

Transportation Revenue Forecast Council

November 2019 Transportation Economic and Revenue Forecasts

Volume I: Summary

Washington Transportation

Economic and Revenue Forecast November 2019 Forecast

Summary Report (Volume I)

Forecast Overview	3
Economic Variables Forecast	10
Motor Fuel Price Forecast	11
Motor Vehicle Fuel Tax Forecast	16
Motor Vehicle Revenue (Licenses, Permits and Fees)	16
Driver Related Revenues Forecasts	17
Other Transportation Related Revenue Forecasts	18
Ferry Ridership and Revenue	19
Toll Revenue	21
Highway Federal Funds Revenue	34
Public Transportation Federal Funds Revenue	36
Washington State Ferries Federal Funds Revenue	37
Forecast Contacts	38
Appendix	39
Tracking Table of Revenues/Expenditures in HB 2042	40

Forecast Tables (Volume II)

Motor Vehicle Fuel	3
Motor Vehicle Related Revenue Forecast (Licenses, Permits and Fees)	24
Driver Related Revenue Forecasts	46
Other Transportation Related Revenue Forecasts	56
Vehicle Sales and Use Tax	56
Rental Car Tax	56
Business and Other Revenue	56
Aeronautics Taxes and Fees	56
Washington State Ferries Ridership and Revenue Forecast	65
Toll Operations and Revenue Forecasts	71
Federal Funds Forecast	83

Alternate Forecast Scenarios (Volume III)

Alternative Ferry Forecast	3
Alternative Transit and TBDs Sales Tax Revenue Forecast	13
Alternate Enhanced Driver License Forecast	20
Alternative LPF and Business Related Revenue Without Initiative I-976 Impacts	22

Pledged Revenue (Volume IV)

Pledged Revenue	2
-----------------	---

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.

November 2019 Transportation Forecast Overview

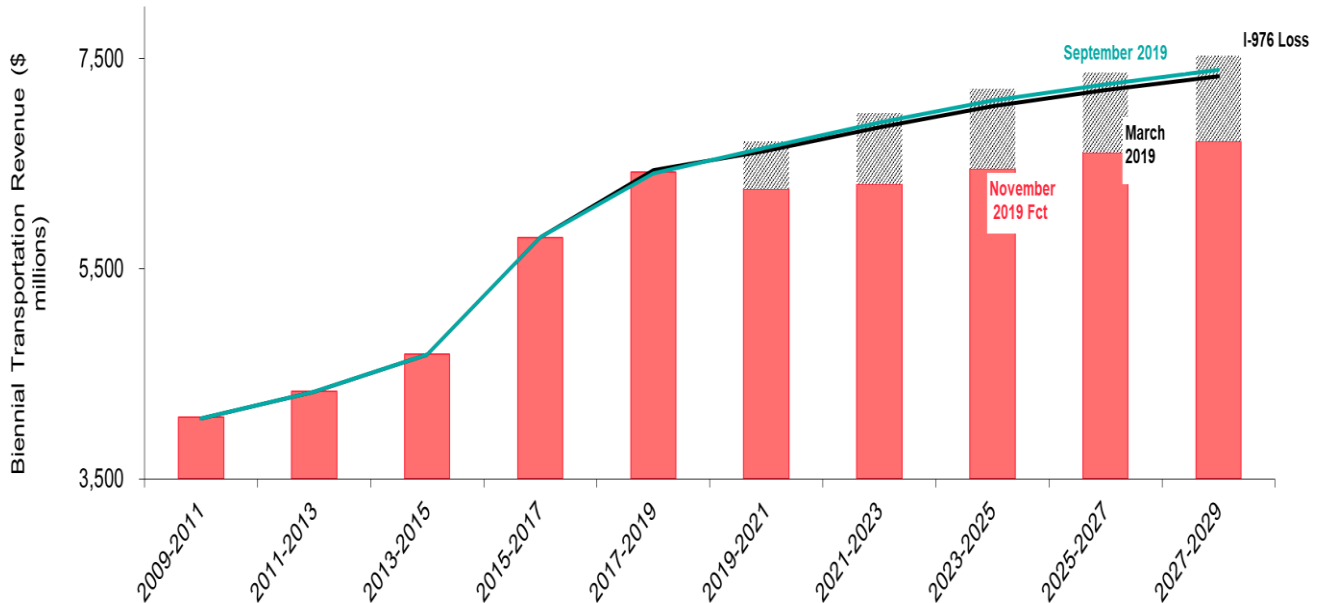
Forecast Overview

Here are key conclusions from the November 2019 transportation revenue forecast.

- In the 2017-19 biennium, transportation revenues came in at \$6.42 billion and 2019-21 biennium is anticipated to be \$6.26 billion which is \$0.16 billion or 2.5% lower than the prior biennium. This decrease from the prior biennium was due mainly to the passage of Initiative I-976 which caused a significant reduction in certain transportation revenues beginning FY 2020.
- November 2019 transportation forecast of revenues: \$6.26 billion for the current biennium which is down forecast to forecast by \$391.9 million or 5.9%. This was due primarily to lower licenses, permits and fee and eliminating the sales tax on new vehicle sales due to the passage of I-976. In next biennium, transportation revenues are down from the last forecast by \$590 million. If the initiative had not passed, this November forecast would have been above the September forecast by \$17 million or 0.3%. This same trend continued in 2021-23 biennium as well with revenues being up by \$69 million from the last forecast.
- For the 10-year forecast horizon, total revenue is projected to be \$32.347 billion, which is down by \$2.95 billion or (8.4%) from September. The decrease in revenue is due to lower licenses, permits and fee revenues, \$2.87 billion, and sales tax on new motor vehicles, \$560 million. This decrease is counteracted by higher fuel taxes and new toll revenue from SR 99 but the increases in these revenue streams do not make up for the loss in the revenue due to the initiative. If the impact of the initiative is removed from the November forecast, it would be up by \$502.5 million or 1.4% above the September forecast.
- New projections of real personal income growth rates are minor revisions down in FY 2020 compared to the September forecast. Employment projections are down in FY 2019 and 2020 and down again in the long-term since the September forecast. Retail gas and diesel prices are up from the September projections in the long-term. The current B5 biodiesel price forecast is also up currently compared to the last forecast in near-term.
- Fuel tax revenue is up a little by \$8.5 million or 0.2% from the last forecast in the current biennium. Next biennium, fuel taxes are up by \$9.2 million over the last forecast. The revision is due to higher diesel taxes.
- The LPF revenue is revised downward due to I-976 by \$359.6 million or 22.7% from the September forecast in the current biennium. Next biennium, the LPF revenue is also down by \$552 million over the last forecast. Over the next 10 years, the forecast for vehicle license, permits and fee revenue is down by \$2.87 billion or 32% less than the September forecast projections due to lower and elimination of license fees in I-976.
- Compared to the last forecast, business related revenue is also down due to the elimination of the sales tax on new motor vehicle sales as required in I-976. Over the next 10 years, the business related revenue is down by \$560 million or 95% from the last projections due to the impacts of I-976.
- Toll forecasts are up in the current biennium by \$42.9 million from the last forecast due to the inclusion of the tolling of the SR 99 tunnel. Over the next 10-years, toll revenue is anticipated to be \$451 million or 18% above the last projection.

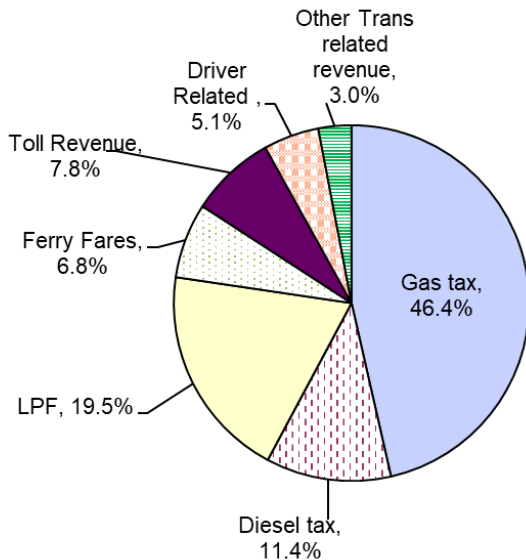
In FY 2019, total transportation revenues came in at \$3.24 billion, which was a 2% increase annually. In the current fiscal year, total transportation revenues are anticipated to be \$3.162 billion. This is a -2.5% decline in revenue year over year. This annual decrease in transportation revenues is due to the passage of I-976 in November. In comparing this current forecast with the last forecast, this November forecast is down sizably throughout the forecast horizon. Next biennium, total transportation revenue is \$6.307 billion and revenues are down by \$590 million from the September forecast. Overall, during the next 10-year horizon, transportation revenues are projected to be \$32.3 billion and down by \$2.95 billion or 8.4% from the projections in September with an average annual growth rate of 0.4% beginning in the current fiscal year. Figure 1 compares transportation revenues in November, September and March. The orange bars denote the lower November forecast with the impact of I-976 and the gray bars represent the loss in transportation revenues due to I-976. If the initiative had not passed, the November forecast would have been above the September and March baseline revenue forecasts.

Figure 1: Total Transportation Revenues Comparing March, September vs. November 2019 Forecasts
millions of dollars



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 2019-21 biennium, (\$6.263 billion). Gasoline fuel taxes comprise the largest share at 46.4%. With the addition of diesel fuel taxes, all motor vehicle fuel taxes comprise 57.8% of all revenues. Licenses, permits, and fee revenues comprise the second largest share at 19.5%. The three largest revenue sources are projected to consist of 77.3% of revenues in the 2019-21 biennium. The remaining 22.7% consists of ferry fares, toll revenue, driver related revenue and other transportation related revenue.

Figure 2: Revenue By Source 2019-21 Biennium (\$6.263 billion)



As Figure 3 indicates the 2019-21 biennium revenues came in at \$6.26 billion and below the September forecast by \$392 million. This was mainly due to the passage initiative I-976 which significantly reduced license, permits and fees as well as the business related revenue. Business related revenue dropped due to the elimination of the sales tax on new motor vehicle sales. Next biennium, actual revenue for transportation is anticipated to be \$6.307 billion, which is anticipated to be \$590 million below the September forecast mainly due to I-976. Over the next 10 years, transportation revenues are anticipated to be \$32.35 billion or \$2.95 billion or 8.4% below the last forecast.

Beside the fuel tax forecast being revised upward by \$8.5 million, toll revenue is also up in the current biennium by \$42.9 million. Vehicle sales taxes are down due to the initiative eliminating the sales tax on new motor vehicle sales. In the current biennium, vehicle sales tax is down \$80.6 million or 75% from the September forecast. Licenses, permits and fee revenue is down \$359.6 million or 23% from the last forecast. Driver-related revenue is up a little by \$4 million in the current biennium. Ferry revenue is also down \$5.87 million from the September forecast in the current biennium. Other transportation revenue sources have only minor changes from the September forecast. Over the 10-year forecast horizon, the transportation revenue forecast for November is anticipated to be \$32.35 billion, which is down \$2.95 billion or 8.4% from the last forecast. This decrease in revenue is mainly due to the passage of I-976. If the impacts of the initiative were excluded from this November forecast, total transportation revenues would have exceeded the prior forecasts. Figure 5 compares the November forecast without the impacts of I-976 to the September forecast. This table reveals that in the current biennium, the November forecast, absent the impacts of the initiative would have resulted in \$17 million more in revenue than in September. Over the next 10-years, the November forecast would have resulted in \$502.5 million or 1.4% more than the September forecast.

Figure 4 compares the new November forecast, with the impacts of I-976, to the March baseline forecast. In the current biennium, the November forecast is now \$360.5 million or 5.4% below the March forecast. Next biennium, the transportation revenues in November are down \$543.5 million from the March forecast. Over the next 10 years, total transportation revenues are \$2.7 billion or 7.7% below the March forecast. Figure 6 shows the comparison of the November forecast, without the impacts of I-976, to the March baseline forecast. This table reveals that the November forecast would have been up by \$48.5 million or 0.7% in the current biennium versus the March baseline forecast if I-976 had not passed. Over the next 10 years, the November forecast would have been up \$747.4 million, 2% over the March forecast if the initiative had not passed.

Figure 3: Current Forecast (With Impact I-976) to Prior Forecast Biennium Comparison of All Transportation Revenues – November 2019 forecast - 10-year period

Forecast to Forecast Comparison for Transportation Revenues and Distributions 10-Year Period									
November 2019• millions of dollars									
	2017-2019			Current Biennium			10-Year Period		
	Forecast Nov-19	Chg from Sep-19	Percent Change	2019-2021			(2019-2029)		
				Forecast Nov-19	Chg from Sep-19	Percent Change	Forecast Nov-19	Chg from Sep-19	Percent Change
Sources of Transportation Revenue									
Motor Vehicle Fuel Tax Collections	3,584.23	0.00	0.00%	3,621.19	8.46	0.23%	18,606.42	44.47	0.24%
Licenses, Permits and Fees	1,510.78	0.00	0.00%	1,222.17	(359.62)	-22.73%	6,031.52	(2,873.25)	-32.27%
Ferry Revenue†	400.33	(0.34)	-0.09%	427.84	(5.87)	-1.35%	2,273.05	(24.17)	-1.05%
Toll Revenue	426.99	5.40	1.28%	486.90	42.85	9.65%	2,923.61	451.07	18.24%
Aviation Revenues	7.19	(0.05)	-0.66%	7.12	(0.01)	-0.08%	36.56	(0.02)	-0.06%
Rental Car Tax	70.16	0.15	0.21%	72.99	(0.61)	-0.83%	397.42	(1.16)	-0.29%
Vehicle Sales Tax	102.36	(0.10)	-0.09%	27.06	(80.62)	-74.87%	27.06	(560.04)	-95.39%
Driver-Related Fees	286.67	0.51	0.18%	316.89	4.02	1.29%	1,638.51	12.47	0.77%
Business/Other Revenues ‡	30.25	4.31	16.62%	80.94	(0.51)	-0.63%	413.18	(0.35)	-0.09%
Total Revenues	6,418.97	9.88	0.15%	6,263.10	(391.90)	-5.89%	32,347.31	(2,950.99)	-8.36%
Distribution of Revenue									
Motor Fuel Tax Refunds and Transfers	228.87	0.07	0.03%	238.57	0.41	0.17%	1,242.52	2.09	0.17%
State Uses									
Motor Vehicle Account (108)	1,244.90	4.60	0.37%	1,242.09	(63.29)	-4.85%	6,476.65	(389.29)	-5.67%
Transportation 2003 (Nickel) Account (550)	429.01	(0.04)	-0.01%	427.41	(4.93)	-1.14%	2,187.13	(30.50)	-1.38%
Transportation 2005 Partnership Account (09H)	634.13	(0.06)	-0.01%	629.71	(11.12)	-1.73%	3,224.64	(68.76)	-2.09%
Connecting Washington Account (20H)	801.97	(0.09)	-0.01%	811.01	0.89	0.11%	4,158.31	9.12	0.22%
Multimodal Account (218)	520.44	0.05	0.01%	201.98	(333.91)	-62.31%	597.78	(2,688.88)	-81.81%
Special Category C Account (215)	50.54	(0.01)	-0.01%	51.11	0.06	0.11%	262.08	0.57	0.22%
Puget Sound Capital Construction Account (099)	36.78	(0.00)	-0.01%	37.19	0.04	0.11%	190.69	0.42	0.22%
Puget Sound Ferry Operations Account (109)	466.16	(0.33)	-0.07%	488.40	(6.83)	-1.38%	2,569.26	(30.58)	-1.18%
Capital Vessel Replacement Account (18J)	43.81	(0.01)	-0.02%	65.08	(0.42)	-0.64%	354.95	(2.18)	-0.61%
Tacoma Narrows Bridge Account (511)	170.84	1.39	0.82%	171.60	(0.46)	-0.27%	897.83	(3.46)	-0.38%
High Occupancy Toll Lanes Account (09F)⁴	7.42	0.21	2.98%	11.07	3.24	0.00%	91.61	37.84	70.37%
SR 520 Corridor Account (16J)	176.89	3.03	1.74%	187.62	4.54	2.48%	1,056.09	17.64	1.70%
SR 520 Corridor Civil Penalties Account (17P)	10.94	1.67	18.02%	6.35	(1.96)	-23.58%	35.61	(11.26)	-24.02%
Interstate 405 Express Toll Lanes Operations (595)	60.91	(0.90)	-1.46%	66.36	(6.41)	-8.81%	508.38	76.22	17.64%
Alaskan Way Viaduct Replacement Acct. (535)				43.91	43.91	100.00%	334.10	334.10	100.00%
Aeronautics Account (039)	7.13	(0.05)	-0.63%	7.04	(0.01)	-0.10%	36.08	(0.03)	-0.09%
Washington State Aviation Account (21G)	0.06	(0.00)	-3.74%	0.08	0.00	1.15%	0.48	0.01	1.75%
State Patrol Highway Account (081)	456.97	(0.29)	-0.06%	443.25	(18.04)	-3.91%	2,319.72	(119.20)	-4.89%
Highway/Motorcycle Safety Accts. (106 & 082)	258.05	0.98	0.38%	290.18	2.98	1.04%	1,499.49	5.88	0.39%
School Zone Safety Account (780)	0.88	0.00	0.12%	0.85	(0.02)	-1.94%	4.38	0.04	0.82%
Other accounts (201, 06T, 09T, 09E, 216, 07C)	18.71	0.00	0.00%	21.61	0.17	0.77%	110.95	0.77	0.70%
Electric Vehicle Account (20J)	0.00	0.00	0.00%	19.48	0.25	100.00%	76.30	(76.54)	100.00%
Ignition Interlock Devices Revolving Acct 14V	7.88	(0.27)	-3.26%	8.61	0.52	6.36%	43.06	2.73	6.76%
Multituse Roadway Safety Account Collections-571	0.26	0.00	0.00%	0.31	0.00	0.89%	1.54	0.00	0.18%
Total for State Use	5,404.66	9.91	0.18%	5,232.29	(390.80)	-6.95%	27,037.08	(2,935.36)	-9.79%
Local Uses									
Cities	193.84	(0.02)	-0.01%	196.03	0.21	0.11%	1,005.10	2.20	0.22%
Counties	314.00	(0.05)	-0.02%	315.88	(0.60)	-0.19%	1,620.63	(1.99)	-0.12%
Transportation Improvement Board (112 & 144)	207.54	(0.02)	-0.01%	209.68	(0.49)	-0.23%	1,077.42	(8.19)	-0.75%
County Road Administration Board (102 & 186)	70.06	(0.01)	-0.01%	70.65	(0.64)	-0.90%	364.57	(9.75)	-2.60%
Total for Local Use	785.44	(0.10)	-0.01%	792.24	(1.52)	-0.19%	4,067.71	(17.72)	-0.43%
Total Distribution of Revenue	6,418.97	9.88	0.15%	6,263.10	(391.90)	-5.89%	32,347.31	(2,950.99)	-8.36%

