

# Economic Review Meeting

September 7, 2016



Washington State  
Economic and Revenue Forecast Council

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WASHINGTON STATE  
**ECONOMIC AND REVENUE FORECAST COUNCIL**

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## AGENDA

### **ECONOMIC REVIEW MEETING**

September 7, 2016  
10:00 A.m.

- Approval of meeting minutes: June 15, 2016
- Presentation of economic outlook and revenue collection experience

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STATE OF WASHINGTON

## ECONOMIC AND REVENUE FORECAST COUNCIL

Capitol Plaza Building, PO Box 40912 □ Olympia, Washington 98504-0912 □ (360) 534-1560

### **Meeting Minutes Revenue Review**

June 15, 2016

John L. O'Brien, Hearing Room D

#### **Economic and Revenue Forecast Council**

##### *Members Present*

Andy Hill, Senator, Chair (via phone)  
Jim Hargrove, Senator  
Terry Nealey, House of Representatives (via phone)  
Timm Ormsby, House of Representatives (via phone)  
James McIntire, Treasurer (via phone)  
David Schumacher, Office of Financial Management

##### *Staff*

Steve Lerch, Executive Director,  
ERFC

#### **Call to Order**

The meeting was called to order by Director Schumacher at 10:02 a.m.

#### **Motion**

Representative Ormsby made a motion to approve the meeting minutes from June 1, 2016, seconded by Director Schumacher. Council approved the motion at 10:02 a.m.

#### **Forecast Presentation**

Dr. Lerch presented information on the final economic and revenue forecast. Dr. Lerch summarized the forecast changes. Discussion ensued regarding housing permits, growth rates, and revenue forecast drivers including real estate excise taxes and retail sales tax.

#### **Motion**

Representative Ormsby moved, seconded by Director Schumacher, that the baseline revenue forecast be adopted. Council unanimously approved the motion at 10:23 a.m.

#### **Adjournment**

Meeting adjourned at 10:37 a.m.

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**Economic & Revenue Forecast Council  
State of Washington**



**Economic Review: September 7, 2016**

**Executive Summary**

- This preliminary forecast was based on a modified version of Global Insight's August 2016 Control forecast for the U.S. economy. Since the June forecast, the level of real GDP in 2015 was revised up 0.3% as a result of the annual revision of the national income and product accounts. However, the August Blue Chip forecast calls for growth rates of 1.5% and 2.2% in 2016 and 2017, down from 1.8% and 2.3% in June leaving the level of GDP in 2016 and 2017 virtually unchanged. The forecasts for growth in 2018 through 2021 are unchanged at 2.2%, 2.1%, 2.2%, and 2.1% as there has not been a new Blue Chip long term forecast since March.
- 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, August 31, 2016 closing prices for Brent and WTI futures. The latest futures prices are lower than the prices used in the June forecast. The refiner acquisition price of crude oil in the third quarter of 2016 is now expected to average \$42 per barrel compared to \$48 in the June forecast. As in June, 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 \$54 per barrel.
- Through August 2016, the U.S. labor market expanded by a monthly average of 182,000 net new jobs, down from the 221,000 average monthly gain in 2015. Average hourly wages, adjusted for inflation, have increased at about a 1.5% pace during January through July 2016 compared to the same period in 2015. The unemployment rate has remained at 4.9% for June, July, and August.
- Two key measures of consumer optimism give conflicting views in August. The University of Michigan (UM) index of consumer sentiment was almost unchanged, declining by 0.2 points to 89.8. However, this marked three consecutive months of decline for the UM index. The Conference Board index of consumer confidence increased 4.4 points to 101.1, its highest level since September 2015. The Conference Board survey noted more positive consumer assessments of both current and near-term economic conditions, while the slight decrease in the UM index was attributed to less positive views on current economic conditions.
- Initial claims for unemployment insurance increased by 2,000 to 263,000 (SA) in the week ending August 27<sup>th</sup>. The four-week moving average of initial claims increased by 1,000 to 263,000.
- Light motor vehicle sales slowed in August, decreasing 5.0% (SAAR) from July to 17.0 million units (SAAR). The dip in sales was similar for both cars and trucks.
- Industrial production increased in both June and July. However, industrial production is still 0.5% below its July 2015 level. New orders for core capital goods (i.e., durables excluding aircraft and military), which is a proxy for

business investment, increased by 1.5% (SA) in July according to Census data.

- Recent housing data has been mixed. July housing starts increased by 2.1% (SA) compared to June and were 5.6% above their July 2015 level. Housing units authorized by building permits in July were nearly unchanged from June, decreasing by 0.1% (SA); building permits were 0.9% above their July 2015 level. Existing home sales decreased in July by 3.2% (SA) compared to June, their first monthly decline since November 2015; they are now 1.6% below July 2015 sales. New single family home sales in July were very strong, increasing by 12.4% (SA) above their June level and 31.3% (SA) above their year-ago level. The seasonally adjusted Case-Shiller national home price index for June was 0.2% above its May level and 5.1% above its year-ago level.
- Major threats to the U.S. and Washington economies remain, including a slowing U.S. and global economy, weaker export growth, and slow growth in labor productivity.

## Washington

- We have two months of new Washington employment data since the June forecast was released. Total nonfarm payroll employment rose 13,800 (seasonally adjusted) in June and July, which was 10,600 more than the 3,200 expected in the June forecast. The manufacturing sector accounted for much of the variance in job growth, adding 500 jobs in the two-month period; the June forecast expected a reduction of 3,900 jobs. The reason was mostly aerospace which was expected to shed 3,700 jobs but instead added 100. Construction employment increased 1,100 and government payrolls expanded by 1,400 jobs. As is usually the case, the bulk of the job growth was in private, service-providing sectors which added 10,800 jobs in the last two months.
- In June we incorporated Boeing's stated intention to reduce its commercial airplane division employment by 4,000 by the middle of the year which we assumed would be by July. The actual decline by July was much smaller than this announcement implied. In the preliminary September forecast we have retained the overall decline implied by the announcement but have spread it over the remaining five months of 2016. In 2017 through 2019 we expect a more gradual decline in aerospace employment similar to the assumption made in June. We project no change in aerospace employment in the final two years of 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 May 2016 by 14,800 jobs (0.5%). As a result of the upward revision to history and stronger-than-expected growth, the total effect is 25,400 (0.8%) more jobs in July 2016 than expected in the June forecast.
- We have incorporated new BEA personal income estimates as well as additional Washington Quarterly Census of Employment and Wages (QCEW) wage data through the first quarter of 2016. Our current estimate of Washington personal income in the first quarter of 2016 is \$380.6 billion which is \$3.5 billion (0.9%) higher than assumed in the June forecast. Wages



and salaries were \$4.5 billion higher than believed in June but other sources of personal income were \$1.0 billion lower.

