

March 2021 Preliminary Economic Forecast

CONTACT: Bret Bertolin, Senior Economist

PHONE: 360.534.1566

This forecast is based on a modified version of IHS Markit's February 2021 Control forecast for the U.S. economy. We have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast for 2021 and 2022. We expect real GDP to increase 4.9% in 2021 and 3.8% in 2022 which is much stronger than the 4.0% and 2.9% growth rates assumed in the November forecast. For 2023-25, we used the long term growth rates published in October 2020 which are the most recent available. We expect growth rates of 2.3%, 2.1%, and 2.0% in 2023 through 2025 compared to the November forecast of 2.1%, 2.0%, and 1.9%. Blue Chip will release new long term forecasts in March which we will incorporate in the final 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 Wednesday, February 25, 2021 closing prices for Brent and WTI futures. Oil prices are significantly higher than expected in the November forecast but are expected to decline over the forecast rather than increase as in November. The latest futures prices indicate that the refiner acquisition price of crude will average \$62 per barrel in the second quarter of 2021 compared to \$42 in the November forecast. By the fourth quarter of 2025 the refiner acquisition price of crude is expected to average \$51 per barrel compared to \$46 per barrel in the November forecast.

The fiscal policy assumptions in this forecast are radically different from those embedded in the November forecast. In November, we assumed there would be no new stimulus beyond the four pandemic relief measures that had already been enacted in 2020. The new forecast incorporates the \$900 billion COVID-19 relief package enacted in December as well as major elements of a \$1.9 trillion stimulus package evolving in Congress, including a third round of stimulus checks, an extension of emergency unemployment programs and benefits, major funding for COVID-19 mitigation efforts, and significant aid to state and local governments and schools. The assumed total is approximately \$1.5 trillion.

A comparison of the preliminary March U.S. forecast with the November U.S. forecast is shown in Table 2.

We have three months of new Washington employment data since the November forecast was released. Over the three-month period, employment declined 1,100 which was a 66,300 worse outcome than the increase of 65,200 expected in the forecast. Private services-providing sectors lost 7,400 jobs in November, December, and January, weighed down by the loss of 19,900 jobs in leisure and hospitality. The manufacturing sector managed an increase of 1,200 jobs in spite of the loss of 1,300 aerospace jobs. Construction employment increased

by 4,300 jobs and state and local government employment increased by 3,900 jobs. Federal government employment declined by 3,200 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 subtracted 20,900 (0.6%) from the estimated level of total employment in October 2020. Because of the lower-than-expected employment growth in November, December, and January in addition to the downward revision to the October estimate, employment is 87,200 (2.6%) lower in January than expected in the November forecast.

Washington's unemployment rate increased to 7.1% in December from 5.7% in November. This was the first increase in the state's jobless rate since July. Despite the increase in December, the unemployment rate is down significantly from the 16.3% rate reached in April which was an all-time high in the series that dates back to 1976.

In December, the Bureau of Economic Analysis released estimates for state personal income through the third quarter of 2020. 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 third quarter of 2020 is \$7.1 billion (1.3%) lower than in the November forecast. Wages and salaries are \$2.6 billion (1.0%) higher than expected but nonwage income is \$9.8 billion (3.6%) lower than expected. The large discrepancy in nonwage income is almost entirely due to transfer payments which are \$9.5 billion (9.1%) lower than expected.

Washington housing construction improved in the fourth quarter of 2020 and slightly exceeded the forecast. The number of housing units authorized by building permits increased to 45,600 (SAAR) from 42,600 in the third quarter. The November 2020 forecast expected 45,500 units. Single-family permits averaged 26,600 units in the fourth quarter and multi-family permits averaged 19,100 units. Single-family construction has fully recovered to pre-recession levels but multi-family construction remains lower. Housing construction got off to a very strong start in the first quarter of 2021. January permits totaled 66,700 units (SAAR) of which 30,800 were single-family units and 35,900 were multi-family units.

