"The Future"

Presented to
NIGP Excellence in Procurement Summit

Steve Lerch
Executive Director

March 14, 2018
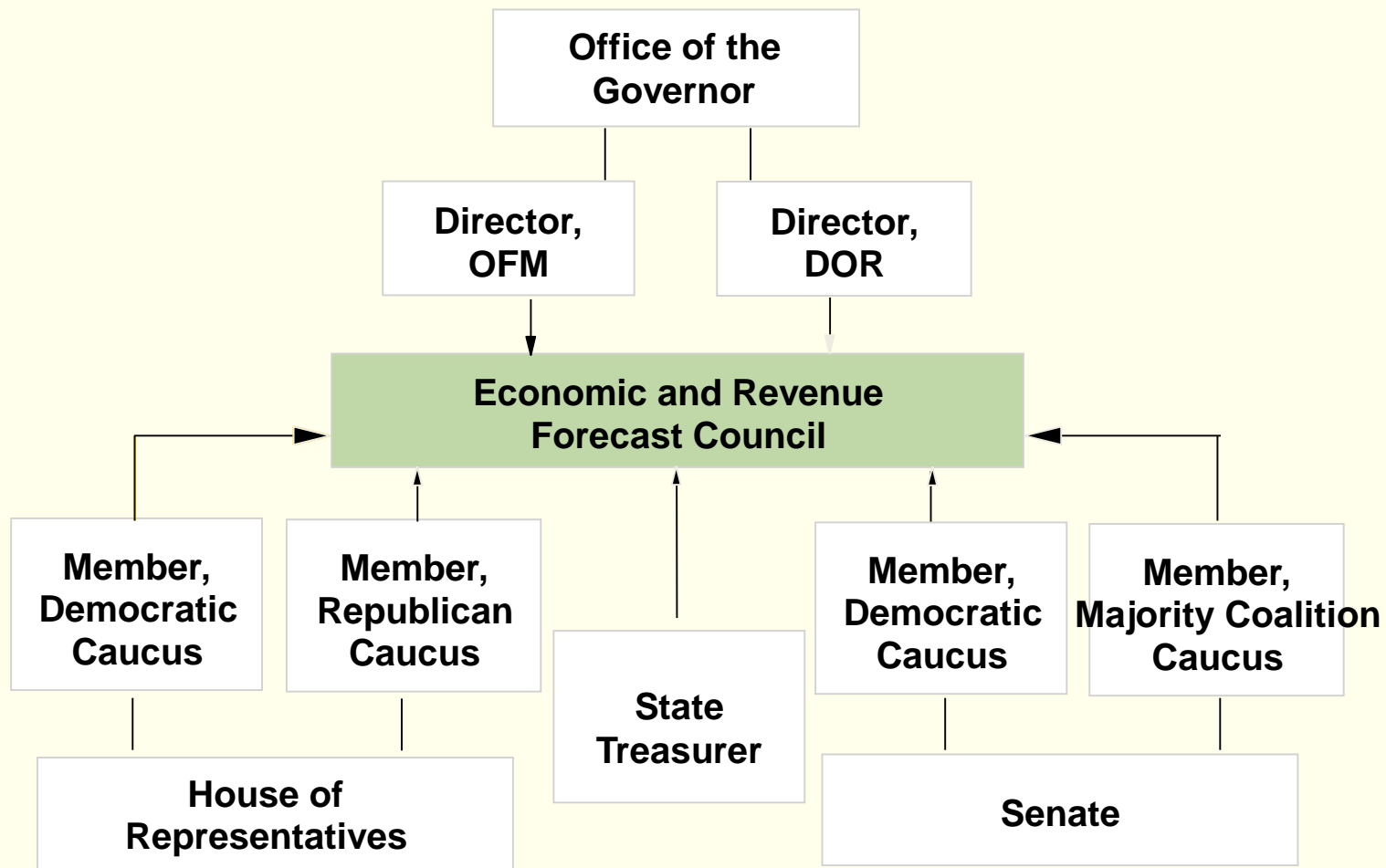Puyallup, Washington

WASHINGTON STATE
ECONOMIC AND REVENUE FORECAST COUNCIL

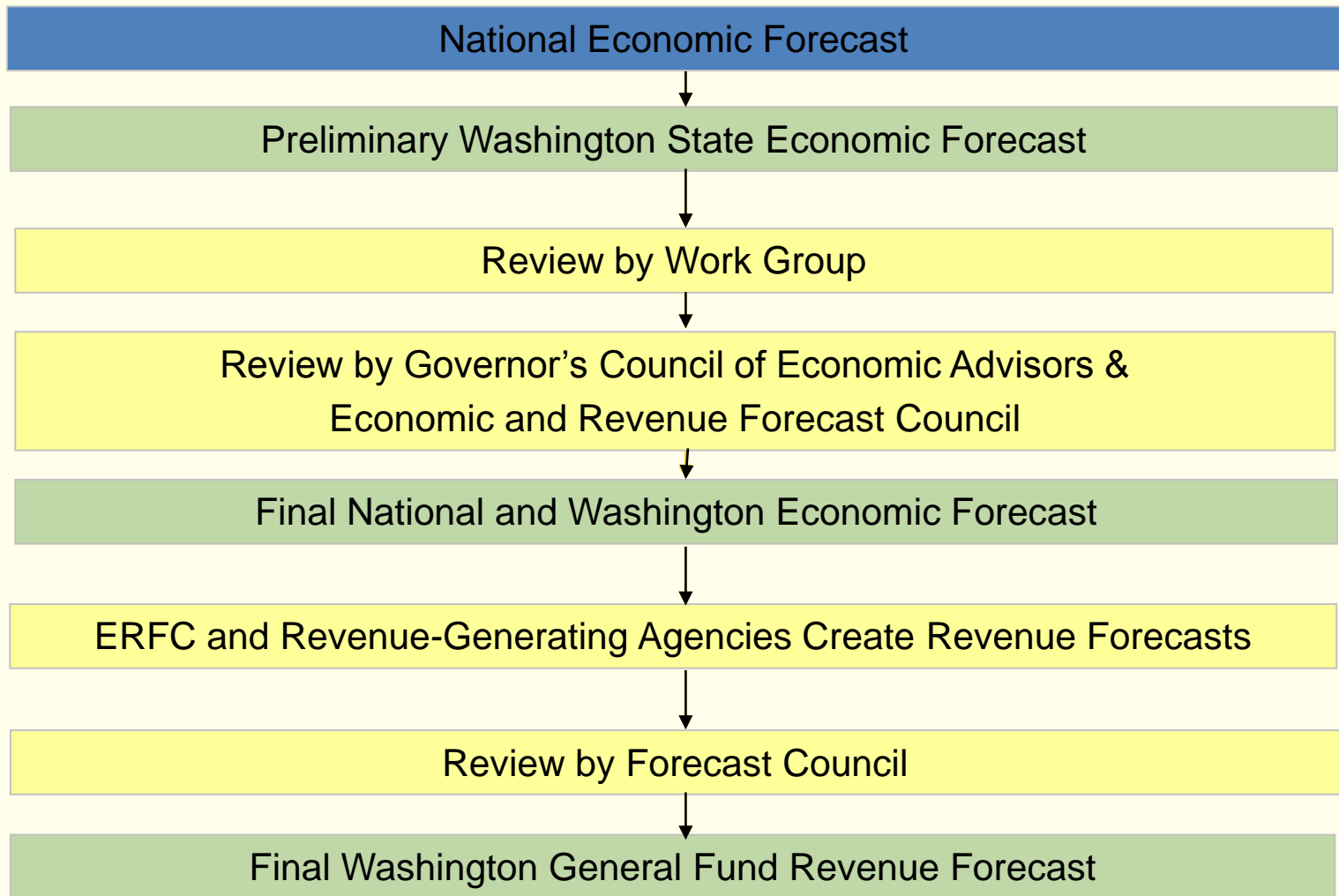# Economic and Revenue Forecast Council Organization Chart

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

Member, Democratic Caucus

Member, Majority Coalition Caucus

House of Representatives

Senate

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

ERFC Forecast Process

The national economic forecast is based on a modified version of the IHS Markit model of the U.S. economy

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┌─────────────────────────────────────────────────────────┐
│              National Economic Forecast                 │
└─────────────────────────────────────────────────────────┘
                          ↓
┌─────────────────────────────────────────────────────────┐
│      Preliminary Washington State Economic Forecast     │
└─────────────────────────────────────────────────────────┘
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┌─────────────────────────────────────────────────────────┐
│                 Review by Work Group                    │
└─────────────────────────────────────────────────────────┘
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┌─────────────────────────────────────────────────────────┐
│   Review by Governor's Council of Economic Advisors &   │
│       Economic and Revenue Forecast Council             │
└─────────────────────────────────────────────────────────┘
                          ↓
┌─────────────────────────────────────────────────────────┐
│    Final National and Washington Economic Forecast      │
└─────────────────────────────────────────────────────────┘
                          ↓
┌─────────────────────────────────────────────────────────┐
│  ERFC and Revenue-Generating Agencies Create Revenue Forecasts │
└─────────────────────────────────────────────────────────┘
                          ↓
┌─────────────────────────────────────────────────────────┐
│               Review by Forecast Council                │
└─────────────────────────────────────────────────────────┘
                          ↓
┌─────────────────────────────────────────────────────────┐
│    Final Washington General Fund Revenue Forecast       │
└─────────────────────────────────────────────────────────┘
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WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Summary

- The forecast now extends through 2023

- The economic forecast for the U.S. is slightly stronger than in November

- The economic forecast for WA has slightly higher personal income than in November

- Federal tax changes have increased after-tax income

- Risks to the baseline include stock market volatility and concerns about international trade and fiscal policy

- The revenue collection variance since the November forecast is $185 million

- GF-S revenue for the 2017-19 biennium has been increased by $647 million, and revenue for the 2019-21 biennium has been increased by $671 million.

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Forecast risks

Upside

- Elevated consumer, business confidence could translate into stronger growth
- Stronger global economic growth

Downside

- International trade and fiscal policy uncertainty
- Stock market volatility could lead to slower household spending
- Federal Reserve raises rates too much or too quickly
- Geopolitical risks: North Korea, Russia, Middle East

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Leading economic indexes for U.S., WA suggest continued growth over at least the next six months
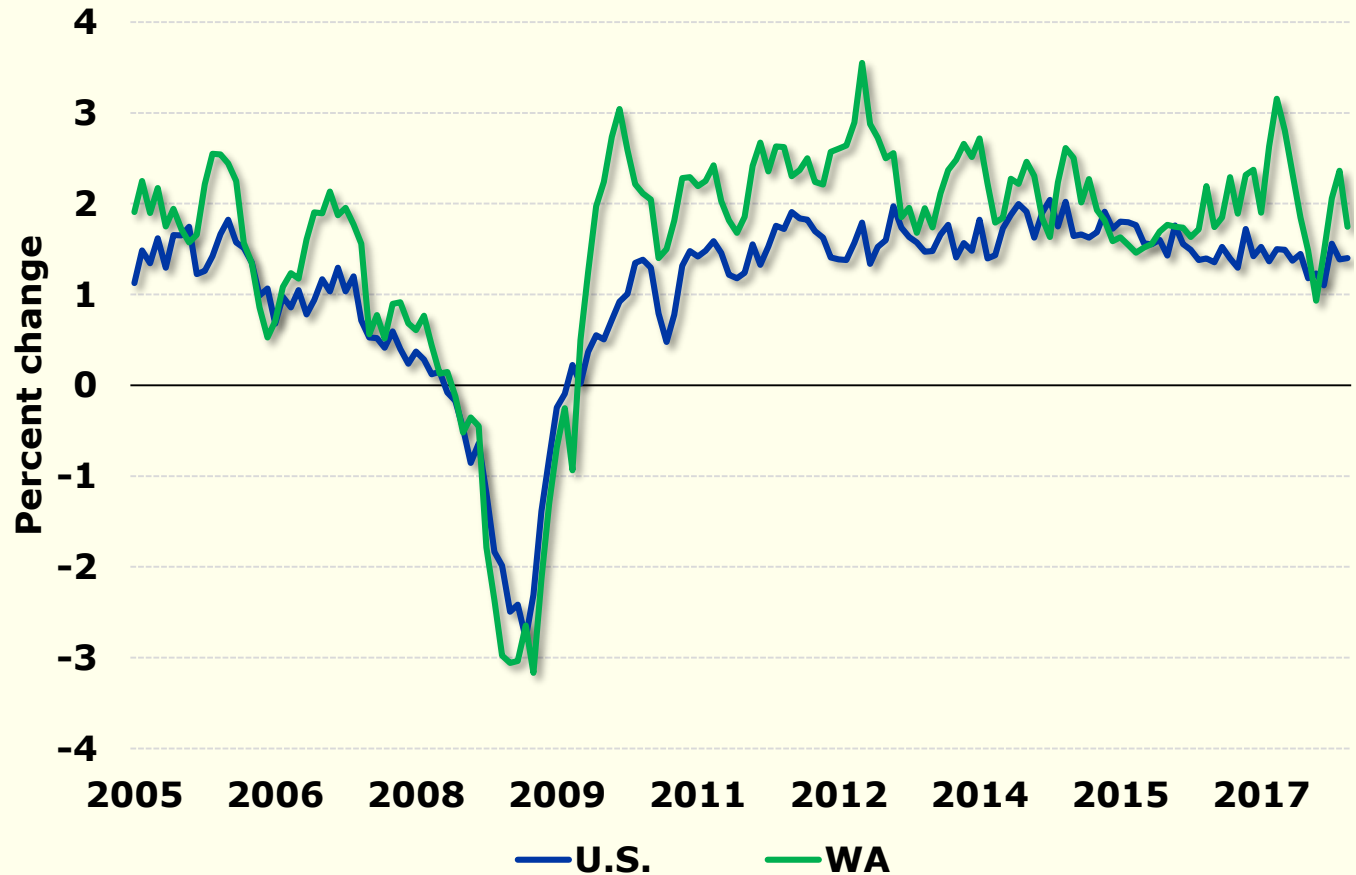
Source: Federal Reserve Bank of Philadelphia, data through December 2017

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This recovery is forecasted to be the longest on record

GCEA members were asked the probability of recession by 2023.

