

Transportation Revenue Forecast Council

June 2016 Transportation Economic and Revenue Forecasts

Volume I: Summary

Washington Transportation Economic and Revenue Forecast June 2016 Forecast

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Preface

Washington law mandates the preparation and 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.

June 2016 Transportation Forecast Overview

Forecast Overview

Here are key conclusions from the June 2016 transportation revenue forecast.

- June 2016 transportation forecast of revenues: \$5.812 billion for the current biennium which represents an increase of 24% over the prior 2013-15 biennium of \$4.69 billion. The current forecast includes the revenue from the 2015 transportation revenue package, 2ESSB 5987, consistent with the prior three forecasts.
- Overall transportation revenue has an upward revision forecast to forecast in the current biennium, up \$74.6 million, with the largest share of the increase in fuel taxes, vehicle sales tax and licenses, permits and fee revenue. Next biennium, overall transportation revenues will be \$6.383 billion which is up \$117 million or 1.87% over the last forecast with \$69 million of the increase being due to higher motor vehicle fuel taxes.
- For the 10-year forecast horizon, total revenues are projected to be \$32.104 billion, which is up by \$655.7 million (2.1%) from February due primarily to higher fuel tax revenues, toll revenue, vehicle sales tax and licenses, permits and fee revenue. Aviation revenue is the only revenue sources down from the last forecast.
- New projections of real personal income are minor revisions down in FY 2016 and down in FY 2017-2019 from the last forecast in terms of growth rates. Employment projections are up slightly in FY 2016 and 2017 and nearly no change or up in FY 2018 and 2019. The current forecast for average annual retail gas and diesel price forecasts are lower than February's forecast for all years except FY 2016. The current B5 biodiesel price for ferries is higher than the last forecast throughout the forecast horizon.
- The primary reason for the change in fuel tax revenue has been fuel tax collections coming in above the last forecast. Gas taxes have been \$7.1 million higher in the last four months compared to the last forecast. In addition, real gas prices are down even further from last quarter's projections and employment forecasts are up minimally or no change in the long-term. The current fuel tax forecast is up \$27.4 million or 0.8% in the current biennium and up even more next biennium by \$69.2 million or 1.9%.
- Licenses, permits and fee (LPF) revenue are up forecast to forecast by \$18.9 million in the current biennium. In the next biennium, the revenues are also anticipated to be up by \$24 million forecast to forecast. Over the 10 year forecast period, LPF revenue is up \$131.8 million (1.8%) over last forecast with the largest share of the increase being higher weight based registration (truck) fees, passenger vehicle basic \$30 license fee and weight fees which contributed to the majority of the LPF increase in the long-term.
- The toll forecast has been revised upward in June from the last forecast due to higher collections on I-405 than expected. In addition, the Commission made toll rate and policy changes which negatively impacting the toll revenue forecast for TNB and SR 520 in the current biennium. For now, toll revenue is increased by \$13 million or 3.7% and in the next biennium, toll revenue is raised by \$11.9 million from the last forecast.
- The June federal forecast incorporates a new forecast for public transportation federal revenue based on the new federal FAST Act.

Figure 1: 2016 Legislation Incorporated into the June 2016 Forecast

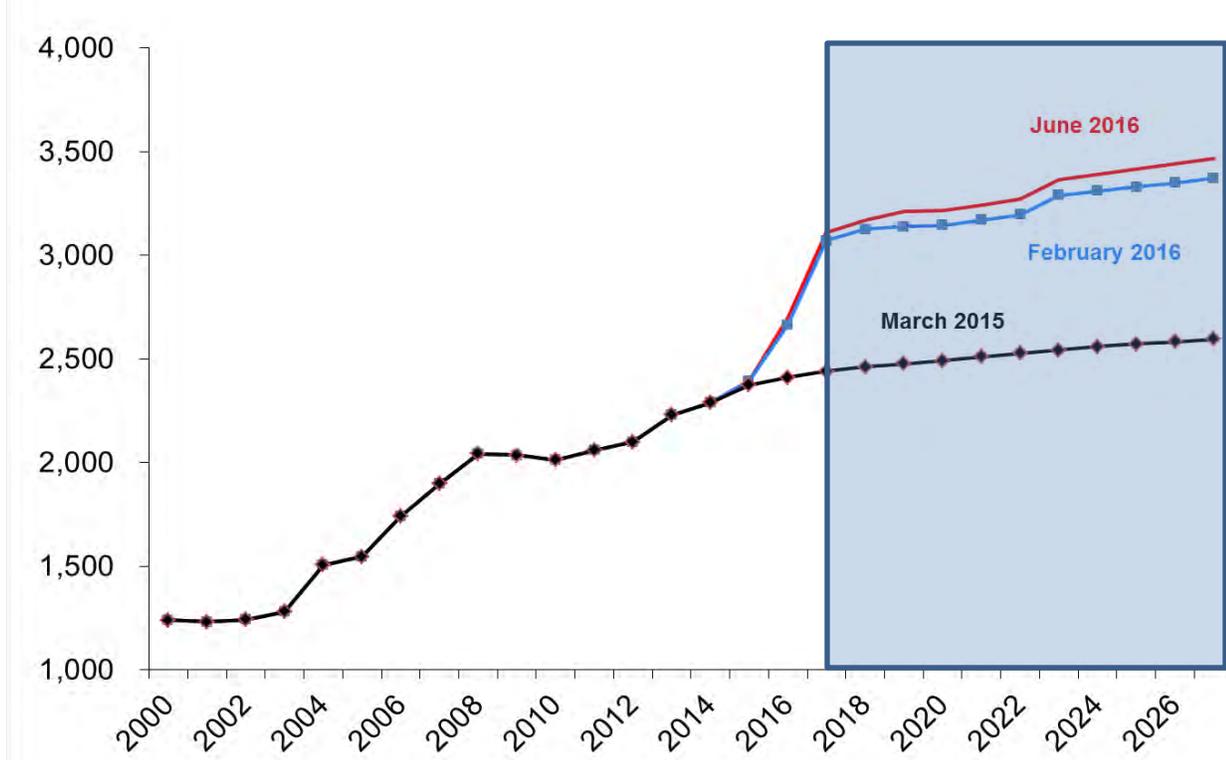
<i>Legislation</i>	<i>Description</i>
<i>ESSHB 2872</i>	<i>Changes distribution of \$30 basic vehicle registration fee. While total revenue is unchanged, the State Patrol account will gain \$3.25 at the expense of the motor vehicle account.</i>
<i>ESSB 6606</i>	<i>Changes definition of Vehicle Wholesale Dealer which will reduce revenue.</i>
<i>ESHB 2906</i>	<i>DOL will no longer be notified of a juvenile's first conviction for minor in possession, crimes involving a firearm, unlawful activities related to prescription drugs, controlled substances or imitation controlled substances.</i>
<i>ESHB 2700</i>	<i>Changes various provisions to Impaired Driving statutes which will increase revenue.</i>

The June 2016 forecast brings in for the first time new legislation passed by the 2016 Legislature. Figure 1 reveals the description of the four pieces of legislation impacting transportation revenues in the future.

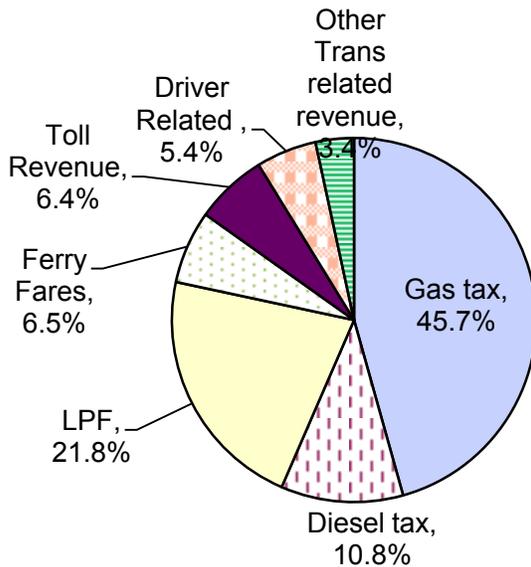
In the current fiscal year, total transportation revenues are anticipated to be \$2.7 billion, which is a 12.8% increase annually. The 2015 transportation revenue package begins in FY 2016 and that explains a large portion of the annual increase between FY 2015 and 2016. Overall during the 10-year horizon, transportation revenues are projected to be \$32.1 billion and \$652 million or 2% above the projections in February with an average annual growth rate of 3.2%.

**Figure 2: Total Transportation Revenues Comparison
June vs. February 2016 forecasts**

millions of dollars



**Figure 3: Revenue by Source
2015-17 biennium (\$5.812 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 2015-17 biennium, (\$5.812 billion). Gasoline fuel taxes comprise the largest share at 45.7%. With the addition of diesel fuel taxes, all motor vehicle fuel taxes comprise 56.5% of all revenues. Licenses, permits, and fee revenues comprise the second largest share at 21.8%. The largest three revenue sources are projected to consist of 78.3% of revenues in the 2015-17 biennium. The remaining 21.7% consists of ferry fares, toll revenue, driver related revenue and other transportation related revenue.

As Figure 4 indicates, in the current biennium, June's transportation revenues are projected at \$5.812 billion and up \$74.6 million or 1.3% above the last projections. Fuel tax collections are up by \$27.4 million or 0.84% higher than the February forecast in the current biennium. Next biennium's transportation revenues are anticipated to grow to \$6.383 billion and up from the last forecast by \$117.4 million or 1.9%. Over the 10-year forecast horizon (2016-2025), the revenue forecast for June is up by \$652 million or 2.1% from the last forecast. The change in transportation revenue for this forecast is due primarily to higher fuel taxes, toll revenue, ferries revenue, licenses permits and fee revenue and vehicle sales and use tax revenue.

