U.S. and Washington State Economic Outlook

Presented to
The Institute for Real Estate Management

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Executive Director

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Seattle, Washington
Economic and Revenue Forecast Council Organization Chart

**ERFC**
- Created in 1984 as part of Dept. of Revenue
- Became separate agency in 1990

**Office of the Governor**
- Director, OFM
- Director, DOR

**Economic and Revenue Forecast Council**
- Member, Democratic Caucus
- Member, Republican Caucus
- State Treasurer
- House of Representatives
- Senate

**State Treasurer**
- Member, Democratic Caucus
- Member, Republican Caucus

**Senate**
- Member, Democratic Caucus
- Member, Republican Caucus
The national economic forecast is based on a modified version of the IHS Markit model of the U.S. economy.

ERFC Forecast Process

1. National Economic Forecast
2. Preliminary Washington State Economic Forecast
3. Review by Work Group
4. Review by Governor’s Council of Economic Advisors & Economic and Revenue Forecast Council
5. Final National and Washington Economic Forecast
6. ERFC and Revenue-Generating Agencies Create Revenue Forecasts
7. Review by Forecast Council
8. Final Washington General Fund Revenue Forecast
Forecast Summary

- The preliminary economic forecast for the U.S. is very similar to the June forecast.

- The preliminary economic forecast for WA has higher personal income and employment than the June forecast.

- Downside risks to the baseline include uncertainty regarding trade and fiscal policy, geopolitical concerns and higher interest rates.

- Revenue collections since the June forecast are $75 million (2.2%) above expectations.
Forecast risks

Upside

• Elevated consumer, business confidence could translate into stronger growth
• Strong U.S., WA labor markets

Downside

• International trade and fiscal policy uncertainty
• Geopolitical risks: North Korea, China, Russia, Iran, Venezuela
• Impact of rising interest rates
• Maturing economic expansion
Consumer confidence remains at an elevated level

Sources: University of Michigan, Conference Board; data through August 2018
Small business optimism and sales expectations remain above pre-recession levels

Source: National Federation of Independent Business; data through July 2018
Preliminary U.S. retail trade and food services sales (SA) increased 6.1% YOY in June and 6.4% in July.

Excluding autos and gas, sales were up 5.4% YOY in June and 5.6% in July.

Source: U.S. Department of Commerce, Census Bureau; Data through July 2018 advance
Both WA and U.S. initial unemployment claims remain low

WA, U.S. job growth remain strong

Source: Bureau of Labor Statistics, ERFC; data through July 2018
After 10 quarters of decline, exports have grown in the last three quarters.

Source: WISERTrade, data through 2018 Q2
So far this year, WA exports to Canada, Japan are up but exports to China are down.

Total exports declined 3.9% in 2017 but increased 0.6% in fourth quarter 2017 and 3.9% in first quarter 2018 and 3.7% in second quarter 2018.

Source: WISERTrade; data through July 2018
## Tariffs imposed on selected WA exports as of August 23rd

<table>
<thead>
<tr>
<th>Product</th>
<th>Country</th>
<th>Tariff</th>
<th>WA 2017 exports (millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ultrasonic Scanning Apparatus</td>
<td>China</td>
<td>25%</td>
<td>$ 281.5</td>
</tr>
<tr>
<td>Wheat</td>
<td>China</td>
<td>25%</td>
<td>$ 248.2</td>
</tr>
<tr>
<td>Apples, Fresh</td>
<td>Mexico</td>
<td>20%</td>
<td>$ 125.6</td>
</tr>
<tr>
<td>Apples, Fresh</td>
<td>China</td>
<td>25%</td>
<td>$ 17.6</td>
</tr>
<tr>
<td>Wood pulp</td>
<td>China</td>
<td>25%</td>
<td>$ 119.2</td>
</tr>
<tr>
<td>Iron or Non-alloy Bars, Rods</td>
<td>Canada</td>
<td>25%</td>
<td>$ 111.5</td>
</tr>
<tr>
<td>Hay, Clover, Vetches</td>
<td>China</td>
<td>25%</td>
<td>$ 101.9</td>
</tr>
<tr>
<td>Cherries, Fresh</td>
<td>China</td>
<td>25%</td>
<td>$ 99.7</td>
</tr>
<tr>
<td>Aluminum Plates Etc. &gt;.2 mm</td>
<td>EU</td>
<td>25%</td>
<td>$ 78.8</td>
</tr>
<tr>
<td>Aluminum Plates Etc. &gt; .2 mm</td>
<td>Canada</td>
<td>10%</td>
<td>$ 43.1</td>
</tr>
<tr>
<td>Aluminum Casks, Etc.&lt; 300 Liters</td>
<td>Canada</td>
<td>10%</td>
<td>$ 56.9</td>
</tr>
<tr>
<td>Potatoes, Frozen</td>
<td>China</td>
<td>25%</td>
<td>$ 54.4</td>
</tr>
<tr>
<td>Potatoes, Frozen</td>
<td>Mexico</td>
<td>20%</td>
<td>$ 36.9</td>
</tr>
</tbody>
</table>