† Ferry Fares plus non-farebox revenue

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

Figure 4: Current November Forecast (With Impact I-976) Compared to Baseline March forecast– 10-year period

Forecast to Baseline Comparison for Transportation Revenues and Distributions 10-Year Period									
November 2019• millions of dollars									
	2017-2019			Current Biennium			10-Year Period		
	Forecast Nov-19	Chg from Baseline ¥	Percent Change	2019-2021			(2019-2029)		
				Forecast Nov-19	Chg from Baseline ¥	Percent Change	Forecast Nov-19	Chg from Baseline ¥	Percent Change
Sources of Transportation Revenue									
Motor Vehicle Fuel Tax Collections	3,584.23	(32.44)	-0.90%	3,621.19	(66.65)	-1.81%	18,606.42	(362.33)	-1.91%
Licenses, Permits and Fees	1,510.78	6.66	0.44%	1,222.17	(313.44)	-20.41%	6,031.52	(2,575.42)	-29.92%
Ferry Revenue†	400.33	(2.23)	-0.55%	427.84	8.43	2.01%	2,273.05	81.26	3.71%
Toll Revenue §	426.99	5.67	1.35%	486.90	50.68	11.62%	2,923.61	504.84	20.87%
Aviation Revenues ‡	7.19	(0.05)	-0.67%	7.12	(0.04)	-0.59%	36.56	(0.21)	-0.56%
Rental Car Tax	70.16	(0.27)	-0.38%	72.99	(1.28)	-1.72%	397.42	(3.27)	-0.82%
Vehicle Sales Tax	102.36	(0.59)	-0.57%	27.06	(81.50)	-75.08%	27.06	(564.31)	-95.42%
Driver-Related Fees	286.67	(2.74)	-0.95%	316.89	(6.29)	-1.95%	1,638.51	(43.65)	-2.60%
Business/Other Revenues ±	30.25	4.16	15.92%	80.94	49.73	159.34%	413.18	253.81	159.25%
Total Revenues	6,418.97	(21.83)	-0.34%	6,263.10	(360.48)	-5.44%	32,347.31	(2,706.12)	-7.72%
Distribution of Revenue									
Motor Fuel Tax Refunds and Transfers	228.87	7.59	3.43%	238.57	18.14	8.23%	1,242.52	97.37	8.50%
State Uses									
Motor Vehicle Account (108)	1,244.90	(1.73)	-0.14%	1,242.09	(35.29)	-2.76%	6,476.65	(227.89)	-3.40%
Transportation 2003 (Nickel) Account (550)	429.01	(3.53)	-0.82%	427.41	(13.73)	-3.11%	2,187.13	(75.97)	-3.36%
Transportation 2005 Partnership Account (09H)	634.13	(8.32)	-1.29%	629.71	(25.88)	-3.95%	3,224.64	(156.04)	-4.62%
Connecting Washington Account (20H)	801.97	(11.13)	-1.37%	811.01	(19.89)	-2.39%	4,158.31	(113.70)	-2.66%
Multimodal Account (218)	520.44	(0.18)	-0.03%	201.98	(337.13)	-62.53%	597.78	(2,702.83)	-81.89%
Special Category C Account (215)	50.54	(0.70)	-1.37%	51.11	(1.25)	-2.39%	262.08	(7.17)	-2.66%
Puget Sound Capital Construction Account (099)	36.78	(0.51)	-1.37%	37.19	(0.91)	-2.39%	190.69	(5.21)	-2.66%
Puget Sound Ferry Operations Account (109)	466.16	(2.93)	-0.62%	488.40	1.26	0.26%	2,569.26	27.03	1.06%
Capital Vessel Replacement Account (18J)	43.81	0.70	1.62%	65.08	21.68	49.95%	354.95	133.02	59.94%
Tacoma Narrows Bridge Account (511)	170.84	1.39	0.82%	171.60	(0.46)	-0.27%	897.83	(3.46)	-0.38%
High Occupancy Toll Lanes Account (09F)	7.42	0.48	0.00%	11.07	11.07	0.00%	91.61	91.61	100.00%
SR 520 Corridor Account (16J)	176.89	3.03	1.74%	187.62	4.54	2.48%	1,056.09	17.64	1.70%
SR 520 Corridor Civil Penalties Account (17P)	10.94	1.67	18.02%	6.35	(1.96)	-23.58%	35.61	(11.26)	-24.02%
Interstate 405 Express Toll Lanes Operations (595)	60.91	(0.90)	-1.46%	66.36	(6.41)	-8.81%	508.38	76.22	17.64%
Alaskan Way Viaduct Replacement Acct. (535)				43.91			334.10	334.10	110.00%
Aeronautics Account (039)	7.13	(0.04)	-0.58%	7.04	(0.13)	-1.87%	36.08	(0.97)	-2.61%
Washington State Aviation Account (21G)	0.06	(0.00)	-3.74%	0.08	0.00	1.15%	0.48	0.01	1.75%
State Patrol Highway Account (081)	456.97	0.09	0.02%	443.25	(18.97)	-4.10%	2,319.72	(123.69)	-5.06%
Highway/Motorcycle Safety Accts. (106 & 082)	258.05	4.33	1.71%	290.18	2.66	0.92%	1,499.49	0.61	0.04%
School Zone Safety Account (780)	0.88	0.01	1.53%	0.85	(0.02)	-2.56%	4.38	0.02	0.57%
Other accounts (201, 06T, 097, 09E, 216, 07C)	18.71	(0.04)	-0.20%	21.61	(0.22)	-1.03%	110.95	(1.06)	-0.95%
Electric Vehicle Account (20J)				19.48			76.30	(76.54)	-50.08%
Ignition Interlock Device Revolving Acct 14V	7.88	(0.29)	-3.60%	8.61	0.55	6.86%	43.06	10.53	32.38%
Multiuse Roadway Safety Account Collections-571	0.14	0.00	0.00%	0.31	0.05	20.20%	1.54	0.11	7.62%
Total for State Use	5,404.40	(18.59)	-0.34%	5,232.29	(356.85)	-6.38%	27,037.08	(2,738.47)	-9.18%
Local Uses									
Cities	193.84	(2.69)	-1.37%	196.03	(4.81)	-2.39%	1,005.10	(27.48)	-2.66%
Counties	314.00	(4.61)	-1.45%	315.88	(8.71)	-2.68%	1,620.63	(49.42)	-2.96%
Transportation Improvement Board (112 & 144)	207.54	(2.85)	-1.35%	209.68	(5.83)	-2.71%	1,077.42	(38.73)	-3.47%
County Road Administration Board (102 & 186)	70.06	(0.94)	-1.32%	70.65	(2.42)	-3.31%	364.57	(19.24)	-5.01%
Total for Local Use	785.44	(11.08)	-1.39%	792.24	(21.77)	-2.67%	4,067.71	(134.87)	-3.21%
Total Distribution of Revenue	6,418.71	(22.09)	-0.34%	6,263.10	(360.48)	-5.44%	32,347.30	(2,706.13)	-7.72%

Baseline is the March 2019 forecast.

Ferry Fares, capital surcharge and non-farebox revenue are all in the ferry revenue

Figure 5: Current Forecast Without Initiative I-976 Compared to September Forecast For All Transportation Revenues - 10-year period

Forecast to Forecast Comparison for Transportation Revenues and Distributions (Excludes I-976 Impacts) 10-Year Period									
November 2019• millions of dollars									
	2017-2019			Current Biennium			10-Year Period		
	Forecast Nov-19	Chg from Sep-19	Percent Change	2019-2021			(2019-2029)		
				Forecast Nov-19	Chg from Sep-19	Percent Change	Forecast Nov-19	Chg from Sep-19	Percent Change
Sources of Transportation Revenue									
Motor Vehicle Fuel Tax Collections	3,584.23	0.00	0.00%	3,621.19	8.46	0.23%	18,606.42	44.47	0.24%
Licenses, Permits and Fees	1,510.78	0.00	0.00%	1,594.54	12.75	0.81%	8,999.96	95.19	1.07%
Ferry Revenue†	400.33	(0.34)	-0.09%	427.84	(5.87)	-1.35%	2,273.05	(24.17)	-1.05%
Toll Revenue	426.99	5.40	1.28%	442.99	(1.05)	-0.24%	2,847.94	375.40	15.18%
Aviation Revenues	7.19	(0.05)	-0.66%	7.12	(0.01)	-0.08%	36.56	(0.02)	-0.06%
Rental Car Tax	70.16	0.15	0.21%	72.99	(0.61)	-0.83%	397.42	(1.16)	-0.29%
Vehicle Sales Tax	102.36	(0.10)	-0.09%	107.57	(0.10)	-0.09%	587.69	0.60	0.10%
Driver-Related Fees	286.67	0.51	0.18%	316.89	4.02	1.29%	1,638.51	12.47	0.77%
Business/Other Revenues ‡	30.25	4.31	16.62%	80.94	(0.51)	-0.63%	413.18	(0.35)	-0.09%
Total Revenues	6,418.97	9.88	0.15%	6,672.09	17.08	0.26%	35,800.71	502.42	1.42%
Distribution of Revenue									
Motor Fuel Tax Refunds and Transfers	228.87	0.07	0.03%	238.57	0.41	0.17%	1,242.52	2.09	0.17%
State Uses									
Motor Vehicle Account (108)	1,244.90	4.60	0.37%	1,311.15	5.77	0.44%	6,975.06	109.13	1.59%
Transportation 2003 (Nickel) Account (550)	429.01	(0.04)	-0.01%	432.94	0.60	0.14%	2,222.62	4.99	0.23%
Transportation 2005 Partnership Account (09H)	634.13	(0.06)	-0.01%	641.88	1.05	0.16%	3,302.80	9.40	0.29%
Connecting Washington Account (20H)	801.97	(0.09)	-0.01%	811.01	0.89	0.11%	4,158.31	9.12	0.22%
Multimodal Account (218)	520.44	0.05	0.01%	540.57	4.68	0.87%	3,323.49	36.83	1.12%
Special Category C Account (215)	50.54	(0.01)	-0.01%	51.11	0.06	0.11%	262.08	0.57	0.22%
Puget Sound Capital Construction Account (099)	36.78	(0.00)	-0.01%	37.19	0.04	0.11%	190.69	0.42	0.22%
Puget Sound Ferry Operations Account (109)	466.16	(0.33)	-0.07%	489.85	(5.37)	-1.09%	2,578.57	(21.26)	-0.82%
Capital Vessel Replacement Account (18J)	43.81	(0.01)	-0.02%	65.08	(0.42)	-0.64%	354.95	(2.18)	-0.61%
Tacoma Narrows Bridge Account (511)	170.84	1.39	0.82%	171.60	(0.46)	-0.27%	897.83	(3.46)	-0.38%
High Occupancy Toll Lanes Account (09F)▲	7.42	0.21	2.98%	11.07	3.24	0.00%	91.61	37.84	70.37%
SR 520 Corridor Account (16J)	176.89	3.03	1.74%	187.62	4.54	2.48%	1,056.09	17.64	1.70%
SR 520 Corridor Civil Penalties Account (17P)	10.94	1.67	18.02%	6.35	(1.96)	-23.58%	35.61	(11.26)	-24.02%
Interstate 405 Express Toll Lanes Operations (595)	60.91	(0.90)	-1.46%	66.36	(6.41)	-8.81%	508.38	76.22	17.64%
Alaskan Way Viaduct Replacement Acct. (535)				0.00	0.00	100.00%	258.43	258.43	100.00%
Aeronautics Account (039)	7.19	(0.05)	-0.66%	7.06	(0.00)	-0.05%	36.13	(0.03)	-0.08%
Washington State Aviation Account (21G)	0.00	0.00	#DIV/0!	0.06	(0.00)	-3.74%	0.43	0.00	1.01%
State Patrol Highway Account (081)	456.97	(0.29)	-0.06%	466.84	5.55	1.20%	2,471.25	32.33	1.33%
Highway/Motorcycle Safety Accts. (106 & 082)	258.05	0.98	0.38%	290.18	2.98	1.04%	1,499.49	5.88	0.39%
School Zone Safety Account (780)	0.88	0.00	0.12%	0.85	(0.02)	-1.94%	4.38	0.04	0.82%
Other accounts (201, 06T, 09T, 09E, 216, 07C)	18.71	0.00	0.00%	21.61	0.17	0.77%	110.95	0.77	0.70%
Electric Vehicle Account (20J)	0.00	0.00	0.00%	19.48	0.25	100.00%	76.30	(76.54)	100.00%
Ignition Interlock Devices Revolving Acct 14V	7.88	(0.27)	-3.26%	8.61	0.52	6.36%	43.06	2.73	6.76%
Multiuse Roadway Safety Account Collections-571	0.26	0.00	0.00%	0.31	0.00	0.89%	1.54	0.00	0.18%
Total for State Use	5,404.66	9.91	0.18%	5,638.77	15.68	0.28%	30,460.03	487.60	1.63%
Local Uses									
Cities	193.84	(0.02)	-0.01%	196.03	0.21	0.11%	1,005.10	2.20	0.22%
Counties	314.00	(0.05)	-0.02%	316.82	0.34	0.11%	1,626.71	4.09	0.25%
Transportation Improvement Board (112 & 144)	207.54	(0.02)	-0.01%	210.46	0.29	0.14%	1,089.60	4.00	0.37%
County Road Administration Board (102 & 186)	70.06	(0.01)	-0.01%	71.43	0.14	0.19%	376.75	2.43	0.65%
Total for Local Use	785.44	(0.10)	-0.01%	794.75	0.99	0.12%	4,098.16	12.73	0.31%
Total Distribution of Revenue	6,418.97	9.88	0.15%	6,672.09	17.08	0.26%	35,800.71	502.42	1.42%

† Ferry Fares plus non-farebox revenue

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

Figure 6: Current Forecast Without Initiative I-976 Compared to Baseline March Forecast For All Transportation Revenues - 10-year period

