

Budget Outlook & Economic Review

June 2, 2020



Washington State
Economic and Revenue Forecast Council

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AGENDA

REVENUE REVIEW

June 2, 2020
10:00 a.m.

- Call to order
- Approval meeting minutes:
 - April 30, 2020
- Economic Review
 - Presentation of economic outlook and revenue collection experience
- Adjournment

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STATE OF WASHINGTON
ECONOMIC AND REVENUE FORECAST COUNCIL
PO Box 40912 • Olympia, Washington 98504-0912 • (360) 534-1560

Meeting Minutes
Revenue Review
April 20, 2020
Conference Call

Economic and Revenue Forecast Council

Ed Orcutt, House of Representatives, Chair
Christine Rolfes, Senate
John Braun, Senate
Timm Ormsby, House
Duane Davidson, Treasurer
Vikki Smith, Department of Revenue
David Schumacher, Office of Financial Management

Staff

Steve Lerch, Executive Director
Rachel Knutson, OFM
Sarian Scott, Senate Ways and Means
Andy Toulon, House Appropriations

Call to Order

Representative Orcutt called the meeting to order at 10:00 a.m.

Approval of the Minutes

Representative Ormsby moved, seconded by Representative Orcutt to adopt the meeting minutes from April 30, 2020. Motion passed unanimously at 10:01 a.m.

Budget Adoption

The Budget Outlook Work Group members presented.

Motion

Director Schumacher moved, seconded by Representative Orcutt, to adopt budget outlook. Council approved the motion unanimously at 10:17 a.m.

Comment

Senator Rolfes noted the Outlook does not reflect the economic changes since March. Representative Orcutt noted the outlook is based on the February forecast. It reflects vetos but does not reflect changes due to Covid-19.

Adjournment

With no further business, the meeting adjourned at 10:18 a.m.

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**Economic & Revenue Forecast Council
State of Washington**



Economic Review: June 2, 2020

Executive Summary

United States

- This forecast is based on a modified version of IHS Markit's May 2020 Control forecast for the U.S. economy. We have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast for 2020 and 2021. The forecast for GDP growth is now -5.8% for 2020 and +4.0% for 2021. This compares to 1.9% in 2020 and 2.0% in 2021 in the February forecast. The Blue Chip long-range forecast has not changed since early March and does not reflect impacts from the COVID-19 pandemic. Instead we used IHS quarterly growth rates after 2021. Our forecast for GDP growth is 4.1% for 2022, 3.9% for 2023, 3.3% for 2024 and 2.8% for 2025.
- Our oil price forecast reflects the futures markets, primarily the Brent (North Sea) oil price but also the West Texas Intermediate (WTI) benchmark. This forecast was based on the Wednesday May 20, 2020 closing prices for Brent and WTI futures. The latest futures prices indicate a steep decline in oil prices in the second quarter of this year with prices then gradually increasing throughout the forecast period. However, oil prices remain below those expected in the February forecast for 2020 through 2025. The refiner acquisition price of crude oil is expected to average \$35 per barrel this year, rising gradually to \$46 per barrel by 2025. This compares to the February forecast, which expected prices to average \$52 per barrel for 2020 through 2025.
- The Federal Reserve has reduced the federal funds rate to a range of 0% – 0.25% since the February forecast. The Federal Reserve has also created a number of credit facilities to make loans and purchase bonds to support the functioning of credit markets. This forecast assumes the Federal Reserve will maintain the federal funds rate in the 0% – 0.25% range throughout the forecast period and that credit facilities are utilized and effective in narrowing credit spreads.
- The forecast also incorporates the fiscal stimulus package (CARES Act) passed by Congress which expands unemployment benefits, provides up to \$1,200 in payments to individuals and provides forgivable loans to small businesses.
- National employment fell by 20.5 million net jobs in April, reflecting the impacts of business closures and other measures related to the containment of COVID-19. Employment data for February and March were revised down by 214,000 jobs. Sectors with the largest job losses in April included accommodation and food service (-6.3 million), retail trade (-2.1 million), administrative and support services (-1.5 million), health care (-1.4 million), manufacturing (-1.3 million), arts, entertainment and recreation (-1.3 million), other services (-1.3 million), construction (-1.0 million) and local government (-0.8 million).

- Two key measures of consumer confidence stabilized in May after large declines in March and April. The University of Michigan (UM) consumer sentiment survey, which fell from 101.0 in February to 71.8 in April, increased by 1.9 points to 73.7 in May. Despite the gain, most consumers expressed concerns about financial prospects for the year ahead. The Conference Board index of consumer confidence, which fell from 132.6 in February to 85.7 in April, increased 0.9 points in May to 86.6. While the Conference Board found a slight improvement in expectations for the economy over the next month, they also found that consumers remain concerned about their financial prospects.
- Initial claims for unemployment insurance remained at very high levels but decreased by 323,000 to 2,123,000 (SA) in the week ending May 23rd. The four-week moving average of initial claims decreased by 436,000 to 2,608,000.
- Industrial production in April decreased by 11.2% (SA) compared to March. Over the year, industrial production is down by 15.0% (SA). New orders for core capital goods (i.e., durables excluding aircraft and military), which is a proxy for business investment, decreased by 0.1% (SA) in March following a 0.7% decrease in February according to U.S. Census Bureau data.
- Residential construction and new home sales data reflected the impacts of the COVID-19 pandemic this month. Housing units authorized by building permits in April were 20.8% (SA) below their March level and 19.2% below their year-ago level. April housing starts decreased by 30.2% (SA) compared to March and were 29.7% below their April 2019 level. New home sales in April increased by 0.6% (SA) compared to March but were 6.2% below their year-ago level. Existing home sales in April decreased by 17.8% (SA) compared to March and were down 17.2% compared to April 2019. The seasonally adjusted Case-Shiller national home price index for March was 0.5% above its February level and 4.3% above its year-ago level.
- The major threat to the U.S. and Washington economies is the uncertain impact of COVID-19. Concerns about international trade policy and geopolitical risks remain.

Washington

- The decline in Washington employment in April was unprecedented in its depth and speed. We have four months of new Washington employment data since the February forecast was released. Total nonfarm payroll employment fell 453,000 (seasonally adjusted) in April and 446,200 in the four-month period. The February forecast expected an increase of 27,500 in January, February, March, and April. Private services-providing sectors lost 359,300 jobs in the four-month period. Construction employment declined by 47,200 jobs and manufacturing declined by 27,700 jobs including the loss of 8,300 aerospace jobs. Government payrolls declined by 11,100 jobs in January, February, March, and April.
- 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 2,800 to the estimated level of total employment in December 2019. April employment is 470,900 (13.3%) lower

than expected in the February forecast because of the huge decline from December through April.

