Economic Review

September 3, 2020





ECONOMIC AND REVENUE FORECAST COUNCIL

AGENDA

ECONOMIC REVIEW

September 3, 2020 10:00 a.m.

- Approval meeting minutes: June 17, 2020
- Interim budget outlooks and other ERFC documents: to post or not to post
- Presentation of economic outlook and revenue collection experience





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

Meeting Minutes Revenue Review

June 17, 2020 Zoom

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

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 June 2, 2020. Motion passed unanimously at 10:05 a.m.

Budget Outlook

The Budget Outlook Workgroup presented options available related to including a calculation of the percentage of the reserves as a percentage of revenue and resources. Treasurer Davidson moved, seconded by Representative Orcutt, to approve adoption of modification to our outlook summary using option one. Motion passed unanimously at 10:15 a.m.

Forecast Presentation

Dr. Lerch presented information on the economic and revenue forecast. Dr. Lerch summarized the forecast changes.

Motion

Representative Ormsby moved, seconded by Representative Orcutt, to adopt the official state economic and revenue forecasts, and the unofficial optimistic, pessimistic and alternative forecasts. Council approved the motion unanimously at 10:44 a.m.

Adjournment

With no further business, the meeting adjourned at 10:45 a.m.



Economic & Revenue Forecast Council State of Washington

Economic Review: September 3, 2020

Executive Summary

STATE OF LASH

United States

- This forecast is based on a modified version of IHS Markit's August 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. We now expect real GDP to decline 5.2% in 2020 followed by a 3.8% increase in 2021. In June we expected a 6.1% decline in 2020 followed by a 4.0% increase in 2021. In the past, we have been guided by the most recent Blue Chip long-range forecast for growth in 2022 through 2025 however this forecast has not been updated since early March and is clearly out of date. Instead, we extended the short-term Blue Chip 2021 forecast to approach the IHS GDP level by 2025, producing growth rates of 3.9%, 3.1%, 2.5%, and 2.2% in 2022 through 2025. In June we expected growth rates of 3.9%, 3.2%, 2.3%, and 2.3% in those years.
- 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, August 26, 2020 closing prices for Brent and WTI futures. Oil prices are slightly higher than expected in the June forecast but also decline slightly more rapidly. The latest futures prices indicate that the refiner acquisition price of crude will average \$43 per barrel in the fourth quarter of 2020 compared to \$39 in the June forecast. By the fourth quarter of 2025 the refiner acquisition price of crude is expected to average \$50 per barrel compared to \$49 per barrel in the June forecast.
- The fiscal policy assumptions in this forecast were developed in early August. The forecast assumes that emergency unemployment benefits of \$600 per week are extended through December and that a second round of stimulus checks is disbursed starting in September. As of this preliminary forecast, there has been no such legislation. We will get a new Blue Chip and IHS forecast in early September and update the fiscal policy assumptions in the final September economic forecast.
- National employment increased by 1.8 million net jobs in July, reflecting the continued resumption of economic activity that had been curtailed due to the COVID-19 pandemic. Employment data for May and June were revised up by 17,000 jobs. Sectors with the largest job gains in July included food services and drinking places (+502,000), retail trade (+258,000), local government education (+215,000), administrative and support services (+168,000), health care (+126,000), personal and laundry services (+118,000), amusement, gambling and recreation (+100,000), social assistance (+66,000) and transportation and warehousing (+38,000). Sectors with declining employment in July included information (-15,000), nondurable goods wholesale trade (-14,000), performing arts and spectator sports (-13,000) and management of companies and enterprises (-12,000).

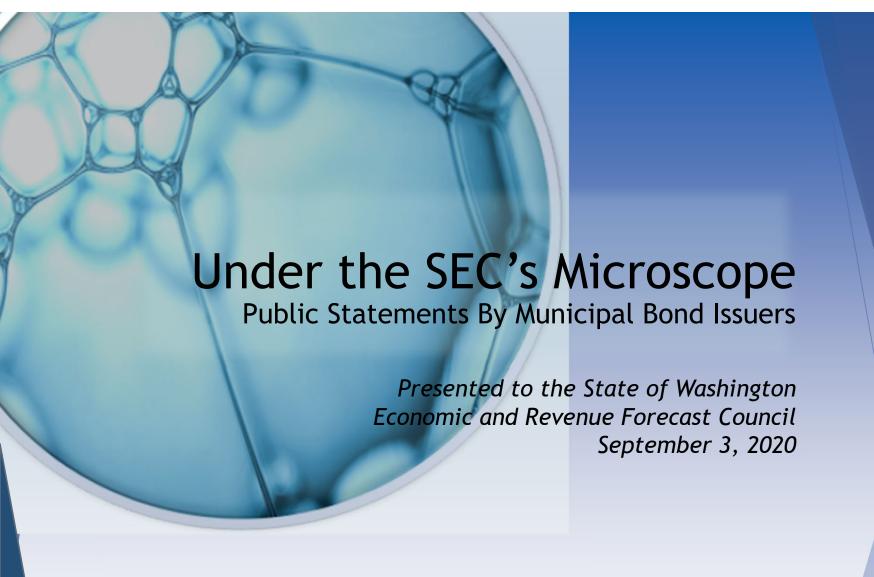
- Two key measures of consumer confidence moved in opposite directions this month but both remained well below their pre-pandemic levels. The University of Michigan (UM) consumer sentiment survey increased by 1.6 points to 74.1 in August. Over 60% of survey respondents judged overall economic conditions to be unfavorable. The Conference Board index of consumer confidence decreased by 6.9 points in August to 84.8. Consumers indicated that both business and employment conditions had deteriorated over the last month.
- Initial claims for unemployment insurance remained at very high levels but decreased by 98,000 to 1,006,000 (SA) in the week ending August 22nd. The four-week moving average of initial claims decreased by 107,250 to 1,068,000.
- Industrial production in July increased by 3.0% (SA) following a revised 5.7% increase in June. However, industrial production is down by 8.2% (SA) compared to July 2019. New orders for core capital goods (i.e., durables excluding aircraft and military), which is a proxy for business investment, increased by 1.9% (SA) in July following a revised 4.3% increase in June according to U.S. Census Bureau data. New orders for core capital goods remain 1.9% below their year-ago level.
- Residential construction activity improved again this month and is now above year-ago levels. Housing units authorized by building permits in July were 17.9% (SA) above their June level and 8.6% above their year-ago level. July housing starts increased by 22.6% (SA) compared to June and were 23.4% above their July 2019 level. New home sales in July increased by 13.9% (SA) compared to June and were 36.3% above their year-ago level. Existing home sales in July increased by 24.7% (SA) compared to June and were up 8.7% compared to July 2019. The seasonally adjusted Case-Shiller national home price index for June was 0.2% above its May 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

- We have two months of new Washington employment data since the June forecast was released. Employment continued to rise in June and July following the historic decline in April. Total nonfarm payroll employment rose 137,500 (seasonally adjusted) in June and July which was 63,000 more than expected in the June forecast. Private services-providing sectors added 118,400 jobs in the two-month period. Construction employment increased by 10,700 jobs and manufacturing added 1,600 jobs despite the loss of 1,900 aerospace jobs. Government payrolls increased by 6,900 jobs in June and July.
- 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 subtracted 2,900 (0.1%) from the estimated level of total employment in May 2020. July employment is 60,100 (1.9%) higher than expected in the June forecast because of the faster-thanexpected employment growth in June and July.