We expect a 1.3% increase in Washington employment this year which is down from the 3.5% increase the November 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 2.2% per year in 2022 through 2025 compared to the 1.7% average rate expected in November. Our forecast for nominal personal income growth this year is 3.9%, up from a 1.1% decline in the November forecast. The improvement in personal income growth is the result of additional fiscal stimulus in 2021 which was not expected in November. Personal income growth will slow next year as the stimulus is withdrawn. We expect personal income growth of only 0.1% in 2022 compared to 3.7% in the November forecast. Our new forecast for nominal personal income growth in 2023 through 2025 averages 5.0% per year compared to the 4.6% rate in the November forecast.

A comparison of the preliminary March Washington forecast with the November Washington forecast is shown in Table 3.

Table 1 U.S. Economic Forecast Comparison

Real GDP, Percent Change, An ERFC (November Preliminary) IHS	2020Q4	2021Q1	2021Q2	2021Q3		2020	2021	2022	2023	2024	202
,	nnual Rat	te									
THC		3.0	6.3	6.1		-3.5	4.9	3.8	2.3	2.1	2.
	4.0	4.7	6.4	7.8		-3.5	5.7	4.1	2.3	2.6	2.
Economy.com	4.0	3.3	5.2	5.8		-3.5	4.9	5.2	3.1		
Blue Chip Average*		2.9	6.3	6.2			4.9	3.8	2.3	2.1	2.
Blue Chip Top 10*		4.5	10.4	9.2			6.2	5.0	2.9	2.4	2.
Blue Chip Bottom 10*		1.1	3.3	3.0			3.6	2.7	1.9	1.7	1.
eal Consumption, Percent C	hange, A	nnual Ra	te								
ERFC (November Preliminary)		2.6	6.9	6.5		-3.9	5.3	3.9	2.4	2.2	2.
IHS	2.5	7.5	3.6	6.9		-3.9	6.0	4.3	2.8	3.1	3.
Economy.com	2.5	6.4	5.1	4.2		-3.9	5.6	3.5	2.8	_	
Blue Chip Average*		2.6	7.0	6.6			5.3	3.9	2.4	2.2	2.
Blue Chip Top 10*		5.6	13.1	10.7			6.9	5.4	3.0	2.6	2
Blue Chip Bottom 10*		0.0	3.0	3.0			3.7	2.4	2.0	1.8	1
ederal Funds Rate											
ERFC (November Preliminary)	0.1	0.1	0.1	0.1		0.4	0.1	0.1	0.1	0.3	0.
IHS	0.1	0.1	0.1	0.1		0.4	0.1	0.1	0.1	0.3	0.
Economy.com	0.1	0.1	0.1	0.1		0.4	0.1	0.1	0.3		
hree Month T-Bill Rate											
ERFC (November Preliminary)	0.1	0.1	0.1	0.1		0.4	0.1	0.2	0.1	0.2	0
	0.1	0.1	0.1	0.1		_	0.1	0.2	0.1	0.2	0
IHS	0.1					0.4					
Blue Chip Average*		0.1	0.1	0.1			0.1	0.2	0.6	0.9	1
Blue Chip Top 10*		0.1	0.1	0.2			0.3	0.6	1.2	1.8	2
Blue Chip Bottom 10*		0.1	0.1	0.1			0.1	0.1	0.2	0.2	0
0-Yr. T-Note Yield											
ERFC (November Preliminary)		1.0	1.2	1.4		0.9	1.3	1.8	2.0	2.1	2
IHS	0.9	1.0	1.2	1.3		0.9	1.2	1.7	2.0	2.2	2.
Economy.com	0.9	1.1	1.1	1.3		0.9	1.2	2.0	2.8		
Blue Chip Average*		1.1	1.2	1.3			1.2	1.6	1.7	2.0	2.
Blue Chip Top 10*		1.2	1.3	1.5			1.5	1.9	2.4	2.7	2
Blue Chip Bottom 10*		0.9	1.1	1.1			1.0	1.3	1.2	1.4	1.
Consumer Price Index, Perce		e, Annua	l Rate								
