June 2020 forecast; historical data through 2020 Q1

Inflation will remain low

Inflation (as measured by the price index for personal consumption expenditures) is expected to be lower than in the February forecast. We expect inflation to be just 0.9% this year, down from 1.5% in the previous forecast. The lower inflation expected this year is primarily due to impacts of COVID-19. Food prices have been higher as a result of supply disruptions and a shift away from restaurants and towards more meals at home. Gasoline prices plummeted due to reduced travel. Inflation is expected to increase to 1.3% in 2021 and reach 1.8% in 2025. The February forecast had inflation reaching 2.1% in 2024 and 2025. Core inflation (minus food and energy) is expected to be 1.0% this year and next year. The forecast calls for core inflation to reach 1.8% in 2025.

Consumer spending growth is expected to decline sharply

Real consumer spending is expected to decline at a 39.2% rate in the second quarter of 2020 as COVID-19 causes economic activity to contract. Businesses that were forced to close are now gradually reopening. We expect real consumer spending to rebound in the third quarter to a 21.0% rate. The forecast calls for a 6.8% reduction in real consumer spending this year. With the economy returning to growth, we expect real consumption to increase 4.4% in 2021. The forecast then calls for consumption growth to trend downward as the recovery continues, reaching 2.6% in 2024 and 2025.

Employment will take time to recover

Employment took a major hit from the COVID-19 pandemic but appears to be partially recovering already. The forecast calls for a 5.8% (SAAR) reduction in employment this year. Almost all of the reduction is due to the unprecedented 20.7 million job loss in the month of April. The employment forecast calls for growth of 4.9% (SAAR) in 2021, bringing average annual employment to 149.1 million jobs; still less than the pre-pandemic annual average of 150.9 million jobs in 2019. We expect job growth to continue as the recovery continues but to trend downward throughout the forecast, reaching 0.9% (SAAR) in 2025. We expect the unemployment rate to average 8.9% this year, up from 3.5% forecasted in February. We expect the unemployment rate to decrease to 6.2% in 2021 and then trend down to 4.1% by 2025.

Business investment is expected to fall this year

Real nonresidential fixed investment is expected to fall 8.2% this year due to plummeting demand, aversion to risk, and tighter lending standards. The drop in oil prices has led to a downshift in investment by energy companies as well. The capital-intensive manufacturing sector has been declining. Office vacancy rates have been rising even before the pandemic shifted many Americans into working from home. We expect real nonresidential construction to decline 16.2% this year followed by a 9.8% drop in 2021. The forecast then calls for growth to average 6.6% in 2022 through 2025. Real equipment investment is expected to decline 11.4% this year. Much of this decline is due to a drop in business spending on motor vehicles

and parts. We expect growth to average 5.0% from 2021 through 2025. We expect real nonresidential fixed investment growth to grow just 0.1% in 2021 and then average 4.6% for the remainder of the forecast.

Growth in construction will be weak

The housing market recovery was already expected to slow even before the pandemic hit. The combination of a sharp decline in employment and specific restrictions on construction limited both supply and demand. The June forecast calls for housing starts to decline 12.7% this year. We expect single-family housing starts to decline 11.3% and the multi-family segment to decline 15.7% this year. We expect growth to be uneven throughout the remainder of the forecast, ranging from an increase of 9.0% in 2021 to a 4.5% decline in 2024. In 2025, the forecast calls for 1.2 million new housing starts, just under the 1.3 million starts in 2019.

Economic growth of U.S. trading partners is expected to be weaker

The COVID-19 pandemic has affected economies throughout the world. Economic growth of major U.S. trading partners is expected to decline 6.8% this year compared to the anticipated 1.7% growth in the February forecast. We expect U.S. major trading partner growth of 3.5% next year followed by 3.6% growth in 2022 as the global economy rebounds. We expect foreign growth to average 2.6% from 2023 through 2025. Real U.S. exports are forecasted to decline 15.5% this year. We expect real export growth of 13.9% in 2021 as the global economy recovers. Real export growth is then expected to trend downward and reach 4.4% in 2025.

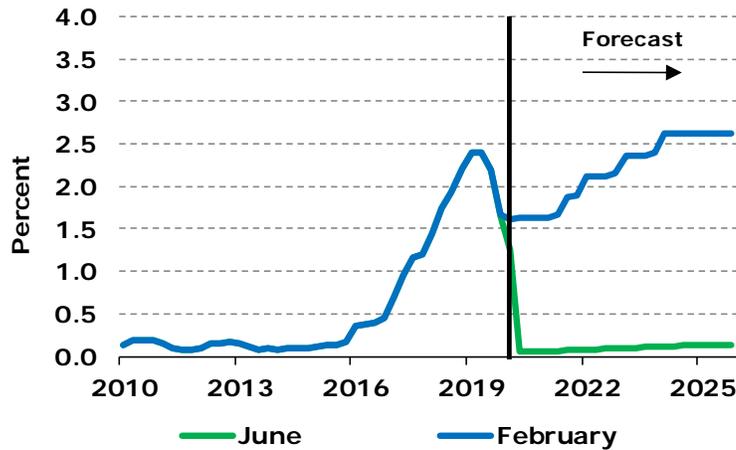
The federal budget deficit will increase dramatically

The federal government passed a \$2.3 trillion stimulus package to address the impacts of the COVID-19 pandemic, the Coronavirus Aid, Relief and Economic Security (CARES) Act. The size of the stimulus is unprecedented. The passage of the act is expected to increase the deficit to \$2,770 billion this year. In comparison, the highest annual deficit prior to this was \$1,416 billion after passage of the \$787 billion American Recovery and Reinvestment Act of 2009. The deficit is expected to remain over \$1 trillion through federal FY 2025. The forecast expects federal tax receipts to total \$3,165 this federal fiscal year compared to \$3,491 billion expected in the February forecast.

The Fed has lowered rates

The Federal Reserve has lowered the federal funds rate to near zero in response to the pandemic (see figure 1.6). In addition, the Federal Reserve has brought back several credit facilities from the previous recession and created new ones to support the economy and ensure normal functioning of credit markets. We expect the Federal Reserve to maintain extraordinary policy support through credit programs, liquidity support, and near zero interest rates until the economy is well into its recovery.

Figure 1.6: Federal Funds Rate



Source: U.S. Treasury, June 2020 ERFC forecast; historical data through 2020 Q1

Table 1.1 provides a fiscal year summary of the U.S. economic indicators. For calendar year tables, see the appendix.

Risks to the Forecast

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

Downside Risks

- COVID-19 infections/deaths don't taper over the summer
- There is a second wave of COVID-19
- Continued social distancing measures cause widespread business failures
- Weak demand causes businesses 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
- Weak global growth persists, further affecting exports

Upside Risks

- COVID-19 infections/deaths decline faster than anticipated
- Further federal stimulus measures are enacted
- An infrastructure package passes
- Increased business confidence leads to more hiring
- Increased consumer confidence gives a boost to consumer spending

- The housing sector improves faster than anticipated
- China successfully transitions to a more consumption based economy
- European and emerging market economies grow faster than expected
- Wage growth picks up faster than expected

Table 1.1
U.S. Economic Forecast Summary
 Forecast 2020 to 2023

Fiscal Years

	2018	2019	2020	2021	2022	2023	2024	2025
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,380.6	18,866.4	18,575.2	18,141.4	18,996.3	19,711.8	20,224.0	20,675.9
% Ch	2.8	2.6	-1.5	-2.3	4.7	3.8	2.6	2.2
Real Consumption	12,752.0	13,109.9	12,896.7	12,558.3	13,172.0	13,546.9	13,927.1	14,282.0
% Ch	2.8	2.8	-1.6	-2.6	4.9	2.8	2.8	2.5
Real Nonresidential Fixed Investment	2,611.6	2,741.0	2,634.7	2,510.0	2,585.0	2,742.9	2,865.7	2,971.5
% Ch	5.5	5.0	-3.9	-4.7	3.0	6.1	4.5	3.7
Real Residential Fixed Investment	611.2	592.9	586.9	538.7	600.6	617.6	615.6	612.5
% Ch	1.7	-3.0	-1.0	-8.2	11.5	2.8	-0.3	-0.5
Real Personal Income	16,214.2	16,740.7	17,208.6	17,416.5	17,689.7	18,116.0	18,425.6	18,869.0
% Ch	3.4	3.2	2.8	1.2	1.6	2.4	1.7	2.4
Real Per Capita Income (\$/Person)	49,633	50,902	51,953	52,213	52,663	53,563	54,113	55,049
% Ch	2.8	2.6	2.1	0.5	0.9	1.7	1.0	1.7
Price and Wage Indexes								
PCE Price Index (2012=100)	107.0	108.9	110.3	111.2	112.8	114.5	116.3	118.3
% Ch	1.9	1.7	1.3	0.8	1.5	1.5	1.6	1.7
U.S. Consumer Price Index (1982-84=1.0)	2.481	2.533	2.574	2.607	2.660	2.703	2.752	2.807
% Ch	2.3	2.1	1.7	1.3	2.0	1.6	1.8	2.0
Employment Cost Index (Dec. 2005=1.0)	1.314	1.354	1.395	1.425	1.459	1.504	1.542	1.583
% Ch	2.8	3.1	3.1	2.2	2.4	3.1	2.6	2.6
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,051.0	21,021.7	21,000.3	20,662.5	22,002.7	23,207.2	24,254.3	25,246.8
% Ch	5.1	4.8	-0.1	-1.6	6.5	5.5	4.5	4.1
Personal Income	17,356.7	18,230.7	18,976.5	19,368.6	19,958.8	20,739.6	21,433.2	22,326.0
% Ch	5.4	5.0	4.1	2.1	3.0	3.9	3.3	4.2
Employment (Millions)								
U.S. Civilian Labor Force	161.2	162.7	162.5	162.0	165.2	166.9	167.7	168.4
Total U.S. Employment	154.5	156.5	153.0	149.1	156.3	159.8	161.0	161.5
Unemployment Rate (%)	4.11	3.77	5.98	8.03	5.53	4.54	4.33	4.25
Nonfarm Payroll Employment	147.72	149.93	147.12	144.61	151.19	154.03	155.27	156.69
% Ch	1.5	1.5	-1.9	-1.7	4.6	1.9	0.8	0.9
Manufacturing	12.55	12.79	12.51	11.76	11.99	12.05	12.20	12.38
% Ch	1.4	1.9	-2.2	-6.0	1.9	0.5	1.2	1.5
Durable Manufacturing	7.83	8.03	7.82	7.27	7.42	7.46	7.58	7.71
% Ch	1.7	2.5	-2.6	-7.0	2.0	0.6	1.6	1.8
Nondurable Manufacturing	4.72	4.76	4.69	4.49	4.57	4.59	4.62	4.66
% Ch	1.1	0.9	-1.5	-4.3	1.8	0.4	0.6	0.9
Construction	7.12	7.41	7.38	6.58	6.80	7.12	7.32	7.47
% Ch	4.0	4.1	-0.4	-10.9	3.4	4.7	2.8	2.1
Service-Providing	127.35	128.99	126.53	125.78	131.93	134.36	135.23	136.30
% Ch	1.4	1.3	-1.9	-0.6	4.9	1.8	0.6	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	58.6	60.8	46.8	40.4	41.8	43.3	44.9	46.5
Personal Saving/Disposable Income (%)	7.3	7.9	12.4	16.3	12.9	12.7	11.6	11.3
Auto Sales (Millions)	5.7	5.1	3.9	3.2	3.5	3.5	3.5	3.5
% Ch	-11.6	-11.2	-23.1	-17.8	8.5	1.3	-1.0	-0.8
Housing Starts (Millions)	1.252	1.219	1.278	1.137	1.275	1.295	1.218	1.198
% Ch	4.4	-2.6	4.8	-11.0	12.1	1.5	-5.9	-1.7
Federal Budget Surplus (Billions)	-876.2	-1,090.0	-2,162.7	-2,590.2	-1,693.9	-1,583.1	-1,427.2	-1,349.9
Net Exports (Billions)	-586.0	-663.0	-583.7	-399.4	-716.8	-560.6	-447.5	-414.1
3-Month Treasury Bill Rate (%)	1.41	2.26	1.22	0.16	0.06	0.08	0.10	0.16
10-Year Treasury Note Yield (%)	2.57	2.74	1.46	0.98	0.83	0.99	1.26	1.63
Bond Index of 20 G.O. Munis. (%)	3.67	4.01	3.21	2.77	3.11	3.25	3.47	3.70
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.55	3.28	3.05	2.98	3.14	3.34

Table 1.2
Forecast Analysis
 Comparison of Forecasts for 2019-21

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

Table 1.3
Forecast Analysis
 Comparison of Forecasts for 2021-23

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

Table 1.4

Fiscal Years

Forecast Comparison

Forecast 2020 to 2025

	2019	2020	2021	2022	2023	2024	2025
U.S.							
Real GDP							
June	18,866.4	18,575.2	18,141.4	18,996.3	19,711.8	20,224.0	20,675.9
% Ch	2.6	-1.5	-2.3	4.7	3.8	2.6	2.2
February	18,866.4	19,255.4	19,621.1	20,000.0	20,388.0	20,797.9	21,212.3
% Ch	2.6	2.1	1.9	1.9	1.9	2.0	2.0
PCE Price Index							
June	108.9	110.3	111.2	112.8	114.5	116.3	118.3
% Ch	1.7	1.3	0.8	1.5	1.5	1.6	1.7
February	108.9	110.5	112.3	114.4	116.6	119.1	121.6
% Ch	1.7	1.5	1.6	1.9	2.0	2.1	2.1
Unemployment Rate							
June	3.77	5.98	8.03	5.53	4.54	4.33	4.25
February	3.77	3.53	3.47	3.59	3.75	3.97	4.14
Mortgage Rate							
June	4.43	3.55	3.28	3.05	2.98	3.14	3.34
February	4.43	3.68	4.00	4.37	4.49	4.59	4.66
3 Month T-Bill Rate							
June	2.26	1.22	0.16	0.06	0.08	0.10	0.16
February	2.26	1.66	1.52	1.86	2.06	2.25	2.35

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Chapter 2: Washington Economy – Current Conditions and Forecast

- **The Washington economy has entered a severe recession because of extreme social distancing in response to COVID-19.**
- **The decline in Washington employment in April was unprecedented and unemployment reached an all-time high.**
- **Washington initial claims for unemployment insurance rose to unprecedented levels.**
- **Washington housing construction has declined but Seattle-area home prices rose over the year.**
- **Washington exports continue to decline and Washington manufacturing activity is contracting.**
- **Core Seattle consumer price inflation remains slightly above the national average.**
- **Compared to February, the Washington economic forecast features lower employment, personal income, housing, and inflation.**

Current Conditions

The Washington economy has entered a severe recession

The Washington economy has entered a severe recession because of extreme social distancing in response to COVID-19. The decline in Washington employment in April was unprecedented and unemployment reached an all-time high. Washington initial claims for unemployment insurance rose to unprecedented levels. Washington housing construction has declined but Seattle-area home prices rose over the year. Washington exports continue to decline and Washington manufacturing activity is contracting. Core Seattle consumer price inflation remains slightly above the national average.

The decline in Washington employment in April was unprecedented

We have five months of new Washington employment data since the February forecast was released. The 468,800 decline in Washington employment in April was unprecedented in its depth and speed. Even with a slight rebound in May, total nonfarm payroll employment fell 417,600 (seasonally adjusted) in the five-month period. The February forecast expected an increase

of 32,600 in January, February, March, April, and May. Private services-providing sectors lost 322,900 jobs in the five-month period. Construction employment declined by 39,500 jobs and manufacturing declined by 32,000 jobs including the loss of 6,700 aerospace jobs. Government payrolls declined by 22,500 jobs in January, February, March, April, and May.

New QCEW data raised employment

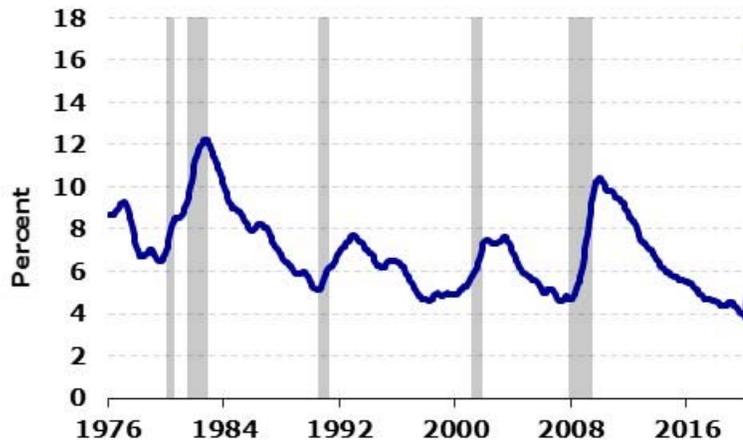
We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions added 5,500 (0.2%) to the estimated level of total employment in December 2019. May employment is 444,700 (12.6%) lower than expected in the February forecast because of the huge decline from December through May.

The Washington unemployment rate soared

Washington's unemployment rate soared to 16.3% in April from 5.1% in March and 3.8% in February before declining to 15.1% in May. The April rate was an all-time high in the series that dates back to 1976 (see Figure 2.1). The February unemployment rate was an all-time low.

Figure 2.1: Washington Unemployment

The April unemployment rate was an all-time high



Source: Employment Security Department; data through May 2020

UI claims rose to unprecedented levels

Initial claims for unemployment insurance rose to unprecedented levels in recent weeks. The seasonally adjusted number of claims in Washington declined slightly to 35,000 in the week ending June 20 from 36,300 in the previous week. The four-week moving average declined from 42,600 to 36,800. While the number of initial claims is down 82% since the peak in late March, it is still more than five times its year-ago level.

Washington exports declined over the year

Washington exports declined over the year for a sixth consecutive quarter. Year-over-year exports decreased 35.1% in the first quarter of 2020. The large decline was mostly because of transportation equipment exports (mostly Boeing planes) which fell 59.2% over the year. Boeing suspended deliveries of

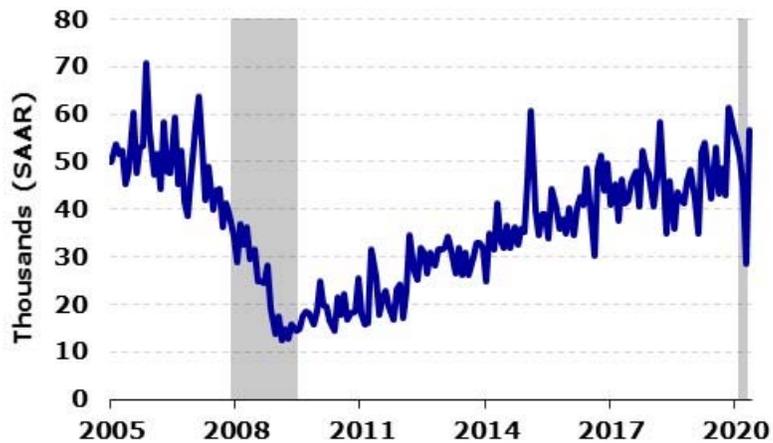
the 737 Max in March 2019. First quarter exports of agricultural products decreased 21.3% over the year and exports of all other commodities (mostly manufacturing) declined 5.7% over the year.

Washington housing permits dropped sharply in April

Washington housing construction slowed in the first quarter of 2020 but still exceeded the February forecast. In the first quarter, 49,800 units (SAAR) were permitted, down from 53,900 in the fourth quarter of 2019. First quarter permits consisted of 24,800 single-family units and 25,000 multi-family units. The February forecast assumed an average rate of 44,900 (SAAR) units for the first quarter consisting of 23,700 single-family units and 21,200 multi-family units. Permits dropped sharply in April to just 28,600 units (SAAR) before rebounding to 56,600 in May (see Figure 2.2). The average for the first two months of the second quarter was 42,600 units consisting of 16,000 single-family units and 26,600 multi-family units. The February forecast predicted 24,300 single-family units and 21,600 multi-family units for a total of 45,900 units in the second quarter.

Figure 2.2: Washington Housing Permits

April permits were the lowest in more than six years



Source: Bureau of the Census, ERFC; data through May 2020

Seattle area home prices rose over the year

Seattle-area home prices rose over the year for an eighth consecutive month in March following year-over-year declines in the previous three months. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices increased 1.1% in March, the eleventh consecutive monthly increase. Because of the strong growth in the last several months, March Seattle home prices were up 6.9% over the year. In comparison, the composite-20 index was up 3.9% over the year. March Seattle home prices were up 102% since the December 2011 trough and exceeded the May 2007 peak by 40%. The reported March figure is for the three months ending in March. It is still too early to see any Covid impact on home prices.

Washington Manufacturing activity is declining

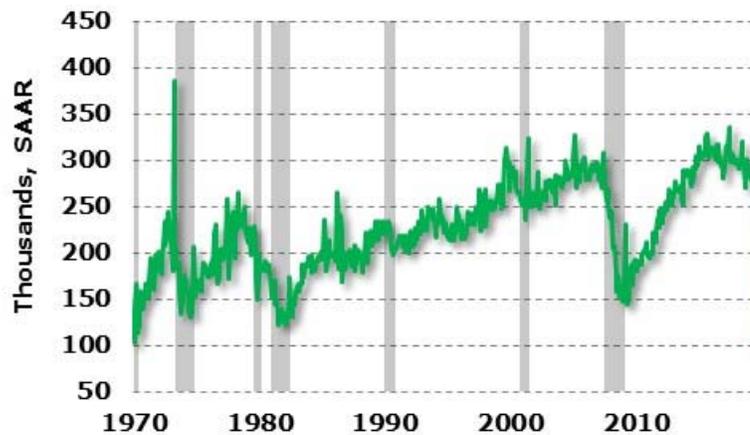
The Institute of Supply Management - Western Washington Index (ISM-WW) indicated declining manufacturing activity for a third consecutive month. The index, which measures conditions in the manufacturing sector, declined from 52.0 in February to 46.0 in March and 38.5 in April before improving to 41.0 in May (index values above 50 indicate growth while values below 50 indicate contraction). The production, employment, and inventory components all indicated contraction in May while the orders component was neutral at 50. As in March and April, only the deliveries components indicated expansion, however this is misleading. A slowing of deliveries is a plus for the index as it normally reflects strong demand. In the current context the slowing of vendor deliveries is due to supply disruptions.

Washington car and truck sales remained low in May

Washington car and truck sales increased in May but remained at a very low level (see Figure 2.3). The seasonally adjusted number of new vehicle registrations increased 20.4% in May following declines of 11.8% and 63.5% in March and April. April's sales were the lowest level in the history of the series which dates back to July 1970. The seasonally adjusted number of new vehicle registrations fell 61.8% over the year in May.

Figure 2.3: Washington New Vehicle Registrations

April's sales were the lowest level in the history of the series



Source: WA State Department of Licensing, ERFC; data through May 2020

Washington personal income grew 2.6% (SAAR) in the first quarter

In June, after the forecast was complete, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the first quarter of 2020. According to these estimates, Washington personal income rose from \$503.1 billion (SAAR) in the fourth quarter of 2019 to \$506.3 billion in the first quarter of 2020. The reported 2.6% growth rate (SAAR) in Washington personal income was the 19th largest among the states and District of Columbia and slightly exceeded the 2.3% growth rate for the U.S. as a whole. As has been the case for several years, Washington income growth was boosted by information (which includes software publishing and other IT services such as internet publishing and web search portals) and retail trade (which includes electronic shopping). On

the other hand, there was a sharp drop in durable manufacturing wages as most Boeing employees did not receive an annual bonus this year. Construction wages also declined in the first quarter.

Seattle area consumer price inflation exceeded the national average

Seattle-area consumer price inflation exceeded the national average due mostly to the volatile food and energy components. From April 2019 to April 2020, the Seattle CPI rose 1.3% compared to a 0.4% increase in the U.S. City Average index. Energy prices fell less in Seattle than elsewhere and food prices rose more. Core prices, which exclude food and energy, increased 1.6% over the year in Seattle compared to 1.4% for the U.S. City Average. Over-the-year shelter-cost inflation in Seattle was 3.1% compared to the national rate of 2.6%. Seattle inflation excluding shelter exceeded the national average at 0.3% compared to -0.7%. While Seattle shelter cost inflation remains above the national average, it is converging toward the national average.

Washington State Forecast

Compared to February, the Washington economic forecast features lower employment, personal income, housing, and inflation

This forecast is the first to incorporate the devastating impact of COVID-19 on the economy. Virtually every aspect of the forecast is significantly lower than in the February forecast. We expect a 5.5% decline in Washington employment this year compared to the 1.8% increase in the February forecast. We expect above-average growth through the remainder of the forecast as the economy recovers from this deep recession. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 0.9% average rate expected in February. Our forecast for nominal personal income growth this year is 3.8%, down from 4.7% in the February forecast. The adverse effects of the recession on personal income this year are mitigated by substantial income support through the CARES Act. Our new forecast for nominal personal income growth in 2021 through 2025 averages 3.5% per year, which is down from the 4.7% rate expected in the February forecast. The effect of the recovery on growth in 2021-25 is offset by the loss of CARES Act support. We expect 37,100 housing units authorized by building permits this year, down from 45,500 units in the February forecast. We expect permits to average 39,000 in 2021 through 2025, down from 42,900 in the February forecast. We expect the Seattle CPI to rise 1.4% this year compared to 1.6% in the February forecast. We expect Seattle inflation to average 1.9% per year in 2021 through 2025, down from 2.2% in February.

Washington Payroll Employment

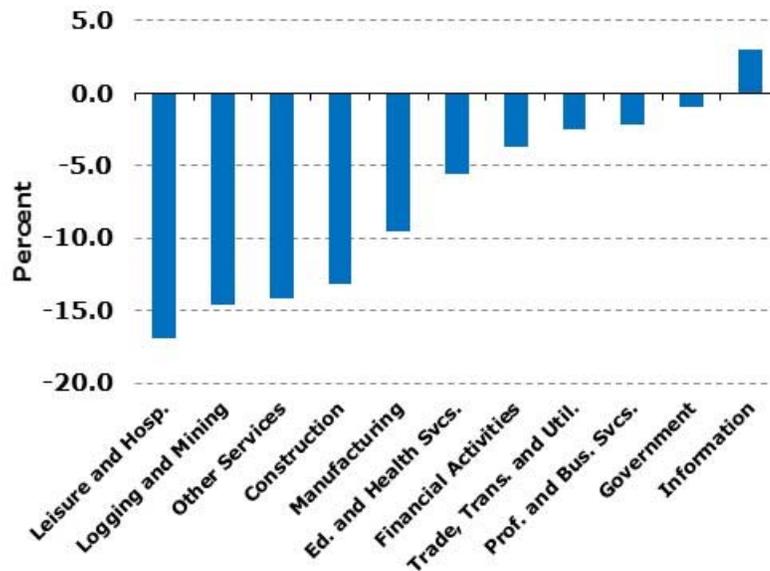
Washington employment will decline sharply in 2020

Washington employment will decline sharply in 2020. The impact on the economy will be uneven. Industries in which social distancing is most difficult will be hardest hit. Employment in leisure and hospitality, which includes eating and drinking places, accommodation, arts, entertainment, and recreation, is expected

to decline 16.9%. At the opposite extreme, information employment, which in Washington is mostly software publishers, data processing, hosting and related services, and internet publishing and web search portals, is expected to increase 3.0% (see Figure 2.4). We expect a 5.5% decline in Washington employment this year compared to the 1.8% increase in the February forecast. We expect above-average growth through the remainder of the forecast as the economy recovers from this deep recession. We expect employment growth to average 2.1% per year in 2021 through 2025 compared to the 0.9% average rate expected in February. On an annual basis, we expect 4.9% employment growth in 2021, 2.9% in 2022, 1.1% in 2023, 0.8% in 2024, and 0.8% in 2025.

Figure 2.4: Washington Employment Change in 2020

The impact on the economy will be uneven



Source: Employment Security Department, ERFC; historical data through Q1 2020

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

The disruption of airline travel is expected to reduce demand for new aircraft for some time. Boeing has indicated that there will be significant reductions in employment, particularly in the commercial airplane division. We have assumed a decline of 12,800 aerospace employees from March through September. We expect a partial recovery in 2021 and 2022 but the level will be lower throughout the forecast. On an annual average basis, we expect aerospace employment to decline 8.7% this year and 4.5% next year. We expect employment to grow 3.2% in 2022 before declining 0.6% in 2023, 1.9% in 2024, and 1.8% in 2025.

The software employment forecast is lower than in February

We expect the software sector to lose 3,200 jobs in second quarter of 2020 based on employment data through May. We do not expect significant job loss through the remainder of the year. For the year as a whole, we expect the sector to eke out a 0.8% gain in employment before declining 1.3% in 2021. Growth

during the remainder of the forecast is similar to the February assumption. On an annual average basis, we expect growth rates of 2.7% in 2022, 1.3% in 2023, 1.6% in 2024, and 1.5% in 2025.

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

In Washington, the electronic shopping and mail order sector consists almost entirely of electronic shopping employment. We have increased our forecast for employment growth in 2020 from 10.6% to 17.1% based mainly on very strong growth in the first quarter of this year. The monthly data through May indicate that employment will grow in the second quarter as well. The forecast for growth during the remainder of the forecast is similar to the February forecast. On an annual basis, electronic shopping and mail order employment will grow 3.6% in 2021, 3.0% in 2022, 2.5% in 2023, 2.3% in 2024, and 2.2% in 2025.

We expect a very sharp drop in construction employment in the second quarter of 2020

The employment data for April and May indicate a very sharp drop in construction employment in the second quarter of 2020. We expect a decline of 48,900. While we believe positive employment growth will resume in the third quarter as the sector begins to re-open, the level of construction employment will be below the level expected in February throughout the forecast. On a calendar year basis, we expect employment to decline 13.1% this year and 0.4% in 2021, before rising 4.4% in 2022, and 0.9% in 2023. We expect no change in employment in 2024 and a 0.5% decline in 2025.

Washington Personal Income

Wages and salaries are lower than previously thought

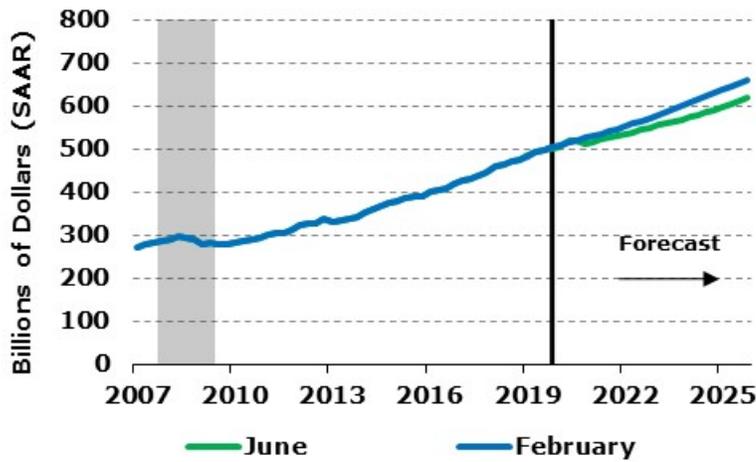
In March, the Bureau of Economic Analysis released estimates for state personal income through the fourth quarter of 2019. The current estimate of Washington personal income in the fourth quarter of 2019 is \$1.6 billion (0.3%) lower than in the February forecast due mainly to lower than expected wages and salaries. Nonwage income was close to the forecast.

Washington personal income growth is slower

Our forecast for nominal personal income growth this year is 3.8%, down from 4.7% in the February forecast. The adverse effects of the recession on personal income this year are mitigated by substantial income support through the CARES Act. Our new forecast for nominal personal income growth in 2021 through 2025 averages 3.5% per year, which is down from the 4.7% rate expected in the February forecast. The effect of the recovery on growth in 2021-25 is offset by the loss of CARES Act support (see Figure 2.5). On an annual basis, we expect personal income to grow 2.0% in 2021, 3.6% in 2022, 3.6% in 2023, 3.6% in 2024, and 4.7% in 2025.

Figure 2.5: Washington Personal Income

The level of Washington personal income is lower than in the February forecast



Source: Bureau of Economic Analysis, ERFC; historical data through Q4 2020

Washington Building Permits

Washington housing construction will decline in 2020.

Washington’s long housing recovery has come to an abrupt halt. The number of housing units authorized by building permits rose from just 17,000 in 2009 to 48,400 in 2019. Permits tumbled to just 28,600 (SAAR) units in April, which was the lowest rate in more than six years. We think the second quarter will prove to be the low point in permits and that a partial rebound is likely as restrictions are lifted. The longer-term recovery will be limited by slower population growth than expected in February (see Figure 2.6).

Figure 2.6: Washington Housing Permits

The housing construction forecast is lower



Source: Census Bureau, ERFC; historical data through Q1 2020

We expect 37,100 housing units this year

We expect 37,100 housing units authorized by building permits this year, down from 45,500 units in the February. We expect permits to average 39,000 in 2021 through 2025, down from

42,900 in the February forecast. On a calendar year basis, we expect 38,900 units in 2021, 40,500 units in 2022, 39,700 units in 2023, 37,900 units in 2024, and 37,700 units in 2025.

Consumer Price Index

The pandemic is putting broad, downward pressure on prices

The pandemic is putting broad, downward pressure on prices. Core (excluding food and energy) prices declined 0.9% (SA) in the Seattle area from February to April as industries facing plummeting demand saw prices fall. We do not expect outright deflation to continue, but the outlook for inflation is much weaker than in the February forecast. We expect the core index to rise 1.4% this year compared to 2.0% in the February forecast. We now expect core inflation to average 1.8% per year in 2021 through 2025 compared to 2.3% in the February forecast. Our forecast calls for core Seattle inflation rates of 1.3% in 2021, 1.6% in 2022, 1.9% in 2023, 1.9% in 2024, and 2.0% in 2025.

Energy costs have also declined

Energy costs have also declined as steep reductions in travel reduced the demand for fuels. The energy component of the Seattle CPI declined 15.3% (SA) from February to April. A partial recovery in energy costs will push headline inflation above core inflation in the second half of this year through 2021. We expect the Seattle CPI to rise 1.4% this year compared to 1.6% in the February forecast. We now expect Seattle inflation to average 1.9% per year in 2021 through 2025 compared to 2.2% per year in the February forecast. On a calendar year basis, we expect inflation rates of 1.9% in 2021, 1.8% 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

The optimistic scenario assumes a slightly less severe recession followed by a quicker recovery.

The optimistic scenario assumes a slightly less severe recession in the first half of 2020 followed by a quicker recovery. Underlying this scenario is the assumption that the spread of COVID-19 and its health ramifications remain less threatening and that the stay-at-home orders are lifted faster than in the baseline forecast. Another potential catalyst for optimism on the healthcare front is the possibility that an effective treatment for the virus is discovered. In this scenario, the U.S. economy suffers a two-quarter recession in the first half of 2020. The unemployment rate spikes to 12.8% in the second quarter,

before rapidly easing to 4.2% by 2022. Real GDP declines 11.4% peak-to-trough, compared to the 11.6% drop in the baseline. While the downturn is similar to the baseline forecast, the recovery is much quicker. The previous peak in GDP is passed in the third quarter of 2021, three quarters earlier than in the baseline forecast.

The optimistic scenario also assumes a stronger Washington economy

In addition to reflecting the impact of the stronger U.S. forecast on the state economy, the optimistic Washington forecast assumes that aerospace employment bottoms out in the fourth quarter of this year as in the baseline, but the recovery is stronger and more sustained. Software employment turns positive sooner and grows more rapidly than in the baseline forecast. In the optimistic scenario, the stronger regional economy drives Seattle consumer price inflation above the baseline. Washington average wage growth is also higher in the optimistic scenario than in the baseline. Construction employment turns up in the third quarter as in the baseline forecast but the recovery is more rapid. By the end of 2025, Washington nonfarm payroll employment is higher by 104,600 jobs (2.9%) than in the baseline forecast and Washington personal income is \$33.1 billion (5.3%) higher.

Pessimistic

The pessimistic scenario has a steeper contraction in consumer spending and a slower recovery than in the baseline forecast

In the pessimistic scenario, the initial decline in consumer spending was deeper than estimated in the baseline and the pace of “opening up” and/or its success in promoting economic activity is less than assumed in the baseline forecast. Moreover, the recovery is assumed to be hampered by the failure of the daily tally of new cases and deaths to decline as quickly towards zero as in the baseline forecast. Peak to trough, real GDP declines 16.0%, compared to 11.6% in the baseline. The unemployment rate peaks at 14.0% in the second quarter but declines at a slower pace than in the baseline, falling below 5.0% in early 2024. Wage growth and inflation slump. Core PCE falls 0.4 percentage point from mid-2020 to mid-2021 as the U.S. suffers a mild bout of deflation. The recovery takes significantly longer than the baseline. The previous peak in GDP is not passed until the second quarter of 2023, five quarters later than in the base forecast.

This scenario also assumes a weaker local economy

In addition to reflecting the impact of the weaker U.S. forecast on the state economy, aerospace employment declines more quickly in the baseline. Software employment also continues to decline through the end of 2021 rather than turning up in the first quarter as in the baseline forecast. Construction employment declines through the third quarter of next year rather than turning up in the third quarter of this year. 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 234,900 (6.5%) lower than in the baseline forecast and Washington personal income is \$95.0 billion (15.3%) lower.

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

Governor’s Council of Economic Advisors (GCEA)

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

The GCEA national forecast predicts a slightly deeper recession

The GCEA national forecast predicts a slightly deeper recession and initially slower recovery than does the baseline forecast. The Governor’s Council members forecast a 6.7% decline in real GDP growth this year compared to a 6.1% decline in the baseline forecast. The GCEA forecast also rises more slowly in 2021-23 though it rises faster in 2024 and 2025. On average, the Council members’ forecast averages 1.4% per year over the six-year interval compared to the baseline forecast of 1.6% per year. The GCEA forecast of 1.4% average real consumer spending growth is also slightly lower than the 1.5% rate in the baseline forecast. The GCEA members PCE inflation forecast averages 1.4% per year, which is the same as in the baseline forecast. The Council members’ mortgage rate forecast averages 3.3% over the forecast horizon, which is slightly higher than the 3.2% average mortgage rate in the baseline forecast but their oil price forecast averages \$46 per barrel compared to \$47 in the baseline forecast.