- Washington's unemployment rate inched up to 10.3% in July from 10.0% in June. The July rate is still down significantly from the 16.3% rate reached in April which was an all-time high in the series that dates back to 1976.
- 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. As of July, Washington aerospace employment had already declined by 6,300 since April when Boeing first announced major job cuts. We assume a decline of another 9,300 aerospace employees by the end of the year. The forecast makes no assumption concerning a possible consolidation of 787 production in South Carolina.
- 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.
- Washington housing construction declined in the second quarter but exceeded the June forecast. Washington housing units authorized by building permits averaged 40,300 (SAAR) in the second quarter of 2020, down from 49,800 in the first quarter. Second quarter permits consisted of 17,800 single-family units and 22,600 multi-family units. The June forecast predicted 12,300 single-family units and 16,700 multi-family units for a total of 28,900 units in the second quarter. Housing construction remained moderate at the beginning of the third quarter. In July, single-family permits improved to 23,600 units (SAAR) and multi-family units slowed to 17,400 for a total of 41,000 units.
- Seattle-area home prices declined for a third consecutive month in June following eleven consecutive increases. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle home prices decreased 0.2% in June following declines of 0.2% and 0.3% in April and May. The composite-20 index was unchanged in June. Seattle home prices were still up 6.5% over the year. In comparison, the composite-20 index was up 3.5% over the year. In June, Seattle home prices were up 100% since the December 2011 trough and exceeded the May 2007 peak by 39%. The reported June figure is for the three months ending in June.
- Seattle-area consumer price inflation was very close to the national average in June despite higher shelter cost inflation. From June 2019 to June 2020, the Seattle CPI rose 0.9% compared to a 0.7% increase in the U.S. City Average index. Core prices, which exclude food and energy, increased 1.1%over the year in Seattle compared to 1.2% for the U.S. City Average. Over-the-year shelter-cost inflation in Seattle was 3.6% compared to the national

- rate of 2.4%. Seattle inflation excluding shelter trailed the national average at -0.7% compared to -0.1%.
- Washington exports declined over the year for a seventh consecutive quarter. Year-over-year exports decreased 42.9% in the second quarter of 2020. The large decline was mostly because of transportation equipment exports (mostly Boeing planes) which fell 83.7% over the year. The second quarter of 2019 had already been severely depressed by Boeing's suspension of 737 Max deliveries in March 2019. Second quarter exports of agricultural products decreased 2.8% over the year and exports of all other commodities (mostly manufacturing) declined 16.4% over the year.
- The Institute of Supply Management Western Washington Index (ISM-WW) indicated declining manufacturing activity again after briefly indicating growth. The index, which measures conditions in the manufacturing sector, declined to 48.9 in August from 56.4 in July and 50.9 in June (index values above 50 indicate growth while values below 50 indicate contraction). The index was below 50 in March, April, and May. The inventory and deliveries components indicated expansion in August while the employment component indicated contraction. The production and orders components were neutral at 50.
- Washington car and truck sales increased in May, June, and July but remained below rates seen prior to the Covid-19 outbreak in Washington. The seasonally adjusted number of new vehicle registrations increased 20.4% in May, 75.9% in June, and 27.2% in July 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 strong growth rates in the last three months were from a very low base. The level in July was still lower than in any month other than the previous three since March 2014. The seasonally adjusted number of new vehicle registrations fell 10.1% over the year in July.
- We expect a 4.9% decline in Washington employment this year compared to the 5.5% decrease in the June 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 2.4% per year in 2021 through 2025 compared to the 2.1% average rate expected in June. Our forecast for nominal personal income growth this year is 8.0%, up from 3.8% in the June forecast. The adverse effects of the recession on personal income this year are more than offset by substantial income support from the federal government. Our new forecast for nominal personal income growth in 2021 through 2025 averages 3.0% per year, which is down from the 3.5% rate expected in the June forecast. The effect of the recovery on growth in 2021-25 is offset by the loss of income support from the federal government.



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SEC Regulations and the State of Washington

As an "issuer" of municipal securities, the State is subject to the SEC's anti-fraud regulations

- The State borrows money in public capital markets
 - SEC regulates disclosures to prevent fraud
 - ERFC provides important information used by the public capital markets
 - "Public capital markets" includes any potential investor in a municipal bond
- Anti-fraud provisions apply to both:
 - ▶ Formal Communications with Market
 - Managed by OST
 - ► Initial Disclosure (Official Statement)
 - ► Ongoing Disclosure (Annual & Listed Events)
 - ▶ Informal Communications with Market
 - All other releases of material information
 - ERFC Forecasts, Toll Revenue Forecasts, other (material) reports

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Why is the ERFC Important?

"...statements by [government] officials 'who may be viewed as having knowledge regarding the financial condition and operation of [an] issuer'...[including]

- verbal statements...
- public announcements and interviews with media representatives, as well as
- statements disseminated through other avenues such as, in staff's view, social media."

- Feb 2020 SEC Legal Bulletin

- Who is making the statement?
 - Does the person or body making the statement have apparent authority or <u>subject-matter expertise</u> to speak on behalf of the Issuer?
 - Governor, Treasurer, Director of OFM, Committee Chair, Member of a key body (e.g., ERFC)
- Would a reasonable investor give it weight?
- ▶ Is it "material"?

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Should it be Disclosed?



Questions

Does it alter the "total mix of information" available?

Is there an information vacuum?

Is a communication accurate and complete? Does it tell the whole story?



Considerations

Does the information change the overall picture?

Is this the only or most timely information available on the tonic?

What is omitted that is necessary to understand the information and place it in context?

Assume any public information may be reasonably expected to "reach the market"

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Selective Disclosure

What is Selective Disclosure?

- Occurs when selected members of the public are given access to information that is material and nonpublic before it is made available to general public
- · Also arises when information is inconsistently communicated to different audiences

Examples

- · Material information provided to media but not made broadly available directly from the source
- Verbal one-on-one conversation with investor or media; mitigate with
- Risk present if dissemination to broader public is in hands of media (both timing and interpretation); mitigate with dissemination through State
- Communication is inconsistently conveyed to different audiences

2000 - "Regulation FD" adopted in corporate context 2017 - MSRB Municipal Market Advisory re: Selective Disclosure 2020 - Chair Clayton's Statements re: Importance of Disclosure for Municipal Markets



Avoiding Selective Disclosure

What are the remedies for selective disclosure?

- If material information is to be released, it should be broadly disclosed and made easily accessible to general
- <u>Unintentional selective disclosure</u> MUST be remedied with <u>broad disclosure</u> promptly after initial disclosure occurs

What is sufficiently "broad" disclosure?

- $\underline{\text{Broad disclosure}} \text{ means making information accessible, } \underline{\text{in}}$ a consistent form/content, to any potential market participant
- Agency website posting (appropriate for muni context)
- May require link to EMMA or State's investor website (or other relevant/significant website)

Stradling

Common Risk Areas



<u>Forecasts</u> or other preliminary information

If a forecast directly bears on "total mix" of information, it should be disclosed



Official public statements by persons or groups with <u>apparent</u> <u>authority</u> to speak on the topic on behalf of the Issuer

The SEC has sanctioned issuers for fraudulent statements or omissions by key officials



Information shared publicly through <u>unofficial channels</u> heightens risk of selective disclosure and inaccuracy

Make broadly available in medium where the Issuer controls timing and content/context

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Recommendations

- SEC is taking more interest on public statements by issuers
- Take control of the "total mix" of information
 - ► Tell the "whole" story with appropriate context
 - ▶ Who is speaking? What hat are they wearing?
 - ▶ Control interpretation (Just the Facts!) and timing, when possible
- ▶ Ensure communication is <u>accurate</u> and <u>complete</u>
 - Supplement or provide context around incomplete information, when necessary to avoid material omissions (including labels, such as "preliminary," and dates)
- Ensure any information that has the potential to materially alter the "total mix of information" is <u>broadly available</u> to all
 - Avoid selective disclosure of <u>material nonpublic</u> information
 - ▶ Make it public Publish on State agency/ERFC website
 - ▶ Treasurer's Office can post on EMMA website (MSRB filing), if necessary