- Washington's unemployment rate soared to 15.4% in April from 5.1% in March and 3.8% in February. The April rate was an all-time high in the series that dates back to 1976. The February unemployment rate was an all-time low.
- 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 16,000 aerospace employees from March through September.
- Washington personal income rose to \$494.2 billion (SAAR) in 2019 from \$467.4 billion in 2018. The 5.7% growth rate in Washington personal income was the sixth largest among the states and District of Columbia and was much higher than the 4.4% growth rate for the U.S. as a whole. The difference between Washington and U.S. personal income and GDP growth was mostly due to two sectors: information (which includes software publishing and other IT services such as internet publishing and web search portals) and retail trade (which includes electronic shopping).
- 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) consisting of 12,000 single-family units and 16,600 multi-family units.
- 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.
- 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%.
- 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.

- The Institute of Supply Management - Western Washington Index (ISM-WW) declined further into negative territory in April. 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 (index values above 50 indicate growth while values below 50 indicate contraction). The production, orders, employment, and inventory components all indicated contraction in April. As in March, 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 plummeted to the lowest level in the history of the series which dates back to July 1970. The seasonally adjusted number of new vehicle registrations fell 63.5% from March to April and 68.9% over the year.
- We expect an 11.0% 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 4.1% 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 2.1%, 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 3.8% 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.

Washington State Economic Outlook & Revenue Collection Experience

Presented to
The Economic & Revenue Forecast Council

Steve Lerch
Executive Director

June 2, 2020
Olympia, Washington



WASHINGTON STATE
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Summary

- The preliminary economic forecast for both the U.S. and WA incorporates COVID-19 impacts on employment through April and on 2020 Q1 GDP
- The forecast reflects Boeing plans to reduce jobs in the commercial aircraft division by 15%
- The forecast reflects Federal Reserve actions to reduce the Federal Funds interest rate and support credit market functioning as well as Congressional actions to assist small businesses and the unemployed
- Revenue collections since the February forecast are \$429 million (8.7%) below expectations; approximately \$200 million are deferred payments

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Forecast risks

Upside

- As states start to re-open, COVID infections remain low leading to greater consumer confidence and spending, increased employment

Downside

- As states start to re-open, a second spike in COVID infections leads to renewal of business closures
- Consumers remain concerned about COVID, response to business re-openings is muted

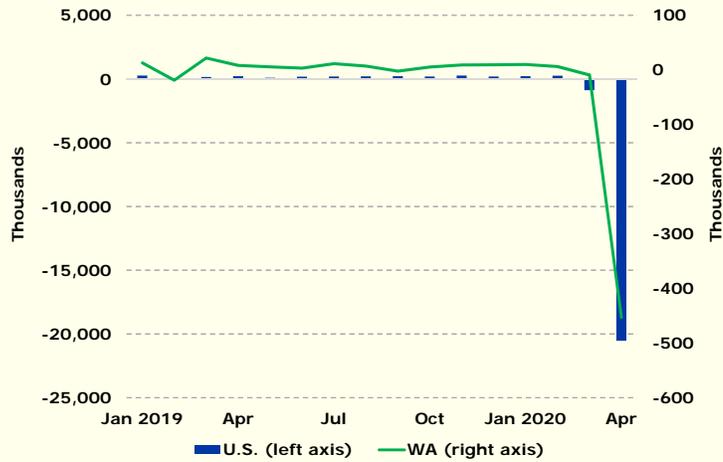
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March and April employment collapsed in U.S. and WA



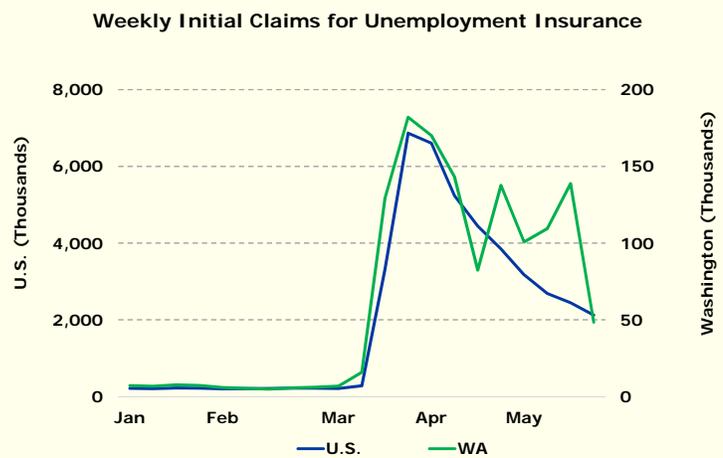
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Source: Bureau of Labor Statistics, Employment Security Dept.; data January 2019 through April 2020

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Initial claims for unemployment insurance remain high



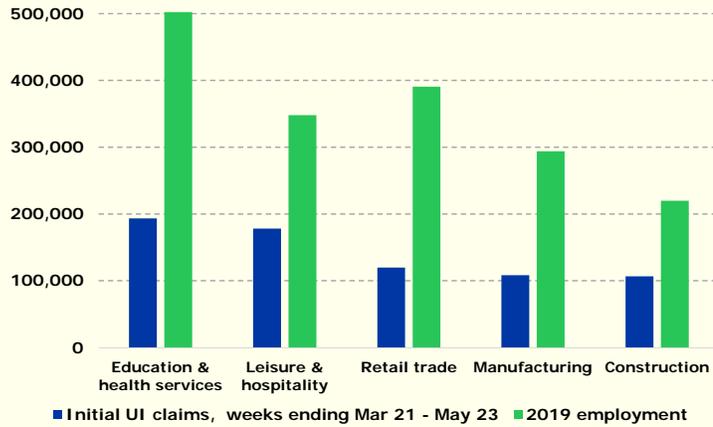
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Source: U.S. Bureau of Labor Statistics, WA Employment Security Dept., data through week ending May 23 2020

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WA sectors with highest number of initial unemployment insurance claims in last ten weeks



Source: ERFC, WA Employment Security Dept.

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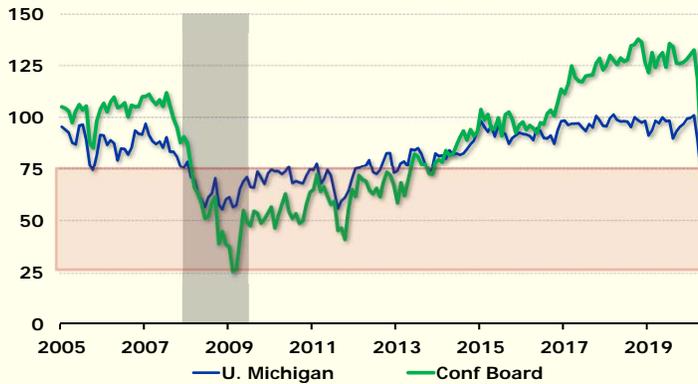
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After big drops in March and April, consumer confidence showed slight improvement in May