Average probability of those who responded = 88%

Months of Recovery After Reaching Previous Peak in Employment
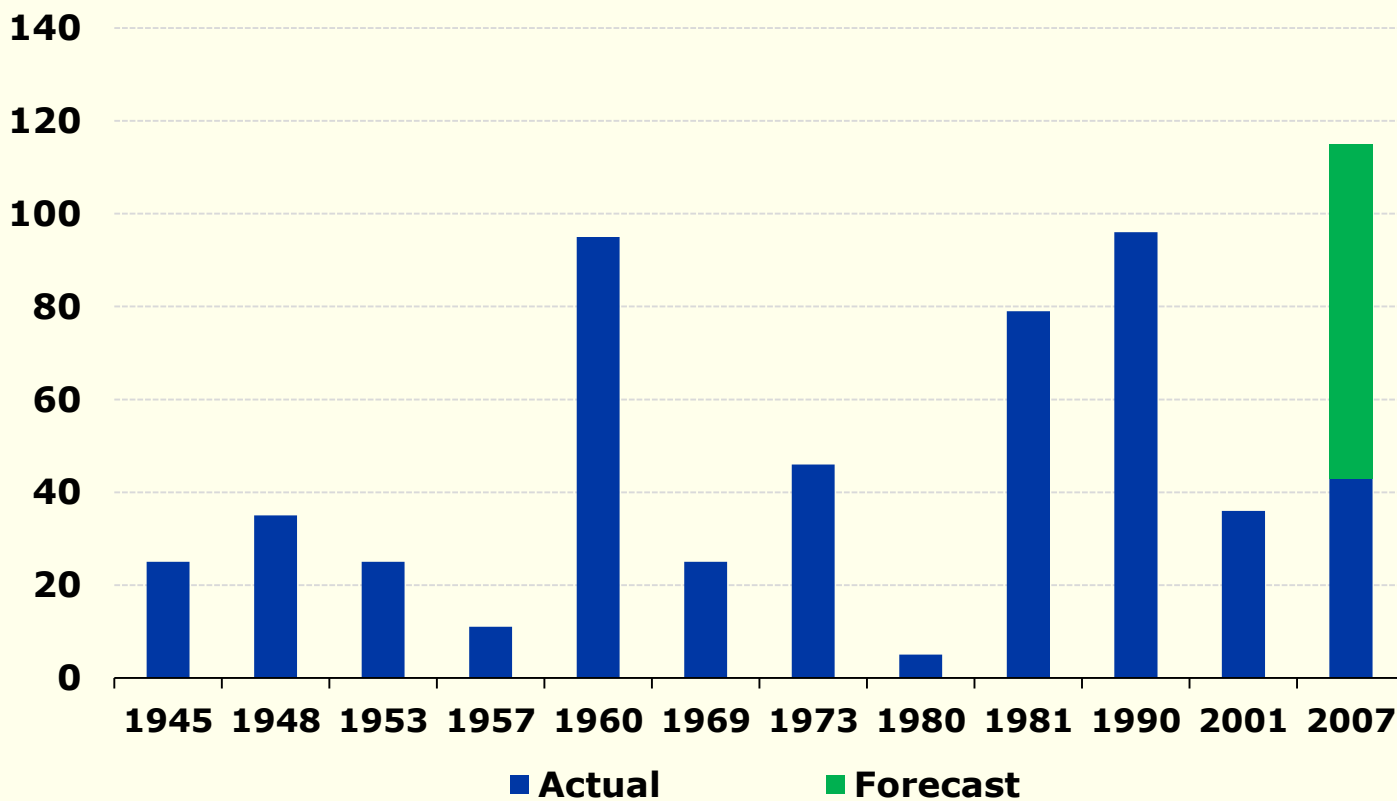
Source: BLS; ERFC February 2018 forecast

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Consumer confidence is at or above pre-recession levels

Index
Mich: 1966Q1 = 100, SA
Conf Board: 1985 =100, SA

Sources: University of Michigan, Conference Board; data through January 2018

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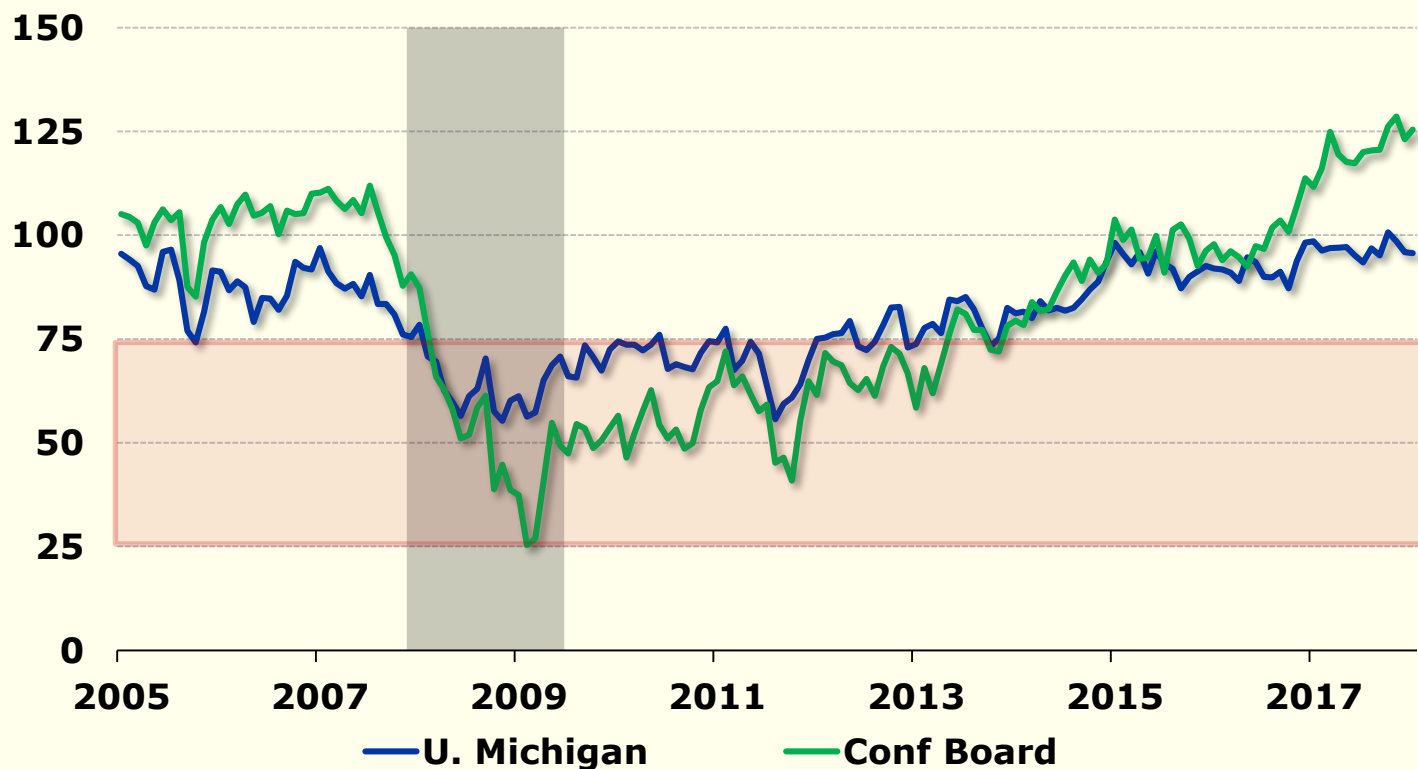
Adjusted for inflation, hourly wage growth remains muted

Year-over-year growth in U.S. real average hourly wages

Source: U.S. Bureau of Labor Statistics, monthly data through January 2018

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After an extended period of rising prices, the stock market has become volatile recently

S&P 500, weekly prices
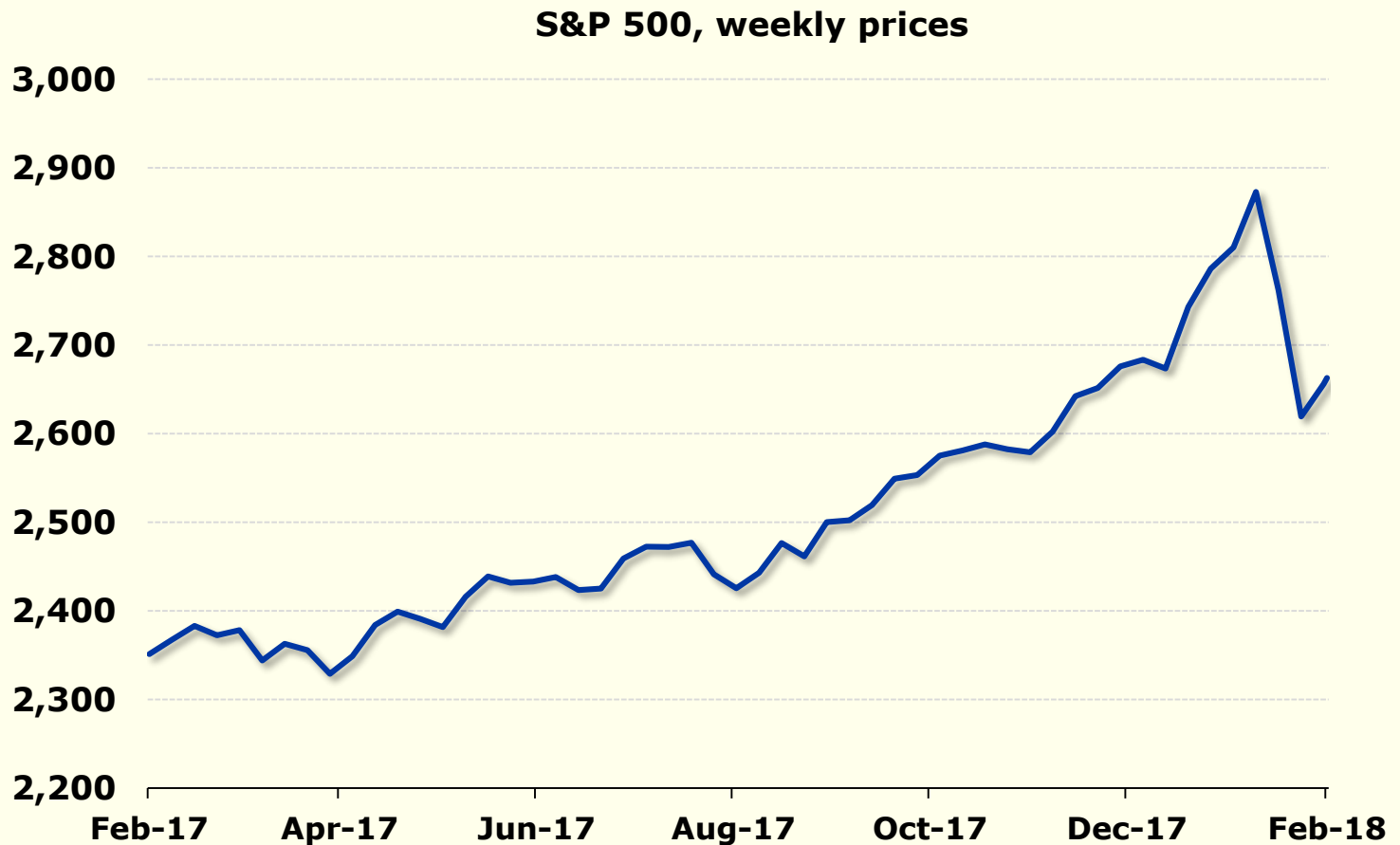
Source: Yahoo Finance, data through Feb. 13, 2018

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U.S. residential construction remains below pre-recession levels

U.S., WA residential building permits (SAAR)
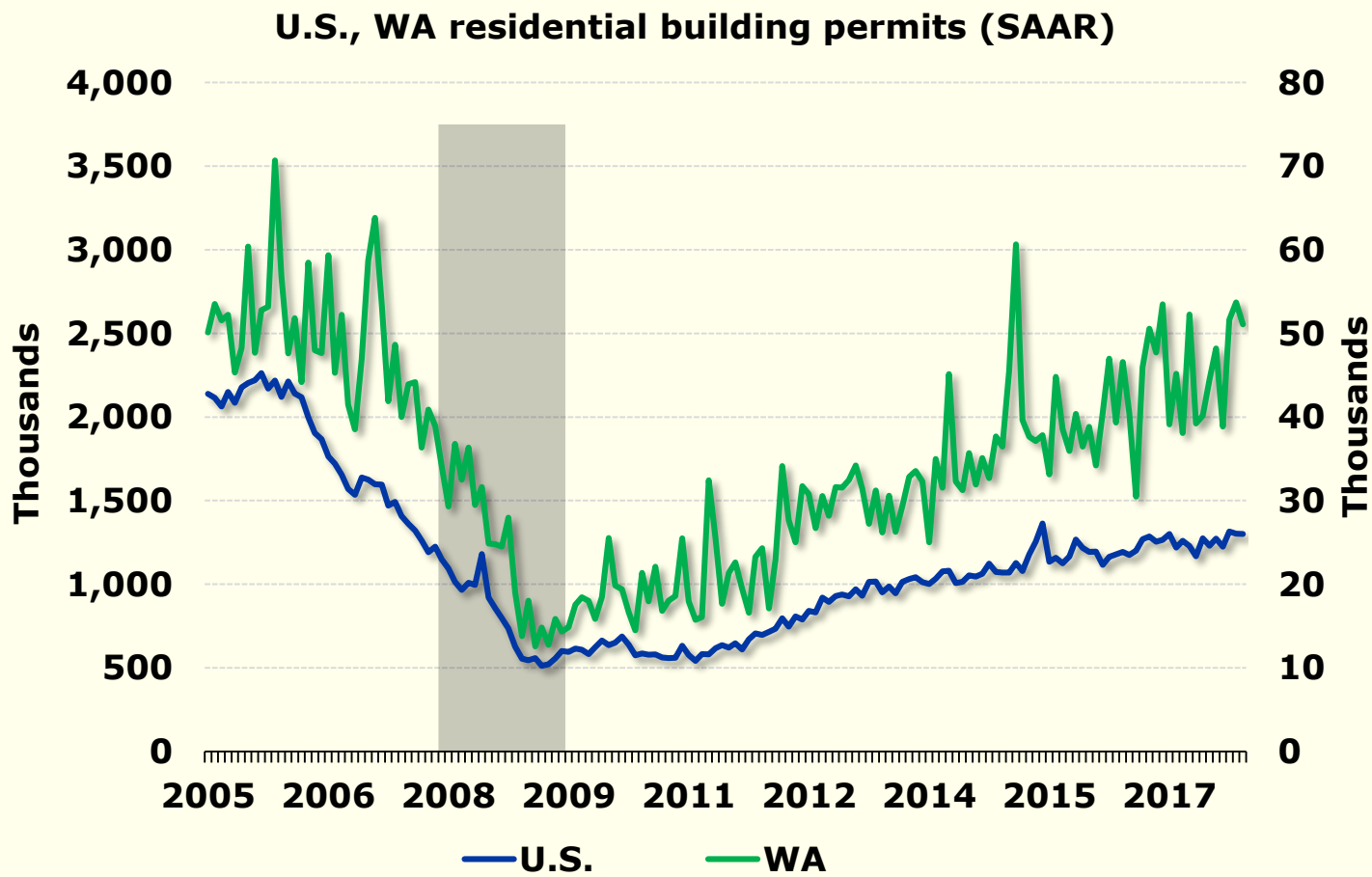
Source: U.S. Census Bureau, ERFC; data through December 2017

