

# **Transportation Revenue Forecast Council**

## **February 2018 Transportation Economic and Revenue Forecasts**

### **Volume I: Summary**

# **Washington Transportation Economic and Revenue Forecast February 2018 Forecast**

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## Preface

Washington law mandates the preparation, adoption of economic, and revenue forecasts. The organizations primarily responsible for revenue forecasts are the Economic and Revenue Forecast Council and the Office of Financial Management. The Office of Financial Management has the statutory responsibility to prepare and adopt those forecasts not made by the Economic and Revenue Forecast Council (RCW 43.88.020). The Office of Financial Management carries out its forecast responsibilities for transportation revenues through the Transportation Revenue Forecast Council. Each quarter, technical staff of the Department of Licensing, Department of Transportation, Washington State Patrol and the Office of Forecast Council produce forecasts. The revenue forecasts agreed upon by the Transportation Revenue Forecast Council members become the official estimated revenues under RCW 43.88.020 21.

## February 2018 Transportation Forecast Overview

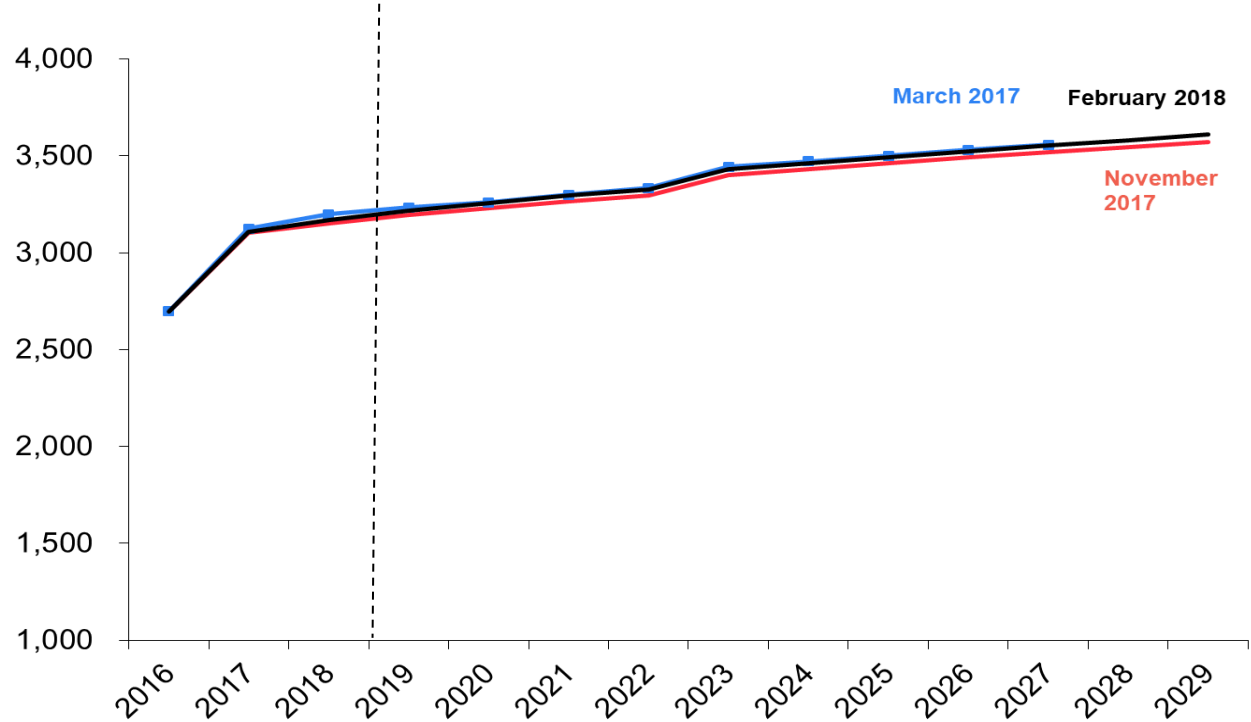
### Forecast Overview

Here are key conclusions from the February 2018 transportation revenue forecast.

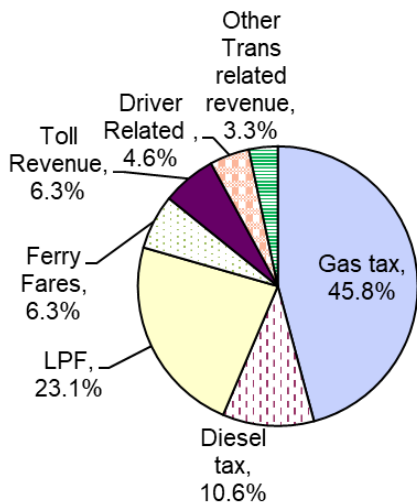
- February 2018 transportation forecast of revenues: \$6.39 billion for the current biennium, which represents an increase of 9.5% over the prior 2015-17 biennium of \$5.836 billion.
- Overall transportation revenue is up forecast to forecast in the current biennium, by \$47.2 million or 0.7%. In next biennium, transportation revenues are up from the last forecast by \$61.3 million compared to the November forecast. The largest share of the increase in the current biennium is due to higher fuel tax and licenses, permits and fee revenue forecasts. Other revenue sources such as ferry revenue and driver related fees are up by \$2 million and \$4.6 million respectively in the current biennium. All other revenue sources are up, or no change, compared to the last forecast in the current biennium.
- This February forecast is down from the March 2017 baseline forecast by \$42.1 million in the current biennium and up slightly by \$0.2 million in the next biennium.
- For the 10-year forecast horizon, total revenue is projected to be \$33.76 billion, which is up by \$312.8 million (0.94%) from November due primarily to higher fuel tax, licenses, permits and fee revenue and higher ferry revenue. The only revenue forecast which is slightly down over the 10-year horizon from the last projections is the business-related revenue.
- New projections of real personal income are minor revisions upward from the last forecast in terms of growth rates in the near term and down slightly after 2019. Employment projections are up slightly in FY 2018 and FY 2019 but down in the years 2021-2025 compared to the last forecast. Inflation is up slightly in the current and next two years compared to November projections. Retail gas prices are up slightly in the near term while diesel prices are down slightly compared to the last forecast; that trend continues for diesel throughout the forecast horizon. The current B5 biodiesel price forecast for ferries is up in the first quarter of 2018 and then down the next quarter and up again in the third quarter of 2018- but overall there is not much change from the last forecast throughout most of the forecast horizon.
- The change in fuel tax revenue is up by \$14.25 million from the last forecast in the current biennium. Next biennium, fuel taxes are up by \$23.9 million over the last forecast. This is due to gas tax collections coming in above the actuals during the last two months and non-highway diesel tax refunds coming in below projections; therefore, those refund projections were lowered. Over the next 10 years, fuel tax collections are anticipated to be up by \$118 million, or 0.64%, from the last forecast.
- The licenses, permits and fee revenue is a revision upward by \$22.5 million from the November forecast for the 2017-19 biennium. For the next biennium, licenses permits and fee revenue are also up by \$27.9 million from the last forecast. Over the next 10 years, the forecast for license, permits and fee revenue is up by \$138 million or 1.7% more than the November forecast projections.
- The ferry forecast is up as well by \$2.1 million in the 2017-19 biennium due to actuals coming in close to forecast and a higher miscellaneous ferry revenue forecast in February. Over the next 10 years, ferry revenue is anticipated to be up slightly by \$24.3 million or 1.2% from the last forecast.

In the current fiscal year, total transportation revenues are anticipated to be \$3.17 billion, which is a 2.0% increase annually. This increase is due to fuel and LPF growth in particular. In comparing this current forecast with the last forecast, this February forecast is up from the last forecast for all fiscal years. Overall, during the next 10-year horizon, transportation revenues are projected to be \$33.76 billion and up \$312.8 million or 0.94% from the projections in November with an average annual growth rate of 1.3% beginning in the current fiscal year.

**Figure 1: Total Transportation Revenues Comparison**  
**February 2018 vs November 2017 vs. March 2017 forecasts** *millions of dollars*



**Figure 2: Revenue by Source**  
**2017-19 biennium (\$6.39 billion)**



Washington's transportation revenues come from numerous taxes, fees, permits, tolls, and other revenues. Revenues forecasted each quarter include the sources contained in Figure 2. This pie graph reveals the anticipated share of each state revenue source to the total transportation revenues for the 2017-19 biennium, (\$6.39 billion). Gasoline fuel taxes comprise the largest share at 45.8%. With the addition of diesel fuel taxes, all motor vehicle fuel taxes comprise 56.4% of all revenues. Licenses, permits, and fee revenues comprise the second largest share at 23.1%. The three largest revenue sources are projected to consist of 79.5% of revenues in the 2017-19 biennium. The remaining 20.5% consists of ferry fares, toll revenue, driver related revenue and other transportation related revenue.

**Figure 3: Forecast to Forecast Biennium Comparison of All Transportation Revenues February 2018 forecast - 10-year period**

Forecast to Forecast Comparison for Transportation Revenues and Distributions 10-Year Period								
February 2018• millions of dollars								
	Current Biennium						10-Year Period	
	2017-2019			2019-2021			(2017-2027)	
	Forecast Feb-18	Chg from Nov-17	Percent Change	Forecast Feb-18	Chg from Nov-17	Percent Change	Forecast Feb-18	Chg from Nov-17
<b>Sources of Transportation Revenue</b>								
Motor Vehicle Fuel Tax Collections	3,604.86	14.25	0.40%	3,676.54	23.87	0.65%	18,563.07	117.94
Licenses, Permits and Fees	1,474.73	22.48	1.55%	1,522.86	27.91	1.87%	8,168.72	138.00
Ferry Revenue†	402.97	2.10	0.52%	420.74	4.52	1.08%	2,149.16	24.34
Toll Revenue §	399.90	0.00	0.00%	416.66	0.00	0.00%	2,200.39	0.00
Aviation Revenues	8.96	1.79	24.92%	7.41	0.01	0.13%	39.38	1.99
Rental Car Tax	69.14	0.23	0.33%	72.08	0.50	0.70%	375.17	2.76
Vehicle Sales Tax	104.38	2.02	1.97%	109.12	2.07	1.93%	567.15	12.54
Driver-Related Fees	294.07	4.63	1.60%	300.81	2.44	0.82%	1,536.02	15.48
Business/Other Revenues ‡	30.66	(0.25)	-0.80%	31.54	0.02	0.05%	158.72	(0.23)
<b>Total Revenues</b>	<b>6,389.66</b>	<b>47.24</b>	<b>0.74%</b>	<b>6,557.75</b>	<b>61.34</b>	<b>0.94%</b>	<b>33,757.79</b>	<b>312.82</b>
<b>Distribution of Revenue</b>								
Motor Fuel Tax Refunds and Transfers	203.53	(5.31)	-2.54%	197.05	(5.14)	-2.54%	1,003.77	(26.32)
<b>State Uses</b>								
Motor Vehicle Account (108)	1,237.55	15.61	1.28%	1,270.52	16.89	1.35%	6,491.20	83.51
Transportation 2003 (Nickel) Account (550)	432.67	2.97	0.69%	441.13	4.49	1.03%	2,228.44	20.20
Transportation 2005 Partnership Account (09H)	640.47	3.97	0.62%	655.39	6.96	1.07%	3,312.92	30.47
Connecting Washington Account (20H)	814.58	3.94	0.49%	833.30	7.46	0.90%	4,203.57	34.23
Multimodal Account (218)	520.16	8.03	1.57%	541.88	8.70	1.63%	3,104.48	56.38
Special Category C Account (215)	51.34	0.25	0.49%	52.52	0.47	0.90%	264.93	2.16
Puget Sound Capital Construction Account (099)	37.35	0.18	0.49%	38.21	0.34	0.90%	192.76	1.57
Puget Sound Ferry Operations Account (109)	468.87	2.31	0.50%	488.50	5.24	1.08%	2,492.23	27.52
Capital Vessel Replacement Account (18J)	41.41	0.51	1.25%	41.27	0.54	1.32%	211.60	2.79
Tacoma Narrows Bridge Account (511)	166.52	0.00	0.00%	170.68	0.00	0.00%	874.16	0.00
High Occupancy Toll Lanes Account (09F)^	7.40	0.00	0.00%	0.00	0.00	0.00%	7.40	0.00
SR 520 Corridor Account (16J)	167.85	0.00	0.00%	178.07	0.00	0.00%	937.98	0.00
SR 520 Corridor Civil Penalties Account (17P)	7.47	0.00	0.00%	8.03	0.00	0.00%	41.86	0.00
Interstate 405 Express Toll Lanes Operations (595)	50.66	0.00	0.00%	59.88	0.00	0.00%	338.98	0.00
Aeronautics Account (039)	8.86	1.86	26.56%	7.24	0.12	1.62%	38.50	2.41
Washington State Aviation Account (21G)	0.10	(0.07)	-41.15%	0.17	(0.11)	-38.45%	0.88	(0.42)
State Patrol Highway Account (081)	450.06	4.67	1.05%	465.62	5.92	1.29%	2,393.97	29.92
Highway/Motorcycle Safety Accts. (106 & 082)	260.61	3.48	1.35%	267.08	1.50	0.57%	1,364.68	10.49
School Zone Safety Account (780)	0.83	0.00	0.00%	0.83	0.00	0.00%	4.13	0.00
Other accounts (201, 06T, 097, 09E, 216, 07C)	18.05	0.34	1.92%	18.37	0.36	1.99%	93.31	1.65
Ignition Interlock Devices Revolving Acct 14V	7.03	0.37	5.52%	6.65	0.14	2.10%	33.62	0.92
Multiuse Roadway Safety Account Collections-571	0.20	0.01	7.14%	0.21	0.01	7.43%	1.04	0.07
<b>Total for State Use</b>	<b>5,389.85</b>	<b>48.41</b>	<b>0.91%</b>	<b>5,545.33</b>	<b>59.03</b>	<b>1.08%</b>	<b>28,631.62</b>	<b>303.80</b>
<b>Local Uses</b>								
Cities	196.89	0.95	0.49%	201.41	1.80	0.90%	1,016.04	8.27
Counties	317.49	1.74	0.55%	324.82	2.89	0.90%	1,639.38	13.60
Transportation Improvement Board (112 & 144)	210.77	1.06	0.51%	215.99	2.02	0.94%	1,093.80	9.67
County Road Administration Board (102 & 186)	71.12	0.39	0.55%	73.14	0.74	1.02%	373.19	3.80
<b>Total for Local Use</b>	<b>796.27</b>	<b>4.15</b>	<b>0.52%</b>	<b>815.37</b>	<b>7.46</b>	<b>0.92%</b>	<b>4,122.40</b>	<b>35.35</b>
<b>Total Distribution of Revenue</b>	<b>6,389.66</b>	<b>47.24</b>	<b>0.74%</b>	<b>6,557.75</b>	<b>61.34</b>	<b>0.94%</b>	<b>33,757.79</b>	<b>312.82</b>