Index
Mich: 1966Q1 = 100, SA
Conf Board: 1985 = 100, SA



Sources: University of Michigan, Conference Board data through May 2020

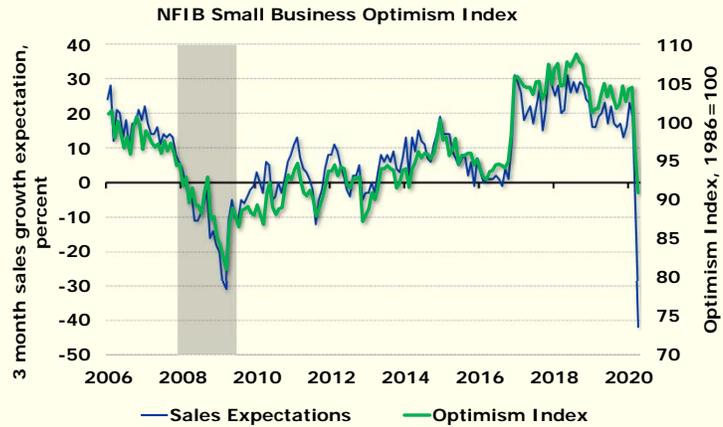
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Small business optimism declines as sales expectations go negative



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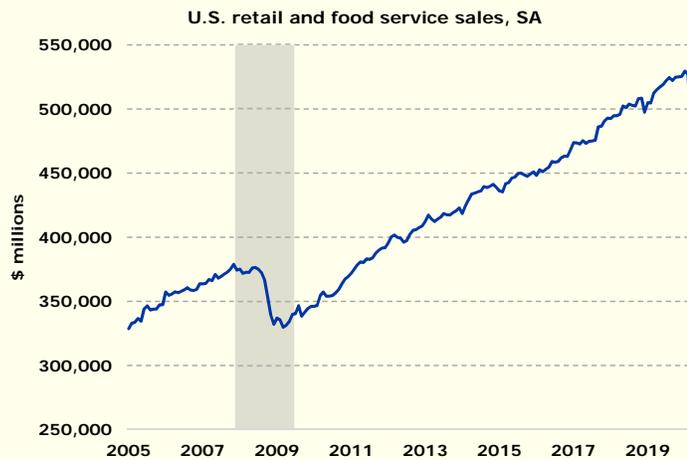
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Source: National Federation of Independent Business; data through April 2020

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U.S. retail sales in April fell 16.5% compared to March



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Source: U.S. Census Bureau; advance data through April 2020

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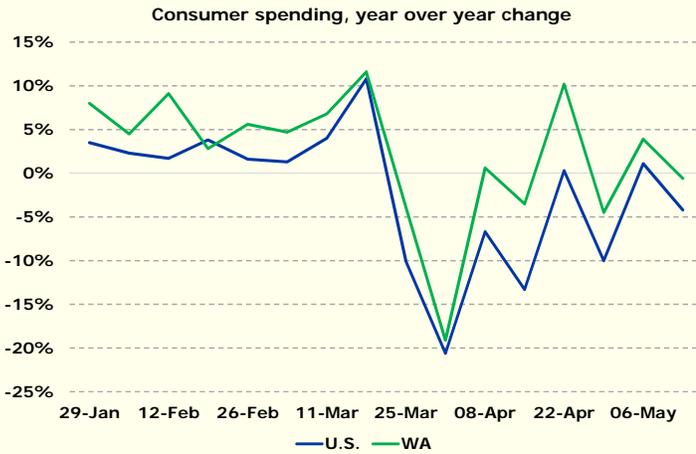


Compared to the same week last year, consumer spending declined starting the week of March 25th

Earnest Research tracks a subset of credit and debit card transactions for large national chain stores and businesses

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Source: Earnest Research COVID-19 tracker, data through week ending May 13 2020

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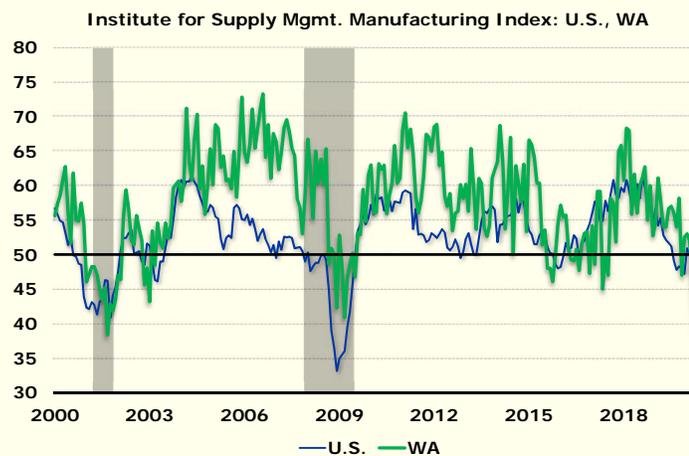


The ISM manufacturing index for the U.S. and WA indicates slowing activity in March and April

Values above 50 indicate expansion, below 50 indicate contraction.

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Source: ISM; data through April 2020

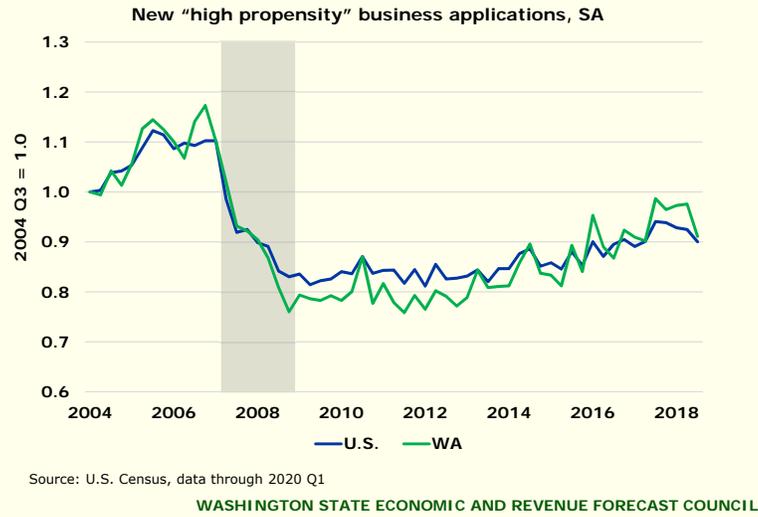
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New business applications dipped in 2020 Q1

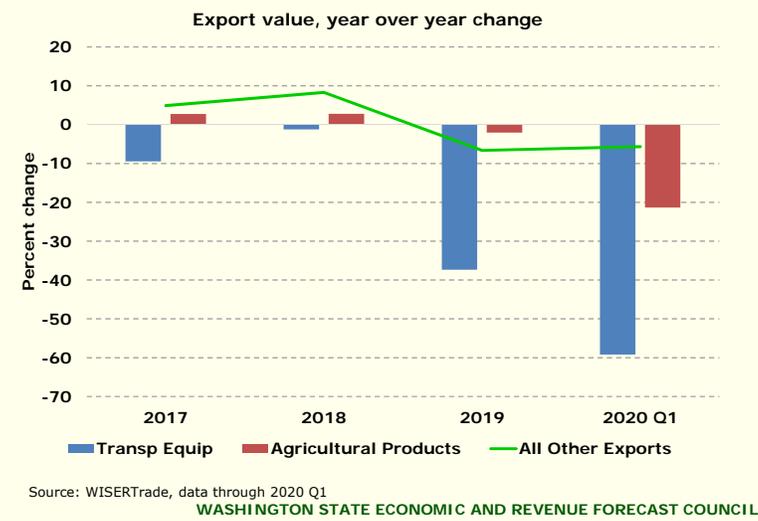
"High propensity" applications are those with characteristics associated with a high rate of business formation such as an indication of hiring employees or providing a first wages-paid date.