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Pace of U.S. job creation has strengthened so far this year, remains strong in WA

Average monthly employment change

Legend: ■ U.S. (left) ■ WA (right)
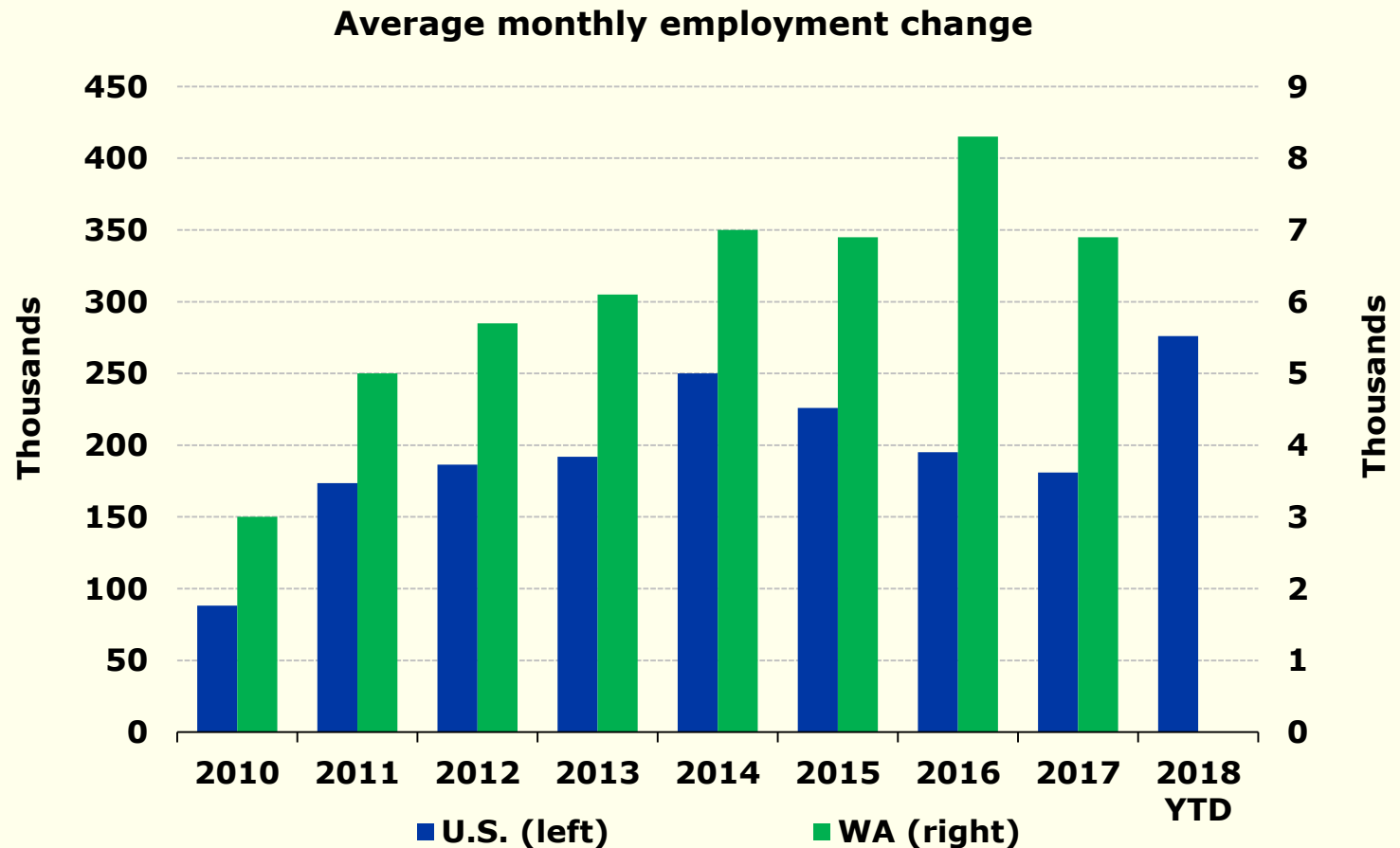
Source: Bureau of Labor Statistics, ERFC; U.S. data through Feb. 2018; WA data through Dec. 2017

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

U.S. and WA: percentage change in employment by sector, 2012-2017

2012 – 2017 employment change:

U.S.: +12.1 M jobs

WA: +416,000 jobs
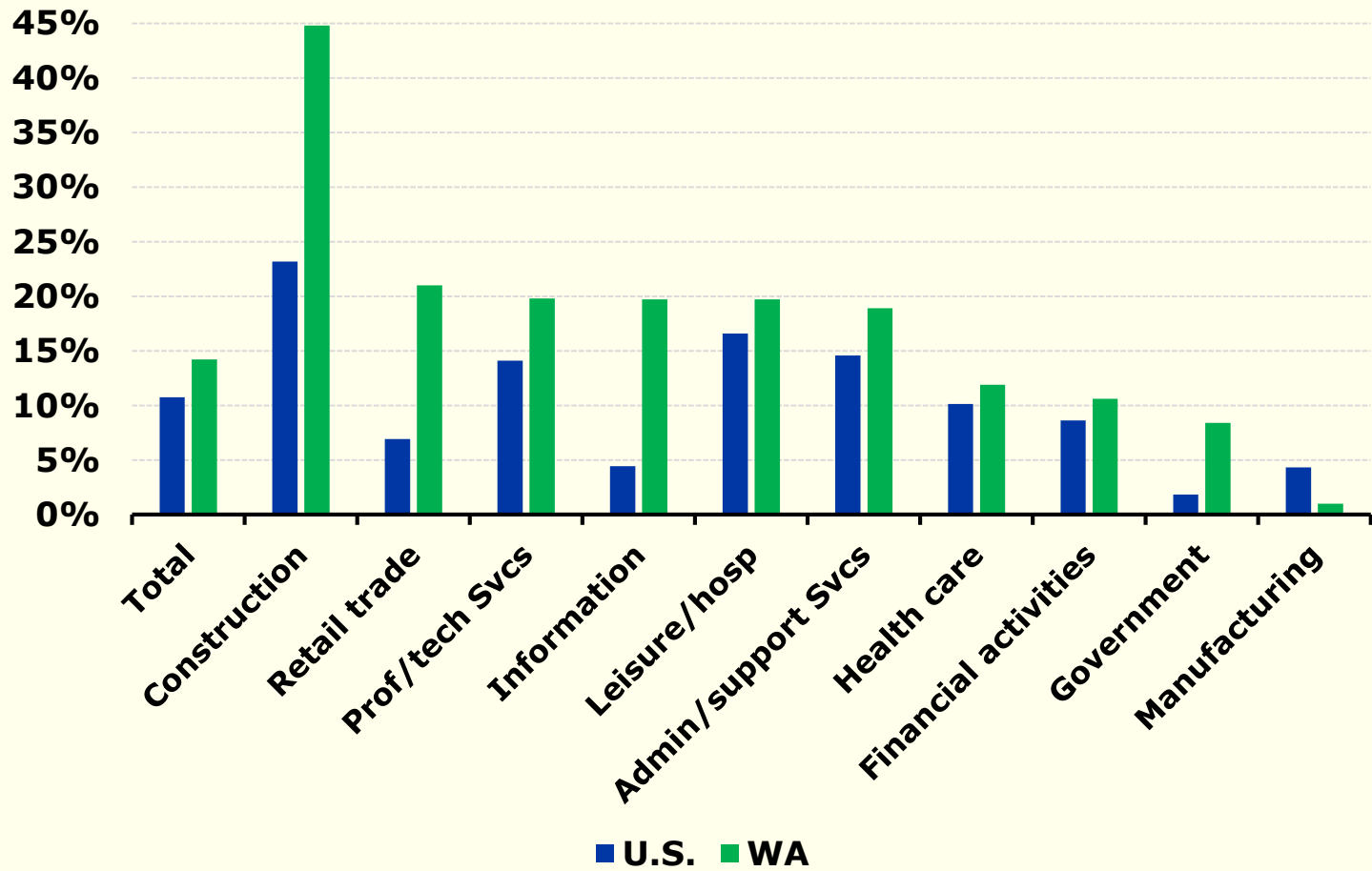
Source: BLS, WA Employment Security Dept., ERFC

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Manufacturing activity continues to expand nationally and in WA

Index values below 50 indicate contraction in manufacturing activity, values above 50 indicate expansion

Manufacturing Purchasing Managers' Index, WA & U.S.

Legend: WA — U.S.

Source: Institute of Supply Management, data through January 2018

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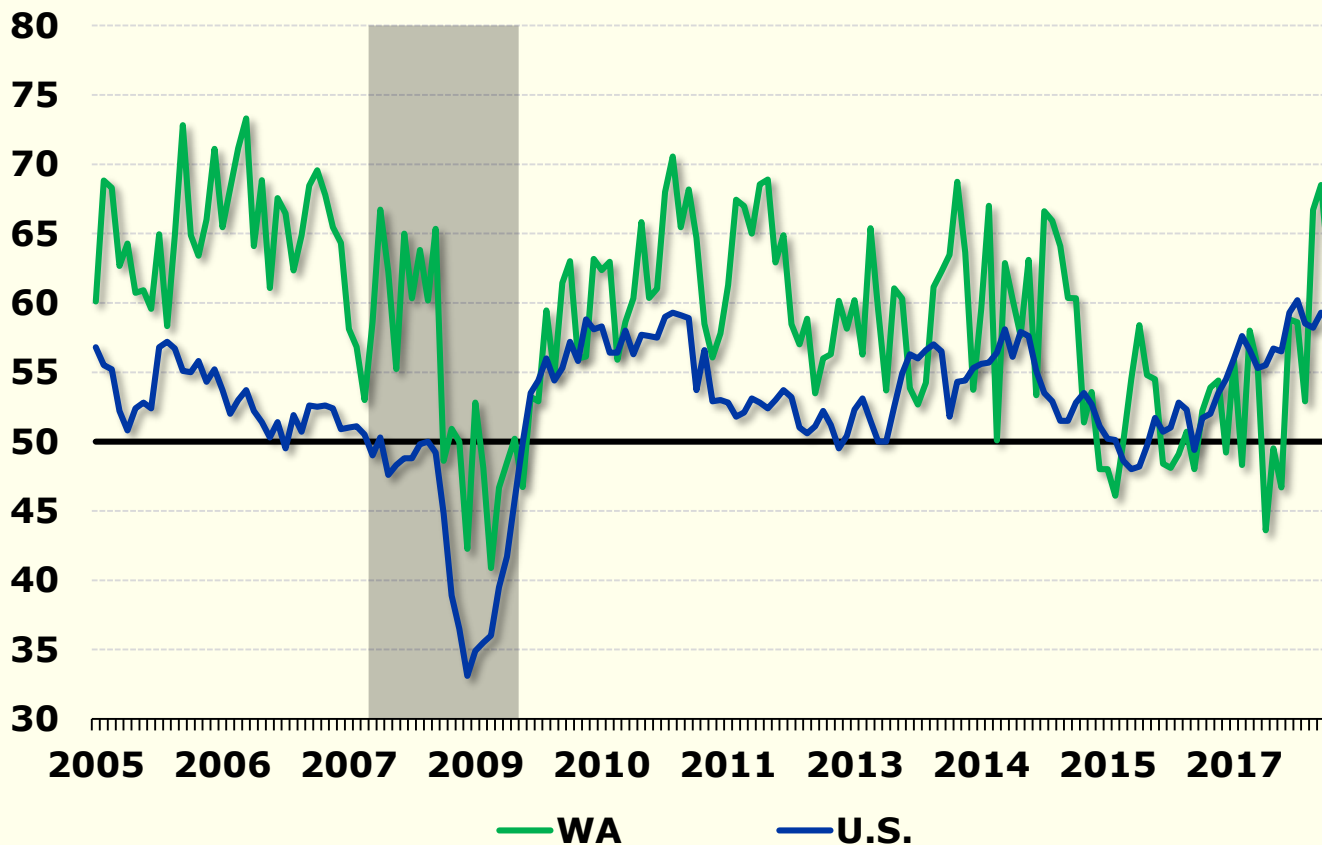
WA exports have slowed, but exports to China, Canada have improved in 2017