- Washington housing construction was stronger than expected in the second quarter. Washington housing units authorized by building permits averaged 45,300 units (SAAR) in the second quarter of 2016, up from 37,600 in the first quarter. The June forecast expected an average rate of 42,600 units in the second quarter. Multi-family permits averaged 22,700 units in the second quarter, up from 15,300 units in the first quarter and higher than the 20,100 expected in the June forecast. Single-family permits averaged 22,600 units in second quarter, up from 22,300 units in the first quarter and slightly higher than the 22,500 units forecasted for the second quarter. The third quarter of 2016 got off to a weaker start with 39,800 units (SAAR) permitted in July of which 21,600 were single-family and 18,200 were multi-family.
- Seattle home prices continue to rise rapidly. According to the S&P/Case-Shiller Home Price Indices, seasonally adjusted Seattle area home prices rose 0.5% in June following increases of 0.3% in May and 0.4% increase in April. While the last three months have exhibited weaker growth than in earlier months, we believe this is due to problems with the seasonal adjustment process. A more reliable measure is the over-the-year growth which shows a 11.0% increase in prices since the previous June. Seattle home prices are up 50.0% since the November 2011 trough and prices now exceed the May 2007 peak by 4.2%.
- Seattle area consumer price inflation remains moderate thanks to lower energy costs. Over the last year, from June 2015 to June 2016, consumer prices in the Seattle area rose 1.8% compared to 1.1% for the U.S. city average. Core prices, which exclude food and energy, were up 2.7% in Seattle compared to 2.2% for the nation. The higher Seattle inflation was due to more rapid growth in shelter costs. During the year, shelter costs in Seattle rose 5.3% compared to 3.4% for the nation. With shelter excluded, Seattle inflation was about the same as the U.S. city average (-0.2% compared to -0.1%).
- The Institute of Supply Management - Western Washington Index (ISM-WW) returned to positive territory in July after two consecutive negative months. The index, which measures conditions in the manufacturing sector, rose from 49.1 in June to 50.8 in July (index values above 50 indicate positive growth while values below 50 indicate contraction). The production, orders, and inventory components all declined in July but the employment and deliveries components increased.
- Washington car and truck sales fell 0.9% in July following increases in May and June. Seasonally adjusted new vehicle registrations have now declined in four of the six months since January's post-recession peak. Car and truck sales are down 10.9% since January but are down only 1.1% over the year.
- Second quarter 2016 Washington exports were down 8.3% from the second quarter of 2015. Transportation equipment exports (mostly Boeing planes) declined 9.5% over the year. Exports of agricultural products increased 3.8% over the year but exports of all other commodities declined 9.1%. The drop likely reflects the negative influence of a stronger dollar and weak economic growth abroad.

- Washington employment is expected to grow 2.9% this year, up from 2.4% in the June forecast due mainly to the strong job growth in the first half of the year. As in June, we expect growth to gradually decelerate as the recovery matures. We expect employment growth to average 1.3% per year in 2017 through 2021 which is the same rate assumed in June. Our preliminary forecast for nominal personal income growth this year is 4.7%, up sharply from 4.1% in the June forecast. The higher growth this year is mainly due to the Quarterly Census of Employment and Wages data for the first quarter which indicates that wages are higher than previously believed. Our new forecast for nominal personal income growth in 2017 through 2021 averages 5.0% per year, the same rate as in the June forecast.

# Washington State Economic Outlook & Revenue Collection Experience

Presented to  
The Economic & Revenue Forecast Council

Steve Lerch  
Executive Director

September 7, 2016  
Olympia, Washington



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## Summary

- The U.S. preliminary economic forecast is very similar to June; the WA preliminary forecast is slightly stronger
- Oil prices are slightly lower than in June
- The forecast assumes the Federal Reserve will increase interest rates in December
- Downside risks to the baseline also remain similar to those discussed in June: slow global and U.S. economic growth, the impact of a stronger dollar on exports, weak labor productivity growth
- Revenue collections since the June forecast are \$129 million (4.4%) above expectations, including one-time audit and refund payments of \$27 million

Economic Review  
September 7, 2016

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## Economic news continues to suggest risks to forecast

### Upside:

- Stronger than expected Washington job growth
- Rising wage growth
- Stronger housing starts and home sales (new and existing)

### Downside:

- Slowing global economy
- Slower U.S. GDP growth
- Negative impact of stronger dollar on exports
- Weak growth in labor productivity

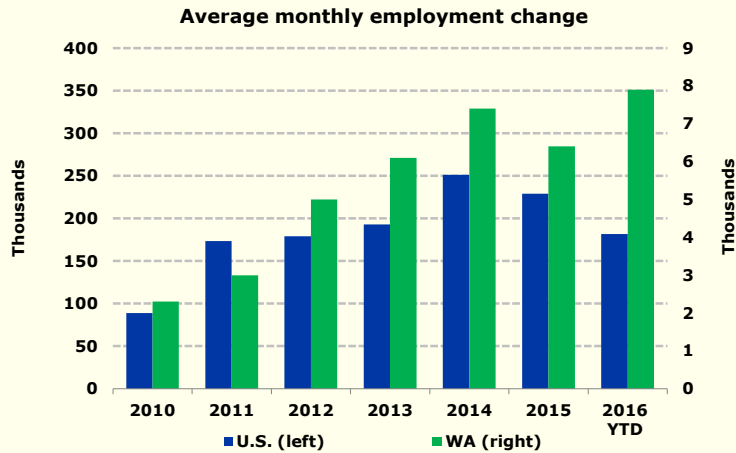
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## So far in 2016, employment change in WA is stronger than last year