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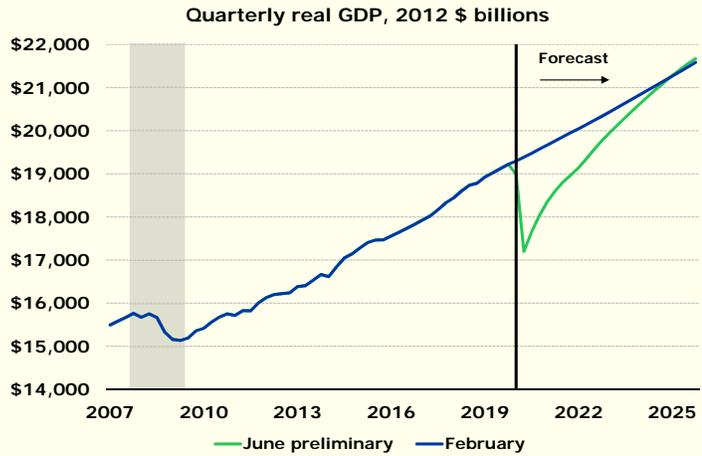
WA exports have now decreased for six consecutive quarters

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GDP is expected to decline 5.8% in 2020 before gradually increasing



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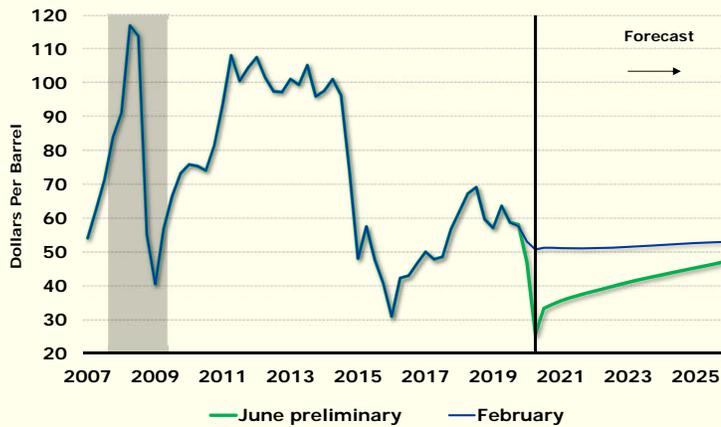
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Source: IHS Markit, ERFC June 2020 preliminary forecast; data through 2020 Q1

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After sharp decline, oil prices are expected to gradually increase but remain below the February forecast



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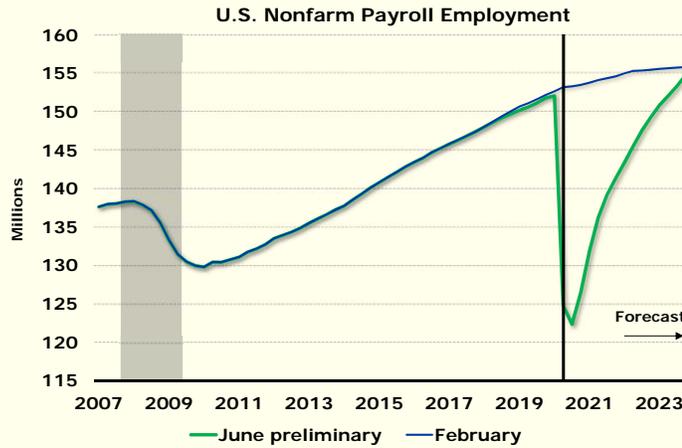
Source: Energy Information Administration, IHS Markit, ERFC; data through Q1 2020
Note: Vertical black line indicates last actual

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U.S. nonfarm employment is expected to fall by 27.3 million jobs in 2020 Q2

The U.S. unemployment rate is expected to peak at 18.9% in 2020 Q3.



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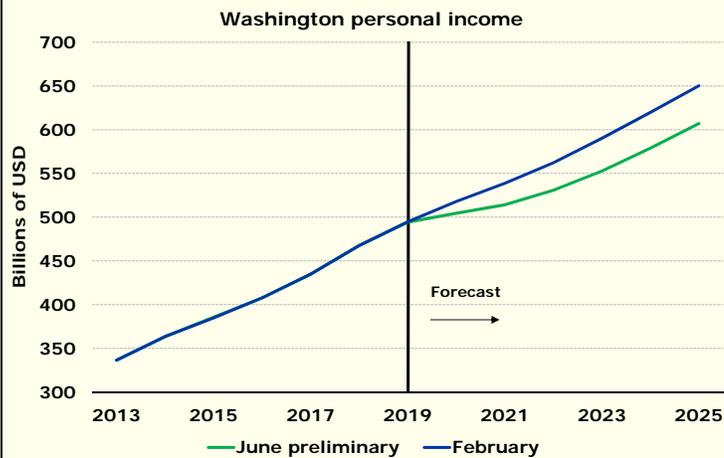
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Source: IHS Markit, ERFC June 2020 preliminary forecast; data through 2020 Q1

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WA personal income in 2020 is expected to be \$13 billion lower than in the February forecast



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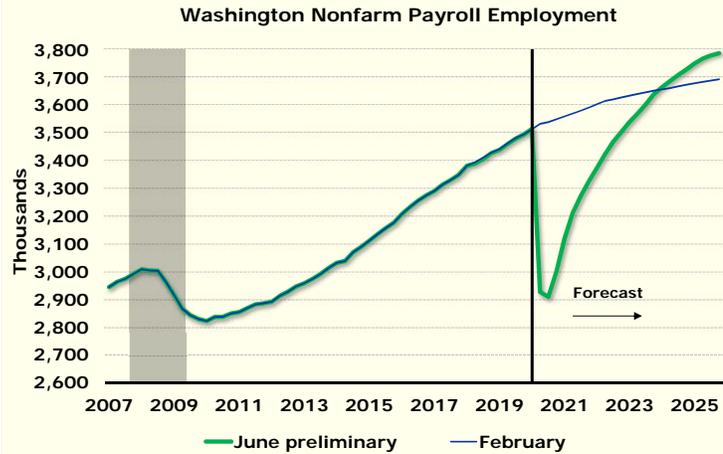
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Source: ERFC June 2020 Preliminary forecast; historical data through 2019

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Washington employment for 2020 is expected to be 446,000 lower than the February forecast



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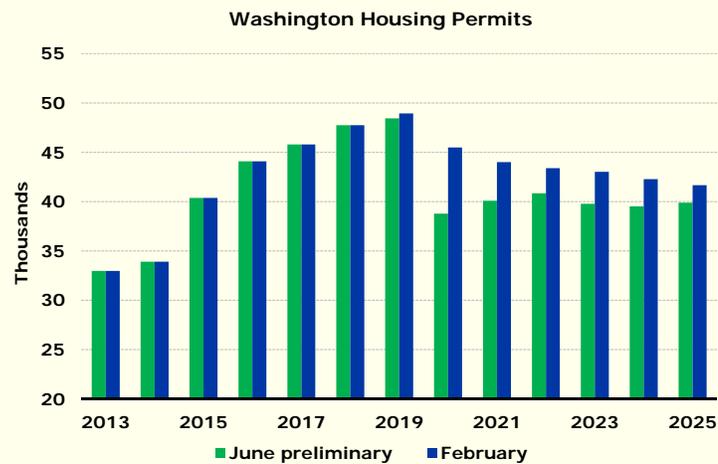
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Source: ERFC June 2020 Preliminary forecast; historical data through Q1 2020