Forecast to Baseline Comparison for Transportation Revenues and Distributions (Excludes I-976 Impacts) 10-Year Period									
November 2019• millions of dollars									
	2017-2019			Current Biennium			10-Year Period		
	2019-2021			(2019-2029)					
	Forecast Nov-19	Chg from Baseline ¥	Percent Change	Forecast Nov-19	Chg from Baseline ¥	Percent Change	Forecast Nov-19	Chg from Baseline ¥	Percent Change
Sources of Transportation Revenue									
Motor Vehicle Fuel Tax Collections	3,584.23	(32.44)	-0.90%	3,621.19	(66.65)	-1.81%	18,606.42	(381.26)	-2.01%
Licenses, Permits and Fees	1,510.78	6.66	0.44%	1,594.54	58.93	3.84%	8,999.96	416.59	4.85%
Ferry Revenue†	400.33	(2.23)	-0.55%	427.84	8.43	2.01%	2,273.05	81.26	3.71%
Toll Revenue §	426.99	5.67	1.35%	442.99	6.77	1.55%	2,847.94	429.17	17.74%
Aviation Revenues †	7.19	(0.05)	-0.67%	7.12	(0.16)	-2.18%	36.56	(1.18)	-3.13%
Rental Car Tax	70.16	(0.27)	-0.38%	72.99	(1.28)	-1.72%	397.42	(2.81)	-0.70%
Vehicle Sales Tax	102.36	(0.59)	-0.57%	107.57	(0.98)	-0.91%	587.69	(3.96)	-0.67%
Driver-Related Fees	286.67	(2.74)	-0.95%	316.89	(6.29)	-1.95%	1,638.51	(44.24)	-2.63%
Business/Other Revenues ±	30.25	4.16	15.92%	80.94	49.73	159.34%	413.18	253.72	159.11%
Total Revenues	6,418.97	(21.83)	-0.34%	6,672.09	48.51	0.73%	35,800.71	747.28	2.13%
Distribution of Revenue									
Motor Fuel Tax Refunds and Transfers	228.87	7.59	3.43%	238.57	18.14	8.23%	1,242.52	97.37	8.50%
State Uses									
Motor Vehicle Account (108)	1,244.90	(1.73)	-0.14%	1,311.15	33.77	2.64%	6,975.06	270.52	4.03%
Transportation 2003 (Nickel) Account (550)	429.01	(3.53)	-0.82%	432.94	(8.20)	-1.86%	2,222.62	(40.48)	-1.79%
Transportation 2005 Partnership Account (09H)	634.13	(8.32)	-1.29%	641.88	(13.71)	-2.09%	3,302.80	(77.88)	-2.30%
Connecting Washington Account (20H)	801.97	(11.13)	-1.37%	811.01	(19.89)	-2.39%	4,158.31	(113.70)	-2.66%
Multimodal Account (218)	520.44	(0.18)	-0.03%	540.57	1.45	0.27%	3,323.49	22.88	0.69%
Special Category C Account (215)	50.54	(0.70)	-1.37%	51.11	(1.25)	-2.39%	262.08	(7.17)	-2.66%
Puget Sound Capital Construction Account (099)	36.78	(0.51)	-1.37%	37.19	(0.91)	-2.39%	190.69	(5.21)	-2.66%
Puget Sound Ferry Operations Account (109)	466.16	(2.93)	-0.62%	489.85	2.71	0.56%	2,578.57	36.35	1.43%
Capital Vessel Replacement Account (18J)	43.81	0.70	1.62%	65.08	21.68	49.95%	354.95	133.02	59.94%
Tacoma Narrows Bridge Account (511)	170.84	1.39	0.82%	171.60	(0.46)	-0.27%	897.83	(3.46)	-0.38%
High Occupancy Toll Lanes Account (09F)	7.42	0.48	0.00%	11.07	11.07	0.00%	91.61	91.61	100.00%
SR 520 Corridor Account (16J)	176.89	3.03	1.74%	187.62	4.54	2.48%	1,056.09	17.64	1.70%
SR 520 Corridor Civil Penalties Account (17P)	10.94	1.67	18.02%	6.35	(1.96)	-23.58%	35.61	(11.26)	-24.02%
Interstate 405 Express Toll Lanes Operations (595)	60.91	(0.90)	-1.46%	66.36	(6.41)	-8.81%	508.38	76.22	17.64%
Alaskan Way Viaduct Replacement Acct. (535)				0.00			258.43	258.43	110.00%
Aeronautics Account (039)	7.19	0.02	0.23%	7.06	(0.12)	-1.61%	36.13	(0.92)	-2.48%
Washington State Aviation Account (21G)	0.00	0.00	0.00%	0.06	(0.00)	-3.74%	0.43	0.00	1.01%
State Patrol Highway Account (081)	456.97	0.09	0.02%	466.84	4.63	1.00%	2,471.25	27.85	1.14%
Highway/Motorcycle Safety Accts. (106 & 082)	258.05	4.33	1.71%	290.18	2.66	0.92%	1,499.49	0.61	0.04%
School Zone Safety Account (780)	0.88	0.01	1.53%	0.85	(0.02)	-2.56%	4.38	0.02	0.57%
Other accounts (201, 06T, 097, 09E, 216, 07C)	18.71	(0.04)	-0.20%	21.61	(0.22)	-1.03%	110.95	(1.06)	-0.95%
Electric Vehicle Account (20J)				19.48			76.30	(76.54)	-50.08%
Ignition Interlock Device Revolving Acct 14V	7.88	(0.29)	-3.60%	8.61	0.55	6.86%	43.06	10.53	32.38%
Multiuse Roadway Safety Account Collections-571	0.14	0.00	0.00%	0.31	0.05	20.20%	1.54	0.11	7.62%
Total for State Use	5,404.40	(18.59)	-0.34%	5,638.77	49.63	0.89%	30,460.03	684.53	2.29%
Local Uses									
Cities	193.84	(2.69)	-1.37%	196.03	(4.81)	-2.39%	1,005.10	(27.48)	-2.66%
Counties	314.00	(4.61)	-1.45%	316.82	(7.76)	-2.39%	1,626.71	(43.33)	-2.59%
Transportation Improvement Board (112 & 144)	207.54	(2.85)	-1.35%	210.46	(5.05)	-2.34%	1,089.60	(26.55)	-2.38%
County Road Administration Board (102 & 186)	70.06	(0.94)	-1.32%	71.43	(1.64)	-2.25%	376.75	(7.06)	-1.84%
Total for Local Use	785.44	(11.08)	-1.39%	794.75	(19.26)	-2.37%	4,098.16	(104.42)	-2.48%
Total Distribution of Revenue	6,418.71	(22.09)	-0.34%	6,672.09	48.51	0.73%	35,800.71	747.28	2.13%

Baseline is the March 2019 forecast.
 Ferry Fares, capital surcharge and non-farebox revenue are all in the ferry revenue

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 7: Annual Percentage Change (%) in Select Economic Variables
November 2019 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
2019	4.5%	1.6%	-10.5%	1.7%	3.7%	1.8%	6.2%	2.2%	1.0%	1.2%
2020	2.8%	1.6%	-0.7%	1.8%	0.6%	1.9%	5.6%	1.9%	0.8%	0.8%
2021	2.5%	1.5%	1.3%	2.1%	-4.6%	1.9%	3.8%	1.2%	0.7%	0.6%
2022	2.7%	2.9%	1.1%	2.0%	2.5%	1.9%	3.1%	1.1%	0.3%	0.2%
2023	2.9%	1.3%	0.8%	1.9%	3.9%	1.9%	3.5%	1.0%	0.0%	-0.1%
2024	2.2%	0.0%	0.8%	2.0%	3.7%	2.0%	3.3%	0.8%	-0.3%	-0.2%
2025	0.7%	1.3%	0.8%	2.2%	3.0%	2.0%	3.5%	0.5%	0.2%	0.2%
2026	1.7%	1.3%	0.8%	2.1%	2.2%	2.1%	3.9%	0.5%	0.5%	0.4%
2027	2.1%	1.2%	0.8%	2.1%	2.6%	2.2%	3.9%	0.6%	0.6%	0.5%
2028	2.4%	1.2%	0.7%	2.1%	3.2%	2.1%	1.9%	0.7%	0.7%	0.3%
2029	2.7%	1.1%	0.6%	2.1%	3.6%	2.2%	3.2%	0.8%	0.8%	0.3%

Source: Washington Economic and Revenue Forecast Council, Washington Office of Financial Management 2019 long-range forecast, October 2019 Global Insight forecast adjusted for Blue Chip average GDP growth rates and NYMEX crude oil prices

Figure 8: Difference in Annual Percent Changes in Select Economic Variables from Last Forecast - November 2019 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
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 (through calendar year 2020), 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 2020, the fuel price projections are based on November’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 9: Near-term UNADJUSTED BASELINE Qtrly Fuel Prices: November 2019

Fiscal Year Quarter	Crude Oil Price (\$/barrel)	WA Retail Gasoline Price (\$/gal)	WA Retail Diesel Price (\$/gal)
2018: Q3	69.76	3.30	3.53
2018: Q4	59.08	3.28	3.50
2019: Q1	54.83	2.80	3.15
2019: Q2	59.78	3.34	3.38
FY 2019	60.86	3.18	3.39
2019: Q3	56.37	3.11	3.28
2019: Q4	54.65	3.22	3.40
2020: Q1	52.83	3.23	3.36
2020: Q2	51.50	3.24	3.30
FY 2020	53.84	3.20	3.33
2020: Q3	55.50	3.24	3.36
2020: Q4	58.50	3.25	3.46
2021: Q1	57.15	3.13	3.40
2021: Q2	58.13	3.31	3.45
FY 2021	57.32	3.23	3.42
2021: Q3	61.19	3.47	3.58
2021: Q4	64.02	3.39	3.70
2022: Q1	63.90	3.34	3.71
2022: Q2	66.16	3.58	3.81
FY 2022	63.82	3.44	3.70

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 in Portland 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 Portland 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 10: Forecast of UNADJUSTED Washington Retail Gasoline Prices, Regular March, September and November 2019

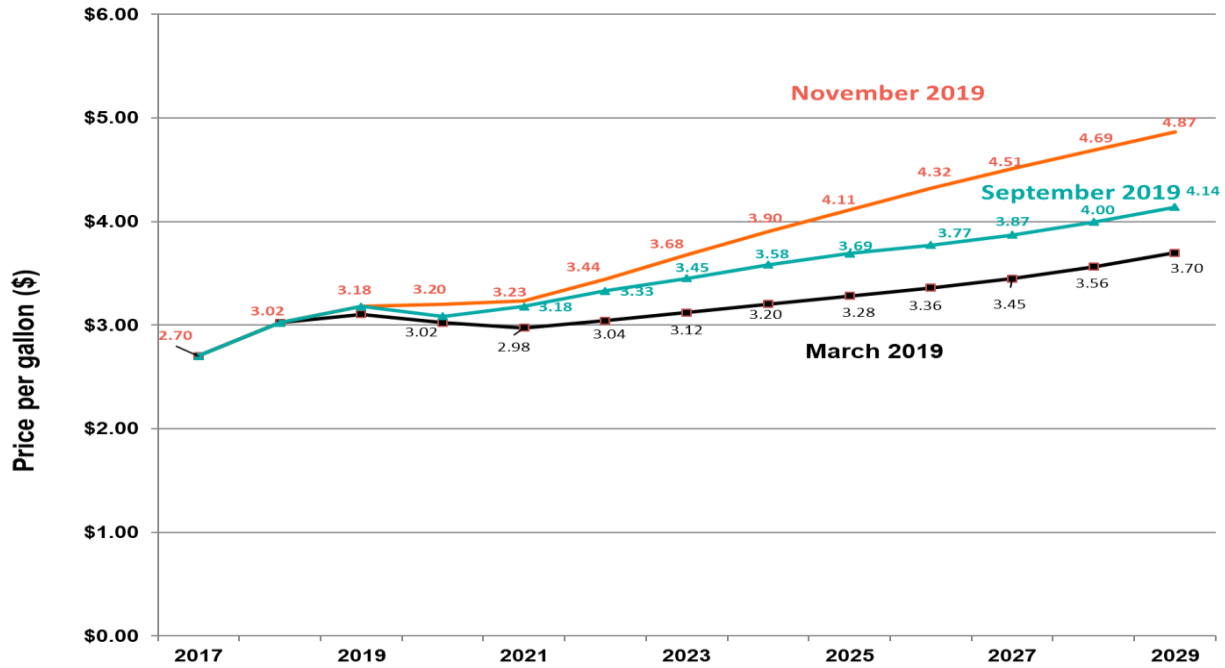
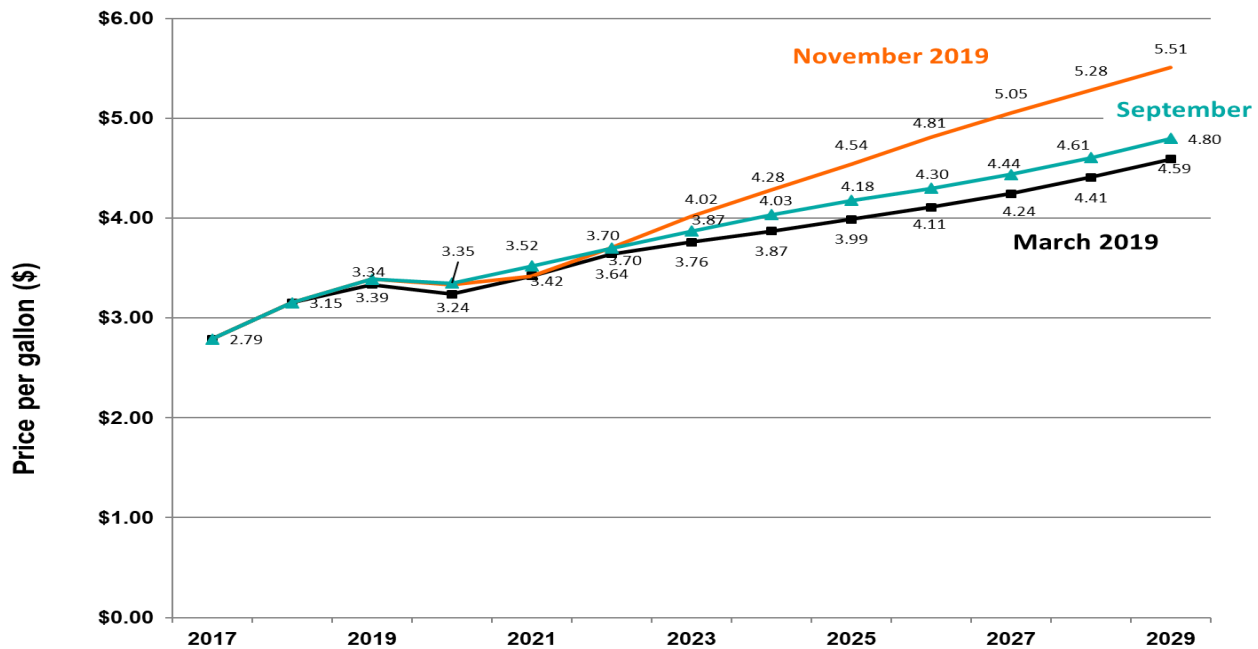


Figure 11: Forecast of UNADJUSTED Washington Retail Diesel Prices March, September and November 2019



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 2020 and then use the growth rates from Global Insight forecasts for subsequent years. In FY 2020, the crude oil price projections range from \$53.8 per barrel from WSDOT to \$57.2 per barrel from Consensus Economics. WSDOT baseline to \$53.8 per barrel with an average of \$55.9 per barrel. In FY 2020, there is a slight upward adjustment needed for the forecast of 3.9%. The forecast for WTI crude oil in FY 2021 ranged from \$47.3 per barrel by Global Insight to \$60.3 per barrel in the Economy.com forecast. The baseline crude oil price forecast in FY 2021 was \$57.3 per barrel which is 3.4% above the 5 entity average of \$55.38. In FY 2022, the crude oil prices range from \$50.4 per barrel in the Global Insight projections to \$63.8 per barrel in the WSDOT forecast. The 5-entity average price is \$57.5 which is 10% below the baseline price forecast of \$63.8 per barrel. Figure 12 reveals the WSDOT baseline WTI price forecast compared to the other entities' crude oil price forecasts and the necessary adjustments each year.

Figure 12: Near-term Annual WTI Crude Oil Price Forecasts – 5 Different Forecast Comparisons: November 2019 Dollars per barrel

Fiscal Year	WSDOT (EIA/GI)	NYMEX	Global Insight	Economy.com	Consensus Economics	5 Entity Avg	% Diff Lowest	% Diff Highest	% Diff Average
2020	\$53.84	\$55.98	\$55.41	\$57.10	\$57.24	\$55.92	0.00%	6.31%	3.86%
2021	\$57.32	\$53.81	\$47.30	\$60.34	\$58.13	\$55.38	-17.48%	5.26%	-3.39%
2022	\$63.82	\$52.18	\$50.39	\$61.92	\$59.14	\$57.49	-21.04%	0.00%	-9.92%

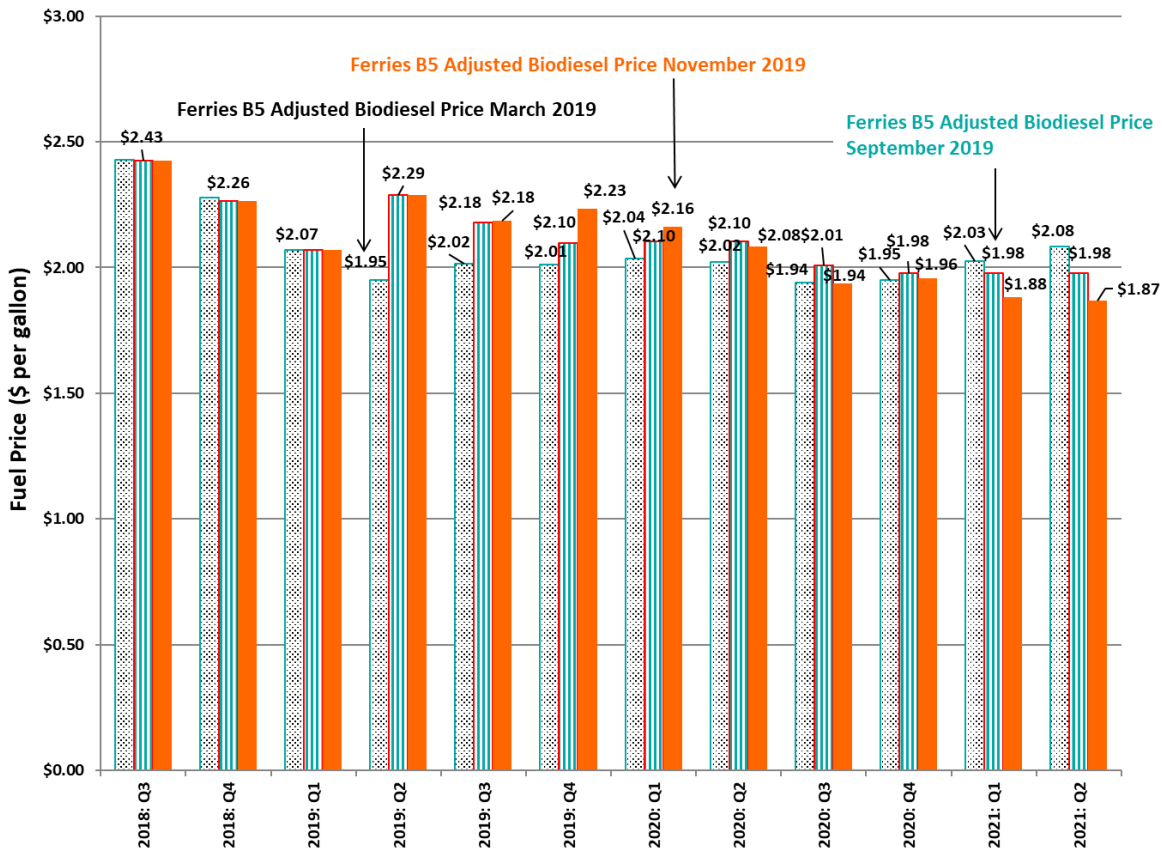
Figure 13: Near-term Average Adjusted Quarterly Fuel Prices and B5 Biodiesel Prices and Unadjusted B99 Biodiesel Prices Used for Budgeting Purposes: November 2019 Dollars per gallon

