



## June 2016 Preliminary Economic Forecast

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This forecast was based on a modified version of Global Insight's May 2016 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. In the May Blue Chip release, the average forecast for real GDP growth in 2016 is 1.8%, down from 2.1% in February and the average forecast for 2017 is 2.3%, down from 2.4% in February. Our June preliminary forecast also reflects the new long term Blue Chip forecast which was released in March. The new Blue Chip forecast for GDP growth in 2018 through 2021 is generally weaker with growth rates of 2.2%, 2.1%, 2.2%, and 2.1% compared to the previous long term forecast of 2.4%, 2.2%, 2.2%, and 2.2%.

Our oil price forecast continues to rely on the futures markets, primarily the Brent (North Sea) oil price but also the West Texas Intermediate (WTI) benchmark. This forecast was based on the Wednesday, May 25, 2016 closing prices for Brent and WTI futures. The latest futures prices are higher than the prices used in the February forecast. The refiner acquisition price of crude oil in the second quarter of 2016 is now expected to average \$43 per barrel compared to \$32 in the February forecast. As in February, oil prices are expected to rise during the remainder of the forecast. By the end of 2021, the refiner acquisition price is expected to increase to \$56 per barrel.

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

We have three months of new Washington employment data since the February forecast was released. Total nonfarm payroll employment rose 16,500 (seasonally adjusted) in February, March, and April, which was 3,000 more than the 13,600 expected in the February forecast. The construction sector more than accounted for the variance in job growth, adding 2,900 jobs in the three-month period; the February forecast expected reduction of 1,200 jobs. Manufacturing employment declined 2,400 of which 1,400 were in the aerospace sector. As is usually the case, the bulk of the job growth was in private, service-providing sectors which added 13,200 jobs in the last three

months. Government payrolls expanded by 2,800 jobs in February, March, and April.

We have also incorporated another quarter of benchmark employment data from the Quarterly Census of Employment and Wages (QCEW). The new QCEW data and other revisions lowered the estimated level of total employment in January 2016 by 3,600 jobs. As a result of the downward revision to history but stronger-than-expected growth, the total effect is just 600 (0.0%) fewer jobs in April 2016 than expected in the February forecast.

In March, the Bureau of Economic Analysis released estimates for state personal income through the fourth quarter of 2015. 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 fourth quarter. Our current estimate of Washington personal income in the fourth quarter of 2015 is \$372.0 billion which is \$2.9 billion (0.8%) lower than assumed in the February forecast. Of the \$2.9 billion variance, \$1.8 billion is due to lower than previously expected transfer payments as the BEA reduced its estimates of Medicaid benefits in the state. Most of the rest (\$0.8 billion) was due to lower than expected wages and salaries.

Washington housing permits declined slightly to 37,600 units (SAAR) in the first quarter of 2016 from a revised 38,000 units in the fourth quarter of 2015. The February forecast projected 37,400 units in the first quarter. The number of single-family units averaged 22,300 in the first quarter of 2016, 1,900 higher than the 20,400 expected in the forecast. However, the number of multi-family units averaged 15,300 in the first quarter which was 1,700 below the 17,000 expected in the forecast. The estimates for all four quarters of 2015 have been adjusted to reflect the final annual estimate from the Census Bureau. The second quarter of 2016 got off to a very strong start with 49,300 units (SAAR) permitted in April of which 22,800 were single family and 26,500 were multi-family.

We have revised the aerospace employment forecast to reflect Boeing's stated intention to reduce its commercial airplane division employment by 4,000 by the middle of the year. We expect the vast majority of the job cuts will be in the Puget Sound region. This implies a steeper decline in the near term than assumed in February. In the second half of 2016 through 2019 we expect a more gradual decline in aerospace employment similar to the assumption made in February. We project no change in aerospace employment in the final two years of the forecast.

Washington employment is expected to grow 2.4% this year, up from 2.0% in the February forecast due mainly to the strong job growth in the first quarter.