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

The Governor’s Council of Economic Advisors’ Washington forecast is weaker than the baseline forecast. The GCEA scenario for Washington real personal income growth averages 1.7% per year in 2020 through 2025, compared to the 2.1% average rate in the baseline forecast. The difference in nominal personal income growth is the same, 3.1% compared to 3.6%, as the average inflation rate in the GCEA forecast was the same as the rate in the baseline forecast. The Council members’ forecast for total employment growth over the six-year period averages 0.3% per year compared to 0.8% in the baseline forecast. The GCEA forecasts for manufacturing employment growth and construction employment growth are both lower than the baseline forecasts. The GCEA housing permit forecast is slightly higher, averaging 39,600 units per year compared to 38,700 in the baseline forecast. At the end of 2025, the GCEA forecast for Washington nonfarm payroll employment is 120,500 (3.3%) lower than in the baseline forecast but Washington personal income is \$15.7 billion (2.5%) lower.

Table 2.3 compares the GCEA forecast with the baseline forecast.

Table 2.1
Washington Economic Forecast Summary
 Forecast 2020 to 2023

Fiscal Years

	2018	2019	2020	2021	2022	2023	2024	2025
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	421.707	441.818	458.649	464.556	471.564	482.434	490.857	503.207
% Ch	5.3	4.8	3.8	1.3	1.5	2.3	1.7	2.5
Real Wage and Salary Disb.	213.178	225.310	229.449	232.887	245.553	252.415	256.125	261.301
% Ch	6.6	5.7	1.8	1.5	5.4	2.8	1.5	2.0
Real Nonwage Income	208.529	216.507	229.200	231.669	226.010	230.020	234.732	241.906
% Ch	3.9	3.8	5.9	1.1	-2.4	1.8	2.0	3.1
Real Per Capita Income (\$/Person)	56,416	58,361	59,859	59,978	60,247	60,990	61,435	62,392
% Ch	3.6	3.4	2.6	0.2	0.4	1.2	0.7	1.6
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.070	1.089	1.103	1.112	1.128	1.145	1.163	1.183
% Ch	1.9	1.7	1.3	0.9	1.5	1.5	1.6	1.7
Seattle Cons. Price Index (1982-84=1.0)	2.671	2.745	2.803	2.841	2.899	2.946	2.999	3.059
% Ch	3.1	2.8	2.1	1.4	2.0	1.6	1.8	2.0
Average Nonfarm Annual Wage	65,769	69,365	72,433	75,560	76,998	78,765	80,617	82,955
% Ch	6.3	5.5	4.4	4.3	1.9	2.3	2.4	2.9
Avg. Hourly Earnings-Mfg. (\$/Hour)	27.93	28.91	28.76	28.22	28.83	29.66	30.35	31.08
% Ch	4.2	3.5	-0.5	-1.9	2.2	2.9	2.3	2.4
Current Dollar Income (Billions of Dollars)								
Personal Income	451.422	481.127	505.752	516.623	532.052	552.300	570.981	595.399
% Ch	7.3	6.6	5.1	2.1	3.0	3.8	3.4	4.3
Disposable Personal Income	397.381	424.906	450.039	463.327	473.243	492.190	507.628	527.466
% Ch	7.4	6.9	5.9	3.0	2.1	4.0	3.1	3.9
Per Capita Income (\$/Person)	60,390	63,553	66,006	66,699	67,974	69,822	71,463	73,821
% Ch	5.6	5.2	3.9	1.0	1.9	2.7	2.4	3.3
Employment (Thousands)								
Washington Civilian Labor Force	3,763.5	3,859.7	3,951.5	4,084.6	4,174.8	4,225.1	4,256.2	4,283.7
Total Washington Employment	3,591.9	3,688.6	3,687.5	3,727.7	3,917.2	4,000.4	4,034.6	4,060.7
Unemployment Rate (%)	4.56	4.43	6.65	8.75	6.17	5.32	5.21	5.20
Nonfarm Payroll Employment	3,362.7	3,433.1	3,395.1	3,326.3	3,493.4	3,562.3	3,588.3	3,619.1
% Ch	2.4	2.1	-1.1	-2.0	5.0	2.0	0.7	0.9
Manufacturing	284.0	291.9	285.0	257.4	264.6	268.4	271.4	274.7
% Ch	-1.1	2.8	-2.3	-9.7	2.8	1.5	1.1	1.2
Durable Manufacturing	199.4	205.5	200.2	175.9	181.3	184.0	185.5	187.0
% Ch	-2.1	3.1	-2.6	-12.2	3.1	1.5	0.8	0.8
Aerospace	82.5	86.6	87.6	76.0	79.0	79.8	78.5	77.0
% Ch	-5.9	4.9	1.1	-13.2	3.9	1.0	-1.6	-1.9
Nondurable Manufacturing	84.6	86.3	84.8	81.5	83.2	84.4	85.9	87.7
% Ch	1.5	2.0	-1.7	-3.9	2.1	1.4	1.8	2.1
Construction	206.5	216.7	210.6	184.5	194.3	200.1	200.3	199.7
% Ch	6.7	4.9	-2.8	-12.4	5.3	3.0	0.1	-0.3
Service-Providing	2,865.8	2,918.4	2,894.0	2,879.4	3,029.3	3,088.4	3,111.2	3,139.2
% Ch	2.5	1.8	-0.8	-0.5	5.2	2.0	0.7	0.9
Software Publishers	63.1	67.6	71.5	69.3	70.6	72.0	73.0	74.2
% Ch	4.7	7.2	5.6	-3.0	1.8	2.1	1.3	1.7
Electronic Shopping and Mail-Order	53.5	58.1	69.8	75.7	78.2	80.3	82.2	84.0
% Ch	21.7	8.7	20.0	8.4	3.3	2.7	2.4	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	48.753	45.964	45.276	36.496	40.127	40.367	38.730	37.617
% Ch	9.6	-5.7	-1.5	-19.4	9.9	0.6	-4.1	-2.9
Single-Family	24.161	22.364	21.723	22.391	25.203	24.964	23.527	22.654
% Ch	9.5	-7.4	-2.9	3.1	12.6	-0.9	-5.8	-3.7
Multi-Family	24.593	23.599	23.552	14.105	14.924	15.403	15.203	14.963
% Ch	9.7	-4.0	-0.2	-40.1	5.8	3.2	-1.3	-1.6
30-Year Fixed Mortgage Rate (%)	4.16	4.43	3.55	3.28	3.05	2.98	3.14	3.34

Table 2.2
Comparison of Alternative Forecasts

Fiscal Years

	2020	2021	2022	2023	2024	2025
U.S.						
Real GDP, Percent Change						
Optimistic	-1.5	0.0	5.1	2.3	1.9	1.8
Baseline	-1.5	-2.3	4.7	3.8	2.6	2.2
Pessimistic	-2.6	-9.2	8.4	4.3	2.9	1.8
PCE Price Index, Percent Change						
Optimistic	1.2	0.7	1.3	1.6	1.9	2.0
Baseline	1.3	0.8	1.5	1.5	1.6	1.7
Pessimistic	1.2	-0.3	0.3	0.6	0.9	1.2
Mortgage Rate, Percent						
Optimistic	3.55	3.29	3.17	3.31	3.49	3.76
Baseline	3.55	3.28	3.05	2.98	3.14	3.34
Pessimistic	3.55	3.22	2.78	2.46	2.55	2.78
3 Month T-Bill Rate, Percent						
Optimistic	1.20	0.13	0.10	0.11	0.18	0.59
Baseline	1.22	0.16	0.06	0.08	0.10	0.16
Pessimistic	1.20	0.12	0.09	0.09	0.11	0.11
Washington						
Real Personal Income, Percent Change						
Optimistic	4.3	2.8	2.9	2.6	2.0	2.8
Baseline	3.8	1.3	1.5	2.3	1.7	2.5
Pessimistic	3.1	-5.9	0.4	3.0	1.0	1.1
Personal Income, Percent Change						
Optimistic	5.6	3.5	4.2	4.2	3.9	4.8
Baseline	5.1	2.1	3.0	3.8	3.4	4.3
Pessimistic	4.4	-6.2	0.7	3.6	1.9	2.3
Employment, Percent Change						
Optimistic	-1.1	-1.8	5.6	2.9	1.7	0.9
Baseline	-1.1	-2.0	5.0	2.0	0.7	0.9
Pessimistic	-1.4	-8.2	3.8	2.7	1.6	1.3
Housing Permits, Thousands of Authorized Units						
Optimistic	45.5	37.0	41.8	44.7	45.7	44.9
Baseline	45.3	36.5	40.1	40.4	38.7	37.6
Pessimistic	44.5	27.0	29.5	32.5	33.3	32.3

Table 2.3

Calendar Years

Governor's Council of Economic Advisor's Forecast

	2020	2021	2022	2023	2024	2025
U.S.						
Real GDP						
<i>Growth</i>						
ERFC	-6.1	4.0	3.9	3.2	2.3	2.3
GCEA Average	-6.7	3.6	3.3	3.1	2.5	2.6
Real Consumption						
<i>Growth</i>						
ERFC	-6.8	4.4	3.4	2.9	2.6	2.6
GCEA Average	-6.9	3.3	3.4	3.2	2.7	2.5
PCE Price Index						
<i>Growth</i>						
ERFC	0.9	1.3	1.4	1.5	1.6	1.8
GCEA Average	0.4	1.6	1.6	1.5	1.6	1.6
Mortgage Rate						
<i>Percent</i>						
ERFC	3.4	3.1	3.0	3.0	3.2	3.4
GCEA Average	3.2	2.9	3.2	3.3	3.4	3.5
Oil Price (Brent)						
<i>Dollars per barrel</i>						
ERFC	41.0	44.1	46.4	48.4	50.3	52.2
GCEA Average	36.0	42.4	46.2	48.6	50.9	53.2
Washington State						
Real Personal Income						
<i>Growth</i>						
ERFC	2.9	0.7	2.1	2.1	2.0	2.9
GCEA Average	0.4	0.7	1.7	2.4	2.6	2.6
Wage and Salary Employment						
<i>Growth</i>						
ERFC	-5.5	4.9	2.9	1.1	0.8	0.8
GCEA Average	-11.3	1.9	3.8	3.1	2.6	1.9
Manufacturing Employment						
<i>Growth</i>						
ERFC	-9.5	-1.7	2.3	1.0	1.3	1.0
GCEA Average	-13.8	-0.8	2.6	1.3	1.5	1.3
Construction Employment						
<i>Growth</i>						
ERFC	-13.1	-0.4	4.4	0.9	0.0	-0.5
GCEA Average	-12.2	-4.5	1.8	1.4	0.9	0.7
Housing Permits						
<i>Thousands of authorized units</i>						
ERFC	37.1	38.9	40.5	39.7	37.9	37.7
GCEA Average	35.0	39.2	41.3	40.8	40.7	40.9
Washington Average Annual Wage						
<i>Growth</i>						
ERFC	4.6	2.8	1.9	2.4	2.5	3.4
GCEA Average	4.5	1.8	0.4	0.4	1.0	1.8

Table 2.4
Forecast Analysis
 Comparison of Forecasts for 2019-21

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

Table 2.5
Forecast Analysis
 Comparison of Forecasts for 2021-23

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

Table 2.6
Forecast Comparison
 Forecast 2020 to 2025

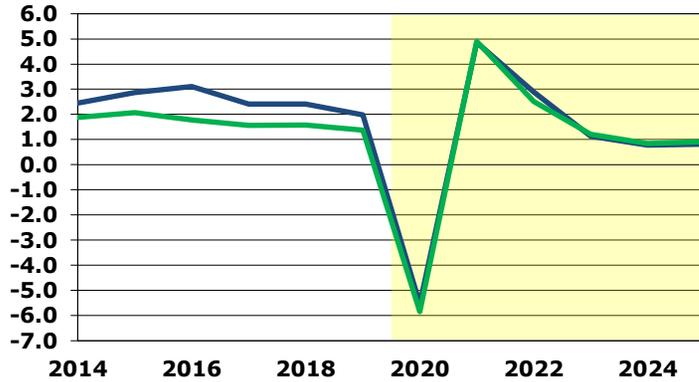
Fiscal Years

	2019	2020	2021	2022	2023	2024	2025
Washington							
Real Personal Income							
June	441.818	458.649	464.556	471.564	482.434	490.857	503.207
% Ch	4.8	3.8	1.3	1.5	2.3	1.7	2.5
February	441.534	458.777	470.408	480.830	493.180	508.034	522.070
% Ch	4.7	3.9	2.5	2.2	2.6	3.0	2.8
Personal Income							
June	481.127	505.752	516.623	532.052	552.300	570.981	595.399
% Ch	6.6	5.1	2.1	3.0	3.8	3.4	4.3
February	480.819	507.009	528.091	550.030	575.263	605.097	634.864
% Ch	6.5	5.4	4.2	4.2	4.6	5.2	4.9
Employment							
June	3433.1	3395.1	3326.3	3493.4	3562.3	3588.3	3619.1
% Ch	2.1	-1.1	-2.0	5.0	2.0	0.7	0.9
February	3436.1	3505.7	3554.5	3597.6	3631.0	3654.6	3676.4
% Ch	2.1	2.0	1.4	1.2	0.9	0.7	0.6
Housing Permits							
June	45.964	45.276	36.496	40.127	40.367	38.730	37.617
% Ch	-5.7	-1.5	-19.4	9.9	0.6	-4.1	-2.9
February	46.203	48.545	45.015	43.498	43.260	42.632	42.018
% Ch	-5.2	5.1	-7.3	-3.4	-0.5	-1.5	-1.4

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

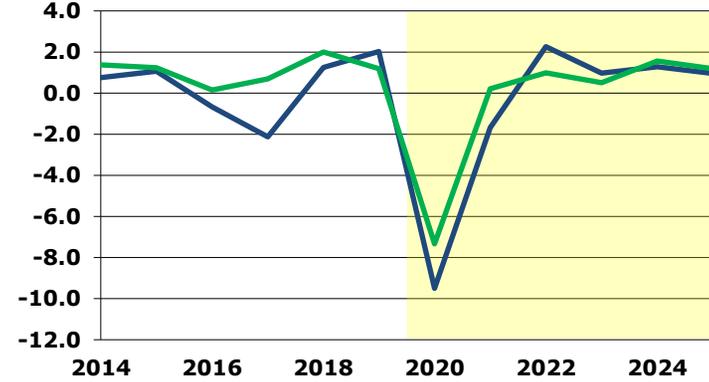
Forecast

Total Nonfarm Payroll Employment



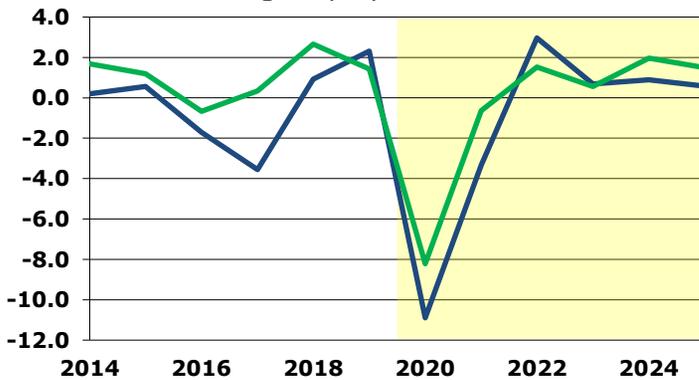
Source: WA State Employment Security Dept. 2019, ERFC 2025

Manufacturing Employment



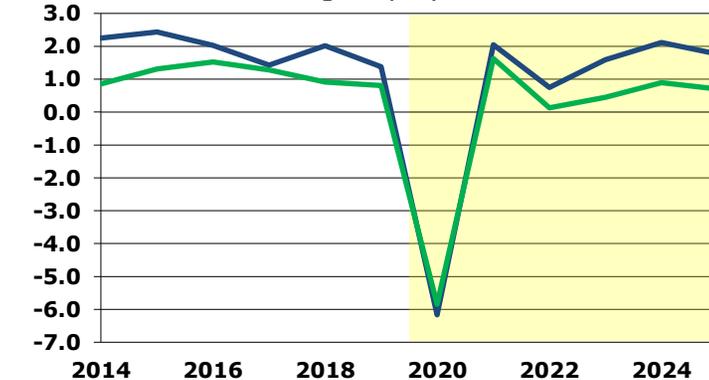
Source: WA State Employment Security Dept. 2019, ERFC 2025

Durable Manufacturing Employment



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

Nondurable Manufacturing Employment



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

Washington

U.S.

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

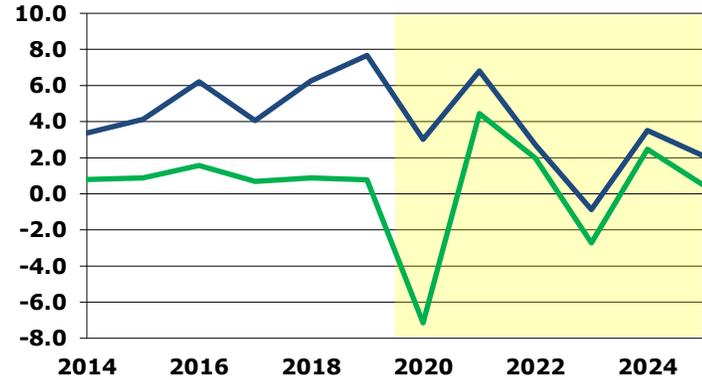
Forecast

Construction Employment



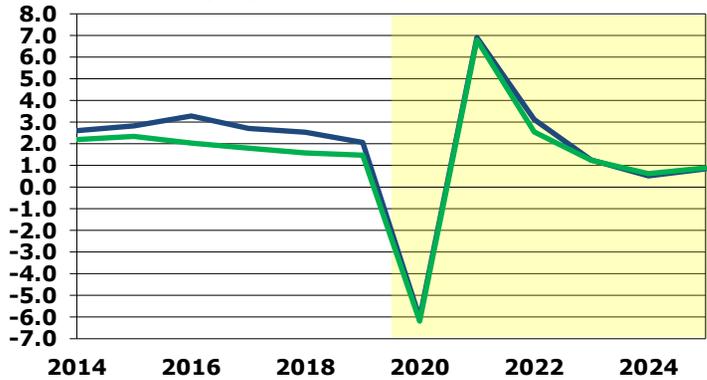
Source: WA State Employment Security Dept. 2019, ERFC 2025

Information Employment



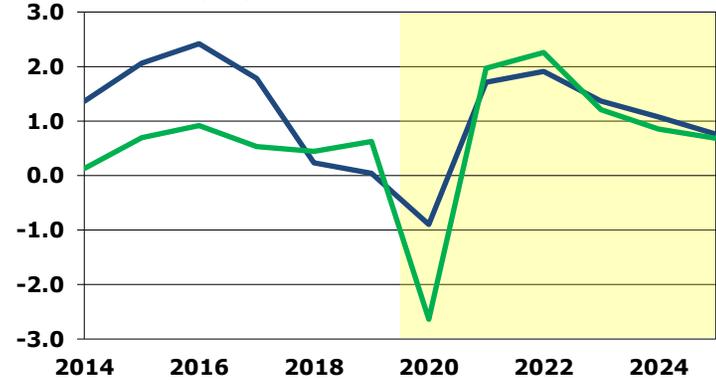
Source: WA State Employment Security Dept. 2019, ERFC 2025

Other Private Employment



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

Government Employment



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

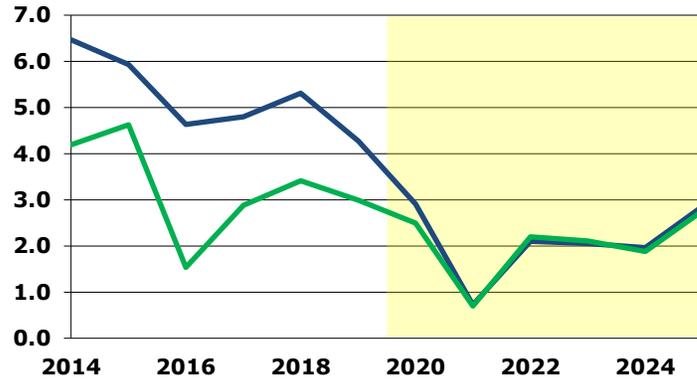
Washington

U.S.

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

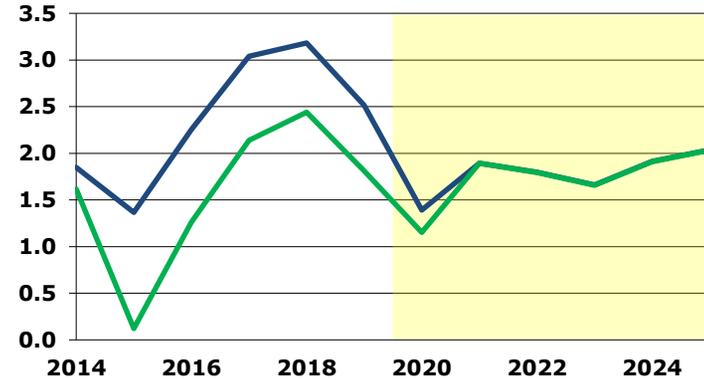
Forecast

Real Personal Income



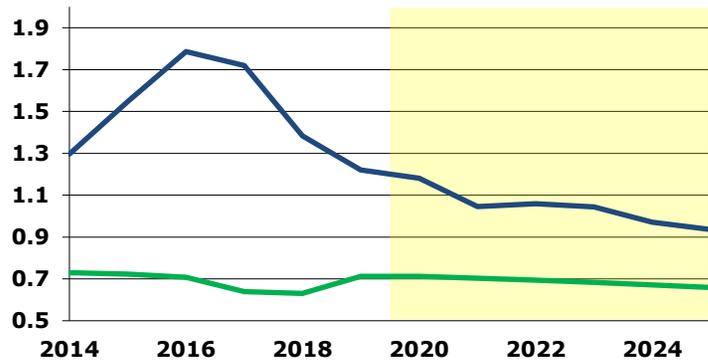
Source: Bureau of Economic Analysis 2018, ERFC 2025

Consumer Price Indices



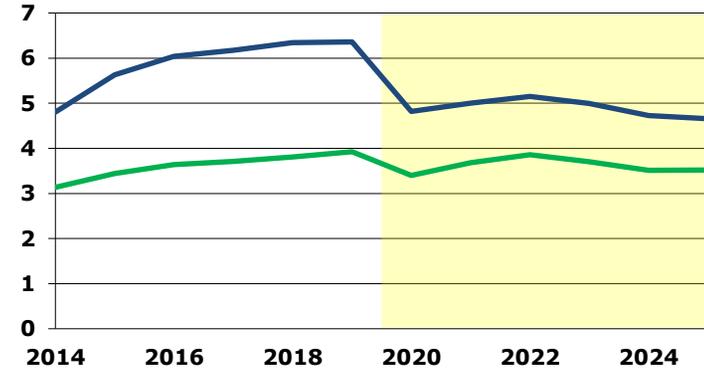
Source: Bureau of Labor Statistics 2019, ERFC 2025

Population



Source: Census Bureau 2019, ERFC 2025

New Housing Units Per 1,000 Population (Level)



Source: Census Bureau 2019, ERFC 2025

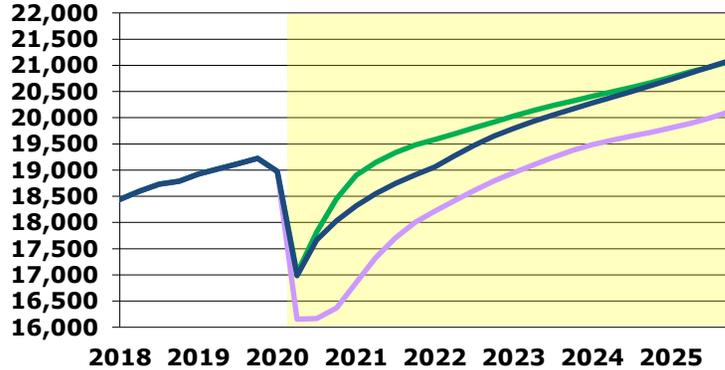
Washington

U.S.

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

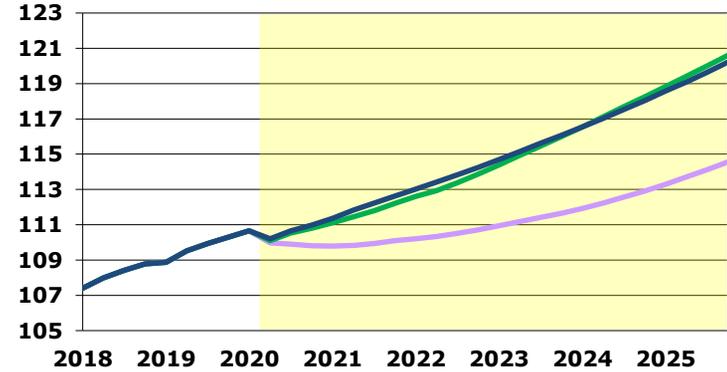
Forecast

Real GDP, Billions of 2012 Dollars



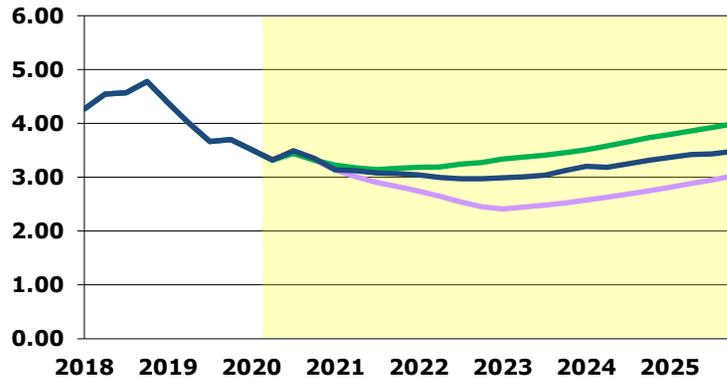
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

PCE Price Index, 2012 = 100



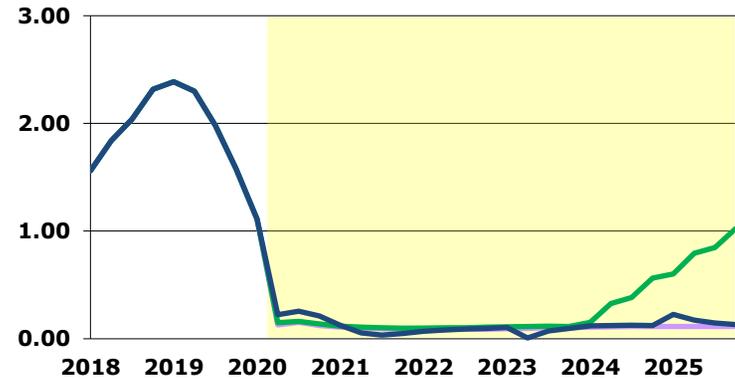
Source: Bureau of Economic Analysis 2019 Q4, ERFC 2025

Mortgage Rate, Percent



Source: Freddie Mac 2019 Q4, ERFC 2025

Three Month T-Bill Rate, Percent



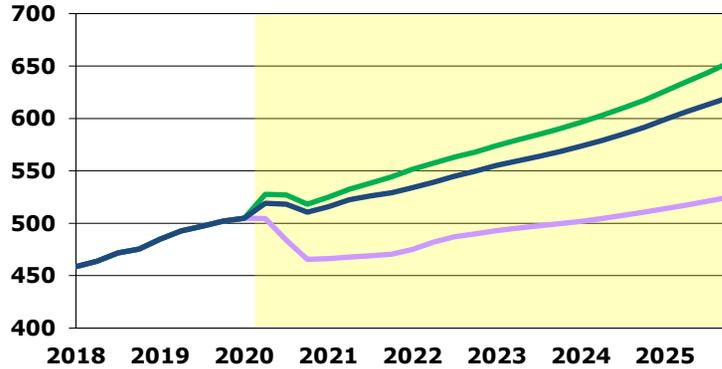
Source: Federal Reserve Board 2019 Q4, ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic

Figure 2.9: Comparison of Alternative Washington Economic Forecasts

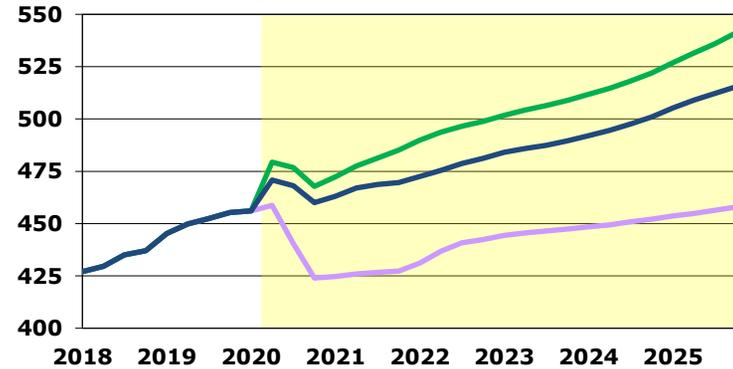
Forecast

Personal Income, Billions of Dollars



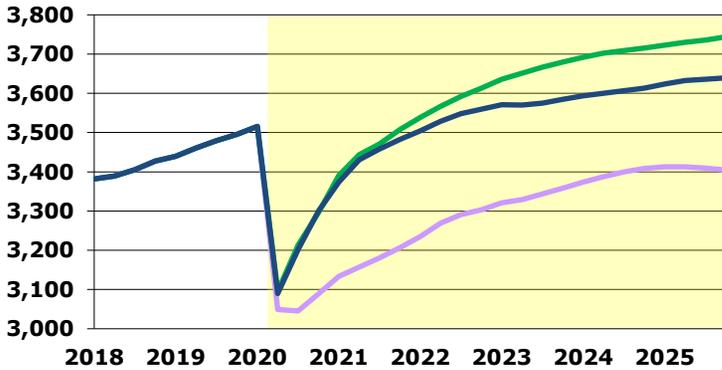
Source: Bureau of Economic Analysis 2018 Q4, ERFC 2025

Real Personal Income, Billions of 2012 Dollars



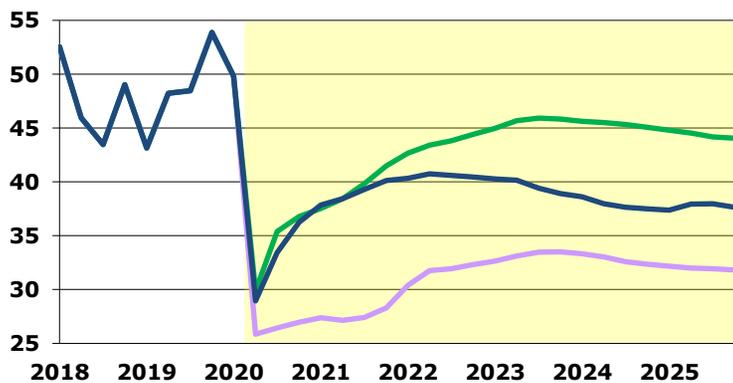
Source: Bureau of Economic Analysis 2018 Q4, ERFC 2025

Total Nonfarm Payroll Employment, Thousands



Source: WA State Employment Security 2019 Q4, ERFC 2023

Housing Permits, Thousands



Source: Census Bureau 2019 Q4, ERFC 2025

■ Baseline ■ Optimistic ■ Pessimistic



Chapter 3: Washington State Revenue Forecast Summary

- **General Fund-State (GF-S) revenue collections since the February forecast have come in \$893 million (11.1%) below the forecasted amount. About half of the shortfall, however, is due to deferred payment of Revenue Act and property taxes that will still be received during the current biennium.**
- **The large drops in forecasted employment and income due to the COVID-19 pandemic will mean large drops in state revenue collections that will persist for years.**
- **The GF-S forecast was decreased by \$4.5 billion in the 2019-21 biennium, \$4.4 billion in the 2021-23 biennium and \$4.5 billion in the 2023-25 biennium.**
- **Forecasted Near General Fund revenue was decreased by \$4.5 billion in the 2019-21 biennium, \$4.3 billion in the 2021-23 biennium and \$4.5 billion in the 2023-25 biennium.**

Overview

The economic disruption caused by the COVID-19 pandemic will affect state revenues for years

Though the existence of the SARS-CoV-2 was known at the time of the February 2020 forecast, how far or fast it would spread was still an open question. Now the disease caused by the virus, Coronavirus Disease 2019 (COVID-19), is pandemic. The mandated closure of non-essential businesses and stay-at-home orders that began in March have had a large impact on state revenue collections. Even though those restrictions are starting to be lifted, the June forecast does not show the national and state economies returning to their pre-pandemic levels until late 2021. The net result is the negation of almost two years of economic growth. Though growth will resume in the current biennium, the next two biennia will start off at much lower levels of economic activity than assumed in February, which will reduce their forecasted tax revenue generation accordingly.

Deferred tax payments have increased the revenue shortfall since February

Since the February forecast, General Fund – State (GF-S) revenue collections have come in far lower than forecasted. Only about half of the shortfall, however, was directly related to the shutdowns that began in early-to-mid March. The rest of the shortfall was due to the extension of certain tax payment due dates and payment deferrals that were granted by the

Department of Revenue and county governments to help people and companies cope with the pandemic. While some of the deferred payments will arrive in FY 2020, most will not arrive until FY 2021.

GF-S forecast change by biennium (billions):

19-21: -\$4.5
21-23: -\$4.4
23-25: -\$4.5

Table 3.1 summarizes the changes to the forecasts of GF-S revenue for the 2019-21 and 2021-23 biennia. For the current biennium, revenue collections that are tracked monthly came in \$893 million lower than forecasted. New legislation from the 2020 legislative session added \$125 million to expected revenue. The forecasted decline in economic activity for the rest of the biennium subtracted \$3.714 billion, resulting in a total forecast reduction of \$4.482 billion. The forecast for the 2021-23 biennium was decreased by \$4.357 billion, net of \$213 million in revenue from new legislation. The forecast for the 2023-25 biennium was decreased by \$4.473 billion, net of \$209 million in revenue from new legislation. The June 2020 forecast for GF-S revenue totals \$46.129 billion in the 2019-21 biennium, \$49.935 billion in the 2021-23 biennium and \$53.457 billion in the 2023-25 biennium.

GF-S forecast (\$billions):

2019-21:
\$46.129

2021-23:
\$49.935

2023-25:
\$53.457

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

	2019-21 Biennium	2021-23 Biennium	2023-25 Biennium
Collection Experience	(\$893.3)	NA	NA
Non-Economic Change	\$125.2	\$213.5	\$209.0
Forecast Change	(\$3,713.5)	(\$4,570.3)	(\$4,682.0)
Total Change	(\$4,481.6)	(\$4,356.8)	(\$4,472.9)

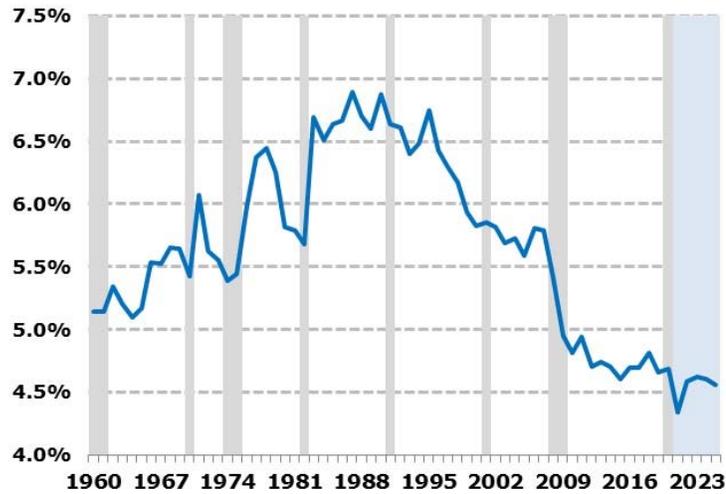
Though the ratio of collections to income has increased from the FY 2015 trough, it is still near historical lows

As can be seen in Figure 3.1, the ratio of GF-S revenue collected relative to state personal income has been increasing after reaching a trough in FY 2015. The ratio of revenue to income had been on a downward trend since 1995, broken only by the housing boom that raised the ratio from 2005 to mid-2008, and by temporary taxes and transfers of funds from non-GF-S sources into the GF-S that again boosted the ratio in fiscal years 2011 and 2013. The ratio increased slightly in FY 2014 due to low personal income growth and then decreased slightly in FY 2015. The ratio then increased in FY 2016 and 2017, largely due to revenue increases stemming from legislative changes. Additional legislative changes enacted in June of 2017 boosted the FY 2018 ratio, but legislative changes from the 2018 session reduced the ratio in FY 2019. The ratio is now expected to hold steady in FY 2020 but drop to a record low in FY 2021. After recovery in FY 2022 and 2023 it is expected continue its downward trend. Despite the recent increases, the ratio of

revenue to income in FY 2025 is forecasted to be below that of any fiscal year on record besides FY 2021.

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

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



Source: ERFC, data through fiscal year 2019. Gray shaded area indicates recession; blue shaded area indicates forecast.

Forecast details are at the end of the chapter

The history of nominal and real GF-S revenue by biennium can be found in Table 3.3. GF-S forecast changes by agency and major revenue classification for the 2019-21 biennium can be found in Table 3.5 (cash) and Table 3.6 (GAAP). Forecast changes for the 2021-23 biennium can be found in Table 3.7 (cash) and Table 3.8 (GAAP). The GF-S forecast by fiscal year and major source category through FY 2023 can be found in Table 3.9.