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Washington housing permits forecast for 2020 is 6,700 units lower than February



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Source: ERFC June 2020 Preliminary forecast; historical data through 2019

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Quarterly Rev Act collections no longer growing faster than personal income

Adjusted Rev Act growth
YOY:

19Q2: 8.1%
19Q3: 6.6%
19Q4: 5.5%
20Q1: 1.6%

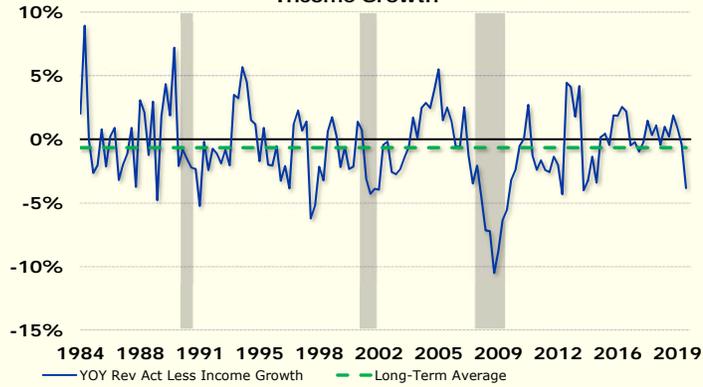
February personal income YOY growth estimates:

19Q2: 6.2%
19Q3: 5.7%
19Q4: 6.0%
20Q1: 5.4%

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Year-Over-Year Rev Act* Growth Less State Personal Income Growth



*Adjusted for large one-time payments and refunds, payments under the amnesty program and deferred April 2020 payments

Source: ERFC; Quarterly revenue data through Q1 2020, February 2020 income estimates

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April REET activity dropped to level last seen in January 2015

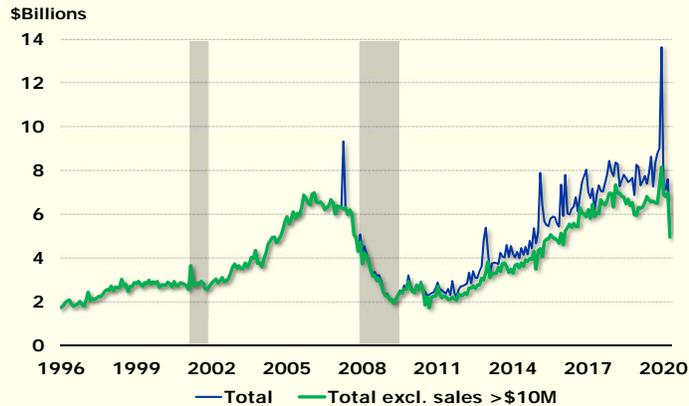
Seasonally adjusted taxable activity in April was \$5.2 billion, down from \$7.6 billion in March.

Large commercial sales (>\$10 million) fell to \$299 million in April after March sales of \$633 million.

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Seasonally Adjusted Taxable Real Estate Excise Activity



Source: ERFC; Monthly data through April 2020 preliminary

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Revenue collections to date

About \$200 million of the collections shortfall is due to deferred tax payments that were approved by DOR. The deferred payments are due before June 30.

Collections Variance Since February Forecast (February 11 – May 10, 2020) dollars in thousands

	<u>Estimate</u>	<u>Actual</u>	<u>Difference</u>	<u>Pct.</u>
Dept. of Revenue	\$4,894,594	\$4,466,581	(\$428,013)	-8.7%
All other agencies	\$15,999	\$15,489	(\$511)	-3.2%
Total GF-S	\$4,910,593	\$4,482,070	(\$428,523)	-8.7%

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Conclusion

- As a result of impacts related to the COVID-19 pandemic, the U.S. and Washington economic forecasts reflect lower personal income and employment compared to February
- Uncertainty regarding COVID-19 impacts to the economy is high
- Social unrest, international trade and geopolitical issues are also risks to the forecast
- The next monthly revenue collection report will be available on June 15th and the revenue forecast will be presented on June 17th

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Questions

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Economic & Revenue Forecast Council
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U.S. Economic Forecast Comparison
May 2020

