



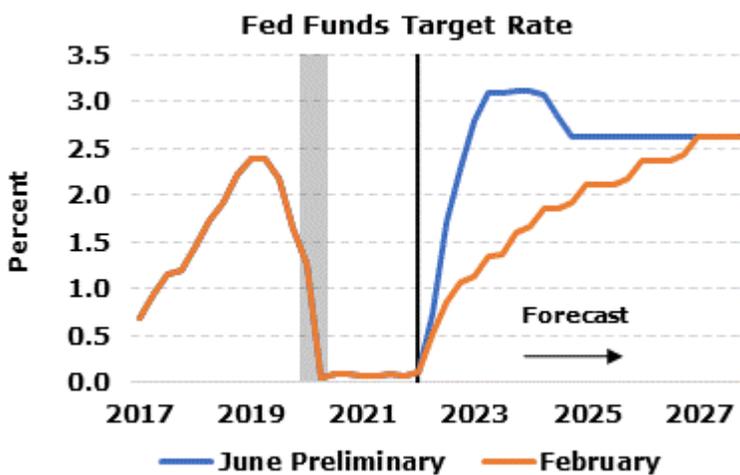
June 2022 Preliminary Economic Forecast

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This forecast is based on a modified version of IHS Markit's May 2022 Control forecast for the U.S. economy. We have adjusted real gross domestic product (GDP) to match the May 2022 Blue Chip "Consensus" GDP forecast for 2022 and 2023. We expect real GDP to increase 2.6% in 2022 and 2.1% in 2023 which is lower than to the 3.7% and 2.7% growth rates assumed in the February forecast. Our forecast for real GDP growth in 2024-27 is based on the most recent long term forecast from Blue Chip which was released in March 2022. We expect growth rates of 2.1%, 2.0%, 2.0%, and 1.9% in 2024 through 2027 which is very close to the 2.2%, 2.0%, 2.0%, and 1.9% rates in the February forecast.

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 Friday, May 27, 2022 closing prices for Brent and WTI futures. Oil prices have risen substantially since the February forecast was produced. While oil prices are expected to decline from current levels, they are expected to remain higher than in the February forecast throughout the forecast. The latest futures prices indicate that the refiner acquisition price of crude oil will peak at \$110 per barrel in the third quarter of 2022 compared to \$83 in the February forecast. By the fourth quarter of 2027 the refiner acquisition price of crude is expected to average \$69 per barrel compared to \$67 per barrel in the February forecast.

The new national forecast reflects the higher near-term inflation outlook in the IHS forecast as well as a more aggressive response by the Fed (see figure). The forecast now expects a federal funds rate of 3.0%-3.25% by next spring compared to 1.25% to 1.50% at that time in the February forecast. The forecast also retains IHS' assumption of a modest rise in the unemployment rate with slower but still positive GDP and job growth.



A comparison of the preliminary June U.S. forecast with the February U.S. forecast is shown in Table 2.

We have four months of new Washington employment data since the February forecast was released. Total seasonally adjusted nonfarm payroll employment increased 57,800 in January, February, March, and April which was 6,400 more than the increase of 51,400 expected in the forecast. Washington employment is now 1,400 (0.0%) lower than at its February 2020 peak. Private services-providing sectors added 47,400 jobs in the four-month period of which 13,800 were in the socially-dense leisure and hospitality sector. The manufacturing sector added 4,000 jobs, including 1,100 jobs in aerospace manufacturing, and construction employment increased by 5,000 jobs. State and local government employment increased by 1,500 jobs in January, February, March, and April but the federal government lost 100 jobs.

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 27,300 (0.8%) to the estimated level of total employment in December 2021. Because employment growth in January, February, March, and April was more than expected, April employment is 33,700 (1.0%) higher than expected in the February forecast.

Washington's unemployment rate remained at a post-recession low 4.1% in April. The unemployment rate is down significantly from the 16.8% rate reached in April 2020 which was an all-time high in the series that dates back to 1976. At the business cycle peak in February 2020 the Washington unemployment rate was 3.9%.

In March, after the forecast was complete, the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) released state personal income estimates for the fourth quarter of 2021. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) data. Our current estimate of Washington personal income in the fourth quarter of 2021 is \$1.6 billion (0.3%) higher than in the February forecast. Wages and salaries are \$3.2 billion (1.1%) higher than expected but nonwage income is \$1.6 billion (0.6%) lower than expected.