**Figure 4: Forecast to Forecast Biennium Comparison of All Transportation Revenues
June 2016 forecast - 10 year period**

**Forecast to Forecast Comparison for Transportation Revenues and Distributions 10-Year Period
June 2016• millions of dollars**

	Current Biennium			2017-2019			10-Year Period		
	2015-2017			2017-2019			(2016-2025)		
	Forecast Jun-16	Chg from Feb-16	Percent Change	Forecast Jun-16	Chg from Feb-16	Percent Change	Forecast Jun-16	Chg from Feb-16	Percent Change
Sources of Transportation Revenue									
Motor Vehicle Fuel Tax Collections	3,283.87	27.37	0.84%	3,631.16	69.20	1.94%	18,019.02	378.23	2.14%
Licenses, Permits and Fees	1,269.80	18.91	1.51%	1,455.69	24.08	1.68%	7,414.16	131.76	1.81%
Ferry Revenue [†]	376.76	1.58	0.42%	389.20	3.75	0.97%	1,976.80	23.05	1.18%
Toll Revenue [§]	371.52	13.10	3.65%	399.42	11.90	3.07%	2,095.16	64.67	3.19%
Aviation Revenues	5.52	(0.30)	-5.10%	6.89	(0.06)	-0.89%	33.61	(0.34)	-0.99%
Rental Car Tax	64.36	2.15	3.46%	68.26	3.34	5.14%	353.21	16.81	5.00%
Vehicle Sales Tax	94.20	3.31	3.64%	100.76	4.41	4.58%	521.74	22.39	4.48%
Driver-Related Fees	311.97	7.25	2.38%	299.73	(0.22)	-0.07%	1,534.08	10.27	0.67%
Business/Other Revenues [‡]	33.78	1.23	3.76%	32.22	0.95	3.03%	155.85	5.22	3.47%
Total Revenues	5,811.78	74.59	1.30%	6,383.33	117.36	1.87%	32,103.63	652.05	2.07%
Distribution of Revenue									
Motor Fuel Tax Refunds and Transfers	182.46	(0.27)	-0.15%	206.76	1.39	0.68%	1,045.38	6.23	0.60%
State Uses									
Motor Vehicle Account (108)	1,237.15	(2.08)	-0.17%	1,264.30	(9.21)	-0.72%	6,309.29	(20.36)	-0.32%
Transportation 2003 (Nickel) Account (550)	416.80	3.56	0.86%	430.82	7.37	1.74%	2,164.07	41.09	1.94%
Transportation 2005 Partnership Account (09H)	615.44	5.14	0.84%	639.56	11.66	1.86%	3,213.25	64.23	2.04%
Connecting Washington Account (20H)	541.97	4.87	0.91%	816.83	14.78	1.84%	3,856.78	82.41	2.18%
Multimodal Account (218)	393.90	9.16	2.38%	503.71	12.82	2.61%	2,692.65	67.71	2.58%
Special Category C Account (215)	49.89	0.38	0.77%	51.48	0.93	1.84%	258.80	5.27	2.08%
Puget Sound Capital Construction Account (099)	36.30	0.28	0.77%	37.46	0.68	1.84%	188.30	3.83	2.08%
Puget Sound Ferry Operations Account (109)	437.61	7.16	1.66%	455.83	13.90	3.15%	2,307.94	70.11	3.13%
Capital Vessel Replacement Account (18J)	42.93	0.74	1.76%	37.81	1.40	3.83%	189.25	2.25	1.21%
Tacoma Narrows Bridge Account (511)	163.19	(5.83)	-3.45%	168.81	(13.11)	-7.21%	864.16	(60.17)	-6.51%
High Occupancy Toll Lanes Account (09F) [§]	3.18	(0.56)	0.00%	0.00	0.00	0.00%	3.18	(0.56)	-14.92%
SR 520 Corridor Account (16J)	154.94	(1.91)	-1.22%	172.01	4.12	2.46%	910.84	15.57	1.74%
SR 520 Corridor Civil Penalties Account (17P)	14.95	0.07	0.44%	16.11	0.45	2.85%	85.26	2.12	2.55%
Interstate 405 Express Toll Lanes Operations (595)	35.26	21.32	152.94%	42.50	20.44	92.68%	231.72	107.70	86.85%
Aeronautics Account (039)	5.52	(0.30)	-5.10%	6.89	(0.06)	-0.89%	33.61	(0.34)	-0.99%
State Patrol Highway Account (081)	403.56	24.47	6.45%	446.22	44.29	11.02%	2,252.02	208.26	10.19%
Highway/Motorcycle Safety Accts. (106 & 082)	277.03	6.79	2.51%	264.39	(0.44)	-0.16%	1,354.77	8.95	0.67%
School Zone Safety Account (780)	0.92	(0.18)	-16.46%	0.92	(0.18)	-16.46%	4.59	(0.91)	-16.46%
Other accounts (201, 06T, 097, 09E, 216, 07C)	17.25	0.17	1.02%	17.56	0.17	0.95%	89.65	0.88	0.99%
Ignition Interlock Devices Revolving Acct 14V	7.44	0.52	7.50%	7.20	0.28	3.99%	36.24	1.62	4.69%
Multiuse Roadway Safety Account Collections-571	0.10	0.00	1.76%	0.10	0.00	0.48%	0.53	0.00	0.72%
Total for State Use	4,855.22	73.78	1.54%	5,380.40	110.28	2.09%	27,046.40	599.69	2.27%
Local Uses									
Cities	191.31	1.46	0.77%	197.43	3.57	1.84%	992.53	20.20	2.08%
Counties	309.50	(2.51)	-0.80%	316.36	(3.16)	-0.99%	1,595.37	(7.81)	-0.49%
Transportation Improvement Board (112 & 144)	204.48	1.57	0.78%	211.20	3.90	1.88%	1,063.94	24.03	2.31%
County Road Administration Board (102 & 186)	68.80	0.54	0.79%	71.18	1.37	1.96%	360.00	9.70	2.77%
Total for Local Use	774.10	1.07	0.14%	796.17	5.69	0.72%	4,011.84	46.13	1.16%
Total Distribution of Revenue	5,811.78	74.59	1.30%	6,383.33	117.35	1.87%	32,103.63	652.05	2.07%

† Ferry Fares plus non-farebox revenue

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

§ 167 HOT lanes is a pilot program that is currently scheduled to sunset June 30, 2017

Economic Variables Forecast

Several economic variables are used in forecasting Washington's transportation revenues each quarter. Key economic variables include the following: Washington personal income, 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
June 2016 Forecast**

Fiscal Year	WA 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
2010	-2.4%	1.0%	-1.0%	1.0%	3.1%	-0.9%	10.8%	-3.5%	-4.0%	-3.3%
2011	3.0%	1.0%	19.9%	1.8%	18.2%	1.4%	11.8%	0.7%	0.6%	0.8%
2012	3.7%	1.0%	-9.8%	2.4%	13.9%	1.1%	13.7%	1.4%	2.0%	1.8%
2013	3.0%	1.1%	2.1%	1.5%	0.5%	1.0%	9.2%	2.0%	2.4%	2.8%
2014	1.6%	1.4%	9.7%	1.4%	-2.4%	1.3%	4.6%	2.4%	3.2%	3.7%
2015	4.9%	1.5%	10.2%	0.8%	-17.6%	1.6%	6.5%	2.7%	3.6%	3.8%
2016	3.6%	1.5%	5.1%	0.7%	-18.9%	1.8%	-0.2%	2.7%	2.8%	2.8%
2017	2.7%	1.4%	-8.9%	1.4%	1.3%	1.9%	6.5%	1.9%	1.7%	1.8%
2018	3.1%	1.3%	1.0%	1.8%	3.7%	1.8%	7.7%	1.3%	0.7%	0.4%
2019	3.2%	1.3%	0.9%	1.9%	2.1%	1.8%	2.4%	1.2%	0.3%	-0.3%
2020	3.1%	1.2%	0.9%	1.9%	2.4%	1.9%	2.0%	1.1%	0.1%	-0.4%
2021	3.0%	1.1%	0.8%	1.9%	2.8%	1.9%	0.3%	1.0%	0.1%	-0.3%
2022	2.6%	1.1%	0.8%	2.0%	3.2%	1.9%	1.5%	1.1%	0.3%	0.1%
2023	2.5%	1.1%	0.6%	2.1%	5.9%	1.9%	1.1%	0.9%	0.4%	0.4%
2024	2.4%	1.1%	0.6%	2.2%	6.2%	2.0%	2.6%	0.9%	0.5%	0.5%
2025	2.5%	1.1%	0.6%	2.1%	5.1%	2.0%	2.8%	0.8%	0.5%	0.6%
2026	2.5%	1.1%	0.6%	2.1%	2.6%	2.1%	2.9%	0.8%	0.6%	0.8%
2027	2.7%	1.1%	0.6%	2.1%	1.9%	2.1%	2.9%	0.8%	0.7%	0.8%

Source: Washington Economic and Revenue Forecast Council, Washington Office of Financial Management 2016 long-range forecast, May 2016 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 - June 2016 Forecast

Fiscal Year	WA 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
2016	▼	▬	▲	▲	▲	▬	▼	▲	▬	▼
2017	▼	▬	▲	▲	▼	▬	▲	▲	▲	▲
2018	▼	▬	▼	▲	▼	▬	▲	▬	▬	▲
2019	▬	▬	▬	▲	▼	▬	▼	▬	▼	▼
2020	▲	▬	▬	▲	▼	▬	▼	▬	▼	▼
2021	▬	▬	▬	▲	▼	▬	▼	▬	▼	▼
2022	▼	▬	▬	▲	▼	▬	▼	▬	▬	▲
2023	▼	▬	▬	▼	▼	▬	▼	▬	▲	▲
2024	▼	▬	▬	▬	▼	▬	▲	▬	▲	▲
2025	▼	▬	▬	▬	▼	▬	▲	▬	▲	▲
2026	▼	▬	▬	▬	▼	▬	▲	▬	▲	▲
2027	▼	▬	▬	▬	▼	▬	▲	▬	▲	▲

▲	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 and the 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 fuel price forecast includes the following fuel price projections: U.S. West Texas Intermediate crude oil (WTI) and Washington retail prices of gasoline, diesel, and biodiesel (B5 and B99).

Source of data for the forecast

For the Washington retail price of gasoline, actual 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 (through calendar year 2017), the retail gas price forecasts are based on the growth in the national retail gas price forecast by EIA. The diesel and biodiesel diesel prices are projected based on the growth in national diesel prices from the Energy Information Agency (EIA) monthly projections. Beyond calendar year 2017, the fuel price projections are based on June's Global Insight national gas price forecast for Washington's gas price forecast and the producer price index (PPI) projections for refined petroleum products for the diesel and biodiesel price forecasts.