Recent Collection Experience

Collections were \$893 million (11.1%) less than forecasted in February

Revenue collections from the Department of Revenue (DOR) and Administrative Office of the Courts are tracked monthly. In the period since the February forecast, total revenue from the above sources came in \$893.3 million (11.1%) lower than expected (see Table 3.2). Revenue Act collections reported by the DOR were \$633.5 million (11.3%) lower than forecasted. Revenue from other DOR tax sources was \$257.1 million (10.6%) below the forecast.

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

<u>Agency/Source</u>	<u>Collection Variance</u>	<u>Percent of Estimate</u>
Department of Revenue		
Revenue Act	(\$633.5)	-11.3%
Non-Revenue Act	(\$257.1)	-10.6%
Subtotal	(\$890.6)	-11.1%
Administrative Office of the Courts	(\$2.7)	-12.6%
Total*	(\$893.3)	-11.1%

* Detail may not add to total due to rounding.

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

About \$180 million of the shortfall in Revenue Act taxes was from deferred payments

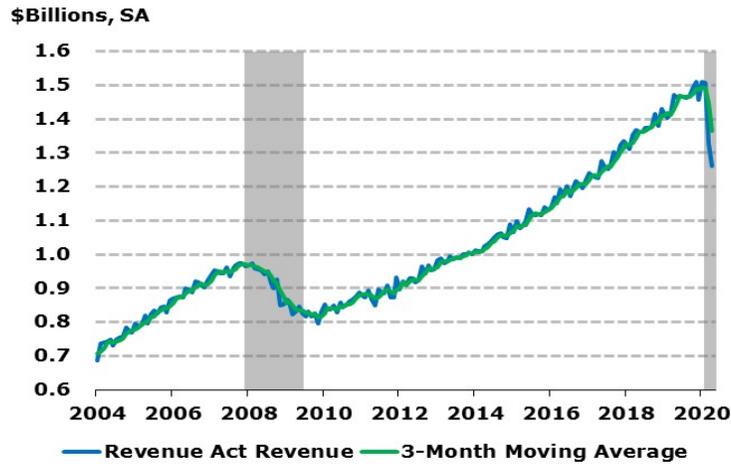
Because of COVID-19-related business disruptions, the DOR granted automatic due date extensions for quarterly and annual filers of Revenue Act taxes. Those payments are now due in June instead of April. In addition, the Department also granted extensions to some monthly taxpayers who requested them pending departmental approval. While many of the extensions of April monthly payments were received in May, there were approximately \$180 million in outstanding deferred payments at the end of the June 10 collection period. Most of the deferred payments are due by the end of June, but some taxpayers have been granted extensions into FY 2021.

Due date extensions for property taxes also contributed to the collection shortfall.

Most of the shortfall in non-Revenue Act collections came from property tax collections, which came in \$258.4 million (13.7%) lower than forecasted. Most of this shortfall was due to the granting of due date extensions by many large counties. While the payments are now due at the end of June rather than the end of April, they will not show up in GF-S collections until FY 2021. The next largest shortfall was in cigarette tax collections, which came in \$7.5 million (7.7%) lower than forecasted. Liquor sales and liter tax receipts came in \$9.5 million (10.8%) higher than forecasted. Real estate excise tax (REET), came in \$4.9 million (2.1%) higher than forecasted. Net refunds of unclaimed property from the GF-S were \$0.2 million lower than forecasted. Revenue from all other DOR revenue sources came in \$5.9 million (5.2%) lower than forecasted. Revenue from the Administrative Office of the Courts was \$2.7 million (12.6%) lower than forecasted.

Figure 3.2: Revenue Act Collections*

Revenue Act collections dropped precipitously over the last two collection periods



Source: ERFC; Data through June 10, 2020

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

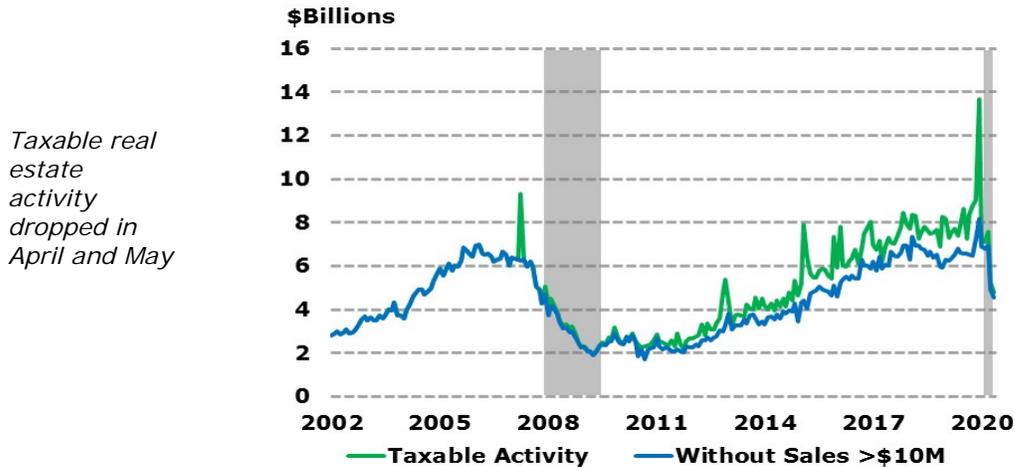
Adjusted Revenue Act collections were up 1.6% year over year for first quarter activity after 5.5% growth in the previous quarter

Figure 3.2 shows seasonally adjusted Revenue Act receipts excluding payments received under the tax amnesty program in early 2011 and other large payments. It is also adjusted for some changes in payment patterns. As shown in the figure, collections dropped precipitously over the last two collection periods. Adjusted for large one-time payments and refunds and estimated deferred payments, collections dropped 14.8% year over year in the May 11 – June 10, 2020 collection period after a drop of 7.1% year over year in the previous period. Adjusted year-over-year growth in collections representing first quarter activity (February 11 – May 10, 2020 collections) was 1.6% despite the large drop in May 10 collections. Adjusted year-over-year growth in collections representing fourth quarter 2019 activity (November 11, 2019 – February 10, 2020 collections) was 5.5%. Collections growth for third quarter 2019 activity was 6.6% and growth for the second quarter was 8.1%.

Cumulative REET collections came in above the forecast due to strength in February and March activity

The positive variance in REET collections was due to stronger-than-expected activity in February and March. After the large spike in sales ahead of a January 1 increase in the effective tax rate for certain properties, sales were expected to drop more than they did. While total sales of property worth \$10 million or more did drop after the December spike, sales of lower priced properties did not fall in those months. Collections in April and May, however, dropped sharply as real estate services were shut down due to the pandemic (see Figure 3.3).

Figure 3.3: Taxable Real Estate Excise Activity, SA



Source: ERFC; data through May 2020

Legislative Changes to the Forecast

The Governor vetoed several bills that would have negatively affected the state fiscal balance

Since the February forecast, the State Legislature passed a number of bills that affect GF-S revenue. After the close of the legislative session, however, the impacts of the COVID-19 pandemic were becoming clearer. Subsequently, the Governor vetoed many bills that would either reduce state revenue or increase state spending. The list of bills with impacts on state revenue that were signed by the Governor and their effects by fiscal year can be found in Table 3.20.

The main legislative change was the reversal of preferential B&O tax rates for the aerospace industry

The bill that produced the largest change was Senate Bill 6690, which removed the special business and occupation (B&O) tax rate for certain aerospace industries. The reversal was made at the request of the industry in order to settle certain disputes with the World Trade Organization. At the time of the bill signing, the change in rates was expected to bring in an extra \$134 million in the current biennium, \$229 million in the next biennium, and \$225 million in the 2023-25 biennium. The net changes from the rest of the signed legislation, including changes related to the supplemental budget, were much smaller, amounting to net reductions of less than \$20 million per biennium.

Revenue Forecasts by Source

Department of Revenue

Taxes collected by DOR are most of GF-S taxes

The Department of Revenue (DOR) collects and administers the majority of Washington’s GF-S revenue, accounting for 95.0% of total GF-S revenue in FY 2019. The largest tax sources administered by the DOR are the retail sales tax, business and

occupation tax, property tax, use tax, cigarette tax and real estate excise tax. The revenue forecasts discussed below can be found in Tables 3.5-3.8.

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

The retail sales tax is the largest source of GF-S revenue, accounting for 49.5% of GF-S revenue in FY 2019. The state's share of the tax is 6.5% of the sales price. While construction labor, repair services, and some other services are taxed, the tax does not apply to most services. Taxable sales as a share of personal income have been declining. Their share fell sharply during the recession and continued to fall through FY 2012. In that year, 33.7% of personal income was spent on taxable items and services, the lowest percentage on record. Increased spending on construction and autos, along with legislative changes to services and companies deemed taxable, caused the share to grow through FY 2017, reaching 36.1% of personal income. Legislation passed in 2017, 2018 and March 2019 that extends the tax to bottled water and online sales has caused the share to continue to increase. The COVID-19-related collapse that began in FY 2020, however, will cause the ratio of sales to income to decline in FY 2020 and reach a forecasted new historical low of 31.2% in FY 2021. While the ratio is expected to increase in FY 2022, it is forecasted to remain below the previous FY 2012 low through FY 2025. The historical and forecasted relationship between taxable sales and income is illustrated in Figure 3.4. Taxable retail sales by fiscal year can be found in Table 3.4.

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

The ratio of taxable sales to state personal income is on a declining trend



*Past tax base adjusted to represent current base. Shaded area indicates forecast

Source: ERFC; Data through FY 2019, forecast through FY 2025

Retail sales tax receipt growth forecast:

- FY20: 0.9%
- FY21: -8.8%
- FY22: 9.6%
- FY23: 5.1%

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

2017 activity to 6.3%. Growth increased to 8.6% in FY 2018, due largely to increased taxation of online sales. Growth in FY 2019 taxable activity stayed relatively strong at 7.6% despite slowing auto sales and construction because of continuing increases in the volume of taxable online sales. Taxable activity is forecasted to decline by 1.5% in FY 2020 and a further 6.7% in FY 2021. Growth is then forecasted to rebound by 8.6% in FY 2022 before slowing to 4.9% in FY 2023 and 3.3% in FY 2024 and 2025 (see Table 3.4). Due to the lag between taxable activity and collections and the presence of tax deferrals, credits, refunds, and payments of past due taxes, the growth in actual collections differs from the growth in taxable activity. Growth in collections for FY 2019 was 8.6%. Collections growth is forecasted to remain barely positive at 0.9% in FY 2020 before dropping by 8.8% in FY 2021. Collections are then forecasted to rebound by 9.6% in FY 2022 and 5.1% in FY 2023. Growth is forecasted at 3.3% for FY 2024 and FY 2025.

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

The business and occupation (B&O) tax is the second largest source of GF-S revenue, accounting for 19.8% of GF-S revenue in FY 2019. It is a tax on the gross receipts of all businesses operating in Washington. The state portion of the tax applies ten different rates according to various classifications of business activities. In FY 2019, the largest contributor to total state B&O tax was the services sector, which had a gross tax rate of 1.5% and represented an estimated 43% of B&O taxes due. The next largest sector was retailing, which is taxed at 0.471% and represented an estimated 24% of taxes due, followed by the wholesaling sector, which is taxed at 0.484% and represented an estimated 19% of taxes due.

B&O tax growth forecast:

*FY20: 2.5%
FY21: -11.7%
FY22: 12.2%
FY23: 6.3%*

In FY 2018, B&O tax receipts grew by 8.6% due to several large one-time payments of past due taxes and legislative expansion of the tax base. Growth slowed to a still-strong 6.9% in FY 2019. Despite the second quarter collapse in activity, forecasted FY 2020 growth remains positive at 2.5%. Collections are forecasted to shrink by 11.7% in FY 2021 before they rebound by 12.2% in FY 2022. Growth is forecasted at 6.3% in FY 2023 and 4.5% in FY 2024 and FY 2025.

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

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

Property tax growth forecast:

*FY20: 44.5%
FY21: 23.9%
FY22: -0.6%
FY23: 2.4%*

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 are forecasted to rebound by 44.5% in FY 2020 with a smaller \$83.8 million transfer to ELTA and the end of the temporary levy reduction in the second half of the year. FY 2020 collections are lower than forecasted in February due to payment deferrals granted by several large counties. Most of the deferred payments will arrive in FY 2021, which, along with a full year at the unreduced levy rate, boosts forecasted FY 2021 growth to 23.9%. The absence of the extra payments from deferrals brings a 0.6% decline in FY 2022 before growth continues at 2.4% in FY 2023. Growth is forecasted at 2.5% for FY 2024 and 2.4% for FY 2025.

REET rates and distributions changed on January 1, 2020

The real estate excise tax (REET) was the fourth largest DOR source of GF-S revenue in FY 2019, accounting for 4.9% of total revenue. The tax is applied to both residential and commercial real estate, including purchases of vacant land. Prior to January 1, 2020, the state portion of REET was 1.28% of the sales price and was divided between the GF-S (92.3%), a fund for local public works (2.0%), a fund for assistance of cities and counties (1.6%) and ELTA (4.1%). As of January 1, rates are 1.1% for the portion of the selling price less than or equal to \$500 thousand, 1.28% for the portion greater than \$500 thousand and less than or equal to \$1.5 million, 2.75% for the portion greater than \$1.5 million and less than or equal to \$3.0 million and 3.0% for the portion greater than \$3.0 million. The distributions of the tax are also changed: 79.4% is deposited in the GF-S, 1.7% in the public works assistance account, 1.4% in the city-county assistance account and the remainder (17.5%) in ELTA. Beginning July 1, 2023, distributions to the city-county assistance account increase to 5.2% and distributions to the Education Legacy Trust Account decrease to 14%. The new rates and distributions were designed to result in increased collections for both the GF-S and ELTA.

GF-S REET growth forecast:

*FY20: -2.9%
 FY21: -30.5%
 FY22: 36.0%
 FY23: 2.3%*

Since FY 2013, the recovery in the real estate market after the Great Recession has been accompanied by a boom in commercial real estate. Sales of large commercial properties began to weaken in FY 2019 while residential sales increased, resulting in a 0.5% increase in collections in FY 2019. In the first half of FY 2020, residential sales remained strong, and commercial sales surged in December 2019 ahead of the January 1, 2020 change in tax rates. The real estate market collapse that began with April 2020 collections, however, brings a forecasted total decline of 2.9% in FY 2020. The decline is forecasted to accelerate to 30.5% in FY 2021 before growth springs back at 36.0% in FY 2022. Growth then slows to 2.3% in FY 2023, declines by 1.4% in FY 2024 and grows 3.9% in FY 2025.

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

The state use tax was the fifth largest GF-S revenue source in FY 2019 at 3.4% of total receipts. The state portion of the tax is 6.5% of the purchase price for items used in the state that were not subject to the state retail sales tax. Examples of items subject to the state use tax are goods purchased out-of-state; online and mail-order purchases, where sales tax was not collected; or purchases of used vehicles from private individuals.

Use tax growth forecast:

*FY20: -4.4%
FY21: -14.3%
FY22: 8.6%
FY23: 5.7%*

Use tax collections grew 9.0% in FY 2019, boosted by several large one-time purchases. Despite strong collections in the first half of the fiscal year, FY 2020 collections are now forecasted to decline by 4.4%. Collections are forecasted to decline a further 14.3% in FY 2021 before rebounding by 8.6% in FY 2022. Growth then continues at 5.7 in FY 2023, 4.5% in FY 2024 and 4.8% in FY 2025.

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

Public utility taxes were the sixth largest DOR source of GF-S revenue in FY 2019, bringing in 1.8% of total receipts. The tax applies to the gross income of sales to consumers by public and privately owned utilities and is in lieu of the B&O tax. The largest source of public utility taxes is the 3.873% tax on the distribution and generation of electrical power, followed by the 3.852% tax on the distribution of natural gas.

Growth forecast:

*FY20: 1.0%
FY21: 7.2%
FY22: 7.9%
FY23: 2.6%*

Public utility tax receipts shrank by 1.1% in FY 2018 after 1.4% growth in FY 2017. Growth shrank by a further 0.3% in FY 2019, but collections are forecasted to grow by 1.0% in FY 2020. The expiration of a large tax credit boosts collections growth to 7.2% in FY 2021 and a strengthening economic recovery brings growth of 7.9% in FY 2022. Growth is then forecasted to continue at 2.6% in FY 2023, 2.5% in FY 2024 and 3.0% in FY 2025.

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

The state tax on cigarettes was the seventh largest DOR GF-S revenue source in FY 2019 at 1.5% of total receipts. Prior to FY 2010, the tax made up a much smaller portion of GF-S revenue because much of the tax was dedicated to non-GF-S accounts. In FY 2010, all of the tax except the portion dedicated to the Education Legacy Trust account was redirected to the GF-S, and in FY 2011 all of the cigarette tax was redirected to the GF-S. The current tax rate, which took effect May 1, 2010, is \$3.025 per pack of 20 cigarettes.

Cigarette tax growth forecast:

*FY20: -5.3%
FY21: -3.6%
FY22: -3.4%
FY23: -3.3%*

The total number of taxed cigarettes has been on a downward trend due to a continuing decline in the number of smokers. Recently, the rate of decline has been increasing further. Collections decreased by 3.3% in FY 2019 after decreasing by 5.4% in FY 2018. The decrease in collections is forecasted to accelerate to 5.3% in FY 2020, partially due to a state increase in the legal age to purchase cigarettes from 18 to 21 that took effect on January 1, 2020. Declining collections are forecasted to continue at a rate of 3.6% in FY 2021, 3.4% in FY 2022, 3.3% in FY 2023 and FY 2024, and 3.6% in FY 2025.

Forecasted Revenue from Cannabis-Related Sales

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

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

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

19-21: \$15.1
21-23: \$3.8
23-25: \$6.9

Distributions of cannabis excise taxes to the GF-S totaled \$15.3 million in the 2013-15 biennium and \$147.6 million in the 2015-17 biennium. GF-S distributions were \$248.9 million in the 2017-19 biennium. Distributions are forecasted at \$318.2 million in the 2019-21 biennium, an increase of \$15.1 million from the previous forecast, and \$325.3 million in the 2021-23 biennium, an increase of \$3.8 million. The forecast of GF-S distributions for the 2023-25 biennium is \$357.6 million, an increase of \$6.9 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: \$0.2
21-23: \$3.3
23-25: \$0.4

The Office of Financial Management (OFM) is responsible for preparing General Fund-State revenue and transfer forecasts for all agencies excluding the Department of Revenue, the Liquor and Cannabis Board, the Insurance Commissioner, the Washington State Lottery, and the State Treasurer. The office's forecast for the 2019-21 biennium was increased \$0.2 million to \$206.6 million and the forecast for the 2021-23 biennium was increased \$3.3 million to \$201.4 million. The office's forecast of revenue for the 2023-25 biennium was increased \$0.4 million to \$169.2 million.

State Treasurer

*Forecast change
by biennium
(millions):*

19-21: *-\$13.5*
21-23: *-\$30.2*
23-25: *-\$35.0*

The Office of the State Treasurer generates GF-S revenue by investing state short-term cash reserves. The office's forecast for the 2019-21 biennium has been decreased \$13.5 million to \$3.9 million and the office's forecast for the 2021-23 biennium has been decreased \$30.2 million to \$0.9 million. The office's forecast of revenue for the 2023-25 biennium has been decreased \$35.0 million to \$3.4 million. The decreases in forecasted revenue were due to large reductions in both forecasted balances and forecasted interest rates.

Insurance Commissioner

*Forecast
change by
biennium
(millions):*

19-21: *-\$168.3*
21-23: *-\$76.2*
23-25: *-\$61.4*

The Office of the Insurance Commissioner collects premium taxes on most classes of insurance sold in Washington State. These taxes are distributed to the GF-S and various accounts in support of fire services. The forecast of GF-S revenue for the 2019-21 biennium has been decreased \$168.3 million to \$1,144.4 million and the forecast of revenue for the 2021-23 biennium has been decreased \$76.2 million to \$1,350.1 million. The forecast of GF-S revenue for the 2023-25 biennium has been decreased \$61.4 million to \$1,476.9 million.

Liquor and Cannabis Board

*Forecast
change by
biennium
(millions):*

19-21: *\$22.1*
21-23: *-\$0.7*
23-25: *\$4.4*

The Liquor and Cannabis Board (LCB) collects fees from distributors and retailers on sales of spirits and surtaxes on sales of beer and wine (sales and liter taxes on sprits are collected by the DOR). The LCB is also responsible for the collection of excise taxes and fees associated with the legalized sale and use of recreational and medicinal cannabis discussed previously. The forecast of GF-S distributions for the 2019-21 biennium has been increased \$22.1 million to \$585.7 million and the forecast of revenue for the 2021-23 biennium has been decreased \$0.7 million to \$613.0 million. The forecast of GF-S distributions for the 2023-25 biennium has been increased 4.4 million to \$663.0 million. The forecast changes were a combination of changes to expected fees and taxes associated with beer, wine, and liquor distribution and the changes in expected distributions of cannabis excise taxes to the GF-S discussed above. The forecast also incorporated a budget-driven revenue decrease of \$3.6 million for the current biennium and an increase of \$3.4 for the next biennium as shown in Table 3.20.

Lottery Commission

While most of the proceeds from sales of lottery games go to the Washington Opportunity Pathways Account (OPA), distributions are also made to programs such as Problem Gambling, Economic Development and the Stadium/Exhibition Center. Details of the

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

19-21: *-\$12.6*
21-23: *-\$6.7*
23-25: *-\$6.9*

forecast of the distribution of Lottery earnings can be found in Table 3.15 on a cash basis and Table 3.16 on a GAAP basis. When total profits from all Washington-only games plus the Powerball game exceed \$102 million per year, the amount above \$102 million is transferred to the GF-S. Forecasted transfers for the 2019-21 biennium have been decreased \$12.6 million to \$39.7 million and the forecast of GF-S transfers for the 2021-23 biennium has been decreased \$6.7 million to \$47.3 million. The forecast for the 2023-25 biennium has been decreased \$6.9 million to \$48.6 million.

*OPA forecast
change by
biennium
(millions):*

19-21: *\$18.5*
21-23: *\$8.0*
23-25: *\$8.1*

The OPA receives all profits (excluding statutory transfers) from Washington-only lottery games plus all profits from the Mega Millions game. The forecast of OPA revenue for the 2019-21 biennium has been increased \$18.5 million to \$299.3 million and the forecast for the 2021-23 biennium has been increased \$8.0 million to \$320.2 million. The forecast for the 2023-25 biennium has been increased \$8.1 million to \$329.2 million.

Administrative Office of the Courts

*Forecast
change by
biennium
(millions):*

19-21: *-\$16.8*
21-23: *-\$25.3*
23-25: *-\$26.5*

The Administrative Office of the Courts collects surcharges on certain filing fees, fines, and infraction penalties and transfers this revenue to the GF-S on a monthly basis. The forecast of GF-S transfers for the 2019-21 biennium has been decreased \$16.8 million to \$117.2 million and the forecast of revenue for the 2021-23 biennium has been decreased \$25.3 million to \$106.3 million. The forecast of transfers for the 2023-25 biennium has been decreased \$26.5 million to \$103.9 million.

Track Record for the 2019-21 Biennium

*The current
forecast is \$3.6
billion (7.2%)
lower than the
forecasted
revenue at the
time of the
initial 2019-21
budget*

Table 3.10 summarizes the historical changes to the GF-S revenue forecast for the 2019-21 biennium. The February 2016 forecast was the initial forecast for the biennium. The June 2020 forecast is \$2.7 billion (6.2%) 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 \$704 million (1.6%) lower than the initial forecast. The March 2019 forecast, coupled with \$109 million in legislative and budget-driven revenue changes passed in the 2019 legislative session subsequent to the March forecast, was the basis for the initial budget for the 2019-21 biennium. The June forecast of biennial revenue is \$3.6 billion (7.2%) lower than that sum.

Track Record for the 2021-23 Biennium

*The current
forecast is \$2.0
billion lower than
the initial
forecast in
February 2018*

Table 3.11 summarizes the historical changes to the GF-S revenue forecast for the 2021-23 biennium. The February 2018 forecast was the initial forecast for the biennium. The June 2020

forecast is \$2.0 billion (3.8%) lower than the initial forecast. Non-economic changes have increased the forecast by \$765 million (1.5%). Excluding non-economic changes, the current forecast is \$2.8 billion (5.3%) lower than the initial forecast.

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

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

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

Budgetary Balance Sheet for the 2019-21 Biennium

Assuming the BSA is used, the forecast implies a shortfall of \$1.4 billion at the end of the 2019-21 biennium for GF-S, ELTA and OPA

Table 3.12 shows the budgetary balance sheets for the 2019-21 biennium as prepared by the Office of Financial Management and the House and Senate fiscal committees. The balance sheet shows not only projected GF-S spending and resources but also total projected spending and resources for the GF-S plus the other main non-transportation state-funded accounts: the Education Legacy Trust Account (ELTA) and the Washington Opportunity Pathways Account (OPA). 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 and OPA was \$1,981.2 million. Based on the June 2020 revenue forecast and currently enacted budgets, there will be a \$3,477.7 million shortfall in GF-S balances at the end of the 2019-21 biennium and a shortfall of \$3,372.2 million in total GF-S, ELTA and OPA balances. The Budget Stabilization Account (BSA) is projected to have a balance of \$1,962.5 million. Using the BSA funds would lower the projected GF-S biennial shortfall to \$1,515.1 million and the total shortfall for GF-S, ELTA and OPA balances to \$1,409.7 million.

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

Optimistic scenario (billions):
19-21: +\$2.09
21-23: +\$4.79

Pessimistic scenario:
19-21: -\$2.44
21-23: -\$5.39

Chapter 2 outlines optimistic and pessimistic economic scenarios relative to the baseline economic forecast. The forecast assigns a probability of 50% to the baseline forecast, 25% to the optimistic scenario and 25% to the pessimistic scenario. The revenue implications of these alternative scenarios for the 2019-21 biennium are shown in Table 3.13 and those of the 2021-23 biennium are shown in Table 3.14. For the 2019-21 biennium, the optimistic forecast generates \$48.217 billion in GF-S revenue, \$2.087 billion (4.5%) more than the baseline scenario, while the pessimistic forecast produces \$43.687 billion in revenue, \$2.443 billion (5.3%) less than the baseline. For the 2021-23 biennium, the optimistic forecast generates \$54.721 billion in GF-S revenue, \$4.787 billion (9.6%) more than the baseline scenario, while the pessimistic forecast produces \$44.542 billion in revenue, \$5.393 billion (10.8%) less than the baseline.

Near General Fund Forecast

Near General Fund Forecast (billions):

2019-21:
\$47.800

2021-23:
\$51.347

2021-23:
\$54.702

“Near General Fund” (NGF) accounts are those included in the GF-S plus the Education Legacy Trust Account (ELTA) and the Washington Opportunity Pathways Account (OPA). 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, which had previously gone into non-GF-S accounts. Subsequent legislation also added revenue from solid waste taxes beginning in FY 2016 and a transfer of \$935 million from the additional property tax levy to the account in FY 2019. The OPA is funded by lottery revenue as discussed above. The forecast of NGF revenue for the 2019-21 biennium is \$47,800.4 million, \$4,539.1 million less than the February forecast. The forecast of Near General Fund revenue for the 2021-23 biennium is \$51,347.0 million, \$4,342.8 million less than the February forecast. The forecast for the 2023-25 biennium is \$54,702.4 million, \$4,473.4 million less than the February forecast. The Near General Fund forecast and recent history by fiscal year are presented in Table 3.17.

Workforce Education Investment Account

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

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

6492, passed in early February of the 2020 legislative session, retroactively eliminated the existing surcharge and replaced it with a simplified version that is effective April 1, 2020. The simplified surcharge applies to businesses with gross taxable activity under the "services and other activities" category of \$1 million or more (with some nonprofit and other businesses exempt). In addition to this surcharge, which equals 0.25% of gross taxable income, another surcharge is applied to a group of "select advanced computing businesses," and is paid quarterly. The forecast of WEIA revenue has been lowered by \$28.6 million in the current biennium, \$55.8 million in the 2021-23 biennium and \$2.6 million in the 2023-25 biennium. WEIA revenue is now forecasted at \$321.8 million in the 2019-21 biennium, \$571.6 million in the 2021-23 biennium and \$664.7 million in the 2023-25 biennium. The WEIA forecast by fiscal year is presented in Table 3.19.

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

<u>Biennium</u>	<u>Current Dollars</u>	<u>Percent Change</u>	2012	
			<u>Chained Dollars</u>	<u>Percent Change</u>
1961-63	\$817.1		\$4,300.0	
1963-65	866.2	6.0%	4,439.3	3.2%
1965-67	1,128.6	30.3%	5,565.5	25.4%
1967-69	1,440.5	27.6%	6,658.6	19.6%
1969-71	1,732.7	20.3%	8,271.5	24.2%
1971-73	1,922.1	10.9%	8,490.3	2.6%
1973-75	2,372.4	23.4%	9,054.3	6.6%
1975-77	3,395.0	43.1%	11,271.8	24.5%
1977-79	4,490.0	32.3%	13,091.7	16.1%
1979-81	5,356.4	19.3%	12,990.7	-0.8%
1981-83	6,801.4	27.0%	14,354.4	10.5%
1983-85	8,202.4	20.6%	15,975.3	11.3%
1985-87	9,574.6	16.7%	17,604.4	10.2%
1987-89	10,934.1	14.2%	18,775.3	6.7%
1989-91	13,309.0	21.7%	21,047.1	12.1%
1991-93	14,862.2	11.7%	22,112.5	5.1%
1993-95	16,564.6	11.5%	23,547.7	6.5%
1995-97	17,637.7	6.5%	24,059.4	2.2%
1997-99	19,620.1	11.2%	26,059.1	8.3%
1999-01	21,262.1	8.4%	27,187.8	4.3%
2001-03	21,140.7	-0.6%	26,144.9	-3.8%
2003-05	23,388.5	10.6%	27,714.8	6.0%
2005-07	27,772.0	18.7%	31,145.3	12.4%
2007-09	27,703.0	-0.2%	29,633.3	-4.9%
2009-11	28,218.1	1.9%	29,418.7	-0.7%
2011-13	30,657.0	8.6%	30,679.6	4.3%
2013-15	33,666.0	9.8%	32,835.5	7.0%
2015-17	38,317.4	13.8%	36,760.8	12.0%
2017-19	44,142.6	15.2%	40,886.6	11.2%
2019-21 ^F	46,129.5	4.5%	41,656.1	1.9%
2021-23 ^F	49,934.5	8.2%	43,936.4	5.5%
2023-25 ^F	53,457.0	7.1%	45,565.9	3.7%

^F June 2020 forecast

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

Source: Department of Revenue, the Office of Financial Management and the Economic and Revenue Forecast Council 's June 2020 forecast.

Table 3.4
Taxable retail sales*
(millions of dollars)

Fiscal Year	Amount	Percent Change
1981	25,197	4.7%
1982	26,097	3.6%
1983	29,368	12.5%
1984	29,156	-0.7%
1985	30,687	5.3%
1986	32,158	4.8%
1987	34,647	7.7%
1988	37,452	8.1%
1989	41,429	10.6%
1990	47,183	13.9%
1991	49,812	5.6%
1992	53,189	6.8%
1993	55,319	4.0%
1994	59,009	6.7%
1995	61,927	4.9%
1996	62,817	1.4%
1997	66,748	6.3%
1998	72,059	8.0%
1999	77,197	7.1%
2000	83,335	8.0%
2001	85,633	2.8%
2002	84,418	-1.4%
2003	86,165	2.1%
2004	90,139	4.6%
2005	97,253	7.9%
2006	107,071	10.1%
2007	115,527	7.9%
2008	118,676	2.7%
2009	106,379	-10.4%
2010	99,983	-6.0%
2011	101,825	1.8%
2012	106,036	4.1%
2013	113,173	6.7%
2014	120,453	6.4%
2015	130,168	8.1%
2016	141,103	8.4%
2017	149,992	6.3%
2018	162,958	8.6%
2019	175,266	7.6%
2020 ^F	172,586	-1.5%
2021 ^F	161,056	-6.7%
2022 ^F	174,913	8.6%
2023 ^F	183,433	4.9%
2024 ^F	189,511	3.3%
2025 ^F	195,739	3.3%

^F June2020 forecast

Source: ERFC

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

Table 3.5
Comparison of the General Fund-State forecast by agency
 2019-21 biennium; cash basis
 (millions of dollars)

Forecast by Agency	Feb 2020 Forecast¹	Non-Economic Changes	Forecast Revision	June 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$24,047.9	(\$1.7)	(\$2,619.1)	\$21,427.0	(\$2,620.9)
Business & Occupation	9,642.6	130.9	(1,210.0)	8,563.5	(1,079.1)
Use	1,503.9	(0.0)	(162.2)	1,341.7	(162.3)
Public Utility	892.9	0.0	(55.0)	837.9	(55.0)
Liquor Sales/Liter	598.9	0.0	5.0	603.9	5.0
Cigarette	654.2	0.0	(11.3)	642.9	(11.3)
Property (State Levy)	7,888.2	(0.3)	(112.5)	7,775.4	(112.8)
Real Estate Excise	2,024.8	0.0	(224.5)	1,800.2	(224.5)
Timber Excise	4.0	0.0	(0.8)	3.1	(0.8)
Other	1,067.3	0.0	(31.0)	1,036.4	(31.0)
Subtotal	48,324.8	128.8	(4,421.6)	44,032.0	(4,292.7)
Insurance Commissioner					
Insurance Premiums	1,312.7	0.0	(168.3)	1,144.4	(168.3)
Liquor Control Board					
Fees, Cannabis Excise Tax	506.4	(3.6)	25.2	528.0	21.6
Beer & Wine Surtax	57.2	0.0	0.5	57.7	0.5
Lottery Commission					
Lottery Revenue	52.3	(0.0)	(12.6)	39.7	(12.6)
State Treasurer					
Interest Earnings	17.4	0.0	(13.5)	3.9	(13.5)
Office of Financial Management					
Other Agencies	206.4	0.0	0.2	206.6	0.2
Administrative Office of the Courts					
Fines and Forfeitures	134.0	0.0	(16.8)	117.2	(16.8)
Total General Fund-State *	\$50,611.1	\$125.2	(\$4,606.8)	\$46,129.5	(\$4,481.6)

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council February 19, 2020

² Forecast for the 2019-21 biennium, adopted June 17, 2020

*Detail may not add to totals because of rounding.

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

Table 3.6
Comparison of the General Fund-State forecast by agency
 2019-21 biennium; GAAP basis
 (millions of dollars)

Forecast by Agency	Feb 2020 Forecast¹	Non-Economic Changes	Forecast Revision	June 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$24,047.9	(\$1.7)	(\$2,619.1)	\$21,427.0	(\$2,620.9)
Business & Occupation	9,642.6	130.9	(1,210.0)	8,563.5	(1,079.1)
Use	1,503.9	(0.0)	(162.2)	1,341.7	(162.3)
Public Utility	892.9	0.0	(55.0)	837.9	(55.0)
Liquor Sales/Liter	612.8	0.0	(2.9)	609.9	(2.9)
Cigarette	654.2	0.0	(11.3)	642.9	(11.3)
Property (State Levy)	7,972.0	(\$0.3)	(112.5)	7,859.2	(112.8)
Real Estate Excise	2,024.8	0.0	(224.5)	1,800.2	(224.5)
Timber Excise	4.1	0.0	(0.9)	3.2	(0.9)
Other	1,067.0	0.0	(32.7)	1,034.3	(32.7)
Subtotal	48,422.3	128.8	(4,431.2)	44,119.8	(4,302.4)
Insurance Commissioner					
Insurance Premiums	1,312.7	0.0	(168.3)	1,144.4	(168.3)
Liquor Control Board					
Fees, Cannabis Excise Tax	506.4	(3.6)	25.2	528.0	21.6
Beer & Wine Surtax	57.2	0.0	0.5	57.7	0.5
Lottery Commission					
Lottery Revenue	51.7	(0.0)	(12.6)	39.1	(12.6)
State Treasurer					
Interest Earnings	16.1	0.0	(14.6)	1.5	(14.6)
Office of Financial Management					
Other Agencies	206.4	0.0	0.2	206.6	0.2
Administrative Office of the Courts					
Fines and Forfeitures	134.0	0.0	(16.8)	117.2	(16.8)
Total General Fund-State *	\$50,706.7	\$125.2	(\$4,617.6)	\$46,214.3	(\$4,492.4)

¹ Forecast for the 2019-21 biennium adopted by the Economic and Revenue Forecast Council February 19, 2020

² Forecast for the 2019-21 biennium, adopted June 17, 2020

*Detail may not add to totals because of rounding.

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

Table 3.7
Comparison of the General Fund-State forecast by agency
 2021-23 biennium; cash basis
 (millions of dollars)

Forecast by Agency	Feb 2020 Forecast¹	Non-Economic Changes	Forecast Revision	June 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$25,508.8	(\$10.3)	(\$2,507.8)	\$22,990.7	(\$2,518.1)
Business & Occupation	10,590.8	221.5	(1,515.3)	9,296.9	(1,293.8)
Use	1,571.3	(0.0)	(187.9)	1,383.3	(187.9)
Public Utility	984.1	0.0	(36.5)	947.6	(36.5)
Liquor Sales/Liter	621.8	0.0	(2.5)	619.3	(2.5)
Cigarette	617.5	0.0	(17.7)	599.8	(17.7)
Property (State Levy)	8,892.8	(1.1)	(231.0)	8,660.7	(232.1)
Real Estate Excise	1,960.0	0.0	72.0	2,032.0	72.0
Timber Excise	4.5	0.0	(0.4)	4.0	(0.4)
Other	1,085.6	0.0	(3.9)	1,081.7	(3.9)
Subtotal	51,837.1	210.1	(4,431.1)	47,616.2	(4,221.0)
Insurance Commissioner					
Insurance Premiums	1,426.3	0.0	(76.2)	1,350.1	(76.2)
Liquor Control Board					
Fees, Cannabis Excise Tax	554.9	3.4	(4.5)	553.8	(1.1)
Beer & Wine Surtax	58.1	0.0	0.4	58.5	0.4
Lottery Commission					
Lottery Revenue	54.0	(0.0)	(6.7)	47.3	(6.7)
State Treasurer					
Interest Earnings	31.1	0.0	(30.2)	0.9	(30.2)
Office of Financial Management					
Other Agencies	198.2	0.0	3.3	201.4	3.3
Administrative Office of the Courts					
Fines and Forfeitures	131.6	0.0	(25.3)	106.3	(25.3)
Total General Fund-State *	\$54,291.3	\$213.5	(\$4,570.3)	\$49,934.5	(\$4,356.8)

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council February 19, 2020

² Forecast for the 2021-23 biennium, adopted June 17, 2020

*Detail may not add to totals because of rounding.