† Ferry Fares plus non-farebox revenue

‡ Business/Other Revenues net of amounts transferred to General Fund in the forecast.

§ 167 HOT lanes is a pilot program that is currently scheduled to sunset June 30, 2019

As Figure 3 indicates, in the current biennium, actual revenue for transportation is anticipated to be \$6.39 billion, which was \$47.2 million above the November forecast mainly due to higher fuel tax and LPF revenue actuals being brought in. In the next biennium, February's transportation revenues are projected at \$6.56 billion, which is up more \$61.3 million or 0.94% from November. This forecast is being revised upward because the first six months of actuals for FY 2018 have been higher than anticipated in key revenue streams like fuel tax and LPF. In addition, important economic variables like personal income and employment in the near term were higher but lower in the long-term. Most all revenue sources are up forecast to forecast except for business related revenue, which has a minimal change annually and toll revenue forecasts, which have not been changed in February. Over the 10-year forecast horizon, the transportation revenue forecast for February is anticipated to be \$33.76 billion, which is up \$312.8 million or 0.94% from the last forecast. The change in transportation revenue for this 10-year forecast is driven by the increase in fuel tax and LPF revenue, which totals \$256 million over the next ten years.

**Figure 4: Forecast to Baseline Biennium Comparison of All Transportation Revenues February 2018 forecast - 10-year period**

Forecast to Baseline Comparison for Transportation Revenues and Distributions 10-Year Period									
February 2018• millions of dollars									
	Current Biennium						10-Year Period		
	2017-2019			2019-21			(2017-2027)		
	Forecast Feb-18	Chg from Baseline ¥	Percent Change	Forecast Feb-18	Chg from Baseline ¥	Percent Change	Forecast Feb-18	Chg from Baseline ¥	Percent Change
<b>Sources of Transportation Revenue</b>									
Motor Vehicle Fuel Tax Collections	3,604.86	(52.92)	-1.45%	3,676.54	(49.71)	-1.33%	18,563.07	(281.36)	-1.49%
Licenses, Permits and Fees	1,474.73	(3.19)	-0.22%	1,522.86	26.43	1.77%	8,168.72	132.15	1.64%
Ferry Revenue†	402.97	12.55	3.21%	420.74	20.58	5.14%	2,149.16	107.03	5.24%
Toll Revenue §	399.90	(2.72)	-0.68%	416.66	(9.30)	-2.18%	2,200.39	(75.19)	-3.30%
Aviation Revenues ‡	8.96	2.10	30.68%	7.41	0.45	6.46%	39.38	4.32	12.33%
Rental Car Tax	69.14	0.69	1.00%	72.08	0.68	0.95%	375.17	4.14	1.12%
Vehicle Sales Tax	104.38	3.09	3.05%	109.12	3.09	2.91%	567.15	17.32	3.15%
Driver-Related Fees	294.07	0.36	0.12%	300.81	6.56	2.23%	1,536.02	21.03	1.39%
Business/Other Revenues ±	30.66	(2.07)	-6.31%	31.54	1.43	4.76%	158.72	3.18	2.04%
<b>Total Revenues</b>	<b>6,389.66</b>	<b>(42.11)</b>	<b>-0.65%</b>	<b>6,557.75</b>	<b>0.21</b>	<b>0.00%</b>	<b>33,757.79</b>	<b>(67.38)</b>	<b>-0.20%</b>
<b>Distribution of Revenue</b>									
Motor Fuel Tax Refunds and Transfers	203.53	2.79	1.39%	197.05	(7.44)	-3.64%	1,003.77	(34.46)	-3.32%
<b>State Uses</b>									
Motor Vehicle Account (108)	1,237.55	(35.44)	-2.78%	1,270.52	(4.34)	-0.34%	6,491.20	(47.24)	-0.72%
Transportation 2003 (Nickel) Account (550)	432.67	(2.61)	-0.60%	441.13	(1.60)	-0.36%	2,228.44	(12.69)	-0.57%
Transportation 2005 Partnership Account (09H)	640.47	(7.60)	-1.17%	655.39	(4.99)	-0.76%	3,312.92	(33.70)	-1.01%
Connecting Washington Account (20H)	814.58	(11.70)	-1.42%	833.30	(8.71)	-1.03%	4,203.57	(53.28)	-1.25%
Multimodal Account (218)	520.16	8.99	1.76%	541.88	10.20	1.92%	3,104.48	69.50	2.29%
Special Category C Account (215)	51.34	(0.74)	-1.42%	52.52	(0.55)	-1.03%	264.93	(3.36)	-1.25%
Puget Sound Capital Construction Account (099)	37.35	(0.54)	-1.42%	38.21	(0.40)	-1.03%	192.76	(2.44)	-1.25%
Puget Sound Ferry Operations Account (109)	468.87	10.91	2.38%	488.50	19.65	4.19%	2,492.23	102.43	4.29%
Capital Vessel Replacement Account (18J)	41.41	4.74	12.93%	41.27	4.77	13.06%	211.60	24.33	12.99%
Tacoma Narrows Bridge Account (511)	166.52	(2.33)	-1.38%	170.68	(2.65)	-1.53%	874.16	(12.38)	-1.40%
High Occupancy Toll Lanes Account (09F)	7.40	7.40	0.00%	0.00	0.00	0.00%	7.40	7.40	100.00%
SR 520 Corridor Account (16J)	167.85	(1.64)	-0.96%	178.07	(2.46)	-1.36%	937.98	(34.56)	-3.55%
SR 520 Corridor Civil Penalties Account (17P)	7.47	(0.21)	-2.75%	8.03	(0.13)	-1.56%	41.86	(1.98)	-4.51%
Interstate 405 Express Toll Lanes Operations (595)	50.66	(5.95)	-10.51%	59.88	(4.07)	-6.37%	338.98	(33.68)	-9.04%
Aeronautics Account (039)	8.86	2.00	29.19%	7.24	0.28	4.03%	38.50	4.48	13.15%
Washington State Aviation Account (21G)	0.10	(0.07)	-41.15%	0.17	(0.11)	-38.45%	0.88	(0.42)	-32.28%
State Patrol Highway Account (081)	450.06	(0.71)	-0.16%	465.62	3.18	0.69%	2,393.97	18.12	0.76%
Highway/Motorcycle Safety Accts. (106 & 082)	260.61	(2.49)	-0.95%	267.08	4.00	1.52%	1,364.68	7.47	0.55%
School Zone Safety Account (780)	0.83	(0.07)	-7.85%	0.83	(0.07)	-7.85%	4.13	(0.44)	-9.56%
Other accounts (201, 06T, 09T, 09E, 216, 07C)	18.05	0.48	2.71%	18.37	0.35	1.95%	93.31	1.85	2.02%
Ignition Interlock Device Revolving Acct 14V	7.03	1.50	27.11%	6.65	1.11	20.08%	33.62	5.94	21.48%
Multiuse Roadway Safety Account Collections-571	0.14	0.02	18.77%	0.20	0.07	56.26%	0.97	0.32	49.75%
<b>Total for State Use</b>	<b>5,389.85</b>	<b>(35.89)</b>	<b>-0.66%</b>	<b>5,545.33</b>	<b>13.74</b>	<b>0.25%</b>	<b>28,631.62</b>	<b>5.36</b>	<b>0.02%</b>
<b>Local Uses</b>									
Cities	196.89	(2.83)	-1.42%	201.41	(2.11)	-1.03%	1,016.04	(12.88)	-1.25%
Counties	317.49	(2.50)	-0.78%	324.82	(1.60)	-0.49%	1,639.38	(12.59)	-0.76%
Transportation Improvement Board (112 & 144)	210.77	(2.84)	-1.33%	215.99	(1.94)	-0.89%	1,093.80	(11.10)	-1.01%
County Road Administration Board (102 & 186)	71.12	(0.84)	-1.16%	73.14	(0.45)	-0.61%	373.19	(1.97)	-0.53%
<b>Total for Local Use</b>	<b>796.27</b>	<b>(9.01)</b>	<b>-1.12%</b>	<b>815.37</b>	<b>(6.10)</b>	<b>-0.74%</b>	<b>4,122.40</b>	<b>(38.55)</b>	<b>-0.93%</b>
<b>Total Distribution of Revenue</b>	<b>6,389.66</b>	<b>(42.11)</b>	<b>-0.65%</b>	<b>6,557.75</b>	<b>0.21</b>	<b>0.00%</b>	<b>33,757.79</b>	<b>(67.38)</b>	<b>-0.20%</b>

† Ferry Fares plus non-farebox revenue

‡ Business/Other Revenues net of amounts transferred to General Fund in the forecast.

§ 167 HOT lanes is a pilot program that is currently scheduled to sunset June 30, 2019

Baseline forecast is March 2017

The comparison of the February forecast to the baseline forecast (March 2017) is provided in Figure 4. Since the March 2017 forecast, in the current biennium, transportation revenues are anticipated to be \$6.39 billion, down \$42.1 million or 0.65%, from the baseline forecast. This is mainly due to motor fuel tax collections coming in less than anticipated in March by \$53 million. In addition, licenses, permits and fee revenue is anticipated to be lower by \$3.2 million and toll revenue is projected lower by \$2.7 million from the March forecast. Ferry revenue is up \$12.6 million above the March forecast. Next biennium is anticipated to have \$6.56 billion, which is nearly the same as the March forecast, up by \$0.2 million. Over the next 10 years, the February forecast for transportation revenue is still below the March forecast by \$67.4 million or 0.2%.

## Economic Variables Forecast

Several economic variables are used in forecasting Washington's transportation revenues each quarter. Key economic variables include the following: Washington real personal income, driver age population, driver-in population, inflation, employment, oil price index, fuel efficiency, US sales of new light vehicles and various employment sectors.