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Source: Bureau of Labor Statistics, ERFC; U.S. data through August 2016, WA data through July 2016

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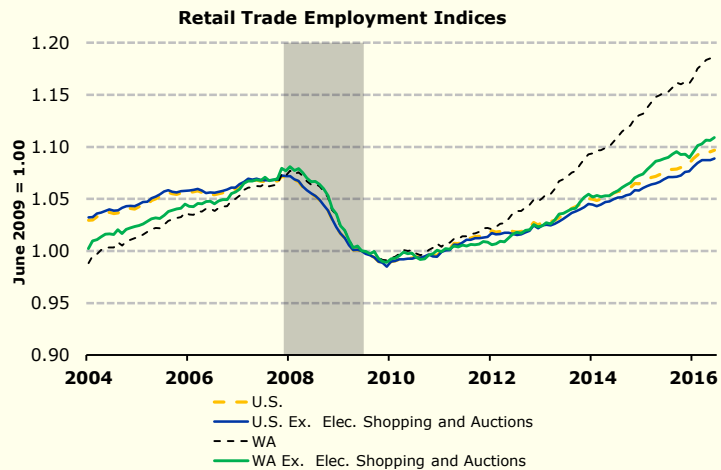
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## Retail trade employment growth has been much stronger thanks to electronic shopping and auctions

Washington retail trade employment has grown 19% since the end of the recession compared to only 10% for the nation.

Excluding electronic shopping and auctions, the difference is much smaller, 11% for Washington compared to 9% for the nation.



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Source: BLS, ESD data through June, 2016

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## Wage growth has slowed this year but remains positive



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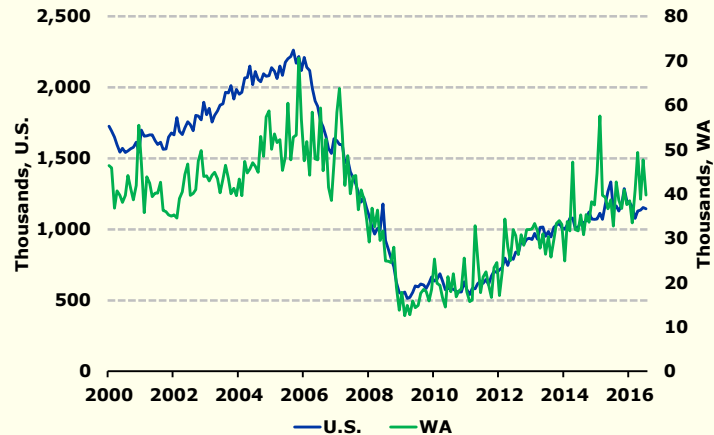
Source: U.S. Bureau of Labor Statistics, data through July 2016

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## U.S., WA housing permits trending up; U.S. remains below historical averages



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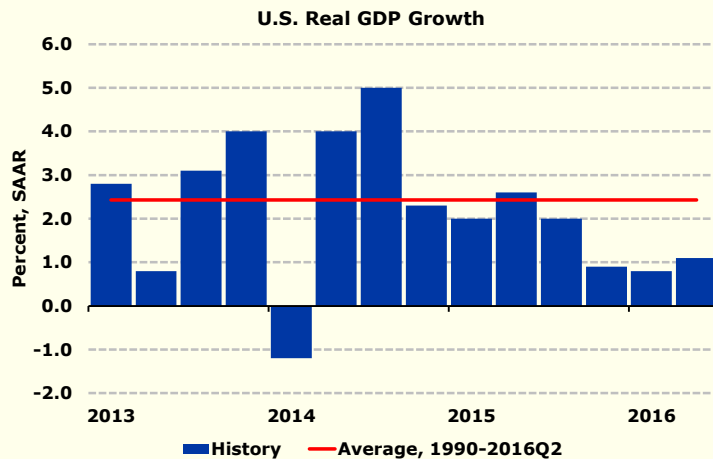
Source: U.S. Census Bureau, data through July 2016

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## U.S. economic growth weakened in the last three quarters



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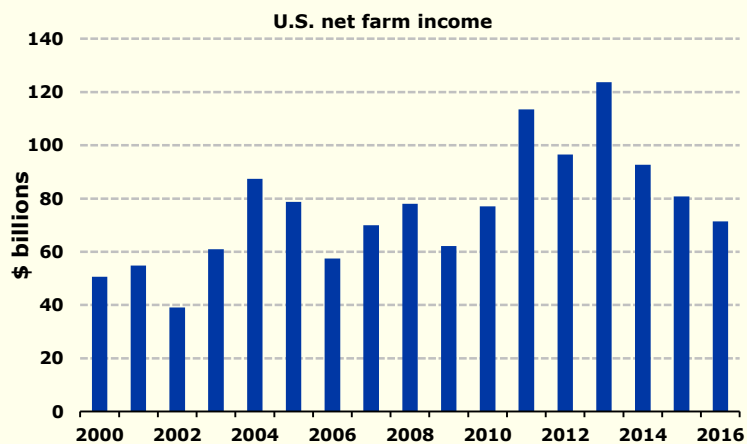
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Source: U.S. Dept. of Commerce, BEA, data through 2016 Q2

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## 2016 is expected to be third consecutive year with declining farm sector income



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Source: U.S. Dept. of Agriculture, 2016 Farm Sector Forecast; historical data through 2015

