



## March 2017 Preliminary Economic Forecast

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This forecast is based on a modified version of Global Insight's February 2017 Control forecast for the U.S. economy. As usual, we have adjusted real gross domestic product (GDP) to match the Blue Chip "Consensus" GDP forecast. The February Blue Chip forecast for real GDP growth in 2017 and 2018 was revised up to 2.3% and 2.4% from 2.2% and 2.1% in November. The Blue Chip long-range forecast, which is revised only twice per year, has not been updated since the election and remains at 2.1%, 2.1%, and 2.0% in 2019, 2020, and 2021. A new long-range forecast will be released in March and will be reflected in the final March 2017 economic 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 Thursday, February 23, 2017 closing prices for Brent and WTI futures. The latest futures prices are higher in the near term than the prices used in the November forecast. The refiner acquisition price of crude oil in the second quarter of 2017 is now expected to average \$53 per barrel compared to \$47 in the November forecast. However, oil prices are now expected to decline slightly during the remainder of the forecast rather than rise as in November. By the end of 2021, the refiner acquisition price is expected to average \$52 per barrel compared to \$55 in the November forecast.

The November U.S. forecast was produced before the election results were known. The preliminary March forecast incorporates some policies proposed by the new administration, including lower personal and corporate federal tax rates, consistent with the House Republican plan, as well as \$250 billion in additional infrastructure spending over 10 years and a hiring freeze for federal nonmilitary employees. The forecast does not assume a border adjustment tax.

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. Total nonfarm payroll employment rose 13,600 (seasonally adjusted) in November, December, and January, which was 1,500 more than the 12,100 expected in the November forecast. The goods producing sectors more than accounted for the variance in job growth. Manufacturing employment, which had been expected to fall 3,300, managed an increase of 400 jobs. About half the variance in manufacturing employment was due to aerospace, which declined less than expected, but other manufacturing industries also grew more than expected. Construction employment increased 2,700 in the three-month period compared to the forecast of a decline of 500 jobs. Government payrolls expanded by 1,500 jobs compared to the forecast of 1,600 jobs but private, service-providing sectors added only 8,900 jobs, far less than the 14,300 expected on the forecast.

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 raised the estimated level of total employment in October 2016 by 12,200 jobs (0.4%). As a result of the upward revision to history and slightly stronger-than-expected growth, the total effect is 13,700 (0.4%) more jobs in January 2017 than expected in the November forecast.

Though aerospace employment declined less than expected in November, December, and January, Boeing has made it clear that significant reductions should be expected in 2017. As a result, the aerospace employment forecast is 2,100 lower by the end of 2017 than in the November forecast.

In December, the Bureau of Economic Analysis released estimates for state personal income through the third quarter of 2016. We have incorporated the new BEA estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) and other wage data, also through the third quarter. Our current estimate of Washington personal income in the third quarter of 2016 is \$391.7 billion, which is \$0.4 billion (0.1%) higher than assumed in the November forecast. Wages and salaries were \$0.1 billion higher than believed in November and other sources of personal income were \$0.3 billion higher.

Washington housing construction finished the year on a high note. The number of housing units authorized by building permits in the fourth quarter averaged 22,300 single-family units and 28,700 multi-family units permitted for a total of 50,900 units (SAAR). The forecast expected 21,500 single-family and 17,700 multi-family units for a total of 39,200 units in the fourth quarter. It is worth noting that the variance was nearly entirely in the multi-family segment.