ERFC (November Preliminary)) 2.2	4.7	1.7	1.6		1.3	2.7	1.8	1.6	2.1	2.
IHS	2.2	2.7	1.1	1.8		1.3	2.1	2.1	2.0	2.1	2.
Economy.com	2.2	2.0	1.8	2.4		1.3	2.1	2.6	2.7		
Blue Chip Average*		2.8	2.0	2.2			2.3	2.1	2.2	2.2	2.
Blue Chip Top 10*		3.9	2.9	2.9			2.7	2.5	2.5	2.5	2.
Blue Chip Bottom 10*		1.7	1.0	1.5			1.8	1.7	1.9	1.9	1.
ayroll Employment, Millions	i.										
ERFC (November Preliminary)	142.6	142.9	144.0	145.4					153.3		15
Percent Change, Annual Rate		0.6	3.1	4.0		-5.7	1.8	3.8	2.0	0.6	0
IHS	142.6	142.9	144.1	145.7		142.3	145.0	150.4	152.9	154.6	15
Percent Change, Annual Rate		0.6	3.5	4.5		-5.7	1.9	3.7	1.7	1.1	0.
Economy.com	142.6	142.9	144.0	145.3		142.3	144.7	149.4	152.5		
Percent Change, Annual Rate	e 5.2	0.9	2.9	3.6		-5.7	1.7	3.3	2.1		
	t										
<u>, </u>											
<i>,</i>		6.4	6.0	5.7		8.1	5.9	4.5	3.9	3.9	4
nemployment Rate, Percent	6.7	6.4 6.3	6.0 5.9	5.7 5.5		8.1 8.1		4.5 4.1	3.9 3.8	3.9 3.6	
Inemployment Rate, Percent ERFC (November Preliminary)							5.9 5.6 6.1				
nemployment Rate, Percent ERFC (November Preliminary) IHS) 6.7 6.7	6.3	5.9	5.5		8.1	5.6	4.1	3.8		3
nemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com) 6.7 6.7	6.3 6.3	5.9 6.3 6.1	5.5 6.0 5.6		8.1	5.6 6.1	4.1 4.9	3.8 4.2 4.8	3.6 4.5	3 4
nemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average*) 6.7 6.7	6.3 6.3 6.4	5.9 6.3	5.5 6.0		8.1	5.6 6.1 5.8	4.1 4.9 4.7	3.8 4.2	3.6	3 4 4
nemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10*	6.7 6.7 6.8	6.3 6.4 6.8 6.2	5.9 6.3 6.1 6.6 5.7	5.5 6.0 5.6 6.3 5.1		8.1	5.6 6.1 5.8 6.4	4.1 4.9 4.7 5.7	3.8 4.2 4.8 5.5	3.6 4.5 5.1	3 4 4
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10*) 6.7 6.7 6.8	6.3 6.4 6.8 6.2	5.9 6.3 6.1 6.6 5.7	5.5 6.0 5.6 6.3 5.1	1	8.1	5.6 6.1 5.8 6.4	4.1 4.9 4.7 5.7	3.8 4.2 4.8 5.5	3.6 4.5 5.1	3 4 4 3
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* Leal Disposable Personal Ince ERFC (November Preliminary)) 6.7 6.7 6.8 come, Per	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2	5.9 6.3 6.1 6.6 5.7 I nge, Ani 17.6	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0		8.1 8.1	5.6 6.1 5.8 6.4 5.4	4.1 4.9 4.7 5.7 3.9	3.8 4.2 4.8 5.5 4.1	3.6 4.5 5.1 3.9	3 4 4 3
nemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* eal Disposable Personal Inc ERFC (November Preliminary) IHS) 6.7 6.7 6.8	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2 22.1	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6	3	8.1 8.1	5.6 6.1 5.8 6.4 5.4 1.9 2.5	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6	3.8 4.2 4.8 5.5 4.1 3.0 2.6	3.6 4.5 5.1 3.9 2.4 2.9	3 4 4 3 2 2