Washington housing construction remained very strong in the first quarter of 2022 due to booming multi-family activity. In the first quarter, 60,500 units (SAAR) were permitted, up from 58,900 in the fourth quarter of 2021. First quarter permits consisted of 25,000 single-family units and 35,500 multi-family units. The number of multi-family units permitted in each of the last three quarters was higher than in any previous quarter in the history of the series which dates back to 1968 (see figure). The February forecast assumed 51,200 (SAAR) units in the first quarter consisting of 24,800 single-family units and 26,400 multi-family units. Permits dropped in April to 49,100 units (SAAR) consisting of 23,400 single-family units and 25,700 multi-family units. The February forecast expected 49,900 units (SAAR) in the second quarter as a whole, consisting of 25,700 single-family units and 24,200 multi-family units.

We expect a 5.1% increase in Washington employment this year up from the 4.2% growth rate expected in the February forecast. The increase in growth this year is due to upward revisions to historical data. We expect slower growth during the remainder of 2022 through mid-2025 as the U.S economy slows, partially offset by higher growth in the last two years of the forecast. We expect employment growth to average 0.9% per year in 2023 through 2027, down from 1.2% per year in the February forecast. Our forecast for nominal personal income growth this year is 3.4%, up from 2.3% in the February forecast. However, real personal income is expected to decline 2.4% this year which is a more severe decline than the 1.4% decline expected in February. Personal income growth this year will be undermined by the withdrawal of the extraordinary stimulus of the previous two years. Our new forecast for

nominal personal income growth in 2023 through 2027 averages 5.3% per year which is the same rate expected in the February forecast.

A comparison of the preliminary June Washington forecast with the February Washington forecast is shown in Table 3.