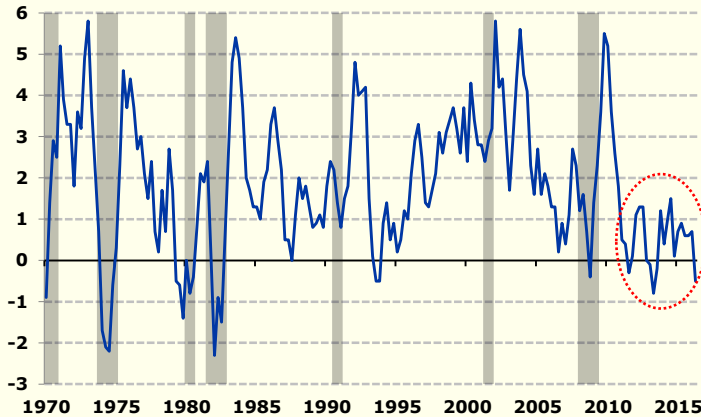
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## Labor productivity has remained low since 2011

Labor productivity, year over year % change



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Source: U.S. Bureau of Labor Statistics, data through 2016 Q2

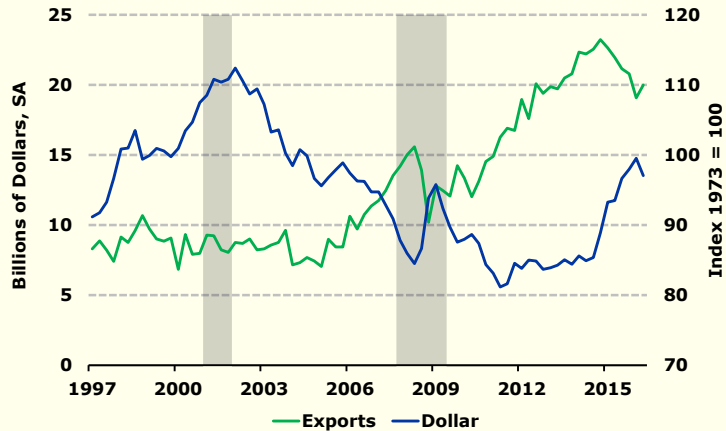
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## Strong dollar is contributing to a decline in exports

Washington Exports and U.S. Dollar



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Source: Wiser Trade, Federal Reserve Bank of St. Louis; data through 2016Q2

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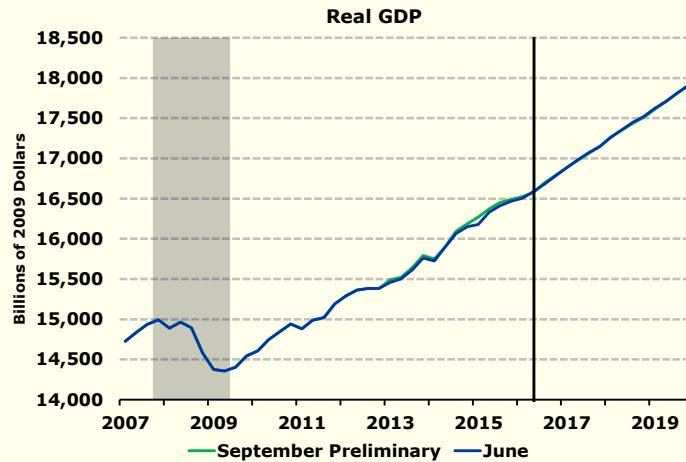
## Real GDP is similar to the June forecast

2015 real GDP was revised higher but the forecast for growth in 2016 and 2017 is lower than in June.

The level at the end of 2021 is almost identical to the June forecast.

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Source: ERFC September 2016 Preliminary forecast; data through Q2 2016

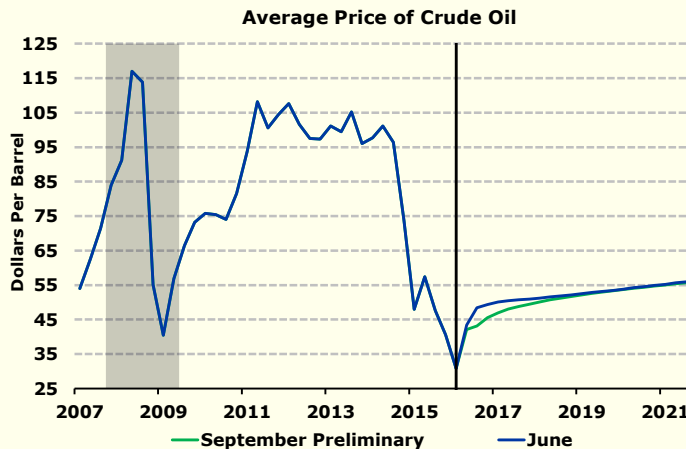
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## Oil prices are slightly lower in the near term compared to the June forecast

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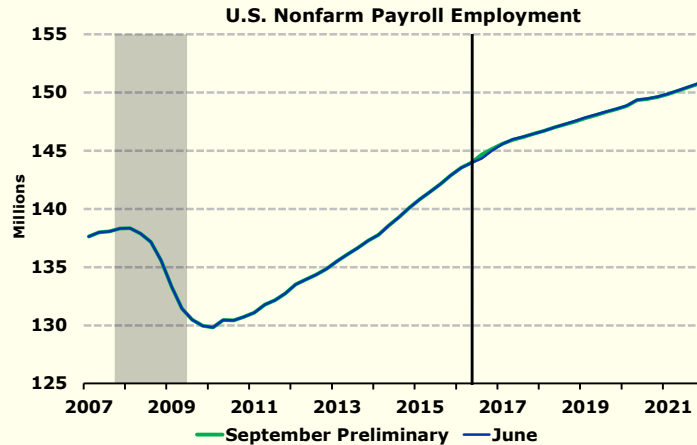
Source: DOE, ERFC September 2016 Preliminary forecast; historical data through 2016Q2

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## The U.S. nonfarm payroll employment forecast is virtually unchanged from June

Employment growth picked up in June and July after disappointing growth in April and May.