Source: WiserTrade, Economy.com
Mortgage debt is slightly above its previous 2008 peak

Source: Federal Reserve System Board of Governors, data through 2018Q1
Outstanding debt securities, U.S. non-financial corporations

Debt securities include commercial paper, bonds and other securities traded in financial markets.

Source: Federal Reserve Bank of St. Louis, data through 2017 Q3.
While corporate debt has risen, it is below pre-recession levels relative to stock values.

Source: Federal Reserve Bank of St. Louis, data through 2018 Q1
Probability of recession by year, May 2018 WSJ Survey of Economists

Macroeconomic Advisors recession probabilities:
1 year = 20%
5 years = 80%

Source: Wall Street Journal, 2018
In recent survey, most economists saw downside risks to their forecast over the next 12 months.

Source: Wall Street Journal monthly economist survey, August 2018
Capacity utilization is typically at or above 80% before the start of a recession.

Source: Federal Reserve Bank of St. Louis, data through July 2018
An inverted yield curve (short-term interest rates > long-term rates) is a consistent recession predictor.

As of July 2018, 10 year Treasury bond yields were 0.9% above three month Treasury bond yields.

10 year – 3 month Treasury bond yields

Source: Federal Reserve Bank of St. Louis, data through July 2018
Washington vs U.S. employment growth: July 2017 to July 2018

Average weekly wage growth in WA has been at or above national rates since 2011.

Growth in average weekly wages reflects both changes in hours worked and in hourly pay.

Source: U.S. Bureau of Labor Statistics, data through 2018 Q1
## Population growth 2014-2017; top 10 Washington counties

<table>
<thead>
<tr>
<th>County</th>
<th>Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>7.9%</td>
</tr>
<tr>
<td>Snohomish</td>
<td>6.5%</td>
</tr>
<tr>
<td>Clark</td>
<td>5.9%</td>
</tr>
<tr>
<td>Kittitas</td>
<td>5.5%</td>
</tr>
<tr>
<td>Thurston</td>
<td>5.2%</td>
</tr>
<tr>
<td>Pierce</td>
<td>4.8%</td>
</tr>
<tr>
<td>Whitman</td>
<td>4.7%</td>
</tr>
<tr>
<td>Douglas</td>
<td>4.5%</td>
</tr>
<tr>
<td>Franklin</td>
<td>4.2%</td>
</tr>
<tr>
<td>Whatcom</td>
<td>4.0%</td>
</tr>
<tr>
<td>WA</td>
<td>2.6%</td>
</tr>
</tbody>
</table>

Source: Office of Financial Management, U.S. Census Bureau
Average weekly wages, 2017; top 10 Washington counties

Includes part-time and full-time workers

<table>
<thead>
<tr>
<th>County</th>
<th>Average Weekly Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>King</td>
<td>$1,600</td>
</tr>
<tr>
<td>Snohomish</td>
<td>$1,100</td>
</tr>
<tr>
<td>Benton</td>
<td>$1,000</td>
</tr>
<tr>
<td>Clark</td>
<td>$900</td>
</tr>
<tr>
<td>Kitsap</td>
<td>$800</td>
</tr>
<tr>
<td>Klickitat</td>
<td>$700</td>
</tr>
<tr>
<td>Pierce</td>
<td>$600</td>
</tr>
<tr>
<td>Thurston</td>
<td>$500</td>
</tr>
<tr>
<td>Pend Oreille</td>
<td>$400</td>
</tr>
<tr>
<td>Cowlitz</td>
<td>$300</td>
</tr>
<tr>
<td>WA</td>
<td>$200</td>
</tr>
<tr>
<td>U.S.</td>
<td>$1,000</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of Labor Statistics
U.S. residential construction remains below historic levels

Source: U.S. Census Bureau, ERFC; data through July 2018
WA single-family home construction is slowly recovering

Source: U.S. Census Bureau, seasonally adjusted annual rates, data through July 2018
Washington ranks 5th in year-over-year home price growth

Source: Zillow, Data: ZHVI Summary, July 2018
Growth in median home sale price, top 10 WA counties (July 2017 – July 2018)

Source: Zillow Home Value Index Summary, July 2018
Affordability has been decreasing in recent years, especially in King County.