The forecasts of biodiesel prices include two different biodiesel prices: B5 and B99 without the renewable identification number (RIN). WSF currently purchases biodiesel as 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 in Tacoma. The B5 price is based on Washington State ferries' 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 7: Near-term UNADJUSTED BASELINE Quarterly Fuel Prices: June 2016

Fiscal Year Quarter	Crude Oil Price (\$/barrel)	WA Retail Gasoline Price (\$/gal)	WA Retail Diesel Price (\$/gal)
2015: Q3	46.42	2.97	3.00
2015: Q4	41.95	2.42	2.68
2016: Q1	33.18	2.18	2.30
2016: Q2	44.50	2.46	2.47
FY 2016	41.51	2.51	2.61
2016: Q3	46.00	2.51	2.62
2016: Q4	47.00	2.30	2.68
2017: Q1	47.33	2.26	2.75
2017: Q2	49.67	2.58	2.79
FY 2017	47.50	2.41	2.71
2017: Q3	52.33	2.61	2.85
2017: Q4	58.00	2.52	3.02
2018: Q1	57.83	2.43	3.03
2018: Q2	54.12	2.84	2.92
FY 2018	55.57	2.60	2.96
2018: Q3	54.97	3.14	2.97
2018: Q4	56.99	2.70	3.06
2019: Q1	61.12	2.70	3.23
2019: Q2	63.91	3.10	3.35
FY 2019	59.25	2.91	3.15

Figure 8: Forecast of UNADJUSTED Washington Retail Gasoline Prices, Regular June and February 2016

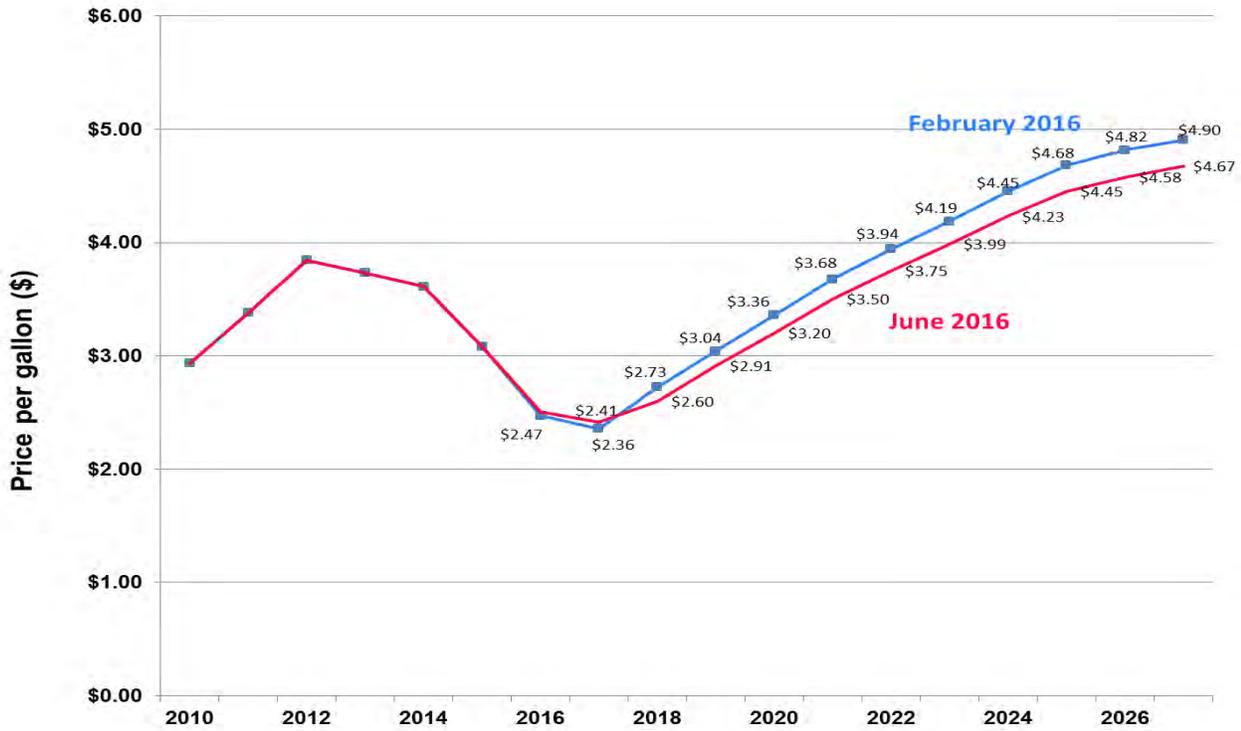
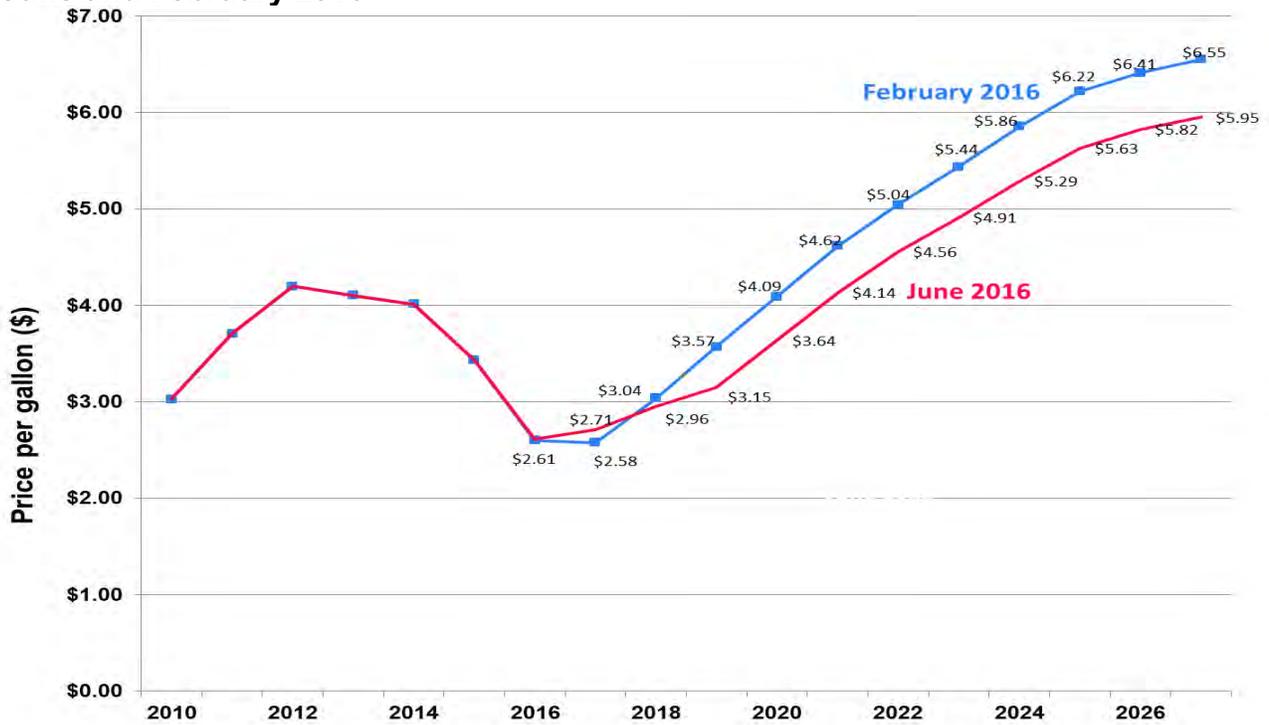


Figure 9: Forecast of UNADJUSTED Washington Retail Diesel Prices June and February 2016



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 2017 and then use the growth rates from Global Insight forecasts for subsequent years. The forecast for WTI crude oil in FY 2017 ranged from \$41.08 per barrel from NYMEX to \$53.1 per barrel by Moody's Economy.com with an average of \$47.05 per barrel. The forecast for WTI crude oil in FY 2018 ranged from \$44.5 per barrel by NYMEX to \$58.9 per barrel by Moody's Economy.com with the average being \$54.2 per barrel. The baseline crude oil price forecast in FY 2017 and 2018 was 0.95% above and -2.55% below the 5 entity average. The average forecast for WTI crude oil in FY 2019 ranged from \$46.6 per barrel by NYMEX to \$64.5 per barrel by Economy.com with the average being \$57.4 per barrel. The baseline crude oil price forecast is anticipated to be 3.05% below the 5 entity average. Figure 10 reveals the WSDOT baseline WTI price forecast compared to the other entity crude oil price forecasts.

Figure 10: Near-term Annual WTI Crude Oil Price Forecasts – 5 Different Forecast Comparisons: June 2016 Dollars per barrel

Fiscal Year	WSDOT (EIA/GI)	NYMEX	Global Insight	Economy.com	Consensus Economics	5 Entity Avg	% Diff Lowest	% Diff Highest	% Diff Average
2017	\$47.50	\$41.08	\$52.01	\$53.13	\$46.05	\$47.95	-13.51%	11.85%	0.95%
2018	\$55.57	\$44.45	\$57.15	\$58.91	\$54.70	\$54.16	-20.01%	6.00%	-2.55%
2019	\$59.25	\$46.58	\$59.43	\$64.47	\$57.47	\$57.44	-21.38%	8.81%	-3.05%