**Figure 5: Annual Percentage Change (%) in Select Economic Variables  
February 2018 Forecast**

Fiscal Year	WA Real Personal Income	Annual Driver Age Population	Driver-In Population	US General Prices (IPDC)	US Oil & Gas Price Index	US Fuel Efficiency (MPG)	Nominal Consumer Sales on New Vehicles	WA Non-ag. employment	WA Trade, Transportation and Utilities Employment	WA Retail Trade Employment
2017	3.5%	1.8%	-4.2%	1.6%	3.2%	1.9%	2.7%	3.0%	4.8%	3.8%
2018	3.2%	1.7%	0.2%	1.7%	6.6%	1.8%	3.8%	2.6%	3.8%	3.3%
2019	3.7%	1.6%	1.3%	1.8%	-6.4%	1.8%	1.6%	2.2%	1.9%	1.9%
2020	3.6%	1.4%	1.1%	1.9%	7.2%	1.9%	-0.1%	1.6%	1.0%	0.9%
2021	3.2%	1.3%	1.0%	2.0%	10.3%	1.9%	1.2%	1.0%	0.1%	0.1%
2022	2.9%	1.2%	0.9%	2.0%	4.8%	1.9%	3.5%	0.9%	-0.5%	-0.3%
2023	2.7%	1.2%	0.7%	2.0%	4.6%	1.9%	6.5%	0.9%	-0.2%	-0.1%
2024	2.6%	1.2%	0.6%	2.0%	3.9%	2.0%	4.7%	0.9%	0.2%	0.1%
2025	2.0%	1.2%	0.6%	2.1%	2.9%	2.0%	3.2%	0.8%	0.5%	0.4%
2026	2.2%	1.2%	0.7%	2.1%	2.3%	2.1%	3.5%	0.8%	0.7%	0.6%
2027	2.2%	1.1%	0.7%	2.1%	2.3%	2.2%	3.5%	0.8%	0.8%	0.6%
2028	2.2%	1.1%	0.6%	2.1%	2.4%	2.1%	3.0%	0.7%	1.0%	0.7%
2029	2.4%	1.1%	0.6%	2.1%	2.7%	2.1%	3.3%	0.8%	1.1%	0.8%

Source: Washington Economic and Revenue Forecast Council, Washington Office of Financial Management 2017 long-range forecast, January 2018 Global Insight forecast adjusted for Blue Chip average GDP growth rates and NYMEX crude oil prices

**Figure 6: Difference in Annual Percent Changes in Select Economic Variables from Last Forecast - February 2018 Forecast**

Fiscal Year	WA Real Personal Income	Annual Driver Age Population	Driver-In Population	US General Prices (IPDC)	US Oil & Gas Price Index	US Fuel Efficiency (MPG)	Nominal Consumer Sales on New Vehicles	WA Non-ag. employment	WA Trade, Transportation and Utilities Employment	WA Retail Trade Employment
2017	■	■	■	■	■	■	■	■	■	■
2018	▲	■	▲	▲	▲	■	▲	■	▲	▲
2019	▲	■	■	▲	▼	■	▲	▲	▲	▲
2020	■	■	■	▲	▲	■	▼	■	■	■
2021	■	■	■	■	▲	■	▲	▼	▼	▼
2022	▼	■	■	■	▼	■	▲	▼	▼	▼
2023	■	■	■	■	▼	■	▲	▼	▼	▼
2024	▲	■	■	■	▲	■	▼	▼	▼	▼
2025	▼	■	■	■	▼	■	▼	▼	▼	▼
2026	▼	■	■	■	▼	■	▼	■	■	■
2027	▼	■	■	■	▼	■	▼	■	■	■
2028	▼	■	■	■	▼	■	▼	▼	▲	▲
2029	▼	■	■	■	■	■	▼	■	▲	▲

▲	Difference in percentage change is greater than 1%		
▲	Difference in percentage change is less than 1% and greater than 0.1%		
■	Difference in percentage change is less than 0.1% and greater than -0.1%		
▼	Difference in percentage change is greater than -0.1% and less than -1%		
▼	Difference in percentage change is greater than -1%		

## Motor Fuel Price Forecast

Washington's transportation revenues are affected by fuel prices. In particular, gasoline tax collections are negatively related to the price of gasoline. WSDOT's budget is heavily impacted by changes in fuel prices. Therefore, projections of fuel prices are made quarterly to assist in the near and long-term budgeting process for WSDOT. The forecast includes the following price projections: U.S. West Texas Intermediate crude oil (WTI) and Washington retail prices of gasoline, diesel, and biodiesel (B5 & B99).

### Source of data for the forecast

For the Washington retail price of gasoline, fuel prices are collected from the Energy Information Administration's (EIA) survey of retail prices for regular gasoline. For the retail price of diesel, the actual prices are collected from AAA's weekly publication of retail prices for diesel in Washington. The actual ferry B5 biodiesel prices are reported by the Washington State Ferries (WSF). In the short term (thorough calendar year 2019), the retail gas price forecasts are based on the growth in the national gas price forecast by EIA. The diesel and biodiesel fuel prices are projected based on the growth in national diesel prices from the Energy Information Agency (EIA) monthly projections. Beyond calendar year 2019, the fuel price projections are based on February's Global Insight national gas price forecast for future Washington gas prices and the producer price index (PPI) projections for refined petroleum products for the diesel price forecasts.

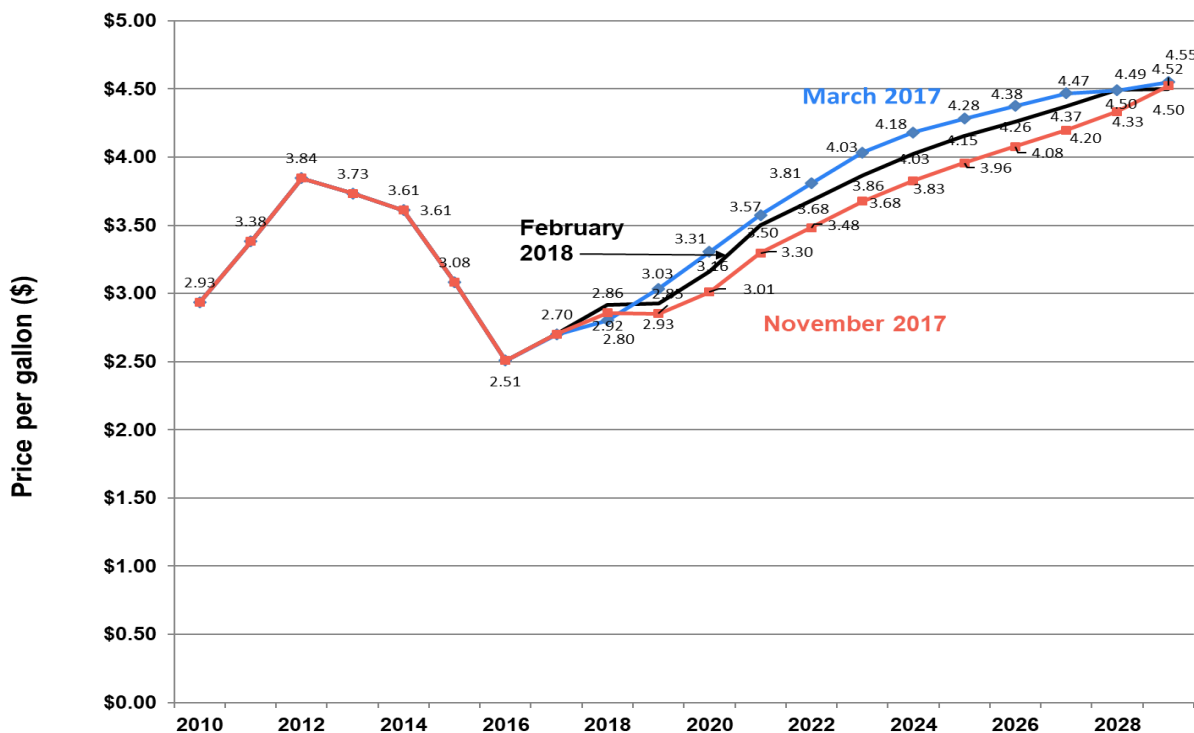


**Figure 7: Near-term UNADJUSTED BASELINE Qtrly Fuel Prices: February 2018**

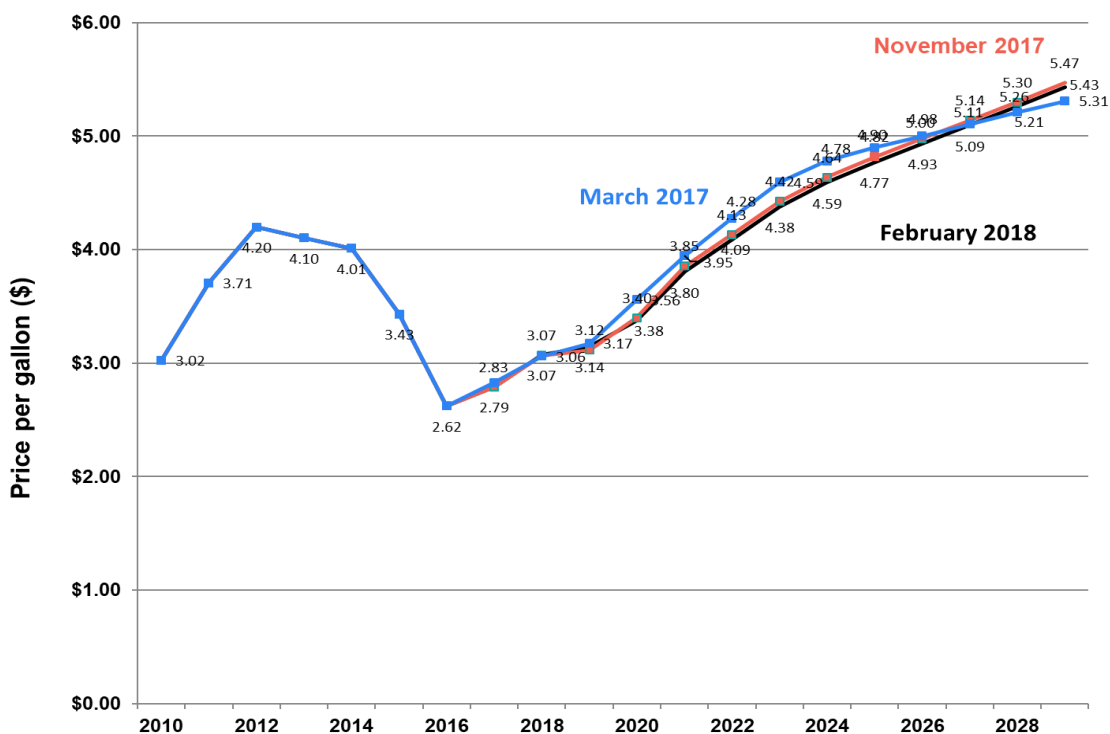
<b>Fiscal Year Quarter</b>	<b>Crude Oil Price (\$/barrel)</b>	<b>WA Retail Gasoline Price (\$/gal)</b>	<b>WA Retail Diesel Price (\$/gal)</b>
2016: Q3	44.85	2.61	2.71
2016: Q4	49.14	2.61	2.73
2017: Q1	51.77	2.73	2.85
2017: Q2	48.24	2.86	2.86
<b>FY 2017</b>	<b>48.50</b>	<b>2.70</b>	<b>2.79</b>
2017: Q3	48.16	2.89	2.93
2017: Q4	55.37	2.94	3.15
2018: Q1	54.00	2.87	3.14
2018: Q2	54.00	2.98	3.07
<b>FY 2018</b>	<b>52.88</b>	<b>2.92</b>	<b>3.07</b>
2018: Q3	56.00	2.99	3.11
2018: Q4	57.33	2.89	3.18
2019: Q1	56.00	2.80	3.13
2019: Q2	56.67	3.03	3.15
<b>FY 2019</b>	<b>56.50</b>	<b>2.93</b>	<b>3.14</b>
2019: Q3	58.00	3.03	3.20
2019: Q4	59.00	2.90	3.25
2020: Q1	62.81	3.08	3.46
2020: Q2	66.32	3.64	3.59
<b>FY 2020</b>	<b>61.53</b>	<b>3.16</b>	<b>3.38</b>
2020: Q3	68.78	3.48	3.69
2020: Q4	70.33	3.26	3.77
2021: Q1	71.47	3.36	3.84
2021: Q2	72.47	3.89	3.91
<b>FY 2021</b>	<b>70.76</b>	<b>3.50</b>	<b>3.80</b>

The forecasts of biodiesel prices include two different biodiesel prices: B5 and B99 without the renewable identification number (RIN). WSF currently purchases biodiesel B5. WSDOT also purchases B99 biodiesel without RIN for vehicle fleet needs. WSDOT receives OPIS fuel prices with the latest prices for B5 and B99 biodiesel prices without RIN in Tacoma. The B99 prices represent those paid by other state entities' purchases of biodiesel. The B5 price is based on Washington State ferries' latest reported purchase price of biodiesel with the markup, delivery, and other tax costs included and the latest B5 OPIS prices for the current forecast month. The base for the price forecast for the B99 price without RIN for non-WSF purchases is the OPIS base price without markup, delivery, and tax costs.

**Figure 8: Forecast of UNADJUSTED Washington Retail Gasoline Prices, Regular February 2018, November and March 2017**



**Figure 9: Forecast of UNADJUSTED Washington Retail Diesel Prices March, September and November 2017**



### Comparison of several current U.S. crude oil price forecasts

The WTI crude oil prices from five surveyed forecasting entities, EIA, NYMEX, Global Insight, Consensus Economics, and Moody's Economy.com were compared in this forecast. WSDOT's baseline fuel price forecasts use the Energy Information Administration (EIA) forecasts in the near-term through calendar year 2019 and then use the growth rates from Global Insight forecasts for subsequent years. The forecast for WTI crude oil in FY 2018 ranged from \$52.9 per barrel from EIA in our baseline forecast to \$57.4 per barrel from Global Insight. The upward adjustment needed from the average crude oil price is 4.45% for FY 2018. In FY 2019, the 5-entity average crude oil price was \$58.74, which was close, within 4%, to the baseline forecast of \$56.50 per barrel. In FY 2020, the crude oil price projections range from \$55.6 per barrel from NYMEX to \$61.5 per barrel in the baseline forecast. The adjustment needed for the forecast is -3.53% in FY 2020. The forecast for WTI crude oil in FY 2021 ranged from \$53 per barrel by NYMEX to \$71 per barrel in the baseline or Global Insight forecast. The baseline crude oil price forecast in FY 2021 were 10.9% below the 5 entity average Figure 10 reveals the WSDOT baseline WTI price forecast compared to the other entity's crude oil price forecasts.