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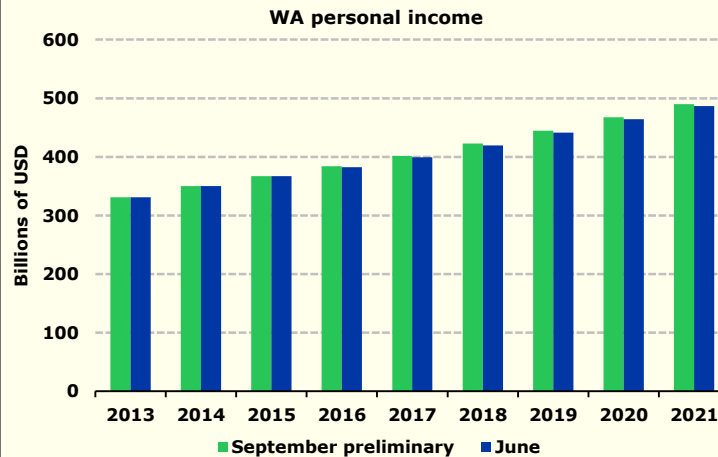
Source: ERFC September 2016 Preliminary forecast; data through Q2 2016

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## WA personal income is slightly stronger than in June



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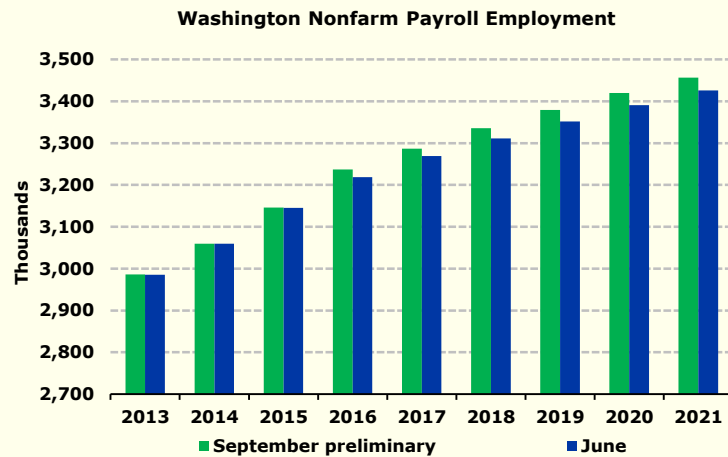
Source: ERFC September 2016 Preliminary forecast; historical data through 2015

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## Washington employment forecast is higher than in June



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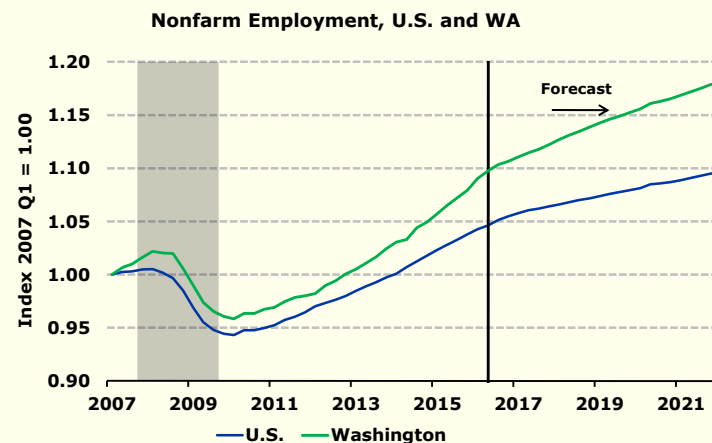
Source: ERFC September 2016 Preliminary forecast; historical data through 2015

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## Washington employment will continue to grow slightly faster than the U.S.



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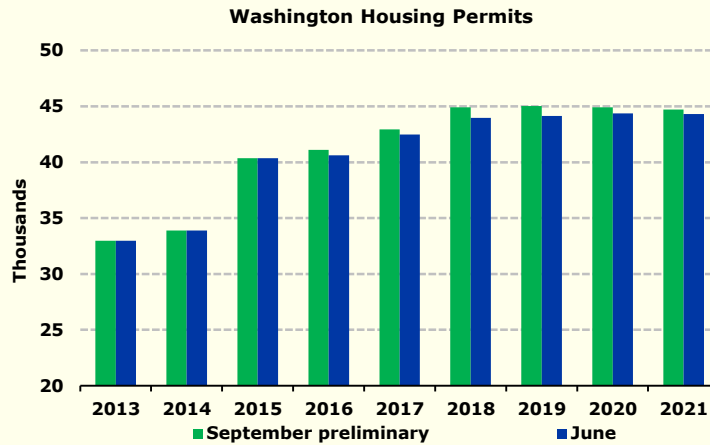
Source: ERFC September 2016 Preliminary forecast; historical data through 2016Q2

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## Washington housing permits forecast is slightly higher compared to June



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Source: ERFC September 2016 Preliminary forecast; historical data through 2015

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## Wall Street Journal economist survey indicates risk of recession has increased but remains low



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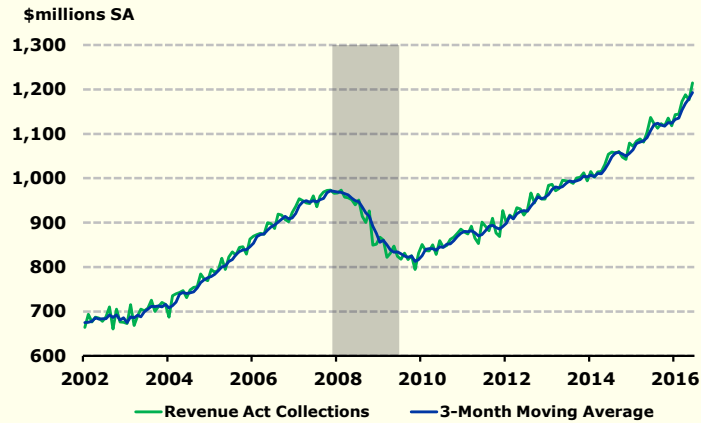
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Source: Wall Street Journal surveys; forecasts through August 2016

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## Revenue Act collections for June economic activity were strong



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\* Adjusted for large one-time transactions, amnesty payments and reporting frequency change, current definition of Revenue Act  
Source: DOR and ERFC; monthly data through estimated June 2016 activity