An index score of 100 means a median-income family can afford a median-priced home.

Source: Runstad Center for Real Estate Studies, University of Washington, data through 2018 Q2
Growth in median rents, top 10 WA counties (July 2017 – July 2018)

Includes both single-family and multi-family rentals

- Lewis
- Whitman
- Mason
- Kittitas
- Grant
- Asotin
- Ferry
- Lincoln
- Adams
- Pierce

Source: Zillow Rent Index Summary, July 2018
Seattle area Class A office lease and vacancy rates, 2018 Q2

Lease rate:
Annual, full service per square foot

Source: CBRE, Puget Sound Office Marketview, 2018 Q2
Seattle area industrial lease and vacancy rates, 2018 Q2

Lease rate:
Monthly, per square foot, NNN

Source: CBRE, Puget Sound Industrial Marketview, 2018 Q2
The real GDP forecast is very similar to the June forecast.

The level of real GDP is slightly higher than in June due to the comprehensive revision of the national income and product accounts.

The growth rates are virtually unchanged from the June forecast in 2018-23.

Source: IHS Markit, ERFC; data through Q2 2018
Note: Vertical black line indicates last actual
Oil prices are very slightly above the June forecast

Source: Energy Information Administration, IHS Markit, ERFC; data through Q2 2018
Note: Vertical black line indicates last actual
U.S. nonfarm payroll employment growth is slightly higher than in June.

By the end of 2023, employment is 0.5% higher than in the June forecast.

Source: IHS Markit, ERFC; data through Q2 2018
Note: Vertical black line indicates last actual
Federal funds interest rate forecast is unchanged from June; two more increases expected this year.

The forecast assumes the rate will rise gradually, eventually reaching 3.5% in 2020.

Source: IHS Markit, ERFC September 2018 preliminary forecast; data through Q2 2018
Note: Vertical black line indicates last actual
Washington personal income is slightly higher than in June

First quarter 2018 personal income data were revised up after the June forecast.

Source: ERFC September 2018 Preliminary forecast; historical data through 2017
Washington employment forecast is slightly higher than in June

The nonfarm employment forecast is 16,000 jobs higher (0.5%) this year and 36,000 jobs higher (1.0%) by 2023 compared to June.

Source: ERFC September 2018 Preliminary forecast; historical data through Q2 2018
Washington housing permits forecast is lower this year, higher for 2019 – 2023 compared to June.

Source: ERFC September 2018 Preliminary forecast; historical data through 2017
General Fund - State plus cannabis revenues for 2017-19 biennium

$ MILLIONS

- Sales Tax, 21,087
- B&O, 8,409
- Prop. Tax, 5,045
- REET, 2,062
- Cannabis, 749
- Cigarettes, 723
- Spirits, total, Other, 5,202

Source: ERFC June 2018 forecast
Rev Act growth relative to personal income has rebounded since 2017Q3

Adjusted Rev Act growth YOY:
- 17Q3: 6.4%
- 17Q4: 8.3%
- 18Q1: 8.2%
- 18Q2: 8.8%

June personal income YOY growth estimates:
- 17Q3: 5.4%
- 17Q4: 6.0%
- 18Q1: 5.6%
- 18Q2: 5.9%

*Adjusted for large one-time payments and refunds and payments under the amnesty program

Source: ERFC; Quarterly revenue data through Q2 2018 preliminary, June 2018 income estimates

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Cannabis revenue continues to be volatile

Collections were 1.8% below forecast in August

Collections are 1.1% above forecast since June

Source: LCB, ERFC; data through August 2018
Large commercial property sales have increased recently while residential sales activity has declined.

Large commercial sales (> $10 million) totaled $0.6 billion in May, $1.2 billion in June and $1.4 billion (preliminary) in July.

Excluding the large sales, taxable activity decreased in June and July.

Seasonally Adjusted Taxable Real Estate Excise Activity

$Billions

10
9
8
7
6
5
4
3
2
1
0

Source: ERFC; Monthly data through July 2018 preliminary

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Conclusion

- The Washington economic forecast is slightly stronger than in June

- As has been the case for some time, Washington’s economy is continuing to outperform the nation

- Threats to economic expansion include geopolitical risks, concerns about international trade, and fiscal policy

- The next monthly revenue collection report will be available on September 18\textsuperscript{th} and the revenue forecast will be presented on September 26\textsuperscript{th}
Questions