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Washington State Economic Outlook & Revenue Collection Experience

Presented to
The Economic & Revenue Forecast Council

Steve Lerch
Executive Director

September 3, 2020 Olympia, Washington





Summary

- The preliminary economic forecast assumes emergency unemployment benefits of \$600/week are extended through December and a second round of stimulus checks will be issued in September
- Congress has not enacted additional stimulus legislation to date; the final economic forecast will incorporate Congressional actions as of early September
- The forecast assumes a decline of 9,300 aerospace jobs over the remainder of 2020; we do not assume a consolidation of 787 production in South Carolina
- Revenue collections since the June forecast are \$643 million (19.6%) above expectations

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Forecast risks

Upside

 COVID infection rates decline as social distancing guidelines are generally observed, leading to faster reopening of businesses, greater consumer confidence and spending, increased employment

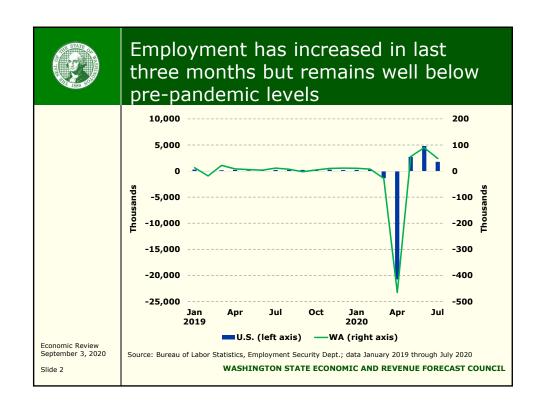
Downside

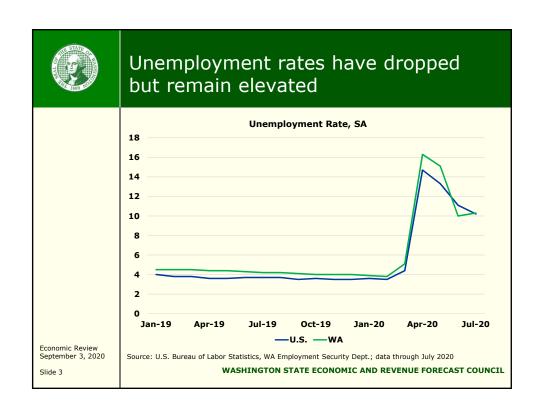
- COVID infection rates increase, leading to slower pace of economic reopening, reduced consumer spending and employment
- Congress does not pass additional fiscal stimulus legislation

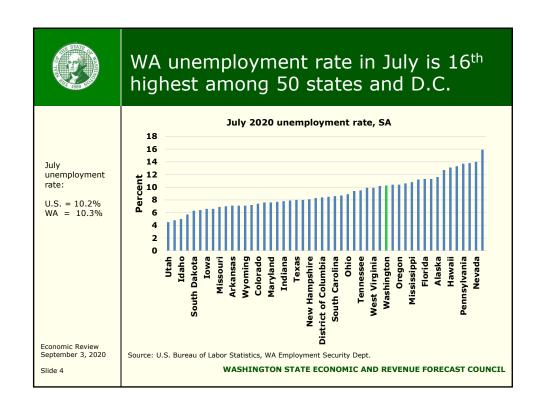
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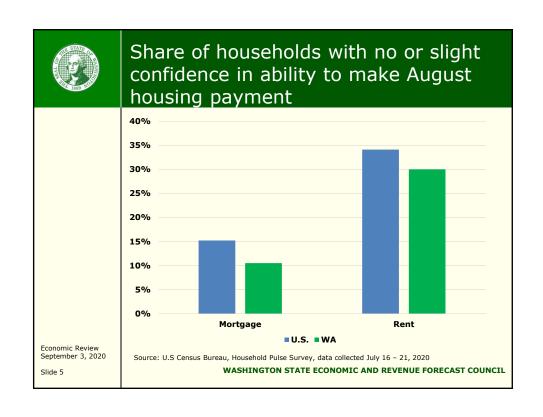
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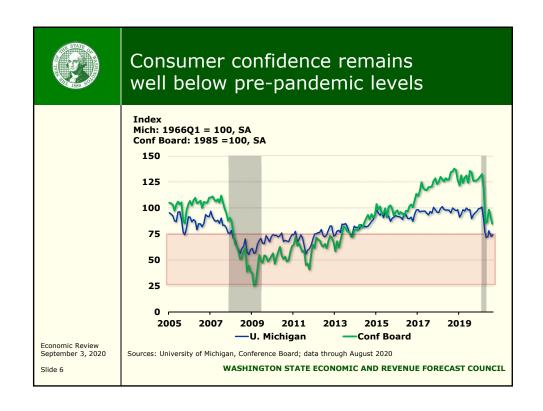
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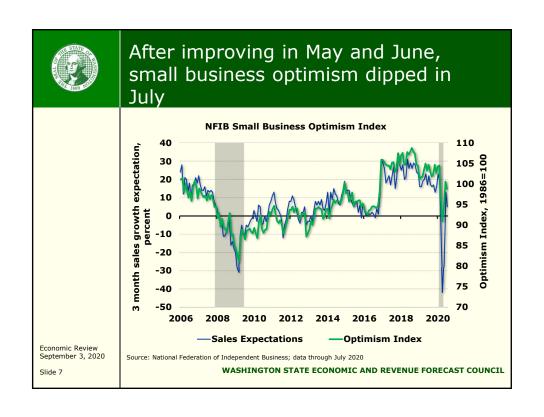