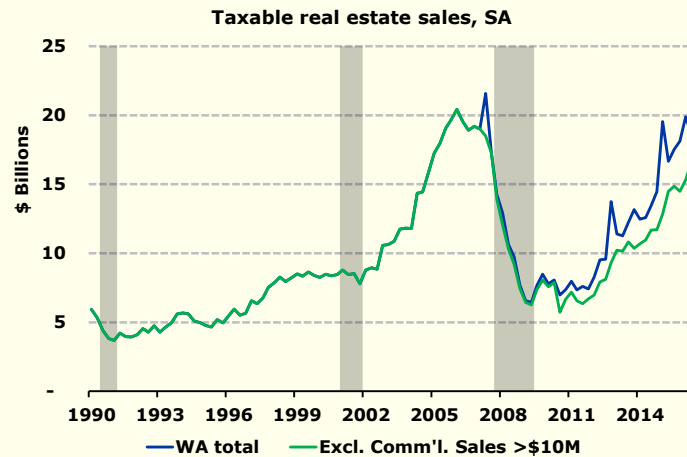
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## Large commercial property sales continue to have major impact on REET collections

Large commercial property sales over \$10 million totaled \$1.6 billion in July.

Recent strong growth in residential activity is due more to price than volume.



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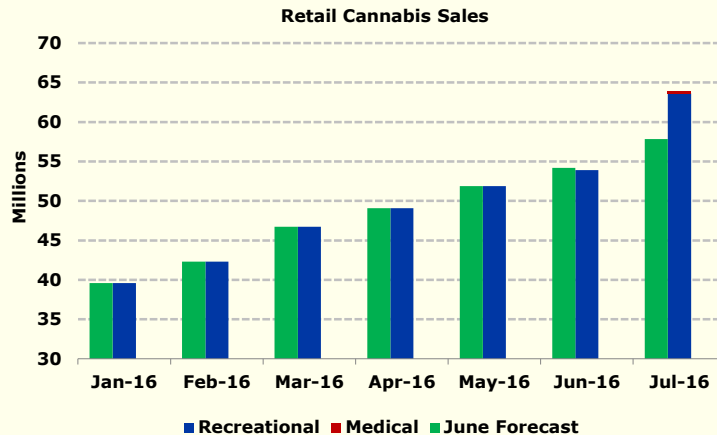
Source: ERFC, data through 2016 Q2

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## Cannabis revenue continues to increase

Retail medical sales became subject to the 37% excise tax on July 1, 2016



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Source: LCB, ERFC; data through July 2016

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## Revenue collections to date

Special factors:

\$27.3 million audit and refund payments that were not anticipated in the June forecast

**Collections Variance Since June Forecast  
(June 11, 2016 – August 10, 2016)  
dollars in thousands**

	<u>Estimate</u>	<u>Actual</u>	<u>Difference</u>	<u>Pct.</u>
Dept. of Revenue	\$2,878,935	\$3,007,961	\$129,026	4.5%
All other agencies	\$21,376	\$21,163	(213)	(1.0%)
<b>Total GF-S</b>	<b>\$2,900,311</b>	<b>\$3,029,124</b>	<b>\$128,813</b>	<b>4.4%</b>
Total excluding special factors	<b>\$2,900,311</b>	<b>\$3,001,833</b>	<b>\$101,522</b>	<b>3.5%</b>

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## Conclusion

- The WA economic forecast is slightly stronger than in June; we continue to expect moderate growth
- As has been the case for some time, Washington is continuing to outperform the nation by a small margin
- Threats to economic expansion include slower domestic and international economic growth, the impact of a stronger dollar on exports, and a slowdown in labor productivity
- The next monthly revenue collection report will be available on September 12<sup>th</sup> and the revenue forecast will be presented on September 21<sup>st</sup>

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## Questions



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**Economic & Revenue Forecast Council**  
1025 E. Union Avenue, Suite 544  
Olympia WA 98504-0912