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* eal Disposable Personal Inc ERFC (November Preliminary) IHS Blue Chip Average*) 6.7 6.7 6.8 come, Per	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2 22.1 22.3	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4 -0.5	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6 -6.1	•	8.1 8.1	5.6 6.1 5.8 6.4 5.4 1.9 2.5 2.1	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6 0.0	3.8 4.2 4.8 5.5 4.1 3.0 2.6 2.2	3.6 4.5 5.1 3.9 2.4 2.9 2.0	3 4 4 3 2 2 2
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* Real Disposable Personal Inc ERFC (November Preliminary) IHS) 6.7 6.7 6.8 come, Per	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2 22.1	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6	1	8.1 8.1	5.6 6.1 5.8 6.4 5.4 1.9 2.5	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6	3.8 4.2 4.8 5.5 4.1 3.0 2.6	3.6 4.5 5.1 3.9 2.4 2.9	3 4 4 3 2 2 2 2
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* ERFC (November Preliminary) IHS Blue Chip Average* Blue Chip Top 10* Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10*) 6.7 6.7 6.8 come, Per	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2 22.1 22.3 49.8	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4 -0.5 20.6	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6 -6.1 3.4	1	8.1 8.1	5.6 6.1 5.8 6.4 5.4 1.9 2.5 2.1 4.5	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6 0.0 2.5	3.8 4.2 4.8 5.5 4.1 3.0 2.6 2.2 2.6	3.6 4.5 5.1 3.9 2.4 2.9 2.0 2.4	3 4 4 3 2 2 2 2
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* Real Disposable Personal Inc ERFC (November Preliminary) IHS Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* West Texas Intermediate	6.7 6.8 6.8 come, Per 9.5 -9.5	6.3 6.4 6.8 6.2 cent Cha 20.2 22.1 22.3 49.8 3.7	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4 -0.5 20.6 -23.0	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6 -6.1 3.4 -21.6		6.0 6.0	5.6 6.1 5.8 6.4 5.4 1.9 2.5 2.1 4.5 -0.4	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6 0.0 2.5 -2.6	3.8 4.2 4.8 5.5 4.1 3.0 2.6 2.2 2.6 1.7	3.6 4.5 5.1 3.9 2.4 2.9 2.0 2.4 1.7	3 4 4 3 2 2 2 2 1
Inemployment Rate, Percent ERFC (November Preliminary) IHS Economy.com Blue Chip Average* Blue Chip Top 10* Blue Chip Bottom 10* Real Disposable Personal Inc ERFC (November Preliminary) IHS Blue Chip Average* Blue Chip Top 10*	6.7 6.8 6.8 come, Per 9.5 -9.5	6.3 6.3 6.4 6.8 6.2 cent Cha 20.2 22.1 22.3 49.8	5.9 6.3 6.1 6.6 5.7 Inge, Ani 17.6 18.4 -0.5 20.6	5.5 6.0 5.6 6.3 5.1 nual Rate -26.0 -25.6 -6.1 3.4	1	8.1 8.1	5.6 6.1 5.8 6.4 5.4 1.9 2.5 2.1 4.5	4.1 4.9 4.7 5.7 3.9 -2.4 -2.6 0.0 2.5	3.8 4.2 4.8 5.5 4.1 3.0 2.6 2.2 2.6	3.6 4.5 5.1 3.9 2.4 2.9 2.0 2.4	4. 3. 4. 4. 3. 2. 2. 2. 2. 1. 500 622