Total exports declined 3.2% in 2017 and 7.9% in 2016

Year-over-year growth in export value, major trading partners
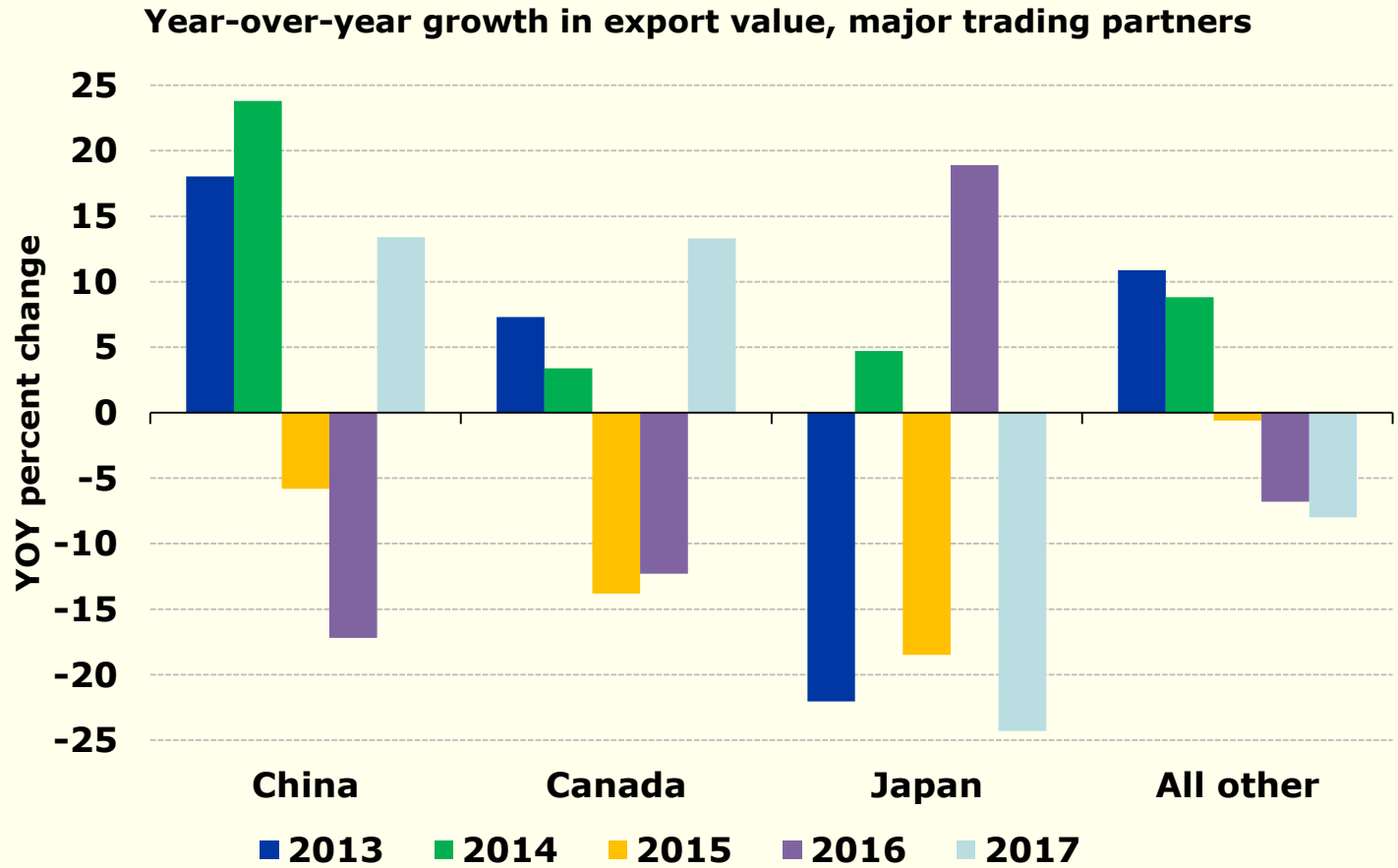
Source: WISERTrade; data through December 2017

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

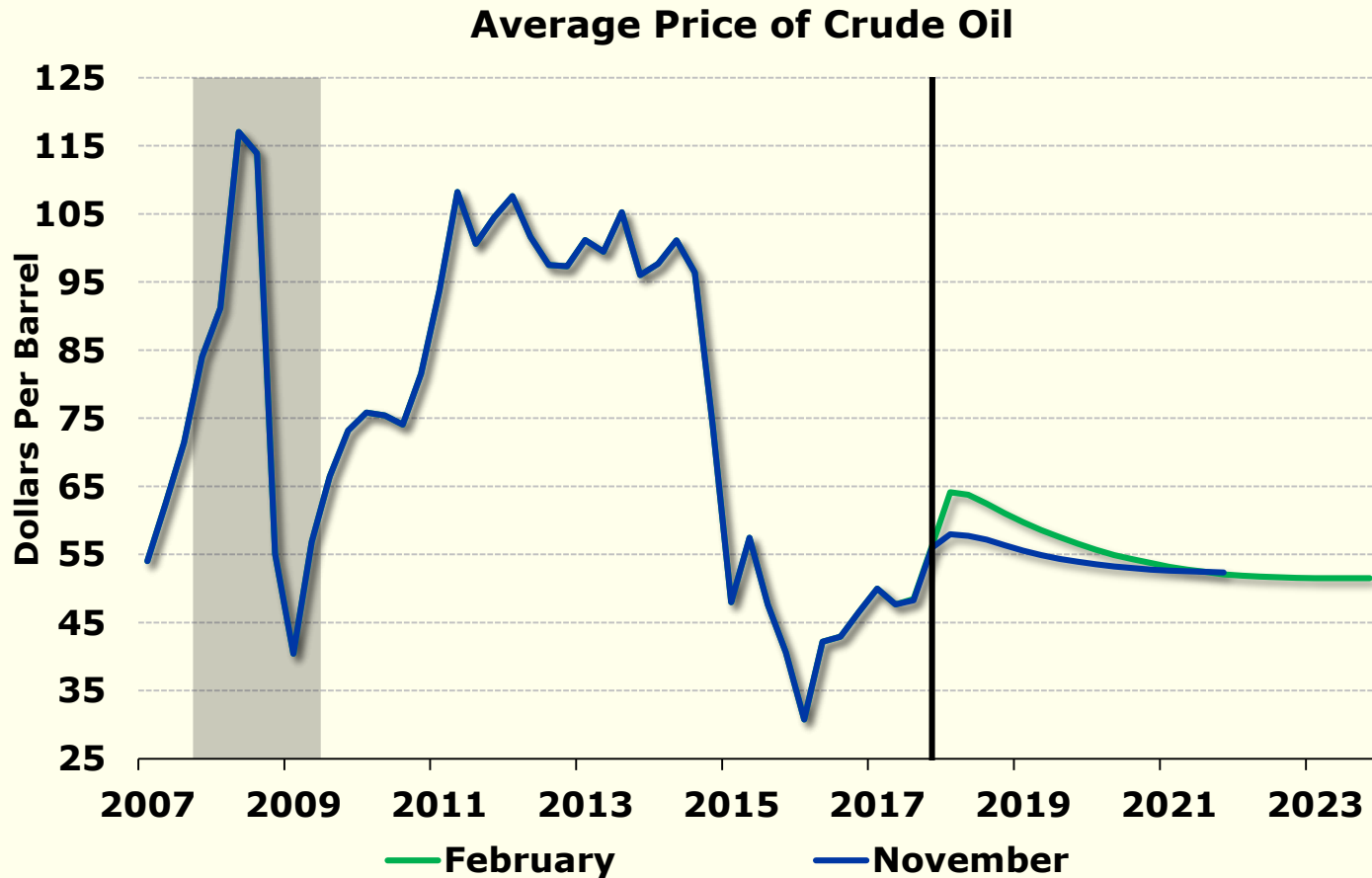# Real GDP is slightly higher than the November forecast
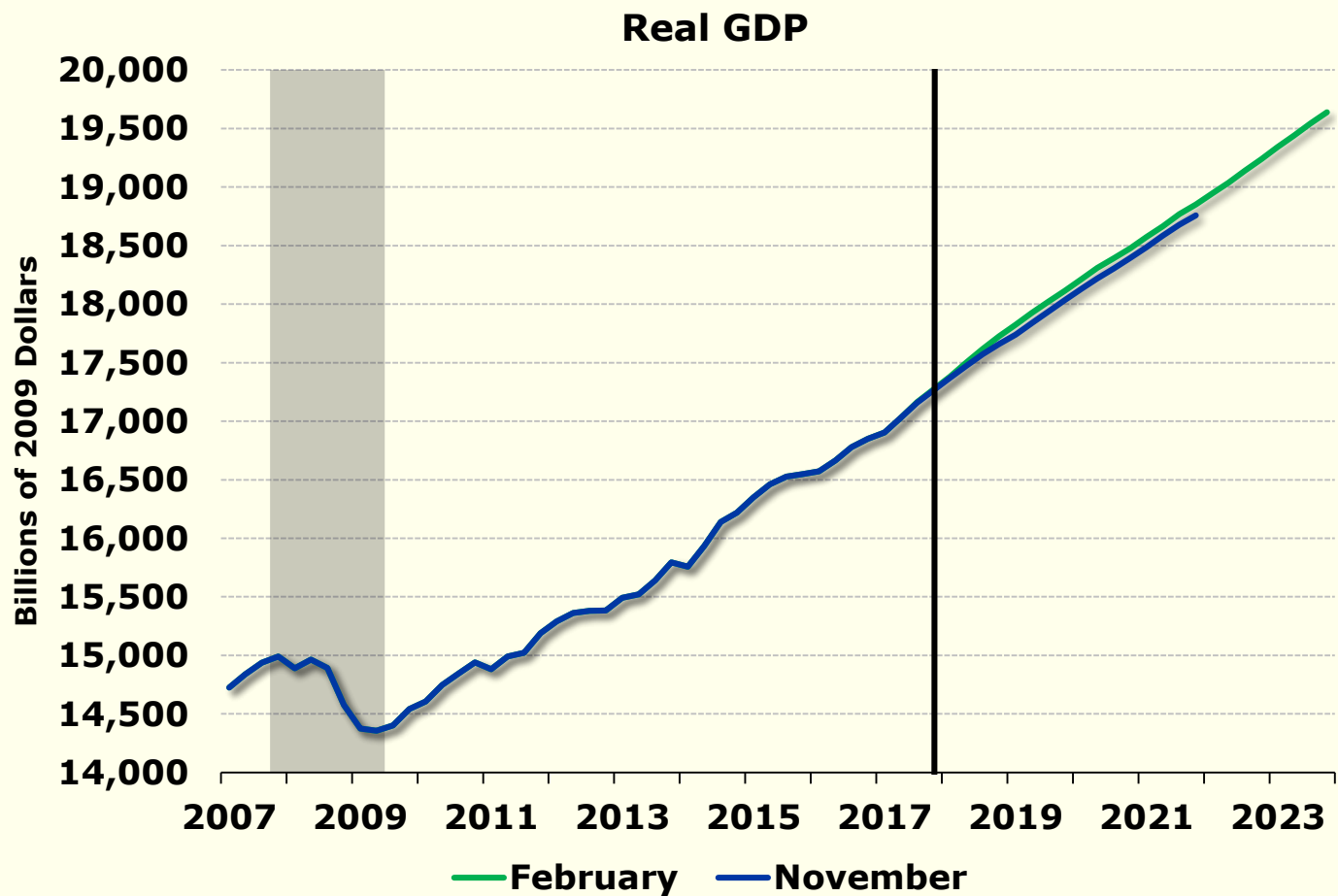
Real GDP