[www.ercf.wa.gov](http://www.ercf.wa.gov)  
360-534-1560



**U.S. Economic Forecast Comparison**  
August 2016

	2016Q2	2016Q3	2016Q4	2017Q1	2016	2017	2018	2019	2020	2021
<b>Real GDP, Percent Change, Annual Rate</b>										
ERFC (Preliminary September)	1.2	2.9	2.3	2.2	1.5	2.2	2.2	2.1	2.2	2.1
Global Insight	1.2	3.0	2.6	2.7	1.6	2.4	2.4	2.2	2.3	2.3
Economy.com	1.2	3.4	3.0	3.3	1.6	2.9	2.6			
Blue Chip Average*	1.2	2.8	2.3	2.2	1.5	2.2	2.2	2.1	2.2	2.1
Blue Chip Top 10*	1.2	3.8	2.8	2.6	1.7	2.5	2.6	2.6	2.6	2.5
Blue Chip Bottom 10*	1.2	2.1	1.8	1.7	1.4	1.9	1.7	1.5	1.8	1.7
<b>Real Consumption, Percent Change, Annual Rate</b>										
ERFC (Preliminary September)	4.2	2.6	2.5	2.4	2.6	2.5	2.3	2.2	2.2	2.2
Global Insight	4.2	3.5	2.6	2.2	2.7	2.6	2.3	2.6	2.5	2.4
Economy.com	4.2	3.1	2.9	3.5	2.7	3.2	3.1			
Blue Chip Average*	4.2	2.7	2.5	2.3	2.6	2.5	2.3	2.2	2.2	2.2
Blue Chip Top 10*	4.2	3.5	3.1	2.7	2.8	2.9	2.7	2.6	2.5	2.5
Blue Chip Bottom 10*	4.2	2.1	2.0	2.0	2.4	2.2	1.9	1.6	1.9	1.8
<b>Federal Funds Rate</b>										
ERFC (Preliminary September)	0.4	0.4	0.5	0.7	0.4	1.0	1.7	2.7	3.0	3.0
Global Insight	0.4	0.4	0.5	0.7	0.4	1.0	1.7	2.7	3.0	3.0
Economy.com	0.4	0.4	0.6	0.7	0.4	0.9	2.2			
<b>Three Month T-Bill Rate</b>										
ERFC (Preliminary September)	0.3	0.3	0.4	0.6	0.3	0.9	1.6	2.5	2.8	2.8
Global Insight	0.3	0.3	0.4	0.6	0.3	0.9	1.6	2.5	2.8	2.8
Blue Chip Average*	0.3	0.3	0.4	0.6	0.3	0.9	2.3	2.7	2.9	3.0
Blue Chip Top 10*	0.3	0.3	0.6	0.8	0.3	1.2	3.3	3.8	3.8	3.7
Blue Chip Bottom 10*	0.3	0.3	0.3	0.4	0.3	0.6	1.5	1.6	1.9	2.2
<b>10-Yr. T-Note Yield</b>										
ERFC (Preliminary September)	1.8	1.6	1.7	2.0	1.7	2.3	2.8	3.5	3.7	3.7
Global Insight	1.8	1.5	1.7	2.0	1.7	2.3	2.9	3.5	3.8	3.8
Economy.com	1.8	1.7	2.0	2.3	1.8	2.9	3.9			
Blue Chip Average*	1.8	1.6	1.7	1.9	1.7	2.1	3.4	3.7	3.8	3.9
Blue Chip Top 10*	1.8	1.7	1.9	2.2	1.8	2.5	4.2	4.4	4.5	4.5
Blue Chip Bottom 10*	1.8	1.5	1.5	1.5	1.6	1.7	2.6	2.8	3.0	3.2
<b>Consumer Price Index, Percent Change, Annual Rate</b>										
ERFC (Preliminary September)	2.5	1.8	3.3	1.9	1.3	2.3	2.1	2.1	2.3	2.3
Global Insight	2.5	1.2	3.5	2.5	1.2	2.5	2.4	2.4	2.6	2.7
Economy.com	2.5	1.8	1.8	2.6	1.2	2.3	2.7			
Blue Chip Average*	2.5	2.0	2.2	2.3	1.3	2.3	2.3	2.3	2.3	2.3
Blue Chip Top 10*	2.5	2.7	2.9	2.7	1.4	2.7	2.8	2.8	2.7	2.7
Blue Chip Bottom 10*	2.5	1.4	1.5	1.8	1.2	2.0	1.9	1.9	1.9	2.0
<b>Payroll Employment, Millions</b>										
ERFC (Preliminary September)	144.0	144.7	145.2	145.6	144.3	146.0	147.1	148.2	149.3	150.3
Percent Change, Annual Rate	1.3	1.9	1.4	1.2	1.8	1.2	0.7	0.7	0.7	0.7
Global Insight	144.0	144.6	145.1	145.6	144.3	146.1	147.3	148.4	149.8	151.0
Percent Change, Annual Rate	1.3	1.7	1.4	1.5	1.7	1.2	0.8	0.8	0.9	0.9
Economy.com	144.0	144.6	145.2	145.8	144.3	146.6	148.7			
Percent Change, Annual Rate	1.3	1.7	1.8	1.6	1.8	1.6	1.4			
<b>Unemployment Rate, Percent</b>										
ERFC (Preliminary September)	4.9	4.8	4.7	4.7	4.8	4.7	4.6	4.6	4.7	4.8
Global Insight	4.9	4.9	4.8	4.7	4.9	4.7	4.8	4.9	5.0	5.0
Economy.com	4.9	4.9	4.9	4.8	4.9	4.7	4.5			
Blue Chip Average*	4.9	4.8	4.7	4.7	4.8	4.6	4.6	4.7	4.7	4.8
Blue Chip Top 10*	4.9	4.9	4.9	4.8	4.9	4.8	5.1	5.2	5.1	5.2
Blue Chip Bottom 10*	4.9	4.7	4.6	4.4	4.8	4.3	4.1	4.2	4.2	4.3
<b>Real Disposable Personal Income, Percent Change, Annual Rate</b>										
ERFC (Preliminary September)	1.2	3.1	1.9	2.6	2.5	2.3	2.7	2.6	2.4	2.3
Global Insight	1.2	3.9	2.3	2.7	2.6	2.6	2.9	2.9	2.7	2.5
Blue Chip Average*	1.2	2.2	2.3	2.6	2.4	2.3	2.6	2.4	2.4	2.4
Blue Chip Top 10*	1.2	2.9	3.1	3.3	2.6	2.8	3.5	3.4	3.0	3.0
Blue Chip Bottom 10*	1.2	1.4	1.7	1.9	2.2	1.9	2.0	1.6	1.9	1.8
<b>West Texas Intermediate</b>										
ERFC (Preliminary September)	45.6	44.7	45.3	47.0	42.3	48.5	50.7	52.1	53.2	54.2
Global Insight	45.6	44.1	47.6	52.5	42.7	56.2	61.1	68.6	76.8	86.5
Economy.com	45.6	47.8	50.3	53.8	44.3	56.6	62.7			