**Figure 10: Near-term Annual WTI Crude Oil Price Forecasts – 5 Different Forecast Comparisons: February 2018** *Dollars per barrel*

Fiscal Year	WSDOT (EIA/GI)	NYMEX	Global Insight	Economy.com	Consensus Economics	5 Entity Avg	% Diff Lowest	% Diff Highest	% Diff Average
2018	\$52.88	\$53.79	\$57.41	\$57.49	\$54.62	\$55.24	1.72%	8.71%	4.45%
2019	\$56.50	\$59.83	\$59.41	\$60.79	\$57.18	\$58.74	1.20%	7.60%	3.97%
2020	\$61.53	\$55.60	\$61.07	\$59.26	\$59.36	\$59.36	-9.65%	-0.76%	-3.53%
2021	\$70.76	\$52.93	\$70.74	\$59.54	\$61.33	\$63.06	-25.20%	-0.02%	-10.88%

**Figure 11: Near-term Average Adjusted Quarterly Fuel Prices and B5 Biodiesel Prices and Unadjusted B99 Biodiesel Prices Used for Budgeting Purposes: February 2018** *Dollars per gallon*

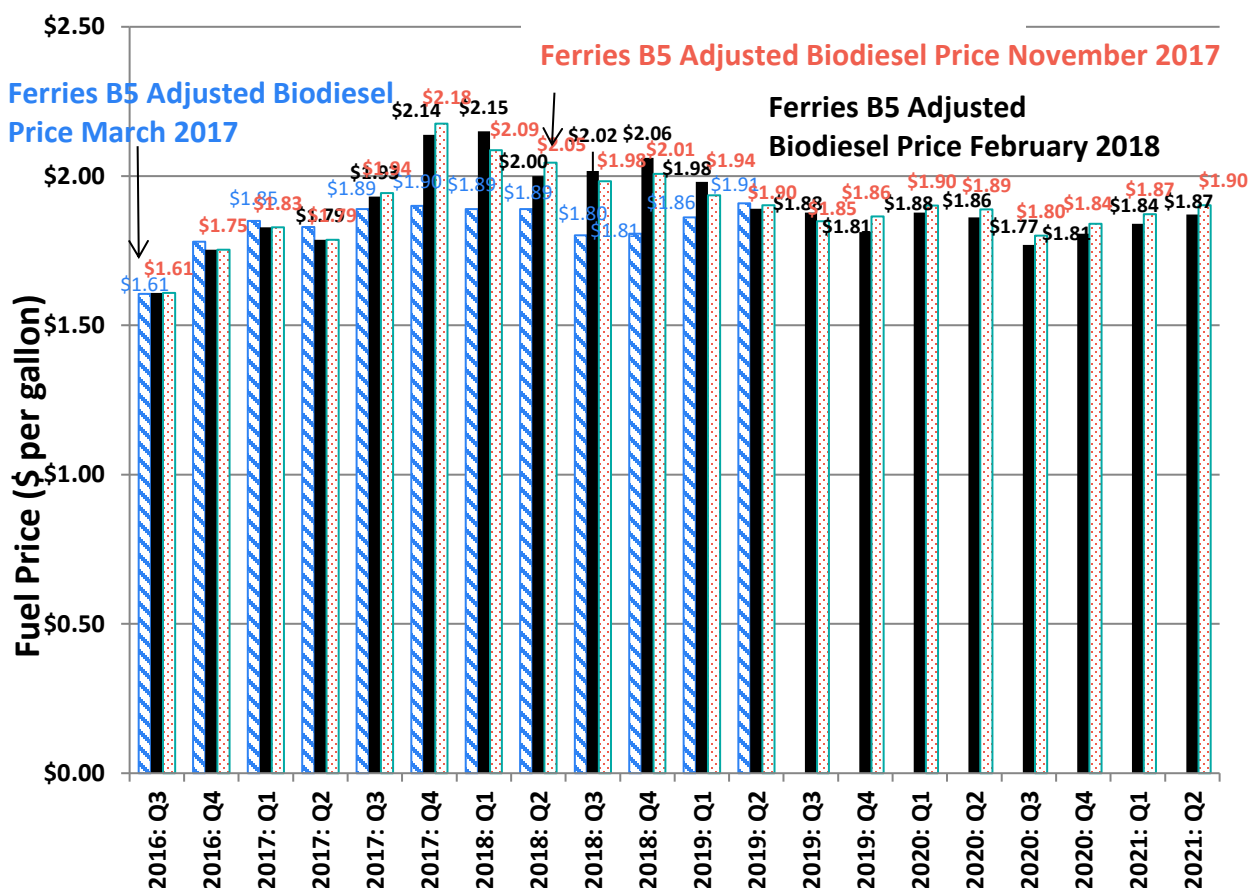
Fiscal Year Quarter	Adjusted WA Retail Gasoline Price (\$/gal)	Adjusted WA Retail Diesel Price (\$/gal)	Adjusted B5 Biodiesel Price (\$/gal)	Unadjusted B99 Biodiesel price
2017Q3	2.89	2.93	1.93	2.39
2017Q4	2.94	3.15	2.14	2.37
2018Q1	2.99	3.28	2.15	2.53
2018Q2	3.12	3.20	2.00	2.52
<b>FY2018</b>	<b>2.98</b>	<b>3.14</b>	<b>2.05</b>	<b>2.45</b>
2018Q3	3.11	3.24	2.02	2.55
2018Q4	3.00	3.31	2.06	2.61
2019Q1	2.91	3.26	1.98	2.57
2019Q2	3.15	3.27	1.89	2.56
<b>FY2019</b>	<b>3.05</b>	<b>3.27</b>	<b>1.99</b>	<b>2.57</b>
2019Q3	2.93	3.09	1.88	2.60
2019Q4	2.80	3.14	1.81	2.64
2020Q1	2.97	3.34	1.88	2.81
2020Q2	3.51	3.47	1.86	2.91
<b>FY2020</b>	<b>3.05</b>	<b>3.26</b>	<b>1.86</b>	<b>2.74</b>
2020Q3	3.10	3.29	1.77	3.00
2020Q4	2.90	3.36	1.81	3.06
2021Q1	3.00	3.42	1.84	3.12
2021Q2	3.46	3.48	1.87	3.17
<b>FY2021</b>	<b>3.12</b>	<b>3.39</b>	<b>1.82</b>	<b>3.09</b>

WSDOT applies the five entity forecast average adjustment to the baseline February 2018 retail gasoline, diesel, and B5 biodiesel prices. The fuel prices listed in Figure 11 will be used to estimate the

future costs to WSDOT agency's 2017-19 biennium budget and next biennium budget for gas, diesel and biodiesel fuel purchases for fiscal years 2018 through 2021. The latest adjusted forecast requires a 4.5% adjustment upward in the baseline fuel prices for retail gas, diesel and B5 biodiesel prices for FY 2018 and 4% upward adjustment to the baseline fuel prices in FY 2019. In FY 2020, the baseline fuel prices are adjusted downward by 3.5%. As the forecast horizon goes out further, the adjustments to the baseline forecasts are larger due to more uncertainty about future oil prices. The adjustment in FY 2021 is -10.9% in FY 2021.

As Figure 12 reveals, the new B5 fuel price forecast is slightly lower in the last quarter of 2017 but slightly above the last forecast for the first quarter of 2018. Beginning in the third quarter of 2018, the most recent forecast is higher than the last forecast for 3 quarters. Then by the first quarter of 2020, the Feb. forecast is below the November forecast for the remainder of the forecast horizon.

**Figure 12: Quarterly Ferries Adjusted B5 Biodiesel Prices Used for Budgeting the 2017-19 and 2019-21 Biennia February 2018 vs. November 2017 vs. March 2017 Forecasts**



## Motor Vehicle Fuel Tax Forecast

### Overview

Tax collections from motor vehicle fuel sales of gasoline and diesel for November and December 2017 came in above the November 2017 forecast by 2.9% or \$8.2 million. Gasoline tax collections for November and December exceeded November projections by \$2.9 million or 1.2%. Gasoline collections in December exceeded projections by \$3.2 million while collections for November fell short by \$0.3 million.

Diesel collections in November and December exceeded the November 2017 forecast projections by \$5.3 million or 10.5%. Diesel collections in November exceeded projections by \$5.6 million while collections for December fell short by \$0.3 million.

Projected gross fuel tax revenue for the 2017-2019 biennium measures \$3.6 billion or \$14.3 million above the November forecast. In the 2019-2021 biennium, gross fuel tax collections total \$3.7 billion, \$23.9 million or 0.65% higher than forecasted in November 2017. The overall motor vehicle fuel tax revenue for the 10-year period beginning in the current biennium and ending in the 2025-27 biennium increased to \$18.56 billion in total, or a net of \$117.9 million higher or 0.64% more than the November revenue forecast. Generally, throughout the forecast horizon, the current revenue forecast projections are higher than November's forecast.

### Primary reasons for the change in the February 2018 forecast

- In the current biennium, gross gas tax collections increase by \$8.2 million due to actuals coming in higher than anticipated by the November forecast. The current biennium projections for gas tax revenue is up \$6.2 million over the last forecast.
- In the 2019-2021 biennium, gas tax collections increase by \$9.1 million, compared to November's forecast and forecast-to-forecast revenues increase by \$56.4 million in total over the 10-year forecast horizon from 2018-2027. The long-term increase results from higher actuals in FY2018 and higher growth rates of non-agricultural employment through FY2020. Also, from FY2021 through FY2027, the February gasoline forecast model incorporated lower real gasoline prices (based on percentage change) compared to November 2017 projections of real gasoline prices.
- In the current biennium, diesel tax collections are anticipated to come in \$8 million or 1.2% above the November forecast. Next biennium, diesel tax collections are projected to be \$14.8 million above the latest forecast. Overall, diesel tax revenue will increase by \$61.6 million in the next ten years compared to the November forecast. The increase in revenues is due to stronger projected growth in employment in transportation, trade, and utilities from FY2018-FY2021.
- In this February forecast, non-highway diesel tax refunds has been revised downward by \$7.8 million, in the current biennium. This is due to actual monthly refunds being lower in FY 2018 than projected. This downward adjustment brings the non-highway diesel tax refunds forecast in line with the actual diesel tax refunds seen so far in FY 2018.

## Motor Vehicle Revenue (Licenses, Permits, and Fees)

### Overview

Vehicle related forecasts fall into two main categories: motor vehicle registrations and license plate-related fees. This forecast has a variety of small fees but the majority of the revenue is from registration-based fees. There are five main economic drivers for the vehicle licenses, permits, and fees (LPF) forecast: Washington population and net migration, Washington real personal income, Washington Retail Employment, Washington - U.S. real income share, and U.S. sales of light vehicles.

Washington State anticipates collecting about \$1.47 billion from vehicle licenses, permits, and fees (LPFs) in the 2017-2019 biennium, an increase of \$22 million or 1.55% compared to the forecast in November. Over the next 10-year period, the LPF forecast is anticipated to be \$8.17 billion which is up \$138 million or 1.7% from the previous forecast.

*Primary reasons for the change in the February 2018 forecast*

- Forecasted passenger vehicle registrations for FY 2018 are up 35,000 vehicles or 0.68% over the previous forecast. We see a forecast-to-forecast increase in the out years as well. The increased registrations are mainly due to the increased personal income growth rate and higher actual registrations we received for the past three months including October, November and December.
- The truck registration forecast is also up by 0.95% in FY 2018 and all future years compared to the last forecast. In FY 2019, truck registrations will increase 1.29% from the previous forecast. The increase in truck registrations peaks in FY 2021 with an upturn of 2.15%, or 35,000 vehicles. The reason for this revision upward is because actual truck registrations have been coming in above the last forecast for the past three months. The retail employment forecast, used in this forecast model, is also higher in the near-term but lower after a few years.
- In the current biennium, \$30 registrations revenue is up 0.54% or about \$1.9 million due to the higher car registration forecast. In the next biennium, revenue from \$30 registrations is about \$2.1 million higher than the previous forecast. The revenue keeps increasing thereafter and runs about \$4.7 million (1.16%) higher than the November forecast by the end of the forecast horizon. This synchronizes with the pattern of the passenger vehicle registrations and also the personal income economic variable, used in this forecast, was up in the near-term from the last forecast.
- In the current biennium, weight based truck revenue is forecasted to be \$7.6 million higher than the previous forecast. This is due to the higher truck forecast and the new truck weight distribution applied in this forecast. The revised revenue forecast increase peaks in the 2019-2021 biennium to \$11.4 million comparing to the previous forecast. The increase then gradually reduces in the following biennium and by the end of the forecast horizon, the forecast-to-forecast change is \$6.5 million more weight based truck revenue in 2027-29 biennium.
- The freight project fee forecast is also driven up higher by the truck weight distribution and truck registrations. The freight project fee maintains a higher forecast than the previous one throughout the forecast horizon. In the current biennium, the freight project fee is about \$1.7 million more than the previous forecast. Similar to the Truck weight revenue, the revenue increase peaks in the 2019-2021 biennium to \$2 million increase over the last forecast and then gradually decreases. By the end of the forecast horizon, we see about \$1.7 million more revenue than last projected.
- The passenger weight fee revenue forecast is higher in February, driven by the higher passenger car forecast and a change in the passenger car weight distribution to slightly heavier cars. In the current biennium, the passenger weight fee forecast is above the last forecast by \$5.5 million, or 1.76% forecast-to-forecast change. This positive forecast change continues throughout the forecast horizon. The forecast-to-forecast change grows to \$10.4 million or 2.12% by the end of the forecast.
- Other LPF forecasts have been raised in the current biennium to better reflect the actual revenue received to date in FY 2018. The trip permit administrative fee and surcharge increased by \$1.2 million compared to the last forecast in the current biennium and that trend continued throughout the forecast horizon.
- Electric vehicle renewals have come in higher than expected. Updating the renewal rate resulted in a \$0.3 million (+7.4%) in the current biennium and an average of 9.6% in the outer years.