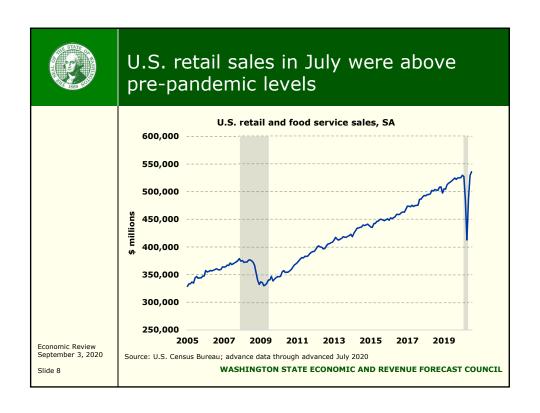


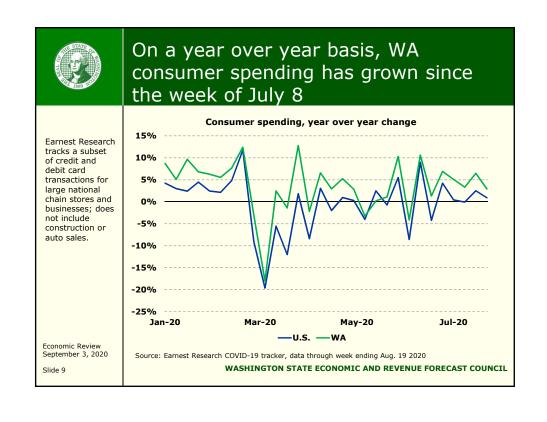


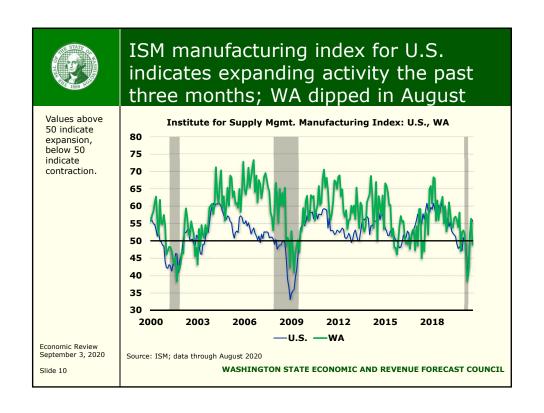


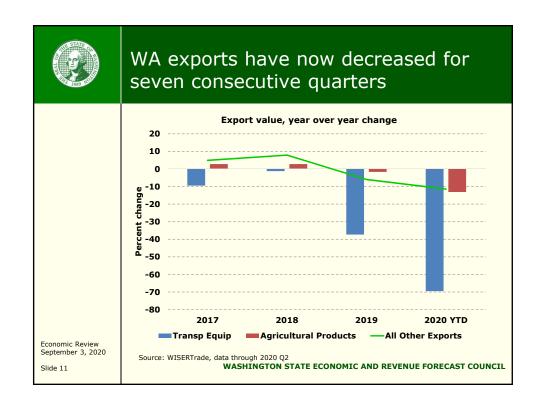


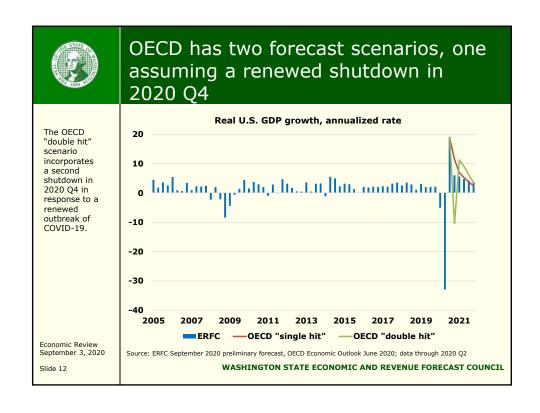


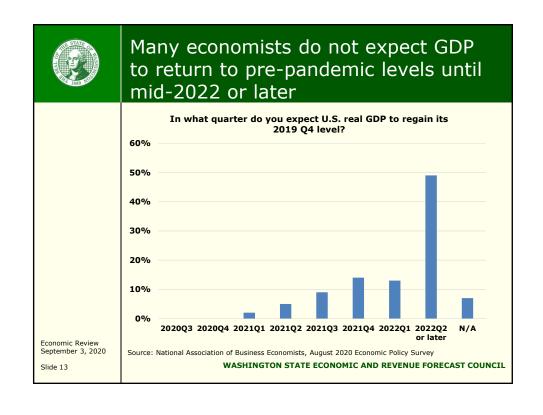


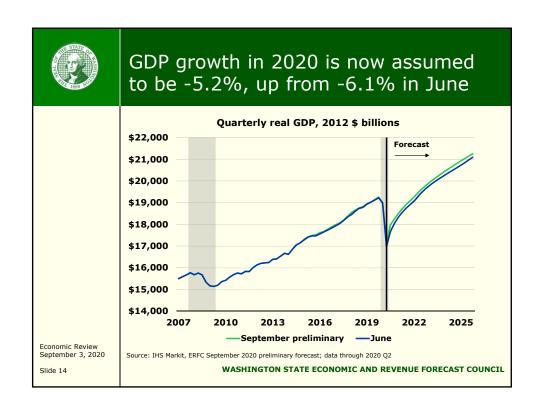


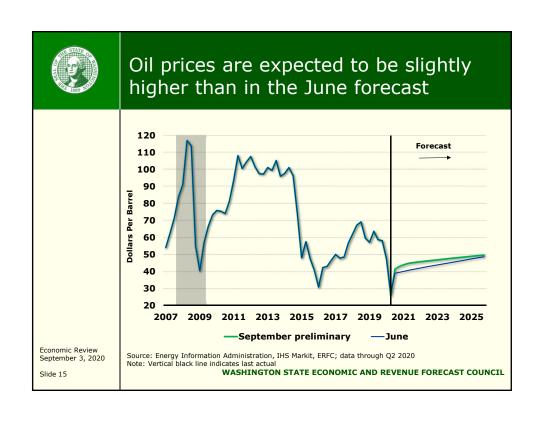


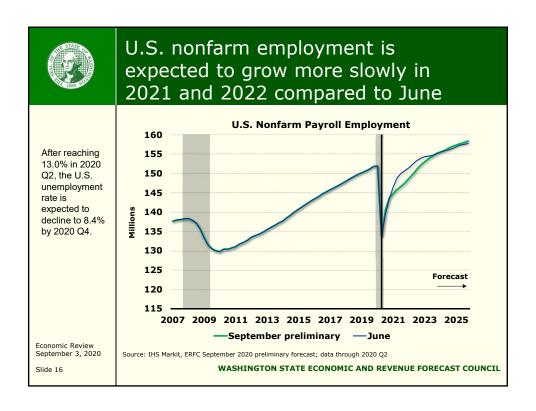


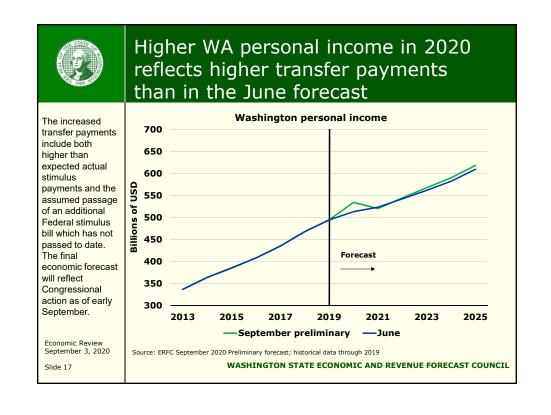


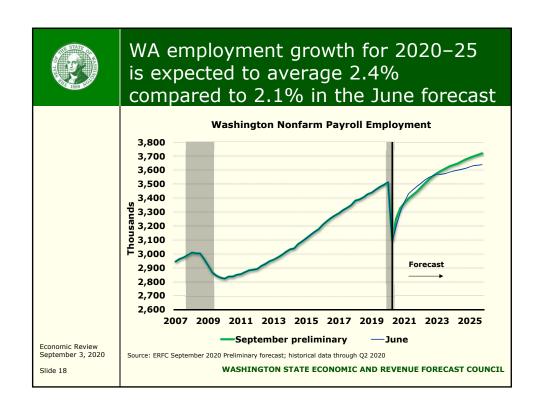


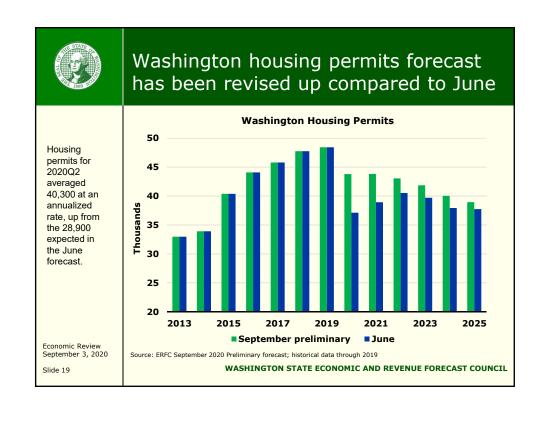


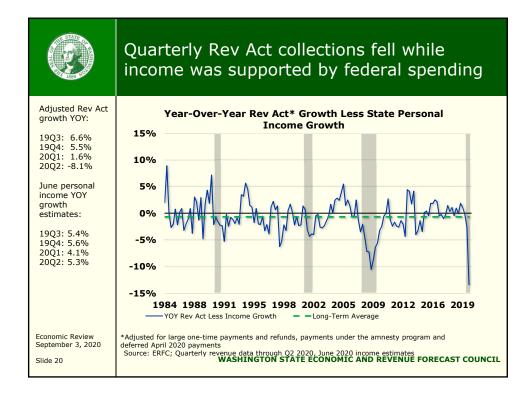














REET activity rebounded in June and July but is still below pre-COVID levels

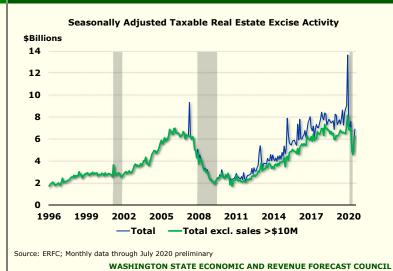
Seasonally adjusted taxable activity in July was \$6.9 billion, up from \$5.9 billion in June and \$4.8 billion in May.