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

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

Forecast by Agency	Feb 2020 Forecast¹	Non-Economic Changes	Forecast Revision	June 2020 Forecast²	Total Change
Department of Revenue					
Retail Sales	\$25,508.8	(\$10.3)	(\$2,507.8)	\$22,990.7	(\$2,518.1)
Business & Occupation	10,590.8	221.5	(1,515.3)	9,296.9	(1,293.8)
Use	1,571.3	(0.0)	(187.9)	1,383.3	(187.9)
Public Utility	984.1	0.0	(36.5)	947.6	(36.5)
Liquor Sales/Liter	621.8	0.0	(2.5)	619.3	(2.5)
Cigarette	617.5	0.0	(17.7)	599.8	(17.7)
Property (State Levy)	8,892.8	(1.1)	(231.0)	8,660.7	(232.1)
Real Estate Excise	1,960.0	0.0	72.0	2,032.0	72.0
Timber Excise	4.5	0.0	(0.4)	4.1	(0.4)
Other	1,085.6	0.0	(3.9)	1,081.7	(3.9)
Subtotal	51,837.1	210.1	(4,431.1)	47,616.2	(4,221.0)
Insurance Commissioner					
Insurance Premiums	1,426.3	0.0	(76.2)	1,350.1	(76.2)
Liquor Control Board					
Fees, Cannabis Excise Tax	554.9	3.4	(4.5)	553.8	(1.1)
Beer & Wine Surtax	58.1	0.0	0.4	58.5	0.4
Lottery Commission					
Lottery Revenue	55.4	(0.0)	(7.0)	48.3	(7.0)
State Treasurer					
Interest Earnings	31.4	0.0	(30.4)	1.0	(30.4)
Office of Financial Management					
Other Agencies	198.2	0.0	3.3	201.4	3.3
Administrative Office of the Courts					
Fines and Forfeitures	131.6	0.0	(25.3)	106.3	(25.3)
Total General Fund-State *	\$54,293.0	\$213.5	(\$4,570.8)	\$49,935.7	(\$4,357.3)

¹ Forecast for the 2021-23 biennium adopted by the Economic and Revenue Forecast Council February 19, 2020

² Forecast for the 2021-23 biennium, adopted June 17, 2020

*Detail may not add to totals because of rounding.

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

Table 3.9

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

Forecast by Source	Fiscal 2020	Fiscal 2021	2019-21 Biennium	Fiscal 2022	Fiscal 2023	2021-23 Biennium	Fiscal 2024	Fiscal 2025	2023-25 Biennium
State Taxes									
Retail sales**	\$11,205.6	\$10,221.4	\$22,990.7	\$11,207.3	\$11,783.4	\$24,738.4	\$12,169.3	\$12,569.1	\$24,738.4
Business & occupation Use**	4,548.2	4,015.3	9,296.9	4,506.6	4,790.3	10,234.4	5,004.2	5,230.2	10,234.4
Public Utility	722.5	619.2	1,383.3	672.5	710.8	1,520.6	742.6	778.0	1,520.6
Liquor sales/liter	404.4	433.6	947.6	467.8	479.8	998.3	491.7	506.6	998.3
Beer & wine surtax	306.3	297.6	619.3	305.9	313.3	646.8	319.9	326.9	646.8
Cigarette	28.7	29.0	58.5	29.2	29.3	59.1	29.5	29.6	59.1
Tobacco products	335.8	324.0	616.6	313.4	303.2	576.6	293.4	283.1	576.6
Cannabis Excise Taxes	52.2	55.7	117.0	58.1	58.9	119.6	59.5	60.1	119.6
Property (state school levy)	151.4	156.9	315.2	153.9	161.3	347.4	169.5	177.9	347.4
Leasehold Excise Tax	3,472.1	4,303.3	8,660.7	4,278.2	4,382.5	9,093.0	4,491.6	4,601.5	9,093.0
Public utility district	36.1	36.5	75.4	37.4	38.0	77.8	38.6	39.2	77.8
Brokered Natural Gas	58.4	61.3	126.2	62.5	63.7	130.7	64.8	65.9	130.7
Real estate excise***	22.3	22.1	44.7	22.2	22.5	45.8	22.7	23.0	45.8
Timber excise	1,061.8	738.4	2,032.0	1,004.3	1,027.7	2,066.0	1,013.1	1,053.0	2,066.0
Estate/inheritance	1.3	1.8	4.0	2.0	2.1	4.4	2.1	2.2	4.4
Boat excise	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Insurance premiums	15.3	15.2	30.4	15.2	15.2	31.4	16.0	15.4	31.4
Penalties and interest on past due taxes	651.2	493.2	1,350.1	658.3	691.8	1,476.9	723.1	753.8	1,476.9
Other	143.7	150.7	340.0	165.0	175.0	367.7	180.8	187.0	367.7
Total Taxes	23,275.1	22,030.3	45,305.4	24,015.6	25,104.8	49,120.3	25,888.9	26,759.7	52,648.6
State Non-Tax Sources									
Licenses, permits, fees	149.0	149.3	302.9	151.0	151.9	300.1	153.2	146.9	300.1
Liquor & Cannabis fees	108.7	111.0	238.6	116.7	121.9	256.5	126.0	130.5	256.5
Earnings on investments	4.2	(0.4)	0.9	0.4	0.5	3.4	1.7	1.7	3.4
Administrative Office of the Courts	62.4	54.8	106.3	53.6	52.7	103.9	52.0	51.9	103.9
Transfers of unclaimed property	117.2	91.4	185.9	92.4	93.4	189.8	94.4	95.4	189.8
Other revenue & transfers	(17.5)	(6.0)	(20.4)	(10.5)	(9.9)	(45.2)	(24.3)	(21.0)	(45.2)
Total Non-Tax	424.1	400.0	824.1	403.6	410.6	814.2	402.9	405.5	808.4
Total General Fund-State *	\$23,699.1	\$22,430.4	\$46,129.5	\$24,419.2	\$25,515.3	\$49,934.5	\$26,291.9	\$27,165.2	\$53,457.0

* 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 June 2020
 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>
February 2016 #	\$36,887	\$1,823				\$43,441
Changes to Forecast						
June 2016	172	(31)	141	(7) #1	134	43,575
September 2016	86	(31)	55	0	55	43,630
November 2016	21	4	26	0	26	43,656
March 2017	241	(55)	186	0	186	43,842
June 2017	47	(13)	34	(1) #2	34	43,875
September 2017	245	(3)	243	3,278 #3	3,521	47,396
November 2017	188	(2)	186	0	186	47,582
February 2018	655	16	671	0	671	48,253
June 2018	426	22	448	(181) #4	267	48,520
September 2018	295	22	317	38 #5	355	48,875
November 2018	186	3	189	0	189	49,064
March 2019	465	(35)	430	115 #6	545	49,609
June 2019	57	29	86	109 #7	195	49,804
September 2019	307	3	310	(84) #8	226	50,030
November 2019	283	(8)	274	0	274	50,304
February 2020	309	(2)	307	0	307	50,611
June 2020	(4,422)	(185)	(4,607)	125 #9	(4,482)	46,129
Total change***:						
From February 2016	(437)	(267)	(704)	3,393	2,688	
Percent change	(1.2)	(14.7)	(1.6)	7.8	6.2	

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

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

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

First official forecast for the 2019-21 biennium.

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

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

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

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

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

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

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

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

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

Table 3.11
Track Record for the 2021-23 General Fund-State Cash Forecast
 February 2018 through June 2020
 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>
February 2018[#]	\$49,551	\$2,381				\$51,932
Changes to Forecast						
June 2018	324	33	357	(7) ^{#1}	350	52,282
September 2018	248	1	249	46 ^{#2}	295	52,577
November 2018	228	(27)	201	0	201	52,778
March 2019	402	(33)	369	190 ^{#3}	559	53,337
June 2019	17	8	24	322 ^{#4}	347	53,683
September 2019	(89)	10	(79)	0	(79)	53,604
November 2019	169	6	175	0	175	53,779
February 2020	501	12	512	0	512	54,291
June 2020	(4,431)	(139)	(4,570)	213 ^{#5}	(4,357)	49,935
Total change***:						
From February 2016	(2,632)	(130)	(2,762)	765	(1,997)	
Percent change	(5.3)	(5.5)	(5.3)	1.5	(3.8)	

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

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

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

[#] First official forecast for the 2021-23 biennium.

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

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

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

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

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

Table 3.12

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

	2019-21		
	GFS	ELTA and OPA	TOTAL
RESOURCES			
Beginning Fund Balance	999.3	981.9	1,981.2
February 2020 Revenue Forecast change	50,611.1	1,728.4	52,339.5
June 2020 Revenue Forecast change	(4,606.8)	(57.4)	(4,664.3)
Current Revenue Totals	46,004.3	1,670.9	47,675.2
Transfer to Budget Stabilization Account (1% of GSR)	(506.9)		(506.9)
Transfer to Budget Stabilization Account (EGSR)	-		-
Enacted Fund Transfers	49.0	160.0	209.0
Assumed Prior Period Adjustments	38.5		38.5
Revenue technical adjustment- stadium	9.4		9.4
2020 Legislative session			
Revenue Legislation	114.8	(0.2)	114.6
Governor Vetoes-revenue legislation	14.0	0.2	14.2
New Fund Transfers	(55.1)	-	(55.1)
Governor Vetoes- new fund transfers	41.3	-	41.3
Budget driven revenue	(3.6)		(3.6)
Total Resources (including beginning fund balance)	46,705.1	2,812.8	49,517.9
EXPENDITURES			
Enacted Budgets			
2019-21 Biennium	50,395.5	2,103.2	52,498.6
2020 Supplemental	323.3	637.7	961.0
Governor's vetoes	(115.9)	(33.5)	(149.4)
Assumed Reversions	(420.1)	-	(420.1)
Total Expenditures	50,182.7	2,707.4	52,890.1
RESERVES			
Projected Ending Balance (GFS + ELTA + OPA)	(3,477.7)	105.4	(3,372.2)
Budget Stabilization Account			
Budget Stabilization Account Beginning Balance	1,618.4		1,618.4
Transfers from General Fund (1% of GSR)	506.9		506.9
Transfers from GFS (EGSR)	-		-
Assumed Interest Earnings	37.2		37.2
Less 2020 Supplemental Approp from BSA-Coronavirus	(200.0)		(200.0)
Projected Budget Stabilization Account Ending Balance	1,962.5		1,962.5
Total Reserves (Near General Fund plus Budget Stabilization)	(1,515.1)	105.4	(1,409.7)

Acronyms

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

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

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$22,669.0	\$21,427.0	\$19,937.5
Business & Occupation Use	9,038.8	8,563.5	7,981.2
Public Utility	1,429.3	1,341.7	1,237.5
Property (school levy)	887.2	837.9	803.1
Real Estate Excise	7,799.5	7,775.4	7,750.5
Other	1,811.6	1,800.2	1,651.4
Subtotal	2,310.8	2,286.4	2,178.6
	45,946.4	44,032.0	41,539.9
Insurance Commissioner¹	1,169.0	1,144.4	1,119.7
Lottery Commission	41.1	39.7	38.3
State Treasurer - Interest earnings	14.7	3.9	(0.4)
Liquor and Cannabis Surtaxes & Fees²	718.5	585.7	672.7
Office of Financial Management			
Other agencies	208.7	206.6	204.5
Administrative Office of the Courts			
Fines and Forfeitures	118.4	117.2	111.9
Total General Fund - State*	\$48,216.7	\$46,129.5	\$43,686.6
Difference from June 2020 Baseline	\$2,087.3		(\$2,442.9)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.14
Alternative forecasts compared to the baseline forecast
2021-23 biennium
(cash basis, millions of dollars)

Forecast by Source	Optimistic Forecast	Baseline Forecast	Pessimistic Forecast
Department of Revenue			
Retail Sales	\$25,893.4	\$22,990.7	\$19,874.1
Business & Occupation Use	10,444.5	9,296.9	8,176.2
Public Utility	1,572.7	1,383.3	1,246.7
Property (school levy)	1,052.3	947.6	881.2
Real Estate Excise	8,707.9	8,660.7	8,508.9
Other	2,105.1	2,032.0	1,520.4
Subtotal	2,378.5	2,304.9	2,052.3
	52,154.4	47,616.2	42,259.9
Insurance Commissioner¹	1,417.6	1,350.1	1,282.6
Lottery Commission	49.6	47.3	44.9
State Treasurer - Interest earnings	20.4	0.9	(6.3)
Liquor and Cannabis Surtaxes & Fees²	762.2	612.3	670.3
Office of Financial Management			
Other agencies	207.5	201.4	195.4
Administrative Office of the Courts			
Fines and Forfeitures	109.7	106.3	94.7
Total General Fund - State*	\$54,721.5	\$49,934.5	\$44,541.5
Difference from June 2020 Baseline	\$4,787.0		(\$5,393.0)

1 Insurance premiums, General Fund-State portion.

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

* Detail may not add to total due to rounding.

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

Table 3.15
Lottery transfers by fund
 June 2020 Forecast
 (cash basis, millions of dollars)

	Lottery: Total Transfers:*	Mariners General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2014	147.9	9.3	0.0	10.8	0.0	0.0	0.3	3.7	113.7	0.0	10.1
2015	143.1	0.6	0.0	11.2	0.0	0.0	0.3	4.7	120.2	0.0	6.1
2013-15 Biennium	291.0	9.9	0.0	22.0	0.0	0.0	0.6	8.4	233.9	0.0	16.1
2016	171.6	17.1	0.0	11.7	0.0	0.0	0.3	3.3	139.1	0.0	0.0
2017	159.7	14.8	0.0	12.2	0.0	0.0	0.3	4.8	126.6	0.0	0.0
2015-17 Biennium	331.2	31.9	0.0	23.8	0.0	0.0	0.7	8.0	265.7	0.0	0.0
2018	183.6	38.5	0.0	12.6	0.0	0.0	0.3	3.5	128.5	0.0	0.0
2019	213.8	38.7	0.0	13.1	0.0	0.0	0.4	5.8	155.7	0.0	0.0
2017-19 Biennium	397.3	77.3	0.0	25.8	0.0	0.0	0.8	9.3	284.2	0.0	0.0
2020	185.3	15.6	0.0	13.7	0.0	0.0	0.4	3.2	152.5	0.0	0.0
2021	189.5	24.1	0.0	14.2	0.0	0.0	0.4	4.0	146.8	0.0	0.0
2019-21 Biennium	374.9	39.7	0.0	27.9	0.0	0.0	0.8	7.2	299.3	0.0	0.0
2022	187.2	23.0	0.0	0.0	0.0	0.0	0.4	4.3	159.6	0.0	0.0
2023	189.7	24.3	0.0	0.0	0.0	0.0	0.4	4.3	160.7	0.0	0.0
2021-23 Biennium	376.9	47.3	0.0	0.0	0.0	0.0	0.8	8.6	320.2	0.0	0.0
2024	192.3	24.5	0.0	0.0	0.0	0.0	0.4	4.3	163.1	0.0	0.0
2025	194.8	24.1	0.0	0.0	0.0	0.0	0.4	4.3	166.0	0.0	0.0
2023-25 Biennium	387.2	48.6	0.0	0.0	0.0	0.0	0.8	8.6	329.2	0.0	0.0

Table 3.16
Lottery transfers by fund
 June 2020 Forecast
 (GAAP basis, millions of dollars)

	Lottery: Total Transfers:*	Mariners General Fund	Mariners Stadium	Exhibition Center & Stadium	Student Achievement Account	School Construction Account	Problem Gambling Account	Economic Development Account	Opportunity Pathways Account	Veteran's VIP Account	Education Legacy Trust Account
2014	147.7	0.6	0.0	10.8	0.0	0.0	0.3	4.0	121.9	0.0	10.1
2015	141.3	0.0	0.0	11.2	0.0	0.0	0.3	4.7	119.0	0.0	6.1
2013-15 Biennium	288.9	0.6	0.0	22.0	0.0	0.0	0.6	8.7	240.9	0.0	16.1
2016	175.5	31.9	0.0	11.7	0.0	0.0	0.3	2.8	128.7	0.0	0.0
2017	161.9	16.8	0.0	12.2	0.0	0.0	0.3	4.9	126.8	0.0	0.0
2015-17 Biennium	337.4	48.7	0.0	23.8	0.0	0.0	0.7	7.7	255.5	0.0	0.0
2018	183.0	31.2	0.0	12.6	0.0	0.0	0.4	4.6	134.2	0.0	0.0
2019	215.8	30.9	0.0	13.1	0.0	0.0	0.4	4.6	166.7	0.0	0.0
2017-19 Biennium	398.8	62.1	0.0	25.8	0.0	0.0	0.8	9.2	300.9	0.0	0.0
2020	183.6	15.8	0.0	13.7	0.0	0.0	0.4	3.2	150.6	0.0	0.0
2021	184.6	23.3	0.0	14.2	0.0	0.0	0.4	4.3	142.4	0.0	0.0
2019-21 Biennium	368.2	39.1	0.0	27.9	0.0	0.0	0.8	7.5	293.0	0.0	0.0
2022	187.5	24.0	0.0	0.0	0.0	0.0	0.4	4.3	158.8	0.0	0.0
2023	189.9	24.3	0.0	0.0	0.0	0.0	0.4	4.3	160.9	0.0	0.0
2021-23 Biennium	377.3	48.3	0.0	0.0	0.0	0.0	0.8	8.6	319.6	0.0	0.0
2024	192.5	24.5	0.0	0.0	0.0	0.0	0.4	4.3	163.3	0.0	0.0
2025	195.0	24.6	0.0	0.0	0.0	0.0	0.4	4.3	165.7	0.0	0.0
2023-25 Biennium	387.6	49.1	0.0	0.0	0.0	0.0	0.8	8.6	329.1	0.0	0.0

* Total Transfers are equal to total sales less total expenses (prizes, cost of sales, administration etc.)
 Source: Lottery Commission, ERF

Table 3.17

General Fund-State, Education Legacy Trust Account and Opportunity Pathways Account (Near General Fund-State)

History and Forecast by Fiscal Year (Cash basis)

June 2020 - Millions of Dollars

	General Fund-State (GF-S) (current definition)		Education Legacy Trust Fund* (ELTA)		Total GF-S plus ELTA		WA Opportunity Pathways Account (OPA)		Total GF-S plus ELTA and OPA	
	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.	Level	% Chg.
History:										
FY 2001	\$11,560	4.4%			\$11,560	4.4%			\$11,560	4.4%
FY 2002	\$11,632	0.6%			\$11,632	0.6%			\$11,632	0.6%
FY 2003	\$11,721	0.8%			\$11,721	0.8%			\$11,721	0.8%
FY 2004	\$12,358	5.4%			\$12,358	5.4%			\$12,358	5.4%
FY 2005	\$13,036	5.5%			\$13,036	5.5%			\$13,036	5.5%
FY 2006	\$14,318	9.8%	\$115		\$14,432	10.7%			\$14,432	10.7%
FY 2007	\$15,467	8.0%	\$266	132.2%	\$15,734	9.0%			\$15,734	9.0%
FY 2008	\$15,659	1.2%	\$213	-20.1%	\$15,872	0.9%			\$15,872	0.9%
FY 2009	\$14,158	-9.6%	\$224	5.4%	\$14,382	-9.4%			\$14,382	-9.4%
FY 2010	\$13,571	-4.1%	\$157	-29.9%	\$13,728	-4.6%			\$13,728	-4.6%
FY 2011	\$14,648	7.9%	\$112	-29.0%	\$14,759	7.5%	\$99		\$14,859	8.2%
FY 2012	\$14,874	1.5%	\$114	2.3%	\$14,988	1.6%	\$118	19.1%	\$15,107	1.7%
FY 2013	\$15,783	6.1%	\$101	-11.5%	\$15,884	6.0%	\$126	5.9%	\$16,009	6.0%
FY 2014	\$16,383	3.8%	\$197	95.3%	\$16,580	4.4%	\$114	-9.4%	\$16,694	4.3%
FY 2015	\$17,283	5.5%	\$207	5.0%	\$17,491	5.5%	\$120	5.7%	\$17,611	5.5%
FY 2016	\$18,579	7.5%	\$215	3.6%	\$18,793	7.4%	\$139	15.7%	\$18,933	7.5%
FY 2017	\$19,739	6.2%	\$252	17.5%	\$19,991	6.4%	\$127	-9.0%	\$20,118	6.3%
FY 2018	\$21,712	10.0%	\$302	19.6%	\$22,014	10.1%	\$129	1.5%	\$22,143	10.1%
FY 2019	\$22,430	3.3%	\$1,352	348.1%	\$23,783	8.0%	\$156	21.1%	\$23,938	8.1%
Forecast:										
FY 2020	\$23,699	5.7%	\$913	-32.5%	\$24,612	3.5%	\$152	-2.0%	\$24,765	3.5%
FY 2021	\$22,430	-5.4%	\$458	-49.8%	\$22,889	-7.0%	\$147	-3.7%	\$23,035	-7.0%
FY 2022	\$24,419	8.9%	\$534	16.6%	\$24,953	9.0%	\$160	8.7%	\$25,113	9.0%
FY 2023	\$25,515	4.5%	\$558	4.4%	\$26,073	4.5%	\$161	0.7%	\$26,234	4.5%
FY 2024	\$26,292	3.0%	\$446	-20.1%	\$26,738	2.5%	\$163	1.5%	\$26,901	2.5%
FY 2025	\$27,165	3.3%	\$470	5.5%	\$27,635	3.4%	\$166	1.8%	\$27,802	3.3%
Biennial Totals										
07-09 Biennium	\$29,817	0.1%	\$437	14.8%	\$30,254	0.3%	\$0	NA	\$30,254	0.3%
09-11 Biennium	\$28,218	-5.4%	\$269	-38.5%	\$28,487	-5.8%	\$99	NA	\$28,586	-5.5%
11-13 Biennium	\$30,657	8.6%	\$215	-19.9%	\$30,872	8.4%	\$244	145.2%	\$31,116	8.8%
13-15 Biennium	\$33,666	9.8%	\$405	88.0%	\$34,071	10.4%	\$234	-4.1%	\$34,305	10.2%
15-17 Biennium	\$38,317	13.8%	\$467	15.4%	\$38,785	13.8%	\$266	13.6%	\$39,050	13.8%
17-19 Biennium	\$44,143	15.2%	\$1,654	254.1%	\$45,797	18.1%	\$284	6.9%	\$46,081	18.0%
19-21 Biennium	\$46,129	4.5%	\$1,372	-17.1%	\$47,501	3.7%	\$299	5.3%	\$47,800	3.7%
21-23 Biennium	\$49,935	8.2%	\$1,092	-20.4%	\$51,027	7.4%	\$320	7.0%	\$51,347	7.4%
23-25 Biennium	\$53,457	7.1%	\$916	-16.1%	\$54,373	6.6%	\$329	2.8%	\$54,702	6.5%

*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
 June 2020
 Thousands of dollars

Fiscal year	Total of cannabis excise taxes plus license fees	LCB administration and pre-distribution allotments	Total to distribute	Distribution of remaining funds						
				DSHS substance abuse program	Dept. of Health cannabis education program	UW/WSU research	Basic Health Plan Trust Account	Health Care Authority 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	\$16,722	\$431,705	\$0	\$10,786	\$374	\$215,096	\$48,660	\$522	\$156,266
2021	\$460,921	\$17,560	\$443,361	\$0	\$10,616	\$390	\$221,131	\$48,746	\$530	\$161,949
2022	\$455,261	\$16,760	\$438,501	\$0	\$10,616	\$390	\$219,251	\$48,746	\$530	\$158,969
2023	\$471,341	\$16,760	\$454,581	\$0	\$10,616	\$390	\$227,291	\$49,446	\$530	\$166,309
2024	\$487,958	\$16,760	\$471,198	\$0	\$10,616	\$390	\$235,599	\$49,446	\$530	\$174,617
2025	\$504,737	\$16,760	\$487,977	\$0	\$10,616	\$390	\$243,989	\$49,446	\$530	\$183,007
Biennial totals										
2013-15	\$67,486	\$22,074	\$45,412	\$5,166	\$0	\$0	\$22,706	\$2,271	\$0	\$15,269
2015-17	\$468,686	\$17,752	\$450,934	\$40,600	\$15,000	\$690	\$225,467	\$20,770	\$762	\$147,645
2017-19	\$751,799	\$28,330	\$723,469	\$27,786	\$19,525	\$730	\$361,735	\$63,807	\$1,028	\$248,859
2019-21	\$909,348	\$34,282	\$875,066	\$0	\$21,402	\$764	\$436,227	\$97,406	\$1,052	\$318,215
2021-23	\$926,603	\$33,520	\$893,083	\$0	\$21,232	\$780	\$446,541	\$98,192	\$1,060	\$325,277
2023-25	\$992,695	\$33,520	\$959,175	\$0	\$21,232	\$780	\$479,588	\$98,892	\$1,060	\$357,624

*Before distributions to local governments

Table 3.19
Workforce Education Investment Account
 June 2020
 Thousands of dollars

	FY20	FY21	2019-21 Biennium	FY22	FY23	2021-23 Biennium	FY24	FY25	2023-25 Biennium
February 2020 forecast	45,100	305,300	350,400	307,500	319,900	627,400	328,900	338,400	667,300
Forecast change	(11,009)	(17,590)	(28,600)	(31,524)	(24,305)	(55,829)	(9,918)	7,314	(2,604)
June 2020 forecast	34,091	287,710	321,800	275,976	295,595	571,571	318,982	345,714	664,696

Table 3.20

Signed GF-S revenue legislation and budget driven revenue changes

Passed in the 2020 Legislative Session

(Millions of dollars)

Bill #	Bill title	Tax Type/Fee	FY20	FY21	FY22	FY23	FY24	FY25
2230	Indian tribe-owned property	Property tax	0.000	-0.210	-0.390	-0.400	-0.400	-0.400
2384	Nonprofit housing/prop. tax	Property tax	0.000	-0.040	-0.077	-0.067	-0.067	-0.067
2486	Electric Battery Marine Incentive	Sales tax	0.000	-0.409	-0.359	-0.509	-0.509	-0.509
2803	Tribal Tax Compacts	Sales tax	0.000	-1.000	-0.500	-0.500	-0.500	-0.500
2803	Tribal Tax Compacts	B&O tax	0.000	-3.140	-3.760	-3.760	-3.760	-3.760
2950	Multifamily Housing	Property tax	0.000	-0.036	-0.069	-0.071	-0.071	-0.071
5147	Feminine Hygiene Products	Sales tax	0.000	-4.127	-4.643	-4.786	-4.786	-4.786
5323	Plastic Bags	Sales tax	0.000	3.794	3.694	3.694	3.694	3.694
6068	Large Private Aircraft	Sales tax	0.000	0.000	-2.900	-3.500	-3.500	-3.500
6312	Nonprofit Fund-Raising	Use tax	0.000	-0.011	-0.012	-0.012	-0.012	-0.012
6690	Aerospace B&O Taxes	B&O tax	18.000	116.000	115.000	114.000	113.000	112.000
Total revenue legislation-fiscal year-GFS			18.000	110.821	105.984	104.089	103.089	102.089
Biennium totals				128.821		210.073		205.178
2020 Budget driven revenue								
2870	Marijuana retail licenses	GFS	0.000	2.507	4.990	4.990	4.990	4.990
	Liquor Control Board (Liquor)	GFS	0.031	-2.419	-1.093	0.070	0.070	0.070
	Liquor Control Board (Marijuana)	GFS	-1.587	-2.157	-2.398	-3.126	-3.126	-3.126
	Lottery	GFS	0.019	-0.023	-0.004	-0.004	-0.004	-0.004
Total budget driven revenue-fiscal year-GFS			-1.537	-2.092	1.495	1.930	1.930	1.930
Biennium totals				-3.629		3.425		3.860
Total of GF-S revenue legislation and budget-driven revenue changes			16.463	108.729	107.479	106.019	105.019	104.019
Biennium totals				125.192		213.498		209.038

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Detail Components of the Washington State Economic and Revenue Forecast

Calendar Years

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

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

	2018	2019	2020	2021	2022	2023	2024	2025
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,638.2	19,073.1	17,913.7	18,629.8	19,364.0	19,986.0	20,448.7	20,913.3
% Ch	2.9	2.3	-6.1	4.0	3.9	3.2	2.3	2.3
Real Consumption	12,944.5	13,280.1	12,380.2	12,922.0	13,357.1	13,742.3	14,102.4	14,471.2
% Ch	3.0	2.6	-6.8	4.4	3.4	2.9	2.6	2.6
Real Nonresidential Fixed Investment	2,692.3	2,748.1	2,523.0	2,524.6	2,669.7	2,807.1	2,919.2	3,026.9
% Ch	6.4	2.1	-8.2	0.1	5.7	5.1	4.0	3.7
Real Residential Fixed Investment	602.9	593.8	553.6	567.4	614.8	617.0	613.9	610.1
% Ch	-1.5	-1.5	-6.8	2.5	8.3	0.3	-0.5	-0.6
Real Personal Income	16,476.8	16,969.1	17,392.6	17,513.9	17,899.1	18,276.0	18,619.0	19,133.9
% Ch	3.4	3.0	2.5	0.7	2.2	2.1	1.9	2.8
Real Per Capita Income (\$/Person)	50,277	51,413	52,324	52,321	53,103	53,854	54,499	55,640
% Ch	2.8	2.3	1.8	0.0	1.5	1.4	1.2	2.1
Price and Wage Indexes								
PCE Price Index (2012=100)	108.1	109.7	110.6	112.0	113.6	115.4	117.3	119.4
% Ch	2.1	1.4	0.9	1.3	1.4	1.5	1.6	1.8
U.S. Consumer Price Index (1982-84=1.0)	2.511	2.557	2.586	2.635	2.682	2.727	2.779	2.835
% Ch	2.4	1.8	1.2	1.9	1.8	1.7	1.9	2.0
Employment Cost Index (Dec. 2005=1.0)	1.334	1.374	1.413	1.440	1.482	1.524	1.562	1.605
% Ch	3.1	3.0	2.8	1.9	2.9	2.8	2.5	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	20,580.2	21,427.7	20,317.0	21,382.1	22,610.0	23,750.2	24,743.4	25,779.1
% Ch	5.4	4.1	-5.2	5.2	5.7	5.0	4.2	4.2
Personal Income	17,819.2	18,608.3	19,240.4	19,618.0	20,339.2	21,088.5	21,838.8	22,844.6
% Ch	5.6	4.4	3.4	2.0	3.7	3.7	3.6	4.6
Employment (Millions)								
U.S. Civilian Labor Force	162.1	163.5	160.8	164.0	166.1	167.4	168.1	168.8
Total U.S. Employment	155.8	157.5	146.7	153.9	158.2	160.6	161.2	162.0
Unemployment Rate (%)	3.89	3.66	8.90	6.20	4.99	4.38	4.31	4.13
Nonfarm Payroll Employment	148.89	150.94	142.12	149.08	152.82	154.65	155.95	157.39
% Ch	1.6	1.4	-5.8	4.9	2.5	1.2	0.8	0.9
Manufacturing	12.69	12.84	11.90	11.92	12.04	12.10	12.29	12.44
% Ch	2.0	1.2	-7.3	0.2	1.0	0.5	1.6	1.2
Durable Manufacturing	7.95	8.06	7.40	7.35	7.46	7.50	7.65	7.76
% Ch	2.7	1.4	-8.2	-0.6	1.5	0.6	2.0	1.5
Nondurable Manufacturing	4.74	4.78	4.50	4.57	4.58	4.60	4.64	4.67
% Ch	0.9	0.8	-5.8	1.6	0.1	0.4	0.9	0.7
Construction	7.29	7.49	6.92	6.61	6.99	7.23	7.39	7.54
% Ch	4.6	2.9	-7.6	-4.6	5.7	3.4	2.3	2.0
Service-Providing	128.19	129.87	122.70	130.09	133.30	134.81	135.73	136.86
% Ch	1.3	1.3	-5.5	6.0	2.5	1.1	0.7	0.8
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	64.9	57.0	38.4	41.1	42.5	44.1	45.7	47.4
Personal Saving/Disposable Income (%)	7.7	7.9	17.6	13.7	12.9	12.2	11.3	11.3
Auto Sales (Millions)	5.3	4.7	3.2	3.4	3.5	3.5	3.5	3.5
% Ch	-12.8	-11.3	-32.1	5.0	4.9	-0.4	-1.4	0.5
Housing Starts (Millions)	1.248	1.295	1.131	1.233	1.299	1.256	1.199	1.211
% Ch	3.4	3.8	-12.7	9.0	5.4	-3.3	-4.5	1.0
Federal Budget Surplus (Billions)	-1,009.8	-1,190.1	-3,194.8	-1,807.2	-1,641.7	-1,504.2	-1,372.5	-1,345.2
Net Exports (Billions)	-638.2	-631.9	-430.1	-605.4	-656.3	-493.8	-421.8	-414.5
3-Month Treasury Bill Rate (%)	1.94	2.06	0.45	0.07	0.08	0.07	0.12	0.17
10-Year Treasury Note Yield (%)	2.91	2.14	1.10	0.84	0.91	1.10	1.43	1.80
Bond Index of 20 G.O. Munis. (%)	3.96	3.60	2.89	2.99	3.17	3.35	3.57	3.82
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.42	3.10	3.00	3.04	3.24	3.43

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

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	18,974.7	16,982.9	17,665.4	18,031.7	18,319.2	18,549.4	18,741.9	18,908.8
% Ch , Annual Rate	-5.0	-35.8	17.1	8.6	6.5	5.1	4.2	3.6
Real Consumption	13,180.8	11,639.0	12,205.8	12,495.2	12,681.8	12,850.3	13,009.4	13,146.4
% Ch , Annual Rate	-6.8	-39.2	21.0	9.8	6.1	5.4	5.0	4.3
Real Nonresidential Fixed Investment	2,670.5	2,399.8	2,451.2	2,570.5	2,519.5	2,498.9	2,519.7	2,560.4
% Ch , Annual Rate	-7.9	-34.8	8.8	20.9	-7.7	-3.2	3.4	6.6
Real Residential Fixed Investment	629.2	521.7	528.7	535.0	535.8	555.2	579.1	599.6
% Ch , Annual Rate	18.5	-52.7	5.4	4.9	0.6	15.3	18.4	14.9
Real Personal Income	17,125.9	17,633.4	17,587.7	17,223.2	17,343.9	17,511.3	17,585.1	17,615.3
% Ch , Annual Rate	1.0	12.4	-1.0	-8.0	2.8	3.9	1.7	0.7
Real Per Capita Income (\$/Person)	51,659	53,096	52,865	51,678	51,949	52,359	52,488	52,487
% Ch , Annual Rate	0.2	11.6	-1.7	-8.7	2.1	3.2	1.0	0.0
Price and Wage Indexes								
PCE Price Index (2012=100)	110.7	110.2	110.7	111.0	111.4	111.8	112.2	112.6
% Ch , Annual Rate	1.3	-1.6	1.6	1.2	1.4	1.7	1.4	1.5
U.S. Consumer Price Index (1982-84=1.0)	2.586	2.570	2.588	2.600	2.613	2.629	2.642	2.656
% Ch , Annual Rate	1.2	-2.4	2.8	1.8	2.1	2.4	2.1	2.0
Employment Cost Index (Dec. 2005=1.0)	1.403	1.410	1.416	1.422	1.428	1.435	1.443	1.453
% Ch , Annual Rate	4.1	1.9	1.8	1.7	1.7	2.1	2.1	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	21,534.9	19,194.7	20,040.0	20,498.3	20,880.7	21,230.9	21,553.2	21,863.8
% Ch , Annual Rate	-3.5	-36.9	18.8	9.5	7.7	6.9	6.2	5.9
Personal Income	18,949.8	19,434.4	19,462.9	19,114.7	19,314.6	19,582.1	19,734.9	19,840.4
% Ch , Annual Rate	2.2	10.6	0.6	-7.0	4.2	5.7	3.2	2.2
Employment (Millions)								
U.S. Civilian Labor Force	164.0	157.9	159.9	161.4	162.7	163.8	164.5	165.0
Total U.S. Employment	157.7	137.6	143.8	147.6	151.2	153.7	155.0	155.9
Unemployment Rate (%)	3.82	12.94	10.22	8.61	7.12	6.18	5.84	5.65
Nonfarm Payroll Employment	151.92	133.62	139.46	143.46	146.57	148.95	150.04	150.75
% Ch , Annual Rate	0.4	-40.2	18.7	12.0	9.0	6.7	3.0	1.9
Manufacturing	12.83	11.52	11.51	11.72	11.84	11.98	11.91	11.96
% Ch , Annual Rate	-0.4	-35.0	-0.4	7.4	4.2	4.7	-2.3	1.9
Durable Manufacturing	8.05	7.12	7.13	7.28	7.29	7.38	7.32	7.41
% Ch , Annual Rate	-0.1	-38.5	0.4	8.5	0.4	5.4	-3.6	5.0
Nondurable Manufacturing	4.79	4.40	4.38	4.44	4.55	4.59	4.59	4.56
% Ch , Annual Rate	-1.0	-28.7	-1.8	5.7	10.6	3.5	-0.1	-2.9
Construction	7.60	6.85	6.72	6.52	6.52	6.53	6.65	6.73
% Ch , Annual Rate	3.1	-34.2	-7.0	-11.3	-0.2	0.7	7.1	5.3
Service-Providing	130.78	114.62	120.68	124.73	127.74	129.98	131.03	131.59
% Ch , Annual Rate	0.3	-41.0	22.9	14.1	10.0	7.2	3.3	1.7
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	45.8	28.0	39.8	40.2	40.6	40.9	41.3	41.6
Personal Saving/Disposable Income (%)	9.6	24.5	20.6	15.8	14.8	14.2	13.4	12.7
Auto Sales (Millions)	3.8	2.7	2.9	3.3	3.2	3.3	3.4	3.5
% Ch , Annual Rate	-42.4	-74.1	28.1	68.1	-8.6	13.7	5.1	8.6
Housing Starts (Millions)	1.487	0.905	1.003	1.129	1.204	1.214	1.246	1.269
% Ch , Annual Rate	16.0	-86.3	50.8	60.5	29.2	3.5	10.8	7.6
Federal Budget Surplus (Billions)	-1,344.2	-4,857.3	-4,090.4	-2,487.1	-1,950.3	-1,833.1	-1,776.8	-1,668.5
Net Exports (Billions)	-526.2	-577.7	-306.7	-309.8	-415.6	-565.4	-686.8	-753.9
3-Month Treasury Bill Rate (%)	1.11	0.22	0.26	0.21	0.13	0.06	0.03	0.05
10-Year Treasury Note Yield (%)	1.38	0.86	1.08	1.06	0.93	0.84	0.79	0.81
Bond Index of 20 G.O. Munis. (%)	3.45	2.83	2.55	2.73	2.84	2.95	3.08	3.08
30-Year Fixed Mortgage Rate (%)	3.51	3.32	3.50	3.35	3.14	3.12	3.08	3.07