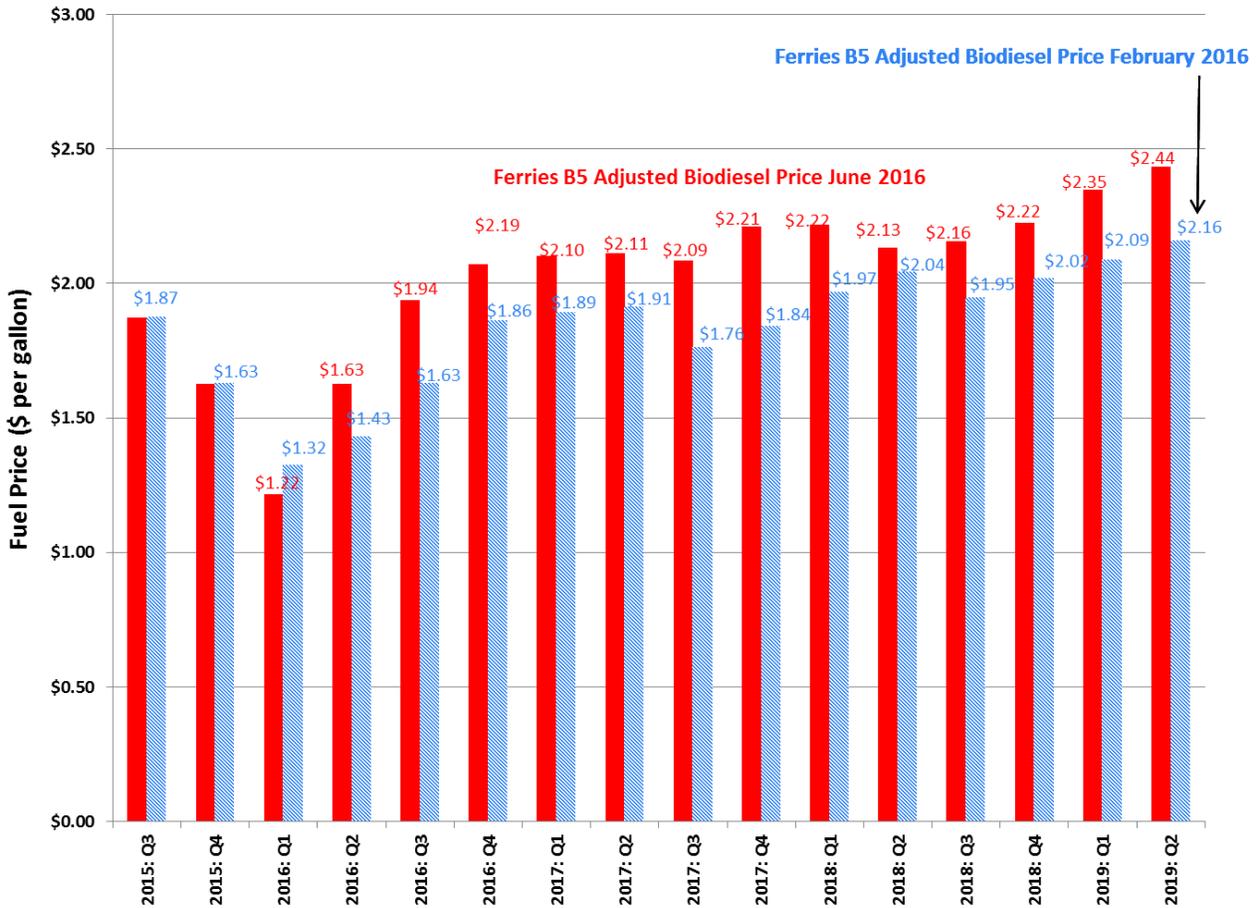
Figure 11: Near-term Average Adjusted Quarterly Fuel Prices and B5 Biodiesel Prices and Unadjusted B99 Biodiesel Prices Used for Budgeting Purposes: June 2016 Dollars per gallon

Fiscal Year Quarter	Adjusted WA Retail Gasoline Price (\$/gal)	Adjusted WA Retail Diesel Price (\$/gal)	Adjusted B5 Biodiesel Price (\$/gal)	Unadjusted B99 Biodiesel price
2015Q3	2.97	3.00	1.87	3.96
2015Q4	2.42	2.68	1.63	3.88
2016Q1	2.18	2.30	1.22	3.33
2016Q2	2.46	2.47	1.63	3.57
FY2016	2.51	2.61	1.59	3.68
2016Q3	2.53	2.64	1.94	3.78
2016Q4	2.32	2.70	2.07	3.87
2017Q1	2.28	2.77	2.10	3.97
2017Q2	2.61	2.81	2.11	4.03
FY2017	2.44	2.73	2.06	3.91
2017Q3	2.54	2.78	2.09	4.12
2017Q4	2.45	2.95	2.21	4.37
2018Q1	2.37	2.95	2.22	4.38
2018Q2	2.77	2.84	2.13	4.22
FY2018	2.53	2.88	2.16	4.27
2018Q3	3.05	2.87	2.16	4.29
2018Q4	2.62	2.96	2.22	4.42
2019Q1	2.62	3.13	2.35	4.66
2019Q2	3.01	3.24	2.44	4.84
FY2019	2.82	3.05	2.29	4.55

WSDOT applies the five forecast entity average adjustment to the baseline June 2016 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 2015-17 and 2017-19 biennium budgets for gas, diesel and biodiesel fuel purchases for fiscal years 2016 through 2019. The latest adjusted forecast requires a 0.95% increase in the baseline fuel prices for retail gas, diesel and B5 biodiesel prices for FY 2017 and 2.55% downward adjustment to FY 2018. In FY 2019 baseline fuel prices are also adjusted downward by 3.05%. The B99 biodiesel prices are not adjusted.

Figure 12: Quarterly Ferries Adjusted B5 Biodiesel Prices Used for Budgeting the 2015-17 and 2017-19 Biennia June vs. February 2016 Forecast Comparison



Motor Vehicle Fuel Tax Forecast

Overview

Motor vehicle tax collections for gasoline and diesel consumption for February through May 2016 exceeded the February 2016 forecast by 1.5% or \$7.3 million. Gasoline tax collections were responsible for most of the positive variance by \$7.1 million or 1.8% and diesel was up minimally by 0.3%.

Gross motor vehicle fuel tax revenues for the 2015-2017 biennium are projected to be \$3.284 billion which is \$27.4 million or 0.84% higher than forecasted in February. The overall motor vehicle fuel tax revenue for the 10-year period beginning in the current biennium and ending in the 2023-25 biennium totals \$18.02 billion, which represents \$378.2 million or 2.1% more than the February revenue forecast.

Primary reasons for the change in the June 2016 forecast

- In the current biennium, gross gas tax collections are up by \$27.2 million (1.04%) due to higher fuel tax collections in recent months, lower gas prices and higher employment projections in the short-term. Gasoline consumption increased by an annual growth rate of 3.15% in FY2016 compared to FY2014 and FY2015 consumption growth rates of 1.5% annually. In future biennia, gas tax collections are up by \$73 million in the next biennium and the forecast-to-forecast difference increases over the forecast horizon, peaking at \$101 million in the 2025-2027 biennium.
- Diesel tax revenues are up \$0.17 million in the current biennia compared to the February forecast but then diesel tax projections are down throughout the forecast horizon compared to February. This is due to lower near-term projections of trade, transportation and utilities employment. The forecast-to-forecast diesel tax revenue declines \$50.7 million through the 2023-2025 biennium.
- Overall, in the current biennium, gross fuel tax revenues will increase by \$27.4 million or (0.84%) from the last forecast. Over the 10-year forecast period, fuel tax collections are expected to grow by 2.14% or \$348.2 million when compared to February's forecast.

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 - U.S. real income share, Washington Retail Employment, and U.S. sales of light vehicles.

Washington State anticipates collecting over \$1.3 billion from vehicle licenses, permits, and fees (LPFs) in the 2015-2017 biennium, an increase of \$18.9 million (1.5%) compared to the forecast in February. For the next 10-year period, the LPF forecast is anticipated to be \$7.414 billion which is up \$132 million or 1.8% from the previous estimate in February.

Primary reasons for the change in the June 2016 forecast

- Forecasted passenger vehicle registrations for FY 2016 are higher than the previous forecast because of significantly higher actual registrations in the current fiscal year
- In the long-term, this June forecast is higher than the last forecast by roughly \$6 million or 1.8% each biennium.
- Forecasted truck registrations are up from the previous forecast due to significantly higher actual registrations.
- Truck Revenues are up over the previous forecast from \$7 to \$11 million (2%) each biennium due to higher forecasted registrations.

- Electric and hybrid vehicle renewal fee forecast is significantly higher throughout the forecast horizon due to a major upward revision of EIA forecast of electric vehicles in the US;
- Quick titles growth has slowed resulting in about 9% forecast to forecast reduction, although year over year it is still a strong growth;
- Plate replacement came in lower than expected and forecast is down by about 3% in the current biennium and about 2% reduction in outer years.

Driver Related Revenue Forecasts

Overview

The June 2016 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 FY2015-17 biennium is forecast at **\$312.0 million, about \$7.3 million (or +2.4%) higher** than the prior forecast. Over the next ten year period (FY16-FY25), driver related revenue is anticipated to total **\$1,534.1 million, about \$10.3 million (+0.7%) 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 it becomes a six-year cycle. Caution is advised in year over year comparisons.

Primary reasons for the change in the June 2016 forecast

- Continued strength in driver-in-migration, resulting in more driver learning permits, driver exams, as well as first time driver license issuances;
- Declining problem-driver license issuances and reinstatements observed in recent years.

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 anticipates collecting over \$197.9 million from transportation related revenues in the 2015-2017 biennium, an increase of \$6.4 million compared to the forecast in February. For the next 10-year period, the transportation related revenue forecast is anticipated to be \$1,064 million which is up \$44 million or 4.3% from the previous estimate in February.

Primary reasons for the change in the June 2016 forecast

- Vehicle sales and use tax revenue is up by \$2.1 million or 3.5% in the current biennium since the last forecast due to updated actual collections. Despite a lower long-term national forecast of US spending on light vehicles, new vehicle sales tax revenue forecast is up from the last forecast in future biennia by almost 4.5% on average for the next 10 years.
- Rental car tax revenue is up \$2.15 million, 3.5%, in the current biennium due to higher collections in recent months. In next biennium, the change in the rental car tax revenue is up 5% from February. In all future biennia, the rental car forecast is also up from the February forecast by 5.1% to 6.1% by the end of the forecast horizon due to a higher near term forecast and stronger labor market forecast.
- WSDOT Business and other miscellaneous revenue have been updated to reflect current receipts which caused a slight change from the last forecast.
- The school zone fines forecast has been adjusted for actuals which are trending downward compared to February's forecast.
- The WSP business related revenue forecast for June has not changed from the February forecast except for the Access fees that were updated to reflect current receipts.
- The aviation fuel tax forecast was revised downward by -\$312,400 or -7.5% in the current biennium due to lower fuel tax revenue year to date along with unanticipated amended tax returns resulting in refunds. Subsequent biennia are lower on average by -\$44,200 or -0.8% due to a lower FAA General Aviation Fuel Consumption forecast.
- The aeronautics refund transfer has been raised in this June forecast to reflect higher fuel.
- The largest revenue source increasing in this June forecast for other transportation related revenue forecasts is the retail sales and use tax on motor vehicles.