## Driver Related Revenue Forecasts

### Overview

The February 2018 forecast of driver related revenue projected by the Department of Licensing includes the following revenues: driver license fees (including commercial driver licenses, enhanced driver licenses, and temporary restricted licenses), ID card fees, driver exam application fees, copies of records, motorcycle operator fees, ignition interlock fees, and other miscellaneous fees. The miscellaneous fees include vehicle filing fees, limousine licenses, fines and forfeitures, and driver school instructor license fees. These driver-related fees are deposited into the Highway Safety Fund (HSF), Motorcycle Safety Education Account (MSEA), the State Patrol Highway Account (SPHA), and Ignition Interlock Revolving Account (IIRA).

All driver-related revenue for FY2017-19 biennium is closed at \$294.1 million, about \$4.6 million higher (or 1.6%) than the prior forecast. Revenue for FY2019-21 biennium is forecasted at \$300.8 million, about \$2.4 million (or 0.8%) higher than the prior forecast. Over the next ten year period (FY18-FY27), driver related revenue is anticipated to total \$1,536 million, about \$15.5 million (1.0%) higher from the prior forecast.

It is important to note that many of the driver related revenue streams follow a five-year renewal cycle until FY2015 when DOL started issuing six-year licenses. Caution is advised in year over year comparisons.

#### *Primary reasons for the change in the February 2018 forecast*

- Driver-in migration is slightly higher than prior forecast, but employment in the outer years are lower, resulting in about \$2.5 million (+1.2%) forecast to forecast change in the current biennium and an average of 0.6 million (+0.3%) in the outer biennia.
- Better than expected ADR sales in the last few months resulted about 1.0 million (or +3%) upward revision each biennium.
- Hearings revenue came in significantly higher than expected, resulting in 0.5 million (+12%) upward revision to the forecast in the current biennium and an average of 0.4 million (+9.5%) in the outer biennia.

## Other Transportation Related Revenue Forecast

### Overview

This category of transportation related revenue forecasts consist of four primary components: vehicle sales and use taxes, rental car sales taxes, studded tire fees, business and other revenue and aeronautics revenue. The business and other revenue category includes the following revenue sources:

- Sales of property
- WSP and DOT services and publications and documents
- Filing fees and legal services
- Property management
- Access Permits (Highways)
- Outdoor Advertising
- Other revenues

State Patrol Highway Account miscellaneous revenue consists of ACCESS fees (fees charged for usage of our statewide law enforcement telecommunications system), Breathalyzer Test fines, DUI Cost Reimbursement, Commercial Vehicle Penalties and Communication Tower Site Leases and Terminal Safety Inspection fees.

Washington State collected \$192.66 million from Other Transportation Related revenues in the 2015-2017 biennium and are projected to be \$213.13 million in the 2017-19 biennium, an increase of 10.6% biennium to biennium. For the next 10-year period, the transportation related revenue forecast is anticipated to be \$1,647 million, which is up \$29.2 million from the previous estimate in November 2017 mainly due to higher rental car, motor vehicle sales tax and aviation revenue being higher than prior projections.

#### *Primary reasons for the change in the February 2018 forecast*

- Motor vehicle tax revenue came in above forecast by \$2 million in the current biennium. Sales tax collections were \$724,000 higher, or 5.1%. Use tax collections were \$177,000 higher, or 7.6%. Combined, the forecast was off by 5.5% over the past three months. This was the largest variance the forecast has had in quite some time. In addition, the forecast for U.S. new vehicle sales were higher in the near term, lower in the medium term and then again higher in the long term. This caused the motor vehicle sales tax projections to be higher as well. The revenue forecast has been increased throughout the forecast horizon. The biennial forecast change ranges from 1.9% in the near term to 2.5% in the long term.
- In the four months since the last forecast, rental car tax collections were \$22,000 below forecast, or 0.2%. The monthly pattern took advantage of offsetting errors. The economic variables improved since November. Growth is expected to pick up after FY 2017 growth of 2.7%. In the current forecast, the rental car tax FY 2018 growth is forecasted to be 4.9%, up from 4.8% expected in November. The close revenue forecast for rental car taxes, combined with a stronger economic forecast, resulted in a slight upward revision to this forecast. The biennial change ranges from 0.3% in the current biennium to 0.9% in 2023-25 before diminishing somewhat.
- WSDOT Business and other miscellaneous revenue for February has been revised down slightly by \$153,600 or 1% forecast compared to the November forecast in the current biennium. In consultation with WSDOT Real Estate Services Department, property sales continue to be projected at \$10 million a biennium. Overall, WSDOT Business related revenues are up marginally by \$0.1 million or 0.1% from the last forecast in the next ten-year horizon due to the increase in inflation.
- The school zone fines forecast is unchanged since the November forecast.
- WSP business related revenue for February has changed slightly from the November forecast. The Communication Tower leases estimate is lower in the 2027-2029 Biennium by \$63,000 due to a formula error discovered in the last forecast.
- Aviation Fuel Tax forecast for FY 2017-19 biennium is higher by \$1.9 million or 36.5% than the November 2017 forecast due to incorporating revenue related to a recent DOL audit finding. Of note is that the audit finding is currently under appeal and the final disposition of these monies has yet to be determined. However, the deposit of approximately \$2.2 million into the Aeronautics Account (039-115) with a bulk of the monies associated with the audit finding is reflected in the current forecast. The February forecast is higher throughout the forecast horizon on average by \$151,000 or 2.8% per biennium with the updated OFM long-term manufacturing employment forecast.
- The aeronautics fuel tax refund transfer had been revised upward by \$819,287 in the current biennium due to higher fuel consumption & revenue in this February forecast.
- The new revenue from the aviation specialty license plates has been revised downward due to actuals not meeting projections in FY 2018. The decline in this revenue is \$34,400 in the current fiscal year, \$59,000 next year, \$58,000 in FY 2020, \$59,620 in FY 2021 and \$63,620 in FY 2022. The decline in revenue falls over the remainder of the forecast horizon.

## **Ferry Ridership and Revenue**

### *Overview*

For the current forecast, the ferry fare revenue and ridership forecasts for Washington State Ferries are completed in four stages applying to seven fare categories. The seven fare categories are:



- Passenger full fares
- Passenger frequent user discounted (commuter) fares
- Passenger other discounted fares (e.g., senior fare, youth fare)
- Auto / driver full fares
- Auto / driver frequent user discounted (commuter) fares
- Other vehicle / driver discounted (senior/disabled and motorcycle) fares
- Oversize vehicle / driver (over 22 feet in length) fares

In August 2017, the Washington State Transportation Commission adopted two annual fare increases, the first of which took effect on October 1, 2017 (FY 2018), to be followed by the second on October 1, 2018 (FY 2019). The first increase on October 1, 2017 will raise passenger fares by 2.1% and vehicle/driver fares by 2.9%, except oversize vehicles, which will receive smaller fare increases averaging about 1.6% overall. A second increase will take place on October 1, 2018, raising passenger fares by another 2.1% and non-oversize vehicle/driver fares by 2.5%. Oversize vehicle fares will remain unchanged over their FY 2018 values. With no further fare increases included in the Baseline Forecast, real fares will slowly decline beyond FY 2019 due to general inflation. These increases were first included in both the September and November 2017 Baseline Forecasts, thus providing equivalent fare policy points of comparison for the February 2018 Baseline Forecast.

Overall, the February Baseline Forecast ridership in the current 2017-19 biennium is 0.3% higher than the November forecast (including actual ridership data through January 2018), and fare revenues are projected to be 0.5% higher (including actual collections through January 2018). This is the result of improving economic conditions slightly offsetting marginally lower than expected ridership in the seven months of FY 2018 due to a series of service disruptions early in the fiscal year. For the rest of the forecast horizon, projected overall ridership and revenue are slightly higher, due a combination of factors including lower real gas prices, higher working age population forecasts, and slightly lower real fares due to higher inflation projections, among other factors.

For the current biennium, miscellaneous revenues are projected to be slightly higher than in November (up 1.7%), reflecting a gradual ramp-up of elevated vendor expectations for on-board concession sales that more than offset a slight drop in other non-fare revenues generated at the terminals. For the 2019-21 biennium, forecasted miscellaneous revenues are expected to be nearly 19% higher. In subsequent biennia, miscellaneous revenues are expected to be about 31% higher than in the November forecast.

Total fare and miscellaneous revenues forecasted for the 2017-19 biennium amount to \$403.0 million, which is 0.5% higher than the last forecast due to a slight increase in farebox revenues along with the aforementioned increase in miscellaneous revenues. Over 12 years (FY 2018-29), ferry fare and miscellaneous revenue will amount to nearly \$2.61 billion, which is 1.2% higher than the November Forecast.

*Primary reasons for the change in the February 2018 forecast*

- Overall, the February fares forecast is the result of lower real gas prices, higher working age population projections, slightly lower real fares, and in the near term, slightly higher real personal income and employment forecasts.
- WSF's forecast for miscellaneous revenue has been revised upward, progressing to levels that are significantly higher from November by FY 2022 due to higher vendor expectations for vessel non-fare revenues.

## Toll Revenue

### Overview

Washington State has four tolled facilities. The Traffic and Revenue Forecast for February 2018 is a no-change forecast.

Figure 13 below provides actual traffic and adjusted gross toll revenue for the four facilities from July through December 2017. Adjusted gross toll revenues were impacted by operational issues that led to a delay in license plate image processing and toll bill mailings. However, gross toll revenue potential measures revenue based on the transaction data and therefore is not as impacted.

For the first six months of the year, in comparison to the November 2017 forecasts for transactions are within a percent of the forecast for TNB, 3.3 percent lower on SR 167, 3.2 percent higher on SR 520 and 1.6 percent higher on I-405. Adjusted gross toll revenue is 10.3% above forecast on I-405; the primary cause of the positive variance is due to higher than anticipated toll rates. Similar to toll trips, toll revenue on SR 167 is slightly lower than forecasted while SR 520 is 2.8% above forecast, and TNB is showing a 2.8 percent increase in revenue compared to the forecast.

**Figure 13: FY 2018 YTD Actuals (July to December) vs November 2017 Forecast**

Toll Facility	Toll Traffic				Adjusted Gross Toll Revenue			
	Forecast	Actuals	Variance	Variance %	Forecast	Actuals	Variance	Variance %
TNB	7,707,000	7,776,082	69,082	0.9%	\$ 40,222,000	\$ 41,360,268	\$ 1,138,268	2.8%
SR 167 HOT Lanes	820,100	792,988	(27,112)	-3.3%	\$ 1,665,400	\$ 1,651,828	\$ (13,572)	-0.8%
SR 520	12,255,000	12,647,034	392,034	3.2%	\$ 39,307,000	\$ 40,395,147	\$ 1,088,147	2.8%
I-405 ETLs	4,992,000	5,071,815	79,815	1.6%	\$ 10,360,000	\$ 11,430,444	\$ 1,070,444	10.3%