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

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	19,062.5	19,272.0	19,471.9	19,649.5	19,797.2	19,928.7	20,049.9	20,168.3
% Ch , Annual Rate	3.3	4.5	4.2	3.7	3.0	2.7	2.5	2.4
Real Consumption	13,221.3	13,311.0	13,399.0	13,497.1	13,595.7	13,696.0	13,792.6	13,884.9
% Ch , Annual Rate	2.3	2.7	2.7	3.0	3.0	3.0	2.9	2.7
Real Nonresidential Fixed Investment	2,607.7	2,652.4	2,691.5	2,727.3	2,760.0	2,792.8	2,823.2	2,852.5
% Ch , Annual Rate	7.6	7.0	6.0	5.4	4.9	4.8	4.4	4.2
Real Residential Fixed Investment	609.5	614.3	617.3	618.1	617.6	617.4	616.5	616.2
% Ch , Annual Rate	6.8	3.2	2.0	0.5	-0.3	-0.1	-0.6	-0.2
Real Personal Income	17,721.2	17,837.4	17,969.7	18,068.0	18,176.4	18,249.9	18,301.6	18,375.9
% Ch , Annual Rate	2.4	2.6	3.0	2.2	2.4	1.6	1.1	1.6
Real Per Capita Income (\$/Person)	52,711	52,966	53,267	53,467	53,697	53,823	53,884	54,012
% Ch , Annual Rate	1.7	1.9	2.3	1.5	1.7	0.9	0.5	1.0
Price and Wage Indexes								
PCE Price Index (2012=100)	113.0	113.4	113.8	114.2	114.7	115.1	115.6	116.1
% Ch , Annual Rate	1.4	1.4	1.4	1.5	1.6	1.6	1.7	1.6
U.S. Consumer Price Index (1982-84=1.0)	2.666	2.678	2.688	2.697	2.708	2.720	2.733	2.746
% Ch , Annual Rate	1.6	1.7	1.5	1.4	1.6	1.8	2.0	1.8
Employment Cost Index (Dec. 2005=1.0)	1.465	1.477	1.488	1.499	1.510	1.519	1.528	1.537
% Ch , Annual Rate	3.3	3.2	3.1	3.0	3.0	2.4	2.3	2.4
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	22,139.3	22,454.5	22,770.8	23,075.5	23,357.7	23,624.8	23,885.2	24,133.2
% Ch , Annual Rate	5.1	5.8	5.8	5.5	5.0	4.7	4.5	4.2
Personal Income	20,028.6	20,231.5	20,454.3	20,642.5	20,847.7	21,013.8	21,162.0	21,330.5
% Ch , Annual Rate	3.8	4.1	4.5	3.7	4.0	3.2	2.9	3.2
Employment (Millions)								
U.S. Civilian Labor Force	165.5	166.0	166.4	166.7	167.1	167.3	167.5	167.6
Total U.S. Employment	156.7	157.8	158.8	159.6	160.2	160.6	160.8	160.9
Unemployment Rate (%)	5.51	5.12	4.79	4.56	4.43	4.38	4.36	4.34
Nonfarm Payroll Employment	151.49	152.49	153.34	153.94	154.36	154.49	154.67	155.09
% Ch , Annual Rate	2.0	2.7	2.2	1.6	1.1	0.4	0.5	1.1
Manufacturing	12.05	12.04	12.04	12.04	12.05	12.07	12.11	12.17
% Ch , Annual Rate	2.9	-0.4	0.1	-0.2	0.5	0.8	1.2	2.1
Durable Manufacturing	7.48	7.46	7.46	7.45	7.46	7.48	7.51	7.56
% Ch , Annual Rate	4.2	-1.2	-0.2	-0.5	0.5	1.3	1.7	2.6
Nondurable Manufacturing	4.57	4.58	4.59	4.59	4.59	4.59	4.60	4.61
% Ch , Annual Rate	0.7	1.1	0.7	0.4	0.3	0.0	0.4	1.3
Construction	6.86	6.97	7.02	7.10	7.15	7.20	7.25	7.30
% Ch , Annual Rate	7.6	6.7	3.1	4.4	2.9	3.1	2.7	2.7
Service-Providing	132.11	133.00	133.78	134.31	134.65	134.70	134.79	135.09
% Ch , Annual Rate	1.6	2.7	2.4	1.6	1.0	0.2	0.3	0.9
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	42.0	42.3	42.7	43.1	43.5	43.9	44.3	44.7
Personal Saving/Disposable Income (%)	12.8	12.8	13.0	12.9	12.7	12.4	12.0	11.7
Auto Sales (Millions)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
% Ch , Annual Rate	7.8	0.6	-1.5	1.0	-0.8	0.2	-1.5	-0.6
Housing Starts (Millions)	1.276	1.311	1.310	1.301	1.287	1.281	1.235	1.221
% Ch , Annual Rate	2.2	11.6	-0.3	-2.8	-4.1	-2.0	-13.6	-4.4
Federal Budget Surplus (Billions)	-1,674.8	-1,655.3	-1,648.4	-1,588.1	-1,568.7	-1,527.2	-1,480.2	-1,440.6
Net Exports (Billions)	-742.5	-684.1	-622.6	-576.2	-537.9	-505.8	-476.6	-454.8
3-Month Treasury Bill Rate (%)	0.07	0.08	0.09	0.10	0.11	0.01	0.07	0.10
10-Year Treasury Note Yield (%)	0.83	0.88	0.93	0.99	1.06	0.98	1.12	1.23
Bond Index of 20 G.O. Munis. (%)	3.12	3.14	3.18	3.24	3.32	3.26	3.38	3.45
30-Year Fixed Mortgage Rate (%)	3.04	2.99	2.97	2.97	2.99	3.01	3.04	3.13

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

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Real National Income Accounts (Billions of Chained 2012 Dollars)								
Real Gross Domestic Product	20,284.5	20,393.1	20,501.7	20,615.6	20,732.9	20,853.5	20,973.0	21,093.9
% Ch , Annual Rate	2.3	2.2	2.1	2.2	2.3	2.3	2.3	2.3
Real Consumption	13,972.8	14,058.3	14,144.8	14,233.9	14,326.9	14,422.5	14,517.6	14,617.6
% Ch , Annual Rate	2.6	2.5	2.5	2.5	2.6	2.7	2.7	2.8
Real Nonresidential Fixed Investment	2,880.7	2,906.5	2,931.6	2,957.9	2,984.1	3,012.3	3,041.3	3,069.8
% Ch , Annual Rate	4.0	3.6	3.5	3.6	3.6	3.8	3.9	3.8
Real Residential Fixed Investment	615.5	614.3	612.8	613.0	612.4	611.8	609.8	606.5
% Ch , Annual Rate	-0.5	-0.8	-1.0	0.2	-0.4	-0.4	-1.3	-2.1
Real Personal Income	18,465.5	18,559.3	18,667.8	18,783.5	18,942.6	19,082.2	19,198.1	19,312.8
% Ch , Annual Rate	2.0	2.0	2.4	2.5	3.4	3.0	2.5	2.4
Real Per Capita Income (\$/Person)	54,185	54,369	54,597	54,845	55,219	55,535	55,781	56,024
% Ch , Annual Rate	1.3	1.4	1.7	1.8	2.8	2.3	1.8	1.7
Price and Wage Indexes								
PCE Price Index (2012=100)	116.5	117.0	117.5	118.0	118.6	119.1	119.7	120.2
% Ch , Annual Rate	1.6	1.7	1.7	1.7	1.8	1.7	1.9	1.9
U.S. Consumer Price Index (1982-84=1.0)	2.758	2.772	2.786	2.799	2.814	2.828	2.842	2.858
% Ch , Annual Rate	1.9	2.0	2.0	2.0	2.1	2.0	2.1	2.2
Employment Cost Index (Dec. 2005=1.0)	1.547	1.557	1.567	1.577	1.588	1.600	1.611	1.622
% Ch , Annual Rate	2.7	2.6	2.5	2.5	2.9	3.0	2.9	2.8
Current Dollar National Income (Billions of Dollars)								
Gross Domestic Product	24,379.5	24,619.4	24,861.9	25,112.9	25,374.5	25,637.8	25,912.2	26,191.9
% Ch , Annual Rate	4.1	4.0	4.0	4.1	4.2	4.2	4.3	4.4
Personal Income	21,519.7	21,720.7	21,941.9	22,172.9	22,463.1	22,726.0	22,970.9	23,218.5
% Ch , Annual Rate	3.6	3.8	4.1	4.3	5.3	4.8	4.4	4.4
Employment (Millions)								
U.S. Civilian Labor Force	167.8	168.0	168.1	168.3	168.5	168.7	168.9	169.1
Total U.S. Employment	161.1	161.2	161.3	161.4	161.6	161.9	162.1	162.4
Unemployment Rate (%)	4.31	4.32	4.32	4.29	4.24	4.16	4.09	4.02
Nonfarm Payroll Employment	155.49	155.81	156.10	156.40	156.90	157.35	157.54	157.77
% Ch, Annual Rate	1.0	0.8	0.7	0.8	1.3	1.1	0.5	0.6
Manufacturing	12.23	12.28	12.31	12.34	12.41	12.44	12.45	12.45
% Ch, Annual Rate	1.9	1.5	1.1	1.0	2.1	1.2	0.1	0.3
Durable Manufacturing	7.60	7.64	7.67	7.69	7.74	7.77	7.77	7.78
% Ch, Annual Rate	2.3	1.9	1.3	1.1	2.7	1.5	0.2	0.4
Nondurable Manufacturing	4.63	4.64	4.65	4.66	4.67	4.68	4.67	4.68
% Ch, Annual Rate	1.1	0.9	0.8	0.8	1.1	0.7	-0.2	0.0
Construction	7.34	7.38	7.41	7.45	7.49	7.53	7.56	7.59
% Ch, Annual Rate	2.2	1.9	2.0	2.2	2.0	2.0	1.9	1.8
Service-Providing	135.40	135.63	135.84	136.07	136.47	136.83	136.98	137.17
% Ch, Annual Rate	0.9	0.7	0.6	0.7	1.2	1.1	0.4	0.5
Miscellaneous Indicators								
Oil-WTI (\$ per barrel)	45.1	45.5	45.9	46.3	46.7	47.2	47.6	48.0
Personal Saving/Disposable Income (%)	11.5	11.3	11.2	11.2	11.3	11.4	11.3	11.2
Auto Sales (Millions)	3.5	3.5	3.5	3.4	3.5	3.5	3.5	3.5
% Ch, Annual Rate	-3.2	-1.0	-0.9	-0.8	1.0	1.1	2.2	2.1
Housing Starts (Millions)	1.220	1.198	1.191	1.188	1.184	1.227	1.228	1.203
% Ch, Annual Rate	-0.5	-6.9	-2.5	-0.9	-1.2	15.4	0.2	-7.8
Federal Budget Surplus (Billions)	-1,409.5	-1,378.4	-1,360.6	-1,341.7	-1,350.9	-1,346.5	-1,344.4	-1,339.2
Net Exports (Billions)	-434.7	-423.8	-416.0	-412.6	-412.8	-414.9	-414.3	-416.1
3-Month Treasury Bill Rate (%)	0.12	0.12	0.13	0.12	0.23	0.17	0.15	0.13
10-Year Treasury Note Yield (%)	1.31	1.40	1.47	1.55	1.75	1.76	1.80	1.87
Bond Index of 20 G.O. Munis. (%)	3.50	3.55	3.58	3.64	3.79	3.79	3.82	3.87
30-Year Fixed Mortgage Rate (%)	3.20	3.19	3.25	3.31	3.37	3.42	3.43	3.48

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

	2018	2019	2020	2021	2022	2023	2024	2025
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	432.202	450.665	463.771	467.126	476.927	486.715	496.273	510.463
% Ch	5.3	4.3	2.9	0.7	2.1	2.1	2.0	2.9
Real Wage and Salary Disb.	219.298	231.248	226.453	241.149	249.304	254.311	258.413	264.548
% Ch	6.5	5.4	-2.1	6.5	3.4	2.0	1.6	2.4
Real Nonwage Income	212.904	219.417	237.318	225.977	227.622	232.405	237.860	245.915
% Ch	4.1	3.1	8.2	-4.8	0.7	2.1	2.3	3.4
Real Per Capita Income (\$/Person)	57,445	59,177	60,188	59,995	60,612	61,217	61,819	62,997
% Ch	3.9	3.0	1.7	-0.3	1.0	1.0	1.0	1.9
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.081	1.097	1.106	1.120	1.136	1.154	1.173	1.194
% Ch	2.1	1.4	0.9	1.3	1.4	1.5	1.6	1.8
Seattle Cons. Price Index (1982-84=1.0)	2.711	2.779	2.818	2.871	2.923	2.971	3.028	3.090
% Ch	3.2	2.5	1.4	1.9	1.8	1.7	1.9	2.0
Average Nonfarm Annual Wage	67,640	70,989	74,260	76,320	77,803	79,691	81,677	84,434
% Ch	6.4	5.0	4.6	2.8	1.9	2.4	2.5	3.4
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.42	29.16	28.22	28.48	29.26	30.01	30.71	31.49
% Ch	3.8	2.6	-3.2	0.9	2.7	2.6	2.3	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	467.399	494.189	513.039	523.244	541.944	561.618	582.094	609.459
% Ch	7.5	5.7	3.8	2.0	3.6	3.6	3.6	4.7
Disposable Personal Income	412.904	436.210	461.310	465.790	482.716	500.081	516.468	539.474
% Ch	8.1	5.6	5.8	1.0	3.6	3.6	3.3	4.5
Per Capita Income (\$/Person)	62,122	64,891	66,581	67,202	68,874	70,637	72,509	75,213
% Ch	6.0	4.5	2.6	0.9	2.5	2.6	2.6	3.7
Employment (Thousands)								
Washington Civilian Labor Force	3,806.8	3,912.7	4,008.3	4,138.3	4,203.0	4,242.0	4,269.9	4,297.9
Total Washington Employment	3,637.3	3,745.8	3,618.5	3,855.0	3,963.9	4,021.0	4,047.0	4,077.2
Unemployment Rate (%)	4.45	4.27	9.70	6.85	5.69	5.21	5.22	5.13
Nonfarm Payroll Employment	3,401.1	3,468.6	3,276.7	3,435.9	3,535.3	3,575.5	3,603.3	3,632.9
% Ch	2.4	2.0	-5.5	4.9	2.9	1.1	0.8	0.8
Manufacturing	287.8	293.6	265.7	261.2	267.1	269.7	273.2	275.8
% Ch	1.2	2.0	-9.5	-1.7	2.3	1.0	1.3	1.0
Durable Manufacturing	202.2	206.8	184.3	178.2	183.4	184.7	186.3	187.4
% Ch	0.9	2.3	-10.9	-3.3	3.0	0.7	0.9	0.6
Aerospace	83.9	88.5	80.8	77.3	79.7	79.3	77.8	76.4
% Ch	-0.3	5.5	-8.7	-4.5	3.2	-0.6	-1.9	-1.8
Nondurable Manufacturing	85.6	86.8	81.4	83.1	83.7	85.0	86.8	88.4
% Ch	2.0	1.4	-6.2	2.1	0.7	1.6	2.1	1.8
Construction	213.1	219.4	190.7	190.0	198.3	200.2	200.2	199.1
% Ch	6.7	3.0	-13.1	-0.4	4.4	0.9	0.0	-0.5
Service-Providing	2,893.9	2,949.7	2,815.3	2,979.6	3,064.5	3,100.2	3,124.5	3,152.5
% Ch	2.2	1.9	-4.6	5.8	2.8	1.2	0.8	0.9
Software Publishers	65.3	70.0	70.6	69.7	71.5	72.4	73.6	74.8
% Ch	6.4	7.1	0.8	-1.3	2.7	1.3	1.6	1.5
Electronic Shopping and Mail-Order	54.8	63.5	74.3	77.0	79.3	81.3	83.1	84.9
% Ch	10.1	15.8	17.1	3.6	3.0	2.5	2.3	2.2
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	47.746	48.424	37.114	38.927	40.533	39.693	37.930	37.729
% Ch	4.3	1.4	-23.4	4.9	4.1	-2.1	-4.4	-0.5
Single-Family	23.676	23.300	19.488	24.756	25.218	24.322	22.931	22.539
% Ch	2.4	-1.6	-16.4	27.0	1.9	-3.6	-5.7	-1.7
Multi-Family	24.070	25.124	17.626	14.171	15.316	15.371	15.000	15.190
% Ch	6.1	4.4	-29.8	-19.6	8.1	0.4	-2.4	1.3
30-Year Fixed Mortgage Rate (%)	4.54	3.94	3.42	3.10	3.00	3.04	3.24	3.43

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

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	456.126	470.863	468.125	459.968	463.071	467.058	468.706	469.668
% Ch, Annual Rate	0.8	13.6	-2.3	-6.8	2.7	3.5	1.4	0.8
Real Wage and Salary Disb.	233.259	218.151	223.751	230.652	236.553	240.592	242.816	244.636
% Ch, Annual Rate	-1.5	-23.5	10.7	12.9	10.6	7.0	3.7	3.0
Real Nonwage Income	222.868	252.712	244.374	229.316	226.518	226.466	225.891	225.032
% Ch, Annual Rate	3.2	65.3	-12.6	-22.5	-4.8	-0.1	-1.0	-1.5
Real Per Capita Income (\$/Person)	59,437	61,182	60,670	59,461	59,711	60,068	60,120	60,082
% Ch, Annual Rate	-0.5	12.3	-3.3	-7.7	1.7	2.4	0.3	-0.3
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.106	1.102	1.107	1.110	1.114	1.118	1.122	1.126
% Ch, Annual Rate	1.3	-1.6	1.6	1.2	1.4	1.7	1.4	1.5
Seattle Cons. Price Index (1982-84=1.0)	2.818	2.801	2.820	2.833	2.848	2.864	2.879	2.894
% Ch, Annual Rate	2.7	-2.5	2.8	1.8	2.1	2.4	2.1	2.0
Average Nonfarm Annual Wage	71,274	75,466	75,017	75,283	75,797	76,144	76,508	76,831
% Ch, Annual Rate	-2.6	25.7	-2.4	1.4	2.8	1.8	1.9	1.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.70	27.96	28.07	28.17	28.27	28.40	28.53	28.71
% Ch, Annual Rate	-5.3	-9.9	1.5	1.4	1.4	1.8	1.9	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	504.685	518.953	518.035	510.481	515.688	522.288	526.005	528.995
% Ch, Annual Rate	2.1	11.8	-0.7	-5.7	4.1	5.2	2.9	2.3
Disposable Personal Income	445.718	471.609	469.705	458.206	460.492	464.905	467.476	470.289
% Ch, Annual Rate	2.0	25.3	-1.6	-9.4	2.0	3.9	2.2	2.4
Per Capita Income (\$/Person)	65,765	67,431	67,139	65,991	66,495	67,171	67,469	67,671
% Ch, Annual Rate	0.8	10.5	-1.7	-6.7	3.1	4.1	1.8	1.2
Employment (Thousands)								
Washington Civilian Labor Force	3,936.1	3,993.4	4,032.1	4,071.7	4,104.0	4,130.8	4,150.1	4,168.1
Total Washington Employment	3,767.6	3,428.8	3,584.0	3,693.6	3,785.0	3,848.2	3,880.5	3,906.4
Unemployment Rate (%)	4.28	14.14	11.11	9.29	7.77	6.84	6.50	6.28
Nonfarm Payroll Employment	3,515.7	3,089.6	3,201.8	3,299.7	3,373.5	3,430.2	3,457.9	3,482.1
% Ch, Annual Rate	2.3	-40.4	15.3	12.8	9.2	6.9	3.3	2.8
Manufacturing	291.8	260.9	254.5	255.5	258.0	261.5	262.2	263.3
% Ch, Annual Rate	-1.6	-36.1	-9.5	1.6	3.9	5.5	1.1	1.7
Durable Manufacturing	204.8	182.3	175.2	174.9	175.3	178.1	178.8	180.5
% Ch, Annual Rate	-2.5	-37.3	-14.6	-0.8	1.0	6.4	1.6	3.9
Aerospace	88.3	83.5	76.8	74.8	75.4	76.9	78.2	78.5
% Ch, Annual Rate	-2.9	-19.9	-28.3	-10.0	2.9	8.2	7.2	1.8
Nondurable Manufacturing	87.0	78.7	79.3	80.7	82.7	83.4	83.4	82.8
% Ch, Annual Rate	0.4	-33.2	3.2	7.1	10.4	3.5	0.1	-2.8
Construction	224.7	175.7	178.2	184.2	187.5	188.2	190.9	193.3
% Ch, Annual Rate	5.6	-62.6	5.8	14.0	7.4	1.7	5.7	5.2
Service-Providing	2,993.5	2,648.0	2,764.5	2,855.0	2,922.9	2,975.4	2,999.9	3,020.3
% Ch, Annual Rate	2.5	-38.8	18.8	13.8	9.9	7.4	3.3	2.7
Software Publishers	73.4	70.1	69.5	69.2	69.2	69.5	69.7	70.3
% Ch, Annual Rate	8.8	-16.5	-3.6	-1.9	-0.1	2.1	1.1	3.4
Electronic Shopping and Mail-Order	73.4	73.8	74.6	75.3	76.0	76.7	77.3	77.9
% Ch, Annual Rate	39.6	2.4	4.3	4.0	3.7	3.5	3.3	3.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	49.811	28.947	33.457	36.242	37.850	38.436	39.298	40.124
% Ch, Annual Rate	-26.9	-88.6	78.5	37.7	19.0	6.3	9.3	8.7
Single-Family	24.783	12.259	19.158	21.751	23.796	24.859	25.135	25.234
% Ch, Annual Rate	-21.4	-94.0	496.4	66.2	43.2	19.1	4.5	1.6
Multi-Family	25.028	16.687	14.299	14.491	14.055	13.576	14.163	14.890
% Ch, Annual Rate	-31.9	-80.2	-46.1	5.5	-11.5	-12.9	18.4	22.2
30-Year Fixed Mortgage Rate (%)	3.51	3.32	3.50	3.35	3.14	3.12	3.08	3.07

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

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	472.504	475.376	478.676	481.150	484.034	485.877	487.422	489.527
% Ch, Annual Rate	2.4	2.5	2.8	2.1	2.4	1.5	1.3	1.7
Real Wage and Salary Disb.	246.283	248.479	250.436	252.019	253.405	253.799	254.457	255.581
% Ch, Annual Rate	2.7	3.6	3.2	2.6	2.2	0.6	1.0	1.8
Real Nonwage Income	226.221	226.897	228.240	229.131	230.629	232.078	232.965	233.946
% Ch, Annual Rate	2.1	1.2	2.4	1.6	2.6	2.5	1.5	1.7
Real Per Capita Income (\$/Person)	60,289	60,496	60,755	60,907	61,112	61,187	61,228	61,342
% Ch, Annual Rate	1.4	1.4	1.7	1.0	1.3	0.5	0.3	0.7
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.130	1.134	1.138	1.142	1.147	1.151	1.156	1.161
% Ch, Annual Rate	1.4	1.4	1.4	1.5	1.6	1.6	1.7	1.6
Seattle Cons. Price Index (1982-84=1.0)	2.905	2.918	2.929	2.939	2.951	2.964	2.978	2.992
% Ch, Annual Rate	1.6	1.7	1.5	1.4	1.6	1.8	2.0	1.8
Average Nonfarm Annual Wage	77,110	77,544	78,017	78,541	79,026	79,476	79,906	80,356
% Ch, Annual Rate	1.5	2.3	2.5	2.7	2.5	2.3	2.2	2.3
Avg. Hourly Earnings-Mfg. (\$/Hour)	28.94	29.16	29.36	29.57	29.77	29.94	30.09	30.26
% Ch, Annual Rate	3.2	3.1	2.9	2.8	2.8	2.2	2.1	2.2
Current Dollar Income (Billions of Dollars)								
Personal Income	534.028	539.180	544.860	549.707	555.171	559.460	563.604	568.235
% Ch, Annual Rate	3.9	3.9	4.3	3.6	4.0	3.1	3.0	3.3
Disposable Personal Income	475.107	480.102	485.590	490.064	494.798	498.308	501.673	505.543
% Ch, Annual Rate	4.2	4.3	4.7	3.7	3.9	2.9	2.7	3.1
Per Capita Income (\$/Person)	68,139	68,616	69,155	69,585	70,093	70,454	70,798	71,205
% Ch, Annual Rate	2.8	2.8	3.2	2.5	2.9	2.1	2.0	2.3
Employment (Thousands)								
Washington Civilian Labor Force	4,183.4	4,197.5	4,210.1	4,220.8	4,231.6	4,237.9	4,245.6	4,253.0
Total Washington Employment	3,927.1	3,954.7	3,978.1	3,995.8	4,010.6	4,017.0	4,024.5	4,031.6
Unemployment Rate (%)	6.13	5.78	5.51	5.33	5.22	5.21	5.21	5.20
Nonfarm Payroll Employment	3,504.7	3,528.9	3,547.9	3,559.9	3,571.2	3,570.3	3,575.3	3,585.0
% Ch, Annual Rate	2.6	2.8	2.2	1.4	1.3	-0.1	0.6	1.1
Manufacturing	265.8	266.9	267.7	268.1	268.7	269.3	269.9	271.0
% Ch, Annual Rate	3.9	1.6	1.1	0.7	0.8	1.0	0.9	1.5
Durable Manufacturing	182.8	183.4	183.7	183.9	184.1	184.5	184.8	185.3
% Ch, Annual Rate	5.2	1.4	0.7	0.3	0.6	0.9	0.6	1.1
Aerospace	79.4	79.7	79.9	79.9	79.8	79.5	79.1	78.7
% Ch, Annual Rate	4.3	1.8	0.9	0.2	-0.6	-1.5	-1.9	-2.0
Nondurable Manufacturing	83.1	83.5	84.0	84.3	84.6	84.8	85.1	85.7
% Ch, Annual Rate	1.2	2.0	2.2	1.7	1.3	1.1	1.6	2.5
Construction	195.3	197.8	199.6	200.5	200.7	199.5	199.9	200.4
% Ch, Annual Rate	4.2	5.3	3.6	1.9	0.5	-2.3	0.8	1.0
Service-Providing	3,038.3	3,058.7	3,075.2	3,085.9	3,096.5	3,096.1	3,100.0	3,108.1
% Ch, Annual Rate	2.4	2.7	2.2	1.4	1.4	0.0	0.5	1.1
Software Publishers	70.9	71.4	71.8	71.9	72.1	72.3	72.5	72.8
% Ch, Annual Rate	3.8	2.6	2.2	0.8	1.1	1.1	1.2	1.5
Electronic Shopping and Mail-Order	78.5	79.0	79.5	80.1	80.5	81.0	81.5	82.0
% Ch, Annual Rate	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	40.342	40.744	40.590	40.459	40.264	40.157	39.424	38.927
% Ch, Annual Rate	2.2	4.0	-1.5	-1.3	-1.9	-1.1	-7.1	-4.9
Single-Family	25.166	25.279	25.297	25.129	24.900	24.531	24.140	23.716
% Ch, Annual Rate	-1.1	1.8	0.3	-2.6	-3.6	-5.8	-6.2	-6.8
Multi-Family	15.176	15.465	15.293	15.330	15.364	15.627	15.284	15.211
% Ch, Annual Rate	7.9	7.8	-4.4	1.0	0.9	7.0	-8.5	-1.9
30-Year Fixed Mortgage Rate (%)	3.04	2.99	2.97	2.97	2.99	3.01	3.04	3.13

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

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Real Income (Billions of Chained 2012 Dollars)								
Real Personal Income	491.928	494.549	497.660	500.955	505.213	509.003	512.227	515.409
% Ch, Annual Rate	2.0	2.1	2.5	2.7	3.4	3.0	2.6	2.5
Real Wage and Salary Disb.	256.705	257.757	258.944	260.246	262.076	263.939	265.383	266.793
% Ch, Annual Rate	1.8	1.6	1.9	2.0	2.8	2.9	2.2	2.1
Real Nonwage Income	235.223	236.792	238.716	240.708	243.137	245.063	246.844	248.616
% Ch, Annual Rate	2.2	2.7	3.3	3.4	4.1	3.2	2.9	2.9
Real Per Capita Income (\$/Person)	61,495	61,676	61,920	62,185	62,569	62,892	63,142	63,384
% Ch, Annual Rate	1.0	1.2	1.6	1.7	2.5	2.1	1.6	1.5
Price and Wage Indexes								
U.S. Implicit Price Deflator, PCE (2012=1.0)	1.165	1.170	1.175	1.180	1.186	1.191	1.197	1.202
% Ch, Annual Rate	1.6	1.7	1.7	1.7	1.8	1.7	1.9	1.9
Seattle Cons. Price Index (1982-84=1.0)	3.006	3.021	3.036	3.051	3.066	3.081	3.098	3.114
% Ch, Annual Rate	1.9	2.0	2.0	2.0	2.1	2.0	2.1	2.2
Average Nonfarm Annual Wage	80,838	81,369	81,943	82,559	83,283	84,036	84,817	85,599
% Ch, Annual Rate	2.4	2.7	2.9	3.0	3.6	3.7	3.8	3.7
Avg. Hourly Earnings-Mfg. (\$/Hour)	30.44	30.62	30.79	30.97	31.17	31.39	31.60	31.80
% Ch, Annual Rate	2.4	2.4	2.3	2.3	2.7	2.8	2.7	2.6
Current Dollar Income (Billions of Dollars)								
Personal Income	573.293	578.791	584.943	591.349	599.107	606.198	612.890	619.640
% Ch, Annual Rate	3.6	3.9	4.3	4.5	5.4	4.8	4.5	4.5
Disposable Personal Income	509.505	513.790	518.666	523.913	530.594	536.693	542.467	548.143
% Ch, Annual Rate	3.2	3.4	3.9	4.1	5.2	4.7	4.4	4.3
Per Capita Income (\$/Person)	71,666	72,182	72,779	73,406	74,198	74,902	75,551	76,203
% Ch, Annual Rate	2.6	2.9	3.3	3.5	4.4	3.8	3.5	3.5
Employment (Thousands)								
Washington Civilian Labor Force	4,259.9	4,266.6	4,273.3	4,279.9	4,287.1	4,294.4	4,301.5	4,308.5
Total Washington Employment	4,038.4	4,043.7	4,049.6	4,056.3	4,064.0	4,073.1	4,081.7	4,090.1
Unemployment Rate (%)	5.20	5.22	5.24	5.22	5.21	5.15	5.11	5.07
Nonfarm Payroll Employment	3,593.3	3,599.8	3,606.6	3,613.4	3,623.7	3,632.6	3,635.9	3,639.3
% Ch, Annual Rate	0.9	0.7	0.8	0.8	1.1	1.0	0.4	0.4
Manufacturing	271.9	272.9	273.6	274.3	275.1	275.7	276.0	276.3
% Ch, Annual Rate	1.4	1.4	1.1	1.0	1.2	0.9	0.3	0.5
Durable Manufacturing	185.8	186.2	186.5	186.8	187.2	187.4	187.5	187.6
% Ch, Annual Rate	1.0	1.0	0.6	0.5	0.8	0.6	0.1	0.2
Aerospace	78.3	78.0	77.6	77.2	76.8	76.5	76.2	76.0
% Ch, Annual Rate	-2.0	-1.8	-2.0	-2.0	-1.9	-1.9	-1.4	-0.8
Nondurable Manufacturing	86.2	86.6	87.1	87.5	88.0	88.3	88.5	88.7
% Ch, Annual Rate	2.3	2.1	2.1	2.1	2.0	1.7	0.8	1.0
Construction	200.6	200.3	200.1	199.7	199.7	199.6	199.0	198.4
% Ch, Annual Rate	0.3	-0.5	-0.6	-0.7	-0.1	-0.2	-1.2	-1.1
Service-Providing	3,115.4	3,121.1	3,127.5	3,134.0	3,143.5	3,151.8	3,155.5	3,159.3
% Ch, Annual Rate	0.9	0.7	0.8	0.8	1.2	1.1	0.5	0.5
Software Publishers	73.1	73.5	73.8	74.1	74.3	74.6	74.9	75.1
% Ch, Annual Rate	1.8	1.9	1.7	1.7	1.3	1.7	1.3	1.3
Electronic Shopping and Mail-Order	82.5	82.9	83.4	83.8	84.3	84.7	85.2	85.6
% Ch, Annual Rate	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Housing Indicators (Thousands)								
Housing Units Authorized by Bldg. Permit	38.609	37.961	37.652	37.500	37.369	37.947	37.963	37.639
% Ch, Annual Rate	-3.2	-6.5	-3.2	-1.6	-1.4	6.3	0.2	-3.4
Single-Family	23.315	22.937	22.777	22.694	22.577	22.567	22.531	22.482
% Ch, Annual Rate	-6.6	-6.3	-2.8	-1.4	-2.0	-0.2	-0.6	-0.9
Multi-Family	15.294	15.024	14.875	14.806	14.792	15.380	15.432	15.157
% Ch, Annual Rate	2.2	-6.9	-3.9	-1.8	-0.4	16.9	1.4	-6.9
30-Year Fixed Mortgage Rate (%)	3.20	3.19	3.25	3.31	3.37	3.42	3.43	3.48