Fiscal Year Quarter	Adjusted WA Retail Gasoline Price (\$/gal)	Adjusted WA Retail Diesel Price (\$/gal)	Adjusted B5 Biodiesel Price (\$/gal)	Unadjusted B99 Biodiesel price
2018Q3	3.30	3.53	2.43	3.07
2018Q4	3.28	3.50	2.26	3.19
2019Q1	2.80	3.15	2.07	3.13
2019Q2	3.34	3.38	2.29	3.20
FY2019	3.18	3.39	2.26	3.15
2019Q3	3.23	3.40	2.18	3.27
2019Q4	3.35	3.53	2.23	3.27
2020Q1	3.36	3.48	2.16	3.23
2020Q2	3.36	3.43	2.08	3.17
FY2020	3.32	3.46	2.17	3.23
2020Q3	3.13	3.25	1.94	3.23
2020Q4	3.14	3.35	1.96	3.33
2021Q1	3.02	3.29	1.88	3.27
2021Q2	3.20	3.33	1.87	3.31
FY2021	3.12	3.30	1.91	3.29
2021Q3	3.12	3.23	1.52	3.44
2021Q4	3.05	3.33	1.57	3.56
2022Q1	3.01	3.34	1.57	3.57
2022Q2	3.22	3.44	1.62	3.67
FY2022	3.10	3.33	1.57	3.56

WSDOT applies the five entity forecast average adjustment to the baseline November 2019 retail gasoline, diesel, and B5 biodiesel prices. The adjusted fuel prices listed in Figure 11 will be used to estimate the future costs to WSDOT agency's 2019-21 biennium budget and next biennium budget for gas, diesel and biodiesel fuel purchases. The latest adjusted forecast requires a 3.9% upward adjustment to the baseline fuel prices in FY 2020 and downward adjustment of 3.4% in FY 2021. In FY 2022, the baseline fuel prices are adjusted downward by 10%.

As Figure 14 reveals, that the new B5 fuel price forecast are higher for the remaining quarter in 2019 and in first quarter of calendar year 2020. The new forecast is lower than in September for the remaining quarters of the forecast horizon. Compared to the March forecast, the same trends are seen and by FY 2021, the November forecast has quarterly prices real close to the March forecast.

Figure 14: Quarterly Ferries Adjusted B5 Biodiesel Prices Used for Budgeting the 2019-21 Biennia November and September 2019 Forecasts



Motor Vehicle Fuel Tax Forecast

Overview

Motor fuel tax collections for September through October 2019 came in above the September 2019 forecast by \$5.7 million or 1.8 percent. Gasoline tax collections underperformed September projections by \$2.3 million or -0.9 percent. Diesel collections came in above projections by \$7.9 million or 13.6 percent.

The forecast for gross fuel tax revenue for the 2019-2021 biennium is \$3.621 billion, \$8.5 million or 0.2 percent above the September, 2019 forecast. In the 2021-2023 biennium, gross fuel tax collections are \$3.678 billion or \$9.2 million (0.3 percent) higher than the estimate in September 2019. Total fuel tax revenue for the 10-year period beginning in the current biennium and ending in the 2027-2029 biennium is \$18.606 billion. This is \$44.5 million higher, or 0.2% more, than the September 2019 revenue forecast. Current fuel tax revenue projections are higher than September's forecast throughout the forecast horizon.

Primary Reasons for Changes in the November Forecast

This is essentially a forecast that benchmarks the November forecast to current actuals. As noted above, recent fuel tax collections have come in above the last forecast by \$5.7 million; slightly weak gasoline tax receipts have been more than offset by very strong diesel tax collections. Of some concern is the discrepancy between reported special fuels gallons and calculated gallons based on the distributed cash in FY 2020. For FY 2020, year-to-date special fuels reported gallons are 6 percent less than the gallons implied by the revenue received for special fuel.

Overall in the current biennium, gasoline tax collections are down \$5.9 million or 0.2 percent while diesel tax collections are up \$14.4 million or 2.1 percent from the September forecast. Next biennium, gasoline tax collections are projected down \$7.0 million or 0.2 percent and special fuel tax collections are up \$16.1 million or 2.2% from the last forecast.

On a minor note, the FY 2020 estimates for administrative fees assessed by the Department of Licensing has been increased to conform to year-to-date-actuals. Non-highway and tribal refunds have only minor adjustments to reflect the higher special fuel and lower gasoline tax collections in recent months.

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 \$1.22 billion from vehicle licenses, permits, and fees (LPFs) in the 2019-2021 biennium, which is reduced for \$359.6 million or 22.7% compared to the forecast in September. The LPF forecast is anticipated to be \$1.25 billion by 2027-2029 biennium, which is down for about \$0.68 billion or 35.2% from the previous forecast. Over the 10-year period, the revenue loss is about \$2.87 billion. This is due to the passage of I-976 in November. The details of this initiative are in the November alternative forecasts VOL III.

Primary reasons for the change in the November 2019 forecast

- For the fiscal year 2020, passenger car registrations are up 90,000 vehicles or 1.72% above the previous forecast. For FY 2021, passenger car registrations will be 1.49% more than the previous forecast. The forecast remains about 1.45% higher in recent years until FY2024, then the forecast sees larger

difference from 2025 through 2029. The increased forecast registrations are mainly due to the higher Passenger Car actuals we received for the first 4 months of FY2020 and the higher population growth rates in the out years forecasted by Office of Financial Management.

- For the fiscal year 2020, truck registrations are up 20,000 vehicles or 1.24% more than the previous forecast. In FY 2021, truck registrations will increase 1.08% from the previous forecast. The truck forecast sees a forecast-to-forecast increase in registrations; however, the increase will gradually reduce to 0.03% by the end of the forecast horizon. The higher registration forecast is mainly due to the higher actual truck registrations we received for the first 4 months in the current fiscal year.
- In the 2019-21 biennium, \$30 registrations revenue is up 0.64% or \$2.2 million due to the increased passenger car forecast. In the next biennium, revenue from \$30 registrations is about \$4.8 million more than the previous forecast. This trend keeps going on in the later periods. We see the revenue runs about \$7.3 million above the previous forecast by the 2027-29 biennium due to the higher forecast for the passenger car registrations.
- In the 2019-21 biennium, with the impact of I-976, the revenue decrease is \$105.5 million, however, because of the increase of the truck registration forecast, it contributed \$3.1 million more revenue. Altogether, weight based revenue is reduced for \$102.4 million comparing to the September forecast. In the following biennium, the revenue loss increases to \$134.7 million, since the I-976 will affect the full biennium. The revenue loss stabilizes in this level in the following years. By the end of the forecast horizon, we will see a revenue loss of \$142.9 million in the 2027-29 biennium.
- In the 2019-21 biennium, the Freight Project fee is about \$0.55 million more than the previous forecast due to the increased truck forecast. In the 2021-23 biennium, the Freight Project fee is \$0.50 million more than the September forecast. The revenue increase gradually get smaller in the out years due to the difference of truck forecasts get narrower. By the end of this forecast horizon, we will see a \$0.05 million increased freight project revenue in 2027-29 biennium.
- I-976 has the most impact on this revenue category. For the 2019-21 biennium, we see a revenue loss of \$245.3 million. In the following biennia, I-976 eliminates all of the revenue. Specifically, we see a \$396.6 million loss in 2021-23 biennium, \$466.6 million loss in 2023-25 biennium, \$479.3 million loss in 2025-27 biennium and \$491.8 million loss in 2027-29 biennium.
- Electric and Hybrid Vehicle renewal revenues incorporated the I-976 impact. Effective December 5, 2019, the \$100 renewal fee is reduced to \$30, and the \$50 renewal fee is eliminated, while the \$75 is not affected. The \$100 fee revenue is down by about \$4.8 million (or -57%) for the current biennium (about half year impact) and down by \$9.5 million (or -68.6%) for the next full biennium. With somewhat higher than expected hybrid vehicle counts and data correction, the \$75 fee revenue is up by about \$.25 million (or 1.3%) for the current biennium and up by about \$.17 million (or 0.65%) for the next biennium.
- Ferry Service Fee revenue (18J) forecast is down by -\$243,000 or -0.47% for the current biennium and down by -\$271,000 or -0.5% for the next. The reduction is primarily due to lower than previously anticipated Report of Sale transactions.
- Original Issue Plate Revenue forecast is nearly unchanged, but slightly higher for FY 2019-21 by \$1,100 or 0.004% updating with actuals thru October. The forecast is slightly lower from FY 2021 throughout the forecast horizon by -\$61,800 or -0.2% per biennium with an updated original title forecast for November 2019.
- License Plate Replacement Revenue forecast is slightly lower for FY 2019-21 by -\$21,620 or -0.07% with actuals updated through October. This forecast continues to be slightly lower throughout the forecast horizon by an average of -\$31,800 or -0.1% per biennium with an updated other title activity forecast for November 2019.

Driver Related Revenue Forecasts

Overview

The November 2019 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 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 FY2019-21 biennium is forecasted at \$316.9 million, about \$4.0 million (or +1.3%) higher than the prior forecast. Over the next ten year period (FY18-FY27), driver related revenue is anticipated to total \$1,584.7 million, about \$9.8 million (+0.6%) higher than 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. Six-year renew cycle starts in FY2020. Caution is advised in year over year comparisons.

Primary reasons for the change in the November 2019 forecast

- Due to stronger than expected actual driver record sales in recent months, ADR revenue is up by about \$.59 million (or 1.6%) for the current biennium and about \$.68 million (or 1.8%) for the next biennium.
- Ignition interlock devices revenue (14V) is tracking significantly higher for about .5 million (or +6.9%) per biennium increase over prior forecast due to strong actual to date.

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 \$210 million from Other Transportation Related revenues in the 2017-2019 biennium and are projected to be \$188 million in the 2019-21 biennium, a decrease of 12% biennium to biennium. This November forecast of \$188 million in the current biennium is down from the last forecast by \$81.75 million or 30%. This November forecast includes the impact of the passage of Initiative I-976 which called for the elimination of the 0.3% sales tax on new motor vehicles. This begins in December and causes the vehicle sales tax revenue to decline by \$80.6 million in the current biennium. For the next 10-year period, the transportation related revenue forecast is anticipated to be down by \$561 million from the previous estimate in September all due to the passage of I-976.

Primary reasons for the change in the November 2019 forecast

- Motor vehicle sales and use tax revenue came in \$7,000 below forecast in the three months since the September forecast. Sales tax collections were \$162,000 lower, or 1.4%. Use tax collections were \$155,000 higher, or 7.7%. The forecast for U.S. new vehicle sales is higher throughout the forecast compared to September. The forecast for U.S. sales of used vehicles compared to September is mixed; lower in the near and long term, higher in the medium term. The biennial forecast change ranges from -0.1% in 2019-21 to 0.3% in 2027-29. The passage of I976 eliminates the tax after December 5th 2019.
- Rental car collections came in \$287,000 (2.2%) below forecast in the three months since the September forecast. The economic variables changed very little since the September forecast. The forecast has been revised downward, primarily in the near term. The biennial change ranges from -0.6% in 2019-21 to virtually no change in 2027-29 onward.
- WSDOT Business and other miscellaneous revenue for November has been revised down by \$.49 million or 3.22% from the September forecast in the 2019-21 biennium to reflect actuals. The significant swing in other revenues was the result of a correction. Funds were deposited in error into the liquidated damages revenue stream in July and removed in the month of September (\$.6 million).
- WSDOT Real Estate Services Department, property sales are projected to be \$9.8 million in the current biennium, which is a slight increase (1.6%) over the September forecast.
- The business related forecast in the outer biennia are impacted by IPD and population.
- The school zone fines forecast is down slightly (\$.03 million or 2.6%) in the current biennium due to actuals coming in lower, to date, in the 2019-21 Biennium.
- The 2017-2019 WSP business related revenue for November 2019 has been is no change from the June 2019 forecast.
- Aviation revenues have been updated with actuals through FY 2019. With the exception of the motor fuel components, the forecast is unchanged from September.
- Aviation Fuel Tax 039 forecast is unchanged from the previous forecast. The forecast is tracking well. The forecast model was updated with the OFM long-term manufacturing employment forecast and the FAA General Aviation Fuel Consumption forecast in June.
- Aviation Specialty Plate Forecast per HB 1400 (2017) with an effective date of July 22, 2017. This forecast is a little higher FY 2019-21 by \$1,100 or 1.3% than the September forecast based on actuals through October. The forecast continues higher on average by \$2,000 or 1.9% per biennium throughout the forecast horizon.

Ferry Ridership and Revenue

Overview

For the current November Baseline Forecast, as in past forecasts, the fare revenue and ridership projections 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 auto and all motorcycle) fares
- Oversize vehicle / driver (over 22 feet in length) fares

In August 2019, the Washington State Transportation Commission adopted two fare increases for FY 2020. The first took place on October 1, 2019 and the second will occur on May 1, 2020. Both increases raise passenger fares by 2.0% and vehicle/driver fares by 2.5%, with the second May 1, 2020 increase also including a doubling of the existing fare surcharge for capital, from \$0.25 to \$0.50 at the direction of the legislature. The additional \$0.25 surcharge is dedicated to help repay the bonds being used to fund the construction of a new electric vessel. With no further fare increases assumed in the Baseline Forecast, real fares are expected to slowly decline beyond FY 2020 because of general inflation.

Overall, the November Baseline Forecast for ridership in the current 2019-21 biennium is 1.4% lower than the September Forecast, which overall, is virtually unchanged from FY 2019, though expected passengers are less, and expected vehicles greater, than exhibited in FY 2019. Compared to the September Forecast, fare revenues are also projected to be 1.4% lower, whereas miscellaneous revenues are expected to be almost unchanged at 0.3% higher.

For the rest of the forecast horizon, the November ridership projections range from 1.1% to 1.7% lower than forecasted in September. This lower trend is the result of several factors, including lower than expected actual ridership in the first 10 months of 2019, which alters the forecast launch point. Specifically, the November Forecast reflects actual ridership data through October 2019 and actual revenue collections through September 2019. Through October, total ridership is both less than previously forecasted and 3.4% lower than the same period in FY 2019. Passenger ridership is 4.1% lower than the previous fiscal year, with the largest drop in commuter fares at 8.1%. Vehicle/driver ridership is 2.3% lower than FY 2019, with frequent user fares nearly unchanged but full fares down 3.6% over FY 2019. The following additional factors potentially contribute to both the lower than expected actual ridership levels and lower forecast trends:

- A planned, four-week temporary suspension of service on the Anacortes-Sidney, B.C. route in November 2019 lowers the FY 2020 ridership and revenue forecasts.
- The ongoing decline in commuter passengers and their purchases of discounted multi-ride fare media may be in part attributed to losing these passengers in recent months to Kitsap Transit's Kingston/Seattle and Bremerton/Seattle passenger-only ferries.
- Colman Dock construction is also likely negatively impacting recent ridership, and thus, forecast trends. Through October, the collective ridership on the Seattle-Bremerton and Seattle-Bainbridge routes serving Colman Dock is well below forecast and 7.2% lower than the same period in FY 2019.

Overall, the effects of lower recent ridership trends more than offset the combined positive effects of the economic and demographic forecast variables, which collectively would otherwise have a slightly positive impact on the ridership projections. Fare revenues beyond the current biennium follow a similar trend as ridership, ranging from 1.0% to 1.6% lower than September.

Miscellaneous revenues are essentially unchanged from September, up only very slightly. For the 2019-21 biennium, collective vessel and terminal non-fare revenues are stable in November at +0.3%, compared to 5.4% higher when September was compared to the June forecast, and this holds for the balance of the forecast horizon.

Total fare and miscellaneous revenues forecasted for the 2019-21 biennium amount to \$427.8 million, which is 1.4% lower than the previous forecast for the same period. This is the result of the lower ridership projections which reflect lower than expected trends through 10 months of 2019, in combination with a very slight upward tick in miscellaneous revenues. Over 10 years (FY 2020-29), ferry fare and miscellaneous revenues total \$2.27 billion, which is \$24 million lower than the September Forecast for the same period.