Source: ERFC February 2018 forecast; data through Q4 2017
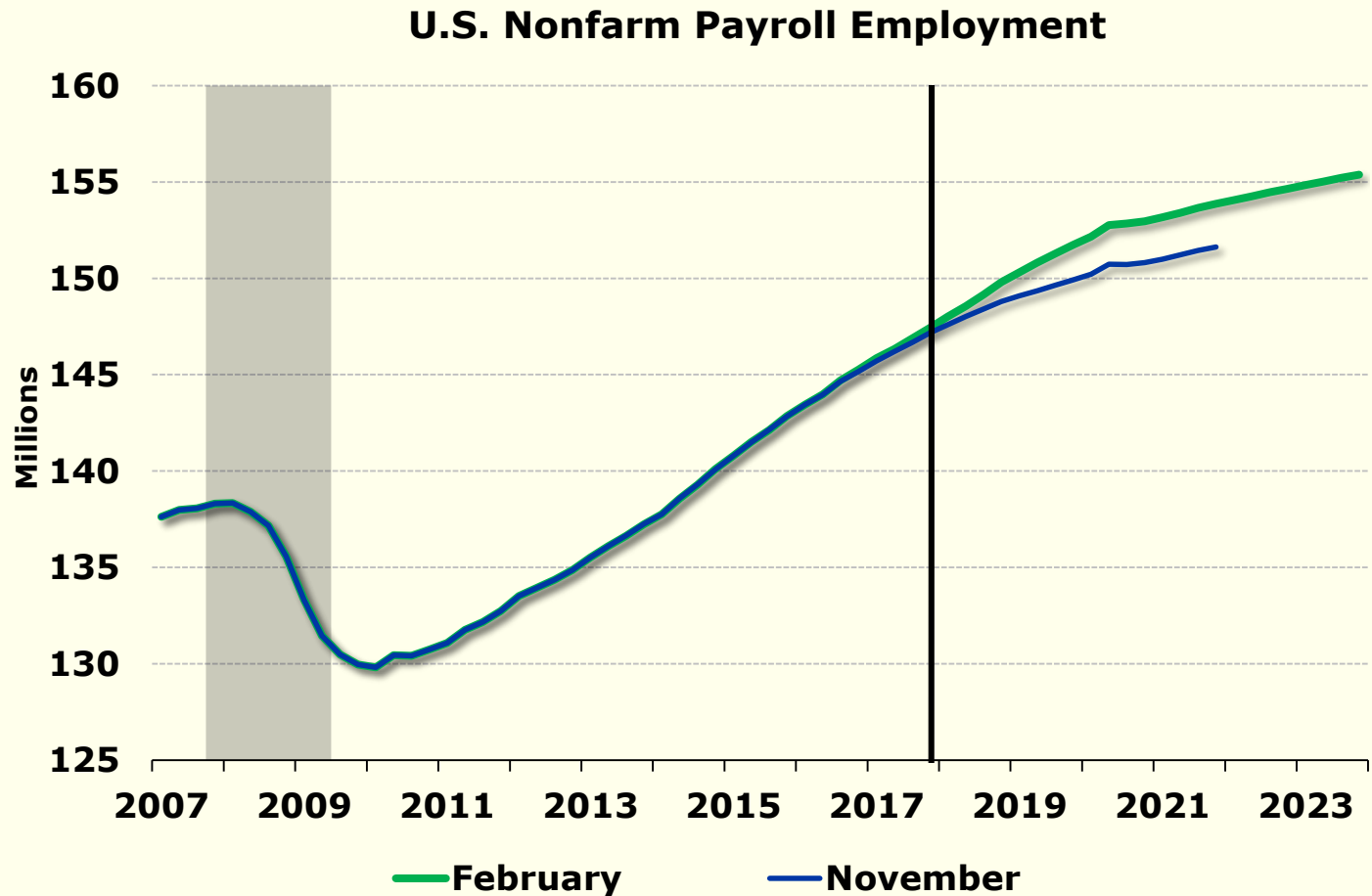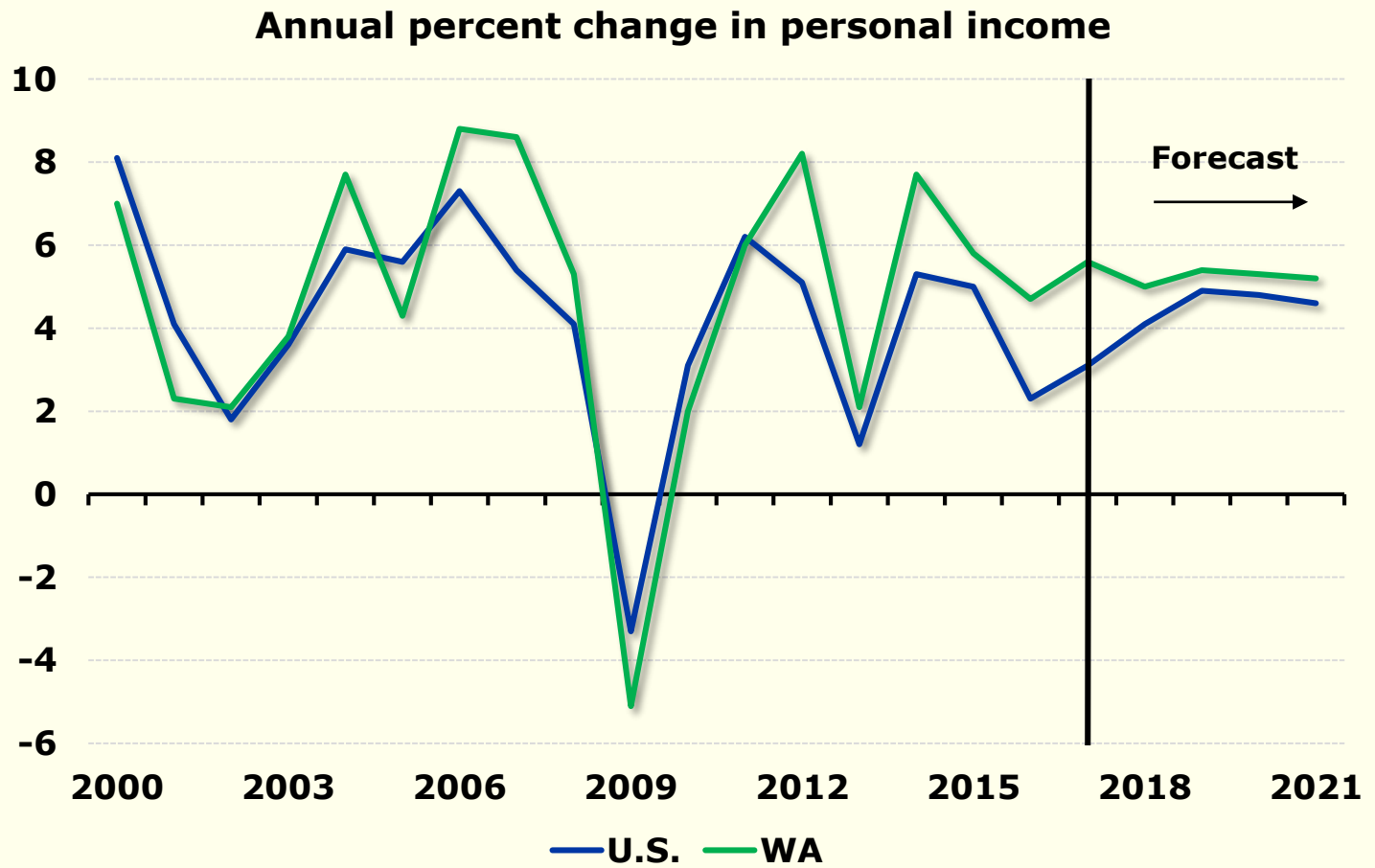
WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Oil prices are slightly higher in the near term compared to the November forecast

Average Price of Crude Oil

Source: U.S. DOE, ERFC February 2018 forecast; historical data through Q4 2017

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The U.S. nonfarm payroll employment forecast is stronger than November

U.S. Nonfarm Payroll Employment

Source: ERFC February 2018 forecast; data through Q4 2017

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

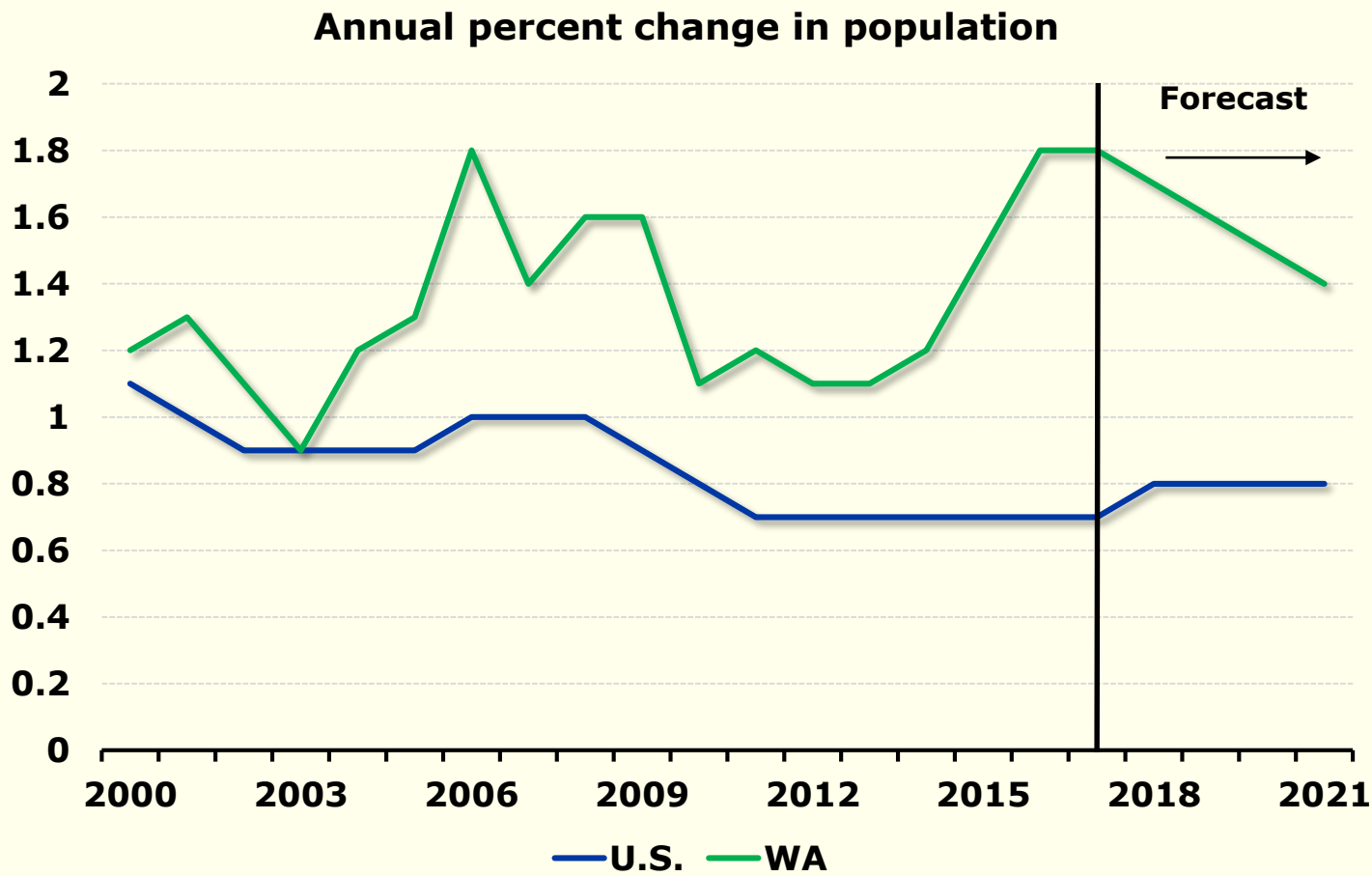# Since 2011, personal income has grown faster in WA than nationally

Annual percent change in personal income

Forecast →

Legend: U.S. — WA

Source: U.S. Bureau of Economic Analysis, ERFC Feb. 2018 forecast

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

WA population consistently grows faster than U.S. as a whole

Washington's population has grown from 5.9 million in 2000 to an expected 7.9 million in 2021

Annual percent change in population

Forecast

Legend: U.S. — WA

Source: U.S. Bureau of Economic Analysis, ERFC Feb. 2018 forecast

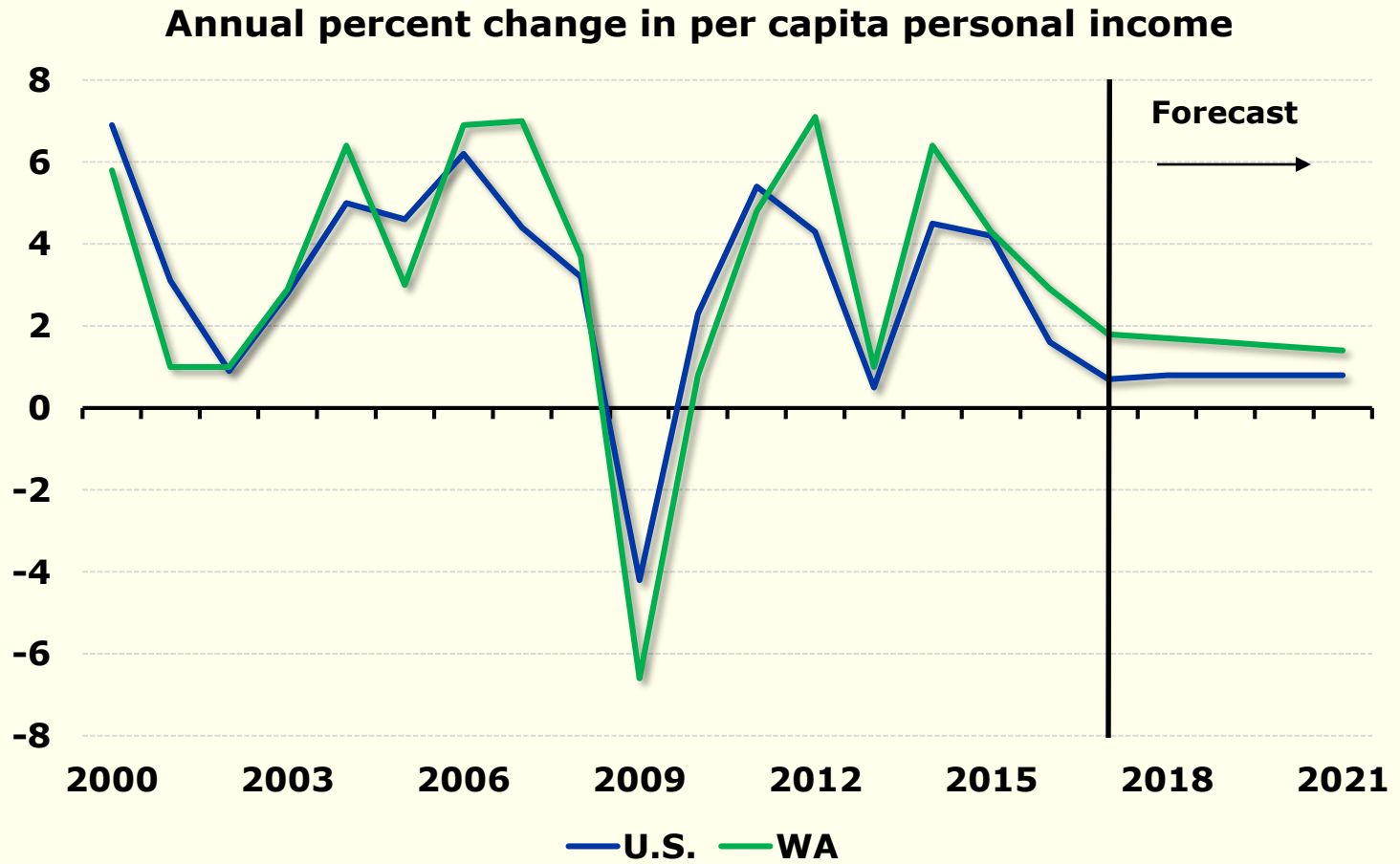**WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL**

On a per capita basis, WA personal income has grown as fast or faster than U.S. as a whole