Large commercial sales (>\$10 million) totaled \$638 million in July after June sales of \$195 million.

Current activity is similar to the levels of the first half of 2017.

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Revenue collections to date

Revenue Act collections since the June forecast reflect taxable activity in May and June, months when a majority of counties reached phase 2 or 3 reopening after a long shutdown. It remains to be seen whether this level of activity will continue or if it was a short term release of pentup demand. Economic Review September 3, 2020

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

Total GF-S	\$3,275,447	\$3,918,397	\$642,950	19.6%
All other agencies	\$7,685	\$7,455	(\$229)	-3.0%
Dept. of Revenue	\$3,267,762	\$3,910,942	\$643,180	19.7%
	<u>Estimate</u>	<u>Actual</u>	<u>Difference</u>	Pct.

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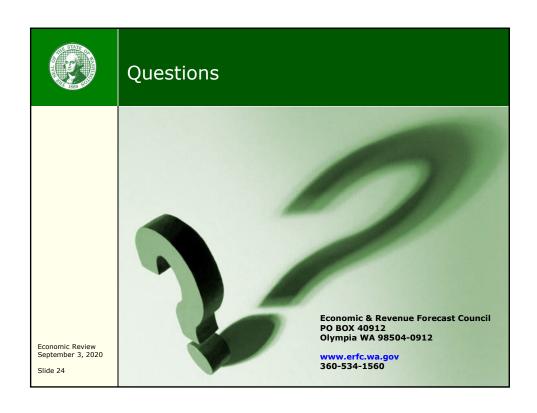
Conclusion

- The preliminary economic forecast reflects stronger growth in 2020 but slower growth in 2021 compared to the June forecast.
- Uncertainty regarding COVID-19 impacts to the economy remains high.
- International trade and geopolitical issues are also risks to the forecast.
- The next monthly revenue collection report will be available on September 16th and the revenue forecast will be presented on September 23rd.

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WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL



U.S. Economic Forecast Comparison August 2020

August 2020	2020Q2	2020Q3	2020Q4	2021Q1	2020	2021	2022	2023	2024	2025
Real GDP, Percent Change, Annu	ıal Dato									
		10 1	6.0	F 7	5 2	20	2.0	2 1	2 5	2.2
ERFC (September Preliminary)	-32.9	19.1	6.0	5.7	-5.2	3.8	3.9	3.1	2.5	2.2
IHS	-32.9	23.4	4.5	1.9	-4.8	3.1	4.1	3.3	2.5	2.2
Economy.com	-32.9	23.2	2.8	2.1	-4.9	2.6	5.2			
Blue Chip Average*		18.7	5.9	5.8	-5.2	3.8	1.9	1.9	2.0	2.0
Blue Chip Top 10*		28.0	9.5	8.6	-4.1	5.5	2.3	2.3	2.3	2.3
Blue Chip Bottom 10*		10.5	1.7	3.5	-6.2	2.2	1.4	1.6	1.7	1.7
Real Consumption, Percent Char	nae. Annu	al Rate								
ERFC (September Preliminary)	-34.6	23.3	7.1	4.8	-5.6	4.1	3.5	2.8	2.4	2.3
IHS	-34.6	30.3	3.4	-0.5	-5.2	2.7	3.9	3.2	2.5	2.3
Economy.com	-34.6	22.4	3.6	2.6	-5.9	2.6	4.3	3.2		213
Blue Chip Average*	54.0	21.8	6.6	5.2	-5.6	4.1	2.0	2.1	2.1	2.2
Blue Chip Top 10*		31.6	11.7	9.0	-4.5	6.1	2.4	2.4	2.5	2.5
Blue Chip Bottom 10*		10.5	1.7	2.2	-6.8	2.3	1.7	1.8	1.8	1.9
Federal Funds Rate										
ERFC (September Preliminary)	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
IHS	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
Economy.com	0.1	0.1	0.1	0.1	0.4	0.1	0.1			
Three Month T-Bill Rate										
ERFC (September Preliminary)	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
IHS	0.1	0.1	0.1	0.1	0.4	0.1	0.1	0.1	0.1	0.1
	0.1									
Blue Chip Average*		0.1	0.1	0.2	0.3	0.2	1.6	1.9	2.0	2.1
Blue Chip Top 10*		0.2	0.2	0.3	0.4	0.3	2.2	2.4	2.4	2.6
Blue Chip Bottom 10*		0.1	0.1	0.1	0.2	0.1	1.1	1.3	1.5	1.6
10-Yr. T-Note Yield										
ERFC (September Preliminary)	0.7	0.6	0.6	0.7	0.8	0.9	1.1	1.3	1.5	1.8
IHS '	0.7	0.6	0.6	0.6	0.8	0.8	1.1	1.3	1.5	1.8
Economy.com	0.7	0.6	0.7	0.8	0.8	1.1	2.1			
Blue Chip Average*	0.7	0.7	0.8	0.9	0.9	1.0	2.3	2.5	2.7	2.9
Blue Chip Top 10*		0.9	1.0	1.2	1.0	1.4	2.8	3.1	3.3	3.5
Blue Chip Bottom 10*		0.6	0.6	0.6	0.7	0.7	1.8	2.0	2.1	2.2
Bide Chip Bottom 10		0.0	0.0	0.0	0.7	0.7	1.0	2.0	2.1	2.2
Consumer Price Index, Percent (2.5		2.4	4 7	4.4	1.0	2.4
ERFC (September Preliminary)	-3.5	4.4	1.8	3.5	1.1	2.4	1.7	1.4	1.8	2.1
IHS	-3.5	3.4	1.6	3.5	1.0	2.3	1.9	1.6	1.8	2.1
Economy.com	-3.5	4.6	1.5	1.5	1.1	1.9	2.8			
Blue Chip Average*		2.8	1.9	2.1	0.9	1.7	2.2	2.2	2.2	2.2
Blue Chip Top 10*		4.0	2.9	2.9	1.1	2.2	2.5	2.5	2.5	2.4
Blue Chip Bottom 10*		1.3	1.1	1.4	0.5	1.2	1.9	1.9	1.9	1.9
Payroll Employment, Millions										
ERFC (September Preliminary)	133.7	140.6	143.7	144.8	142.5	146.2	150.4	154.1	156.3	157.9
Percent Change, Annual Rate	-40.0	22.4	9.0	3.1	-5.6	2.6	2.9	2.5	1.4	1.0
IHS	133.7	140.8	143.9	144.8	142.6	146.1	150.2	154.0	156.5	158.0
_Percent Change, Annual Rate	-40.0	23.0	9.3	2.5	-5.5	2.5	2.8	2.5	1.6	0.9
Economy.com	133.7	139.8	139.7	140.0	141.3	141.4	146.1			
Percent Change, Annual Rate	-40.0	19.6	-0.5	1.0	-6.4	0.0	3.4			
Unemployment Rate, Percent										
ERFC (September Preliminary)	13.0	9.7	8.4	8.1	8.7	7.5	5.6	4.3	3.8	3.6
IHS	13.0	9.5	8.2	8.1	8.6	7.6	5.8	4.5	3.8	3.6
			9.5	9.3		8.8	6.6	7.5	5.0	5.0
Economy.com	13.0	9.8			9.0			4 4	4.2	4 1
Blue Chip Average*		10.4	9.3	8.5	9.2	7.6	4.0	4.1	4.2	4.1
Blue Chip Top 10*		11.7	10.9	10.1	10.0	9.1	4.5	4.7	4.7	4.6
Blue Chip Bottom 10*		9.3	8.1	7.2	8.6	6.3	3.4	3.4	3.6	3.6
Real Disposable Personal Incom	e. Percen	t Change	. Annual	Rate						
ERFC (September Preliminary)	44.9	-9.2	0.9	-29.9	7.3	-6.1	3.1	2.9	2.1	2.5
IHS	44.9	-8.2	1.2	-30.6	7.5	-6.3	2.9	2.8	2.3	2.5
Blue Chip Average*	1115	-15.9	-6.3	0.7	4.5	-0.8	1.9	2.0	2.1	2.1
				4.4		2.2				
Blue Chip Top 10*		0.3	1.1		6.6		2.3	2.3	2.4	2.4
Blue Chip Bottom 10*		-29.1	-14.9	-4.3	2.4	-4.1	1.5	1.7	1.8	1.9
West Texas Intermediate										
ERFC (September Preliminary)	27.8	42.2	43.7	44.6	39.9	45.3	46.2	47.1	48.0	48.9
IHS	27.8	39.7	40.8	43.4	38.5	47.5	56.0	58.3	59.7	62.6
Economy.com	28.1	39.0	40.7	42.0	38.5	46.5	56.4	33.3	5517	5_10
2001101117100111	20.1	33.0	10.7	12.0	50.5	10.5	ЭО₁⁻т			