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

U.S. Forecast Comparison	Fiscal Years					
	2016	2017	2018	2019	2020	2021
<b>Real GDP</b>						
Billions of 2009 dollars						
September Preliminary Forecast	16,511	16,835	17,206	17,566	17,951	18,339
<i>Growth</i>	1.7%	2.0%	2.2%	2.1%	2.2%	2.2%
June Forecast	16,494	16,832	17,209	17,576	17,957	18,344
<i>Growth</i>	1.9%	2.0%	2.2%	2.1%	2.2%	2.2%
Difference in level	17	3	-3	-10	-6	-5
<i>Difference in growth forecast</i>	<b>-0.2%</b>	<b>-0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Real Consumption</b>						
Billions of 2009 dollars						
September Preliminary Forecast	11,356	11,663	11,936	12,203	12,471	12,747
<i>Growth</i>	2.7%	2.7%	2.3%	2.2%	2.2%	2.2%
June Forecast	11,359	11,641	11,915	12,182	12,449	12,724
<i>Growth</i>	2.8%	2.5%	2.4%	2.2%	2.2%	2.2%
Difference in level	-3	23	22	21	21	23
<i>Difference in growth forecast</i>	<b>-0.1%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Implicit Price Deflator</b>						
Index 2009 = 100						
September Preliminary Forecast	110.0	111.7	113.5	115.5	117.6	119.9
<i>Growth</i>	0.7%	1.5%	1.6%	1.7%	1.9%	1.9%
June Forecast	110.0	111.8	113.9	116.0	118.3	120.5
<i>Growth</i>	0.7%	1.7%	1.8%	1.9%	1.9%	1.9%
Difference in level	0.0	-0.2	-0.4	-0.6	-0.7	-0.6
<i>Difference in growth forecast</i>	<b>-0.1%</b>	<b>-0.2%</b>	<b>-0.2%</b>	<b>-0.2%</b>	<b>-0.1%</b>	<b>0.0%</b>
<b>Unemployment Rate</b>						
Percent of Labor Force						
September Preliminary Forecast	5.0%	4.7%	4.6%	4.6%	4.7%	4.7%
June Forecast	5.0%	4.6%	4.5%	4.5%	4.6%	4.7%
<i>Difference in forecast</i>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.1%</b>
<b>30 Year Fixed Mortgage Rate</b>						
Annual Average						
September Preliminary Forecast	3.8%	3.7%	4.5%	5.1%	5.7%	5.8%
June Forecast	3.8%	4.0%	4.5%	5.4%	5.7%	5.7%
<i>Difference in forecast</i>	<b>0.0%</b>	<b>-0.3%</b>	<b>0.0%</b>	<b>-0.3%</b>	<b>0.1%</b>	<b>0.1%</b>
<b>3 Month T-Bill Rate</b>						
Annual Average						
September Preliminary Forecast	0.2%	0.5%	1.2%	2.0%	2.7%	2.8%
June Forecast	0.2%	0.7%	1.6%	2.5%	2.8%	2.8%
<i>Difference in forecast</i>	<b>0.0%</b>	<b>-0.1%</b>	<b>-0.4%</b>	<b>-0.5%</b>	<b>-0.1%</b>	<b>0.0%</b>

**Washington Forecast Comparison**
**Fiscal Years**

	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Real Personal Income</b>						
Billions of 2009 dollars						
September Preliminary Forecast	341.7	351.7	362.9	375.2	387.3	398.9
<i>Growth</i>	4.0%	2.9%	3.2%	3.4%	3.2%	3.0%
June Forecast	340.7	349.2	359.5	370.9	382.7	394.5
<i>Growth</i>	3.6%	2.5%	3.0%	3.2%	3.2%	3.1%
Difference in level	1.0	2.6	3.3	4.3	4.6	4.4
<b><i>Difference in growth forecast</i></b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>-0.1%</b>
<b>Nominal Personal Income</b>						
Billions of dollars						
September Preliminary Forecast	376.0	392.7	411.9	433.3	455.6	478.2
<i>Growth</i>	4.7%	4.5%	4.9%	5.2%	5.1%	5.0%
June Forecast	374.8	390.5	409.4	430.4	452.7	475.5
<i>Growth</i>	4.3%	4.2%	4.8%	5.1%	5.2%	5.0%
Difference in level	1.2	2.3	2.5	2.9	2.9	2.8
<b><i>Difference in growth forecast</i></b>	<b>0.4%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>-0.1%</b>
<b>Nonfarm Payroll Employment</b>						
Thousands						
September Preliminary Forecast	3,194.1	3,264.2	3,310.5	3,357.7	3,399.3	3,436.6
<i>Growth</i>	2.9%	2.2%	1.4%	1.4%	1.2%	1.1%
June Forecast	3,185.7	3,245.1	3,290.3	3,331.8	3,371.7	3,407.7
<i>Growth</i>	2.7%	1.9%	1.4%	1.3%	1.2%	1.1%
Difference in level	8.4	19.1	20.3	25.9	27.6	28.9
<b><i>Difference in growth forecast</i></b>	<b>0.3%</b>	<b>0.3%</b>	<b>0.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.0%</b>
<b>Housing Permits</b>						
Units Authorized, Thousands						
September Preliminary Forecast	39.8	41.5	44.3	44.9	45.0	44.8
<i>Growth</i>	3.0%	4.4%	6.6%	1.5%	0.1%	-0.3%
June Forecast	39.1	41.6	43.4	44.0	44.3	44.4
<i>Growth</i>	1.3%	6.2%	4.5%	1.4%	0.6%	0.2%
Difference in level	0.7	0.0	0.9	0.9	0.7	0.4
<b><i>Difference in growth forecast</i></b>	<b>1.7%</b>	<b>-1.8%</b>	<b>2.1%</b>	<b>0.1%</b>	<b>-0.5%</b>	<b>-0.6%</b>

**Year-Over-Year Employment Growth by Industry  
(July 2015 to July 2016)  
Washington vs. U.S.**

	Washington		U.S.
	(000)	% Chg.	% Chg.
<b>Total</b>	<b>91.8</b>	<b>2.9%</b>	<b>1.7%</b>
Electronic Shopping and Mail-Order Houses	6.1	21.6%	5.2%
Software Publishers	3.5	6.3%	6.3%
Construction	10.7	6.2%	3.2%
Information Excluding Software	2.8	4.8%	0.0%
Professional and Business Services	14.2	3.6%	2.8%
Leisure and Hospitality	11.3	3.6%	2.8%
Transportation, Warehousing and Utilities	3.5	3.4%	0.9%
Other Services	3.8	3.3%	1.1%
Financial Activities	4.7	3.2%	2.0%
Education and Health Services	13.4	3.0%	2.9%
State and Local Gov Education	5.3	2.1%	0.5%
State and Local Gov Non-Education	4.1	2.0%	0.9%
Wholesale Trade	1.6	1.2%	0.8%
Manufacturing Excluding Aerospace	1.2	0.6%	-0.3%
Mining and Logging	0.0	0.6%	-15.9%
Aerospace Product and Parts Manufacturing	-3.0	-3.1%	-0.6%
Information	6.4	5.6%	0.8%
Retail Trade	12.1	3.4%	1.8%
Manufacturing	-1.7	-0.6%	-0.3%

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