Washington employment is expected to grow 2.2% this year, up from 1.9% in the November forecast. As in November, we expect growth to decelerate gradually as the recovery matures. We expect employment growth to average 1.4% per year in 2018 through 2021, which is slightly higher than the 1.3% rate assumed in November. Our preliminary forecast for nominal personal income growth this year is 4.9%, up from 4.5% in the November forecast. Our new forecast for nominal personal income growth in 2018 through 2021 averages 5.1% per year, also up slightly from the 5.0% 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**

February 2016

	2016Q4	2017Q1	2017Q2	2017Q3	2016	2017	2018	2019	2020	2021
<b>Real GDP, Percent Change, Annual Rate</b>										
ERFC (Preliminary March)	1.9	2.2	2.3	2.4	1.6	2.3	2.4	2.1	2.1	2.0
Global Insight	1.9	2.1	2.2	2.8	1.6	2.3	2.7	2.3	2.1	2.2
Economy.com	1.9	2.6	3.1	2.7	1.6	2.6	2.9	2.2		
Blue Chip Average*	1.9	2.2	2.3	2.4	2.3	2.4	2.1	2.1	2.1	2.0
Blue Chip Top 10*		2.7	2.7	3.0	2.6	2.9	2.5	2.5	2.5	2.4
Blue Chip Bottom 10*		1.9	1.8	1.9	2.1	2.0	1.6	1.6	1.6	1.6
<b>Real Consumption, Percent Change, Annual Rate</b>										
ERFC (Preliminary March)	2.5	2.4	2.5	2.6	2.7	2.7	2.5	2.2	2.1	2.1
Global Insight	2.5	2.7	2.7	2.8	2.7	2.8	3.2	2.9	2.4	2.3
Economy.com	2.5	3.4	3.4	3.4	2.7	3.2	3.2	2.1		
Blue Chip Average*	2.5	2.4	2.5	2.6	2.7	2.5	2.2	2.1	2.1	2.1
Blue Chip Top 10*		3.0	2.9	3.4	2.9	3.0	2.6	2.5	2.5	2.5
Blue Chip Bottom 10*		1.9	2.1	2.2	2.4	2.1	1.7	1.6	1.6	1.7
<b>Federal Funds Rate</b>										
ERFC (Preliminary March)	0.5	0.7	0.8	1.0	0.4	0.9	1.7	2.6	3.0	3.0
Global Insight	0.5	0.7	0.8	1.0	0.4	0.9	1.7	2.6	3.0	3.0
Economy.com	0.4	0.7	0.9	1.0	0.4	1.0	1.9	3.4		
<b>Three Month T-Bill Rate</b>										
ERFC (Preliminary March)	0.4	0.5	0.7	1.0	0.3	0.9	1.6	2.5	2.8	2.8
Global Insight	0.4	0.5	0.7	1.0	0.3	0.9	1.7	2.5	2.9	2.9
Blue Chip Average*	0.4	0.6	0.7	0.9		0.8	1.6	2.2	2.5	2.7
Blue Chip Top 10*		0.9	0.9	1.2		1.1	2.1	3.2	3.4	3.5
Blue Chip Bottom 10*		0.5	0.5	0.7		0.7	1.2	1.2	1.6	1.8
<b>10-Yr. T-Note Yield</b>										
ERFC (Preliminary March)	2.1	2.5	2.6	2.7	1.8	2.7	3.2	3.8	4.0	3.9