Primary reasons for the change in the November 2019 forecast

- Overall, the November fares forecast is the result of lower recent ridership trends, which offset otherwise very modest upward impacts from the economic and demographic projections.
- Miscellaneous forecasts are essentially unchanged from September. The February forecast will include revised projections from vendors and update actual revenues through January.

Toll Revenue

Overview

Washington State now has five tolled facilities. The November 2019 forecast introduces the new SR 99 Tunnel which became a tolled facility on November 9, 2019.

The forecasted Revenue and Fees for SR 99 Tunnel is \$43.9 million in the 2019-21 Biennium, or 9.0 percent of \$ 486.9 million of all five facilities Toll Revenue & Fees forecast. In the 2021-23 Biennium SR 99 Tunnel Revenue and Fees will increase to \$69.3 million, or 12.9 percent of \$ 538.6 of all facilities Toll Revenue & Fees forecast. SR 99 Adjusted Gross Toll Revenue is \$38.3 million in the 2019-21 Biennium, and \$58.7 million in the 2021-23 Biennium.

For the original four facilities: Tacoma Narrows Bridge (TNB), SR 520 Toll Bridge, SR 167 and the I-405 Express Toll Lanes (ETLs) this forecast shows anticipated changes in toll traffic and toll revenues. Overall, there are no significant changes in Total Revenue and Fees Forecasts for the four facilities that existed prior to November 2019 (Figure 15) in comparison to November forecast last year. In the current 2019-21 Biennium the Total Revenue and Fees have decreased by 0.2 percent, or \$1.1 million, and at the 2021-2023 Biennium Total Revenue and Fees are forecasted to be up 0.3 percent, or \$1.5 million. The November 2019 forecast showed a small increase in Adjusted Gross Toll Revenue. Total reported revenues in the 2019-21 Biennium are forecasted to be up by \$54 thousand (a 0.0 percent increase); the 2021-2023 Biennium Adjusted Gross Toll Revenue are forecasted to be up by \$2.01 million (0.5 percent increase).

SR 167 Express Toll Lanes and SR 520 Toll Bridge are the main drivers for the higher than forecasted revenues. The forecast update for the Tacoma Narrows Bridge is relatively flat, with less than one percent increase across forecast horizon. Forecasted revenues for I-405 Express Toll Lanes reduced from FY 2020 to FY 2024 to reflect the actual performance in FY 2019. The I-405 ETLs traffic and revenue forecasts from FY 2025 to FY 2029 are substantially higher than the November 2018 forecast due to the anticipated overall corridor traffic growth after the completion of the Renton to Bellevue section of the I-405 ETLs in FY 2025.

The upward trend for the four toll facilities in the November 2019 forecast matches the actuals in FY 2019. The total revenues were up by \$1.88 million (0.9 percent) compared to the November 2018 forecast, despite ten days of snowy weather in February FY 2019. The TNB, SR 520 and SR 167 ETLs facilities are still showing growth. The number of I-405 ETLs toll transactions has decreased from the last year, resulting in a revenue reduction.

Figure 15 is a summary of FY 2019 performance against last year forecast by Facility.

Figure 15: FY 2019 Actuals vs November 2018 Forecast

	November 2018 Forecast	Actuals	Variance	Variance %
TNB				
Toll Traffic	15,542,000	15,465,037	(76,963)	-0.5%
Adjusted Gross Toll Revenue	\$ 81,119,000	\$ 82,274,332	\$ 1,155,332	1.4%
Other Revenue	\$ 2,957,000	\$ 3,192,410	\$ 235,410	8.0%
Total TNB Revenue & Fees	\$ 84,076,000	\$ 85,466,742	\$ 1,390,742	1.7%
SR 520				
Toll Traffic	26,366,000	26,523,075	157,075	0.6%
Adjusted Gross Toll Revenue	\$ 84,419,000	\$ 85,678,689	\$ 1,259,689	1.5%
Other Revenue	\$ 6,986,000	\$ 10,430,027	\$ 3,444,027	49.3%
Total SR 520 Revenue & Fees	\$ 91,405,000	\$ 96,108,715	\$ 4,703,715	5.1%
I-405 ETLs				
Toll Traffic	10,149,000	9,665,350	(483,650)	-4.8%
Adjusted Gross Toll Revenue	\$ 30,242,000	\$ 29,335,854	\$ (906,146)	-3.0%
Other Revenue	\$ 3,727,000	\$ 3,728,183	\$ 1,183	0.0%
Total I-405 ETLs Revenue & Fees	\$ 33,969,000	\$ 33,064,037	\$ (904,963)	-2.7%
SR 167 ETLs				
Toll Traffic	1,607,200	1,664,159	56,959	3.5%
Adjusted Gross Toll Revenue	\$ 3,328,000	\$ 3,703,617	\$ 375,617	11.3%
Other Revenue	\$ 131,000	\$ 239,818	\$ 108,818	83.1%
Total SR 167 ETLs Revenue & Fees	\$ 3,459,000	\$ 3,943,435	\$ 484,435	14.0%
All Toll Facilities				
Toll Traffic	53,664,200	53,317,621	(346,579)	-0.6%
Adjusted Gross Toll Revenue	\$ 199,108,000	\$ 200,992,491	\$ 1,884,491	0.9%
Other Revenue	\$ 13,801,000	\$ 17,590,438	\$ 3,789,438	27.5%
Total Revenue & Fees	\$ 212,909,000	\$ 218,582,930	\$ 5,673,930	2.7%

- Tacoma Narrows Bridge: Results of the November 2019 update show small changes, less than one percent, for both toll traffic and total revenues in comparison to the prior forecast. The new forecast includes an upward adjustment to reflect FY 2019 actuals being higher than the prior forecast, and changes to payment type split assumptions with higher image-based transaction shares. Beginning in FY 2020, transit and vanpools will be able to utilize the facility toll-free, which will increase the number of non-revenue transactions for the remainder of the forecast. The higher image-based transaction shares led to a slight decrease in the toll revenue forecast with adjusted revenue for the November 2019 forecast being 0.2 to 0.5 percent lower than the prior forecast.
- SR 520 Toll Bridge: In the November 2019 update, SR 520 traffic forecast is up 3.4 percent in FY 2020, and up 2.6 percent in FY 2021. These upward adjustments in transactions also led to increases in gross revenue potential, from 1.8 percent in FY 2020 and an additional 1.4 percent in FY 2021. Miscellaneous revenue increased due to a revision in the assumed interest rate from 0.9 percent to 1.5 percent, and payments for the sale of the Aberdeen casting basin are now being included. Total adjusted gross toll revenue and fees are expected to be 2.5 percent higher in the FY 2019-21 Biennium and 1.9 percent higher in the FY 2021-23 Biennium.

- **I-405 Express Toll Lanes:** The November 2019 Forecast update anticipates a change in toll trips through FY 2024, ranging from -0.3 percent to 6.2 percent. Beginning in FY 2025, the proposed Renton to Bellevue extension of the I-405 ETLs, and improvements to the existing Bellevue to Lynnwood I-405 ETLs, will lead to transaction growth of 40.5 percent to 48.7 percent between FY 2025 and FY 2029. An upward adjustment in non-toll trips was also incorporated into the update to better match actual travel patterns. Despite an increase in toll trips, the new I-405 gross revenue potential forecast in the FY 2019-21 Biennium is down by \$4.9 million, or 6.9 percent, from the last forecast. It is primarily due to lower than forecasted toll rates, adjusted to match actual experience. Beginning in FY 2025, the corridor changes will lead to a gross revenue potential growth of 30.5 percent to 44.8 percent by FY 2029. The rate of leakage attributed to unreadable license plates was reduced from 3.5 percent in November 2018 to 3.0 percent in the November 2019 Forecast, and is expected to continue decreasing to 2.5 percent by FY 2020. The adjusted gross toll revenue is projected to be \$4.2 million, or 6.5 percent, lower for 2019-21 Biennium, and continues to decrease through the 2021-23 Biennium before rising with the assumed completion of the Renton to Bellevue ETLs in FY 2025. That change will result in increases of 22.3 percent in 2023-25, 39.7 percent in 2025-27, and 32.3 percent in the 2027-29 Biennium. Miscellaneous revenue, primarily attributed to interest earnings, was based on interest rates of 0.9 percent in the November 2018 forecast and has increased to 1.5 percent in the November 2019 forecast.
- **SR 167 Express Toll Lanes:** FY 2020 forecasted toll traffic and revenues were adjusted upward, reflecting the actual transaction and revenue performance through June 2019. This includes the effects from the completion of the I-405/SR 167 interchange connection, and incorporates actual data from the connector which opened in February 2019.
- **SR 99 Tunnel:** The SR 99 Tunnel toll traffic and revenue forecast for November 2019 is first reported TRFC traffic and revenue forecast for the facility. The SR 99 Tunnel opened to traffic on February 4, 2019. Tolling began on November 9, 2019. Toll traffic and Gross Toll Potential Revenue forecasts were developed based on 2015 model. Future toll rates and policies assumed in the November 2019 forecast are consistent with the toll rate schedule adopted by the Washington State Transportation Commission (WSTC) in October 2018. Toll rates are ranged from \$1.25 to \$2.25 on weekdays, with overnight and weekend rates at \$1 for drivers with a Good to Go! Pass. Three percent toll rate increases every three years will begin in July 2022, subject to annual review by the Transportation Commission. The forecast assumes transit, private buses, and on-duty emergency vehicles will be exempt from paying tolls on SR 99. The November 2019 forecasts for SR 99 does not include miscellaneous revenue.

The first nine days of SR 99 Tunnel toll operations show indications that preliminary actuals might exceed daily toll transactions forecast (Figure 16). Please note, actual data is under validation process.

Figure 16: FY 2020 first nine days of toll operations vs November 2019 Forecast for SR 99 Tunnel

	9-Nov	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov
	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Toll Traffic, Forecast ¹	33,200	25,300	42,800	47,500	47,500	47,500	50,500	33,200	25,300
Toll Traffic, Actuals ²	45,687	27,780	46,291	54,504	55,191	55,342	57,355	36,956	27,377
Variance	12,487	2,480	3,491	7,004	7,691	7,842	6,855	3,756	2,077
% Variance	37.6%	9.8%	8.2%	14.7%	16.2%	16.5%	13.6%	11.3%	8.2%

Notes:

¹ Forecast assumes ramp-up factor of 72% for opening month, toll traffic includes non-revenue transactions

² These actuals are preliminary results, includes duplicates and non-revenue transactions

For the four facilities existed prior to November 2019, Total Revenue and Fees Forecasts showed no significant changes in comparison to November forecast last year. In the current 2019-21 Biennium the Total Revenue and Fees have decreased by 0.2 percent, or \$1.1 million, and at the 2021-23 Biennium Total Revenue and Fees are forecasted to be up 0.3 percent, or \$1.5 million. Adjusted Gross Toll Revenue is up to \$415.6 million and \$54 thousand higher than last year's projections in the FY 2019-21 Biennium. In the FY 2021-23 Biennium, adjusted gross toll revenue will increase to \$439.8 million, up \$2.0 million from last year's projections. The largest increase in this year's toll revenue forecast is from SR 167 ETLs forecast increase. SR

520 is the second largest contributor to the higher forecast. Miscellaneous revenue has increased over 100 percent in the current Biennium and by 88.8 percent in FY 2021-23 Biennium. Civil Penalty revenue has decrease by \$4.0 million, or 24.5 percent in the current Biennium, and by \$3.7 million, or 22.2 percent in FY 2021-23 Biennium.

Figure 17 is a summary of changes to the Adjusted Gross Toll Revenue and Total Revenue & Fees. More details are available under the narratives for each toll facility.

Updates to Tacoma Narrows Bridge traffic and toll revenue

TNB's primary change in the November 2019 forecast is to reflect the FY 2019 actual performance and payment mix revision. There was also an adjustment to reflect the updated exemption policy and actual non-revenue data.

The November update includes an upward adjustment to the prior forecast to reflect FY 2019 actuals. While overall transactions are 0.2 to 0.3 percent higher, the majority of these transactions are non-revenue. Toll transactions are relatively unchanged from the November 2018 forecast. There is also a revision in the payment mix for TNB. For FY 2020, the Good To Go! (GTG) transponder transactions percent of the total decreased from 56.3 to 56.1 percent, image-based transactions (PBP and PBM combined) increased from 21.2 to 21.5 percent, and cash transactions decreased from 22.5 to 22.4 percent. Beginning in FY 2020, transit and vanpools will be able to utilize the facility toll-free, increasing the number of non-revenue transactions for the remainder of the forecast. This same trend continues throughout the forecast horizon. The November 2019 forecast anticipates the transponder transaction share will go up in the future, reaching to a steady stage of 58.0 percent in FY 2026.

The November 2019 forecast shows TNB adjusted gross toll revenue decreased by \$457,000 (or 0.3 percent) in FY 2019-21 Biennium. Adjusted gross toll revenue in future Biennium will be decreased by around 0.5 percent through forecast horizon.

In the current Biennium Miscellaneous Revenue increased by \$334,000, or over 312 percent, due to \$12.5 million in fund transfer and an increased interest rate from 0.9 to 1.5 percent. In FY 2019 transponder sales was \$118 thousand, or 32.6 percent higher than the last forecast. The methodology of transponder revenue forecast has changed from cost based approach to sales revenue based approach. This change of methodology results the revenue increase in near term and revenue reduction in the long term due to transponder sale price stays the same over years while transponder costs increase with the inflation. Miscellaneous revenue are up from the last forecast due to an increased interest rate from 0.9 to 1.5 percent. The 2019-21 Biennium total forecasted revenues are \$11.1 million, up by \$3.2 million or 41.4 percent from the prior forecast. At the end of FY 2019 a couple of accounting adjustments were made to Allowance for Doubtful Accounts (ADA) and Unearned Revenues based on the actual cash received since FY 2014. \$5 Administrative Fee ADA has decreased from 88 percent to 45 percent, and ADA for Civil Penalties revenue has increased from 67 percent to 86 percent. As a result of these adjustments, late payment fees plus NSF/statement fees revenues increased by 28.3 percent in the current Biennium and will increase by 34.7 percent in the next Biennium. Civil penalty forecast are down by \$792,000, a 19 percent decrease in the current Biennium, and by \$589,000, a 14.5 percent decrease, in the next Biennium.

Overall, total TNB toll and fee revenues are down by less than 0.5 percent from the last forecast over the forecast horizon.

Figure 17: Changes to the Total Revenue & Fees (\$ millions)