Table 1
U.S. Economic Forecast Comparison
 May 2022

	2022Q1	2022Q2	2022Q3	2022Q4	2022	2023	2024	2025	2026	2027
Real GDP, Percent Change, Annual Rate										
ERFC (June Preliminary)	-1.4	3.0	2.7	2.3	2.6	2.1	2.1	2.0	2.0	1.9
IHS	-1.4	1.9	2.3	2.4	2.4	2.4	2.3	2.2	2.5	2.6
Economy.com	-1.4	3.6	2.9	2.7	2.8	2.7				
Blue Chip Average*		2.8	2.6	2.3	2.6	2.1	2.1	2.0	2.0	1.9
Blue Chip Top 10*		4.0	3.9	3.5	3.3	2.9	2.5	2.3	2.2	2.1
Blue Chip Bottom 10*		1.3	1.0	1.1	1.8	1.3	1.7	1.6	1.7	1.7
Real Consumption, Percent Change, Annual Rate										
ERFC (June Preliminary)	2.7	2.5	2.4	2.1	3.0	2.0	2.3	2.2	2.1	2.1
IHS	2.7	2.1	2.6	1.6	2.9	2.0	2.1	2.3	3.0	3.2
Economy.com	2.7	2.3	1.8	2.2	2.9	2.3				
Blue Chip Average*		2.4	2.4	2.2	3.0	2.0	2.3	2.2	2.1	2.1
Blue Chip Top 10*		3.5	3.6	3.0	3.6	2.7	2.7	2.6	2.4	2.3
Blue Chip Bottom 10*		1.3	1.4	1.3	2.5	1.3	1.8	1.7	1.9	1.8
Federal Funds Rate										
ERFC (June Preliminary)	0.1	0.7	1.7	2.3	1.2	3.0	2.9	2.6	2.6	2.6
IHS	0.1	0.7	1.7	2.3	1.2	3.0	2.9	2.6	2.6	2.6
Economy.com	0.1	0.8	1.6	2.1	1.1	2.7				
Three Month T-Bill Rate										
ERFC (June Preliminary)	0.3	0.9	1.6	2.0	1.2	2.5	2.2	1.9	1.9	2.0
IHS	0.3	0.9	1.5	2.0	1.2	2.5	2.2	1.8	1.9	2.0
Blue Chip Average*		1.1	1.8	2.2	1.4	2.7	2.1	2.1	2.1	2.2
Blue Chip Top 10*		1.4	2.1	2.6	1.7	3.2	2.6	2.7	2.6	2.6
Blue Chip Bottom 10*		0.8	1.4	1.7	1.1	2.1	1.5	1.5	1.6	1.8
10-Yr. T-Note Yield										
ERFC (June Preliminary)	1.9	2.9	3.1	3.1	2.8	3.1	3.1	3.1	3.2	3.2
IHS	1.9	2.9	3.0	3.0	2.7	3.1	3.1	3.1	3.1	3.1
Economy.com	2.0	3.0	3.1	3.2	2.8	3.2				
Blue Chip Average*		2.8	3.0	3.1	2.7	3.1	2.9	3.0	3.0	3.0
Blue Chip Top 10*		3.1	3.4	3.7	3.1	4.0	3.6	3.7	3.7	3.5
Blue Chip Bottom 10*		2.4	2.5	2.5	2.4	2.4	2.3	2.3	2.4	2.5
Consumer Price Index, Percent Change, Annual Rate										
ERFC (June Preliminary)	9.2	7.2	4.3	3.0	7.2	3.0	1.8	2.1	2.1	2.1
IHS	9.2	5.3	4.0	3.0	6.8	2.8	1.9	2.1	2.1	2.0
Economy.com	9.2	6.5	3.7	2.6	6.9	2.7				
Blue Chip Average*		7.2	4.5	3.4	7.6	3.2	2.3	2.2	2.2	2.2
Blue Chip Top 10*		9.6	6.5	5.2	6.6	4.1	2.6	2.5	2.4	2.4
Blue Chip Bottom 10*		5.4	2.9	1.8	6.8	2.2	2.0	2.0	2.0	1.9
Payroll Employment, Millions										
ERFC (June Preliminary)	150.4	151.6	152.5	153.0	151.9	153.3	153.5	153.6	154.1	155.1
Percent Change, Annual Rate	4.7	3.4	2.3	1.4	3.9	0.9	0.1	0.1	0.3	0.6
IHS	150.4	151.6	152.4	152.9	151.8	153.3	153.4	153.6	154.4	156.1
Percent Change, Annual Rate	4.7	3.4	2.2	1.3	3.9	0.9	0.1	0.1	0.6	1.1
Economy.com	150.4	151.7	152.5	153.1	151.9	154.4				
Percent Change, Annual Rate	4.7	3.6	2.1	1.6	4.0	1.6				
Unemployment Rate, Percent										
ERFC (June Preliminary)	3.8	3.5	3.3	3.3	3.5	3.7	4.3	4.6	4.6	4.4
IHS	3.8	3.6	3.5	3.6	3.6	4.0	4.6	5.0	5.0	4.7
Economy.com	3.8	3.5	3.4	3.3	3.5	3.4				
Blue Chip Average*		3.5	3.5	3.5	3.6	3.6	3.6	3.7	3.8	3.8
Blue Chip Top 10*		3.7	3.7	3.8	3.8	4.5	4.0	4.2	4.3	4.2
Blue Chip Bottom 10*		3.4	3.3	3.2	3.4	3.1	3.3	3.3	3.3	3.4
Real Disposable Personal Income, Percent Change, Annual Rate										
ERFC (June Preliminary)	-2.0	-0.2	1.1	2.3	-4.0	2.8	4.3	3.1	2.7	2.6
IHS	-2.0	0.6	1.0	2.0	-3.9	2.9	4.3	2.9	2.9	3.1
Blue Chip Average*		-0.1	1.7	2.2	-3.8	2.2	2.2	2.0	1.9	2.0
Blue Chip Top 10*		2.1	3.4	3.5	-2.5	3.4	2.7	2.3	2.2	2.3
Blue Chip Bottom 10*		-2.6	-0.5	0.7	-4.9	1.0	1.8	1.7	1.7	1.7
West Texas Intermediate										
ERFC (June Preliminary)	94.4	108.9	112.2	104.2	104.9	92.9	82.4	75.5	71.1	68.4
IHS	94.4	105.7	105.6	99.1	101.2	90.9	84.0	81.2	82.8	85.0
Economy.com	95.0	103.5	95.5	86.7	95.2	71.3				

* Forecasts beyond 2023 are from the March 2022 Blue Chip Economic Indicators
 a Actual