Global Insight	2.1	2.5	2.6	2.7	1.8	2.6	3.2	3.8	4.1	4.1
Economy.com	2.1	2.6	2.7	3.0	1.8	2.9	3.7	4.3		
Blue Chip Average*	2.1	2.5	2.6	2.7	2.7	3.1	3.1	3.4	3.4	3.6
Blue Chip Top 10*		2.6	2.8	3.0	2.9	3.6	4.0	4.4	4.4	4.3
Blue Chip Bottom 10*		2.4	2.5	2.5	2.5	2.7	2.2	2.5	2.5	2.7
<b>Consumer Price Index, Percent Change, Annual Rate</b>										
ERFC (Preliminary March)	3.4	2.8	1.7	2.9	1.3	2.5	2.0	2.0	2.2	2.2
Global Insight	3.4	2.5	1.9	2.5	1.3	2.4	1.9	2.4	2.7	2.6
Economy.com	3.4	3.5	2.4	2.4	1.3	2.8	2.7	3.1		
Blue Chip Average*	3.4	2.5	2.3	2.4	2.5	2.3	2.3	2.3	2.3	2.3
Blue Chip Top 10*		3.2	3.0	2.9	2.8	2.8	2.7	2.7	2.7	2.6
Blue Chip Bottom 10*		1.9	1.6	1.9	2.2	2.0	2.0	1.9	1.9	1.8
<b>Payroll Employment, Millions</b>										
ERFC (Preliminary March)	145.2	145.7	146.2	146.7	144.3	146.5	148.2	149.4	150.5	151.3
Percent Change, Annual Rate	1.4	1.6	1.3	1.4	1.8	1.5	1.2	0.8	0.7	0.5
Global Insight	145.2	145.7	146.2	146.7	144.3	146.4	148.5	150.2	151.5	152.5
Percent Change, Annual Rate	1.4	1.5	1.2	1.6	1.8	1.5	1.4	1.1	0.9	0.7
Economy.com	145.2	145.7	146.2	146.7	144.3	146.5	148.6	150.4		
Percent Change, Annual Rate	1.4	1.6	1.4	1.4	1.8	1.5	1.4	1.2		
<b>Unemployment Rate, Percent</b>										
ERFC (Preliminary March)	4.7	4.7	4.6	4.5	4.9	4.6	4.3	4.3	4.4	4.5
Global Insight	4.7	4.7	4.6	4.6	4.9	4.6	4.2	4.1	4.2	4.3
Economy.com	4.7	4.7	4.8	4.7	4.9	4.7	4.5	4.3		
Blue Chip Average*	4.7	4.7	4.6	4.6	4.6	4.6	4.4	4.7	4.7	4.8
Blue Chip Top 10*		4.8	4.8	4.8	4.8	4.9	5.4	5.2	5.2	5.3
Blue Chip Bottom 10*		4.5	4.5	4.4	4.5	4.1	4.2	4.2	4.3	4.3
<b>Real Disposable Personal Income, Percent Change, Annual Rate</b>										
ERFC (Preliminary March)	1.5	1.9	3.1	2.2	2.7	2.3	3.5	2.6	2.1	2.1
Global Insight	1.5	2.5	3.3	2.9	2.7	2.6	4.1	3.0	2.4	2.5
Blue Chip Average*	1.5	2.1	2.5	2.9	2.3	2.7	2.3	2.2	2.2	2.2
Blue Chip Top 10*		2.9	3.1	4.8	2.7	3.5	2.7	2.7	2.7	2.8
Blue Chip Bottom 10*		1.3	2.0	2.0	2.0	2.1	1.7	1.7	1.7	1.6
<b>West Texas Intermediate</b>										
ERFC (Preliminary March)	49.3	53.5	54.7	55.2	43.2	54.7	54.7	53.8	53.3	53.4
Global Insight	49.3	55.3	58.6	57.5	43.2	56.7	55.7	63.9	74.7	80.5
Economy.com	49.4	52.9	55.5	58.1	43.4	56.9	62.3	65.7		