	Toll Facility	FY 2020	FY 2021	2019-21 Biennium	FY 2022	FY 2023	2021-23 Biennium
November 2019 TRFC	TNB						
	Adjusted Gross Toll Revenue	\$82.120	\$83.390	\$165.510	\$84.379	\$85.395	\$169.774
	Other Revenue	\$3.074	\$3.016	\$6.090	\$2.955	\$2.835	\$5.790
	Total TNB Revenue & Fees	\$85.194	\$86.406	\$171.600	\$87.334	\$88.230	\$175.564
	SR 520						
	Adjusted Gross Toll Revenue	\$87.823	\$90.564	\$178.387	\$92.235	\$95.682	\$187.917
	Other Revenue	\$7.613	\$7.966	\$15.578	\$8.334	\$8.645	\$16.979
	Total SR 520 Revenue & Fees	\$95.436	\$98.530	\$193.965	\$100.569	\$104.327	\$204.896
	I-405 ETLs						
	Adjusted Gross Toll Revenue	\$29.471	\$31.684	\$61.155	\$33.402	\$35.018	\$68.420
	Other Revenue	\$2.537	\$2.670	\$5.207	\$2.925	\$3.172	\$6.097
	Total I-405 ETLs Revenue & Fees	\$32.008	\$34.354	\$66.362	\$36.327	\$38.190	\$74.517
	SR 167 ETLs						
	Adjusted Gross Toll Revenue	\$4.928	\$5.620	\$10.548	\$6.409	\$7.309	\$13.718
	Other Revenue	\$0.243	\$0.274	\$0.517	\$0.309	\$0.346	\$0.655
Total SR 167 ETLs Revenue & Fees	\$5.171	\$5.894	\$11.065	\$6.718	\$7.655	\$14.373	
All Toll Facilities							
Adjusted Gross Toll Revenue	\$204.342	\$211.258	\$415.600	\$216.425	\$223.404	\$439.829	
Other Revenue	\$13.466	\$13.926	\$27.392	\$14.522	\$14.998	\$29.520	
Total Revenue & Fees	\$217.808	\$225.184	\$442.992	\$230.947	\$238.402	\$469.349	
November 2018 TRFC	TNB						
	Adjusted Gross Toll Revenue	\$82.448	\$83.519	\$165.967	\$84.632	\$85.762	\$170.394
	Other Revenue	\$2.997	\$3.100	\$6.097	\$2.999	\$2.915	\$5.914
	Total TNB Revenue & Fees	\$85.445	\$86.619	\$172.064	\$87.631	\$88.677	\$176.308
	SR 520						
	Adjusted Gross Toll Revenue	\$86.956	\$89.689	\$176.645	\$91.997	\$95.345	\$187.342
	Other Revenue	\$7.213	\$7.523	\$14.736	\$7.864	\$8.105	\$15.969
	Total SR 520 Revenue & Fees	\$94.169	\$97.212	\$191.381	\$99.861	\$103.450	\$203.311
	I-405 ETLs						
	Adjusted Gross Toll Revenue	\$31.963	\$33.458	\$65.421	\$34.933	\$36.448	\$71.381
	Other Revenue	\$3.613	\$3.742	\$7.355	\$3.833	\$3.889	\$7.722
	Total I-405 ETLs Revenue & Fees	\$35.576	\$37.200	\$72.776	\$38.766	\$40.337	\$79.103
	SR 167 HOT Lanes¹						
	Adjusted Gross Toll Revenue	\$3.618	\$3.895	\$7.513	\$4.192	\$4.513	\$8.705
	Other Revenue	\$0.147	\$0.166	\$0.313	\$0.184	\$0.205	\$0.389
Total SR 167 HOT Lanes Revenue & Fees	\$3.765	\$4.061	\$7.826	\$4.376	\$4.718	\$9.094	
All Toll Facilities							
Adjusted Gross Toll Revenue	\$204.985	\$210.561	\$415.546	\$215.754	\$222.068	\$437.822	
Other Revenue	\$13.970	\$14.531	\$28.501	\$14.880	\$15.114	\$29.994	
Total Revenue & Fees	\$218.955	\$225.092	\$444.047	\$230.634	\$237.182	\$467.816	
Changes from November 2018 TRFC	TNB						
	Adjusted Gross Toll Revenue	-\$0.328	-\$0.129	-\$0.457	-\$0.253	-\$0.367	-\$0.620
	Other Revenue	\$0.077	-\$0.084	-\$0.007	-\$0.044	-\$0.080	-\$0.124
	Total TNB Revenue & Fees	-\$0.251	-\$0.213	-\$0.464	-\$0.297	-\$0.447	-\$0.744
	SR 520						
	Adjusted Gross Toll Revenue	\$0.867	\$0.875	\$1.742	\$0.238	\$0.337	\$0.575
	Other Revenue	\$0.400	\$0.443	\$0.842	\$0.470	\$0.540	\$1.010
	Total SR 520 Revenue & Fees	\$1.267	\$1.318	\$2.584	\$0.708	\$0.877	\$1.585
	I-405 ETLs						
	Adjusted Gross Toll Revenue	-\$2.492	-\$1.774	-\$4.266	-\$1.531	-\$1.430	-\$2.961
	Other Revenue	-\$1.076	-\$1.072	-\$2.148	-\$0.908	-\$0.717	-\$1.625
	Total I-405 ETLs Revenue & Fees	-\$3.568	-\$2.846	-\$6.414	-\$2.439	-\$2.147	-\$4.586
	SR 167 ETLs						
	Adjusted Gross Toll Revenue	\$1.310	\$1.726	\$3.035	\$2.217	\$2.797	\$5.013
	Other Revenue	\$0.096	\$0.108	\$0.204	\$0.125	\$0.141	\$0.266
Total SR 167 ETLs Revenue & Fees	\$1.406	\$1.834	\$3.239	\$2.342	\$2.938	\$5.279	
All Toll Facilities							
Adjusted Gross Toll Revenue	-\$0.643	\$0.698	\$0.054	\$0.671	\$1.337	\$2.007	
Other Revenue	-\$0.504	-\$0.605	-\$1.109	-\$0.358	-\$0.116	-\$0.474	
Total Revenue & Fees	-\$1.147	\$0.092	-\$1.055	\$0.313	\$1.220	\$1.534	

Figure 18: SR 520 Main Assumptions and Methodologies Comparison

	November 2018 Forecast	November 2019 Forecast																																																																																		
Exemption Policies	No change.																																																																																			
Value of Time																																																																																				
SR 520 Connecting Washington Construction Phase Assumption	- FY 2019-2023: Current Configuration with Main Bridge Span Replaced and New West Approach Bridge North - FY 2024-2026: West Approach Bridge North and South Complete - After FY 2028: Portage Bay Bridge replaced, new I-5 HOV connection.	Update: Final configuration completion year changed from FY 2028 to FY 2029. New I-5 HOV connection completed by FY 2026																																																																																		
Closure Assumption	<table border="1"> <thead> <tr> <th rowspan="2">FY</th> <th colspan="2">Nov 2018 Forecast</th> </tr> <tr> <th>Weekday Night</th> <th>Weekend</th> </tr> </thead> <tbody> <tr><td>2019</td><td>0.0</td><td>10.0</td></tr> <tr><td>2020</td><td>35.5</td><td>20.5</td></tr> <tr><td>2021</td><td>37.8</td><td>21.0</td></tr> <tr><td>2022</td><td>38.3</td><td>22.0</td></tr> <tr><td>2023</td><td>30.5</td><td>15.5</td></tr> <tr><td>2024</td><td>10.0</td><td>3.0</td></tr> <tr><td>2025</td><td>10.0</td><td>3.0</td></tr> <tr><td>2026</td><td>12.0</td><td>7.0</td></tr> <tr><td>2027</td><td>0.0</td><td>0.0</td></tr> <tr><td>2028</td><td>0.0</td><td>0.0</td></tr> <tr><td>2029</td><td>0.0</td><td>0.0</td></tr> <tr><td>Total</td><td>174.1</td><td>102.0</td></tr> </tbody> </table>	FY	Nov 2018 Forecast		Weekday Night	Weekend	2019	0.0	10.0	2020	35.5	20.5	2021	37.8	21.0	2022	38.3	22.0	2023	30.5	15.5	2024	10.0	3.0	2025	10.0	3.0	2026	12.0	7.0	2027	0.0	0.0	2028	0.0	0.0	2029	0.0	0.0	Total	174.1	102.0	<table border="1"> <thead> <tr> <th rowspan="2">FY</th> <th colspan="2">Nov 2019 Forecast</th> </tr> <tr> <th>Weekday Night</th> <th>Weekend</th> </tr> </thead> <tbody> <tr><td>2019</td><td></td><td></td></tr> <tr><td>2020</td><td>1.5</td><td>7.0</td></tr> <tr><td>2021</td><td>7.5</td><td>12.0</td></tr> <tr><td>2022</td><td>12.0</td><td>21.0</td></tr> <tr><td>2023</td><td>14.0</td><td>16.0</td></tr> <tr><td>2024</td><td>13.1</td><td>7.5</td></tr> <tr><td>2025</td><td>13.1</td><td>7.5</td></tr> <tr><td>2026</td><td>11.3</td><td>3.8</td></tr> <tr><td>2027</td><td>10.0</td><td>3.0</td></tr> <tr><td>2028</td><td>10.0</td><td>3.0</td></tr> <tr><td>2029</td><td>12.0</td><td>7.0</td></tr> <tr><td>Total</td><td>104.5</td><td>87.8</td></tr> </tbody> </table>	FY	Nov 2019 Forecast		Weekday Night	Weekend	2019			2020	1.5	7.0	2021	7.5	12.0	2022	12.0	21.0	2023	14.0	16.0	2024	13.1	7.5	2025	13.1	7.5	2026	11.3	3.8	2027	10.0	3.0	2028	10.0	3.0	2029	12.0	7.0	Total	104.5	87.8
FY	Nov 2018 Forecast																																																																																			
	Weekday Night	Weekend																																																																																		
2019	0.0	10.0																																																																																		
2020	35.5	20.5																																																																																		
2021	37.8	21.0																																																																																		
2022	38.3	22.0																																																																																		
2023	30.5	15.5																																																																																		
2024	10.0	3.0																																																																																		
2025	10.0	3.0																																																																																		
2026	12.0	7.0																																																																																		
2027	0.0	0.0																																																																																		
2028	0.0	0.0																																																																																		
2029	0.0	0.0																																																																																		
Total	174.1	102.0																																																																																		
FY	Nov 2019 Forecast																																																																																			
	Weekday Night	Weekend																																																																																		
2019																																																																																				
2020	1.5	7.0																																																																																		
2021	7.5	12.0																																																																																		
2022	12.0	21.0																																																																																		
2023	14.0	16.0																																																																																		
2024	13.1	7.5																																																																																		
2025	13.1	7.5																																																																																		
2026	11.3	3.8																																																																																		
2027	10.0	3.0																																																																																		
2028	10.0	3.0																																																																																		
2029	12.0	7.0																																																																																		
Total	104.5	87.8																																																																																		
Socio-economic inputs																																																																																				
Population growth assumption	Update: • Population Growth Rate is significantly higher till 2025 for all counties; • The main cities (Seattle, Bellevue, Kirkland and Redmond) growth is a major driver: it's 1.95% till 2025, and 0.92% till 2045.	Update: • No new land use forecast completed																																																																																		
	<table border="1"> <thead> <tr> <th>Compound Growth Rate (2015-2025)</th> <th>Compound Growth Rate (2025-2045)</th> <th>Compound Growth Rate (2025-2045)</th> </tr> </thead> <tbody> <tr><td>King</td><td>1.65%</td><td>0.71%</td></tr> <tr><td>Kitsap</td><td>0.91%</td><td>1.42%</td></tr> <tr><td>Pierce</td><td>1.28%</td><td>0.96%</td></tr> <tr><td>Snohomish</td><td>1.86%</td><td>1.42%</td></tr> </tbody> </table>	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	Compound Growth Rate (2025-2045)	King	1.65%	0.71%	Kitsap	0.91%	1.42%	Pierce	1.28%	0.96%	Snohomish	1.86%	1.42%																																																																				
Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	Compound Growth Rate (2025-2045)																																																																																		
King	1.65%	0.71%																																																																																		
Kitsap	0.91%	1.42%																																																																																		
Pierce	1.28%	0.96%																																																																																		
Snohomish	1.86%	1.42%																																																																																		
Employment growth assumption	Updates: • Employment Growth Rate is higher for all counties till 2025; • The main cities (Seattle, Bellevue, Kirkland and Redmond) growth is a major driver: it's 1.41% till 2025 and 1.14% till 2045.	Update: • No new land use forecast completed																																																																																		
	<table border="1"> <thead> <tr> <th>County</th> <th>Compound Growth Rate (2015-2025)</th> <th>Compound Growth Rate (2025-2045)</th> </tr> </thead> <tbody> <tr><td>King</td><td>1.52%</td><td>1.20%</td></tr> <tr><td>Kitsap</td><td>1.08%</td><td>1.15%</td></tr> <tr><td>Pierce</td><td>1.09%</td><td>1.07%</td></tr> <tr><td>Snohomish</td><td>1.36%</td><td>1.65%</td></tr> </tbody> </table>	County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	King	1.52%	1.20%	Kitsap	1.08%	1.15%	Pierce	1.09%	1.07%	Snohomish	1.36%	1.65%																																																																				
County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)																																																																																		
King	1.52%	1.20%																																																																																		
Kitsap	1.08%	1.15%																																																																																		
Pierce	1.09%	1.07%																																																																																		
Snohomish	1.36%	1.65%																																																																																		
Toll Diversion Process	Logit-based toll choice model, embedded in highway traffic assignment procedure. Takes into consideration of the impact of multiple travel-related costs such as value of time, time saving, distance, vehicle operation cost, and toll rate. The generalized costs for both tolled and free paths are compared to decide the share of toll path.	No change																																																																																		
Transaction share by payment type	<table border="1"> <thead> <tr> <th></th> <th>2018 - 2025</th> <th>2025 - 2045</th> </tr> </thead> <tbody> <tr><td>GTG! Pass</td><td>63.0% - 62.9%</td><td>62.9% - 61.9%</td></tr> <tr><td>GTG! Plate</td><td>22.4% - 23.5%</td><td>23.5% - 26.6%</td></tr> <tr><td>PBM</td><td>14.6% - 13.5%</td><td>13.5% - 11.5%</td></tr> </tbody> </table>		2018 - 2025	2025 - 2045	GTG! Pass	63.0% - 62.9%	62.9% - 61.9%	GTG! Plate	22.4% - 23.5%	23.5% - 26.6%	PBM	14.6% - 13.5%	13.5% - 11.5%	<table border="1"> <thead> <tr> <th></th> <th>2020 - 2025</th> <th>2025 - 2045</th> </tr> </thead> <tbody> <tr><td>GTG! Pass</td><td>63.0% - 62.9%</td><td>63.0% - 62.9%</td></tr> <tr><td>GTG! Plate</td><td>24.4% - 25.5%</td><td>25.5% - 26.6%</td></tr> <tr><td>PBM</td><td>12.6% - 11.5%</td><td>11.5% - 10.5%</td></tr> </tbody> </table>		2020 - 2025	2025 - 2045	GTG! Pass	63.0% - 62.9%	63.0% - 62.9%	GTG! Plate	24.4% - 25.5%	25.5% - 26.6%	PBM	12.6% - 11.5%	11.5% - 10.5%																																																										
	2018 - 2025	2025 - 2045																																																																																		
GTG! Pass	63.0% - 62.9%	62.9% - 61.9%																																																																																		
GTG! Plate	22.4% - 23.5%	23.5% - 26.6%																																																																																		
PBM	14.6% - 13.5%	13.5% - 11.5%																																																																																		
	2020 - 2025	2025 - 2045																																																																																		
GTG! Pass	63.0% - 62.9%	63.0% - 62.9%																																																																																		
GTG! Plate	24.4% - 25.5%	25.5% - 26.6%																																																																																		
PBM	12.6% - 11.5%	11.5% - 10.5%																																																																																		
Average Toll Rate	\$3.45 to \$3.54	Update: Decrease to \$3.41 to \$3.51 due to higher PBP share vs. PBM.																																																																																		
Truck %	1.3% to 1.5%	No change																																																																																		

Updates to SR 520 Toll Bridge traffic and toll revenue

The SR 520 November 2019 TRFC forecast incorporates actuals through June 2019, the latest closure and construction phasing assumptions for SR 520, and revised payment share projections.

Figure 18 is the comparison of main assumptions and methodologies used in this forecast compared to the prior forecast.

SR 520's full FY 2019 reported transactions are 0.6 percent higher than the November 2018 forecast values. The November 2019 traffic forecast is up 3.4 percent in FY 2020 and 2.6 percent in FY 2021. This change in the current fiscal year traffic for SR 520 is partly due to FY 2019 traffic coming in above the last forecast and a reduction in planned construction closures. The change in closure assumptions caused a change in transactions from a decrease of 1.3 percent to an increase of 1.2 percent between FY 2021 and FY 2029. These adjustments in transactions led to a similar range in gross toll revenue potential, which ranged from a decrease of 1.2 percent to an increase of 1.8 percent.

SR 520 gross toll revenue potential in this forecast is up \$2.95 million, or 1.6 percent, from last year's projections in the current 2019-21 Biennium. The next Biennium is up slightly by \$64,000 or 0.03 percent. Future Biennium have similar minimal increases or decreases over the prior forecast, ranging from a decrease of just over 1 percent in the 2027-29 Biennium to a 1.55 percent increase in the current Biennium. Adjusted gross toll revenue values were within 1 percent of the November 2018 forecast. The adjusted gross toll revenue values for toll revenue not recognized and unpaid toll revenue includes an annual average of \$670,000 in recaptured toll revenue through the Customer Program for Resolution (CPR). The program provides customers who have overdue unpaid tolls, fees, and penalties an opportunity to resolve the underlying issues with their late payments and have the fees and penalties, but not the tolls, waived as a one-time courtesy. The program was implemented in July 2015 with the latest FY 2019 values estimated to be \$546,000 in the November 2018 forecast compared to actual revenue of \$787,000. Revenue recovered in the CPR program is anticipated to remain steady for the remainder of the forecast horizon through FY 2029. The forecast for miscellaneous pledged revenue is significantly higher than the November 2018 forecast due to revised assumptions on the interest rate applied to the principle balance which increased from 0.9 percent in the November 2018 forecast to 1.5 percent in the November 2019 forecast. Payment for the sale of the Aberdeen Casting Basin land is included for the first time in the November 2019 forecast amounting to approximately \$386,000 per year for 20 years starting in mid-FY 2019.

The November 2019 forecast includes adjustments to the current and subsequent biennia to reflect actual experience with the current back office vendor in regards to the payment rates on toll bills before and after NOCP. It also includes a more conservative approach to the assumed reduction in leakage attributed to the transition to new back office systems and operations vendors, assumed to be fully transitioned by the start of FY 2021. Combined with similar values for transactions and toll revenue, the changes to leakage assumptions result in lower rates of revenue not recognized (unbillable) over the forecast horizon and improve adjusted revenue. Accounting for higher overall pay by plate transactions and associated \$0.25 Good to Go! Pay By Plate fees, overall fees and discounts increased by a range of 0.18 percent to 3.9 percent per biennium over the forecast horizon. The \$0.50 short-term account discount off the Pay By Mail rate is eliminated effective August 1, 2019. With the changes to leakage and fees, adjusted gross toll revenue is 0.8 percent lower to 1.0 percent higher in the November 2019 forecast compared to the previous forecast.

SR 520 transponder revenue is higher in the November 2019 forecast for all years to account for a change in methodology from a cost basis to a revenue basis. Prior forecasts assumed transponder purchase, inventory, packaging, shipping, and postage costs are directly offset by transponder revenue with no resulting net revenue from transponder sales. Starting in November 2019 the transponder revenue forecast assumes the number of units sold through direct and wholesale channels at the sales price. The forecast does not assume increases in the sales price of transponders through the end of the TRFC forecast horizon.