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

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	148.89	150.94	142.12	149.08	152.82	154.65	155.95	157.39
% Ch	1.6	1.4	-5.8	4.9	2.5	1.2	0.8	0.9
Manufacturing	12.69	12.84	11.90	11.92	12.04	12.10	12.29	12.44
% Ch	2.0	1.2	-7.3	0.2	1.0	0.5	1.6	1.2
Durable Manufacturing	7.95	8.06	7.40	7.35	7.46	7.50	7.65	7.76
% Ch	2.7	1.4	-8.2	-0.6	1.5	0.6	2.0	1.5
Wood Products	0.41	0.41	0.37	0.35	0.37	0.39	0.40	0.42
% Ch	2.3	0.7	-9.9	-4.8	5.1	4.8	4.1	3.7
Primary and Fabricated Metals	1.85	1.88	1.72	1.70	1.73	1.76	1.82	1.85
% Ch	3.0	1.4	-8.3	-1.3	2.0	1.7	3.1	1.7
Computer and Electronic Products	1.05	1.08	1.09	1.09	1.09	1.09	1.11	1.11
% Ch	1.5	2.5	1.1	-0.2	0.1	0.3	1.0	0.7
Machinery and Electrical Equipment	1.52	1.53	1.42	1.39	1.41	1.41	1.45	1.47
% Ch	3.5	1.0	-7.3	-2.1	1.7	-0.1	2.4	1.7
Transportation Equipment	1.70	1.73	1.47	1.48	1.47	1.48	1.50	1.53
% Ch	3.6	1.9	-15.0	0.5	-0.6	0.6	1.2	2.0
Other Durables	1.42	1.43	1.32	1.34	1.39	1.37	1.38	1.39
% Ch	1.3	0.7	-7.3	1.4	3.4	-1.2	0.9	0.3
Nondurable Manufacturing	4.74	4.78	4.50	4.57	4.58	4.60	4.64	4.67
% Ch	0.9	0.8	-5.8	1.6	0.1	0.4	0.9	0.7
Food Manufacturing	1.62	1.64	1.60	1.68	1.70	1.75	1.81	1.86
% Ch	1.4	1.3	-2.6	5.3	1.1	2.8	3.4	2.7
Paper and Paper Products	0.37	0.37	0.35	0.36	0.36	0.36	0.36	0.36
% Ch	-0.1	0.0	-4.5	2.3	0.2	-0.5	0.9	0.6
Other Nondurables	2.76	2.77	2.55	2.53	2.52	2.49	2.47	2.45
% Ch	0.8	0.6	-8.0	-0.7	-0.6	-1.0	-0.9	-0.8
Natural Resources and Mining	0.73	0.74	0.59	0.46	0.49	0.52	0.53	0.55
% Ch	7.6	1.2	-19.4	-22.5	6.4	5.5	3.2	3.1
Construction	7.29	7.49	6.92	6.61	6.99	7.23	7.39	7.54
% Ch	4.6	2.9	-7.6	-4.6	5.7	3.4	2.3	2.0
Trade, Transportation, and Utilities	27.60	27.71	26.28	28.14	28.25	26.34	25.88	26.07
% Ch	0.8	0.4	-5.2	7.1	0.4	-6.7	-1.8	0.8
Wholesale Trade	5.84	5.90	5.81	6.04	6.43	6.58	6.73	6.78
% Ch	0.5	1.1	-1.6	3.9	6.6	2.3	2.2	0.8
Retail Trade	15.78	15.64	14.76	16.35	15.71	13.60	12.93	13.04
% Ch	-0.4	-0.9	-5.6	10.8	-3.9	-13.5	-4.9	0.8
Trans., Warehousing, and Utilities	5.98	6.17	5.71	5.76	6.11	6.17	6.22	6.25
% Ch	4.3	3.1	-7.4	0.8	6.1	1.0	0.8	0.6
Information	2.84	2.86	2.65	2.77	2.83	2.75	2.82	2.83
% Ch	0.9	0.8	-7.1	4.4	2.0	-2.7	2.5	0.5
Publishing Industries	0.74	0.76	0.71	0.64	0.66	0.64	0.63	0.61
% Ch	1.3	2.9	-6.3	-9.6	2.5	-3.2	-1.8	-2.0
Other Information	2.10	2.10	1.94	2.13	2.17	2.11	2.19	2.22
% Ch	0.7	0.0	-7.5	9.6	1.8	-2.6	3.7	1.2
Financial Activities	8.59	8.75	8.61	8.41	8.94	8.95	8.97	8.97
% Ch	1.7	1.8	-1.5	-2.4	6.3	0.1	0.2	0.0
Professional and Business Services	20.95	21.32	20.51	20.97	22.77	23.89	24.53	25.35
% Ch	2.2	1.7	-3.8	2.3	8.6	4.9	2.7	3.3
Education and Health Services	23.64	24.18	23.63	24.96	25.29	26.33	26.94	27.13
% Ch	1.9	2.3	-2.3	5.6	1.3	4.1	2.3	0.7
Leisure and Hospitality	16.30	16.58	13.63	17.27	16.89	17.89	17.75	17.55
% Ch	1.5	1.7	-17.8	26.7	-2.2	5.9	-0.8	-1.1
Other Services	5.83	5.89	5.40	5.14	5.40	5.45	5.44	5.39
% Ch	1.1	1.1	-8.4	-4.9	5.0	1.0	-0.2	-0.9
Federal Government	2.80	2.83	2.97	2.85	2.85	2.85	2.85	2.85
% Ch	-0.2	1.2	4.8	-4.1	-0.1	0.0	0.0	0.0
State and Local Government	19.65	19.75	19.02	19.58	20.09	20.36	20.56	20.72
% Ch	0.5	0.5	-3.7	2.9	2.6	1.4	1.0	0.8

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

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	151.92	133.62	139.46	143.46	146.57	148.95	150.04	150.75
% Ch, Annual Rate	0.4	-40.2	18.7	12.0	9.0	6.7	3.0	1.9
Manufacturing	12.83	11.52	11.51	11.72	11.84	11.98	11.91	11.96
% Ch, Annual Rate	-0.4	-35.0	-0.4	7.4	4.2	4.7	-2.3	1.9
Durable Manufacturing	8.05	7.12	7.13	7.28	7.29	7.38	7.32	7.41
% Ch, Annual Rate	-0.1	-38.5	0.4	8.5	0.4	5.4	-3.6	5.0
Wood Products	0.41	0.37	0.35	0.35	0.35	0.35	0.35	0.35
% Ch, Annual Rate	-0.3	-36.6	-15.5	-6.4	7.8	-1.2	-4.9	8.7
Primary and Fabricated Metals	1.85	1.70	1.65	1.67	1.68	1.71	1.69	1.71
% Ch, Annual Rate	-2.8	-28.8	-11.7	5.4	1.6	7.2	-3.8	4.2
Computer and Electronic Products	1.10	1.09	1.08	1.10	1.09	1.09	1.09	1.09
% Ch, Annual Rate	2.0	-1.9	-3.3	4.6	-2.7	1.7	0.2	-2.3
Machinery and Electrical Equipment	1.51	1.36	1.38	1.42	1.40	1.40	1.36	1.40
% Ch, Annual Rate	-2.6	-35.0	7.1	10.7	-6.6	1.4	-9.7	9.3
Transportation Equipment	1.74	1.34	1.38	1.43	1.46	1.49	1.48	1.48
% Ch, Annual Rate	2.9	-64.4	10.9	16.7	8.0	9.6	-3.4	0.8
Other Durables	1.43	1.26	1.28	1.31	1.31	1.34	1.34	1.38
% Ch, Annual Rate	0.9	-39.9	8.0	9.3	-0.5	7.9	0.3	11.5
Nondurable Manufacturing	4.79	4.40	4.38	4.44	4.55	4.59	4.59	4.56
% Ch, Annual Rate	-1.0	-28.7	-1.8	5.7	10.6	3.5	-0.1	-2.9
Food Manufacturing	1.65	1.58	1.57	1.60	1.67	1.69	1.70	1.68
% Ch, Annual Rate	-1.3	-16.3	-3.0	7.6	18.7	5.8	1.3	-3.8
Paper and Paper Products	0.36	0.35	0.34	0.35	0.35	0.36	0.36	0.36
% Ch, Annual Rate	-1.4	-18.5	-6.6	7.1	9.6	4.1	2.3	-2.7
Other Nondurables	2.77	2.47	2.47	2.50	2.53	2.54	2.54	2.52
% Ch, Annual Rate	-0.7	-36.6	-0.3	4.3	5.8	2.0	-1.3	-2.3
Natural Resources and Mining	0.71	0.63	0.54	0.49	0.46	0.46	0.46	0.46
% Ch, Annual Rate	-7.5	-38.8	-44.2	-35.1	-19.8	-4.8	-0.5	7.6
Construction	7.60	6.85	6.72	6.52	6.52	6.53	6.65	6.73
% Ch, Annual Rate	3.1	-34.2	-7.0	-11.3	-0.2	0.7	7.1	5.3
Trade, Transportation, and Utilities	27.80	25.00	25.72	26.59	27.33	28.20	28.35	28.69
% Ch, Annual Rate	0.3	-34.5	12.0	14.3	11.6	13.2	2.2	4.8
Wholesale Trade	5.93	5.67	5.70	5.95	5.97	5.96	6.03	6.18
% Ch, Annual Rate	0.2	-16.5	1.9	18.9	1.4	-0.3	4.4	10.2
Retail Trade	15.64	13.72	14.63	15.04	15.74	16.49	16.56	16.62
% Ch, Annual Rate	-0.2	-40.7	29.1	11.8	19.8	20.5	1.7	1.5
Trans., Warehousing, and Utilities	6.22	5.61	5.39	5.60	5.63	5.74	5.76	5.89
% Ch, Annual Rate	1.6	-33.9	-14.5	16.4	1.8	8.5	1.4	8.8
Information	2.89	2.47	2.55	2.71	2.78	2.75	2.75	2.81
% Ch, Annual Rate	2.5	-46.7	13.3	27.1	10.8	-3.1	-1.3	10.2
Publishing Industries	0.77	0.73	0.69	0.66	0.65	0.64	0.64	0.65
% Ch, Annual Rate	2.6	-19.3	-20.4	-15.2	-9.2	-0.3	-4.2	5.9
Other Information	2.12	1.74	1.86	2.05	2.13	2.11	2.11	2.17
% Ch, Annual Rate	2.5	-54.7	30.1	46.2	17.9	-4.0	-0.4	11.5
Financial Activities	8.83	8.74	8.56	8.32	8.27	8.39	8.43	8.54
% Ch, Annual Rate	1.3	-4.0	-8.2	-10.5	-2.3	5.9	1.5	5.4
Professional and Business Services	21.51	19.53	20.22	20.76	20.90	20.87	20.76	21.34
% Ch, Annual Rate	0.6	-32.0	14.9	11.2	2.6	-0.5	-2.1	11.6
Education and Health Services	24.51	22.62	23.31	24.08	24.62	24.81	25.53	24.89
% Ch, Annual Rate	1.4	-27.4	12.8	13.8	9.3	3.1	12.3	-9.8
Leisure and Hospitality	16.60	9.92	12.99	15.00	16.48	17.45	17.63	17.52
% Ch, Annual Rate	-3.4	-87.2	193.5	78.0	45.8	25.6	4.1	-2.4
Other Services	5.91	4.87	5.52	5.30	5.22	5.15	5.06	5.13
% Ch, Annual Rate	-0.7	-53.8	65.0	-15.2	-6.0	-5.1	-7.1	6.0
Federal Government	2.87	2.90	3.16	2.96	2.85	2.85	2.85	2.85
% Ch, Annual Rate	3.2	3.7	41.6	-23.3	-13.0	-1.3	0.0	0.0
State and Local Government	19.86	18.57	18.66	19.01	19.29	19.51	19.69	19.83
% Ch, Annual Rate	0.9	-23.6	2.0	7.7	6.0	4.7	3.7	3.0

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

	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4
Nonfarm Payroll Employment	151.49	152.49	153.34	153.94	154.36	154.49	154.67	155.09
% Ch, Annual Rate	2.0	2.7	2.2	1.6	1.1	0.4	0.5	1.1
Manufacturing	12.05	12.04	12.04	12.04	12.05	12.07	12.11	12.17
% Ch, Annual Rate	2.9	-0.4	0.1	-0.2	0.5	0.8	1.2	2.1
Durable Manufacturing	7.48	7.46	7.46	7.45	7.46	7.48	7.51	7.56
% Ch, Annual Rate	4.2	-1.2	-0.2	-0.5	0.5	1.3	1.7	2.6
Wood Products	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.39
% Ch, Annual Rate	8.5	6.0	6.3	4.2	4.4	5.5	3.3	4.7
Primary and Fabricated Metals	1.73	1.73	1.73	1.73	1.74	1.75	1.77	1.78
% Ch, Annual Rate	4.2	0.8	0.4	0.0	1.2	3.5	3.1	4.2
Computer and Electronic Products	1.09	1.09	1.09	1.09	1.09	1.09	1.10	1.10
% Ch, Annual Rate	0.8	0.9	0.2	-0.2	0.0	0.6	0.8	1.0
Machinery and Electrical Equipment	1.42	1.42	1.41	1.40	1.40	1.41	1.41	1.42
% Ch, Annual Rate	8.5	-1.6	-3.4	-2.2	0.2	2.2	2.2	2.7
Transportation Equipment	1.48	1.46	1.47	1.48	1.48	1.47	1.48	1.49
% Ch, Annual Rate	-0.8	-6.4	3.3	2.1	1.4	-2.3	1.2	2.4
Other Durables	1.40	1.39	1.38	1.37	1.36	1.37	1.37	1.38
% Ch, Annual Rate	7.1	-1.5	-3.4	-3.4	-1.5	1.1	0.3	1.5
Nondurable Manufacturing	4.57	4.58	4.59	4.59	4.59	4.59	4.60	4.61
% Ch, Annual Rate	0.7	1.1	0.7	0.4	0.3	0.0	0.4	1.3
Food Manufacturing	1.68	1.70	1.71	1.72	1.73	1.74	1.75	1.77
% Ch, Annual Rate	0.7	2.7	3.8	3.3	2.1	2.0	2.9	3.9
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	1.2	1.3	-1.9	-2.0	-0.3	-0.3	0.4	1.4
Other Nondurables	2.52	2.52	2.52	2.51	2.50	2.50	2.49	2.49
% Ch, Annual Rate	0.6	-0.1	-1.0	-1.2	-0.8	-1.3	-1.2	-0.6
Natural Resources and Mining	0.47	0.48	0.49	0.50	0.51	0.51	0.52	0.52
% Ch, Annual Rate	9.6	8.4	8.5	6.5	6.0	3.4	2.9	2.6
Construction	6.86	6.97	7.02	7.10	7.15	7.20	7.25	7.30
% Ch, Annual Rate	7.6	6.7	3.1	4.4	2.9	3.1	2.7	2.7
Trade, Transportation, and Utilities	28.84	28.54	28.22	27.40	26.60	26.41	26.25	26.12
% Ch, Annual Rate	2.2	-4.1	-4.5	-11.1	-11.2	-2.8	-2.5	-2.0
Wholesale Trade	6.31	6.36	6.52	6.54	6.56	6.57	6.58	6.62
% Ch, Annual Rate	8.7	3.2	10.5	1.6	0.7	0.7	0.9	2.3
Retail Trade	16.53	16.13	15.52	14.67	13.86	13.68	13.51	13.33
% Ch, Annual Rate	-2.4	-9.3	-14.3	-20.0	-20.4	-5.3	-4.8	-5.1
Trans., Warehousing, and Utilities	6.01	6.06	6.18	6.18	6.18	6.17	6.15	6.16
% Ch, Annual Rate	8.7	3.1	8.4	0.2	-0.1	-0.9	-0.8	0.6
Information	2.88	2.87	2.81	2.76	2.75	2.74	2.74	2.78
% Ch, Annual Rate	9.6	-1.8	-7.9	-6.6	-1.5	-1.5	0.2	5.2
Publishing Industries	0.66	0.66	0.66	0.65	0.65	0.64	0.63	0.63
% Ch, Annual Rate	7.6	2.1	0.6	-5.1	-4.0	-4.2	-3.8	-2.4
Other Information	2.22	2.20	2.14	2.11	2.10	2.10	2.11	2.14
% Ch, Annual Rate	10.2	-3.0	-10.3	-7.1	-0.7	-0.7	1.5	7.6
Financial Activities	8.77	8.92	9.05	9.02	9.00	8.96	8.92	8.92
% Ch, Annual Rate	11.4	7.2	5.7	-1.3	-1.0	-1.8	-1.5	-0.1
Professional and Business Services	22.06	22.57	23.07	23.40	23.84	23.77	23.88	24.06
% Ch, Annual Rate	14.2	9.5	9.2	5.9	7.8	-1.2	1.9	3.0
Education and Health Services	24.36	25.22	25.72	25.85	26.09	26.27	26.38	26.57
% Ch, Annual Rate	-8.3	14.9	8.2	2.0	3.9	2.8	1.7	2.9
Leisure and Hospitality	17.14	16.61	16.47	17.36	17.78	17.91	17.94	17.93
% Ch, Annual Rate	-8.5	-11.8	-3.2	23.3	10.0	3.1	0.7	-0.3
Other Services	5.27	5.38	5.47	5.47	5.47	5.46	5.44	5.43
% Ch, Annual Rate	11.5	8.2	7.0	0.0	0.1	-0.8	-1.3	-0.6
Federal Government	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	19.95	20.05	20.14	20.21	20.28	20.34	20.39	20.45
% Ch, Annual Rate	2.4	2.0	1.7	1.5	1.3	1.2	1.1	1.0

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

	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4
Nonfarm Payroll Employment	155.49	155.81	156.10	156.40	156.90	157.35	157.54	157.77
% Ch, Annual Rate	1.0	0.8	0.7	0.8	1.3	1.1	0.5	0.6
Manufacturing	12.23	12.28	12.31	12.34	12.41	12.44	12.45	12.45
% Ch, Annual Rate	1.9	1.5	1.1	1.0	2.1	1.2	0.1	0.3
Durable Manufacturing	7.60	7.64	7.67	7.69	7.74	7.77	7.77	7.78
% Ch, Annual Rate	2.3	1.9	1.3	1.1	2.7	1.5	0.2	0.4
Wood Products	0.40	0.40	0.40	0.41	0.41	0.42	0.42	0.42
% Ch, Annual Rate	4.5	3.9	3.4	3.6	5.4	4.9	1.3	-0.2
Primary and Fabricated Metals	1.80	1.81	1.82	1.83	1.84	1.85	1.85	1.85
% Ch, Annual Rate	3.5	2.8	2.1	1.7	2.1	1.9	0.5	0.5
Computer and Electronic Products	1.10	1.10	1.11	1.11	1.11	1.11	1.11	1.11
% Ch, Annual Rate	1.1	1.2	1.2	1.1	0.9	0.5	0.0	-0.4
Machinery and Electrical Equipment	1.43	1.44	1.45	1.46	1.46	1.47	1.47	1.48
% Ch, Annual Rate	2.5	2.8	2.2	1.7	2.1	1.3	0.8	1.1
Transportation Equipment	1.49	1.50	1.50	1.50	1.52	1.53	1.53	1.53
% Ch, Annual Rate	2.1	1.1	0.3	0.2	6.4	1.3	0.2	0.5
Other Durables	1.38	1.38	1.38	1.38	1.39	1.39	1.39	1.39
% Ch, Annual Rate	1.3	0.8	0.1	-0.1	0.7	1.1	-1.0	0.4
Nondurable Manufacturing	4.63	4.64	4.65	4.66	4.67	4.68	4.67	4.68
% Ch, Annual Rate	1.1	0.9	0.8	0.8	1.1	0.7	-0.2	0.0
Food Manufacturing	1.79	1.80	1.82	1.83	1.85	1.86	1.86	1.87
% Ch, Annual Rate	3.7	3.4	3.3	3.2	2.9	2.6	1.5	1.7
Paper and Paper Products	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
% Ch, Annual Rate	1.2	1.0	0.8	0.9	1.0	0.5	-0.4	-0.2
Other Nondurables	2.48	2.48	2.47	2.46	2.46	2.46	2.45	2.44
% Ch, Annual Rate	-0.7	-0.9	-0.9	-0.9	-0.3	-0.7	-1.4	-1.2
Natural Resources and Mining	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.55
% Ch, Annual Rate	3.4	3.2	3.4	3.6	2.9	3.0	2.7	2.6
Construction	7.34	7.38	7.41	7.45	7.49	7.53	7.56	7.59
% Ch, Annual Rate	2.2	1.9	2.0	2.2	2.0	2.0	1.9	1.8
Trade, Transportation, and Utilities	25.99	25.83	25.83	25.85	25.99	26.05	26.11	26.14
% Ch, Annual Rate	-1.9	-2.6	0.1	0.3	2.1	1.0	0.9	0.5
Wholesale Trade	6.67	6.72	6.75	6.77	6.76	6.78	6.79	6.79
% Ch, Annual Rate	3.2	2.8	1.8	1.4	-0.6	1.0	0.5	0.2
Retail Trade	13.13	12.89	12.86	12.85	13.00	13.02	13.06	13.08
% Ch, Annual Rate	-6.0	-7.1	-1.0	-0.3	4.7	0.9	1.1	0.6
Trans., Warehousing, and Utilities	6.19	6.22	6.23	6.23	6.23	6.25	6.26	6.27
% Ch, Annual Rate	1.8	1.6	0.7	0.3	-0.3	1.3	0.8	0.4
Information	2.79	2.81	2.83	2.85	2.85	2.86	2.83	2.79
% Ch, Annual Rate	2.0	2.4	3.7	2.6	0.6	0.6	-3.8	-5.7
Publishing Industries	0.63	0.63	0.63	0.62	0.62	0.62	0.61	0.61
% Ch, Annual Rate	-0.9	-0.6	-1.3	-1.4	-3.1	-1.2	-3.0	-3.2
Other Information	2.16	2.18	2.20	2.22	2.23	2.24	2.22	2.18
% Ch, Annual Rate	2.8	3.3	5.2	3.7	1.6	1.1	-4.0	-6.4
Financial Activities	8.94	8.97	8.98	8.99	8.95	8.97	8.97	8.97
% Ch, Annual Rate	1.1	1.1	0.5	0.4	-1.6	0.7	0.2	0.0
Professional and Business Services	24.30	24.49	24.60	24.72	25.11	25.32	25.43	25.54
% Ch, Annual Rate	4.0	3.3	1.7	2.0	6.5	3.4	1.8	1.7
Education and Health Services	26.76	26.92	27.01	27.08	27.06	27.13	27.15	27.17
% Ch, Annual Rate	2.8	2.4	1.4	1.1	-0.4	1.1	0.3	0.3
Leisure and Hospitality	17.83	17.78	17.71	17.66	17.60	17.56	17.51	17.54
% Ch, Annual Rate	-2.1	-1.1	-1.7	-1.0	-1.5	-0.8	-1.2	0.9
Other Services	5.44	5.45	5.45	5.44	5.40	5.39	5.39	5.39
% Ch, Annual Rate	0.5	0.7	-0.2	-0.7	-2.6	-0.4	-0.1	-0.2
Federal Government	2.85	2.85	2.85	2.85	2.85	2.85	2.85	2.85
% Ch, Annual Rate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
State and Local Government	20.49	20.54	20.58	20.63	20.66	20.70	20.74	20.78
% Ch, Annual Rate	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7

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

	2018	2019	2020	2021	2022	2023	2024	2025
Nonfarm Payroll Employment	3,401.1	3,468.6	3,276.7	3,435.9	3,535.3	3,575.5	3,603.3	3,632.9
% Ch	2.4	2.0	-5.5	4.9	2.9	1.1	0.8	0.8
Manufacturing	287.8	293.6	265.7	261.2	267.1	269.7	273.2	275.8
% Ch	1.2	2.0	-9.5	-1.7	2.3	1.0	1.3	1.0
Durable Manufacturing	202.2	206.8	184.3	178.2	183.4	184.7	186.3	187.4
% Ch	0.9	2.3	-10.9	-3.3	3.0	0.7	0.9	0.6
Wood Products	13.0	12.9	10.9	9.9	10.1	10.3	10.5	10.6
% Ch	0.9	-0.4	-15.7	-9.2	2.2	1.9	1.4	1.1
Primary and Fabricated Metals	26.1	26.9	23.7	23.1	23.7	24.1	24.9	25.4
% Ch	4.3	2.7	-11.8	-2.3	2.3	1.8	3.4	1.9
Computer and Electronic Products	19.8	19.8	18.0	17.9	18.2	18.6	19.2	19.7
% Ch	0.9	-0.3	-9.1	-0.4	1.6	2.1	3.5	2.8
Machinery and Electrical Equipment	21.3	21.3	20.1	20.4	21.4	22.0	23.4	24.6
% Ch	3.0	-0.3	-5.5	1.3	5.2	2.8	6.1	5.1
Aerospace	83.9	88.5	80.8	77.3	79.7	79.3	77.8	76.4
% Ch	-0.3	5.5	-8.7	-4.5	3.2	-0.6	-1.9	-1.8
Other Transportation Equip.	9.9	9.7	8.6	8.4	8.3	8.2	8.0	7.8
% Ch	-3.0	-1.9	-11.4	-2.5	-0.6	-1.4	-2.6	-2.6
Other Durables	28.1	27.8	22.2	21.2	22.0	22.2	22.6	23.0
% Ch	1.5	-1.1	-20.0	-4.4	3.7	0.9	1.9	1.5
Nondurable Manufacturing	85.6	86.8	81.4	83.1	83.7	85.0	86.8	88.4
% Ch	2.0	1.4	-6.2	2.1	0.7	1.6	2.1	1.8
Food Manufacturing	39.1	39.4	37.7	39.2	39.4	40.2	41.3	42.1
% Ch	2.8	0.8	-4.3	4.0	0.4	2.0	2.7	2.0
Paper and Paper Products	7.7	7.8	7.5	7.6	7.6	7.5	7.5	7.5
% Ch	-1.2	1.5	-4.1	2.2	-0.6	-1.4	0.3	-0.1
Other Nondurables	38.9	39.6	36.2	36.2	36.8	37.4	38.1	38.8
% Ch	1.9	1.9	-8.4	0.0	1.4	1.8	1.9	1.8
Natural Resources and Mining	6.3	5.9	5.0	5.1	5.4	5.4	5.5	5.4
% Ch	1.1	-5.9	-14.6	1.1	5.4	0.4	1.0	-0.9
Construction	213.1	219.4	190.7	190.0	198.3	200.2	200.2	199.1
% Ch	6.7	3.0	-13.1	-0.4	4.4	0.9	0.0	-0.5
Trade, Transportation, and Utilities	636.0	643.6	630.1	674.2	676.7	638.4	629.9	635.4
% Ch	1.8	1.2	-2.1	7.0	0.4	-5.7	-1.3	0.9
Wholesale Trade	135.6	136.9	136.0	140.7	149.1	153.7	157.2	158.1
% Ch	1.8	0.9	-0.7	3.5	6.0	3.1	2.3	0.6
Retail Trade	385.8	390.4	383.8	421.4	411.1	369.5	357.8	362.2
% Ch	1.9	1.2	-1.7	9.8	-2.5	-10.1	-3.2	1.2
Electronic Shopping and Mail-Order	54.8	63.5	74.3	77.0	79.3	81.3	83.1	84.9
% Ch	10.1	15.8	17.1	3.6	3.0	2.5	2.3	2.2
Other Retail Trade	331.1	326.9	309.5	344.4	331.8	288.3	274.7	277.2
% Ch	0.6	-1.2	-5.3	11.3	-3.7	-13.1	-4.7	0.9
Trans., Warehousing, and Utilities	114.5	116.3	107.9	108.5	114.1	114.8	115.3	115.5
% Ch	1.8	1.5	-7.2	0.5	5.2	0.5	0.4	0.2
Information	134.2	144.5	148.9	159.0	163.3	161.9	167.5	171.0
% Ch	6.3	7.7	3.0	6.8	2.7	-0.9	3.5	2.1
Software Publishers	65.3	70.0	70.6	69.7	71.5	72.4	73.6	74.8
% Ch	6.4	7.1	0.8	-1.3	2.7	1.3	1.6	1.5
Other Publishing Industries	5.1	4.8	3.8	2.7	2.6	2.1	1.8	1.4
% Ch	-6.8	-6.5	-22.0	-29.1	-1.0	-18.9	-17.6	-22.4
Other Information	63.8	69.7	74.5	86.7	89.1	87.3	92.1	94.9
% Ch	7.4	9.4	6.9	16.2	2.9	-2.1	5.6	3.0
Financial Activities	157.7	160.5	154.5	150.4	160.4	159.4	158.6	157.2
% Ch	2.4	1.8	-3.7	-2.7	6.6	-0.6	-0.5	-0.9
Professional and Business Services	424.3	435.0	425.6	444.6	483.6	508.1	519.9	534.6
% Ch	2.6	2.5	-2.2	4.5	8.8	5.1	2.3	2.8
Education and Health Services	490.2	502.7	474.8	503.3	518.8	542.7	554.1	558.5
% Ch	3.1	2.5	-5.5	6.0	3.1	4.6	2.1	0.8
Leisure and Hospitality	341.9	347.9	289.2	349.6	347.7	365.3	362.6	358.9
% Ch	3.1	1.8	-16.9	20.9	-0.5	5.1	-0.7	-1.0
Other Services	122.4	128.2	110.0	106.3	110.5	112.8	113.4	113.8
% Ch	2.2	4.7	-14.2	-3.4	3.9	2.1	0.6	0.4
Federal Government	74.8	75.7	80.1	76.3	76.4	76.6	76.8	77.0
% Ch	0.0	1.2	5.9	-4.8	0.2	0.3	0.2	0.2
State and Local Government	512.4	511.8	502.1	515.9	527.0	535.1	541.5	546.0
% Ch	0.3	-0.1	-1.9	2.7	2.2	1.5	1.2	0.8

Table A2.4
Washington Nonagricultural Employment by Industry (Thousands)
Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Nonfarm Payroll Employment	3,515.7	3,089.6	3,201.8	3,299.7	3,373.5	3,430.2	3,457.9	3,482.1
% Ch, Annual Rate	2.3	-40.4	15.3	12.8	9.2	6.9	3.3	2.8
Manufacturing	291.8	260.9	254.5	255.5	258.0	261.5	262.2	263.3
% Ch, Annual Rate	-1.6	-36.1	-9.5	1.6	3.9	5.5	1.1	1.7
Durable Manufacturing	204.8	182.3	175.2	174.9	175.3	178.1	178.8	180.5
% Ch, Annual Rate	-2.5	-37.3	-14.6	-0.8	1.0	6.4	1.6	3.9
Wood Products	13.1	10.5	10.1	9.9	10.0	9.9	9.8	9.9
% Ch, Annual Rate	3.7	-57.9	-15.4	-7.5	4.4	-3.1	-6.3	5.2
Primary and Fabricated Metals	26.9	22.9	22.2	22.7	22.8	23.3	23.1	23.3
% Ch, Annual Rate	-0.8	-48.1	-10.9	8.9	2.8	8.1	-3.9	4.7
Computer and Electronic Products	18.8	17.7	17.5	17.9	17.7	17.9	18.0	17.9
% Ch, Annual Rate	-9.4	-22.6	-4.6	10.2	-3.5	4.6	1.8	-2.8
Machinery and Electrical Equipment	20.6	19.2	19.9	20.7	20.3	20.5	19.9	20.7
% Ch, Annual Rate	-2.4	-25.0	15.3	17.3	-7.2	3.9	-10.6	16.2
Aerospace	88.3	83.5	76.8	74.8	75.4	76.9	78.2	78.5
% Ch, Annual Rate	-2.9	-19.9	-28.3	-10.0	2.9	8.2	7.2	1.8
Other Transportation Equip.	9.5	8.3	8.3	8.3	8.4	8.4	8.3	8.4
% Ch, Annual Rate	-0.6	-41.9	0.4	-0.2	4.4	0.1	-1.2	0.6
Other Durables	27.6	20.3	20.4	20.6	20.7	21.1	21.4	21.7
% Ch, Annual Rate	-1.5	-71.0	3.7	2.3	1.8	9.9	4.9	6.5
Nondurable Manufacturing	87.0	78.7	79.3	80.7	82.7	83.4	83.4	82.8
% Ch, Annual Rate	0.4	-33.2	3.2	7.1	10.4	3.5	0.1	-2.8
Food Manufacturing	39.4	37.2	36.8	37.4	39.0	39.4	39.5	39.0
% Ch, Annual Rate	0.7	-21.0	-3.8	6.7	17.6	4.9	0.5	-4.5
Paper and Paper Products	7.7	7.4	7.3	7.4	7.6	7.6	7.7	7.6
% Ch, Annual Rate	0.9	-15.5	-8.0	7.0	9.9	3.7	1.7	-3.8
Other Nondurables	39.8	34.1	35.2	35.9	36.1	36.3	36.3	36.2
% Ch, Annual Rate	0.1	-46.5	14.0	7.6	3.2	2.0	-0.8	-0.7
Natural Resources and Mining	5.7	4.9	4.5	5.0	5.1	5.1	5.0	5.2
% Ch, Annual Rate	-3.6	-45.9	-25.8	52.4	7.0	-2.4	-6.9	13.5
Construction	224.7	175.7	178.2	184.2	187.5	188.2	190.9	193.3
% Ch, Annual Rate	5.6	-62.6	5.8	14.0	7.4	1.7	5.7	5.2
Trade, Transportation, and Utilities	653.1	602.0	623.1	642.1	658.2	676.1	677.6	684.9
% Ch, Annual Rate	2.7	-27.8	14.8	12.8	10.4	11.3	0.9	4.3
Wholesale Trade	139.7	132.2	132.9	139.0	139.5	139.2	140.5	143.5
% Ch, Annual Rate	2.2	-19.8	2.3	19.5	1.5	-0.9	3.8	8.8
Retail Trade	397.0	363.0	382.8	392.2	407.5	423.9	426.1	428.3
% Ch, Annual Rate	5.1	-30.1	23.6	10.2	16.4	17.1	2.2	2.0
Electronic Shopping and Mail-Order	73.4	73.8	74.6	75.3	76.0	76.7	77.3	77.9
% Ch	39.6	2.4	4.3	4.0	3.7	3.5	3.3	3.1
Other Retail Trade	323.7	289.2	308.2	316.9	331.4	347.2	348.8	350.4
% Ch	-1.2	-36.2	28.9	11.8	19.6	20.4	1.9	1.8
Trans., Warehousing, and Utilities	116.3	106.7	102.5	106.1	106.5	108.3	108.6	110.7
% Ch, Annual Rate	-4.3	-29.1	-14.8	14.4	1.5	7.0	1.1	8.0
Information	150.9	142.8	146.9	154.7	158.5	157.9	158.0	161.5
% Ch, Annual Rate	8.5	-19.7	12.0	23.0	10.2	-1.5	0.1	9.2
Software Publishers	73.4	70.1	69.5	69.2	69.2	69.5	69.7	70.3
% Ch, Annual Rate	8.8	-16.5	-3.6	-1.9	-0.1	2.1	1.1	3.4
Other Publishing Industries	4.5	4.0	3.4	3.0	2.8	2.7	2.6	2.6
% Ch, Annual Rate	4.1	-39.5	-46.0	-40.0	-29.9	-8.9	-20.0	9.4
Other Information	73.0	68.7	74.0	82.5	86.6	85.7	85.7	88.6
% Ch, Annual Rate	8.4	-21.5	34.7	54.8	21.3	-4.1	0.0	14.1
Financial Activities	162.6	155.0	152.0	148.6	147.9	150.3	150.7	152.8
% Ch, Annual Rate	1.5	-17.3	-7.7	-8.6	-1.8	6.5	1.1	5.8
Professional and Business Services	444.2	405.1	420.1	433.1	439.0	442.4	442.7	454.5
% Ch, Annual Rate	2.4	-30.8	15.7	12.9	5.6	3.1	0.3	11.1
Education and Health Services	509.2	447.4	462.8	479.8	492.8	500.0	514.3	506.2
% Ch, Annual Rate	1.7	-40.4	14.5	15.5	11.3	6.0	12.0	-6.1
Leisure and Hospitality	349.8	221.4	275.6	310.3	335.4	352.1	355.7	355.1
% Ch, Annual Rate	-1.1	-84.0	140.2	60.7	36.6	21.4	4.2	-0.7
Other Services	129.8	100.4	104.9	104.8	105.4	106.1	106.3	107.4
% Ch, Annual Rate	1.1	-64.1	18.9	-0.4	2.4	2.7	0.6	4.1
Federal Government	76.5	80.9	84.2	78.7	76.3	76.2	76.2	76.3
% Ch, Annual Rate	3.7	24.9	17.4	-23.6	-11.6	-0.9	0.3	0.3
State and Local Government	517.4	493.0	494.9	502.9	509.2	514.3	518.3	521.6
% Ch, Annual Rate	4.2	-17.6	1.6	6.6	5.1	4.0	3.2	2.6

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Nonfarm Payroll Employment	3,504.7	3,528.9	3,547.9	3,559.9	3,571.2	3,570.3	3,575.3	3,585.0
% Ch, Annual Rate	2.6	2.8	2.2	1.4	1.3	-0.1	0.6	1.1
Manufacturing	265.8	266.9	267.7	268.1	268.7	269.3	269.9	271.0
% Ch, Annual Rate	3.9	1.6	1.1	0.7	0.8	1.0	0.9	1.5
Durable Manufacturing	182.8	183.4	183.7	183.9	184.1	184.5	184.8	185.3
% Ch, Annual Rate	5.2	1.4	0.7	0.3	0.6	0.9	0.6	1.1
Wood Products	10.0	10.1	10.2	10.2	10.2	10.3	10.3	10.4
% Ch, Annual Rate	5.0	2.9	3.2	1.4	1.6	2.5	0.7	1.9
Primary and Fabricated Metals	23.6	23.7	23.7	23.7	23.8	24.0	24.2	24.4
% Ch, Annual Rate	4.4	1.1	0.8	0.0	1.3	3.4	3.4	4.6
Computer and Electronic Products	18.0	18.2	18.2	18.3	18.4	18.5	18.6	18.8
% Ch, Annual Rate	2.9	3.2	1.8	1.0	1.5	2.6	3.0	3.3
Machinery and Electrical Equipment	21.4	21.5	21.4	21.4	21.5	21.9	22.2	22.5
% Ch, Annual Rate	14.9	0.7	-1.7	-0.1	3.2	5.8	5.8	6.4
Aerospace	79.4	79.7	79.9	79.9	79.8	79.5	79.1	78.7
% Ch, Annual Rate	4.3	1.8	0.9	0.2	-0.6	-1.5	-1.9	-2.0
Other Transportation Equip.	8.3	8.3	8.3	8.3	8.3	8.2	8.2	8.1
% Ch, Annual Rate	-0.9	-2.1	0.0	0.2	-1.4	-2.4	-2.8	-2.3
Other Durables	22.0	22.0	22.0	22.0	22.1	22.2	22.2	22.4
% Ch, Annual Rate	4.4	0.5	0.4	0.3	0.9	1.5	1.3	2.4
Nondurable Manufacturing	83.1	83.5	84.0	84.3	84.6	84.8	85.1	85.7
% Ch, Annual Rate	1.2	2.0	2.2	1.7	1.3	1.1	1.6	2.5
Food Manufacturing	39.0	39.2	39.5	39.8	39.9	40.0	40.2	40.6
% Ch, Annual Rate	-0.1	1.9	3.1	2.5	1.3	1.3	2.1	3.2
Paper and Paper Products	7.6	7.6	7.6	7.5	7.5	7.5	7.5	7.5
% Ch, Annual Rate	0.6	0.7	-2.9	-3.0	-1.2	-1.1	-0.4	0.8
Other Nondurables	36.4	36.7	36.9	37.0	37.2	37.3	37.5	37.6
% Ch, Annual Rate	2.8	2.4	2.3	1.7	1.7	1.4	1.5	2.1
Natural Resources and Mining	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4
% Ch, Annual Rate	11.9	5.9	2.6	-3.8	0.3	0.7	0.9	1.6
Construction	195.3	197.8	199.6	200.5	200.7	199.5	199.9	200.4
% Ch, Annual Rate	4.2	5.3	3.6	1.9	0.5	-2.3	0.8	1.0
Trade, Transportation, and Utilities	688.1	682.5	676.1	660.3	644.8	638.7	636.0	633.9
% Ch, Annual Rate	1.9	-3.2	-3.7	-9.0	-9.0	-3.7	-1.6	-1.3
Wholesale Trade	146.1	147.3	151.0	152.1	153.0	153.3	153.8	154.7
% Ch, Annual Rate	7.3	3.6	10.3	3.0	2.4	0.6	1.3	2.4
Retail Trade	426.9	419.4	407.4	390.5	374.2	371.0	368.1	364.9
% Ch, Annual Rate	-1.2	-6.9	-10.9	-15.6	-15.7	-3.5	-3.1	-3.4
Electronic Shopping and Mail-Order	78.5	79.0	79.5	80.1	80.5	81.0	81.5	82.0
% Ch	2.9	2.8	2.7	2.6	2.5	2.4	2.4	2.3
Other Retail Trade	348.5	340.4	327.9	310.5	293.7	289.9	286.6	282.9
% Ch	-2.1	-9.0	-13.9	-19.6	-20.0	-5.0	-4.6	-5.0
Trans., Warehousing, and Utilities	112.7	113.4	115.3	115.2	115.1	114.7	114.5	114.6
% Ch, Annual Rate	7.6	2.5	6.7	-0.3	-0.1	-1.4	-0.8	0.3
Information	164.9	164.8	162.5	160.8	160.9	161.0	161.6	163.9
% Ch, Annual Rate	8.9	-0.4	-5.4	-4.1	0.2	0.2	1.6	5.7
Software Publishers	70.9	71.4	71.8	71.9	72.1	72.3	72.5	72.8
% Ch, Annual Rate	3.8	2.6	2.2	0.8	1.1	1.1	1.2	1.5
Other Publishing Industries	2.7	2.7	2.7	2.5	2.3	2.2	2.1	2.0
% Ch, Annual Rate	15.1	-2.0	-6.6	-23.1	-21.0	-22.6	-22.7	-19.1
Other Information	91.3	90.7	88.1	86.4	86.4	86.5	87.0	89.1
% Ch, Annual Rate	12.8	-2.5	-11.0	-7.4	0.1	0.1	2.7	10.0
Financial Activities	157.2	160.1	162.6	161.7	160.9	159.6	158.6	158.3
% Ch, Annual Rate	12.1	7.6	6.2	-2.1	-1.9	-3.3	-2.4	-0.7
Professional and Business Services	468.6	479.1	489.6	497.3	506.7	505.9	508.2	511.4
% Ch, Annual Rate	12.9	9.3	9.0	6.4	7.8	-0.6	1.8	2.6
Education and Health Services	499.9	516.5	527.2	531.7	538.2	541.6	543.8	547.2
% Ch, Annual Rate	-4.9	14.0	8.5	3.5	5.0	2.5	1.6	2.6
Leisure and Hospitality	350.1	342.8	341.7	356.3	363.7	365.7	366.1	365.8
% Ch, Annual Rate	-5.5	-8.1	-1.4	18.3	8.6	2.2	0.5	-0.3
Other Services	108.8	110.0	111.2	111.9	112.6	112.7	112.8	113.0
% Ch, Annual Rate	5.4	4.6	4.3	2.5	2.5	0.6	0.4	0.5
Federal Government	76.3	76.4	76.4	76.5	76.5	76.6	76.6	76.7
% Ch, Annual Rate	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2
State and Local Government	524.3	526.4	528.1	529.4	532.1	534.3	536.2	537.9
% Ch, Annual Rate	2.1	1.6	1.3	1.0	2.0	1.7	1.4	1.3