\* Forecasts beyond 2018 are from the October 2016 Blue Chip Economic Indicators

Table 2

## U.S. Forecast Comparison

	2016Q4	2017Q1	2017Q2	2017Q3
<b>Real GDP (Billions of 2009 Dollars)</b>				
March Forecast, Preliminary	16,805	16,897	16,994	17,096
Percent Change	1.9%	2.2%	2.3%	2.4%
November Forecast	16,789	16,882	16,977	17,067
Percent Change	2.1%	2.2%	2.3%	2.1%
<b>Real Consumption (Billions of 2009 Dollars)</b>				
March Forecast, Preliminary	11,640	11,708	11,781	11,858
Percent Change	2.5%	2.4%	2.5%	2.6%
November Forecast	11,620	11,687	11,754	11,817
Percent Change	2.6%	2.3%	2.3%	2.1%
<b>Implicit Price Deflator, PCE (2009=1.00)</b>				
March Forecast, Preliminary	1.115	1.120	1.123	1.129
Percent Change	2.2%	1.6%	1.4%	2.0%
November Forecast	1.115	1.119	1.124	1.130
Percent Change	2.3%	1.4%	1.7%	2.1%
<b>Real Personal Income (Billions of 2009 Dollars)</b>				
March Forecast, Preliminary	14,575	14,646	14,759	14,849
Percent Change	1.6%	1.9%	3.1%	2.4%
November Forecast	14,510	14,603	14,698	14,770
Percent Change	1.2%	2.6%	2.6%	2.0%
<b>Nonfarm Payroll Employment (Millions)</b>				
March Forecast, Preliminary	145.2	145.7	146.2	146.7
Percent Change	1.4%	1.6%	1.3%	1.4%
November Forecast	145.1	145.6	145.9	146.2
Percent Change	1.4%	1.3%	1.0%	0.9%
<b>Unemployment Rate (Percent of Labor Force)</b>				
March Forecast, Preliminary	4.7	4.7	4.6	4.5
November Forecast	4.9	4.8	4.7	4.7
<b>30 Year Fixed Mortgage Rate (Percent, average)</b>				
March Forecast, Preliminary	3.8	4.2	4.2	4.3
November Forecast	3.5	3.7	3.8	3.9
<b>3 Month T-Bill Rate (Percent, average)</b>				
March Forecast, Preliminary	0.4	0.5	0.7	1.0
November Forecast	0.4	0.6	0.6	0.7

	2015	2016	2017	2018	2019	2020	2021
	16,397	16,660	17,046	17,454	17,821	18,195	18,559
	2.6%	1.6%	2.3%	2.4%	2.1%	2.1%	2.0%
	16,397	16,650	17,019	17,376	17,741	18,114	18,476
	2.6%	1.5%	2.2%	2.1%	2.1%	2.1%	2.0%
	11,215	11,515	11,820	12,120	12,387	12,647	12,913
	3.2%	2.7%	2.7%	2.5%	2.2%	2.1%	2.1%
	11,215	11,504	11,783	12,042	12,307	12,565	12,829
	3.2%	2.6%	2.4%	2.2%	2.2%	2.1%	2.1%
	1.095	1.107	1.126	1.144	1.163	1.185	1.207
	0.4%	1.1%	1.7%	1.6%	1.7%	1.9%	1.9%
	1.095	1.107	1.127	1.148	1.168	1.191	1.215
	0.4%	1.1%	1.8%	1.8%	1.8%	1.9%	2.0%
	14,113	14,455	14,802	15,248	15,693	16,095	16,457
	4.0%	2.4%	2.4%	3.0%	2.9%	2.6%	2.2%
	14,113	14,418	14,732	15,121	15,535	15,947	16,336
	4.0%	2.2%	2.2%	2.6%	2.7%	2.7%	2.4%
	141.8	144.3	146.5	148.2	149.4	150.5	151.3
	2.1%	1.8%	1.5%	1.2%	0.8%	0.7%	0.5%
	141.8	144.3	146.1	147.2	148.4	149.7	150.7
	2.1%	1.7%	1.2%	0.8%	0.8%	0.8%	0.7%
	5.3	4.9	4.6	4.3	4.3	4.4	4.5
	5.3	4.9	4.7	4.6	4.7	4.7	4.8
	3.9	3.6	4.3	5.1	5.8	6.0	5.9
	3.9	3.6	3.9	4.7	5.3	5.6	5.6
	0.1	0.3	0.9	1.6	2.5	2.8	2.8
	0.1	0.3	0.7	1.4	2.2	2.6	2.6