Per capita personal income, 2016

U.S.: $49,246

WA: $54,579

Annual percent change in per capita personal income

Forecast

— U.S. — WA

Source: U.S. Bureau of Economic Analysis, ERFC Feb. 2018 forecast

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WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Washington personal income is slightly higher than in November…

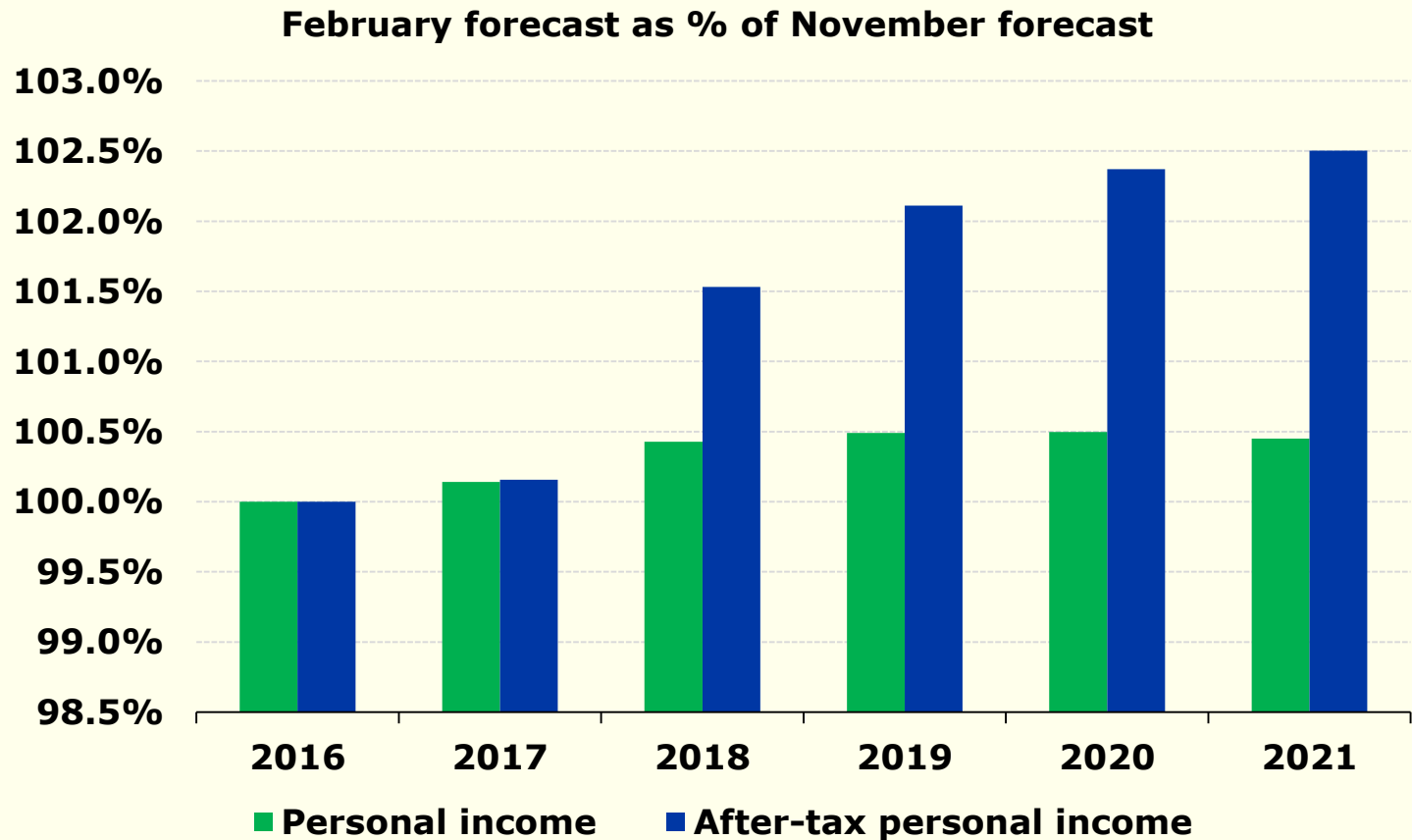Third quarter 2017 personal income data have become available since the November forecast

Washington personal income

Billions of USD

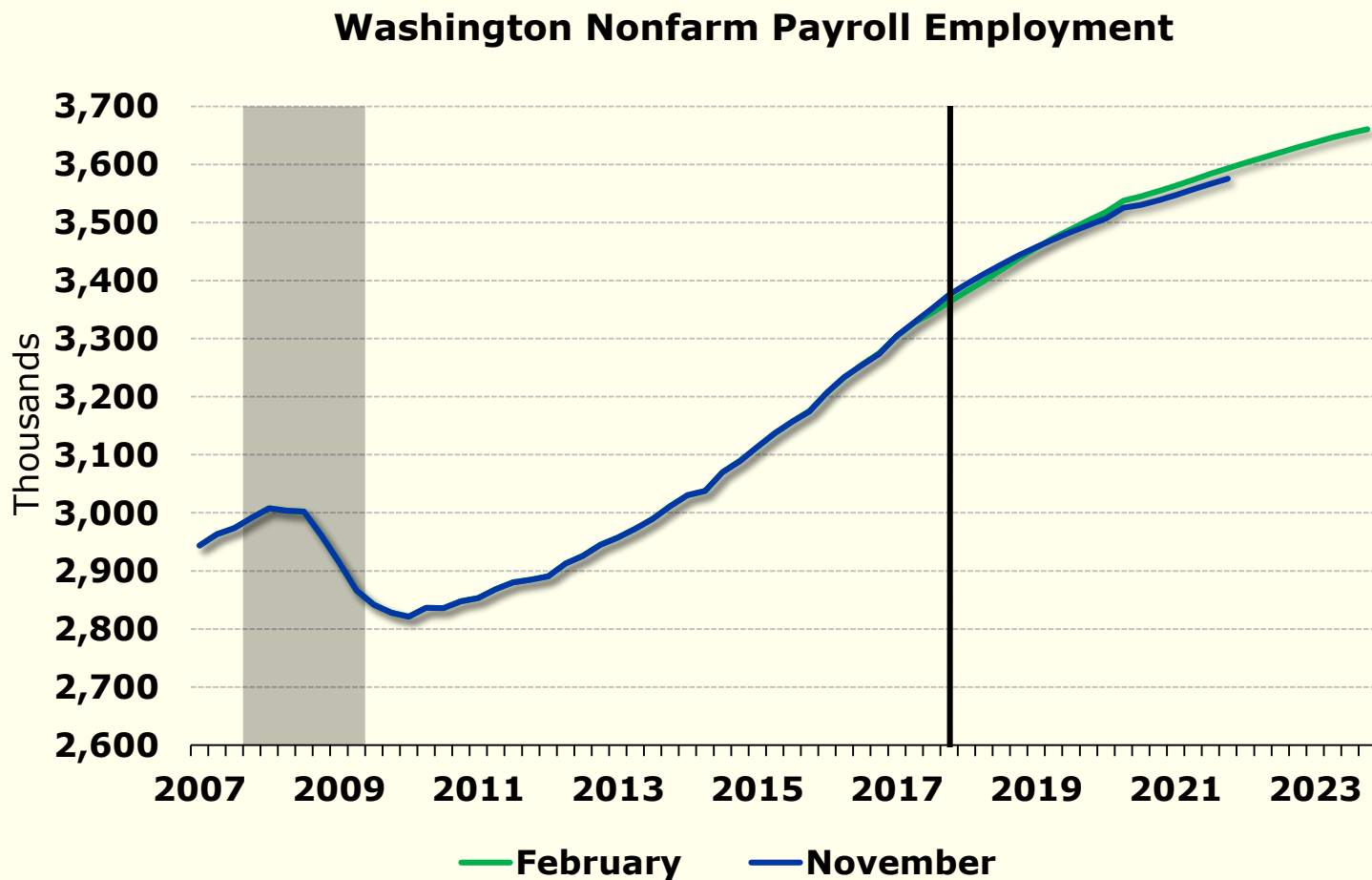|	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023

■ February   ■ November
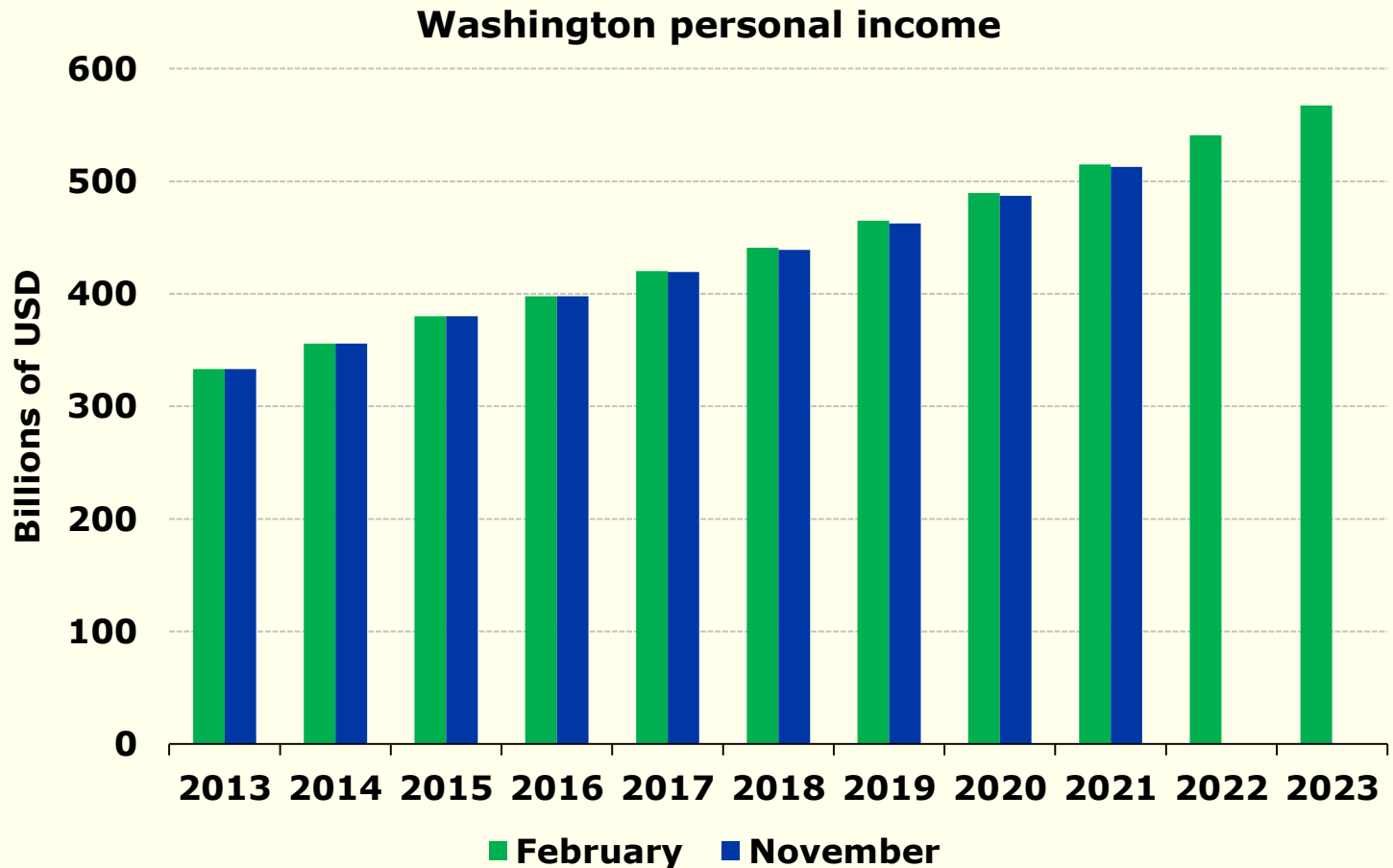
Source: ERFC February 2018 forecast; historical data through 2016

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Washington employment forecast is slightly higher compared to November

The WA nonfarm employment forecast is 18,000 jobs higher (0.5%) by 2021 compared to November.
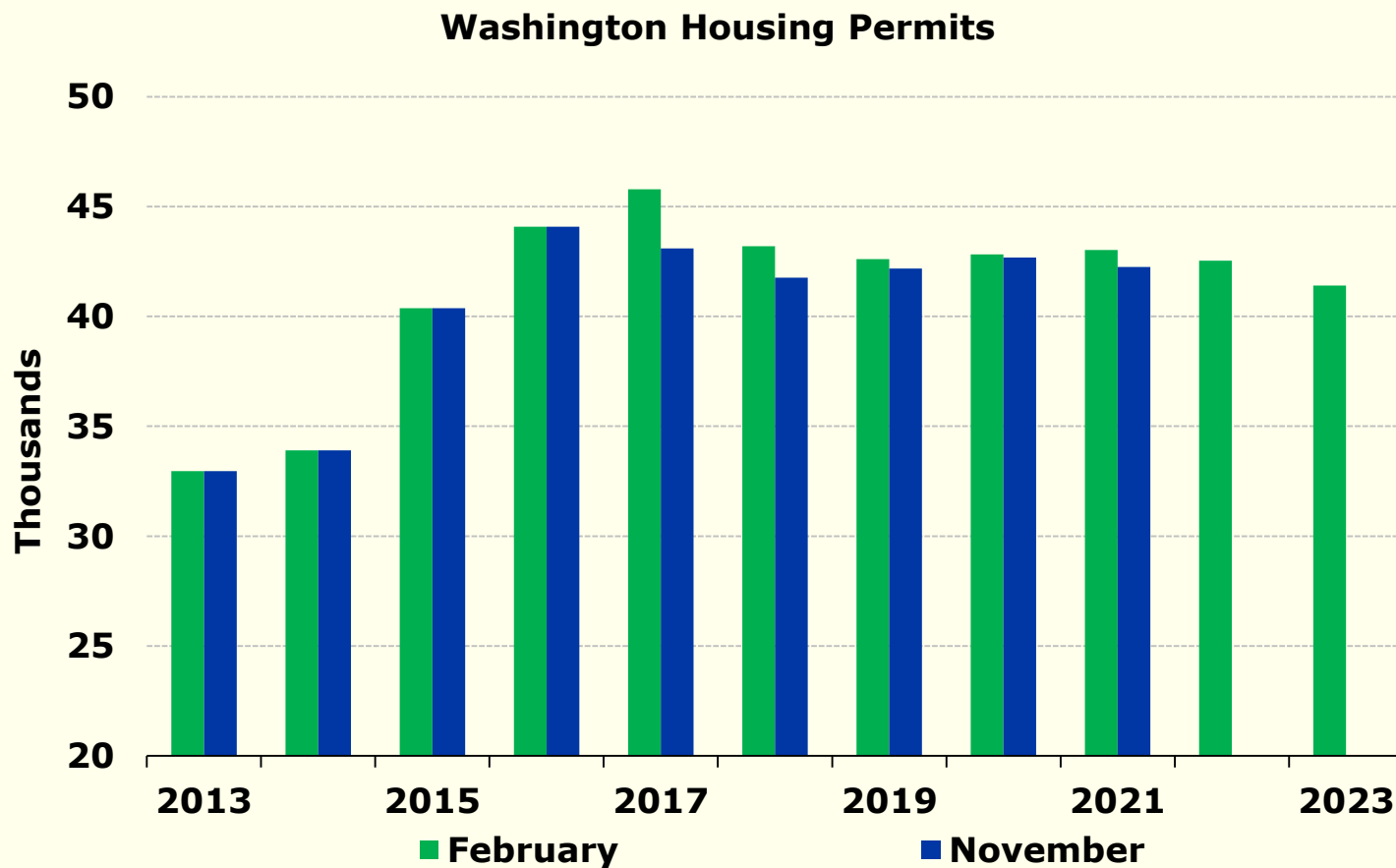
Washington Nonfarm Payroll Employment

Source: ERFC February 2018 forecast; historical data through Q4 2017

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Washington housing permits forecast is slightly higher than in November

Fourth quarter 2017 permits were much higher than expected in November.