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

Overall, the June Baseline Forecast ridership in the current biennium is 0.6% higher than the February Forecast. For the rest of the forecast horizon, projected overall ridership ranges from 0.7 % higher in FY 2018 and FY 2027 to 1.1% higher in FY 2022 through FY 2024, compared to the February forecast.

Total fare and miscellaneous revenues forecasted for the 2015-17 biennium amount to \$376.8 million, higher from the last forecast by 0.4%. Over the next 10 years, ferry total revenue will be \$1.97 billion which is higher than the last forecast by 1.3%.

Primary reasons for the change in the June 2016 forecast

- Total forecasted ferry riders for the June Baseline Forecast are up 0.5% in FY 2016 as a result of recent actual ridership trends for February through May. The June Baseline forecast remains above the February levels over the forecast horizon due to significantly lower real gas prices beyond FY 2017, which more than offset other negative factors, primarily very modest decreases in real personal income.
- FY 2016 ferry fare revenues for the June Baseline Forecast are up nearly \$0.5 M or 0.3% from February. This is due to higher than expected passenger ridership for February, March, April, and May, somewhat offset by slightly lower vehicle/driver ridership in all months except April. Thereafter, fare revenues are expected to be range from 0.7% to 1.6% higher than forecasted in February, due primarily to higher vehicle ridership from lower real gas prices as noted above.
- Miscellaneous revenue forecasts for the 2015-2017 biennium are down 3.0% from February, with vessel non-fare revenue up less than other non-fare revenue from terminals went down. A contested award for a new galley vendor is holding the current vessel non-fare revenue below expectations in the current biennium; thereafter, higher galley sales are anticipated to drive overall miscellaneous revenues upward.

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. This June 2016 and subsequent federal forecasts are based on the Fixing America's Surface Transportation (FAST) Act.

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 comes after a string of five (5) short-term extensions of the previous transportation reauthorization, Moving Ahead for Progress in the 21st Century (MAP-21).

Apportionment Forecast

- The June 2016 baseline total apportionment forecast for FFY 2016 is \$704.9 million and is based on FHWA Notice N4510.802 dated January 8, 2016 which transmits the base apportionment for FFY 2016 and Notice N4510.803 which transmits the sequestration of exempt NHPP funds.
- The apportionment forecast for FFY 2017 – FFY 2020 ranges from \$719.1 million in FFY 2017 to \$636.2 million in FFY 2020. FFY 2020 is lower than previous years due to a rescission.
- An estimate of the Washington State share of the FFY 2020 Rescission of unobligated Federal-aid Highway contract authority is included in this forecast which is estimated at \$131.7 million and the allocation of the rescission was based on historical rescission activity experienced by the state.
- The June 2016 federal forecast for years after FFY 2020 will be grown off of the prerescission FFY 2020 along with the June 2016 Washington State fuel consumption forecast growth rates.

- Federal apportionment is split between state and local programs. For the remainder of the 2015-17 biennium, the current overall 66 -34 percent state/local split will remain for the core FHWA programs with the exception of the new freight program formula funds.
- The Governor's office and the Office of Financial Management will convene a group in 2016 to discuss further state and local distributions of the FAST Act. Once a new state / local split agreement is reached, it will be applied to the apportionment starting in the 2017-19 biennium and carried through the forecast horizon.

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.
- Every year Washington State receives multiple types of OA. The majority of the OA received annually is the Core Program OA. Washington State also receives OA that is tied to other discretionary and allocated programs.
- The June 2016 core formula OA forecast for FFY2016 is \$642.3 million and is based on Notice N4520.240 dated January 8, 2016.
- The total OA for this June 2016 forecast is \$690.8 million which is no change from the last forecast.
- Obligation Authority for federal fiscal years beyond 2016 is assumed to be 98% of apportionment each year which is consistent with the apportionment to OA ratio set in Section 1101 and 1102 of H.R 4348 legislation and our prior forecast assumptions.

Primary reasons for the change in the February 2016 forecast

- The June 2016 federal forecast for FFY 2021 through FFY 2027 is 0.1% to 0.3% higher than the February 2016 forecast due to a higher fuel consumption forecast.

Featured Revenue Forecasts

Public Transportation Federal Funds FAST Act:

Public Transportation Federal Funding

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. Federal assistance to public transportation 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.

The FAST Act authorized \$11.8 billion in FY2016 for public transportation programs, an amount rising to \$12.6 billion in FY2020 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 Program Structure

There are six major federal public transportation programs administered by FTA: (1) Urbanized Area Formula; (2) State of Good Repair (SGR); (3) New Starts; (4) Rural Area Formula; (5) Bus and Bus Facilities; and (6) Enhanced Mobility of Seniors and Individuals with Disabilities. These are discussed in more detail below. Funding for all of these programs, except New Starts, comes from the mass transit account of the Highway Trust Fund. New Starts funding comes from the general fund.

The federal public transportation programs in the FAST Act have different rules for the distribution of their funds. Programs like the Urbanized Area Formula program, State of Good Repair program, and the New Starts Program are distributed directly to local public transportation organizations, in urbanized areas, while funds for programs like the Rural Area Formula Program, Bus and Bus Facilities Program (Small Urban and Rural only) and the Enhanced Mobility of Seniors and Individuals with Disabilities Program (Small Urban and Rural only) are distributed to the state Department of Transportations (DOTs). This forecast will project the federal public transportation programs that are distributed to the state DOTs. It will not include a projection for grant programs like the Urbanized Area Formula program, State of Good Repair program, and the New Starts Program which are distributed directly to local public transportation organizations.

Public Transportation Programs included in TRFC forecast:

- Statewide Planning Program (5304)

This programs provide funding to support cooperative, continuous, and comprehensive planning for making transportation investment decisions in metropolitan areas and statewide.

- Enhanced Mobility for Elderly and Persons with Disabilities (5310)

This program provides formula funding to states for the purpose of assisting private nonprofit groups in meeting the transportation needs of older adults and people with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. Funds are apportioned based on each state's share of the population for these two groups.

- Nonurbanized Area Formula Program (5311)

This program is formula based and provides funding to states for the purpose of supporting public transportation in rural areas, with population of less than 50,000. The goal of the program is to enhance the access of people in nonurbanized areas to health care, shopping, education, employment, public services, and recreation.

The Rural Transit Assistance Program (5311b) is funded as a takedown from the section 5311 program. The Rural Transit Assistance Program) provides a source of funding to assist in the design and implementation of training and technical assistance projects and other support services tailored to meet the needs of transit operators in nonurbanized areas.

- State Safety Oversight Program (5329)

This program is formula based and provides funding to states for the purpose of establishing Minimum Safety Standards as part of the National Safety Plan to ensure safe transit operations. This program also permits FTA to temporarily take over for an inadequate or incapable State Safety Oversight agency, and permits use of that agency's SSO grant funds during the corrective timeframe

- Bus and Bus Facilities Program (5339)

The Bus and Bus Facilities Grant Program provides funding for capital expenses to purchase and rehabilitate buses and to construct bus-related facilities. The FAST Act added a new

competitive discretionary component to the existing formula program, increasing program funding by about \$300 million per year. In FY2016, the Bus Program is authorized at \$696 million nationwide, with \$428 million (61%) for formula grants and \$268 million (39%) for discretionary grants. Bus Program funding increases to \$809 million by FY2020, with \$465 million (57%) for formula grants and \$344 million (43%) for discretionary grants. The formula portion of the grant program provides each state and territory a minimum allocation (\$1.75 million to states and \$0.5 million to territories), with the remaining funds distributed according to population and service levels.

Public Transportation Federal Apportionment Funds Forecast

The June 2016 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 June 2016 apportionment forecast is based on this notice.

The forecast for 2017 through 2020 will be based on the FAST Act program funds distribution tables produced by the Federal Transit Administration (FTA). A 3 year average (1.72%) 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 2016 are anticipated to be \$18.4 million and growing to \$19.6 million by FFY2020. The nonurbanized area formula program is the largest program, making up 70% of all federal public transportation revenue coming to Washington state each year.

The long-term public transportation 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 \$20 million by FFY 2027.

**Figure 13: Federal Public Transportation Revenue (\$ millions) June Forecast–
By Program Type**

Federal Program	FF 2016	FY 2017	FY 2018	FY 2019	FY 2020
Statewide Planning Program	0.5	0.5	0.5	0.5	0.5
Enhanced Mobility for Elderly and Persons with Disabilities	2.7	2.8	2.8	2.9	2.9
Nonurbanized Area Formula Program	12.7	12.9	13.2	13.5	13.8
Rural Transit Assistance Program	0.2	0.2	0.2	0.2	0.2
State Safety Oversight Program	0.6	0.5	0.5	0.5	0.6
Bus and Bus Facilities Program	1.8	1.5	1.6	1.6	1.6
Total Public Transportation Federal	18.4	18.4	18.8	19.2	19.6

Toll Revenue

Overview

Washington State has four tolled facilities. February 2016 forecast was a no change forecast from November 2015; June 2016 forecast has changes to toll revenues for all four toll facilities.