	2020Q1	2020Q2	2020Q3	2020Q4	2020	2021	2022	2023	2024	2025
Real GDP, Percent Change, Annual Rate										
ERFC (June Prelim. Draft)	-4.8	-32.7	11.1	8.8	-5.8	4.0	4.1	3.9	3.3	2.8
IHS	-4.8	-36.5	6.1	9.4	-7.3	5.1	4.6	3.9	3.3	2.8
Economy.com	-4.8	-32.7	16.2	0.6	-5.7	1.5	6.7			
Blue Chip Average*		-32.1	11.6	8.8	-5.8	4.0	1.9	1.9	2.0	2.0
Blue Chip Top 10*		-23.1	26.4	16.8	-3.5	6.3	2.3	2.3	2.3	2.3
Blue Chip Bottom 10*		-40.3	-4.7	2.1	-8.2	1.3	1.4	1.6	1.7	1.7
Real Consumption, Percent Change, Annual Rate										
ERFC (June Prelim. Draft)	-7.6	-35.3	16.9	10.4	-6.3	4.5	4.5	4.1	3.7	2.7
IHS	-7.6	-42.6	14.5	15.6	-8.3	5.1	5.0	4.1	3.7	2.7
Economy.com	-7.6	-22.3	14.1	0.5	-3.9	1.6	4.6			
Blue Chip Average*		-35.3	16.9	10.4	-6.3	4.5	2.0	2.1	2.1	2.2
Blue Chip Top 10*		-20.7	37.4	20.7	-3.1	7.2	2.4	2.4	2.5	2.5
Blue Chip Bottom 10*		-46.8	-2.3	2.0	-9.8	1.5	1.7	1.8	1.8	1.9
Federal Funds Rate										
ERFC (June Prelim. Draft)	1.3	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
IHS	1.3	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
Economy.com	1.2	0.1	0.1	0.1	0.4	0.1	0.1			
Three Month T-Bill Rate										
ERFC (June Prelim. Draft)	1.1	0.2	0.2	0.2	0.4	0.1	0.1	0.1	0.1	0.2
IHS	1.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
Blue Chip Average*		0.1	0.1	0.1	0.3	0.2	1.6	1.9	2.0	2.1
Blue Chip Top 10*		0.2	0.2	0.2	0.4	0.4	2.2	2.4	2.4	2.6
Blue Chip Bottom 10*		0.0	0.0	0.1	0.2	0.1	1.1	1.3	1.5	1.6
10-Yr. T-Note Yield										
ERFC (June Prelim. Draft)	1.4	0.8	0.8	0.8	0.9	0.6	0.8	1.1	1.5	1.8
IHS	1.4	0.7	0.7	0.7	0.8	0.7	0.9	1.2	1.5	1.8
Economy.com	1.4	0.6	0.6	0.7	0.8	1.2	2.1			
Blue Chip Average*		0.7	0.8	0.9	0.9	1.2	2.3	2.5	2.7	2.9
Blue Chip Top 10*		0.9	1.1	1.3	1.2	1.6	2.8	3.1	3.3	3.5
Blue Chip Bottom 10*		0.6	0.6	0.7	0.8	0.8	1.8	2.0	2.1	2.2
Consumer Price Index, Percent Change, Annual Rate										
ERFC (June Prelim. Draft)	1.2	-1.3	2.2	1.9	1.3	1.7	1.3	0.8	1.3	1.9
IHS	1.2	-3.3	2.3	2.4	1.0	1.7	1.7	0.8	1.3	2.0
Economy.com	1.2	-3.9	1.4	2.8	0.7	2.3	2.9			
Blue Chip Average*		-3.3	1.5	1.9	0.8	1.7	2.2	2.2	2.2	2.2
Blue Chip Top 10*		-0.4	3.4	3.2	1.2	2.4	2.5	2.5	2.5	2.4
Blue Chip Bottom 10*		-5.5	-0.2	0.3	0.3	0.9	1.9	1.9	1.9	1.9
Payroll Employment, Millions										
ERFC (June Prelim. Draft)	152.1	124.8	122.3	126.5	131.4	137.2	146.5	152.8	157.8	161.4
Percent Change, Annual Rate	0.8	-54.7	-7.6	14.1	-12.9	4.4	6.8	4.3	3.3	2.3
IHS	152.1	124.4	121.2	124.8	130.6	136.2	146.1	153.0	157.9	161.1
Percent Change, Annual Rate	0.8	-55.3	-9.8	12.4	-13.5	4.3	7.3	4.7	3.2	2.0
Economy.com	152.1	132.2	142.2	142.0	142.1	142.9	147.2			
Percent Change, Annual Rate	0.8	-42.9	33.7	-0.5	-5.8	0.5	3.0			
Unemployment Rate, Percent										
ERFC (June Prelim. Draft)	3.8	17.9	18.9	17.3	14.5	13.0	9.3	6.6	4.8	3.7
IHS	3.8	18.1	19.6	18.2	14.9	13.5	9.5	6.6	4.8	3.8
Economy.com	3.8	15.0	8.4	9.0	9.0	9.0	6.9			
Blue Chip Average*		15.3	12.6	10.3	10.6	8.0	4.0	4.1	4.2	4.1
Blue Chip Top 10*		19.9	17.5	15.1	14.1	11.7	4.5	4.7	4.7	4.6
Blue Chip Bottom 10*		11.1	8.2	7.2	7.8	5.8	3.4	3.4	3.6	3.6
Real Disposable Personal Income, Percent Change, Annual Rate										
ERFC (June Prelim. Draft)	0.5	9.0	15.0	-9.4	3.6	0.3	1.1	2.6	2.9	3.1
IHS	0.5	8.6	12.5	-11.0	3.1	0.3	1.3	2.5	2.7	2.7
Blue Chip Average*		-5.2	1.2	1.0	-0.8	2.0	1.9	2.0	2.1	2.1
Blue Chip Top 10*		14.5	14.1	8.5	2.6	4.5	2.3	2.3	2.4	2.4
Blue Chip Bottom 10*		-24.5	-13.0	-7.9	-4.4	-0.5	1.5	1.7	1.8	1.9
West Texas Intermediate										
ERFC (June Prelim. Draft)	45.8	26.2	33.9	34.9	35.2	36.7	39.2	41.4	43.5	45.6
IHS	45.8	15.8	27.4	35.0	31.0	44.2	54.7	51.2	54.5	59.9
Economy.com	46.3	21.7	25.0	30.7	30.9	43.3	56.4			

* Forecasts beyond 2021 are from the March 2020 Blue Chip Economic Indicators

U.S. Forecast Comparison

	2020Q1	2020Q2	2020Q3	2020Q4
Real GDP (Billions of 2012 Dollars)				
June Forecast, Preliminary	18,988	17,198	17,658	18,035
Percent Change	-4.8%	-32.7%	11.1%	8.8%
	19,295	19,386	19,477	19,574
Percent Change	1.6%	1.9%	1.9%	2.0%
Real Consumption (Billions of 2012 Dollars)				
June Forecast, Preliminary	13,153	11,797	12,268	12,575
Percent Change	-7.6%	-35.3%	16.9%	10.4%
	13,479	13,550	13,620	13,690
Percent Change	2.0%	2.1%	2.1%	2.1%
PCE Price Index (2012=100)				
June Forecast, Preliminary	110.7	110.4	110.8	111.1
Percent Change	1.3%	-0.9%	1.5%	1.2%
	110.7	111.1	111.5	112.0
Percent Change	1.2%	1.5%	1.7%	1.6%
Real Personal Income (Billions of 2012 Dollars)				
June Forecast, Preliminary	17,092	16,734	17,175	16,947
Percent Change	0.7%	-8.1%	10.9%	-5.2%
	17,214	17,332	17,399	17,471
Percent Change	2.8%	2.8%	1.6%	1.7%
Nonfarm Payroll Employment (Millions)				
June Forecast, Preliminary	152.1	124.8	122.3	126.5
Percent Change	0.8%	-54.7%	-7.6%	14.1%
	152.7	153.2	153.3	153.5
Percent Change	1.2%	1.4%	0.3%	0.5%
Unemployment Rate (Percent of Labor Force)				
June Forecast, Preliminary	3.8	17.9	18.9	17.3
	3.5	3.5	3.5	3.5
Oil Price, Refiner's Acquisition				
June Forecast, Preliminary	46.9	25.5	33.2	34.4
	53.0	50.7	51.2	51.2
30 Year Fixed Mortgage Rate (Percent, average)				
June Forecast, Preliminary	3.5	3.3	3.3	3.2
	3.6	3.7	3.8	3.9
3 Month T-Bill Rate (Percent, average)				
June Forecast, Preliminary	1.1	0.2	0.2	0.2
	1.5	1.6	1.5	1.5