^{*} Forecasts beyond 2022 are from the October 2020 Blue Chip Economic Indicators

Table 2

J.S. Forecast Comparison				
	2020Q4	2021Q1	2021Q2	2021Q3
Real GDP (Billions of 2012 Dolla	ırs)			
March Forecast, Preliminary	18,780	18,917	19,207	19,494
Percent Change	4.0%	3.0%	6.3%	6.1%
November Forecast	18,662	18,857	19,047	19,222
Percent Change	1.7%	4.3%	4.1%	3.7%
Real Consumption (Billions of 20	012 Dollars	s)		
March Forecast, Preliminary	13,005	13,089	13,311	13,521
Percent Change	2.5%	2.6%	6.9%	6.5%
November Forecast	12,997	13,120	13,257	13,375
Percent Change	2.5%	3.8%	4.2%	3.6%
PCE Price Index (2012=100)				
March Forecast, Preliminary	111.9	112.8	113.3	113.7
Percent Change	1.5%	3.4%	1.7%	1.6%
November Forecast	112.0	112.5	113.1	113.7
Percent Change	2.1%	1.6%	2.4%	2.0%
Real Personal Income (Billions	of 2012 Do	llars)		
March Forecast, Preliminary	17,502	18,239	18,929	17,704
Percent Change	-8.0%	17.9%	16.0%	-23.5%
November Forecast	17,219	17,039	17,068	17,123
Percent Change	-12.8%	-4.1%	0.7%	1.3%
Nonfarm Payroll Employment (M	dillions)			
March Forecast, Preliminary	142.6	142.9	144.0	145.4
Percent Change	5.2%	0.6%	3.1%	4.0%
November Forecast	143.0	145.6	147.1	148.2
Percent Change	6.3%	7.5%	4.2%	3.1%
Unemployment Rate (Percent of	f Labor For	ce)		
March Forecast, Preliminary	6.7	6.4	6.0	5.7
November Forecast	7.0	6.0	5.8	5.7
Oil Price, Refiner's Acquisition				
March Forecast, Preliminary	42.2	57.5	62.2	60.4
November Forecast	39.1	40.8	41.6	42.1
30 Year Fixed Mortgage Rate (P	ercent, ave	erage)		
March Forecast, Preliminary	2.8	2.8	3.0	3.2
November Forecast	2.8	3.0	3.0	3.1
3 Month T-Bill Rate (Percent, av	erage)			
March Forecast, Preliminary	0.1	0.1	0.1	0.1
November Forecast	0.1	0.1	0.1	0.1

Table 3
Washington Forecast Comparison

Washington Forecast Comparis	on			
	2020Q4	2021Q1	2021Q2	2021Q3
Real Personal Income (Billions	of 2012 Do	llars)		
March Forecast, Preliminary	464.5	483.4	500.9	471.4
Percent Change	-8.5%	17.3%	15.3%	-21.6%
November Forecast	466.9	461.3	461.0	461.4
Percent Change	-11.4%	-4.8%	-0.2%	0.3%
Personal Income (Billions of D	ollars)			
March Forecast, Preliminary	519.5	545.2	567.5	536.2
Percent Change	-7.1%	21.3%	17.4%	-20.3%
November Forecast	523.0	518.8	521.5	524.6
Percent Change	-9.5%	-3.2%	2.1%	2.4%
Disposable Personal Income (E	Billions of D	ollars)		
March Forecast, Preliminary	467.1	492.9	514.7	482.9
Percent Change	-8.9%	24.1%	18.9%	-22.5%
November Forecast	468.5	464.2	466.8	469.5
Percent Change	-11.5%	-3.6%	2.2%	2.3%
Nonfarm Payroll Employment (Thousands))		
March Forecast, Preliminary	3269	3277	3311	3339
Percent Change	3.7%	1.0%	4.2%	3.4%
November Forecast	3313	3372	3411	3435
Percent Change	6.5%	7.3%	4.8%	2.8%
Unemployment Rate (Percent o	of Labor For	ce)		
March Forecast, Preliminary	6,2	6.8	6.4	6.2
November Forecast	6.8	6.6	6.5	6.4
Manufacturing Employment (Th		0.0	0.5	0.4
J , , ,		261.7	200.1	257.0
March Forecast, Preliminary	261.1	261.7	260.1	257.8
Percent Change	-4.6%	1.0%	-2.5%	-3.4%
November Forecast	268.5 -2.5%	266.7 -2.7%	265.0	263.2
Percent Change		-2.7%	-2.5%	-2.7%
Construction Employment (Tho		222.2	240 7	2465
March Forecast, Preliminary	218.4	222.2	218.7	216.5
Percent Change	12.3%	7.1%	-6.0%	-4.1%
November Forecast	217.4	211.8	210.2	208.3
Percent Change	11.3%	-10.0%	-2.8%	-3.7%
Housing Permits (Thousands)				
March Forecast, Preliminary	44.4	53.1	50.7	48.3
Percent Change	17.5%	103.6%	-17.0%	-17.5%
November Forecast	45.5	46.3	45.9	44.9
Percent Change	17.9%	6.5%	-3.1%	-8.2%