- Tacoma Narrows Bridge (TNB): June update incorporates the Transportation Commission's recent toll rate decision on TNB. The forecast assumes no future toll rate increase (previous assumption had a \$0.50 rate increase in FY 2017). This rate policy change leads to \$6 million toll revenue reduction in 2015-17 biennium, and \$13 million toll revenue reduction in 2017-19 biennium. There was also a downward revision in the payment mix for TNB so Good To Go (GTG) transponder transactions percent of total decreased from 62 to 61.5 percent. The Pay By Plate and Pay By Mail transactions percent of total increased by 0.5%. This change was due to actual GTG transponder transactions coming in less than projected and Pay By Mail and Pay By Plate transactions coming in higher than anticipated in FY 2016.
- SR 520 Toll Bridge: Similar to TNB, SR 520 June update incorporates the Transportation Commission's recent decision on a more gradual toll rate increase schedule (5% rate increase in FY 2017, and another 5% increase in FY 2018). The previous assumption was a 15% rate increase in one year, FY 2017. The June forecast also assumes no HOV exemption, which increases toll revenue and reduces leakage. The two combined factors result a \$1.5 million adjusted toll revenue reduction in 2015-17 biennium, and a \$4.6 million toll revenue increase in 2017-19 biennium.
- SR 167 High Occupancy Toll (HOT) Lanes: This June forecast reflects the actual transaction and revenue trend in FY 2016, which brings down the toll revenue by \$557,000 (14% reduction) in the current biennium. The revenue is down due to an unanticipated crash of data server during the current fiscal year.
- I-405 Express Toll Lanes (ETLs): The June forecast is a revised forecast for this facility which incorporates the actual traffic and revenue data since I-405 ETLs opened in September 2015. The new forecast for adjusted toll revenue predicts \$30 million for the 2015-17 biennium, which is \$19 million (168%) higher than the previous forecast. The total I-405 revenue and fees are updated to \$35 million for 2015-17 biennium, \$21 million (153.9%) higher than the previous forecast.

The following table is a summary of changes to the Adjusted Gross Toll Revenue. More details are available under the narratives for each toll facility.

Figure 14: Changes to Adjusted Gross Toll Revenue June Forecast (\$ millions)

	Toll Facility	FY 2016	FY 2017	2015-17 Biennium	FY 2018	FY 2019	2017-19 Biennium
June TRFC	TNB	\$ 77.958	\$ 79.511	\$ 157.469	\$ 81.012	\$ 82.111	\$ 163.123
	SR 520	69.068	79.059	148.127	81.994	83.484	165.478
	SR 167 HOT Lanes	1.350	1.703	3.053	-	-	-
	I-405 ETLs	12.526	17.629	30.155	18.513	19.449	37.962
	Total	\$ 160.902	\$ 177.902	\$ 338.804	\$ 181.519	\$ 185.044	\$ 366.563
February TRFC	TNB	\$ 77.517	\$ 85.875	\$ 163.392	\$ 87.361	\$ 88.689	\$ 176.050
	SR 520	69.054	80.606	149.660	80.021	81.412	161.433
	SR 167 HOT Lanes	1.752	1.834	3.586	-	-	-
	I-405 ETLs	3.738	7.509	11.247	8.982	9.711	18.693
	Total	\$ 152.061	\$ 175.824	\$ 327.885	\$ 176.364	\$ 179.812	\$ 356.176
Changes from February TRFC	TNB	\$ 0.441 0.6%	\$ (6.364) -7.4%	\$ (5.923) -3.6%	\$ (6.349) -7.3%	\$ (6.578) -7.4%	\$ (12.927) -7.3%
	SR 520	\$ 0.014 0.0%	\$ (1.547) -1.9%	\$ (1.533) -1.0%	\$ 1.973 2.5%	\$ 2.072 2.5%	\$ 4.045 2.5%
	SR 167 HOT Lanes	\$ (0.402) -22.9%	\$ (0.131) -7.1%	\$ (0.533) -14.9%	\$ - 0.0%	\$ - 0.0%	\$ - 0.0%
	I-405 ETLs	\$ 8.788 235.1%	\$ 10.120 134.8%	\$ 18.908 168.1%	\$ 9.531 106.1%	\$ 9.738 100.3%	\$ 19.269 103.1%
	Total Changes	\$ 8.841 5.8%	\$ 2.078 1.2%	\$ 10.919 3.3%	\$ 5.155 2.9%	\$ 5.232 2.9%	\$ 10.387 2.9%

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

As mentioned in the toll *Overview*, the primary change in June 2016 forecast is to incorporate the Transportation Commission's May 2016 adopted policy on removing the previously approved \$0.50 toll rate increase in FY 2017. Because of the lower rate assumption, annual toll transactions are revised upward by 1.4% or 1.5% for future years comparing to the February forecast.

FY 2016 revenue has been updated based on year-to-date actual data. The transaction and revenue actuals in the current fiscal year are very close to November 2015 / February 2016 forecast, with 0.8% positive variance for toll transactions, and 1.1% positive variance for adjusted toll revenue.

Based on the actual transaction trend in FY 2016, June forecast slightly adjusts payment share assumptions, with *Good To Go!* (GTG) transponder shares decreasing from approximately 62 percent to 61.5 percent and Pay by Mail (PBM) and GTG Pay by Plate (PBP) shares increasing from 15 percent to 15.5 percent.

All the factors combined, comparing to November 2015 / February 2016 forecast, TNB June forecast shows \$6 million toll revenue reduction in 2015-17 biennium, and \$13 million toll revenue reduction in 2017-19 biennium.

Figure 15: FY 2016 TNB Reported Toll Transactions Compared to November 2015 Forecast

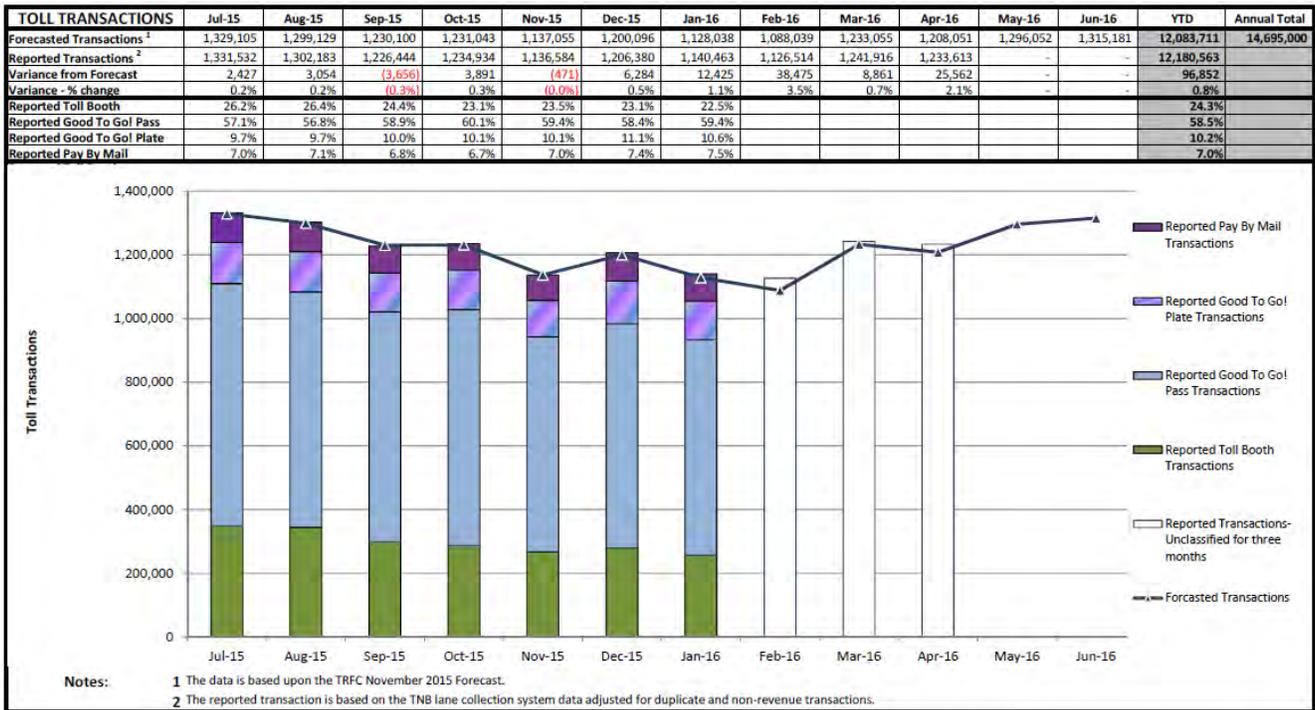
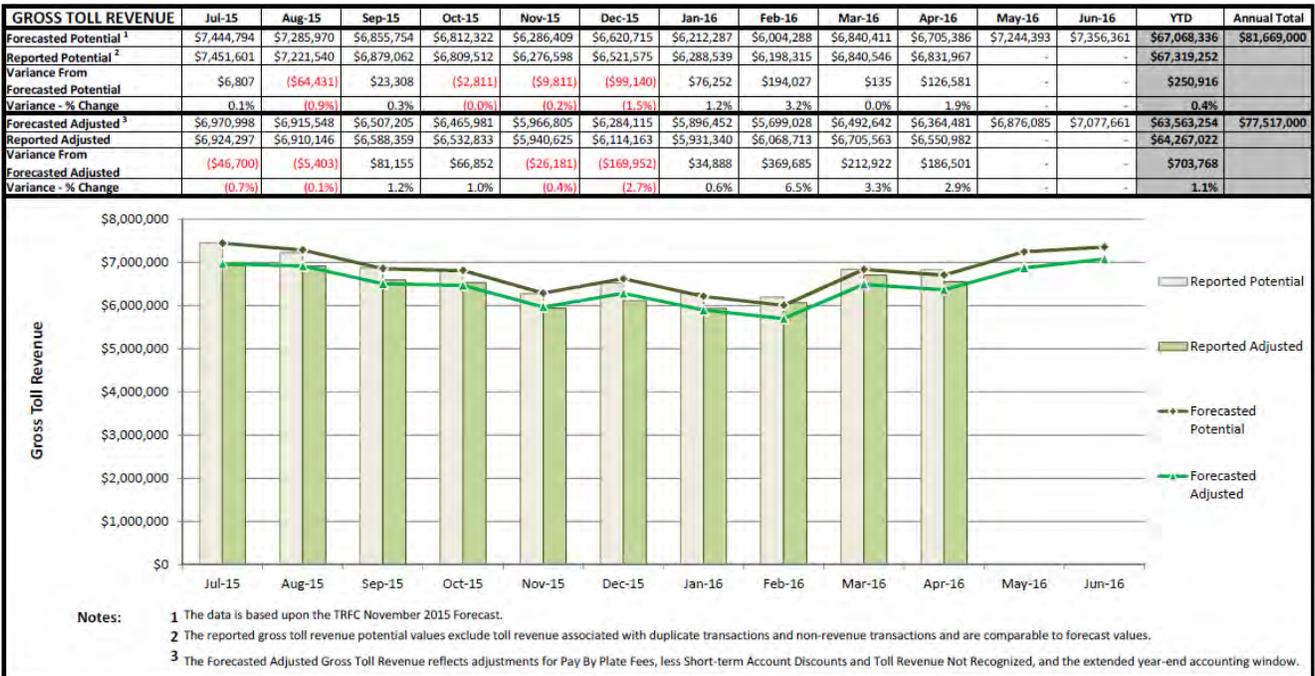


Figure 16: FY 2016 TNB Reported Toll Revenue Compared to November 2015 Forecast



Updates to SR 520 Toll Bridge traffic and toll revenue

Similar to TNB, the main change for SR 520 June 2016 forecast is to incorporate the Transportation Commission's May 2016 adopted toll policy.