As in February, we expect growth to gradually decelerate as the recovery matures. We expect employment growth to average 1.2% per year in 2017 through 2021 which is the same rate assumed in February. Our preliminary June forecast for nominal personal income growth this year is 4.0%, down slightly from 4.2% in the February forecast. Our new forecast for nominal personal income growth in 2017 through 2021 averages 5.0% per year, up from 4.8% in the February forecast. The higher nominal personal income growth expected in 2017 through 2021 is due to higher inflation.

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 2016

	2016Q1	2016Q2	2016Q3	2016Q4	2016	2017	2018	2019	2020	2021
<b>Real GDP, Percent Change, Annual Rate</b>										
ERFC (Preliminary June)	0.5	2.3	2.4	2.4	1.8	2.3	2.2	2.1	2.2	2.1
Global Insight	0.5	1.7	2.2	3.1	1.7	2.7	2.6	2.3	2.3	2.3
Economy.com	0.5	2.2	2.9	2.9	1.8	3.0	2.7			
Blue Chip Average*	0.5	2.3	2.4	2.4	1.8	2.3	2.2	2.1	2.2	2.1
Blue Chip Top 10*		3.2	2.9	2.8	2.0	2.6	2.6	2.6	2.6	2.5
Blue Chip Bottom 10*		1.6	1.9	1.9	1.6	1.9	1.7	1.5	1.8	1.7
<b>Real Consumption, Percent Change, Annual Rate</b>										
ERFC (Preliminary June)	1.9	2.7	2.6	2.6	2.5	2.5	2.3	2.2	2.2	2.2
Global Insight	1.9	3.2	3.0	3.0	2.7	2.9	2.6	2.5	2.3	2.3
Economy.com	1.9	3.3	3.6	3.3	2.8	3.5	3.1			
Blue Chip Average*	1.9	2.7	2.6	2.5	2.5	2.5	2.3	2.2	2.2	2.2
Blue Chip Top 10*		3.4	3.3	3.0	2.7	2.8	2.7	2.6	2.5	2.5
Blue Chip Bottom 10*		2.1	2.1	2.0	2.3	2.1	1.9	1.6	1.9	1.8
<b>Federal Funds Rate</b>										
ERFC (Preliminary June)	0.4	0.4	0.7	0.8	0.6	1.4	2.4	3.0	3.0	3.0
Global Insight	0.4	0.4	0.7	0.8	0.6	1.4	2.4	3.0	3.0	3.0
Economy.com	0.4	0.4	0.7	0.8	0.6	2.0	3.6			
<b>Three Month T-Bill Rate</b>										
ERFC (Preliminary June)	0.3	0.3	0.5	0.7	0.4	1.3	2.4	2.8	2.8	2.8
Global Insight	0.3	0.3	0.5	0.7	0.4	1.3	2.3	2.8	2.8	2.8
Blue Chip Average*	0.3	0.3	0.5	0.7	0.4	1.2	2.3	2.7	2.9	3.0
Blue Chip Top 10*		0.5	0.6	0.8	0.5	1.6	3.3	3.8	3.8	3.7
Blue Chip Bottom 10*		0.2	0.3	0.5	0.3	0.9	1.5	1.6	1.9	2.2
<b>10-Yr. T-Note Yield</b>										
ERFC (Preliminary June)	1.9	1.9	2.2	2.4	2.1	2.6	3.1	3.6	3.6	3.6
Global Insight	1.9	1.9	2.2	2.4	2.1	2.6	3.1	3.6	3.6	3.6