Table A2.4 (continued)

Washington Nonagricultural Employment by Industry (Thousands)

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Nonfarm Payroll Employment	3,593.3	3,599.8	3,606.6	3,613.4	3,623.7	3,632.6	3,635.9	3,639.3
% Ch, Annual Rate	0.9	0.7	0.8	0.8	1.1	1.0	0.4	0.4
Manufacturing	271.9	272.9	273.6	274.3	275.1	275.7	276.0	276.3
% Ch, Annual Rate	1.4	1.4	1.1	1.0	1.2	0.9	0.3	0.5
Durable Manufacturing	185.8	186.2	186.5	186.8	187.2	187.4	187.5	187.6
% Ch, Annual Rate	1.0	1.0	0.6	0.5	0.8	0.6	0.1	0.2
Wood Products	10.4	10.4	10.5	10.5	10.6	10.6	10.6	10.5
% Ch, Annual Rate	1.7	1.2	0.8	1.0	2.5	2.0	-1.0	-2.3
Primary and Fabricated Metals	24.7	24.9	25.0	25.1	25.3	25.4	25.4	25.5
% Ch, Annual Rate	3.9	3.0	2.3	1.8	2.3	2.1	0.6	0.6
Computer and Electronic Products	18.9	19.1	19.3	19.5	19.6	19.7	19.8	19.8
% Ch, Annual Rate	3.6	3.8	3.7	3.6	3.1	2.4	1.5	0.9
Machinery and Electrical Equipment	22.8	23.2	23.5	23.8	24.2	24.4	24.7	25.0
% Ch, Annual Rate	6.1	6.6	5.8	5.2	5.7	4.6	4.0	4.4
Aerospace	78.3	78.0	77.6	77.2	76.8	76.5	76.2	76.0
% Ch, Annual Rate	-2.0	-1.8	-2.0	-2.0	-1.9	-1.9	-1.4	-0.8
Other Transportation Equip.	8.1	8.0	8.0	7.9	7.9	7.8	7.7	7.7
% Ch, Annual Rate	-2.4	-2.6	-2.8	-2.7	-2.2	-2.6	-2.9	-3.1
Other Durables	22.5	22.6	22.7	22.8	22.9	23.0	23.0	23.1
% Ch, Annual Rate	2.3	2.0	1.4	1.1	1.9	2.0	0.9	0.8
Nondurable Manufacturing	86.2	86.6	87.1	87.5	88.0	88.3	88.5	88.7
% Ch, Annual Rate	2.3	2.1	2.1	2.1	2.0	1.7	0.8	1.0
Food Manufacturing	40.9	41.1	41.4	41.6	41.9	42.1	42.2	42.3
% Ch, Annual Rate	3.0	2.7	2.6	2.5	2.2	1.9	0.8	1.1
Paper and Paper Products	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.4
% Ch, Annual Rate	0.6	0.3	0.1	0.2	0.3	-0.3	-1.3	-1.1
Other Nondurables	37.8	38.0	38.2	38.4	38.6	38.7	38.9	39.0
% Ch, Annual Rate	2.0	1.9	1.9	2.0	2.1	1.8	1.2	1.4
Natural Resources and Mining	5.4	5.5	5.5	5.5	5.4	5.4	5.4	5.3
% Ch, Annual Rate	1.5	0.8	0.0	0.2	-1.6	-0.4	-2.8	-3.5
Construction	200.6	200.3	200.1	199.7	199.7	199.6	199.0	198.4
% Ch, Annual Rate	0.3	-0.5	-0.6	-0.7	-0.1	-0.2	-1.2	-1.1
Trade, Transportation, and Utilities	631.8	628.7	629.3	630.0	633.2	634.8	636.3	637.3
% Ch, Annual Rate	-1.3	-1.9	0.3	0.5	2.0	1.0	0.9	0.6
Wholesale Trade	155.9	157.0	157.6	158.1	157.8	158.1	158.2	158.2
% Ch, Annual Rate	3.2	2.9	1.5	1.1	-0.8	0.8	0.2	0.1
Retail Trade	361.2	356.7	356.5	356.8	360.5	361.6	362.8	363.8
% Ch, Annual Rate	-4.0	-4.9	-0.2	0.3	4.1	1.2	1.4	1.1
Electronic Shopping and Mail-Order	82.5	82.9	83.4	83.8	84.3	84.7	85.2	85.6
% Ch	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Other Retail Trade	278.7	273.8	273.2	273.0	276.2	276.9	277.7	278.2
% Ch	-5.8	-6.9	-0.9	-0.2	4.7	1.0	1.2	0.8
Trans., Warehousing, and Utilities	115.0	115.3	115.4	115.4	115.2	115.5	115.6	115.6
% Ch, Annual Rate	1.2	1.1	0.4	0.1	-0.6	0.8	0.4	0.0
Information	165.1	166.5	168.4	170.0	170.9	171.9	171.3	170.0
% Ch, Annual Rate	3.1	3.5	4.6	3.8	2.2	2.2	-1.3	-2.9
Software Publishers	73.1	73.5	73.8	74.1	74.3	74.6	74.9	75.1
% Ch, Annual Rate	1.8	1.9	1.7	1.7	1.3	1.7	1.3	1.3
Other Publishing Industries	1.9	1.8	1.7	1.6	1.5	1.4	1.3	1.2
% Ch, Annual Rate	-14.6	-14.1	-17.2	-18.6	-26.1	-20.1	-28.8	-32.1
Other Information	90.1	91.3	92.9	94.3	95.1	95.8	95.1	93.7
% Ch, Annual Rate	4.5	5.1	7.5	5.9	3.5	3.0	-2.9	-5.7
Financial Activities	158.6	158.7	158.6	158.5	157.5	157.5	157.2	156.9
% Ch, Annual Rate	0.6	0.4	-0.3	-0.4	-2.5	0.0	-0.7	-0.8
Professional and Business Services	515.7	519.2	521.3	523.6	530.2	533.9	536.1	538.2
% Ch, Annual Rate	3.4	2.8	1.6	1.8	5.2	2.8	1.6	1.6
Education and Health Services	550.6	553.6	555.4	556.9	556.8	558.3	559.1	559.7
% Ch, Annual Rate	2.5	2.1	1.4	1.1	-0.1	1.1	0.5	0.5
Leisure and Hospitality	364.2	363.3	361.9	361.1	359.9	359.1	358.1	358.6
% Ch, Annual Rate	-1.8	-1.0	-1.5	-0.9	-1.3	-0.8	-1.1	0.5
Other Services	113.2	113.4	113.5	113.6	113.6	113.7	113.9	114.1
% Ch, Annual Rate	0.7	0.8	0.5	0.4	-0.1	0.5	0.6	0.6
Federal Government	76.7	76.8	76.8	76.9	76.9	76.9	77.0	77.0
% Ch, Annual Rate	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
State and Local Government	539.5	540.9	542.2	543.4	544.5	545.6	546.5	547.5
% Ch, Annual Rate	1.2	1.1	0.9	0.9	0.8	0.8	0.7	0.7

Table A3.1

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

Forecast 2020 to 2025

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	17,819.2	18,608.3	19,240.4	19,618.0	20,339.2	21,088.5	21,838.8	22,844.6
% Ch	5.6	4.4	3.4	2.0	3.7	3.7	3.6	4.6
Total Wage and Salary Disbursements	8,888.5	9,304.2	9,091.1	9,859.6	10,348.0	10,739.5	11,103.2	11,583.7
% Ch	5.0	4.7	-2.3	8.5	5.0	3.8	3.4	4.3
Nonwage Personal Income	8,930.7	9,304.1	10,149.3	9,758.4	9,991.2	10,349.0	10,735.6	11,260.9
% Ch	6.1	4.2	9.1	-3.9	2.4	3.6	3.7	4.9
Supplements to Wages and Salaries	2,040.0	2,123.5	2,072.4	2,226.9	2,339.4	2,442.1	2,521.3	2,625.8
% Ch	4.6	4.1	-2.4	7.5	5.1	4.4	3.2	4.1
Proprietor's Income	1,588.8	1,658.2	1,466.0	1,456.1	1,613.2	1,756.1	1,857.6	1,959.3
% Ch	4.6	4.4	-11.6	-0.7	10.8	8.9	5.8	5.5
Farm	27.2	32.0	21.9	43.6	75.3	70.4	60.9	63.7
% Ch	...	...	...	...	...	...	...	...
Nonfarm	1,561.6	1,626.3	1,444.2	1,412.5	1,537.9	1,685.7	1,796.7	1,895.6
% Ch	5.5	4.1	-11.2	-2.2	8.9	9.6	6.6	5.5
Less: Contribution For Govt. Soc. Ins.	1,356.5	1,420.4	1,420.5	1,525.7	1,582.9	1,635.1	1,687.2	1,758.4
% Ch	4.4	4.7	0.0	7.4	3.7	3.3	3.2	4.2
Dividends/Int./Rent	3,686.9	3,770.8	3,848.2	3,861.0	3,776.0	3,829.0	3,964.7	4,159.2
% Ch	8.4	2.3	2.1	0.3	-2.2	1.4	3.5	4.9
Transfer Payments	2,971.5	3,171.9	4,183.2	3,740.2	3,845.4	3,956.8	4,079.3	4,274.9
% Ch	4.3	6.7	31.9	-10.6	2.8	2.9	3.1	4.8

Table A3.2

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

Forecast 2020 to 2025

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	18,949.8	19,434.4	19,462.9	19,114.7	19,314.6	19,582.1	19,734.9	19,840.4
% Ch, Annual Rate	2.2	10.6	0.6	-7.0	4.2	5.7	3.2	2.2
Total Wage and Salary Disbursements	9,427.0	8,636.2	8,988.2	9,313.2	9,606.2	9,823.1	9,952.9	10,056.1
% Ch, Annual Rate	0.2	-29.6	17.3	15.3	13.2	9.3	5.4	4.2
Nonwage Personal Income	9,522.8	10,798.2	10,474.7	9,801.5	9,708.4	9,758.9	9,782.0	9,784.3
% Ch, Annual Rate	4.3	65.3	-11.5	-23.3	-3.7	2.1	0.9	0.1
Supplements to Wages and Salaries	2,159.9	1,980.1	2,044.1	2,105.5	2,171.5	2,219.0	2,247.4	2,269.6
% Ch, Annual Rate	1.2	-29.4	13.6	12.6	13.1	9.0	5.2	4.0
Proprietor's Income	1,702.1	1,378.8	1,393.5	1,389.8	1,373.1	1,445.3	1,496.5	1,509.5
% Ch, Annual Rate	1.5	-56.9	4.3	-1.1	-4.7	22.7	14.9	3.5
Farm	38.0	15.8	13.8	19.8	28.0	37.8	48.9	59.7
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,664.1	1,363.0	1,379.7	1,369.9	1,345.1	1,407.5	1,447.6	1,449.8
% Ch, Annual Rate	2.6	-55.0	5.0	-2.8	-7.1	19.9	11.9	0.6
Less: Contribution For Govt. Soc. Ins.	1,449.3	1,357.2	1,418.2	1,457.4	1,499.2	1,523.8	1,535.7	1,544.4
% Ch, Annual Rate	3.7	-23.1	19.2	11.5	12.0	6.7	3.2	2.3
Dividends/Int./Rent	3,811.7	3,805.8	3,843.2	3,932.2	3,929.8	3,892.3	3,832.6	3,789.3
% Ch, Annual Rate	2.3	-0.6	4.0	9.6	-0.3	-3.8	-6.0	-4.4
Transfer Payments	3,298.5	4,990.7	4,612.2	3,831.4	3,733.2	3,726.1	3,741.2	3,760.3
% Ch, Annual Rate	10.1	424.1	-27.1	-52.4	-9.9	-0.8	1.6	2.1

Table A3.2 (continued)

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

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	20,028.6	20,231.5	20,454.3	20,642.5	20,847.7	21,013.8	21,162.0	21,330.5
% Ch, Annual Rate	3.8	4.1	4.5	3.7	4.0	3.2	2.9	3.2
Total Wage and Salary Disbursements	10,154.7	10,289.2	10,417.2	10,531.0	10,629.9	10,698.5	10,769.1	10,860.7
% Ch, Annual Rate	4.0	5.4	5.1	4.4	3.8	2.6	2.7	3.4
Nonwage Personal Income	9,873.9	9,942.3	10,037.1	10,111.5	10,217.8	10,315.3	10,392.9	10,469.8
% Ch, Annual Rate	3.7	2.8	3.9	3.0	4.3	3.9	3.0	3.0
Supplements to Wages and Salaries	2,293.4	2,324.1	2,355.6	2,384.8	2,413.7	2,434.6	2,451.4	2,468.7
% Ch, Annual Rate	4.3	5.5	5.5	5.0	4.9	3.5	2.8	2.9
Proprietor's Income	1,545.5	1,593.4	1,642.0	1,672.0	1,710.9	1,742.9	1,772.5	1,798.2
% Ch, Annual Rate	9.9	13.0	12.8	7.5	9.6	7.7	7.0	5.9
Farm	68.6	75.2	78.7	78.8	76.4	72.2	68.1	64.8
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,476.8	1,518.2	1,563.3	1,593.3	1,634.5	1,670.7	1,704.4	1,733.3
% Ch, Annual Rate	7.7	11.7	12.4	7.9	10.8	9.1	8.3	7.0
Less: Contribution For Govt. Soc. Ins.	1,560.4	1,575.9	1,591.0	1,604.3	1,622.9	1,630.2	1,638.0	1,649.2
% Ch, Annual Rate	4.2	4.0	3.9	3.4	4.7	1.8	1.9	2.8
Dividends/Int./Rent	3,782.2	3,767.8	3,774.4	3,779.5	3,785.9	3,821.5	3,841.2	3,867.4
% Ch, Annual Rate	-0.7	-1.5	0.7	0.5	0.7	3.8	2.1	2.8
Transfer Payments	3,813.3	3,832.9	3,856.1	3,879.5	3,930.2	3,946.5	3,965.8	3,984.7
% Ch, Annual Rate	5.8	2.1	2.4	2.4	5.3	1.7	2.0	1.9

Table A3.2 (continued)

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

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	21,519.7	21,720.7	21,941.9	22,172.9	22,463.1	22,726.0	22,970.9	23,218.5
% Ch, Annual Rate	3.6	3.8	4.1	4.3	5.3	4.8	4.4	4.4
Total Wage and Salary Disbursements	10,956.5	11,051.7	11,150.0	11,254.7	11,391.9	11,528.0	11,646.9	11,767.9
% Ch, Annual Rate	3.6	3.5	3.6	3.8	5.0	4.9	4.2	4.2
Nonwage Personal Income	10,563.3	10,669.0	10,792.0	10,918.2	11,071.2	11,198.0	11,324.0	11,450.6
% Ch, Annual Rate	3.6	4.1	4.7	4.8	5.7	4.7	4.6	4.5
Supplements to Wages and Salaries	2,491.0	2,510.2	2,530.8	2,553.2	2,582.8	2,611.8	2,640.4	2,668.4
% Ch, Annual Rate	3.7	3.1	3.3	3.6	4.7	4.6	4.4	4.3
Proprietor's Income	1,821.8	1,846.2	1,870.2	1,892.1	1,919.2	1,946.8	1,973.3	1,998.1
% Ch, Annual Rate	5.3	5.5	5.3	4.8	5.9	5.9	5.5	5.1
Farm	62.3	60.8	60.1	60.2	61.5	63.1	64.4	65.9
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	1,759.4	1,785.5	1,810.0	1,831.9	1,857.7	1,883.8	1,908.9	1,932.2
% Ch, Annual Rate	6.2	6.1	5.6	4.9	5.8	5.7	5.4	5.0
Less: Contribution For Govt. Soc. Ins.	1,668.5	1,680.6	1,693.1	1,706.7	1,732.6	1,751.1	1,766.9	1,783.0
% Ch, Annual Rate	4.8	2.9	3.0	3.2	6.2	4.3	3.7	3.7
Dividends/Int./Rent	3,894.4	3,938.7	3,986.8	4,038.8	4,090.6	4,137.5	4,181.1	4,227.7
% Ch, Annual Rate	2.8	4.6	5.0	5.3	5.2	4.7	4.3	4.5
Transfer Payments	4,024.6	4,054.5	4,097.4	4,140.7	4,211.2	4,253.0	4,296.1	4,339.3
% Ch, Annual Rate	4.1	3.0	4.3	4.3	7.0	4.0	4.1	4.1

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

	2018	2019	2020	2021	2022	2023	2024	2025
Personal Income	467.399	494.189	513.039	523.244	541.944	561.618	582.094	609.459
% Ch	7.5	5.7	3.8	2.0	3.6	3.6	3.6	4.7
Total Wage and Salary Disbursements	237.156	253.582	250.528	270.128	283.293	293.446	303.098	315.851
% Ch	8.7	6.9	-1.2	7.8	4.9	3.6	3.3	4.2
Manufacturing	22.833	23.910	21.553	22.535	23.374	24.002	24.603	25.498
% Ch	5.3	4.7	-9.9	4.6	3.7	2.7	2.5	3.6
Durable Manufacturing	17.976	18.844	16.702	17.355	18.093	18.529	18.914	19.525
% Ch	5.3	4.8	-11.4	3.9	4.3	2.4	2.1	3.2
Nondurable Manufacturing	4.857	5.065	4.851	5.180	5.281	5.473	5.689	5.973
% Ch	5.5	4.3	-4.2	6.8	2.0	3.6	4.0	5.0
Nonmanufacturing	207.226	222.334	221.533	239.709	251.696	260.933	269.707	281.243
% Ch	9.4	7.3	-0.4	8.2	5.0	3.7	3.4	4.3
Other Private Wages	1.339	1.338	1.291	1.400	1.467	1.513	1.553	1.608
% Ch	8.0	-0.1	-3.5	8.5	4.8	3.1	2.6	3.6
Farm Wages	1.490	1.581	1.545	1.723	1.841	1.929	2.009	2.115
% Ch	0.6	6.1	-2.3	11.6	6.9	4.8	4.2	5.3
Military Wages	4.269	4.421	4.606	4.761	4.914	5.070	5.226	5.386
% Ch	2.0	3.6	4.2	3.4	3.2	3.2	3.1	3.1
Nonwage Personal Income	230.243	240.606	262.511	253.116	258.651	268.172	278.996	293.608
% Ch	6.3	4.5	9.1	-3.6	2.2	3.7	4.0	5.2
Supplements to Wages and Salaries	52.360	55.360	54.356	58.041	60.880	63.388	65.404	68.078
% Ch	5.7	5.7	-1.8	6.8	4.9	4.1	3.2	4.1
Proprietor's Income	36.045	37.697	33.179	32.324	35.628	38.750	40.986	43.148
% Ch	2.0	4.6	-12.0	-2.6	10.2	8.8	5.8	5.3
Farm	1.902	2.112	1.412	1.240	1.741	1.656	1.495	1.544
% Ch	...	...	...	...	...	...	...	...
Nonfarm	34.143	35.584	31.766	31.083	33.886	37.093	39.491	41.604
% Ch	3.6	4.2	-10.7	-2.1	9.0	9.5	6.5	5.4
Less: Contribution For Govt. Soc. Ins.	38.088	40.433	40.617	43.333	44.821	46.060	47.310	49.108
% Ch	5.4	6.2	0.5	6.7	3.4	2.8	2.7	3.8
Plus: Residence Adjustment	4.324	4.452	4.275	4.726	5.012	5.241	5.454	5.736
% Ch	2.1	3.0	-4.0	10.5	6.1	4.6	4.1	5.2
Dividends/Int./Rent	109.752	112.664	115.550	116.320	114.159	116.170	120.645	126.925
% Ch	8.7	2.7	2.6	0.7	-1.9	1.8	3.9	5.2
Transfer Payments	65.849	70.866	95.768	85.039	87.794	90.683	93.817	98.829
% Ch	5.0	7.6	35.1	-11.2	3.2	3.3	3.5	5.3
State U.I. Benefits	0.978	0.949	16.472	7.238	5.799	3.880	1.766	1.759
% Ch	-2.2	-3.0	1,636.0	-56.1	-19.9	-33.1	-54.5	-0.4
Other Transfers	64.871	69.917	79.296	77.801	81.995	86.803	92.051	97.069
% Ch	5.1	7.8	13.4	-1.9	5.4	5.9	6.0	5.5

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

	2020:1	2020:2	2020:3	2020:4	2021:1	2021:2	2021:3	2021:4
Personal Income	504.685	518.953	518.035	510.481	515.688	522.288	526.005	528.995
% Ch, Annual Rate	2.1	11.8	-0.7	-5.7	4.1	5.2	2.9	2.3
Total Wage and Salary Disbursements	258.091	240.431	247.606	255.982	263.431	269.043	272.500	275.538
% Ch, Annual Rate	-0.3	-24.7	12.5	14.2	12.2	8.8	5.2	4.5
Manufacturing	21.747	21.804	21.249	21.412	21.920	22.520	22.784	22.915
% Ch, Annual Rate	-31.6	1.1	-9.8	3.1	9.8	11.4	4.8	2.3
Durable Manufacturing	16.671	17.132	16.486	16.520	16.830	17.322	17.552	17.716
% Ch, Annual Rate	-38.5	11.5	-14.3	0.8	7.7	12.2	5.4	3.8
Nondurable Manufacturing	5.076	4.673	4.763	4.892	5.090	5.198	5.232	5.199
% Ch, Annual Rate	-0.8	-28.2	8.0	11.3	17.2	8.8	2.6	-2.4
Nonmanufacturing	228.834	211.356	218.939	227.003	233.777	238.669	241.775	244.614
% Ch, Annual Rate	3.5	-27.2	15.1	15.6	12.5	8.6	5.3	4.8
Other Private Wages	1.342	1.230	1.271	1.320	1.363	1.395	1.414	1.429
% Ch, Annual Rate	-1.8	-29.4	13.9	16.2	13.8	9.7	5.4	4.5
Farm Wages	1.613	1.454	1.518	1.593	1.662	1.713	1.745	1.773
% Ch, Annual Rate	-1.1	-34.0	18.8	21.5	18.2	13.0	7.7	6.5
Military Wages	4.555	4.587	4.630	4.653	4.710	4.745	4.782	4.806
% Ch, Annual Rate	5.7	2.8	3.8	2.1	5.0	3.0	3.2	2.0
Nonwage Personal Income	246.594	278.522	270.429	254.500	252.256	253.246	253.506	253.457
% Ch, Annual Rate	4.5	62.7	-11.1	-21.6	-3.5	1.6	0.4	-0.1
Supplements to Wages and Salaries	56.792	52.112	53.489	55.029	56.665	57.835	58.536	59.127
% Ch, Annual Rate	3.0	-29.1	11.0	12.0	12.4	8.5	4.9	4.1
Proprietor's Income	38.659	31.566	31.380	31.109	30.600	32.108	33.169	33.419
% Ch, Annual Rate	0.7	-55.5	-2.3	-3.4	-6.4	21.2	13.9	3.1
Farm	2.047	1.546	1.078	0.978	1.022	1.144	1.310	1.484
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	36.612	30.021	30.301	30.131	29.578	30.964	31.858	31.934
% Ch, Annual Rate	3.1	-54.8	3.8	-2.2	-7.1	20.1	12.1	1.0
Less: Contribution For Govt. Soc. Ins.	41.647	38.961	40.384	41.476	42.622	43.286	43.588	43.835
% Ch, Annual Rate	5.4	-23.4	15.4	11.3	11.5	6.4	2.8	2.3
Plus: Residence Adjustment	4.472	4.008	4.215	4.405	4.577	4.704	4.780	4.841
% Ch, Annual Rate	0.3	-35.5	22.3	19.3	16.5	11.6	6.6	5.1
Dividends/Int./Rent	114.289	114.239	115.452	118.222	118.238	117.210	115.517	114.315
% Ch, Annual Rate	2.9	-0.2	4.3	9.9	0.1	-3.4	-5.7	-4.1
Transfer Payments	74.028	115.557	106.277	87.210	84.798	84.675	85.093	85.591
% Ch, Annual Rate	11.4	493.8	-28.5	-54.7	-10.6	-0.6	2.0	2.4
State U.I. Benefits	1.322	33.772	20.851	9.942	8.386	7.280	6.794	6.494
% Ch, Annual Rate	359.1	###	-85.5	-94.8	-49.4	-43.2	-24.2	-16.5
Other Transfers	72.706	81.785	85.426	77.268	76.412	77.395	78.299	79.097
% Ch, Annual Rate	9.0	60.1	19.0	-33.1	-4.4	5.2	4.8	4.1

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2020 to 2025

	2022:1	2022:2	2022:3	2022:4	2023:1	2023:2	2023:3	2023:4
Personal Income	534.028	539.180	544.860	549.707	555.171	559.460	563.604	568.235
% Ch, Annual Rate	3.9	3.9	4.3	3.6	4.0	3.1	3.0	3.3
Total Wage and Salary Disbursements	278.351	281.829	285.063	287.928	290.647	292.235	294.228	296.674
% Ch, Annual Rate	4.1	5.1	4.7	4.1	3.8	2.2	2.8	3.4
Manufacturing	23.109	23.279	23.451	23.658	23.798	23.938	24.066	24.205
% Ch, Annual Rate	3.4	3.0	3.0	3.6	2.4	2.4	2.1	2.3
Durable Manufacturing	17.902	18.029	18.147	18.293	18.391	18.492	18.574	18.659
% Ch, Annual Rate	4.3	2.9	2.6	3.3	2.2	2.2	1.8	1.9
Nondurable Manufacturing	5.206	5.250	5.304	5.365	5.407	5.447	5.492	5.546
% Ch, Annual Rate	0.6	3.4	4.1	4.7	3.2	3.0	3.4	4.0
Nonmanufacturing	247.139	250.363	253.343	255.938	258.423	259.817	261.619	263.871
% Ch, Annual Rate	4.2	5.3	4.8	4.2	3.9	2.2	2.8	3.5
Other Private Wages	1.443	1.460	1.476	1.490	1.502	1.508	1.516	1.526
% Ch, Annual Rate	3.9	4.9	4.4	3.7	3.4	1.5	2.1	2.8
Farm Wages	1.798	1.828	1.857	1.882	1.905	1.919	1.936	1.956
% Ch, Annual Rate	5.8	7.0	6.3	5.5	5.1	2.8	3.5	4.3
Military Wages	4.863	4.898	4.936	4.961	5.018	5.053	5.091	5.116
% Ch, Annual Rate	4.8	2.9	3.1	2.0	4.7	2.8	3.0	2.0
Nonwage Personal Income	255.677	257.351	259.797	261.779	264.524	267.224	269.377	271.561
% Ch, Annual Rate	3.5	2.6	3.9	3.1	4.3	4.1	3.3	3.3
Supplements to Wages and Salaries	59.766	60.518	61.271	61.964	62.713	63.177	63.610	64.053
% Ch, Annual Rate	4.4	5.1	5.1	4.6	4.9	3.0	2.8	2.8
Proprietor's Income	34.185	35.203	36.244	36.879	37.752	38.442	39.114	39.690
% Ch, Annual Rate	9.5	12.5	12.4	7.2	9.8	7.5	7.2	6.0
Farm	1.630	1.740	1.797	1.798	1.758	1.687	1.617	1.563
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	32.555	33.463	34.447	35.080	35.994	36.755	37.496	38.127
% Ch, Annual Rate	8.0	11.6	12.3	7.6	10.8	8.7	8.3	6.9
Less: Contribution For Govt. Soc. Ins.	44.275	44.662	45.021	45.327	45.822	45.932	46.111	46.374
% Ch, Annual Rate	4.1	3.5	3.3	2.7	4.4	1.0	1.6	2.3
Plus: Residence Adjustment	4.898	4.977	5.052	5.119	5.177	5.217	5.258	5.312
% Ch, Annual Rate	4.9	6.6	6.2	5.4	4.6	3.1	3.2	4.1
Dividends/Int./Rent	114.194	113.860	114.162	114.421	114.719	115.898	116.589	117.473
% Ch, Annual Rate	-0.4	-1.2	1.1	0.9	1.0	4.2	2.4	3.1
Transfer Payments	86.909	87.455	88.089	88.724	89.986	90.422	90.917	91.406
% Ch, Annual Rate	6.3	2.5	2.9	2.9	5.8	2.0	2.2	2.2
State U.I. Benefits	6.305	5.915	5.594	5.381	5.007	4.250	3.499	2.763
% Ch, Annual Rate	-11.1	-22.5	-20.0	-14.4	-25.0	-48.1	-54.0	-61.1
Other Transfers	80.603	81.540	82.495	83.343	84.980	86.172	87.418	88.643
% Ch, Annual Rate	7.8	4.7	4.8	4.2	8.1	5.7	5.9	5.7

Table A3.4 (continued)

Washington Personal Income by Component (Billions of Dollars)

Forecast 2020 to 2025

	2024:1	2024:2	2024:3	2024:4	2025:1	2025:2	2025:3	2025:4
Personal Income	573.293	578.791	584.943	591.349	599.107	606.198	612.890	619.640
% Ch, Annual Rate	3.6	3.9	4.3	4.5	5.4	4.8	4.5	4.5
Total Wage and Salary Disbursements	299.164	301.664	304.359	307.206	310.783	314.339	317.536	320.746
% Ch, Annual Rate	3.4	3.4	3.6	3.8	4.7	4.7	4.1	4.1
Manufacturing	24.352	24.511	24.682	24.868	25.120	25.367	25.615	25.889
% Ch, Annual Rate	2.5	2.6	2.8	3.1	4.1	4.0	4.0	4.4
Durable Manufacturing	18.751	18.855	18.964	19.085	19.258	19.429	19.607	19.805
% Ch, Annual Rate	2.0	2.2	2.3	2.6	3.7	3.6	3.7	4.1
Nondurable Manufacturing	5.601	5.656	5.717	5.784	5.862	5.938	6.008	6.084
% Ch, Annual Rate	4.0	4.0	4.4	4.7	5.6	5.3	4.8	5.2
Nonmanufacturing	266.125	268.399	270.852	273.451	276.671	279.899	282.767	285.636
% Ch, Annual Rate	3.5	3.5	3.7	3.9	4.8	4.7	4.2	4.1
Other Private Wages	1.536	1.547	1.558	1.570	1.586	1.602	1.616	1.629
% Ch, Annual Rate	2.8	2.7	2.9	3.1	4.2	4.1	3.5	3.4
Farm Wages	1.977	1.998	2.020	2.043	2.073	2.103	2.129	2.156
% Ch, Annual Rate	4.3	4.2	4.5	4.7	6.0	5.8	5.1	5.1
Military Wages	5.174	5.209	5.248	5.274	5.332	5.369	5.409	5.436
% Ch, Annual Rate	4.6	2.8	3.0	2.0	4.5	2.8	3.0	2.0
Nonwage Personal Income	274.129	277.128	280.583	284.142	288.324	291.859	295.354	298.894
% Ch, Annual Rate	3.8	4.4	5.1	5.2	6.0	5.0	4.9	4.9
Supplements to Wages and Salaries	64.631	65.112	65.647	66.225	66.994	67.724	68.445	69.150
% Ch, Annual Rate	3.7	3.0	3.3	3.6	4.7	4.4	4.3	4.2
Proprietor's Income	40.207	40.739	41.263	41.736	42.307	42.887	43.443	43.955
% Ch, Annual Rate	5.3	5.4	5.2	4.7	5.6	5.6	5.3	4.8
Farm	1.520	1.494	1.483	1.484	1.507	1.532	1.555	1.580
% Ch, Annual Rate	...	...	...	...	...	...	...	...
Nonfarm	38.686	39.246	39.780	40.251	40.801	41.355	41.888	42.374
% Ch, Annual Rate	6.0	5.9	5.6	4.8	5.6	5.5	5.3	4.7
Less: Contribution For Govt. Soc. Ins.	46.861	47.141	47.452	47.788	48.465	48.925	49.321	49.720
% Ch, Annual Rate	4.3	2.4	2.7	2.9	5.8	3.9	3.3	3.3
Plus: Residence Adjustment	5.368	5.424	5.482	5.543	5.623	5.703	5.773	5.844
% Ch, Annual Rate	4.3	4.2	4.3	4.6	5.9	5.8	5.0	5.0
Dividends/Int./Rent	118.380	119.812	121.361	123.027	124.692	126.210	127.637	129.160
% Ch, Annual Rate	3.1	4.9	5.3	5.6	5.5	5.0	4.6	4.9
Transfer Payments	92.404	93.181	94.283	95.400	97.172	98.260	99.377	100.504
% Ch, Annual Rate	4.4	3.4	4.8	4.8	7.6	4.6	4.6	4.6
State U.I. Benefits	2.041	1.655	1.675	1.692	1.721	1.745	1.771	1.800
% Ch, Annual Rate	-70.2	-56.7	4.7	4.2	6.9	5.9	6.0	6.7
Other Transfers	90.363	91.525	92.608	93.708	95.452	96.515	97.606	98.704
% Ch, Annual Rate	8.0	5.2	4.8	4.8	7.7	4.5	4.6	4.6