SR 520's civil penalty forecast is lower than the last forecast because of lower overall Pay By Mail trips, as well as actual experience and lower than projected civil penalty fee payment rates. In the 2019-21 Biennium, total SR 520 civil penalty revenue decreased by \$2 million (23.5 percent). By the last Biennium, the change from the last forecast in total NOCP and recovered toll revenue is \$2.5 million lower or 24 percent.

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

The November 2019 update incorporates the latest forecast based on performance assessment through June 2019, recent changes to the toll rate algorithm, payment type split assumptions, and revised toll and non-toll share projections. The November 2019 forecast assumes the completion of the Renton to Bellevue section of the I-405 ETLs. This project also includes improvements to the existing Bellevue to Lynnwood section of the ETLs, most notably a second express lane between SR 522 and SR 527 and an additional direct access point.

These improvements have a significant impact on the traffic and revenue for the I-405 ETLs as the capacity of the ETLs between SR 522 and SR 527 is effectively doubled while the additional access point widens the universe of potential users. These additional users also lead to higher toll rate to maintain operational objectives. This impact is seen in the new forecast as a significant increase in revenue beginning in the 2023-25 biennium. Figure 19 is the comparison of main assumptions and methodologies used in this forecast compared to the prior forecast.

The actual performance of the I-405 traffic and revenue in FY 2019 was below the forecast from November 2018. The I-405 ETLs reported toll traffic in FY 2019 was 9,665,000, or 4.8 percent below what was forecasted. I-405 ETLs reported adjusted toll revenue in FY 2019 was \$29.3 million, making it \$906,000 (3.0 percent) less than forecast.

The November 2019 forecast predicts a 2.7 percent reduction in toll trips for FY 2020, but an increase by 1.7-6.2 percent from FY 2022 to FY 2024. In FY 2025, there is a significant increase in toll trips due to the completion of the Renton to Bellevue section of the I-405 Express Toll Lanes. An upward adjustment in non-toll trips was also incorporated into the November 2019 update to reflect actual travel patterns. Over time, the non-toll trips percentage of total transactions declines.

The FY 2020 average toll rate in the new forecast is \$3.16, or 5 percent lower than November 2018 forecast due to changes in payment type splits. For the November 2019 forecast, recent changes in the toll algorithm were incorporated into the forecasting process.

The reduction in toll trips combined with lower average toll rates in the November 2019 forecast lead to lower gross toll revenues between FY 2020 and 2024. The I-405 ETLs FY 2020 gross revenue potential is projected at \$32.3 million, which is a downward revision of \$2.5 million or a 7.3 percent decrease. In the FY 2020-2021 Biennium, the gross revenue potential is down by \$4.9 million or 6.9 percent.

Figure 20 is a summary of November 2019 forecasts traffic, revenue potential and average toll rates growth.

For FY 2020, I-405 gross revenue potential is down by \$2.5 million or 7.3 percent from the November 2018 forecast, increasing to a positive difference of \$36 million (38.9 percent) in the 2025-27 Biennium.

The November 2019 forecast includes adjustments to the current and subsequent biennia to reflect actual experience with the current vendor's rate of leakage. It specifically addresses the vendor's experience with identifying the vehicle owner's name and address for sending a toll bill when the plate is readable, which results in lower rates of unbillable revenue.

In addition, the November 2019 forecast includes downward adjustments for revenue leakage attributed to false carpool declaration (when a single occupancy driver declares themselves as a carpool vehicle). Although this assumption is already included in the gross toll revenue potential values in FY 2019, we aligned the forecast with actual experience and modeled results representing travel patterns for various vehicle occupancy categories prior to adjustments for false declaration. The leakage forecast assumes that the rate of false declaration will gradually ramp of from 0.55 percent of *Good To Go!* Transactions in the current year to a steady state of 3.6 percent by FY 2026. In FY 2020, there will be a transition to new CSC systems and operations vendors, which is expected to improve and lower the rate of revenue not recognized. For purposes of the forecast, lower leakage rates are anticipated to occur starting in FY 2021 to allow for unanticipated operational issues. License plate leakage has been noticeably lower than projected on I-405 through FY 2019, and with another year of actual operating experience the rate of license plate leakage on I-405 for steady state operations by the new vendors,

was reduced from 3 percent in the November 2018 forecast to 2.5 percent in the November 2019 forecast. The lower license plate leakage rates are being attributed to better-than-expected performance from the lane side video equipment and multiple images of each transaction from multiple toll points.

Figure 19: I-405 Main Assumptions and Methodologies Comparison

	November 2018 Forecast	November 2019 Forecast																								
Exemption Policies	No change.																									
Tolling Hours																										
HOV Policy																										
Value of Time																										
Mode Choice																										
Toll Algorithm	Algorithm adjustments incorporated.	Update: incorporated algorithm adjustments made in March 2019; toll rates increased faster during shoulder hours which reduced transactions																								
Share of Non-Revenue Trips	<table border="1"> <thead> <tr> <th></th> <th>2019-2025</th> <th>2025-2045</th> </tr> </thead> <tbody> <tr> <td>Toll Paying</td> <td>67-68%</td> <td>68-69%</td> </tr> <tr> <td>Non-Toll Paying</td> <td>33-32%</td> <td>32-31%</td> </tr> </tbody> </table>		2019-2025	2025-2045	Toll Paying	67-68%	68-69%	Non-Toll Paying	33-32%	32-31%	<table border="1"> <thead> <tr> <th>Share of Non-Rev Trips</th> <th>2020-2025</th> <th>2025-2045</th> </tr> </thead> <tbody> <tr> <td>Toll Paying</td> <td>66-67%</td> <td>67-69%</td> </tr> <tr> <td>Non-Toll Paying</td> <td>34-33%</td> <td>33-31%</td> </tr> </tbody> </table>	Share of Non-Rev Trips	2020-2025	2025-2045	Toll Paying	66-67%	67-69%	Non-Toll Paying	34-33%	33-31%						
	2019-2025	2025-2045																								
Toll Paying	67-68%	68-69%																								
Non-Toll Paying	33-32%	32-31%																								
Share of Non-Rev Trips	2020-2025	2025-2045																								
Toll Paying	66-67%	67-69%																								
Non-Toll Paying	34-33%	33-31%																								
Weekday Toll Rate Assumptions	No change.																									
Other Projects with Traffic Impact		Includes the planned express lanes between Renton to Bellevue and their impact on the Bellevue to Lynwood section of the I-405 ETL. Transactions and revenue generated within the RTB section are not included																								
Regional Transportation Network																										
Socio-economic inputs																										
Population growth assumption	Update: • Population Growth Rate is significantly higher till 2025 for all counties; • The main cities (Seattle Bellevue, Kirkland and Redmond) growth is a major driver: it's 1.95% till 2025, and 0.92% till 2045. <table border="1"> <thead> <tr> <th>County</th> <th>Compound Growth Rate (2015-2025)</th> <th>Compound Growth Rate (2025-2045)</th> <th>Growth Rate (2025-2045)</th> </tr> </thead> <tbody> <tr> <td>King</td> <td>1.65%</td> <td>0.71%</td> <td>0.71%</td> </tr> <tr> <td>Kitsap</td> <td>0.91%</td> <td>1.42%</td> <td>1.42%</td> </tr> <tr> <td>Pierce</td> <td>1.28%</td> <td>0.96%</td> <td>0.96%</td> </tr> <tr> <td>Snohomish</td> <td>1.86%</td> <td>1.42%</td> <td>1.42%</td> </tr> </tbody> </table>	County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	Growth Rate (2025-2045)	King	1.65%	0.71%	0.71%	Kitsap	0.91%	1.42%	1.42%	Pierce	1.28%	0.96%	0.96%	Snohomish	1.86%	1.42%	1.42%	No new land use forecast was completed				
County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	Growth Rate (2025-2045)																							
King	1.65%	0.71%	0.71%																							
Kitsap	0.91%	1.42%	1.42%																							
Pierce	1.28%	0.96%	0.96%																							
Snohomish	1.86%	1.42%	1.42%																							
Employment growth assumption	Updates: • Employment Growth Rate is higher for all counties till 2025; • The main cities (Seattle Bellevue, Kirkland and Redmond) growth is a major driver: it's 1.41% till 2025 and 1.14% till 2045. <table border="1"> <thead> <tr> <th>County</th> <th>Compound Growth Rate (2015-2025)</th> <th>Compound Growth Rate (2025-2045)</th> </tr> </thead> <tbody> <tr> <td>King</td> <td>1.52%</td> <td>1.20%</td> </tr> <tr> <td>Kitsap</td> <td>1.08%</td> <td>1.15%</td> </tr> <tr> <td>Pierce</td> <td>1.09%</td> <td>1.07%</td> </tr> <tr> <td>Snohomish</td> <td>1.36%</td> <td>1.65%</td> </tr> </tbody> </table>	County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)	King	1.52%	1.20%	Kitsap	1.08%	1.15%	Pierce	1.09%	1.07%	Snohomish	1.36%	1.65%	No new land use forecast was completed									
County	Compound Growth Rate (2015-2025)	Compound Growth Rate (2025-2045)																								
King	1.52%	1.20%																								
Kitsap	1.08%	1.15%																								
Pierce	1.09%	1.07%																								
Snohomish	1.36%	1.65%																								
Transaction share by payment type	<table border="1"> <thead> <tr> <th></th> <th>2018 - 2025</th> <th>2025 - 2045</th> </tr> </thead> <tbody> <tr> <td>GTG! Pass</td> <td>64.5-66.0%</td> <td>66.0%</td> </tr> <tr> <td>GTG! Plate</td> <td>19.7-20.5%</td> <td>20.5%</td> </tr> <tr> <td>PBM</td> <td>15.7-13.5%</td> <td>13.5%</td> </tr> </tbody> </table>		2018 - 2025	2025 - 2045	GTG! Pass	64.5-66.0%	66.0%	GTG! Plate	19.7-20.5%	20.5%	PBM	15.7-13.5%	13.5%	<table border="1"> <thead> <tr> <th>Transaction share by payment type</th> <th>2020 - 2025</th> <th>2025 - 2045</th> </tr> </thead> <tbody> <tr> <td>GTG! Pass</td> <td>~ 64.5%</td> <td>65.0%</td> </tr> <tr> <td>GTG! Plate</td> <td>~ 20.5%</td> <td>21.0%</td> </tr> <tr> <td>PBM</td> <td>~ 15.0%</td> <td>14.0%</td> </tr> </tbody> </table>	Transaction share by payment type	2020 - 2025	2025 - 2045	GTG! Pass	~ 64.5%	65.0%	GTG! Plate	~ 20.5%	21.0%	PBM	~ 15.0%	14.0%
	2018 - 2025	2025 - 2045																								
GTG! Pass	64.5-66.0%	66.0%																								
GTG! Plate	19.7-20.5%	20.5%																								
PBM	15.7-13.5%	13.5%																								
Transaction share by payment type	2020 - 2025	2025 - 2045																								
GTG! Pass	~ 64.5%	65.0%																								
GTG! Plate	~ 20.5%	21.0%																								
PBM	~ 15.0%	14.0%																								
Average Toll Rate	\$3.60 to \$3.92 due to Toll Algorithm changes.	Update: \$3.16 to \$3.64 due to lower PBM shares																								

Figure 20: I-405 ETLs November 2019 Forecast Results

Trips									
FY	November 2019 TRFC						Changes from Nov. 2018		
	Toll Trips	Toll Trips Growth	Non-toll Trips *	Non-toll Trip Growth	Total Trips	Total Trips Growth	Toll Trips	Non-toll Trips	Total Trips
2020	10,220,000	0.7%	5,220,000	3.8%	15,440,000	1.7%	-2.7%	0.9%	-1.5%
2021	10,701,000	4.7%	5,441,000	4.2%	16,142,000	4.5%	-0.3%	3.6%	1.0%
2022	11,204,000	4.7%	5,671,000	4.2%	16,875,000	4.5%	1.7%	5.9%	3.0%
2023	11,733,000	4.7%	5,911,000	4.2%	17,644,000	4.6%	3.7%	8.8%	5.3%
2024	12,286,000	4.7%	6,161,000	4.2%	18,447,000	4.6%	6.2%	11.8%	8.0%
2025	17,759,000	44.5%	7,736,000	25.6%	25,495,000	38.2%	48.7%	37.9%	45.3%
2026	17,918,000	0.9%	7,829,000	1.2%	25,747,000	1.0%	46.5%	37.7%	43.7%
2027	18,078,000	0.9%	7,924,000	1.2%	26,002,000	1.0%	44.3%	36.9%	41.9%
2028	18,241,000	0.9%	8,030,000	1.3%	26,271,000	1.0%	41.5%	36.4%	39.9%
2029	18,405,000	1.8%	8,127,000	2.6%	26,532,000	2.0%	40.5%	36.7%	39.3%

* Include HOV exempt trips and other non-rev trips.

Revenue Potential			Average Toll Rates				
FY	Nov 2019 TRFC	Changes from Nov. 2018	FY	Nov 2019 TRFC		Changes from Nov. 2018	
				Avg. Rate	Annual Growth		
2020	\$ 32,321,000	\$ (2,535,900) -7.3%	2020	\$ 3.16	-3.0%	\$ (0.16)	-5.0%
2021	\$ 34,001,000	\$ (2,393,300) -6.6%	2021	\$ 3.18	0.5%	\$ (0.21)	-6.7%
2022	\$ 35,766,000	\$ (2,259,500) -5.9%	2022	\$ 3.19	0.5%	\$ (0.26)	-8.1%
2023	\$ 37,624,000	\$ (2,094,700) -5.3%	2023	\$ 3.21	0.5%	\$ (0.30)	-9.5%
2024	\$ 39,578,000	\$ (1,736,900) -4.2%	2024	\$ 3.22	0.5%	\$ (0.35)	-10.8%
2025	\$ 62,936,000	\$ 19,474,200 44.8%	2025	\$ 3.54	10.0%	\$ (0.10)	-2.7%
2026	\$ 63,910,000	\$ 18,536,800 40.9%	2026	\$ 3.57	0.6%	\$ (0.14)	-4.0%
2027	\$ 64,901,000	\$ 17,542,200 37.0%	2027	\$ 3.59	0.7%	\$ (0.19)	-5.3%
2028	\$ 65,971,000	\$ 16,355,500 33.0%	2028	\$ 3.62	0.7%	\$ (0.23)	-6.5%
2029	\$ 66,995,000	\$ 15,647,600 30.5%	2029	\$ 3.64	0.6%	\$ (0.28)	-7.7%

After accounting for leakage and payment fees and discounts, I-405 ETLs adjusted gross toll revenue is projected to be \$61.2 million for the 2019-21 biennium, which is \$4.3 million (6.5 percent) lower than the previous forecast. Next biennium, ETL adjusted gross revenue is projected at \$68.4 million, which is \$3.0 million, or 4.2 percent, lower than last forecast. The November 2019 forecast also includes miscellaneous revenue in the form of interest earnings on the account balance. Similar to SR 520 a 1.5 percent rate is used to calculate future interest earnings, up from 0.9 percent in the prior forecast. After accounting for miscellaneous pledged revenues, transponder sales, late payment fees, and recovered toll revenue the adjusted gross toll revenue and fees for I-405 is projected to be \$63.9 million in the 2019-21 biennium, a decrease of \$5.2 million or 7.5 percent compared to the prior forecast. The difference in adjusted gross toll revenue and fees between the November 2020 I-405 forecast and the last forecast increases over time eventually resulting in a positive variance of 33 percent by the 2027-29 biennium.

I-405 transponder revenue is lower in the November 2019 forecast for the current biennium and 2021-23 biennium due to a revision in the revenue and cost allocation method to remove non-revenue carpool HOV exempt trips, consistent with the current approach for allocation of actual revenue and costs. Starting in FY 2025 transponder sales increase as a result of the assumed start of operations on the I-405 Renton to Bellevue which increases overall transponder sales for the system. In addition, there was a revision in the values to account for a change in methodology from a cost basis to a revenue basis. Prior forecasts assumed transponder purchase, inventory, packaging, shipping, and postage costs are directly offset by transponder revenue with no resulting net revenue from transponder sales. Starting in November 2019 the transponder revenue forecast assumes the

number of units sold through direct and wholesale channels at the sales price. The forecast does not assume increases in the sales price of transponders through the end of the TRFC forecast horizon.

The I-405 Civil Penalty and Recovered Toll Revenue has decreased in this forecast by \$1.2 million (33 percent) for the 2019-21 biennium. It is primarily due to lower \$40 civil penalty fee recovery based on actual experience and the lower number of overall Pay By Mail transactions which flow through to Civil Penalty process. Going out past the current biennium, recovered toll revenues are expected to be significantly higher, which is aligned with increases in image based transaction share of total transactions and improved payment rates on tolls in the civil penalty account. Total revenue and fees for I-405 is lower in the 2019-21 biennium by \$6.4 million, or 8.8 percent. By the 2023-25 biennium total revenue and fees increases over the prior forecast by \$17.6 million or 20.6 percent.

Updates to SR 167 Express Toll Lanes traffic and toll revenue

ESSB 5825 repealed the HOT lanes pilot project on SR 167, and made the SR 167 express toll lanes (ETLs) permanent. The bill extends express toll lanes south to the SR 512 interchange, and combines I-405 and SR 167 into one corridor. The bill's effective date is June 30, 2019.