Economy.com	1.9	2.2	2.5	2.8	2.4	3.6	4.0			
Blue Chip Average*	1.9	1.9	2.1	2.2	2.0	2.7	3.4	3.7	3.8	3.9
Blue Chip Top 10*		2.1	2.4	2.6	2.2	3.3	4.2	4.4	4.5	4.5
Blue Chip Bottom 10*		1.7	1.8	1.9	1.8	2.2	2.6	2.8	3.0	3.2
<b>Consumer Price Index, Percent Change, Annual Rate</b>										
ERFC (Preliminary June)	-0.3	2.2	1.1	4.6	1.2	2.4	2.2	2.3	2.3	2.2
Global Insight	-0.3	1.7	1.0	3.6	1.0	2.4	2.5	2.6	2.7	2.6
Economy.com	-0.3	2.9	2.5	2.7	1.4	2.7	2.8			
Blue Chip Average*	-0.3	2.0	2.3	2.4	1.2	2.3	2.3	2.3	2.3	2.3
Blue Chip Top 10*		2.8	3.0	3.3	1.5	2.8	2.8	2.8	2.7	2.7
Blue Chip Bottom 10*		0.9	1.5	1.8	0.9	1.9	1.9	1.9	1.9	2.0
<b>Payroll Employment, Millions</b>										
ERFC (Preliminary June)	143.5	144.3	144.9	145.5	144.6	146.5	147.6	148.6	149.6	150.5
Percent Change, Annual Rate	1.9	2.0	1.8	1.7	1.9	1.3	0.8	0.7	0.7	0.6
Global Insight	143.5	144.2	144.8	145.4	144.5	146.5	147.8	148.9	150.3	151.8
Percent Change, Annual Rate	1.9	1.9	1.7	1.7	1.9	1.4	0.9	0.7	1.0	1.0
Economy.com	143.5	144.1	144.8	145.4	144.4	146.9	149.3			
Percent Change, Annual Rate	1.9	1.6	1.8	1.7	1.8	1.7	1.6			
<b>Unemployment Rate, Percent</b>										
ERFC (Preliminary June)	4.9	4.9	4.9	4.8	4.9	4.8	4.7	4.8	4.8	4.9
Global Insight	4.9	4.9	4.9	4.9	4.9	4.8	4.8	5.1	5.1	5.0
Economy.com	4.9	5.0	5.0	4.9	5.0	4.7	4.6			
Blue Chip Average*	4.9	4.9	4.8	4.7	4.8	4.6	4.6	4.7	4.7	4.8
Blue Chip Top 10*		5.0	4.9	4.9	4.9	4.8	5.1	5.2	5.1	5.2
Blue Chip Bottom 10*		4.8	4.6	4.5	4.7	4.3	4.1	4.2	4.2	4.3
<b>Real Disposable Personal Income, Percent Change, Annual Rate</b>										
ERFC (Preliminary June)	2.9	2.0	2.6	1.6	2.5	2.7	3.2	2.9	2.4	2.4
Global Insight	2.9	2.5	2.8	2.5	2.7	3.1	3.3	2.9	2.5	2.5
Blue Chip Average*	2.9	2.3	2.3	2.4	2.6	2.5	2.6	2.4	2.4	2.4
Blue Chip Top 10*		3.2	3.1	3.1	3.0	3.0	3.5	3.4	3.0	3.0
Blue Chip Bottom 10*		1.3	1.3	1.8	2.3	2.0	2.0	1.6	1.9	1.8
<b>West Texas Intermediate</b>										
ERFC (Preliminary June)	33.5	45.7	49.9	50.9	45.0	51.6	52.3	53.5	54.8	56.0
Global Insight	33.5	45.7	49.7	45.7	43.7	49.8	56.7	66.4	76.9	86.3
Economy.com	33.4	39.7	44.3	48.1	41.4	54.9	60.9			
CME Group (5/25/2016)		45.7	49.9	50.9	45.0	51.6	52.3	53.5	54.8	56.0