	2019	2020	2021	2022	2023	2024	2025
	19,073	17,970	18,681	19,456	20,219	20,890	21,480
Percent Change	2.3%	-5.8%	4.0%	4.1%	3.9%	3.3%	2.8%
	19,073	19,433	19,812	20,189	20,593	21,004	21,424
Percent Change	2.3%	1.9%	2.0%	1.9%	2.0%	2.0%	2.0%
	13,280	12,448	13,003	13,582	14,142	14,670	15,069
Percent Change	2.6%	-6.3%	4.5%	4.5%	4.1%	3.7%	2.7%
	13,280	13,585	13,869	14,146	14,457	14,761	15,071
Percent Change	2.6%	2.3%	2.1%	2.0%	2.2%	2.1%	2.1%
	109.7	110.8	112.0	112.9	113.7	114.8	116.6
Percent Change	1.4%	1.0%	1.1%	0.9%	0.6%	1.0%	1.6%
	109.7	111.3	113.3	115.5	117.9	120.4	122.9
Percent Change	1.4%	1.5%	1.8%	1.9%	2.0%	2.1%	2.1%
	16,964	16,987	17,144	17,552	18,144	18,749	19,323
Percent Change	3.0%	0.1%	0.9%	2.4%	3.4%	3.3%	3.1%
	16,982	17,354	17,681	18,043	18,464	18,878	19,312
Percent Change	3.1%	2.2%	1.9%	2.0%	2.3%	2.2%	2.3%
	150.9	131.4	137.2	146.5	152.8	157.8	161.4
Percent Change	1.4%	-12.9%	4.4%	6.8%	4.3%	3.3%	2.3%
	151.4	153.2	154.2	155.3	155.7	156.0	156.4
Percent Change	1.6%	1.2%	0.7%	0.7%	0.3%	0.2%	0.3%
	3.7	14.5	13.0	9.3	6.6	4.8	3.7
	3.7	3.5	3.5	3.7	3.9	4.1	4.2
	59.3	35.0	36.6	39.3	41.8	44.0	46.0
	59.2	51.5	51.0	51.2	51.6	52.2	52.7
	3.9	3.3	3.0	2.9	3.0	3.2	3.4
	3.9	3.8	4.2	4.4	4.6	4.6	4.7
	2.1	0.4	0.1	0.1	0.1	0.1	0.2
	2.1	1.5	1.6	2.0	2.2	2.3	2.4

Washington Forecast Comparison

	2020Q1	2020Q2	2020Q3	2020Q4
Real Personal Income (Billions of 2012 Dollars)				
June Forecast, Preliminary	456.0	451.0	459.9	455.0
Percent Change	0.7%	-4.3%	8.1%	-4.2%
February Forecast	460.4	464.8	466.8	469.0
Percent Change	3.4%	3.8%	1.8%	1.9%
Personal Income (Billions of Dollars)				
June Forecast, Preliminary	504.6	498.0	509.7	505.7
Percent Change	2.0%	-5.2%	9.7%	-3.1%
February Forecast	509.6	516.3	520.7	525.2
Percent Change	4.7%	5.4%	3.5%	3.5%
Disposable Personal Income (Billions of Dollars)				
June Forecast, Preliminary	449.6	466.7	482.2	472.7
Percent Change	2.5%	16.1%	14.0%	-7.7%
February Forecast	452.5	458.3	462.4	466.7
Percent Change	4.4%	5.2%	3.7%	3.7%
Nonfarm Payroll Employment (Thousands)				
June Forecast, Preliminary	3514	2927	2909	3001
Percent Change	2.3%	-51.9%	-2.4%	13.3%
February Forecast	3513	3533	3539	3548
Percent Change	2.1%	2.2%	0.7%	1.0%
Unemployment Rate (Percent of Labor Force)				
June Forecast, Preliminary	4.3	18.6	19.2	17.7
February Forecast	4.3	4.3	4.3	4.3
Manufacturing Employment (Thousands)				
June Forecast, Preliminary	292.1	258.1	231.4	238.0
Percent Change	-1.4%	-39.0%	-35.4%	12.0%
February Forecast	294.3	293.6	292.3	291.8
Percent Change	1.6%	-1.0%	-1.7%	-0.8%
Construction Employment (Thousands)				
June Forecast, Preliminary	224.7	173.3	193.6	189.9
Percent Change	5.9%	-64.6%	55.7%	-7.4%
February Forecast	222.5	222.3	221.3	220.5
Percent Change	1.1%	-0.3%	-1.8%	-1.5%
Housing Permits (Thousands)				
June Forecast, Preliminary	49.8	31.3	36.0	38.1
Percent Change	-26.9%	-84.5%	75.3%	25.4%
February Forecast	44.9	45.9	45.8	45.3
Percent Change	-53.8%	9.7%	-0.7%	-4.8%

	2019	2020	2021	2022	2023	2024	2025
June Forecast, Preliminary	450.7	455.5	459.0	469.8	486.3	504.1	520.4
Percent Change	4.3%	1.1%	0.8%	2.3%	3.5%	3.7%	3.2%
February Forecast	451.0	465.2	475.4	486.7	500.7	514.9	529.3
Percent Change	4.3%	3.2%	2.2%	2.4%	2.9%	2.9%	2.8%
June Forecast, Preliminary	494.2	504.5	514.1	530.7	552.7	578.9	607.0
Percent Change	5.7%	2.1%	1.9%	3.2%	4.2%	4.7%	4.9%
February Forecast	494.6	517.9	538.6	562.1	590.1	619.8	650.3
Percent Change	5.8%	4.7%	4.0%	4.4%	5.0%	5.0%	4.9%
June Forecast, Preliminary	440.0	467.8	474.0	482.3	497.0	517.3	542.1
Percent Change	5.3%	6.3%	1.3%	1.8%	3.0%	4.1%	4.8%
February Forecast	440.0	460.0	479.1	500.0	523.2	547.7	573.8
Percent Change	5.3%	4.5%	4.2%	4.4%	4.6%	4.7%	4.8%
June Forecast, Preliminary	3468	3088	3233	3443	3588	3698	3772
Percent Change	2.0%	-11.0%	4.7%	6.5%	4.2%	3.1%	2.0%
February Forecast	3470	3533	3575	3617	3644	3665	3686
Percent Change	1.9%	1.8%	1.2%	1.2%	0.7%	0.6%	0.6%
June Forecast, Preliminary	4.3	14.9	13.7	10.2	7.6	5.9	4.9
February Forecast	4.6	4.3	4.4	4.6	4.8	5.0	5.1
June Forecast, Preliminary	293.6	254.9	263.1	278.5	282.3	287.2	290.7
Percent Change	2.0%	-13.2%	3.2%	5.9%	1.4%	1.8%	1.2%
February Forecast	293.5	293.0	291.4	293.3	295.7	296.7	296.1
Percent Change	2.1%	-0.2%	-0.6%	0.7%	0.8%	0.3%	-0.2%
June Forecast, Preliminary	219.4	195.4	187.9	194.8	198.0	199.1	199.7
Percent Change	2.9%	-10.9%	-3.8%	3.7%	1.6%	0.6%	0.3%
February Forecast	219.1	221.6	217.8	215.6	213.5	213.3	213.4
Percent Change	2.7%	1.2%	-1.7%	-1.0%	-1.0%	-0.1%	0.1%
June Forecast, Preliminary	48.4	38.8	40.1	40.8	39.8	39.5	39.9
Percent Change	1.4%	-19.9%	3.4%	1.9%	-2.6%	-0.6%	0.9%
February Forecast	48.9	45.5	44.0	43.4	43.0	42.3	41.7
Percent Change	2.5%	-7.0%	-3.3%	-1.4%	-0.9%	-1.7%	-1.4%