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

Percent Change -32.9% 19.1% 6.0% 5.7% June Forecast 16,983 17,665 18,032 18,319 Percent Change -35.8% 17.1% 8.6% 6.5% Real Consumption (Billions of 2012 Dollars) September Forecast, Preliminary 11,797 12,432 12,646 12,796 Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	19,092 2.2% 19,073 2.3% 13,240 2.4% 13,280 2.6% 109.9 1.5% 109.7 1.4%	2.2% -5.2% 19,073 17,914 2.3% -6.1% 13,240 12,498 2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.2% -5.2% 3.8% 19,073 17,914 18,630 2.3% -6.1% 4.0% 13,240 12,498 13,015 2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.2% -5.2% 3.8% 3.9% 19,073 17,914 18,630 19,364 2.3% -6.1% 4.0% 3.9% 13,240 12,498 13,015 13,472 2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.2% -5.2% 3.8% 3.9% 3.1% 19,073 17,914 18,630 19,364 19,986 2.3% -6.1% 4.0% 3.9% 3.2% 13,240 12,498 13,015 13,472 13,855 2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.2% -5.2% 3.8% 3.9% 3.1% 2.5% 19,073 17,914 18,630 19,364 19,986 20,449 2.3% -6.1% 4.0% 3.9% 3.2% 2.3% 13,240 12,498 13,015 13,472 13,855 14,188 2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -32.9% 19.1% 6.0% 5.7% June Forecast 16,983 17,665 18,032 18,319 Percent Change -35.8% 17.1% 8.6% 6.5% Real Consumption (Billions of 2012 Dollars) September Forecast, Preliminary 11,797 12,432 12,646 12,796 Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	2.2% 19,073 2.3% 13,240 2.4% 13,280 2.6% 109.9 1.5% 109.7	2.2% -5.2% 19,073 17,914 2.3% -6.1% 13,240 12,498 2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.2% -5.2% 3.8% 19,073 17,914 18,630 2.3% -6.1% 4.0% 13,240 12,498 13,015 2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.2% -5.2% 3.8% 3.9% 19,073 17,914 18,630 19,364 2.3% -6.1% 4.0% 3.9% 13,240 12,498 13,015 13,472 2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.2% -5.2% 3.8% 3.9% 3.1% 19,073 17,914 18,630 19,364 19,986 2.3% -6.1% 4.0% 3.9% 3.2% 13,240 12,498 13,015 13,472 13,855 2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.2% -5.2% 3.8% 3.9% 3.1% 2.5% 19,073 17,914 18,630 19,364 19,986 20,449 2.3% -6.1% 4.0% 3.9% 3.2% 2.3% 13,240 12,498 13,015 13,472 13,855 14,188 2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
June Forecast 16,983 17,665 18,032 18,319 Percent Change -35.8% 17.1% 8.6% 6.5% Real Consumption (Billions of 2012 Dollars) September Forecast, Preliminary 11,797 12,432 12,646 12,796 Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	19,073 2.3% 13,240 2.4% 13,280 2.6% 109.9 1.5% 109.7	19,073 17,914 2.3% -6.1% 13,240 12,498 2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	19,073 17,914 18,630 2.3% -6.1% 4.0% 13,240 12,498 13,015 2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	19,073 17,914 18,630 19,364 2.3% -6.1% 4.0% 3.9% 13,240 12,498 13,015 13,472 2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	19,073 17,914 18,630 19,364 19,986 2.3% -6.1% 4.0% 3.9% 3.2% 13,240 12,498 13,015 13,472 13,855 2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	19,073 17,914 18,630 19,364 19,986 20,449 2.3% -6.1% 4.0% 3.9% 3.2% 2.3% 13,240 12,498 13,015 13,472 13,855 14,188 2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -35.8% 17.1% 8.6% 6.5% Real Consumption (Billions of 2012 Dollars) September Forecast, Preliminary 11,797 12,432 12,646 12,796 Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	2.3% 13,240 2.4% 13,280 2.6% 109.9 1.5% 109.7	2.3% -6.1% 13,240 12,498 2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.3% -6.1% 4.0% 13,240 12,498 13,015 2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.3% -6.1% 4.0% 3.9% 13,240 12,498 13,015 13,472 2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.3% -6.1% 4.0% 3.9% 3.2% 13,240 12,498 13,015 13,472 13,855 2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.3% -6.1% 4.0% 3.9% 3.2% 2.3% 13,240 12,498 13,015 13,472 13,855 14,188 2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Real Consumption (Billions of 2012 Dollars) September Forecast, Preliminary 11,797 12,432 12,646 12,796 Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	13,240 2.4% 13,280 2.6% 109.9 1.5% 109.7	13,240 12,498 2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	13,240 12,498 13,015 2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	13,240 12,498 13,015 13,472 2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	13,240 12,498 13,015 13,472 13,855 2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	13,240 12,498 13,015 13,472 13,855 14,188 2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	2.4% 13,280 2.6% 109.9 1.5% 109.7	2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -34.6% 23.3% 7.1% 4.8% June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	2.4% 13,280 2.6% 109.9 1.5% 109.7	2.4% -5.6% 13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.4% -5.6% 4.1% 13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.4% -5.6% 4.1% 3.5% 13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.4% -5.6% 4.1% 3.5% 2.8% 13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.4% -5.6% 4.1% 3.5% 2.8% 2.4% 13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
June Forecast 11,639 12,206 12,495 12,682 Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	13,280 2.6% 109.9 1.5% 109.7	13,280 12,380 2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	13,280 12,380 12,922 2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	13,280 12,380 12,922 13,357 2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	13,280 12,380 12,922 13,357 13,742 2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	13,280 12,380 12,922 13,357 13,742 14,102 2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -39.2% 21.0% 9.8% 6.1% PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	2.6% 109.9 1.5% 109.7	2.6% -6.8% 109.9 111.0 1.5% 1.0% 109.7 110.6	2.6% -6.8% 4.4% 109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	2.6% -6.8% 4.4% 3.4% 109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	2.6% -6.8% 4.4% 3.4% 2.9% 109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	2.6% -6.8% 4.4% 3.4% 2.9% 2.6% 109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