\* Forecasts beyond 2017 are from the March 2016 Blue Chip Economic Indicators

Table 2

## U.S. Forecast Comparison

	2016Q1	2016Q2	2016Q3	2016Q4	2015	2016	2017	2018	2019	2020	2021
<b>Real GDP (Billions of 2009 Dollars)</b>											
June Forecast, Preliminary	16,493	16,587	16,687	16,788	16,349	16,639	17,022	17,397	17,762	18,153	18,534
Percent Change	0.5%	2.3%	2.4%	2.4%	2.4%	1.8%	2.3%	2.2%	2.1%	2.2%	2.1%
February Forecast	16,532	16,638	16,744	16,849	16,342	16,691	17,093	17,503	17,889	18,282	18,684
Percent Change	2.2%	2.6%	2.6%	2.5%	2.4%	2.1%	2.4%	2.4%	2.2%	2.2%	2.2%
<b>Real Consumption (Billions of 2009 Dollars)</b>											
June Forecast, Preliminary	11,383	11,459	11,533	11,606	11,213	11,495	11,779	12,050	12,315	12,586	12,863
Percent Change	1.9%	2.7%	2.6%	2.6%	3.1%	2.5%	2.5%	2.3%	2.2%	2.2%	2.2%
February Forecast	11,395	11,472	11,549	11,625	11,211	11,510	11,803	12,086	12,364	12,649	12,927
Percent Change	2.6%	2.7%	2.7%	2.7%	3.1%	2.7%	2.5%	2.4%	2.3%	2.3%	2.2%
<b>Implicit Price Deflator, PCE (2009=1.00)</b>											
June Forecast, Preliminary	1.099	1.104	1.106	1.114	1.094	1.106	1.126	1.147	1.169	1.191	1.214
Percent Change	0.3%	1.7%	0.8%	3.0%	0.3%	1.0%	1.8%	1.9%	1.9%	1.9%	1.9%
February Forecast	1.098	1.100	1.103	1.108	1.094	1.102	1.120	1.141	1.161	1.181	1.202
Percent Change	0.0%	0.7%	1.2%	2.0%	0.3%	0.7%	1.6%	1.8%	1.8%	1.7%	1.7%
<b>Real Personal Income (Billions of 2009 Dollars)</b>											
June Forecast, Preliminary	14,277	14,356	14,453	14,504	14,017	14,397	14,777	15,179	15,590	15,999	16,394
Percent Change	3.1%	2.2%	2.7%	1.4%	4.1%	2.7%	2.6%	2.7%	2.7%	2.6%	2.5%
February Forecast	14,345	14,404	14,487	14,563	14,034	14,450	14,834	15,243	15,655	16,054	16,448
Percent Change	3.7%	1.6%	2.3%	2.1%	4.2%	3.0%	2.7%	2.8%	2.7%	2.5%	2.5%
<b>Nonfarm Payroll Employment (Millions)</b>											
June Forecast, Preliminary	143.5	144.3	144.9	145.5	141.8	144.6	146.5	147.6	148.6	149.6	150.5
Percent Change	1.9%	2.0%	1.8%	1.7%	2.1%	1.9%	1.3%	0.8%	0.7%	0.7%	0.6%
February Forecast	143.5	144.1	144.5	144.9	141.8	144.3	145.8	147.0	148.2	149.3	150.3
Percent Change	1.8%	1.7%	1.2%	1.1%	2.1%	1.7%	1.0%	0.9%	0.8%	0.8%	0.6%
<b>Unemployment Rate (Percent of Labor Force)</b>											
June Forecast, Preliminary	4.9	4.9	4.9	4.8	5.3	4.9	4.8	4.7	4.8	4.8	4.9
February Forecast	4.8	4.8	4.8	4.8	5.3	4.8	4.8	4.7	4.8	4.8	4.9
<b>30 Year Fixed Mortgage Rate (Percent, average)</b>											
June Forecast, Preliminary	3.7	3.7	4.0	4.2	3.9	3.9	4.5	5.1	5.6	5.6	5.6
February Forecast	3.9	4.0	4.1	4.2	3.9	4.1	4.4	5.0	5.6	5.6	5.6
<b>3 Month T-Bill Rate (Percent, average)</b>											
June Forecast, Preliminary	0.3	0.3	0.5	0.7	0.1	0.4	1.3	2.4	2.8	2.8	2.8
February Forecast	0.3	0.5	0.6	0.7	0.1	0.5	1.4	2.3	2.8	2.8	2.8