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

	PCE Price Index*		U.S. CPI#		Seattle CPI+	
	Index	Percent Change	Index	Percent Change	Index	Percent Change
1971	21.8	4.2	0.405	4.2	0.382	2.1
1972	22.6	3.4	0.418	3.3	0.393	2.9
1973	23.8	5.4	0.444	6.3	0.418	6.4
1974	26.3	10.4	0.493	11.0	0.464	11.0
1975	28.5	8.3	0.538	9.1	0.511	10.2
1976	30.0	5.5	0.569	5.8	0.540	5.5
1977	32.0	6.5	0.606	6.5	0.583	8.0
1978	34.2	7.0	0.652	7.6	0.640	9.9
1979	37.3	8.9	0.726	11.3	0.709	10.8
1980	41.3	10.8	0.824	13.5	0.827	16.7
1981	45.0	9.0	0.909	10.4	0.916	10.8
1982	47.5	5.6	0.965	6.2	0.978	6.7
1983	49.5	4.3	0.996	3.2	0.993	1.5
1984	51.3	3.8	1.039	4.4	1.030	3.8
1985	53.1	3.5	1.076	3.5	1.056	2.5
1986	54.3	2.2	1.097	1.9	1.066	1.0
1987	56.0	3.1	1.136	3.6	1.092	2.4
1988	58.2	3.9	1.183	4.1	1.128	3.3
1989	60.7	4.4	1.239	4.8	1.181	4.7
1990	63.4	4.4	1.307	5.4	1.268	7.3
1991	65.5	3.3	1.362	4.2	1.341	5.8
1992	67.2	2.7	1.403	3.0	1.390	3.7
1993	68.9	2.5	1.445	3.0	1.429	2.8
1994	70.3	2.1	1.482	2.6	1.478	3.4
1995	71.8	2.1	1.524	2.8	1.522	3.0
1996	73.3	2.1	1.569	2.9	1.575	3.4
1997	74.6	1.7	1.605	2.3	1.630	3.5
1998	75.2	0.8	1.630	1.5	1.677	2.9
1999	76.3	1.5	1.666	2.2	1.728	3.0
2000	78.2	2.5	1.722	3.4	1.792	3.7
2001	79.7	1.9	1.770	2.8	1.857	3.6
2002	80.8	1.3	1.799	1.6	1.893	2.0
2003	82.4	1.9	1.840	2.3	1.924	1.6
2004	84.4	2.5	1.889	2.7	1.947	1.2
2005	86.8	2.8	1.953	3.4	2.002	2.8
2006	89.2	2.7	2.016	3.2	2.076	3.7
2007	91.4	2.5	2.073	2.9	2.157	3.9
2008	94.2	3.0	2.153	3.8	2.247	4.2
2009	94.1	-0.1	2.146	-0.3	2.260	0.6
2010	95.7	1.7	2.181	1.6	2.267	0.3
2011	98.1	2.5	2.249	3.1	2.328	2.7
2012	100.0	1.9	2.296	2.1	2.387	2.5
2013	101.3	1.3	2.330	1.5	2.416	1.2
2014	102.8	1.5	2.367	1.6	2.460	1.8
2015	103.0	0.2	2.370	0.1	2.494	1.4
2016	104.1	1.0	2.400	1.3	2.550	2.3
2017	105.9	1.8	2.451	2.1	2.628	3.0
2018	108.1	2.1	2.511	2.4	2.711	3.2
2019	109.7	1.4	2.557	1.8	2.779	2.5
Forecast						
2020	110.6	0.9	2.586	1.2	2.818	1.4
2021	112.0	1.3	2.635	1.9	2.871	1.9
2022	113.6	1.4	2.682	1.8	2.923	1.8
2023	115.4	1.5	2.727	1.7	2.971	1.7
2024	117.3	1.6	2.779	1.9	3.028	1.9
2025	119.4	1.8	2.835	2.0	3.090	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	16.8	5.5	21.4	2.3	4.9	6.4	9.1	0.7
1972	17.5	4.2	22.4	4.8	5.0	0.6	9.2	1.3
1973	18.3	4.8	25.2	12.7	5.7	14.6	10.1	9.6
1974	19.9	8.5	29.0	15.2	9.0	58.9	13.6	35.1
1975	21.6	8.6	31.2	7.5	9.8	8.5	14.6	6.7
1976	23.1	6.9	31.8	1.9	10.5	7.3	15.2	4.2
1977	24.8	7.6	33.7	5.9	11.9	13.2	16.1	5.8
1978	26.8	7.7	36.9	9.6	12.6	5.7	16.8	4.3
1979	29.0	8.4	40.5	9.8	17.3	37.9	22.5	34.0
1980	32.0	10.4	43.9	8.4	24.3	40.4	31.2	38.8
1981	35.3	10.2	47.1	7.1	29.8	22.3	34.7	11.3
1982	38.1	7.8	48.3	2.6	29.2	-1.9	32.9	-5.1
1983	40.4	6.1	48.8	1.1	26.9	-7.8	31.9	-3.3
1984	42.5	5.2	50.3	3.0	27.5	2.2	31.4	-1.5
1985	44.6	4.9	50.9	1.1	26.4	-3.9	31.6	0.8
1986	46.4	4.1	52.1	2.4	20.7	-21.7	24.8	-21.5
1987	47.8	3.0	53.7	3.2	21.2	2.6	25.8	3.8
1988	50.1	4.8	55.3	3.0	21.2	0.0	26.0	0.8
1989	52.4	4.7	58.2	5.3	22.5	5.9	28.4	9.2
1990	54.8	4.6	61.1	4.9	27.1	20.4	32.3	13.8
1991	57.0	3.9	63.0	3.1	25.8	-4.8	31.9	-1.3
1992	59.0	3.6	63.5	0.8	24.7	-4.1	31.8	-0.4
1993	61.1	3.5	64.3	1.4	24.6	-0.7	31.5	-1.0
1994	62.7	2.7	65.4	1.7	24.1	-1.8	31.6	0.5
1995	64.5	2.8	66.8	2.2	23.9	-0.9	32.1	1.6
1996	66.2	2.7	68.9	3.1	27.1	13.3	34.1	6.1
1997	68.1	2.8	70.2	1.9	27.1	0.2	34.1	0.0
1998	69.5	2.1	71.1	1.3	24.0	-11.4	29.7	-12.9
1999	71.0	2.0	72.2	1.6	24.4	1.7	32.3	8.9
2000	72.9	2.8	73.9	2.3	35.8	46.6	41.3	27.8
2001	75.2	3.1	76.1	2.9	35.1	-2.0	39.8	-3.6
2002	77.1	2.6	77.2	1.5	31.3	-10.8	37.4	-6.0
2003	79.5	3.1	78.7	1.9	37.9	20.9	43.6	16.5
2004	82.0	3.1	81.2	3.1	44.1	16.4	51.3	17.6
2005	84.7	3.3	82.6	1.7	58.7	33.0	62.3	21.6
2006	87.6	3.5	84.0	1.7	66.7	13.7	70.3	12.9
2007	90.5	3.3	87.2	3.9	71.3	6.9	76.3	8.4
2008	93.2	3.0	92.6	6.1	96.8	35.7	88.8	16.5
2009	94.2	1.1	93.7	1.2	66.2	-31.6	65.2	-26.6
2010	96.0	1.8	93.9	0.3	77.5	16.9	76.9	18.0
2011	97.8	1.9	97.7	4.0	98.6	27.3	96.6	25.7
2012	100.0	2.2	100.0	2.4	100.0	1.4	100.0	3.5
2013	102.3	2.3	101.0	1.0	98.8	-1.2	97.2	-2.8
2014	104.8	2.4	102.9	1.9	98.3	-0.5	93.5	-3.8
2015	106.7	1.8	104.1	1.1	69.8	-29.0	68.7	-26.6
2016	109.1	2.3	103.0	-1.0	58.0	-17.0	61.0	-11.1
2017	111.8	2.4	102.9	-0.1	66.9	15.3	68.9	12.8
2018	114.9	2.7	103.4	0.5	80.8	20.9	78.0	13.3
2019	117.5	2.3	104.4	1.0	77.1	-4.6	75.2	-3.6

Forecast

2020	119.5	1.7	108.2	3.7	64.7	-16.1	65.3	-13.1
2021	121.5	1.7	110.5	2.1	69.9	8.1	67.5	3.4
2022	124.0	2.0	112.5	1.8	72.6	3.8	70.4	4.3
2023	126.8	2.2	114.5	1.7	72.3	-0.4	69.5	-1.3

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

* As of April 1 of Each Year

Source: Office of Financial Management

Table A5.2
Washington Population*
 (Thousands)

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

* As of April 1 of Each Year

Source: Office of Financial Management

Table A6.1
Summary of National and State Indicators

Indicator	Latest Data	Indication*
U.S. Leading Index	May 2020	+
U.S. Real GDP Growth	1st quarter 2020	-
U.S. ISM Index	May 2020	+
U.S. Employment YOY%Δ	May 2020	+
U.S. Unemployment Rate	May 2020	+
U.S. Consumer Confidence	May 2020	+
U.S. Consumer Sentiment	June 2020	+
U.S. Light Vehicle Sales	May 2020	+
U.S. CPI YOY%Δ	May 2020	+
U.S. Home Prices YOY%Δ	March 2020	+
S&P 500 Index	June 2020	+
WA Leading Index	May 2020	+
WA ISM-WW Index	May 2020	+
WA Employment YOY%Δ	May 2020	+
WA Aerospace Empl. YOY%Δ	May 2020	-
WA Unemployment Rate	May 2020	+
WA Help Wanted Index	May 2020	-
WA Business Cycle Indicator	May 2020	+
WA Initial Unemploy. Claims	May 2020	+
WA Housing Permits	May 2020	+
WA Weekly Hours in Mfg.	May 2020	+
WA New Vehicle Registration	May 2020	+
WA In-Migration	April 2020	-
WA Exports-Total YOY%Δ	1st quarter 2020	-
WA Exports- w/o Trans. Equip. YOY%Δ	1st quarter 2020	-
Seattle CPI YOY%Δ	April 2020	+
Seattle Home Prices YOY%Δ	March 2020	+
WA Construction Activity Index	May 2020	+

*Change from the previous reading

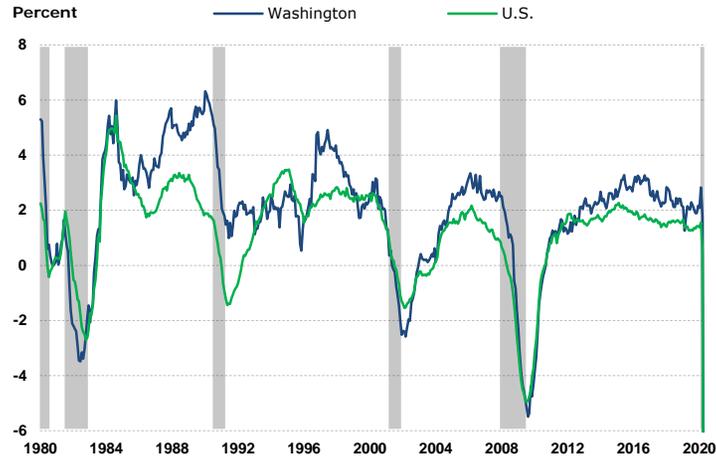
Table A6.2
Washington Business Indicators
Historical Data

	WA Index of Leading Indicators	U.S. Index of Leading Indicators	WA State Business Cycle Indicator	WA State Construction Index	WA State Help Wanted Index	WA Purchasing Management Index	U.S. Purchasing Management Index
2014:01	113.1	92.0	47.9	93.9	118.2	63.5	51.8
2014:02	113.6	92.5	46.5	94.8	118.5	68.7	54.3
2014:03	114.2	93.4	46.9	95.1	118.6	63.6	54.4
2014:04	114.6	93.5	49.4	96.2	120.6	53.7	55.3
2014:05	115.0	94.0	49.7	95.9	118.7	59.6	55.6
2014:06	115.6	94.7	50.1	95.4	121.0	67.0	55.7
2014:07	116.3	95.2	51.5	97.9	121.3	50.1	56.4
2014:08	116.3	95.5	51.4	96.5	121.6	62.9	58.1
2014:09	116.2	96.1	51.8	99.1	114.3	60.3	56.1
2014:10	116.5	96.4	51.8	98.5	119.0	57.6	57.9
2014:11	117.6	96.8	53.5	100.0	128.0	63.1	57.6
2014:12	117.1	97.3	54.2	101.2	122.0	53.3	55.1
2015:01	117.9	97.4	54.8	103.8	127.6	66.6	53.5
2015:02	118.9	97.4	59.8	107.7	137.2	65.9	52.9
2015:03	118.2	97.9	58.9	104.0	138.8	64.1	51.5
2015:04	118.3	98.4	59.0	102.5	135.7	60.4	51.5
2015:05	119.0	98.8	58.3	102.8	139.0	60.3	52.8
2015:06	118.9	99.3	59.0	103.1	136.0	51.4	53.5
2015:07	118.8	99.1	60.8	103.2	141.0	53.6	52.7
2015:08	119.0	99.1	59.8	104.8	139.1	48.0	51.1
2015:09	117.9	99.0	59.1	104.5	126.6	48.0	50.2
2015:10	118.4	99.4	60.2	103.3	132.4	46.1	50.1
2015:11	118.5	99.8	60.4	103.5	134.3	50.0	48.6
2015:12	118.7	99.6	63.1	105.9	130.7	54.5	48.0
2016:01	118.4	99.3	63.4	105.9	128.7	57.2	48.2
2016:02	118.6	99.2	65.8	107.4	124.9	55.4	49.7
2016:03	119.1	99.2	63.2	106.9	128.9	55.7	51.7
2016:04	120.2	99.7	63.2	107.9	130.9	50.8	50.7
2016:05	120.8	99.5	65.4	108.1	148.2	49.2	51.0
2016:06	121.1	99.8	66.6	109.2	151.3	49.1	52.8
2016:07	121.7	100.2	67.7	108.6	156.3	50.8	52.3
2016:08	121.0	100.2	67.0	106.4	153.1	47.7	49.4
2016:09	121.8	100.4	67.6	111.1	143.4	51.4	51.7
2016:10	122.2	100.5	68.5	111.6	152.3	53.1	52.0
2016:11	121.6	100.7	70.1	111.7	148.8	53.3	53.5
2016:12	121.7	101.2	71.1	113.0	149.2	47.3	54.5
2017:01	121.9	101.8	69.3	111.1	152.5	54.2	56.0
2017:02	121.8	102.1	68.9	112.2	140.1	48.6	57.7
2017:03	122.4	102.6	70.4	111.6	143.4	59.2	57.2
2017:04	122.9	102.8	69.0	111.8	143.3	59.2	54.8
2017:05	123.4	103.2	70.6	112.6	149.2	45.0	54.9
2017:06	124.0	103.8	70.2	113.3	145.4	50.0	57.8
2017:07	124.4	104.1	70.7	113.7	139.5	47.0	56.3
2017:08	124.6	104.5	72.0	114.3	135.1	58.2	58.8
2017:09	125.1	104.5	73.5	113.8	140.4	57.5	60.8
2017:10	125.6	105.9	73.7	117.1	132.7	51.8	58.7
2017:11	125.8	106.3	76.4	116.9	134.7	65.0	58.2
2017:12	126.7	107.1	75.3	116.3	138.6	65.8	59.7
2018:01	126.5	107.8	75.0	115.9	136.8	60.8	59.1
2018:02	127.7	108.5	77.0	118.1	133.3	68.3	60.8
2018:03	128.3	108.8	77.8	119.9	137.4	68.0	59.3
2018:04	128.0	109.3	76.5	116.7	133.7	55.8	57.3
2018:05	126.9	109.4	77.2	115.3	128.0	61.7	58.7
2018:06	126.9	110.0	76.9	117.1	123.1	56.0	60.2
2018:07	126.8	110.4	76.9	115.7	124.8	60.0	58.1
2018:08	127.0	110.9	75.9	117.5	123.4	61.1	61.3
2018:09	127.9	111.5	76.7	116.6	131.5	62.7	59.8
2018:10	127.8	111.4	77.3	118.0	129.3	55.0	57.7
2018:11	127.5	111.5	77.6	118.5	121.9	60.0	59.3
2018:12	128.0	111.3	77.2	119.4	121.8	52.7	54.1
2019:01	127.9	111.3	77.0	119.1	123.5	54.5	56.6
2019:02	125.9	111.5	73.3	114.7	122.5	61.1	54.2
2019:03	128.9	111.7	76.4	119.9	125.6	57.8	55.3
2019:04	128.9	111.8	77.7	120.9	125.5	54.0	52.8
2019:05	128.5	111.8	76.9	119.9	124.0	54.0	52.1
2019:06	128.9	111.6	76.9	119.0	122.8	56.7	51.7
2019:07	129.6	112.0	77.8	121.6	123.0	57.0	51.2
2019:08	129.1	111.8	76.7	119.4	123.3	56.0	49.1
2019:09	129.3	111.6	78.2	120.8	127.6	54.0	47.8
2019:10	129.1	111.4	78.6	120.7	122.9	58.2	48.3
2019:11	129.8	111.6	79.0	123.4	122.5	47.0	48.1
2019:12	130.3	111.4	82.0	125.1	123.5	52.5	47.2
2020:01	129.0	112.0	78.9	120.1	121.8	53.0	50.9
2020:02	129.5	111.8	80.3	120.3	122.1	52.0	50.1
2020:03	120.1	103.4	74.3	120.7	119.9	46.0	49.1
2020:04	109.0	97.1	36.6	98.2	70.7	38.5	41.5
2020:05	111.8	99.8	38.1	108.3	56.1	41.0	43.1

Figure A7.1: Washington State Economic Indicators

Year-over-Year Employment Growth

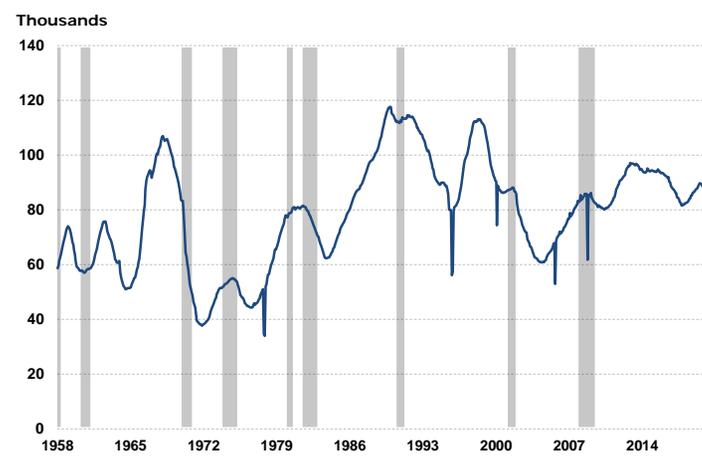
January 1980 to May 2020



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

Washington Aircraft and Parts Employment

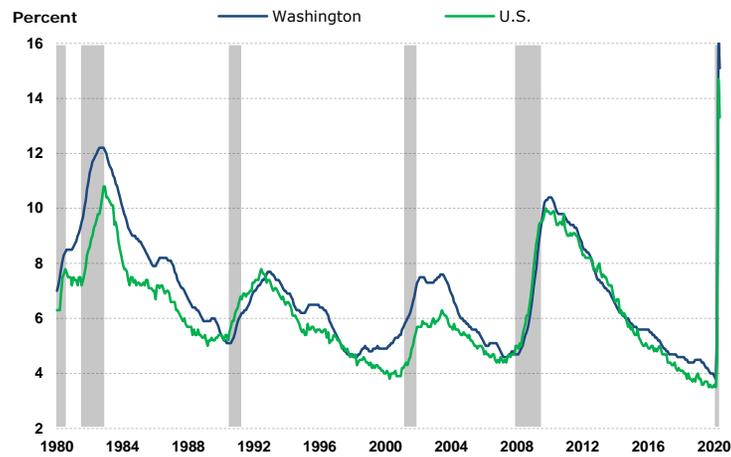
January 1958 to May 2020



* Source: Bureau of Labor Statistics, ERFC

Unemployment Rate, S.A.

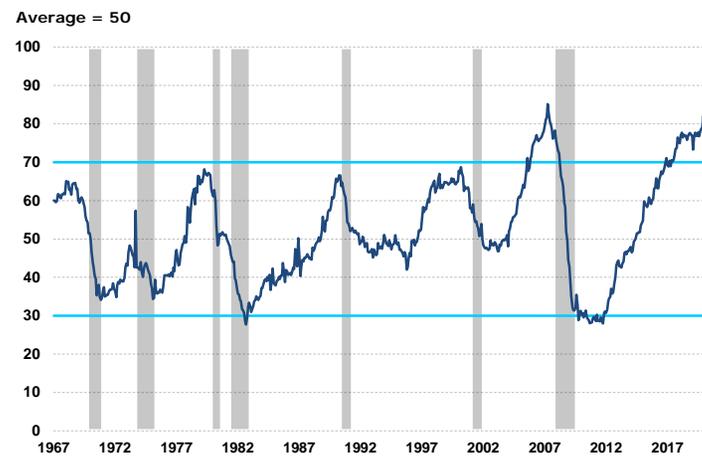
January 1980 to May 2020



* Source: Bureau of Labor Statistics

Washington Business Cycle Indicator

January 1968 to May 2020



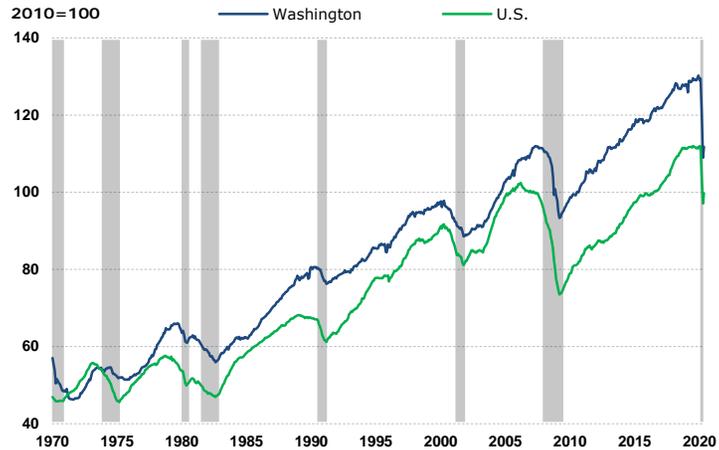
* Source: ERFC

* Shaded areas correspond with national recessions.

Figure A7.2: Washington State Leading Indicators

The Washington and U.S. Indexes of Leading Indicators

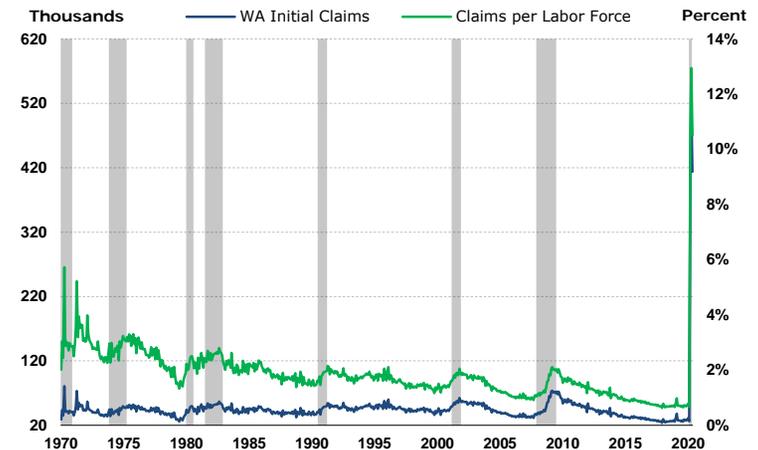
January 1970 to May 2020



* The Conference Board, ERFC

Washington Initial Claims for Unemployment Insurance

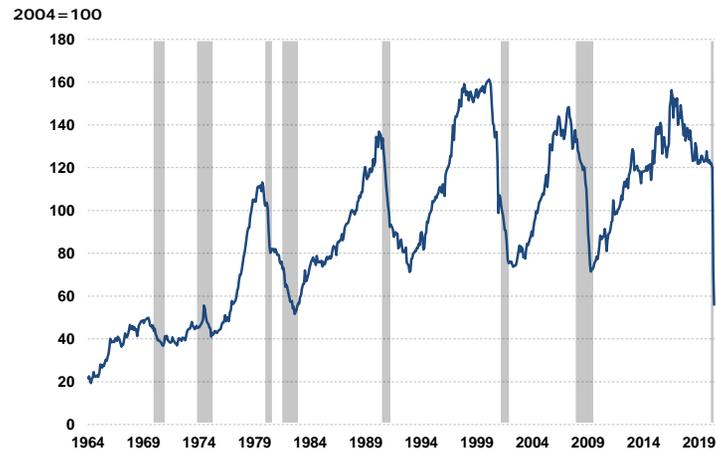
January 1970 to May 2020, S.A.



* Source: WA State Employment Security, ERFC

Washington State Help Wanted Index

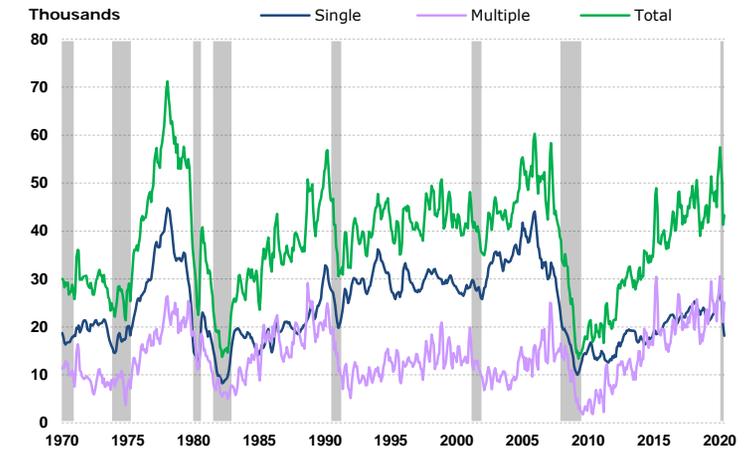
January 1964 to May 2020



* Source: The Conference Board, ERFC

Housing Units Authorized in Washington State

January 1970 to May 2020, 3mma, SAAR



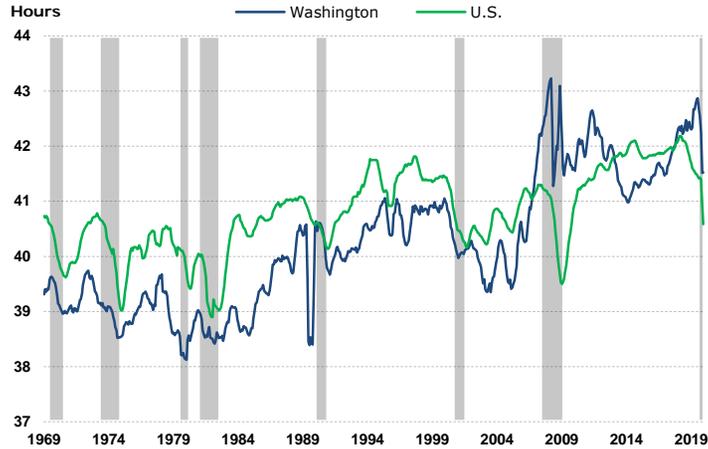
* Source: Census Bureau, ERFC

* Shaded areas correspond with national recessions.

Figure A7.3: Other State Economic Indicators

Average Weekly Hours in Manufacturing

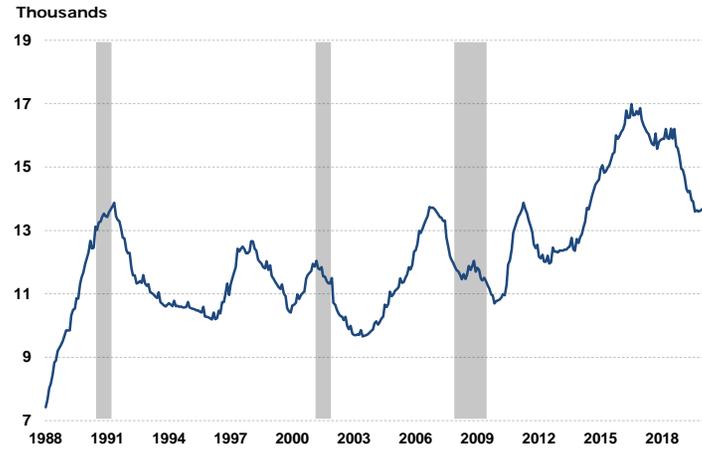
June 1969 to May 2020, 6-Mo. Moving Average, S.A.



* Bureau of Labor Statistics, ERFC

Washington Driver's License In-Migration

January 1988 to April 2020, 12-Month Moving Average



* Source: WA State Department of Licensing, ERFC

New Car and Truck Registrations in Washington

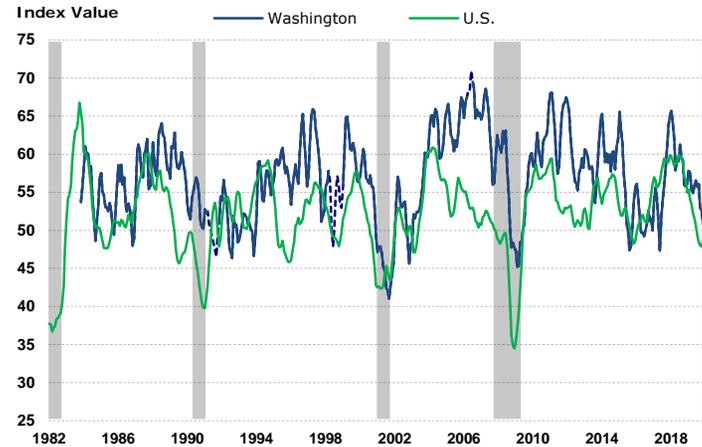
September 1970 to May 2020, 3-Month Moving Average, S.A.



* Source: WA State Department of Licensing, ERFC

Institute for Supply Management Index

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



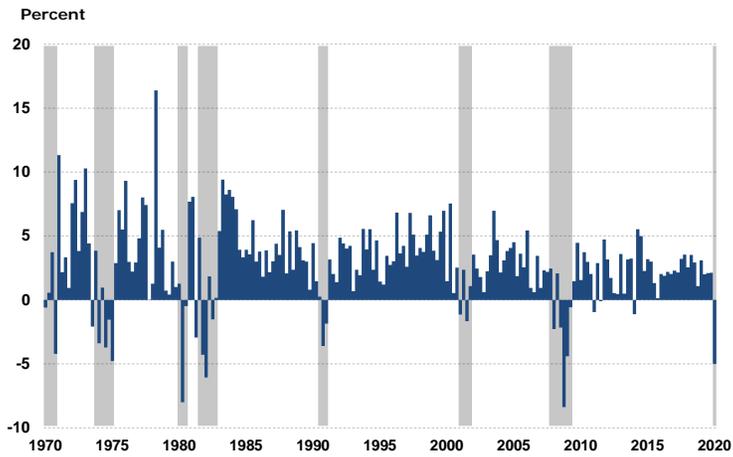
* Source: Institute for Supply Management, ISM-WW, ERFC

* Shaded areas correspond with national recessions.

Figure A7.4: Other Economic Indicators

Quarterly U.S. Real GDP Growth

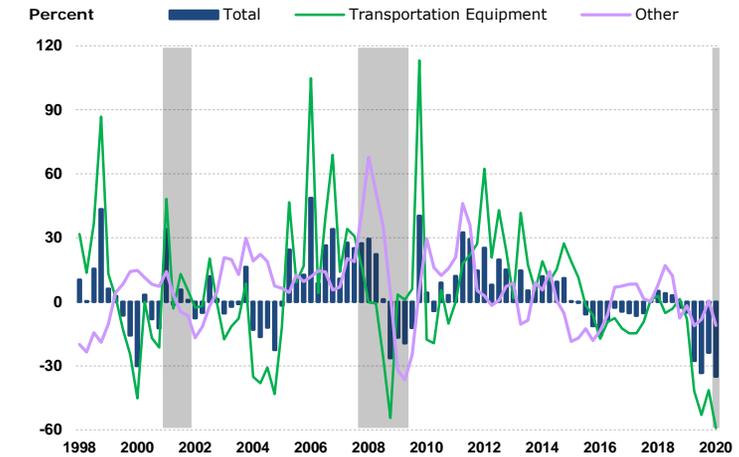
1970Q1 to 2020Q1, SAAR



* Source: Bureau of Economic Analysis

Washington State Export Composition

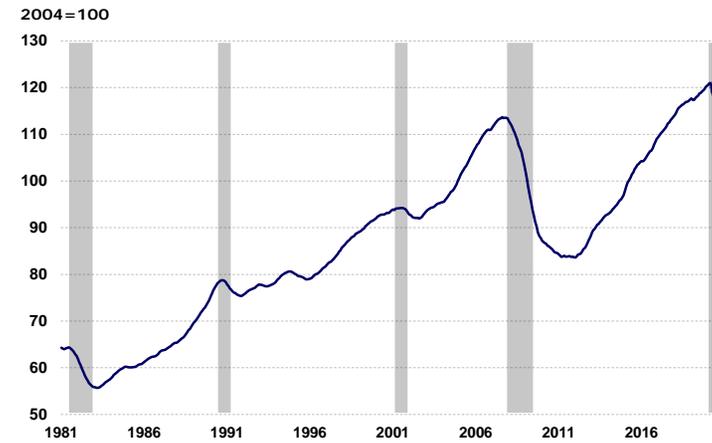
1998Q1 to 2020Q1, Year-over-year percent change



* Source: WISER

Washington State Construction Index

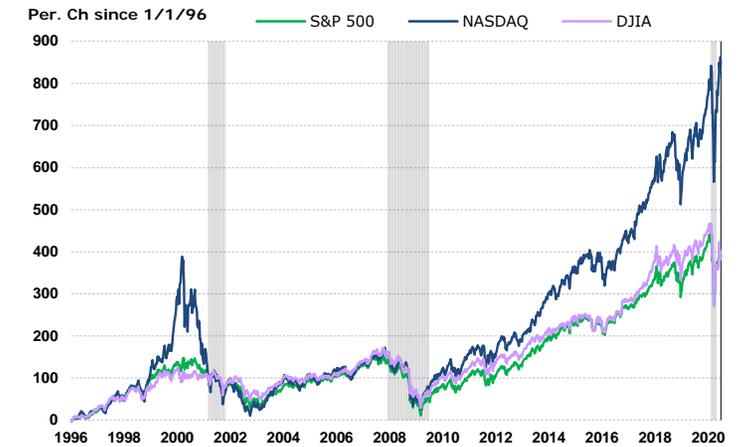
January 1981 to May 2020, 3mma



* Source: ERFC

National Stock Indexes

January 1, 1996 to June 26, 2020



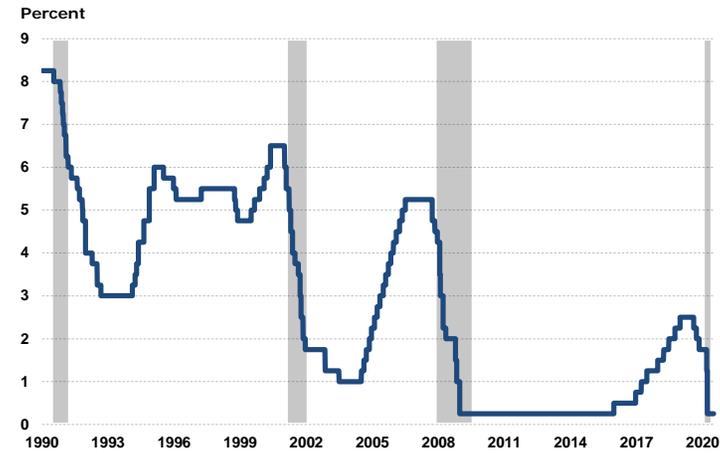
* Source: ERFC

* Shaded areas correspond with national recessions.

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

Federal Funds Target Rate

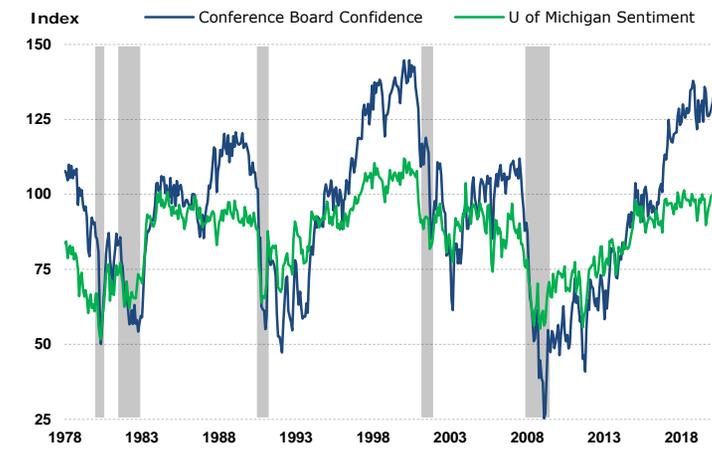
January 1, 1990 to June 30, 2020



* Federal Reserve

Consumer Confidence

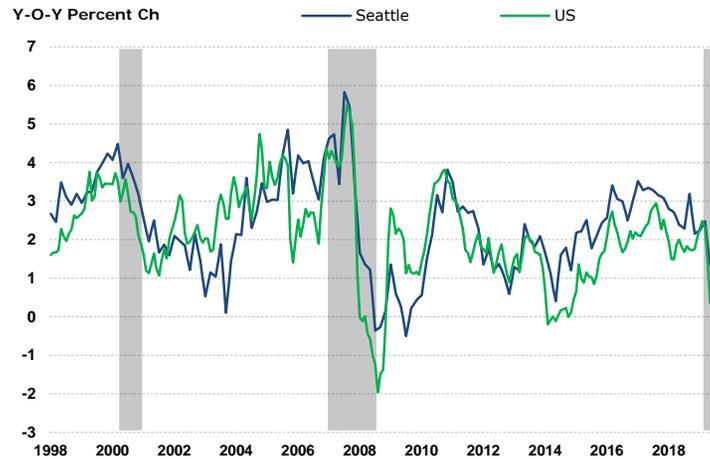
March 1978 to June 2020



* Source: The Conference Board, University of Michigan

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

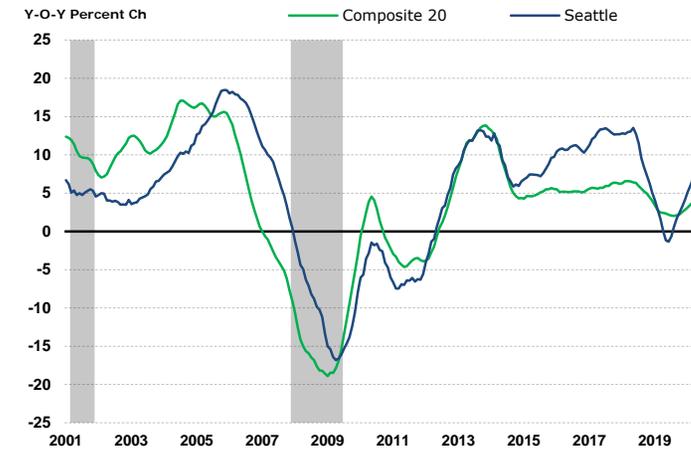
December 1998 to May 2020



* Source: Bureau of Labor Statistics

Case Shiller Home Price Index

January 2001 to April 2020, SA



* Source: Case Shiller, ERFC

* Shaded areas correspond with national recessions.



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.