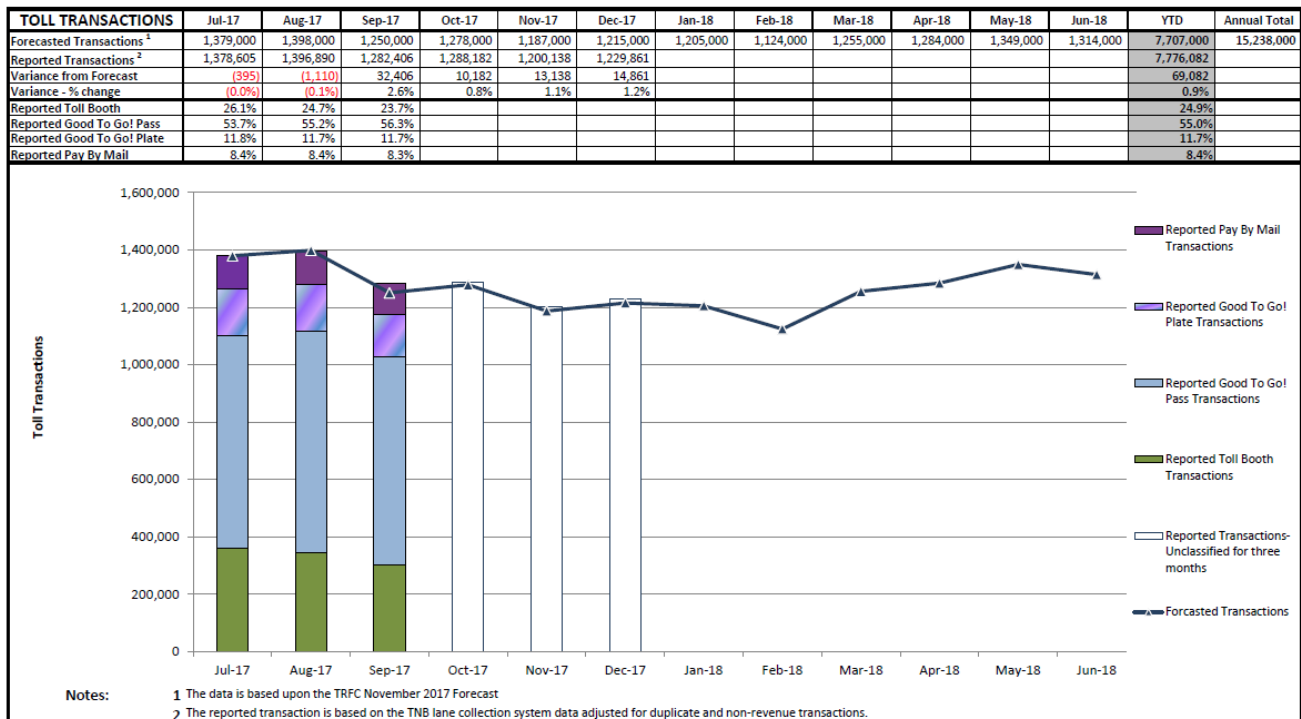
### ***Updates to Tacoma Narrows Bridge (TNB) traffic and toll revenue***

As mentioned in the toll *Overview*, February traffic and revenue forecast update has no change to all toll facilities from November. TNB's primary change in November 2017 forecast was to reflect FY 2017 actual performance and the revision of the payment mix.

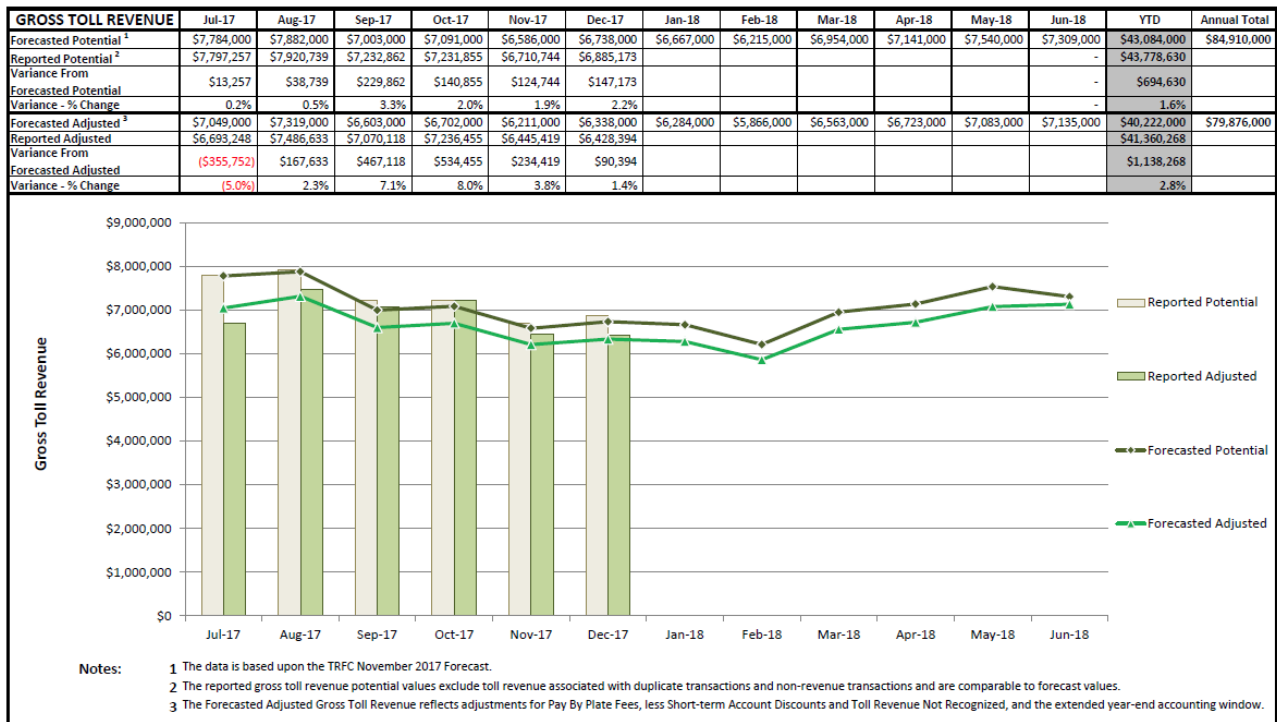
The November 2017 update included a downward adjustment to the prior forecast to reflect FY 2017 actuals lower than the prior forecast. Transactions are about 1.3 to 1.6 percent lower throughout the forecast horizon comparing to last forecast. There was also a revision in the payment mix for TNB. Good To Go (GTG) transponder transactions percent of total was decreased from 59.5 to 58.5 percent in FY 2018 and image-based transactions (PBP and PBM) were increased from 17.0 to 18.0 percent. The decrease in transactional forecast also led to a decrease in the gross toll revenue potential of \$2.61 million or 1.5 percent below the last forecast in the current biennium. This same trend continues throughout the forecast horizon. The November forecast anticipated the transponder transaction share would go up in the future, reaching a steady stage of 64.5% in FY 2026.

For YTD FY 2018, reported transactions are 0.90% above forecast, at almost 7.8 million transactions; in terms of reported adjusted toll revenue, YTD revenue is up 2.8% above forecast, at \$41.4 million (\$1.1 million positive variance).

**Figure 14: FY 2018 TNB Reported Toll Transactions Compared to November 2017 Forecast**



**Figure 15: FY 2018 TNB Reported Toll Revenue Compared to November 2017 Forecast**



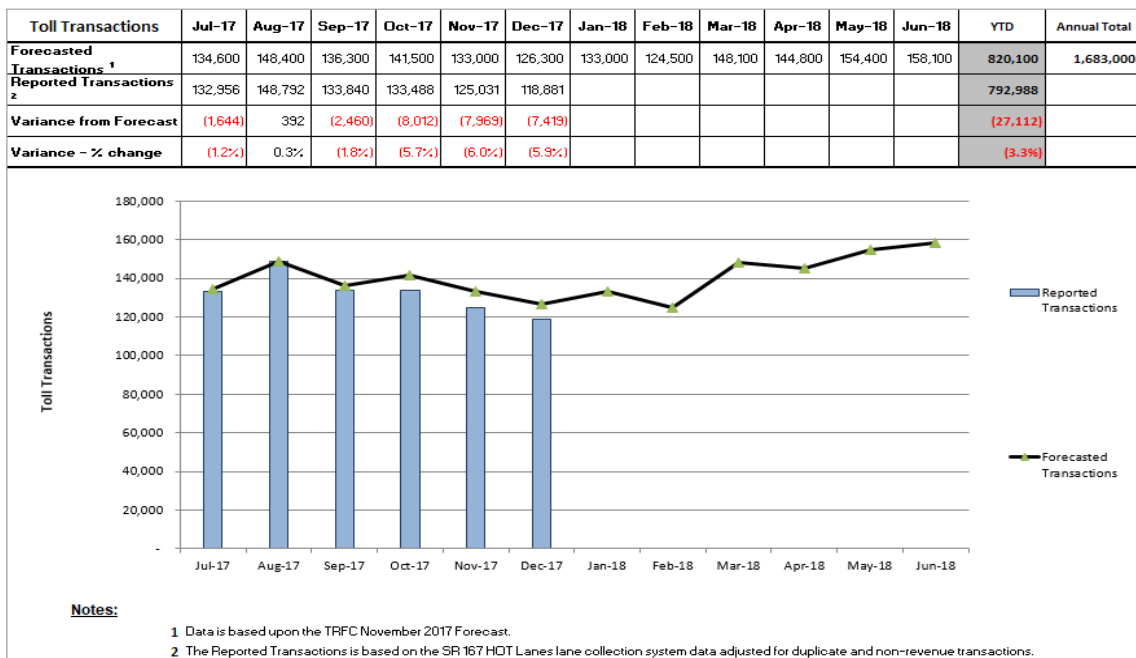
### Updates to SR 167 High Occupancy Toll (HOT) Lanes traffic and toll revenue

There is no change to SR 167 HOT Lanes traffic and revenue forecast in February.

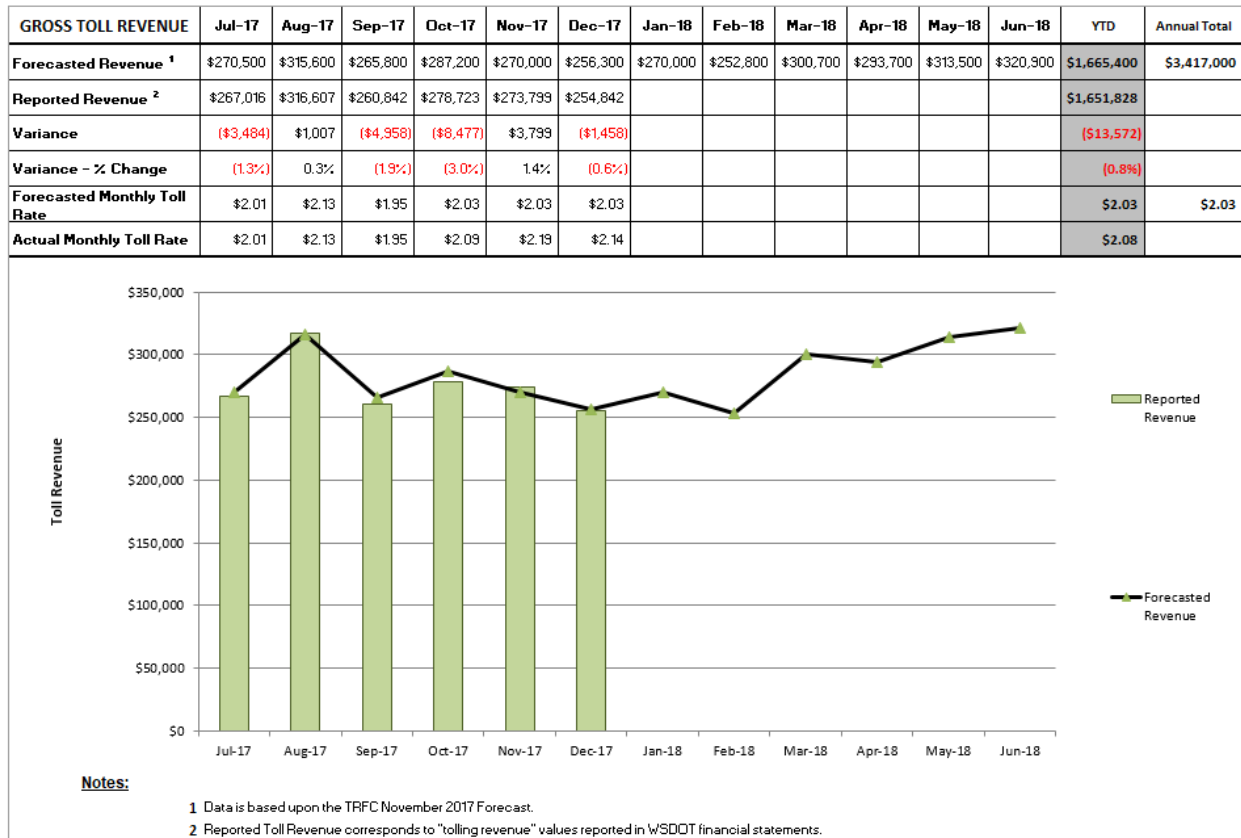
Under current law, SR 167 HOT lanes pilot program will expire in June 2019. The baseline toll revenue forecast has the HOT lanes traffic and revenue ending at the end of FY 2019.