Figure 17: Updates to SR 520 Forecast Assumptions

	November 2015 / February 2016 Forecast	June 2016 Forecast
Cause of the difference	Transportation Commission's or Commission Subcommittee's decision on: (1) toll rate increase structure; (2) HOV exemption policy; (3) discount on Short-term Account (STA) (Commission's toll policy was adopted in May 2016)	
(1) Toll Rate Assumption	Approximately 15% rate increase in FY 2017; start night-time tolling in FY 2017.	Approximately 5% rate increase in FY 2017; another 5% rate increase in FY 2018; start night-time tolling in FY 2018.
(2) HOV exemption policy	3+ carpools toll exemption starts in FY 2017	No carpool exemption
(3) Discount on Short-term account (STA)	Remove \$0.50 discount for short-term account starting from FY 2017	Keep \$0.50 discount for short-term account

The above policy updates result in a \$1.5 million toll revenue reduction in 2015-17 biennium, and a \$4 million toll revenue increase in 2017-19 biennium.

Besides the changes related to the Commission's recent decision, there is no other changes on assumptions.

SR 520's year-to-day transaction and revenue actuals in FY 2016 are very close to November 2015 / February 2016 forecast, with 1.1% positive variance for toll transactions, and 0.7% positive variance for the adjusted toll revenue.

Figure 18: FY 2016 SR 520 Reported Toll Transactions Compared to November 2015 Forecast

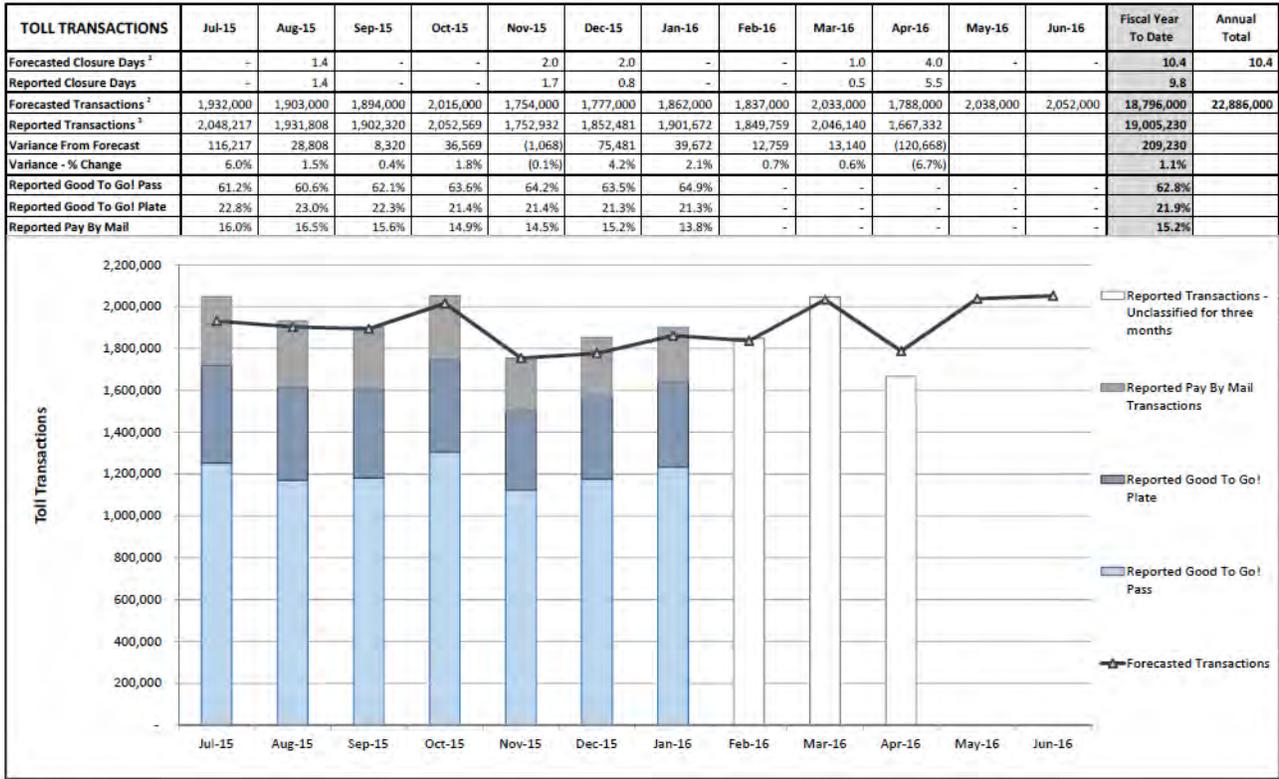
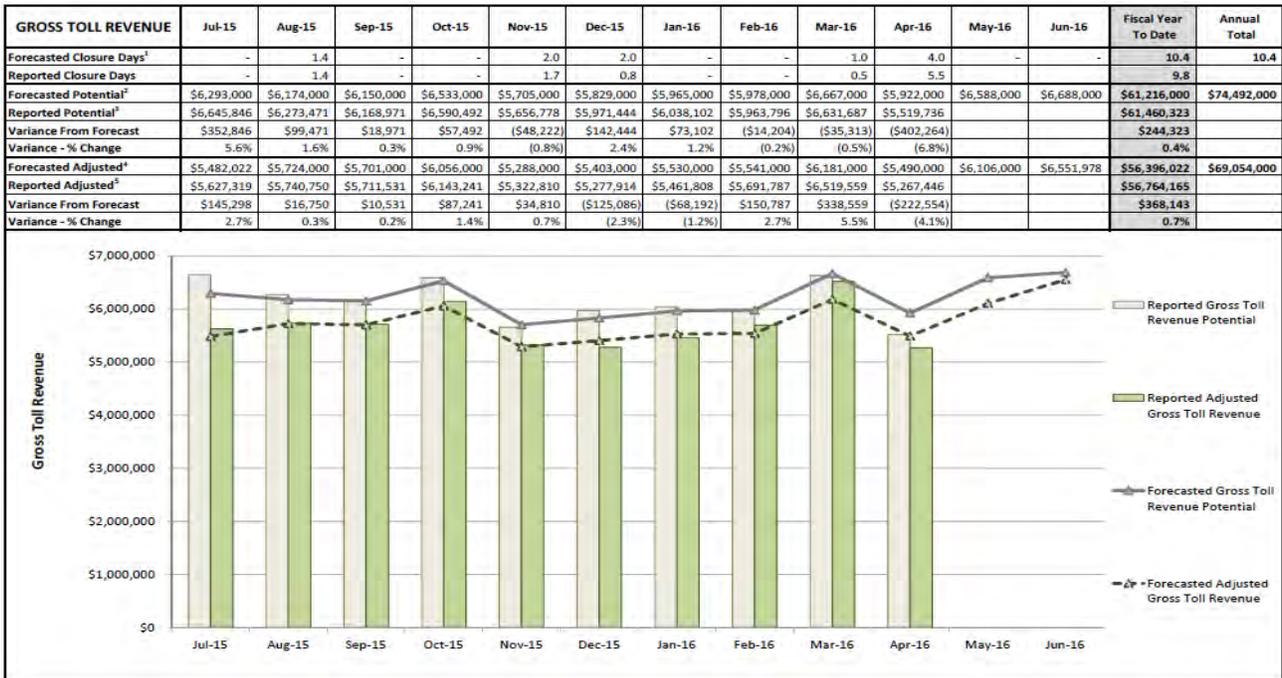


Figure 19: FY 2016 SR 520 Reported Toll Revenue Compared to November 2015 Forecast



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

SR 167 June forecast reflects the actual transaction and revenue trend in FY 2016, which brings down the toll revenue by \$402,000 (23% reduction) in FY 2016. Several factors contribute to this revenue reduction:

- Previous forecast was based on higher than normal average toll rate assumption.
The last time SR 167 toll revenue was updated was in June 2015 forecast. June 2015 update was based on actual data in FY 2015, which include the high toll rate right after the HOT Lanes implemented the open access policy. Overtime drivers adjusted their behavior in response to the new access policy and the toll rate has dropped to the normal range.
- From February 2016 to May 2016, a couple of one-time events reduced the actual toll revenue in FY 2016.
 - Crashed data server. The SR 167 HOT Lanes server crashed on February 12, 2016 and the new server was not installed until May. This server problem reduced the billable toll transactions as well as the average toll rate (during this time frame, default toll rates were in effect, which were lower than the dynamic toll rates).
 - New toll equipment testing in May. The new data server was installed and tested in May. During the one-week testing period, no toll trips were billed.

Comparing to prior forecast, SR 167 HOT Lanes FY 2017 transactions are up by 5.9%, while revenue is down by 7.1%. The seemingly contradicting variances are due to following factors:

- The southbound HOT Lane extension is expected to move ahead of the schedule by half year, becoming fully operational by the end of December 2016. This improvement increases the toll transactions in FY 2017.
- Actual transaction data from July 2015 to January 2016 (before the server crashed) were 9% higher than the prior forecast.
- The revised average toll rate assumption is \$1.29, 12% lower than the previous \$1.47 toll rate assumption.

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

I-405 ETLs June forecast is the first forecast incorporating the actual traffic and revenue data since I-405 ETLs opened in September 2015. Both the prior and new June forecast only include express toll lanes from Bellevue north to Everett and it excludes any future express toll lanes south of Bellevue. The new forecast shows \$30 million toll revenue for 2015-17 biennium, which is \$19 million (168%) higher than previous forecast. The total I-405 revenue and fees are updated to \$35 million for 2015-17 biennium, \$21 million (103.6%) higher than the previous forecast.