Washington Housing Permits

Legend: ■ February ■ November

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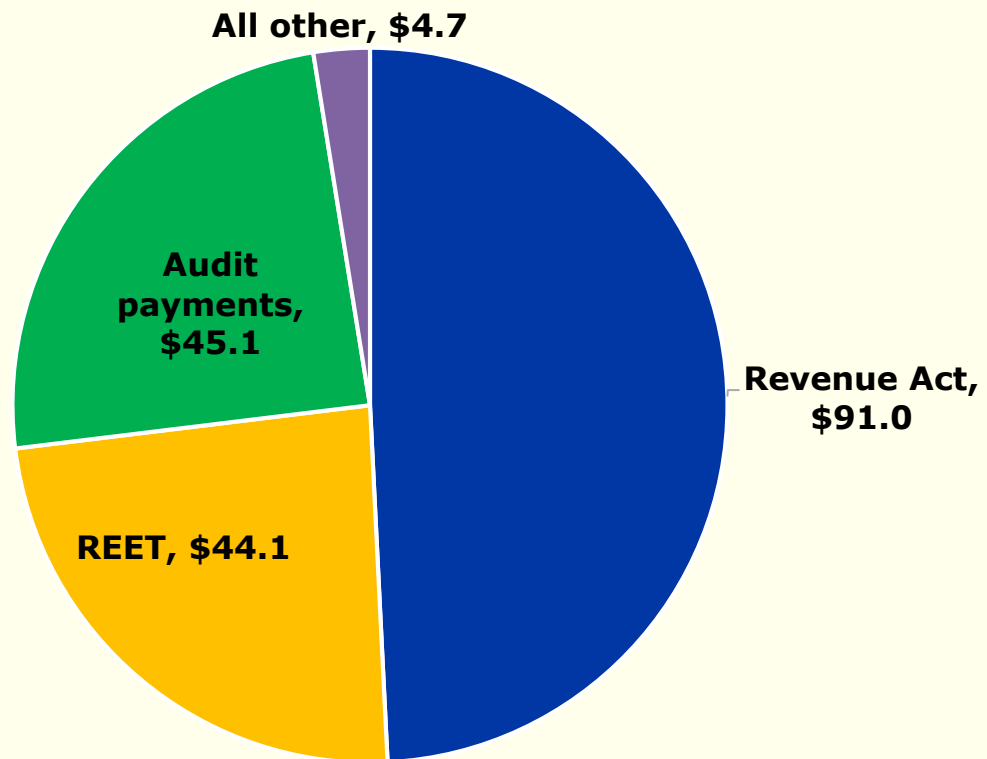
Slide 24

Source: ERFC February 2018 forecast; historical data through 2017

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Forecast variance since November mainly from Revenue Act sources; 24% due to one-time audit payments
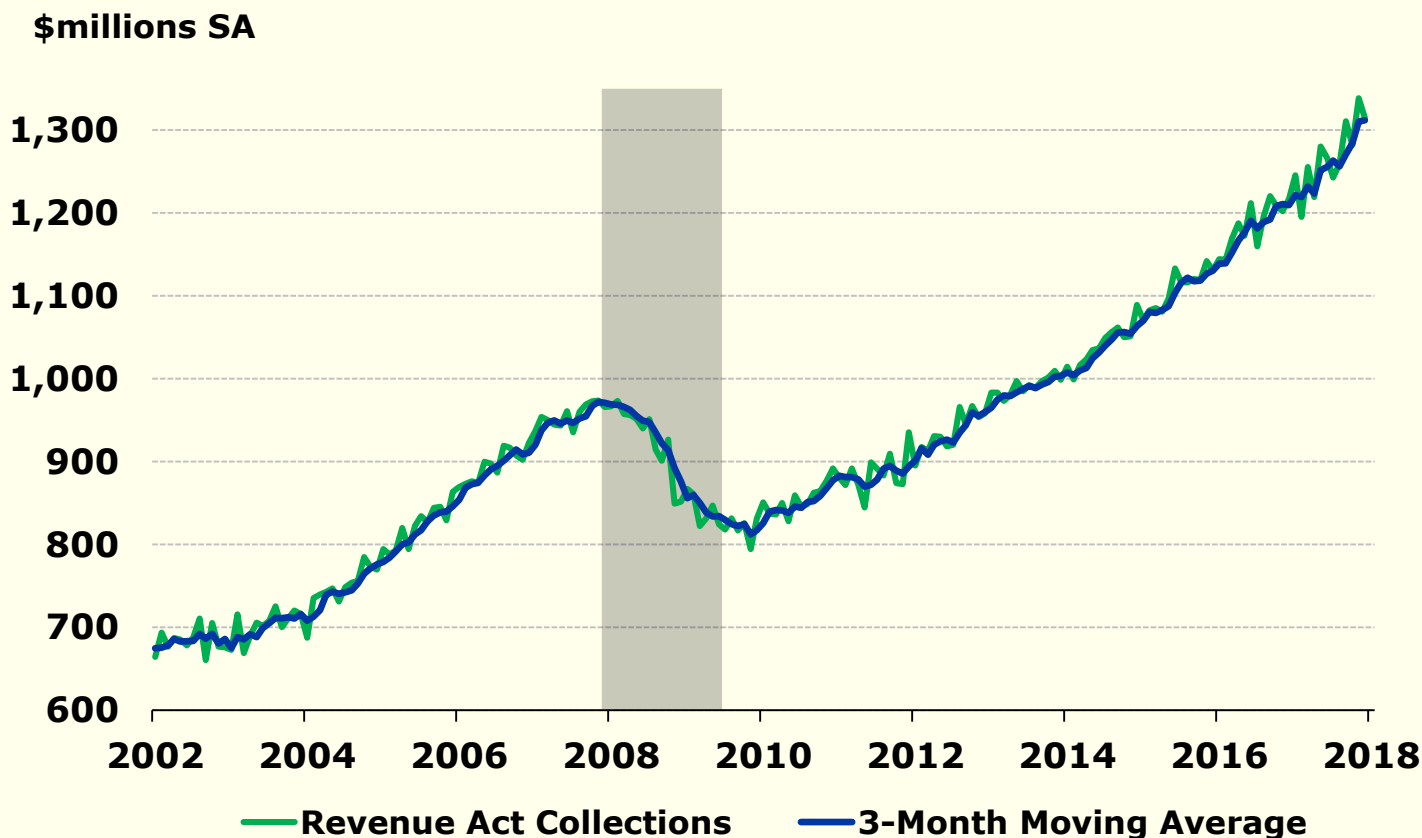
Variance from November forecast ($ millions)

All other, $4.7

Audit payments, $45.1

Revenue Act, $91.0

REET, $44.1

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Revenue Act collections growth accelerated in the 4th quarter

$millions SA

Adjusted year-over-year collections growth (by quarter of activity):

Q1: 6.3%
Q2: 5.6%
Q3: 6.4%
Q4: 8.3%

— **Revenue Act Collections** — **3-Month Moving Average**

* 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 December 2017 activity

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Large commercial property sales increased in the 4th quarter of 2017

Large commercial sales (>$10 million) totaled $1.8 billion in the 1st quarter of 2017, $2.9 billion in the 2nd quarter and $2.0 billion in the 3rd quarter, then rebounded to $3.6 billion in the 4th quarter.

Residential and smaller commercial sales also increased.

Seasonally Adjusted Taxable Real Estate Excise Activity

$Billions

Legend: Total; Total excl. sales >$10M
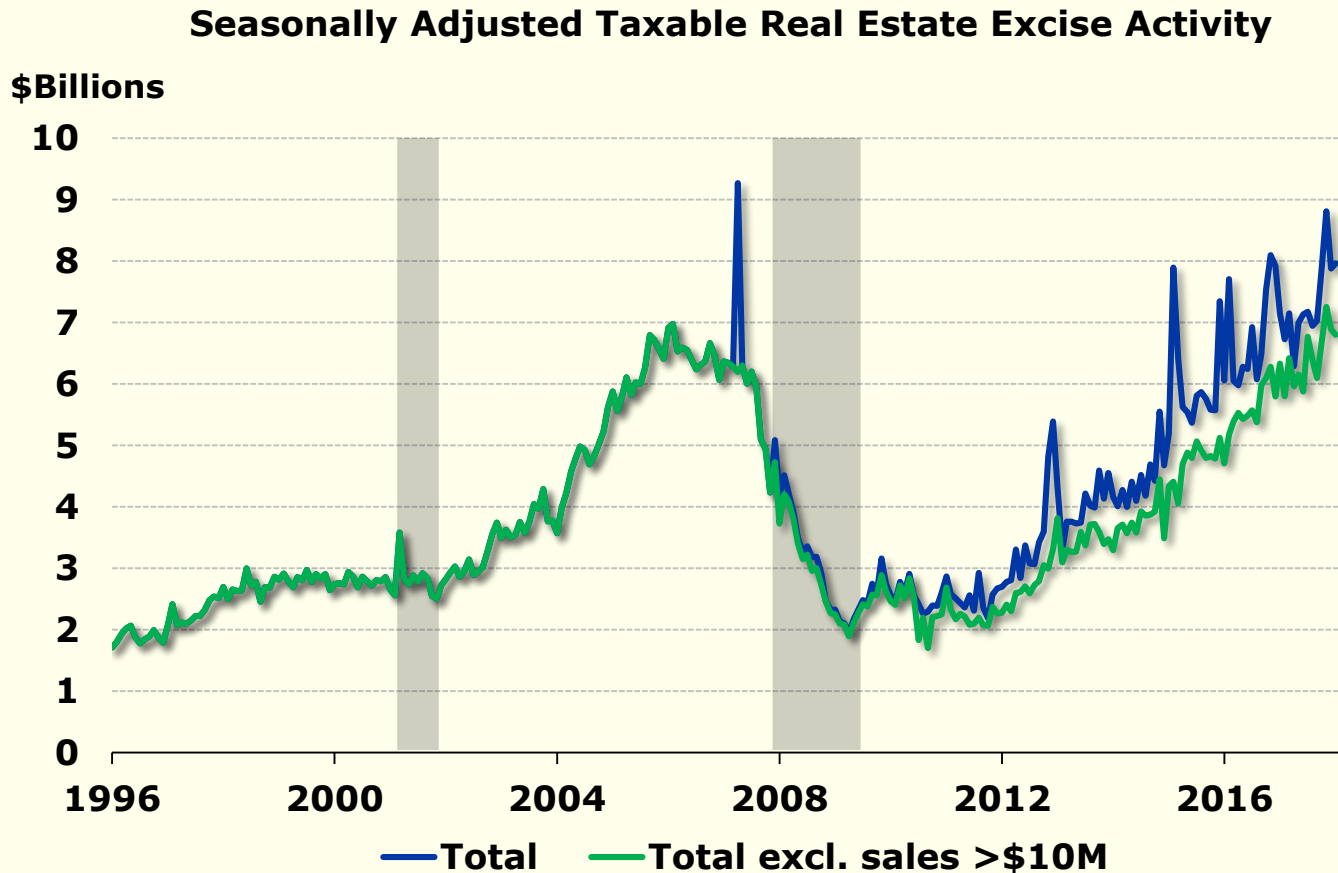
Source: ERFC; Monthly data through January 2018 preliminary

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Cannabis revenue continues to be volatile