Table 2

U.S. Forecast Comparison

	2022Q1	2022Q2	2022Q3	2022Q4	2021	2022	2023	2024	2025	2026	2027
Real GDP (Billions of 2012 Dollars)											
June Forecast, Preliminary	19,736	19,882	20,016	20,131	19,427	19,941	20,363	20,790	21,206	21,630	22,041
Percent Change	-1.4%	3.0%	2.7%	2.3%	5.7%	2.6%	2.1%	2.1%	2.0%	2.0%	1.9%
February Forecast	19,886	20,095	20,243	20,384	19,427	20,152	20,693	21,156	21,579	22,011	22,429
Percent Change	1.6%	4.3%	3.0%	2.8%	5.7%	3.7%	2.7%	2.2%	2.0%	2.0%	1.9%
Real Consumption (Billions of 2012 Dollars)											
June Forecast, Preliminary	13,912	13,998	14,082	14,155	13,625	14,037	14,323	14,652	14,974	15,289	15,610
Percent Change	2.7%	2.5%	2.4%	2.1%	7.9%	3.0%	2.0%	2.3%	2.2%	2.1%	2.1%
February Forecast	13,914	14,038	14,111	14,201	13,631	14,066	14,452	14,830	15,156	15,490	15,830
Percent Change	2.1%	3.6%	2.1%	2.6%	7.9%	3.2%	2.7%	2.6%	2.2%	2.2%	2.2%
PCE Price Index (2012=100)											
June Forecast, Preliminary	120.1	121.9	123.2	124.1	115.5	122.3	125.8	128.0	130.6	133.3	136.0
Percent Change	7.0%	6.2%	4.4%	2.9%	3.9%	5.9%	2.8%	1.8%	2.0%	2.1%	2.1%
February Forecast	119.5	120.3	121.0	121.5	115.5	120.6	123.1	125.6	128.2	130.9	133.7
Percent Change	4.8%	2.8%	2.2%	1.8%	3.9%	4.4%	2.0%	2.1%	2.1%	2.1%	2.1%
Real Personal Income (Billions of 2012 Dollars)											
June Forecast, Preliminary	17,665	17,661	17,721	17,833	18,253	17,720	18,111	18,634	19,146	19,667	20,178
Percent Change	-1.7%	-0.1%	1.4%	2.6%	3.4%	-2.9%	2.2%	2.9%	2.7%	2.7%	2.6%
February Forecast	17,577	17,766	17,930	18,047	18,237	17,830	18,402	18,937	19,435	19,922	20,386
Percent Change	-2.7%	4.4%	3.7%	2.6%	3.3%	-2.2%	3.2%	2.9%	2.6%	2.5%	2.3%
Nonfarm Payroll Employment (Millions)											
June Forecast, Preliminary	150.4	151.6	152.5	153.0	146.1	151.9	153.3	153.5	153.6	154.1	155.1
Percent Change	4.7%	3.4%	2.3%	1.4%	2.8%	3.9%	0.9%	0.1%	0.1%	0.3%	0.6%
February Forecast	150.0	151.2	152.1	152.8	146.1	151.5	153.9	155.0	155.5	155.9	156.2
Percent Change	3.9%	3.1%	2.5%	1.9%	2.8%	3.7%	1.6%	0.7%	0.3%	0.2%	0.2%
Unemployment Rate (Percent of Labor Force)											
June Forecast, Preliminary	3.8	3.5	3.3	3.3	5.4	3.5	3.7	4.3	4.6	4.6	4.4
February Forecast	3.9	3.6	3.4	3.4	5.4	3.6	3.5	3.7	4.0	4.2	4.3
Oil Price, Refiner's Acquisition											
June Forecast, Preliminary	91.5	106.9	110.3	102.8	67.5	102.9	92.3	82.1	75.5	71.6	69.3
February Forecast	86.0	86.1	82.9	80.5	67.4	83.9	76.5	72.3	69.7	68.1	67.3
30 Year Fixed Mortgage Rate (Percent, average)											
June Forecast, Preliminary	3.8	5.2	5.3	5.3	3.0	4.9	5.2	5.0	4.9	4.9	5.0
February Forecast	3.5	3.5	3.7	4.0	3.0	3.7	4.3	4.6	4.7	4.8	4.9
3 Month T-Bill Rate (Percent, average)											
June Forecast, Preliminary	0.3	0.9	1.6	2.0	0.0	1.2	2.5	2.2	1.9	1.9	2.0
February Forecast	0.2	0.4	0.7	1.0	0.0	0.6	1.2	1.7	1.9	2.2	2.4