June update reflects a combination of changes to the base data, assumption, methodologies, and toll policy. The new I-405 forecast uses actuals from the end of September 2015 through April 2016, roughly seven months of actuals. In addition, Figure 20, lists some of the main differences between the last I-405 forecast and this new June I-405 forecast. This revised June I-405 model is not a new travel demand model but a spreadsheet model which takes results from the PSRC regional model as well as the toll traffic experience into consideration in the forecasts. The revised I-405 uses more recent household data for the Puget Sound region from the 2010 census versus the prior model which used household data from the 2000 census. The June I-405 forecast model utilizes a more recent version of the PSRC model than the previous forecast model. The June I-405 forecast relies on population and employment forecasts which are still a few years old but it is more recent projections than the prior I-405 forecast projections of economic variables. The February I-405 forecast had significant ramp-up assumptions included in the modeling. For example in year 1, the old projections had a 57.8% ramp-up, which ended up not being realistic to actual traffic on the ETL. The revised June I-405 forecast

Figure 20: I-405 ETLs Model Differences in the Assumptions and Methodologies

	February 2016 Forecast	June 2016 Forecast
Who developed traffic and gross revenue potential forecast?	CDM Smith (completed in 2013) and modifications by I-405 project office (in 2016)	Stantec
When model developed?	2011 to 2013	March to June 2016
What kind of model used?	Based on a travel demand model and dynamic pricing model developed for the full Eastside corridor based on 2009 data.	Land use and corridor growth was extracted from the regional model and applied to a spreadsheet-based marketshare model. Marketshare curves were developed based on actual data and were applied to determine future ETLs usage and revenue.
Socio-economic inputs Population, employment, and growth assumption	Socio-economic inputs were derived from Version 1.0B of the PSRC Model which utilized 1999 household survey and 2000 census data. The population and employment forecasts used in the model were based on county level projections prepared by PSRC in 2009.	Socio-economic inputs were derived from Version 4.0.3 of the PSRC 4k Model which utilized 2006 household survey and 2010 census data. The population and employment forecasts used in the model were based on county level projections prepared by PSRC. Corridor-level growth rates were developed from the PSRC 4k model and traffic was assigned to the ETL via a market-share based spreadsheet model.
Assumption on driver's preference to toll rate	The value of time was assumed to be \$11.74 per hour based on a stated preference survey conducted in 2011.	Revealed preference information based on I-405 ETL usage since September 2015 was utilized to determine how drivers would respond to various toll levels.
Ramp-up assumption	Year 1 (FY 2016) — 57.8%; Year 2 (FY 2017) — 89.8%, and Year 3 (FY 2018) — 99.7%.	Actual data suggests that the managed lanes are operating close to capacity in the peak hours, suggesting that ramp-up is largely complete. Small ramp-up (<5%) is expected in FY 2017.
Transaction share by payment type	Small Pay-By-Mail share (5%) over the forecast horizon FY 2016: GTG Total = 94.9% (GTG Pass = 91.7%, GTG Plate = 3.2%); PBM = 5.1% FY 2021 to FY 2027: GTG Total = 95.2% (GTG Pass = 92.2%, GTG Plate = 3%); PBM = 4.8%	High Pay-By-Mail share. PBM is predicted to be approximately 20% in FY 2016, 15% in FY 2017 and slowly dropping over time to 10% by FY 2022. FY 2016: GTG Total = 80% (GTG Pass = 63%, GTG Plate = 17%); PBM = 20% FY 2017: GTG Total = 85% (GTG Pass = 68%, GTG Plate = 17%); PBM = 15% FY 2022: GTG Total = 90% (GTG Pass = 72%, GTG Plate = 18%); PBM = 10%
Hours of operation (Toll Policy Change)	24 hours per day, 7-day a week	5 AM - 7 PM weekday, excluding major holidays (starting from March 18, 2016)

has a minor ramp-up of less than 5% in FY 2017. The payment mix was also changed between the two I-405 forecasts. In the new I-405 forecast, the GTG percentage of the total traffic is anticipated to 63% for the GTG pass and 17% for the Pay By Plate for a total of 80%. In the last forecast, GTG pass was assumed to be 91.7% and Pay By Plate was 3.2% but after seeing the actual traffic experience, these percentages were adjusted. In the revised June forecast, there is a higher Pay By Mail share which is approximately 20% in FY 2016 and it is assumed to decline over time to 10% by FY 2022. In the prior I-405 forecast, PBM was only a very small percentage of 5% over the forecast horizon.

As of March 18, 2016, tolls are no longer collected on weeknights from 7pm to 5am, on weekends, and on six major holidays. June forecast estimates this change of operation hour results in 17% reduction on toll

transactions and 12% reduction on toll revenues. The percentage impact on revenue is lower than the impact on transactions due to having no tolls during nighttime and weekends. This revised June I-405 forecast utilizes revealed preferences for the express toll lanes from the past seven months of tolling experience. The dynamic toll rates for I-405 is based on market share curves developed from the actual toll traffic counts and rates paid at different times of day.

As expected, this June 2016 I-405 forecast in the current fiscal year has traffic projected to be significantly higher at 7.375 million, more than 100% increase from the last forecast. In FY 2017, I-405 express toll lanes traffic is projected to grow to 9.031 million which is an annual increase of 22.5% because FY 2016 traffic does not reflect an entire year of ETL traffic. In FY 2018, the ETL traffic is expected to grow by 2.9% to 9.293 million. Future years' annual growth rates average 3%.

The I-405 gross revenue potential is projected at \$35.54 million in the current biennium which is an upward revision of \$23.6 million or nearly 200% increase. The mix of payment type was adjusted to better reflect the recent tolling experience so GTG- transponder pass customers' gross revenue potential rose by 98% or \$9.7 million and PBP customers' gross revenue potential is up by \$4.7 million or 1,375% and PBM customers' gross revenue potential is up by \$9.3 million or 557% in the current biennium. Since the PBM customers has been so much higher than expected in the prior I-405 forecast, the toll revenue not recognized has been revised upward significantly by \$5.32 million or 720% in the current biennium. The adjusted gross toll revenue for ETL is projected to be \$30.155 million and this is \$18.9 million or 168% higher than the last forecast in the current biennium. Next biennium, ETL gross revenue potential is up significantly as well with gross revenue potential projected at \$42.58 million which is \$22.8 million or 115% more than last forecast. The adjusted I-405 toll revenue is projected to be \$37.962 million and up \$19.27 million or 103% above the prior forecast. The difference in revenue between the revised June I-405 forecast and the last forecast does decline over time. By the end of the forecast horizon, the biennia adjusted toll revenue on I-405 is projected to be \$58.6 million which is a revision upward of \$24.5 million or 71.7%.

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Appendix

Table Related to the June 2016 Forecast

Impact to Select Transportation Accounts

Figure 21: 2015 Transportation Revenue Package with June 2016 Forecast Comparison

Transportation Revenue Bill - 2ESSB 5987 & SHB 1480 <i>dollars in millions</i>	2015-17		2017-19		10-Year Period (2015-2025)	
	Forecast Jun 16	Chg from Sep 15	Forecast Jun 16	Chg from Sep 15	Forecast Jun 16	Chg from Sep 15
Revenues						
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	542.0	9.7	816.8	22.8	3,856.8	110.6
Vehicles paying Weight-based Registration Fee (All Trucks)	37.9	3.0	76.0	5.4	385.4	9.6
Vehicles paying Freight Project Fee (Trucks >10,000 lbs)	10.8	0.3	21.6	0.6	97.2	1.9
Passenger Vehicle Weight Fees	88.4	1.0	182.2	0.9	1,032.8	15.6
Intermittent-Use Trailers (\$187.50)	7.2	(0.0)	30.0	0.0	58.1	0.1
Electric/Plug-in Vehicle Renewal Fee (\$100)	0.2	(0.0)	0.4	(0.0)	1.8	(0.1)
Electric/Plug-in Vehicle Renewal Fee (\$50)	0.7	0.1	1.8	0.4	15.9	8.7
Title Service Fee \$12 (Vessels)	0.1	0.0	0.1	0.0	0.6	0.1
Registration Service Fee \$5 (Vessels)	0.5	0.1	0.5	0.2	2.2	0.6
Commercial Driver's License (CDL) Fees HIGHWAY SAFETY	1.6	0.2	3.1	(0.7)	13.7	0.4
Enhanced Driver's License Fees (EDL/EID) HIGHWAY SAFETY	4.2	2.2	11.5	7.7	56.0	39.1
DOL Report of Sale Fees	-	-	5.2	(0.0)	19.6	0.1
Studded Tire Fee	0.2	-	1.0	-	4.3	-
Total Revenues	693.8	16.6	1,150.2	37.2	5,544.4	186.5
Distributions						
Motor Vehicle Fund (108)	35.7	2.0	85.9	3.6	344.4	6.8
Transportation 2003 Nickel Account (550)	2.6	0.2	5.1	0.3	25.3	0.6
Transportation Partnership Account (09H)	5.6	0.4	11.3	0.7	55.7	1.3
Connecting Washington Account (NEW)	542.0	9.7	816.8	22.8	3,856.8	110.6
Puget Sound Capital Construction Account (099)	-	-	-	-	-	-
Puget Sound Ferry Operations Account (109)	0.7	0.0	1.7	0.1	7.3	0.2
Capital Vessel Replacement Account (18J)	0.6	0.1	3.6	0.2	14.2	0.8
Multimodal Transportation Account (218)	89.2	1.1	185.2	1.3	1,053.2	(32.1)
Special Category C Account (215)	-	-	-	-	-	-
License Plate Technology Account (06T)	-	-	0.1	(0.0)	0.4	(0.1)
DOL Services Account (201)	-	-	0.3	0.0	1.2	0.1
WSP Highway Account (081)	11.7	0.7	25.1	1.3	114.2	2.6
Highway Safety Fund (106)	5.8	2.4	15.2	7.0	71.7	39.5
Rural Arterial Trust Account (102)	0.0	0.0	0.0	(0.0)	0.0	(0.1)
Transportation Improvement Accounty (144)	0.0	0.0	0.0	-	0.1	0.0
Total Distributions	693.9	16.7	1,150.2	37.2	5,544.4	130.0

* 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 which are also listed in the table above.