Collections were 2.1% above forecast in January

Collections are 0.5% below forecast since October

Retail Cannabis Collections

Source: LCB, ERFC; data through January 2018

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Forecast changes: General Fund State, 2017-2019 Biennium
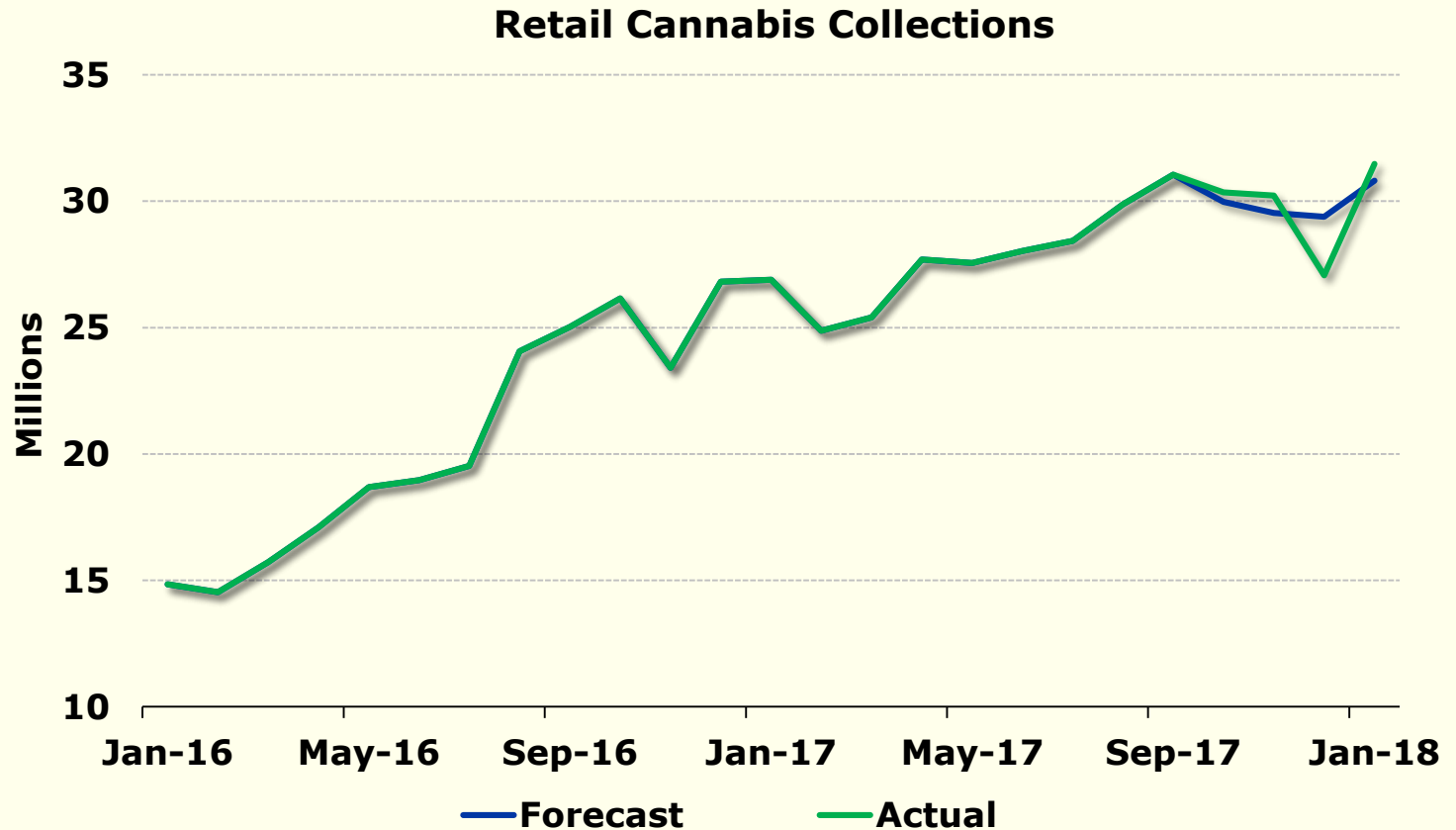
$Millions

	February Forecast				
	Collection Experience	Non-economic Change	Forecast Change	Forecast	Total Change*
Dept. of Revenue	$184	$0	$447	$41,999	$631
All other agencies	$1	$0	$15	$2,213	$16
Total GF-S	**$185**	**$0**	**$462**	**$44,213**	**$647**

* Detail may not add to total due to rounding

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Components of 2017-19 GF-S forecast change

2017-19 forecast change, $ million

- All other, $41.2
- Property Tax, $147.1
- REET, $135.8
- Revenue Act, $322.9

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

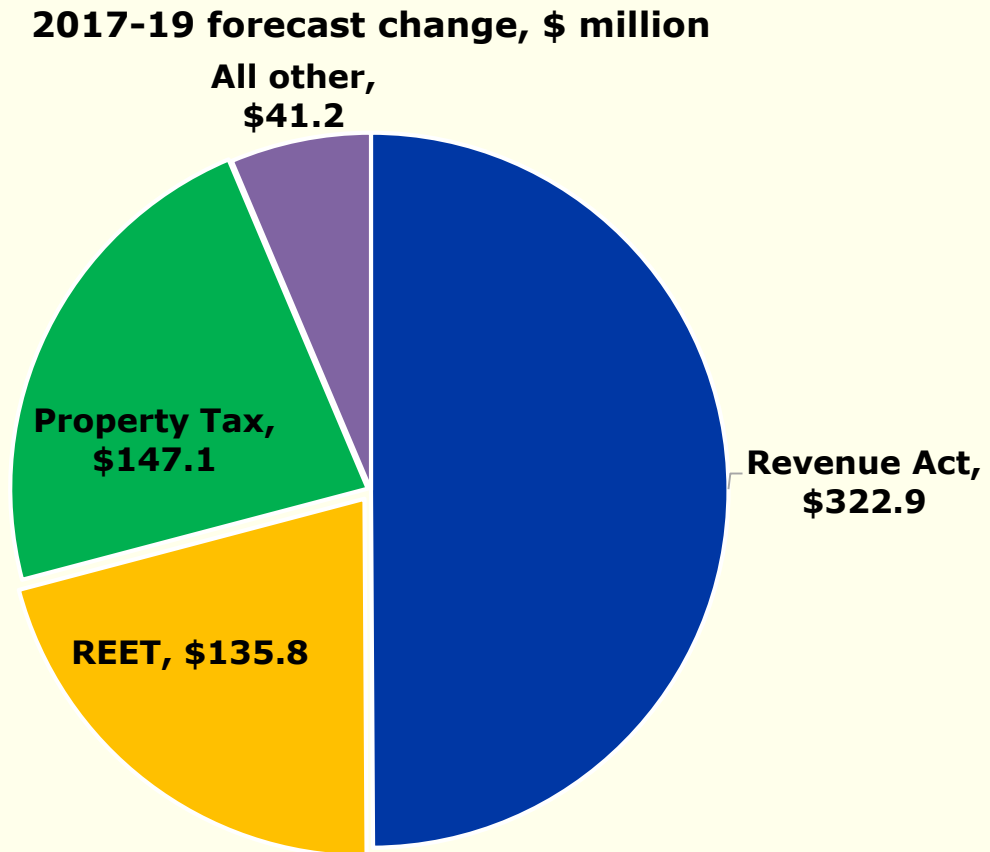# Forecast changes: General Fund State, 2019-2021 Biennium

November Forecast:

$47,582 million

$Millions

	February Forecast			
	Non-economic Change	Forecast Change	Forecast	Total Change*
Dept. of Revenue	$0	$655	$46,029	$655
All other agencies	$0	$16	$2,226	$16
Total GF-S	**$0**	**$671**	**$48,255**	**$671**

* Detail may not add to total due to rounding

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

State property tax estimates

$Millions	Property Tax Forecast		
	2015-17	**2017-19**	**2019-21**
November	$4,133	$6,034	$7,188
February	$4,133	$6,181	$7,416
Difference	**$0**	**$147**	**$228**

* Detail may not add to total due to rounding
Source: ERFC February 2018 forecast

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

Cannabis excise tax and license fee estimates

General Fund change since November forecast:

- 2017-19 $0 M

- 2019-21 +$7.6 M

$Millions	Cannabis Forecast		
	2015-17	**2017-19**	**2019-21**
GF-S share of excise tax and license fees	$148	$250	$278
Non-GF	$321	$499	$532
Total	**$469**	**$749**	**$809**

* Detail may not add to total due to rounding

Source: ERFC February 2018 forecast

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

2017-19 Biennium alternative forecasts – cash basis

$Millions	2017-19 Biennium	Difference From the baseline#
February 2018 Baseline (60%)	**$44,213**	
November 2017 Alternative Forecasts		
Optimistic (15%)	**$45,311**	**$1,098**
Pessimistic (25%)	**$42,832**	**($1,381)**
Probability Weighted Average	**$44,032**	**($181)**
GCEA*	**$44,125**	**($88)**

*Based on the Governor's Council of Economic Advisors' economic assumptions
#May not add to total due to rounding

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

General Fund-State* forecast by fiscal year

General Fund-State Revenue

$billions

Forecast →

- (9.6%) — FY09
- (4.1%) — FY10
- 7.9% — FY11
- 1.5% — FY12
- 6.1% — FY13
- 3.8% — FY14
- 5.5% — FY15
- 7.5 % — FY16
- 6.2% — FY17
- 8.9% — FY18
- 5.7% — FY19
- 3.9% — FY20
- 4.3% — FY21

*General Fund-State & Related Funds for FY 09, General Fund-State current definition for FY 10-21
Source: ERFC forecast, February 2018

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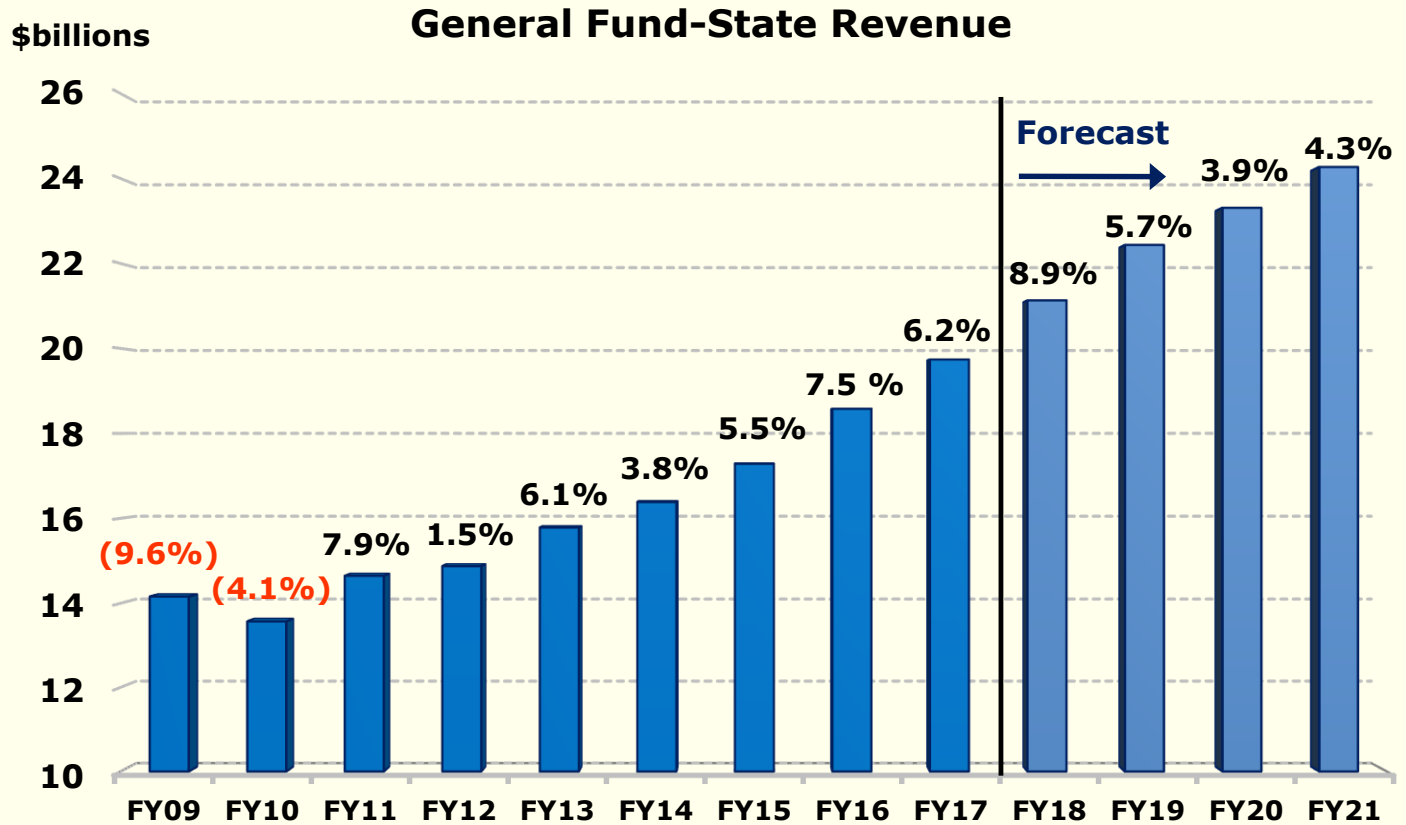
Conclusion

- WA personal income and employment are slightly higher than in November

- The forecast incorporates federal tax changes, raising after-tax income in the U.S. and in WA

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

- GF-S revenues are expected to grow 15.4% between the 2015-17 and 2017-19 biennia and 9.1% between the 2017-19 and 2019-21 biennia

- The level of uncertainty in the baseline remains elevated, with downside risks outweighing upside risks

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

A few thoughts about economic growth in the future…

Robert Gordon: Expect slower growth

- Slower labor force growth as baby boomers retire (and immigration slows?)

- Less impact from gains in educational attainment (larger fraction of population has college education now than in past; rising college costs may reduce college attendance)

- Government deficits and unfunded liabilities (pension plans, Medicare, Medicaid, Social Security) will require either higher taxes or lower government transfer payments

- Technologic innovation in future unlikely to have as large a growth impact as it did in the past

WASHINGTON STATE ECONOMIC AND REVENUE FORECAST COUNCIL

A few thoughts about economic growth in the future…

Techno-optimists: Expect growth at historic rates

- Technology has consistently improved our lives for the better and will continue to do so

- Predicting technologic innovation is difficult, but breakthroughs in information technology, robotics, artificial intelligence and clean energy have the potential for large positive impacts on the economy

- Positive impact of innovations such as Internet (free information, entertainment) and free services (Facebook, Skype) not captured in GDP statistics

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Questions

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