For YTD FY 2018, reported transactions are 3.3% below forecast, at 820,000 transactions; in terms of reported toll revenue, YTD revenue is down 0.8% below forecast, at \$1.65 million (\$13,000 negative variance):

**Figure 16: FY 2018 SR 167 Reported Toll Transactions Compared to November 2017 Forecast**



**Figure 17: FY 2018 SR 167 Reported Toll Revenue Compared to November 2017 Forecast**



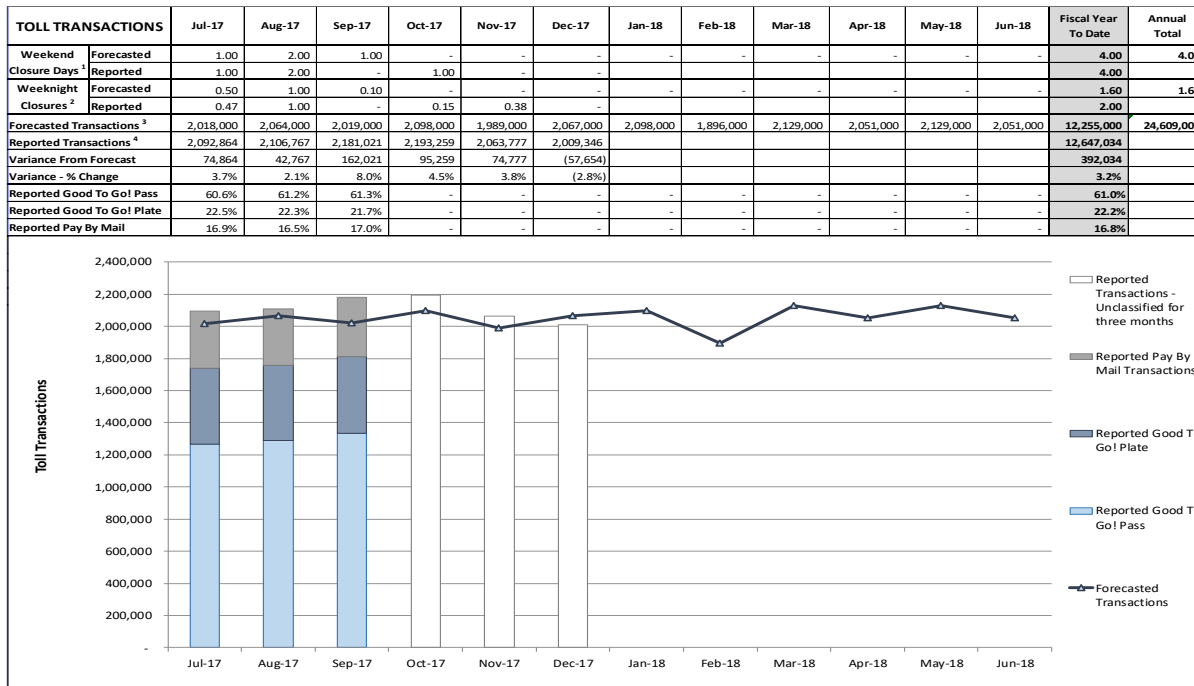
### Updates to SR 520 Toll Bridge traffic and toll revenue

There is no change to SR 520 forecast in February.

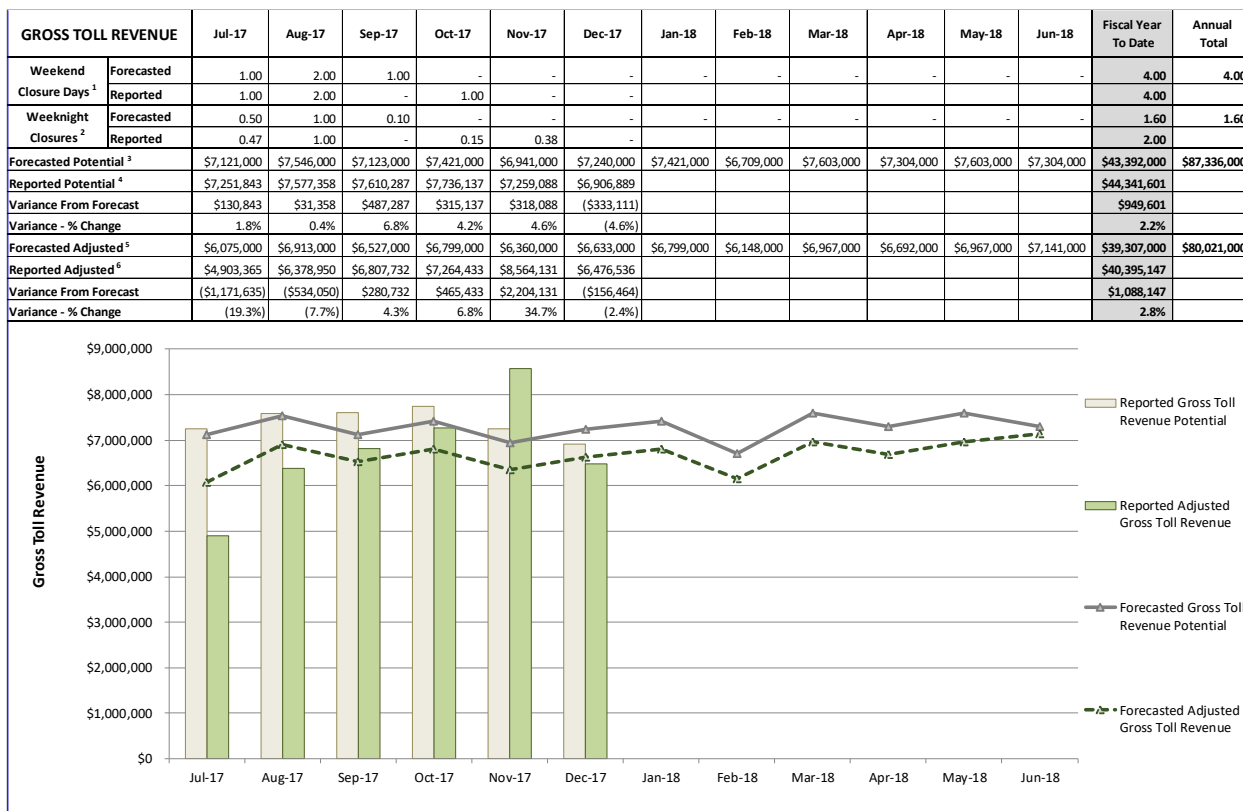
The SR 520 November 2017 TRFC forecast incorporated the latest forecast based on the performance assessment through June 2017, a revised socioeconomic forecast, new forecast model, the latest closure assumptions for SR 520 and I-90, and revised payment share projections.

For YTD FY 2018, reported transactions are 3.2% above forecast, at 12.6 million transactions; in terms of reported adjusted toll revenue, YTD revenue is up 2.8% above forecast, at \$40 million (\$1 million positive variance). Adjusted gross toll revenue in July-December reflect revenue associated to resolved transactions.

**Figure 18: FY 2018 SR 520 Reported Toll Transactions Compared to November 2017 Forecast**



**Figure 19: FY 2018 SR 520 Reported Toll Revenue Compared to November 2017 Forecast**



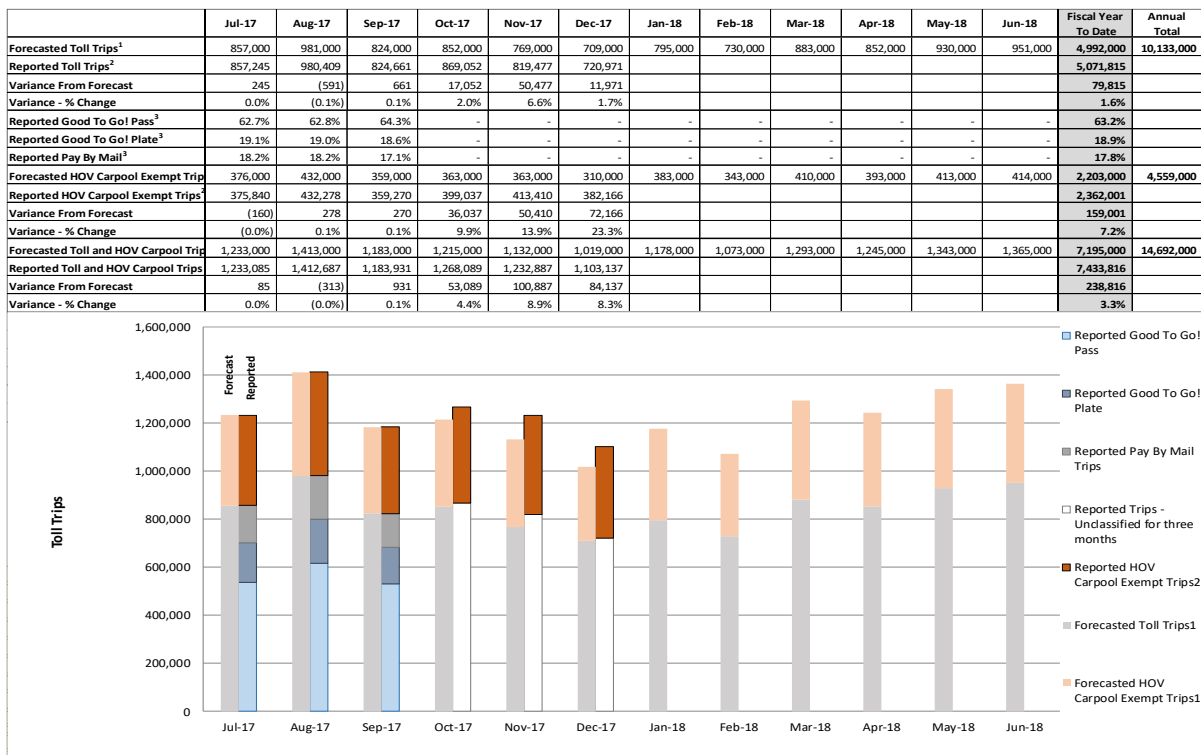
## Updates to I-405 Express Toll Lanes (ETLs) traffic and toll revenue

There is no change to I-405 ETLs forecast in February.

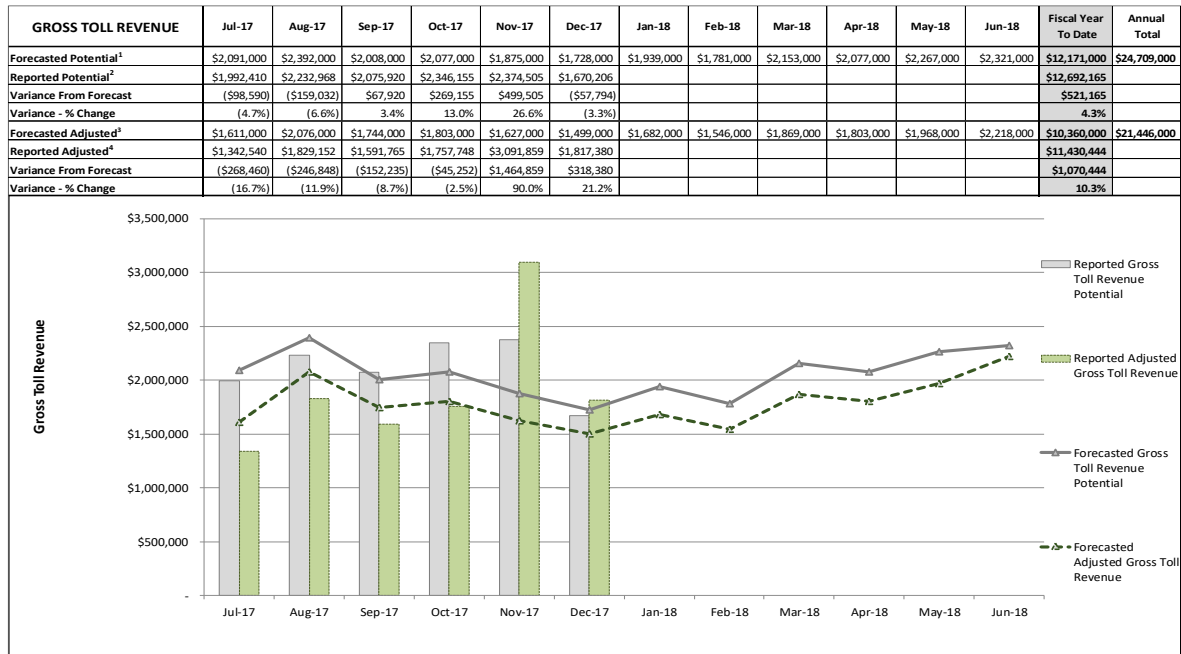
The November 2017 update incorporated the latest forecast based on performance assessment through June 2017, a revised socioeconomic forecast, new forecast model and toll rate algorithm, revised analysis of the peak hour hard shoulder running improvements in the northern portion of the corridor, revised toll and non-toll share projections, and revised leakage assumption.

For YTD FY 2018, reported transactions are 1.6% above forecast, at 5 million transactions. The gross toll revenue potential for the first six months of FY 2018 is up 4.3% or \$0.52 million. The toll reported adjusted toll revenue, YTD revenue is up 10.3% above forecast, at \$10.3 million (\$1 million positive variance). Adjusted gross toll revenue in July-December reflect revenue associated to resolved transactions which has been larger than projected.

**Figure 20: FY 2018 I-405 ETLs Reported Toll and HOV Carpool Trips Compared to November 2017 Forecast**



**Figure 21: FY 2018 I-405 ETLs Reported Toll Revenue Compared to November 2017 Forecast**



## Federal Funds Revenue

### Overview

After state funds, the largest source of transportation revenue is federal funds. The Federal Funds forecast contains the formula funds distributed by the Federal Highway Administration (FHWA) to Washington State Department of Transportation for highway purposes. Federal funds reported in this forecast are based on federal fiscal year (FFY) which begins on October 1.