Table 3

Washington Forecast Comparison

	2022Q1	2022Q2	2022Q3	2022Q4	2021	2022	2023	2024	2025	2026	2027
Real Personal Income (Billions of 2012 Dollars)											
June Forecast, Preliminary	467.4	468.7	469.4	472.6	481.2	469.5	482.1	498.6	514.7	531.3	547.4
Percent Change	-2.8%	1.1%	0.6%	2.7%	3.6%	-2.4%	2.7%	3.4%	3.2%	3.2%	3.0%
February Forecast	466.9	471.8	476.5	480.4	480.8	473.9	491.6	507.4	522.7	538.4	553.9
Percent Change	-1.9%	4.2%	4.1%	3.4%	3.5%	-1.4%	3.7%	3.2%	3.0%	3.0%	2.9%
Personal Income (Billions of Dollars)											
June Forecast, Preliminary	561.3	571.4	578.4	586.4	555.6	574.4	606.5	638.4	672.3	708.2	744.7
Percent Change	4.0%	7.4%	5.0%	5.7%	7.6%	3.4%	5.6%	5.3%	5.3%	5.3%	5.2%
February Forecast	558.0	567.7	576.5	583.9	555.2	571.5	605.0	637.2	670.3	705.1	740.7
Percent Change	2.9%	7.1%	6.3%	5.2%	7.5%	2.9%	5.9%	5.3%	5.2%	5.2%	5.1%
Disposable Personal Income (Billions of Dollars)											
June Forecast, Preliminary	494.1	502.5	508.5	515.4	493.5	505.1	536.8	572.1	603.8	635.7	668.5
Percent Change	4.4%	7.0%	4.8%	5.5%	6.1%	2.4%	6.3%	6.6%	5.5%	5.3%	5.2%
February Forecast	490.2	497.9	505.5	511.6	493.7	501.3	529.9	558.6	588.8	620.5	652.6
Percent Change	1.2%	6.5%	6.2%	4.9%	6.1%	1.5%	5.7%	5.4%	5.4%	5.4%	5.2%
Nonfarm Payroll Employment (Thousands)											
June Forecast, Preliminary	3487	3531	3551	3564	3363	3533	3583	3608	3631	3664	3702
Percent Change	4.7%	5.1%	2.3%	1.4%	2.4%	5.1%	1.4%	0.7%	0.7%	0.9%	1.0%
February Forecast	3458	3494	3524	3551	3364	3507	3594	3633	3664	3693	3723
Percent Change	3.9%	4.2%	3.5%	3.1%	2.4%	4.2%	2.5%	1.1%	0.8%	0.8%	0.8%
Unemployment Rate (Percent of Labor Force)											
June Forecast, Preliminary	4.3	4.0	3.8	3.8	5.3	4.0	4.2	4.7	4.9	4.9	4.7
February Forecast	4.3	4.1	4.0	3.9	5.2	4.1	4.0	4.3	4.6	4.7	4.8
Manufacturing Employment (Thousands)											
June Forecast, Preliminary	266.4	269.0	274.7	276.7	259.2	271.7	277.6	277.4	277.2	277.4	277.2
Percent Change	6.6%	4.1%	8.8%	3.0%	-4.6%	4.8%	2.2%	0.0%	-0.1%	0.1%	-0.1%
February Forecast	266.6	270.1	272.0	274.1	259.4	270.7	276.0	277.1	276.4	276.0	275.4
Percent Change	5.1%	5.4%	2.8%	3.2%	-4.5%	4.4%	2.0%	0.4%	-0.3%	-0.1%	-0.2%
Construction Employment (Thousands)											
June Forecast, Preliminary	232.5	233.9	233.2	232.4	223.4	233.0	231.3	232.1	232.7	235.2	237.5
Percent Change	9.9%	2.3%	-1.2%	-1.3%	4.5%	4.3%	-0.7%	0.4%	0.2%	1.1%	1.0%
February Forecast	228.0	226.4	225.3	224.3	223.4	226.0	223.1	223.1	224.9	228.0	231.5
Percent Change	3.5%	-2.7%	-1.9%	-1.8%	4.6%	1.2%	-1.3%	0.0%	0.8%	1.4%	1.5%
Housing Permits (Thousands)											
June Forecast, Preliminary	60.5	51.8	48.6	47.9	56.2	52.2	48.8	49.2	48.4	47.4	46.2
Percent Change	11.3%	-46.4%	-22.5%	-5.2%	27.5%	-7.1%	-6.5%	0.8%	-1.7%	-2.1%	-2.3%
February Forecast	51.2	49.9	48.0	46.7	56.2	48.9	44.9	44.1	44.1	42.9	41.6
Percent Change	-41.6%	-10.1%	-13.9%	-10.9%	27.5%	-12.9%	-8.2% g		0.1%	-2.8%	-3.0%