PCE Price Index (2012=100) September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	109.9 1.5% 109.7	109.9 111.0 1.5% 1.0% 109.7 110.6	109.9 111.0 113.0 1.5% 1.0% 1.8% 109.7 110.6 112.0	109.9 111.0 113.0 114.6 1.5% 1.0% 1.8% 1.4% 109.7 110.6 112.0 113.6	109.9 111.0 113.0 114.6 116.1 1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	109.9 111.0 113.0 114.6 116.1 118.0 1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
September Forecast, Preliminary 110.4 111.2 111.5 112.2 Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	1.5% 109.7	1.5% 1.0% 109.7 110.6	1.5%1.0%1.8%109.7110.6112.0	1.5%1.0%1.8%1.4%109.7110.6112.0113.6	1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	1.5% 109.7	1.5% 1.0% 109.7 110.6	1.5%1.0%1.8%109.7110.6112.0	1.5%1.0%1.8%1.4%109.7110.6112.0113.6	1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -1.9% 2.9% 1.3% 2.5% June Forecast 110.2 110.7 111.0 111.4 Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)	1.5% 109.7	1.5% 1.0% 109.7 110.6	1.5%1.0%1.8%109.7110.6112.0	1.5%1.0%1.8%1.4%109.7110.6112.0113.6	1.5% 1.0% 1.8% 1.4% 1.3% 109.7 110.6 112.0 113.6 115.4	1.5% 1.0% 1.8% 1.4% 1.3% 1.6%
Percent Change -1.6% 1.6% 1.2% 1.4% Real Personal Income (Billions of 2012 Dollars)						
Real Personal Income (Billions of 2012 Dollars)	1.4%	1.4% 0.9%	1.4% 0.9% 1.3%	1.4% 0.9% 1.3% 1.4%		109.7 110.6 112.0 113.6 115.4 117.3
Real Personal Income (Billions of 2012 Dollars) September Forecast, Preliminary 18,432 18,083 18,113 16,746					1.4% 0.9% 1.3% 1.4% 1.5%	1.4% 0.9% 1.3% 1.4% 1.5% 1.6%
September Forecast, Preliminary 18,432 18,083 18,113 16,746						
, , , , , , , , , , , , , , , , , , , ,	16,888	16,888 17,931	16,888 17,931 16,988	16,888 17,931 16,988 17,538	16,888 17,931 16,988 17,538 18,058	16,888 17,931 16,988 17,538 18,058 18,456
Percent Change 35.2% -7.3% 0.7% -26.9%	2.4%	2.4% 6.2%	2.4% 6.2% -5.3%	2.4% 6.2% -5.3% 3.2%	2.4% 6.2% -5.3% 3.2% 3.0%	2.4% 6.2% -5.3% 3.2% 3.0% 2.2%
June Forecast 17,633 17,588 17,223 17,344	16,969	16,969 17,393	16,969 17,393 17,514	16,969 17,393 17,514 17,899	16,969 17,393 17,514 17,899 18,276	16,969 17,393 17,514 17,899 18,276 18,619
Percent Change 12.4% -1.0% -8.0% 2.8%	3.0%	3.0% 2.5%	3.0% 2.5% 0.7%	3.0% 2.5% 0.7% 2.2%	3.0% 2.5% 0.7% 2.2% 2.1%	3.0% 2.5% 0.7% 2.2% 2.1% 1.9%
Nonfarm Payroll Employment (Millions)						
September Forecast, Preliminary 133.7 140.6 143.7 144.8	150.9	150.9 142.5	150.9 142.5 146.2	150.9 142.5 146.2 150.4	150.9 142.5 146.2 150.4 154.1	150.9 142.5 146.2 150.4 154.1 156.3
Percent Change -40.0% 22.4% 9.0% 3.1%	1.4%					
June Forecast 133.6 139.5 143.5 146.6	150.9	150.9 142.1	150.9 142.1 149.1	150.9 142.1 149.1 152.8	150.9 142.1 149.1 152.8 154.7	150.9 142.1 149.1 152.8 154.7 156.0
Percent Change -40.2% 18.7% 12.0% 9.0%	1.4%	1.4% -5.8%	1.4% -5.8% 4.9%	1.4% -5.8% 4.9% 2.5%	1.4% -5.8% 4.9% 2.5% 1.2%	1.4% -5.8% 4.9% 2.5% 1.2% 0.8%
Unemployment Rate (Percent of Labor Force)						
September Forecast, Preliminary 13.0 9.7 8.4 8.1	3.7					
June Forecast 12.9 10.2 8.6 7.1	3.7	3.7 8.9	3.7 8.9 6.2	3.7 8.9 6.2 5.0	3.7 8.9 6.2 5.0 4.4	3.7 8.9 6.2 5.0 4.4 4.3
Oil Price, Refiner's Acquisition						
September Forecast, Preliminary 25.7 41.3 42.8 43.8	59.4					
June Forecast 27.1 38.9 39.4 39.9	59.3	59.3 38.2	59.3 38.2 40.7	59.3 38.2 40.7 42.6	59.3 38.2 40.7 42.6 44.5	59.3 38.2 40.7 42.6 44.5 46.2
30 Year Fixed Mortgage Rate (Percent, average)						
September Forecast, Preliminary 3.2 3.0 3.0 3.0	3.9	3.9 3.2	3.9 3.2 3.0	3.9 3.2 3.0 3.1	3.9 3.2 3.0 3.1 3.1	3.9 3.2 3.0 3.1 3.1 3.3
June Forecast 3.3 3.5 3.4 3.1	3.9	3.9 3.4	3.9 3.4 3.1	3.9 3.4 3.1 3.0	3.9 3.4 3.1 3.0 3.0	3.9 3.4 3.1 3.0 3.0 3.2
3 Month T-Bill Rate (Percent, average)						
September Forecast, Preliminary 0.1 0.1 0.1 0.1	2.1	2.1 0.4	2.1 0.4 0.1	2.1 0.4 0.1 0.1	2.1 0.4 0.1 0.1 0.1	2.1 0.4 0.1 0.1 0.1 0.1
June Forecast 0.2 0.3 0.2 0.1	2.1					

Washington	Forecast	Comparison
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shington Forecast Compariso	<u> </u>			
	2020Q2	2020Q3	2020Q4	2021Q1
Real Personal Income (Billions o	of 2012 Do	llars)		
September Forecast, Preliminary	494.2	485.1	485.9	453.6
Percent Change	33.6%	-7.2%	0.7%	-24.0%
June Forecast	470.9	468.1	460.0	463.1
Percent Change	13.6%	-2.3%	-6.8%	2.7%
Personal Income (Billions of Dol	lars)			
September Forecast, Preliminary	545.3	539.2	541.9	509.0
Percent Change	31.1%	-4.4%	2.0%	-22.1%
June Forecast	519.0	518.0	510.5	515.7
Percent Change	11.8%	-0.7%	-5.7%	4.1%
Disposable Personal Income (Bil	llions of Do	ollars)		
September Forecast, Preliminary	496.0	487.1	489.5	455.1
Percent Change	44.1%	-7.1%	2.0%	-25.3%
June Forecast	478.3	475.9	463.7	465.6
Percent Change	28.0%	-2.0%	-9.9%	1.6%
Nonfarm Payroll Employment (T	housands)			
September Forecast, Preliminary	3097	3255	3328	3364
Percent Change	-39.5%	22.1%	9.2%	4.5%
June Forecast	3090	3202	3300	3373
Percent Change	-40.4%	15.3%	12.8%	9.2%
Unemployment Rate (Percent of	Labor For	ce)		
September Forecast, Preliminary	13.8	9.5	8.4	8.0
June Forecast	14.1	11.1	9.3	7.8
Manufacturing Employment (The	ousands)			
September Forecast, Preliminary	261.5	261.1	262.9	260.8
Percent Change	-36.1%	-0.6%	2.9%	-3.3%
June Forecast	260.9	254.5	255.5	258.0
Percent Change	-36.1%	-9.5%	1.6%	3.9%
Construction Employment (Thou				
September Forecast, Preliminary	180.0	197.4	202.1	201.4
Percent Change	-58.2%	44.6%	9.9%	-1.3%
June Forecast	175.7	178.2	184.2	187.5
Percent Change	-62.6%	5.8%	14.0%	7.4%
Housing Permits (Thousands)				
September Forecast, Preliminary	40.3	41.0	44.0	43.9
Percent Change	-57.0%	6.5%	32.9%	-1.3%
June Forecast	28.9	33.5	36.2	37.9
Percent Change	-88.6%	78.5%	37.7%	19.0%