On December 4, 2015, President Obama signed into law a new transportation reauthorization bill, Fixing America's Surface Transportation (FAST) Act, providing a five-year extension of the federal surface transportation programs. The FAST Act provides over \$305 billion of funding for Federal-aid transportation programs for federal fiscal years (FFY) 2016 through 2020. This new multiyear reauthorization bill came after a string of five (5) short-term extensions of the previous transportation reauthorization, Moving Ahead for Progress in the 21st Century (MAP-21). Beginning September 2016 and subsequent federal forecasts are based on the Fixing America's Surface Transportation (FAST) Act.



## **FHWA – Highways Forecast**

### ***Apportionment Forecast***

- The February 2018 total apportionment forecast for FFY 2018 is 730.7 million. This 2018 forecast is based on FHWA Notice “N 4510.819 Advance Notification of Federal-Aid Highway Funds to be apportioned on October 6, 2017.” The current apportionment of the National Highway Performance Program, Surface Transportation Block Grant Program, Highway Safety Improvement Program, Railway-Highway Crossings Program, Congestion Mitigation and Air Quality Improvement Program, Metropolitan Planning Program, and National Highway Freight Program for FY 2018 apportionment is \$712.77 million. The overall annual apportionment amount has not changed since the last forecast.
- The apportionment forecast for FFY 2019 – FFY 2020 is based on the FAST Act state-by-state program funds distribution tables produced by the Federal Highway Administration (FHWA) dated December 1, 2015. These distribution tables represent FHWA’s current interpretation of the FAST Act annual funding levels and program distributions. These apportionment and OA totals for these FAST Act years did not change in this February forecast. Future forecasts will be updated as official distribution notices are released by FHWA.
- The baseline forecast for FFY 2021 through FFY 2029 will assume an annual growth of federal revenues matching the annual Washington State fuel consumption growth rates. In this February forecast, there were only minor revisions upwards annually in the long-term federal highway funds forecast compared to the last forecast.
- There is a change in the freight program distribution between state and local programs for FFY 2018-2020. This will reduce state national freight program funds by \$13.7 million in FFY 2018 and increase the local freight program funds by a corresponding amount. The amount of the movement of freight program funds grows in FFY 2019 and 2020.

### ***Obligation Authority (OA) Forecast***

- Obligation authority (OA) (a.k.a. spending authority or obligation limitation) is the ceiling or total amount of commitments of federal apportionment that can be made within a year. Congress sets this ceiling or limit as part of the federal appropriation bills to control federal expenditures annually.
- The baseline CORE OA for 2018 is \$666.5 million, which is the same as the last forecast. This baseline core OA level represents 93.5% of apportionment, which is consistent with the historical Washington State CORE OA distribution.
- TOTAL OA forecast for FFY 2019 and throughout the forecast horizon will be set at 98% of apportionment, which is consistent with historical Washington State OA distributions. The February forecast for total OA has not changed from November’s forecast.

### ***Rescission of FAST ACT Funds:***

- The Omnibus Appropriations package for FFY 2017 includes an \$857 million rescission of unobligated contract authority. Washington’s share of this rescission was \$10.5 million. This rescission is incorporated into the FFY 2017 actuals in this current forecast.
- The FAST Act also includes a \$7.6 billion rescission of unobligated Federal-aid Highway contract authority in FFY 2020. An estimate of Washington’s share of the national rescission is \$110 million of unobligated apportionment balances, this is included in the February forecast for FFY 2020, and this estimate has not changed since the last forecast. This estimate is based on FHWA projections, which are updated annually.

**Figure 22: FFY 2017 – FFY2020 FHWA Highways Forecast**

(\$ millions)

February 2018 Federal Highway Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Total WA Apportionment	\$773.3	\$730.7	\$750.3	\$657.9
Total WA Obligation Authority	\$775.3	\$716.1	\$735.3	\$752.5

**FTA - Public Transportation Federal Funds****Overview**

The FAST Act authorized \$11.8 billion in FFY 2016 for public transportation programs, an amount rising to \$12.6 billion in FFY 2020 nationwide. Typically, about 80% of federal public transportation program funding comes from the mass transit account of the highway trust fund and 20% comes from the general fund of the U.S. Treasury.

**Public Transportation Federal Apportionment Funds Forecast**

- The February 2018 Public Transportation federal funds forecast is based on the FAST Act signed into law by President Obama on December 4, 2015 and the 2016 Federal Apportionment Notice of Public Transportation federal funds on the federal registry. The February 2018 apportionment forecast for FFY 2018 is \$18.82 million, based on this notice.
- The forecast for 2019 through 2020 is based on the FAST Act program funds distribution tables produced by the Federal Transit Administration (FTA). A 3-year average of Washington's proportionate share of the formula program funds is applied to the national totals on the FTA distribution tables for these years. Total federal public transportation formula program funds for FFY 2019 are anticipated to be \$19.2 million and growing to \$19.7 million by FFY 2020.
- The public transportation formula federal program forecast for FFY 2021 – 2029 is grown annually using the Washington State Fuel Consumption forecasted growth rates.

**Figure 23: FFY 2017 – FFY 2020 FTA – Public Transportation Forecast**

(In thousands)

February 2018 FTA – Public Transportation Federal Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Statewide Planning Program	\$495.0	\$506.3	\$516.0	\$527.0
Enhanced Mobility for Elderly and Persons with Disabilities	\$2,773.5	\$2,828.0	\$2,888.0	\$2,949.0
Nonurbanized Area Formula Program	\$12,847.5	\$13,186.0	\$13,465.0	\$13,751.0
Rural Transit Assistance Program	\$204.7	\$209.0	\$214.0	\$219.0
State Safety Oversight Program	\$559.4	\$532.0	\$544.0	\$555.0
Bus and Bus Facilities Program	\$1,750.0	\$1,562.0	\$1,595.0	\$1,629.0

## FTA – Washington State Ferries (WSF) Federal Funds

Federal assistance to Washington State Ferries (WSF) is provided primarily through the public transportation program administered by the Department of Transportation's Federal Transit Administration (FTA). The federal public transportation program was authorized from FY2016 through FY2020 as part of the FAST Act.

### WSF Federal Apportionment Funds Forecast

The February 2018 WSF federal funds forecast is based on the FTA - FAST Act fact sheets for both the State of Good Repair Grants (5337) and the Urbanized Area Formula Program Grants (5307) programs. These fact sheets show the annual national total apportionment for these programs for FFY 2016 through FFY 2020. Washington State's level of apportionment of these programs for FFY 2016 is distributed based on the Puget Sound Regional Council (PSRC) split letter dated June 28, 2016. This letter shows the amount of formula funding received by all eligible recipients including WSF. The FFY 2017 – FFY 2020 WSF formula federal funds forecast is based on maintaining the same proportionate share of the federal total received by Washington State in FFY 2016.

### *Washington State Ferries (WSF) Federal Apportionment Funds Forecast*

- The February 2018 FTA – WSF forecast for 2017 through 2020 is based on the FAST Act program funds distribution tables produced by the Federal Transit Administration (FTA). A three-year average (1.72%) was applied to the national totals on the FTA distribution tables for those years for Washington's proportionate share of the formula program funds.
- Total federal WSF formula program funds for FFY 2018 are forecasted to be \$12.2 million. The core ferry federal funds is anticipated to grow to \$12.5 million by FFY2020. Additional discretionary FTA funds for WSF are not anticipated in future years.
- The long-term WSF formula federal program forecast for FFY 2021 – 2027 will be grown annually using the Washington State Fuel Consumption forecasted growth rates. Total federal public transportation formula program funds are anticipated to grow to \$12.9 million by FFY 2029.

**Figure 24: FFY 2017 – FFY2020 FTA Washington State Ferries Forecast**

(In millions)

February 2018 FTA – Washington State Ferries Federal Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Urbanized Area Formula Program Grants (5307)	\$5.2	\$5.2	\$5.2	\$5.2
State of Good Repair Grants (5307)	\$6.9	\$7.0	\$7.1	\$7.3
Discretionary and Allocated Programs	\$10.0	\$0.0	\$0.0	\$0.0

## Forecast Contacts

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### Motor Fuel Tax Revenue Forecast

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### Motor Vehicle Licenses, Permits & Fees Revenue Forecast

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Alice Vogel, Washington State Department of Licensing, 360-902-3986 [avogel@dol.wa.gov](mailto:avogel@dol.wa.gov)

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[rgroepler@dol.wa.gov](mailto:rgroepler@dol.wa.gov)

### Other Transportation Related Revenue Forecast

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#### *Studded Tire Fee*

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### Washington State Ferries Ridership and Revenue Forecast

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### Federal Funds Forecast

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## **Appendix**

Table Related to the February 2018 Forecast

## Impact to Select Transportation Accounts

**Figure 25: 2015 Transportation Revenue Package with the February 2018 Forecast Compared to the September 2015 Forecast**

Transportation Revenue Bill - 2ESSB 5987 & SHB 1480 <i>dollars in millions</i>	2017-19		2019-21		10-Year Period (2017-2027)	
	Forecast	Chg from	Forecast	Chg from	Forecast	Chg from
	Feb 18	Sep 15	Feb 18	Sep 15	Feb 18	Sep 15
<b>Revenues</b>						
Motor Vehicle Fuel Taxes Increase (7 cents 8/1/15 & 4.9 cents 7/1/16); Handling Loss Elimination and Increase in Off-highway Refunds by 11.9 cents	814.6	20.5	833.3	30.6	4,203.6	178.3
Vehicles paying Weight-based Registration Fee (All Trucks)	79.1	8.6	81.2	10.8	484.3	42.3
Vehicles paying Freight Project Fee (Trucks >10,000 lbs)	34.5	13.5	35.4	14.3	177.2	70.7
Passenger Vehicle Weight Fees	189.2	7.9	197.4	10.6	1,322.7	15.4
Intermittent-Use Trailers (\$187.50)	0.4	(29.5)	0.9	(6.0)	8.4	(49.6)
Plug-in Vehicle Renewal Fee (\$100)	0.6	0.2	0.7	0.3	4.5	2.2
Electric/Plug-in Vehicle Renewal Fee (\$50)	2.4	1.0	3.8	2.2	33.9	25.1
Title Service Fee \$12 (Vessels)	0.2	0.1	0.2	0.1	1.1	1.5
Registration Service Fee \$5 (Vessels)	0.5	0.2	0.5	0.2	2.6	1.0
Commercial Driver's License (CDL) Fees HIGHWAY SAFETY	3.0	(0.8)	2.9	0.2	14.7	0.1
Enhanced Driver's License Fees (EDL/EID) HIGHWAY SAFETY	2.9	(1.0)	4.1	0.4	21.2	2.5
DOL Report of Sale Fees	4.9	(0.3)	4.8	0.0	24.1	(0.2)
Studded Tire Fee	1.0	0.0	1.0	(0.0)	5.0	(0.2)
<b>Total Revenues</b>	<b>1,133.3</b>	<b>20.4</b>	<b>1,166.3</b>	<b>63.8</b>	<b>6,303.3</b>	<b>289.2</b>
<b>Distributions</b>						
Motor Vehicle Fund (108)	71.6	(10.7)	75.5	13.6	443.0	58.2
Transportation 2003 Nickel Account (550)	6.0	1.2	6.1	1.3	34.6	5.9
Transportation Partnership Account (09H)	13.1	2.5	13.5	2.9	76.3	13.0
Connecting Washington Account (NEW)	814.6	20.5	833.3	30.7	4,203.6	178.3
Puget Sound Capital Construction Account (099)	-	-	-	-	-	-
Puget Sound Ferry Operations Account (109)	1.6	(0.0)	1.6	0.3	9.2	1.0
Capital Vessel Replacement Account (18J)	3.5	0.0	3.6	0.4	17.7	2.3
Multimodal Transportation Account (218)	189.3	5.5	197.4	8.0	1,322.8	1.1
Special Category C Account (215)	-	-	-	-	-	-
License Plate Technology Account (06T)	0.1	(0.0)	0.1	(0.0)	0.5	(0.0)
DOL Services Account (201)	0.3	0.0	0.3	0.0	1.5	0.1
WSP Highway Account (081)	25.5	1.7	26.2	5.0	148.8	19.9
Highway Safety Fund (106)	7.7	(0.5)	8.6	1.7	44.1	8.2
Rural Arterial Trust Account (102)	0.05	0.03	0.08	0.06	0.5	0.4
Transportation Improvement Account (144)	0.05	0.03	0.08	0.06	0.5	0.4
<b>Total Distributions</b>	<b>1,133.3</b>	<b>20.4</b>	<b>1,166.3</b>	<b>63.8</b>	<b>6,303.3</b>	<b>289.2</b>

\* Intermittent-Use trailer fee impact is the gross impact from the new trailer fee not the net impact

In 2015 lawmakers passed 2SSB 5987 which was the new 2015 Transportation Revenue package. The new revenue package has a variety of fee increases with the largest tax increase being from the motor fuel tax increase. The new legislation also authorized various transfers of funds and tax credits.