Table 3

**Washington Forecast Comparison**

	2016Q4	2017Q1	2017Q2	2017Q3
<b>Real Personal Income (Billions of 2009 Dollars)</b>				
March Forecast, Preliminary	356.0	360.8	361.9	363.2
Percent Change	3.3%	5.5%	1.2%	1.5%
November Forecast	353.9	359.9	360.5	360.5
Percent Change	1.3%	6.9%	0.7%	0.0%
<b>Personal Income (Billions of Dollars)</b>				
March Forecast, Preliminary	397.0	403.9	406.5	410.0
Percent Change	5.5%	7.2%	2.6%	3.5%
November Forecast	394.7	402.8	405.2	407.4
Percent Change	3.6%	8.4%	2.5%	2.1%
<b>Nonfarm Payroll Employment (Thousands)</b>				
March Forecast, Preliminary	3279	3293	3307	3325
Percent Change	2.9%	1.7%	1.8%	2.1%
November Forecast	3265	3278	3291	3305
Percent Change	2.0%	1.6%	1.6%	1.6%
<b>Unemployment Rate (Percent of Labor Force)</b>				
March Forecast, Preliminary	5.3	5.1	5.0	4.9
November Forecast	5.4	5.3	5.2	5.1
<b>Manufacturing Employment (Thousands)</b>				
March Forecast, Preliminary	286.2	286.1	285.8	285.5
Percent Change	-3.9%	-0.1%	-0.5%	-0.4%
November Forecast	282.6	281.2	281.8	282.2
Percent Change	-6.8%	-2.0%	0.9%	0.5%
<b>Construction Employment (Thousands)</b>				
March Forecast, Preliminary	190.1	191.5	193.1	195.0
Percent Change	7.2%	3.0%	3.4%	3.9%
November Forecast	185.6	185.4	186.2	187.6
Percent Change	3.2%	-0.4%	1.8%	3.0%
<b>Housing Permits (Thousands)</b>				
March Forecast, Preliminary	50.9	40.1	40.7	40.5
Percent Change	183.5%	-61.6%	6.1%	-1.7%
November Forecast	39.2	39.4	39.8	40.2
Percent Change	8.6%	1.7%	4.7%	3.6%

	2015	2016	2017	2018	2019	2020	2021
339.7	352.0	363.2	376.6	389.9	401.9	413.2	
4.3%	3.6%	3.2%	3.7%	3.6%	3.1%	2.8%	
339.7	351.7	361.2	372.7	384.8	396.5	407.5	
4.3%	3.5%	2.7%	3.2%	3.2%	3.1%	2.8%	
372.1	389.8	409.1	430.8	453.6	476.2	498.8	
4.6%	4.7%	4.9%	5.3%	5.3%	5.0%	4.7%	
372.1	389.4	407.1	427.7	449.5	472.1	495.0	
4.6%	4.7%	4.5%	5.1%	5.1%	5.0%	4.8%	
3146	3244	3316	3380	3428	3471	3507	
2.9%	3.1%	2.2%	1.9%	1.4%	1.2%	1.1%	
3146	3238	3298	3350	3398	3442	3479	
2.8%	2.9%	1.9%	1.6%	1.4%	1.3%	1.1%	
5.7	5.6	5.0	4.6	4.5	4.5	4.5	
5.7	5.7	5.2	4.9	4.9	4.9	4.9	
291.8	290.0	285.6	287.3	290.9	293.9	296.3	
1.1%	-0.6%	-1.5%	0.6%	1.2%	1.1%	0.8%	
290.7	287.8	281.9	283.9	286.5	290.0	293.5	
0.7%	-1.0%	-2.0%	0.7%	0.9%	1.2%	1.2%	
173.3	186.2	194.3	201.4	204.9	207.3	211.0	
8.5%	7.5%	4.4%	3.7%	1.7%	1.2%	1.8%	
173.2	183.6	187.3	194.5	199.2	202.1	204.5	
8.5%	6.0%	2.0%	3.8%	2.4%	1.4%	1.2%	
40.4	43.2	40.5	40.9	40.8	40.9	40.9	
19.1%	7.1%	-6.4%	1.2%	-0.5%	0.5%	-0.2%	
40.4	40.1	40.0	41.1	41.4	41.5	41.6	
19.1%	-0.6%	-0.3%	2.9%	0.6%	0.2%	0.4%	