U.S. Forecast Comparison	Fiscal Years					
	2020	2021	2022	2023	2024	2025
Real GDP						
Billions of 2012 dollars						
February Preliminary Forecast	18,632	18,162	19,064	19,856	20,562	21,197
<i>Growth</i>	-1.2%	-2.5%	5.0%	4.2%	3.6%	3.1%
November Forecast	19,255	19,621	20,000	20,388	20,798	21,212
<i>Growth</i>	2.1%	1.9%	1.9%	1.9%	2.0%	2.0%
Difference in level	-623	-1,459	-936	-532	-235	-15
<i>Difference in growth forecast</i>	-3.3%	-4.4%	3.0%	2.2%	1.5%	1.1%
Real Consumption						
Billions of 2012 dollars						
February Preliminary Forecast	12,929	12,636	13,299	13,859	14,420	14,884
<i>Growth</i>	-1.4%	-2.3%	5.2%	4.2%	4.0%	3.2%
November Forecast	13,449	13,727	14,006	14,299	14,611	14,914
<i>Growth</i>	2.6%	2.1%	2.0%	2.1%	2.2%	2.1%
Difference in level	-519	-1,091	-706	-440	-191	-30
<i>Difference in growth forecast</i>	-4.0%	-4.3%	3.2%	2.1%	1.9%	1.1%
PCE Price Index						
2012 = 100						
February Preliminary Forecast	110.3	111.4	112.5	113.3	114.2	115.7
<i>Growth</i>	1.3%	0.9%	1.0%	0.7%	0.8%	1.3%
November Forecast	110.5	112.3	114.4	116.6	119.1	121.6
<i>Growth</i>	1.5%	1.6%	1.9%	2.0%	2.1%	2.1%
Difference in level	-0.2	-0.9	-1.9	-3.3	-4.9	-5.9
<i>Difference in growth forecast</i>	-0.2%	-0.7%	-0.9%	-1.2%	-1.4%	-0.8%
Unemployment Rate						
Percent of Labor Force						
February Preliminary Forecast	7.2%	16.1%	11.0%	7.8%	5.6%	4.2%
November Forecast	3.5%	3.5%	3.6%	3.8%	4.0%	4.1%
<i>Difference in forecast</i>	3.7%	12.7%	7.4%	4.0%	1.6%	0.0%
30 Year Fixed Mortgage Rate						
Annual Average						
February Preliminary Forecast	3.5%	3.1%	2.9%	2.9%	3.1%	3.3%
November Forecast	3.7%	4.0%	4.4%	4.5%	4.6%	4.7%
<i>Difference in forecast</i>	-0.1%	-0.9%	-1.4%	-1.6%	-1.5%	-1.3%
3 Month T-Bill Rate						
Annual Average						
February Preliminary Forecast	1.2%	0.1%	0.1%	0.1%	0.1%	0.2%
November Forecast	1.7%	1.5%	1.9%	2.1%	2.2%	2.4%
<i>Difference in forecast</i>	-0.4%	-1.4%	-1.8%	-2.0%	-2.1%	-2.2%

Washington Forecast Comparison
Fiscal Years

	2020	2021	2022	2023	2024	2025
Real Personal Income						
Billions of 2012 dollars						
June Preliminary Forecast	453.7	457.2	463.9	477.3	495.4	512.5
<i>Growth</i>	2.7%	0.8%	1.4%	2.9%	3.8%	3.5%
February Forecast	458.8	470.4	480.8	493.2	508.0	522.1
<i>Growth</i>	3.9%	2.5%	2.2%	2.6%	3.0%	2.8%
Difference in level	-5.1	-13.2	-17.0	-15.8	-12.6	-9.5
<i>Difference in growth forecast</i>	-1.2%	-1.7%	-0.8%	0.3%	0.8%	0.7%
Nominal Personal Income						
Billions of dollars						
June Preliminary Forecast	500.5	509.2	521.8	540.8	565.6	592.9
<i>Growth</i>	4.0%	1.7%	2.5%	3.6%	4.6%	4.8%
February Forecast	507.0	528.1	550.0	575.3	605.1	634.9
<i>Growth</i>	5.4%	4.2%	4.2%	4.6%	5.2%	4.9%
Difference in level	-6.5	-18.9	-28.2	-34.4	-39.5	-41.9
<i>Difference in growth forecast</i>	-1.4%	-2.4%	-1.7%	-0.9%	-0.6%	-0.1%
Nonfarm Payroll Employment						
Thousands						
June Preliminary Forecast	3,353.7	3,060.4	3,349.7	3,520.7	3,649.3	3,739.6
<i>Growth</i>	-2.3%	-8.7%	9.5%	5.1%	3.7%	2.5%
February Forecast	3,505.7	3,554.5	3,597.6	3,631.0	3,654.6	3,676.4
<i>Growth</i>	2.0%	1.4%	1.2%	0.9%	0.7%	0.6%
Difference in level	-152.0	-494.1	-247.9	-110.4	-5.4	63.2
<i>Difference in growth forecast</i>	-4.3%	-10.1%	8.2%	4.2%	3.0%	1.9%
Housing Permits						
Units Authorized, Thousands						
June Preliminary Forecast	45.9	38.4	40.7	40.5	39.4	39.7
<i>Growth</i>	-0.2%	-16.3%	5.9%	-0.4%	-2.7%	0.9%
February Forecast	48.5	45.0	43.5	43.3	42.6	42.0
<i>Growth</i>	5.1%	-7.3%	-3.4%	-0.5%	-1.5%	-1.4%
Difference in level	-2.7	-6.6	-2.8	-2.8	-3.2	-2.3
<i>Difference in growth forecast</i>	-5.3%	-9.0%	9.3%	0.1%	-1.3%	2.3%

**Year-Over-Year Employment Growth by Industry
(March 2019 to March 2020)
Washington vs. U.S.**

	<u>Washington</u>		<u>U.S.</u>
	(000)	% Chg.	% Chg.
Total	63.1	1.8%	0.9%
Electronic Shopping and Mail-Order Houses	13.6	22.5%	-4.8%
Software Publishers	5.0	7.3%	9.1%
Information Excluding Software	3.9	5.2%	-0.1%
Construction	6.9	3.2%	2.2%
Professional and Business Services	13.4	3.1%	1.4%
Wholesale Trade	3.2	2.3%	0.9%
Financial Activities	3.3	2.1%	1.6%
State and Local Gov Non-Education	4.3	2.0%	1.1%
Education and Health Services	9.4	1.9%	2.1%
State and Local Gov Education	4.2	1.6%	0.1%
Other Services	1.6	1.2%	0.6%
Leisure and Hospitality	1.8	0.5%	-0.8%
Transportation, Warehousing and Utilities	0.2	0.1%	1.2%
Aerospace Product and Parts Manufacturing	0.0	0.0%	2.4%
Manufacturing Excluding Aerospace	-3.1	-1.5%	-0.2%
Mining and Logging	-0.6	-9.5%	-4.6%
Information	8.9	6.2%	1.4%
Retail Trade	7.4	1.9%	-0.1%
Manufacturing	-3.1	-1.1%	-0.1%

Source: WA State ERFC Kalman filtered data, U.S. Bureau of Labor Statistics