U.S. Forecast Comparison					Fis	cal Years
	2020	2021	2022	2023	2024	2025
Real GDP						
Billions of 2012 dollars						
September Preliminary Forecast	18,653	18,356	19,171	19,855	20,397	20,868
Growth	-1.2%	-1.6%	4.4%	3.6%	2.7%	2.3%
June Forecast	18,575	18,141	18,996	19,712	20,224	20,676
Growth	-1.5%	-2.3%	4.7%	3.8%	2.6%	2.2%
Difference in level	78	214	175	143	173	192
Difference in growth forecast	0.3%	0.7%	-0.3%	-0.2%	0.1%	0.1%
Real Consumption Billions of 2012 dollars						
September Preliminary Forecast	12,893	12,705	13,264	13,670	14,027	14,348
Growth	-1.4%	-1.5%	4.4%	3.1%	2.6%	2.3%
June Forecast	12,897	12,558	13,172	13,547	13,927	14,282
Growth	-1.6%	-2.6%	4.9%	2.8%	2.8%	2.5%
Difference in level	-4	147	92	123	100	66
Difference in growth forecast	0.2%	1.2%	-0.5%	0.2%	-0.2%	-0.3%
PCE Price Index 2012 = 100						
September Preliminary Forecast	110.5	111.9	113.8	115.3	117.0	119.0
Growth	1.3%	1.3%	1.7%	1.3%	1.4%	1.8%
June Forecast	110.3	111.2	112.8	114.5	116.3	118.3
Growth	1.3%	0.8%	1.5%	1.5%	1.6%	1.7%
Difference in level	0.2	0.7	1.0	0.8	0.6	0.7
Difference in growth forecast	0.0%	0.5%	0.3%	-0.2%	-0.2%	0.0%
Unemployment Rate Percent of Labor Force						
September Preliminary Forecast	6.0%	8.4%	6.6%	4.9%	4.0%	3.7%
June Forecast	6.0%	8.0%	5.5%	4.5%	4.3%	4.3%
Difference in forecast	0.0%	0.4%	1.1%	0.3%	-0.4%	-0.6%
30 Year Fixed Mortgage Rate Annual Average						
September Preliminary Forecast	3.5%	3.0%	3.0%	3.1%	3.2%	3.4%
June Forecast	3.5%	3.3%	3.0%	3.0%	3.1%	3.3%
Difference in forecast	0.0%	-0.3%	0.0%	0.1%	0.1%	0.1%
3 Month T-Bill Rate Annual Average						
September Preliminary Forecast	1.2%	0.1%	0.1%	0.1%	0.1%	0.1%
June Forecast	1.2%	0.2%	0.1%	0.1%	0.1%	0.2%
Difference in forecast	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%

Washington Forecast Comparison					Fis	cal Years
	2020	2021	2022	2023	2024	2025
Real Personal Income						
Billions of 2012 dollars						
September Preliminary Forecast	465.4	471.0	467.8	482.4	494.4	507.2
Growth	5.5%	1.2%	-0.7%	3.1%	2.5%	2.6%
June Forecast	458.6	464.6	471.6	482.4	490.9	503.2
Growth	3.8%	1.3%	1.5%	2.3%	1.7%	2.5%
Difference in level	6.7	6.4	-3.8	0.0	3.5	4.0
Difference in growth forecast	1.7%	-0.1%	-2.2%	0.8%	0.7%	0.1%
Nominal Personal Income Billions of dollars						
September Preliminary Forecast	514.1	527.0	532.5	556.2	578.2	603.7
Growth	6.9%	2.5%	1.0%	4.5%	4.0%	4.4%
June Forecast	505.8	516.6	532.1	552.3	571.0	595.4
Growth	5.1%	2.1%	3.0%	3.8%	3.4%	4.3%
Difference in level	8.3	10.4	0.4	3.9	7.3	8.3
Difference in growth forecast	1.8%	0.4%	-2.0%	0.6%	0.6%	0.1%
Nonfarm Payroll Employment Thousands						
September Preliminary Forecast	3,395.7	3,336.2	3,460.9	3,566.4	3,630.5	3,681.8
Growth	-1.1%	-1.8%	3.7%	3.0%	1.8%	1.4%
June Forecast	3,395.1	3,326.3	3,493.4	3,562.3	3,588.3	3,619.1
Growth	-1.1%	-2.0%	5.0%	2.0%	0.7%	0.9%
Difference in level	0.6	9.9	-32.5	4.0	42.2	62.7
Difference in growth forecast	0.0%	0.3%	-1.3%	1.1%	1.1%	0.6%
Housing Permits Units Authorized, Thousands						
September Preliminary Forecast	48.1	43.2	43.6	42.4	41.0	39.3
Growth	4.7%	-10.2%	0.8%	-2.8%	-3.1%	-4.2%
June Forecast	45.3	36.5	40.1	40.4	38.7	37.6
Growth	-1.5%	-19.4%	9.9%	0.6%	-4.1%	-2.9%
Difference in level	2.8	6.7	3.4	2.0	2.3	1.7
Difference in growth forecast	6.2%	9.2%	-9.2%	-3.4%	1.0%	-1.3%

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

	Washir	ngton	<u>U.S.</u>
	(000)	% Chg.	% Chg.
Total	-289.2	-8.3%	-8.6%
Electronic Shopping and Mail-Order Houses	12.8	20.6%	-4.6%
State and Local Gov Non-Education	4.8	2.2%	-5.2%
Software Publishers	0.0	0.0%	3.8%
Financial Activities	-6.7	-4.2%	-1.4%
Transportation, Warehousing and Utilities	-4.9	-4.2%	-7.5%
Professional and Business Services	-21.4	-4.9%	-7.3%
Wholesale Trade	-7.2	-5.3%	-4.7%
Information Excluding Software	-4.7	-6.3%	-12.6%
Education and Health Services	-41.6	-8.3%	-5.7%
State and Local Gov Education	-23.0	-8.9%	-7.8%
Aerospace Product and Parts Manufacturing	-9.7	-10.9%	-5.2%
Manufacturing Excluding Aerospace	-22.3	-10.9%	-5.9%
Construction	-25.0	-11.4%	-4.3%
Mining and Logging	-0.8	-13.0%	-15.2%
Other Services	-25.9	-20.2%	-12.4%
Leisure and Hospitality	-95.4	-27.5%	-27.8%
Information	-4.7		-10.0%
Retail Trade	-5.8		-7.1%
Manufacturing	-32.0	-10.9%	-5.9%

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