Table 3

## Washington Forecast Comparison

	2016Q1	2016Q2	2016Q3	2016Q4	2015	2016	2017	2018	2019	2020	2021
<b>Real Personal Income (Billions of 2009 Dollars)</b>											
June Forecast, Preliminary	342.8	344.6	346.4	347.1	335.4	345.2	355.0	366.4	378.0	389.6	400.9
Percent Change	5.0%	2.1%	2.1%	0.8%	4.4%	2.9%	2.8%	3.2%	3.2%	3.1%	2.9%
February Forecast	347.4	348.4	350.2	351.1	337.7	349.2	359.4	370.8	382.3	393.8	405.4
Percent Change	7.2%	1.1%	2.1%	1.0%	5.2%	3.4%	2.9%	3.2%	3.1%	3.0%	2.9%
<b>Personal Income (Billions of Dollars)</b>											
June Forecast, Preliminary	376.7	380.3	383.1	386.7	367.0	381.7	399.7	420.1	441.7	464.1	486.7
Percent Change	5.2%	3.8%	2.9%	3.8%	4.8%	4.0%	4.7%	5.1%	5.2%	5.1%	4.9%
February Forecast	381.4	383.1	386.2	389.1	369.6	385.0	402.7	423.1	444.0	465.3	487.2
Percent Change	7.2%	1.8%	3.3%	3.1%	5.5%	4.2%	4.6%	5.1%	5.0%	4.8%	4.7%
<b>Nonfarm Payroll Employment (Thousands)</b>											
June Forecast, Preliminary	3202	3218	3230	3245	3147	3224	3273	3314	3351	3388	3423
Percent Change	3.6%	2.0%	1.5%	1.8%	2.8%	2.4%	1.5%	1.3%	1.1%	1.1%	1.0%
February Forecast	3205	3218	3227	3238	3158	3222	3262	3301	3340	3380	3415
Percent Change	2.7%	1.6%	1.2%	1.3%	2.8%	2.0%	1.2%	1.2%	1.2%	1.2%	1.1%
<b>Unemployment Rate (Percent of Labor Force)</b>											
June Forecast, Preliminary	5.8	5.8	5.8	5.7	5.7	5.8	5.6	5.4	5.3	5.3	5.3
February Forecast	5.4	5.4	5.3	5.3	5.5	5.3	5.2	5.1	5.1	5.1	5.1
<b>Manufacturing Employment (Thousands)</b>											
June Forecast, Preliminary	287.8	286.2	282.8	284.1	289.3	285.2	284.6	284.4	285.2	286.7	288.8
Percent Change	-0.5%	-2.2%	-4.7%	1.9%	0.2%	-1.4%	-0.2%	-0.1%	0.3%	0.5%	0.8%
February Forecast	288.2	287.5	286.5	287.1	289.1	287.3	287.7	288.9	290.5	292.1	295.0
Percent Change	0.6%	-0.9%	-1.4%	0.8%	0.3%	-0.6%	0.1%	0.4%	0.5%	0.6%	1.0%
<b>Construction Employment (Thousands)</b>											
June Forecast, Preliminary	181.7	182.5	183.4	184.4	173.2	183.0	188.1	195.1	200.7	205.1	207.6
Percent Change	16.9%	1.9%	1.9%	2.1%	8.5%	5.6%	2.8%	3.7%	2.9%	2.2%	1.2%
February Forecast	177.0	176.5	176.8	177.6	172.5	177.0	181.6	189.4	195.2	200.4	203.5
Percent Change	8.4%	-1.2%	0.8%	1.8%	8.3%	2.6%	2.6%	4.3%	3.1%	2.6%	1.6%
<b>Housing Permits (Thousands)</b>											
June Forecast, Preliminary	37.6	42.6	40.4	40.7	40.4	40.3	42.3	43.7	44.3	44.4	44.2
Percent Change	-8.0%	65.8%	-19.1%	2.6%	19.1%	-0.1%	4.7%	3.5%	1.3%	0.4%	-0.5%
February Forecast	37.4	38.0	38.3	39.6	40.0	38.3	41.9	43.6	43.7	44.4	44.4
Percent Change	8.7%	6.8%	3.2%	14.5%	17.9%	-4.1%	9.4%	3.9%	0.4%	1.5%	0.0%