Toll rates and policy for SR 167 express toll lanes photo tolling is a subject to the Washington State Transportation Commission's (WSTC) decision. The SR 167 Photo Tolling project, scheduled to be completed by the end of fiscal year 2024 is excluded from the current forecast.

The SR 167 November 2019 forecast reflects the actual transaction and revenue performance through June 2019. In the FY 2020 forecast toll transactions increased to 1,855,000, up by 175,000 transactions, or 10.4 percent increase. FY 2020 toll revenue is forecasted to be \$4.9 million, which is up \$1.3 million, or 36.2 percent increase. FY 2021 toll revenue is forecasted to be \$5.6 million, which is up \$1.7 million, or 44.3 percent increase. These adjustments are a result of the recent completion of the direct connector between the SR 167 and I-405 interchange.

In FY 2019 transponder sales was \$25 thousand, or 38.0 percent higher than the last forecast. Future transponder revenue is higher in the November 2019 forecast for all years to account for a change in methodology from a cost basis to a revenue basis. Transponder sales is up by \$37 thousand in the current Biennium, and by \$23 thousand in the FY 2021-23 Biennium. Miscellaneous revenue are up from the last forecast due to an increased interest rate from 0.9 to 1.5 percent. The 2019-21 Biennium total forecasted revenues are \$11.1 million, up by \$3.2 million or 41.4 percent from the prior forecast.

SR 99 traffic and toll revenue

The SR 99 Tunnel toll traffic and revenue forecast for November 2019 is first reported TRFC traffic and revenue forecast for the facility. The SR 99 Tunnel opened to traffic on February 4, 2019. Tolling began on November 9, 2019. Toll traffic and Gross Toll Potential Revenue forecasts were developed based on 2015 model. Other Revenues were adjusted in November 2019 forecast. No actual Toll traffic and revenues were used in developing this forecast.

Stantec has been retained to serve as the traffic consultant for SR 99. The net toll revenue forecasts, which will include the adjusted gross toll revenue forecast provided in the TRFC forecast, were prepared by WSP USA Inc., in close coordination with the WSDOT Toll Division and its consultants.

Stantec's November 2019 forecast incorporates revised economic and population projections prepared by a Stantec sub-contractor, BERK Associates. To develop future household, population, and employment estimates, BERK reviewed several sources, including:

- The PSRC Macroeconomic Forecast and Land Use Vision (LUV) forecast product
- Washington State Office of Financial Management (OFM) Small Area Estimates
- The City of Seattle Comprehensive Plan
- Census LEHD Origin-Destination Employment Statistics (LODES)

These estimates were provided to Stantec on a TAZ-level basis for incorporation into the regional travel demand model. The land use forecast was originally developed in 2015 and included forecasts for 2020 and 2040.

Stantec developed a two-tier travel-demand/traffic simulation model platform to complete the SR 99 forecast: a regional travel demand model (TDM), version 4k 4.03 developed by Puget Sound Regional Council (PSRC), and a Dynamic Traffic Assignment (DTA). The purpose of the regional model is to provide the overall travel demand and base travel patterns for movements that traverse or influence traffic in the SR 99 study area, based on appropriate socioeconomic assumptions with relevant traffic analysis zone (TAZ) system and corresponding transportation networks (highway and public transit, respectively). The regional model's estimates should be sensitive to tolls and will provide estimates of the change in transit usage in response to the tolling of SR 99.

Output from the regional model was incorporated as input to the DTA model. The DTA model is a micro-simulation model that includes more robust detail around the downtown street network, including transit routes, pedestrians, and traffic signal impacts. This allows the model to better forecast the SR 99 tunnel usage in response to real-time traffic congestion in the downtown street grid. Output from these two models were combined to complete a daily traffic and revenue forecast for the SR 99 tunnel. Both models were calibrated to 2015 traffic volumes and included forecast years of 2020 and 2040.

Future toll rates and policies assumed in the November 2019 forecast are consistent with the toll rate schedule adopted by the WSTC in October 2018. Initial SR 99 tunnel toll rates are ranged from \$1.25 to \$2.25 on weekdays, with overnight and weekend rates at \$1 for drivers with a Good to Go! pass. Three percent toll rate increases every three years will begin in July 2022, subject to annual review by the Transportation Commission. In July 2018, the Transportation Commission adopted a revised Toll Exemption Policy. The forecast assumes transit, private buses, and on-duty emergency vehicles will be exempt from paying tolls on SR 99.

The November 2019 forecast assumes that Pay By Mail customers would pay \$2 above the Good To Go! toll rates for 2-axle vehicles. A similar rate differential for trucks based on the number of axles is also assumed.

Figure 21: SR 99 Main Assumptions and Methodology

November 2019 Forecast																																		
Exemption Policies	Consistent with other toll facilities																																	
Value of Time	<table border="1"> <thead> <tr> <th>Trip Purpose</th> <th>Occupancy</th> <th>VOT (\$ / hr)</th> </tr> </thead> <tbody> <tr> <td rowspan="3">HBW</td> <td>SOV</td> <td>\$ 19.88</td> </tr> <tr> <td>HOV-2</td> <td>\$ 22.86</td> </tr> <tr> <td>HOV-3+</td> <td>\$ 28.58</td> </tr> <tr> <td rowspan="3">HBO</td> <td>SOV</td> <td>\$ 16.02</td> </tr> <tr> <td>HOV-2</td> <td>\$ 18.42</td> </tr> <tr> <td>HOV-3+</td> <td>\$ 23.03</td> </tr> <tr> <td rowspan="3">NHB</td> <td>SOV</td> <td>\$ 16.54</td> </tr> <tr> <td>HOV-2</td> <td>\$ 19.02</td> </tr> <tr> <td>HOV-3+</td> <td>\$ 23.78</td> </tr> <tr> <td colspan="2">Light Truck</td> <td>\$ 16.54</td> </tr> <tr> <td colspan="2">Medium Truck</td> <td>\$ 25.98</td> </tr> <tr> <td colspan="2">Heavy Truck</td> <td>\$ 57.87</td> </tr> </tbody> </table>	Trip Purpose	Occupancy	VOT (\$ / hr)	HBW	SOV	\$ 19.88	HOV-2	\$ 22.86	HOV-3+	\$ 28.58	HBO	SOV	\$ 16.02	HOV-2	\$ 18.42	HOV-3+	\$ 23.03	NHB	SOV	\$ 16.54	HOV-2	\$ 19.02	HOV-3+	\$ 23.78	Light Truck		\$ 16.54	Medium Truck		\$ 25.98	Heavy Truck		\$ 57.87
Trip Purpose	Occupancy	VOT (\$ / hr)																																
HBW	SOV	\$ 19.88																																
	HOV-2	\$ 22.86																																
	HOV-3+	\$ 28.58																																
HBO	SOV	\$ 16.02																																
	HOV-2	\$ 18.42																																
	HOV-3+	\$ 23.03																																
NHB	SOV	\$ 16.54																																
	HOV-2	\$ 19.02																																
	HOV-3+	\$ 23.78																																
Light Truck		\$ 16.54																																
Medium Truck		\$ 25.98																																
Heavy Truck		\$ 57.87																																
Closure Assumptions	<ul style="list-style-type: none"> Assumes 12 annual full closures Assumes 76 weekend, overnight lane closures (no impact to T&R) 																																	
Socio-economic inputs																																		
Population growth assumption	<ul style="list-style-type: none"> Original land use forecast developed in 2016 <table border="1"> <thead> <tr> <th>Population Growth Assumption</th> <th>Compound Annual Growth Rate (2015-2020)</th> <th>Compound Annual Growth Rate (2020-2040)</th> </tr> </thead> <tbody> <tr> <td>King</td> <td>1.04%</td> <td>0.58%</td> </tr> <tr> <td>Kitsap</td> <td>0.95%</td> <td>1.10%</td> </tr> <tr> <td>Pierce</td> <td>1.25%</td> <td>1.05%</td> </tr> <tr> <td>Snohomish</td> <td>1.20%</td> <td>0.91%</td> </tr> <tr> <td>City of Seattle</td> <td>1.13%</td> <td>0.62%</td> </tr> </tbody> </table>	Population Growth Assumption	Compound Annual Growth Rate (2015-2020)	Compound Annual Growth Rate (2020-2040)	King	1.04%	0.58%	Kitsap	0.95%	1.10%	Pierce	1.25%	1.05%	Snohomish	1.20%	0.91%	City of Seattle	1.13%	0.62%															
Population Growth Assumption	Compound Annual Growth Rate (2015-2020)	Compound Annual Growth Rate (2020-2040)																																
King	1.04%	0.58%																																
Kitsap	0.95%	1.10%																																
Pierce	1.25%	1.05%																																
Snohomish	1.20%	0.91%																																
City of Seattle	1.13%	0.62%																																
Employment growth assumption	<ul style="list-style-type: none"> Original land use forecast developed in 2016 <table border="1"> <thead> <tr> <th>Employment Growth Assumption</th> <th>Compound Annual Growth Rate (2015-2020)</th> <th>Compound Annual Growth Rate (2020-2040)</th> </tr> </thead> <tbody> <tr> <td>King</td> <td>1.05%</td> <td>1.28%</td> </tr> <tr> <td>Kitsap</td> <td>0.70%</td> <td>1.22%</td> </tr> <tr> <td>Pierce</td> <td>0.65%</td> <td>1.47%</td> </tr> <tr> <td>Snohomish</td> <td>0.89%</td> <td>1.45%</td> </tr> </tbody> </table>	Employment Growth Assumption	Compound Annual Growth Rate (2015-2020)	Compound Annual Growth Rate (2020-2040)	King	1.05%	1.28%	Kitsap	0.70%	1.22%	Pierce	0.65%	1.47%	Snohomish	0.89%	1.45%																		
Employment Growth Assumption	Compound Annual Growth Rate (2015-2020)	Compound Annual Growth Rate (2020-2040)																																
King	1.05%	1.28%																																
Kitsap	0.70%	1.22%																																
Pierce	0.65%	1.47%																																
Snohomish	0.89%	1.45%																																
Toll Diversion Process	Logit-based toll choice model, embedded in highway traffic assignment procedure. Takes into consideration of the impact of multiple travel-related costs such as value of time, time saving, distance, vehicle operation cost, and toll rate. The generalized costs for both tolled and free paths are compared to decide the share of toll path.																																	
Transaction share by payment type	<table border="1"> <thead> <tr> <th></th> <th>2020</th> <th>2040</th> </tr> </thead> <tbody> <tr> <td>GTG! Pass</td> <td>60%</td> <td>70%</td> </tr> <tr> <td>GTG! Plate</td> <td>15%</td> <td>15%</td> </tr> <tr> <td>PBM</td> <td>25%</td> <td>15%</td> </tr> </tbody> </table>		2020	2040	GTG! Pass	60%	70%	GTG! Plate	15%	15%	PBM	25%	15%																					
	2020	2040																																
GTG! Pass	60%	70%																																
GTG! Plate	15%	15%																																
PBM	25%	15%																																
Average Toll Rate	\$2.02 to \$2.57																																	
Ramp-up	FY 2020: 74 percent; FY 2021: 83 percent; FY 2022: 95 percent																																	
Truck %	5.7% to 6.7%																																	

The November 2019 forecast assumes that Pay By Mail customers would pay \$2 above the Good To Go! toll rates for 2-axle vehicles. A similar rate differential for trucks based on the number of axles is also assumed. Figure 18 provides the main assumptions and methodologies used in this forecast.

Adjustments to Stantec's potential gross toll revenue forecasts to derive adjusted gross toll revenue include the 25-cent per transaction fee revenue from Pay By Plate transactions, leakage allowances for toll revenue not recognized (unbillable) and unpaid toll bills, and toll revenue recovered through Civil Penalty adjudication for customers using the Customer Program for Resolution (CPR) at the Good To Go! toll rate.

The November 2019 forecast includes an adjustment for CPR toll revenue, which is recorded at the Good To Go! toll rates, in the reported values as adjusted gross toll revenue prior to other net revenue adjustments. In addition to toll revenue captured through CPR at the adjusted toll rate, there is toll revenue collected at the non-adjusted rates that is included in the revenue category for civil penalties and recovered toll revenue.

The 2019 SR 99 traffic and revenue study is informed by actual data on uncollected revenue for FY 2012 through FY 2019 on other WSDOT toll facilities, specifically single point tolling on SR 520 in the Seattle area. In the November 2019 assumptions, of the Pay by Plate and Pay By Mail plate image-based transactions, 95 percent are assumed to have readable license plates in FY 2020, increasing to 95.5 percent by FY 2021 and the rest of the forecast horizon due to anticipated improvements in back office image review processes under the assumed new vendor contract. Of the transactions with readable license plates, 92.5 percent are assumed to yield a valid registered owner and address for the vehicle in FY 2020, increasing to 95.5 percent by FY 2021 due to anticipated improvements in back office account management attributed to the new vendor. The November 2019 forecast assumed 60 percent of customers receiving a first toll bill will pay the bill, with second invoice payment rates at 37 percent for an overall toll bill payment rate of 75 percent within 80 days.

Of the transactions for which toll bills are mailed, the referenced payment rates for the November 2019 forecast result in 25 percent of toll bills remaining unpaid after 80 days. The remainder is reduced by 13 percent to account for toll enforcement rejection caused by a bad plate image or other transaction bill abnormality, which results in the billed toll transactions not being moved to the NOCP process. The SR 99 forecast assumes that tolls will eventually be recovered from 45 percent of these remaining transactions. Of the 45 percent paid, 50 percent are assumed to be paid at Good To Go! rates through the CPR, and 50 percent at the Pay by Mail rates. Of the toll bills paid at the Pay By Mail rate 50 percent are assumed to pay the second toll bill rebilling fee.

SR 99 transponder revenue forecast assumes the number of units sold through direct and wholesale channels at the sales price. The forecast does not assume increases in the sales price of transponders through the end of the TRFC forecast horizon.

The November 2019 forecasts for SR 99 does not include miscellaneous revenue.

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 November 2019 total apportionment forecast for FFY 2019 is \$769.1 million. This 2019 forecast has been reconciled to reflect actual apportionments distributed from FHWA.
- The November 2019 total apportionment forecast for FFY 2020 is \$656.76 million. This forecast is based on Notice N4510.837 dated October 1, 2019 – Apportionment of Federal-Aid Highway Program Funds for Fiscal Year 2020.
- The November 2019 apportionment forecast for FFY2020 reflects the rescission of obligated apportionment balances made law in the FAST Act. The amount of this rescission has been updated since the September 2019 forecast from \$131.7 million (estimated rescission) to \$62.6 million which is the actual amount of the rescission coming out of Washington's balances. The actual distribution of the rescission between the programs is not yet known so it is estimated.
- 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 September forecast, there were only minor revisions downwards annually in the long-term federal highway funds forecast compared to the last forecast.

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 November 2019 CORE OA for FY2019 was updated to reflect actual OA distributions from FHWA for the fiscal year. Total OA for FFY 2019 was \$718.2.
- The November 2019 CORE OA for FFY 2020 is forecasted to be \$696.3 million which is slightly lower from the September 2019 forecast due to a slight decrease in apportionment..
- Total OA forecast for FFY 2021 and throughout the forecast horizon will be set at 98% of apportionment, which is consistent with historical Washington State OA distributions.
- The methodology used to split the OA between the State Programs and the Local Programs was modified in the June 2018 forecast and has not changed since.

Rescission of FAST ACT Funds:

- The FAST Act 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 \$62.6 million of unobligated apportionment balances, this is included in the November forecast for FFY 2020, this amount has been updated since the September forecast of \$131.7 million to reflect actual rescission amounts published by FHWA since the last forecast.

Figure 22: FFY 2017 – FFY2020 FHWA Highways Forecast
(\$ millions)

September 2019 Federal Highway Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Total WA Apportionment	\$ 773.3	\$ 864.7	\$ 769.1	\$ 706.9
Total WA Obligation Authority	\$ 775.3	\$ 906.6	\$ 755.6	\$ 747.4

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 November 2019 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 November 2018 apportionment for FFY 2018 was \$23.5 million and has been revised upward to reflect actual distributions.
- 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 which are down slightly in June compared to the last forecast.

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

(In thousands)

November 2019 - Public Transportation Federal Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Statewide Planning Program	\$ 495.0	\$ 505.4	\$ 516.0	\$ 527.0
Enhanced Mobility for Elderly and Persons with Disabilities	\$ 2,773.5	\$ 5,383.8	\$ 2,888.0	\$ 2,949.0
Nonurbanized Area Formula Program	\$ 12,847.5	\$ 13,345.4	\$ 13,465.0	\$ 13,751.0
Rural Transit Assistance Program	\$ 204.7	\$ 209.0	\$ 214.0	\$ 219.0
State Safety Oversight Program	\$ 559.5	\$ 600.5	\$ 544.0	\$ 555.0
Bus and Bus Facilities Program	\$ 170.0	\$ 3,500.0	\$ 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 November 2019 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

- Total federal WSF formula program funds for FFY 2019 are forecasted to be \$13.3 million. This amount is held constant thru 2020. This is unchanged from the previous forecast.
- 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 \$14.0 million by FFY 2029.

**Figure 24: FFY 2017 – FFY2020 FTA Washington State Ferries Forecast
(In millions)**

November 2019 FTA – Washington State Ferries Federal Forecast	FFY 2017	FFY 2018	FFY 2019	FFY 2020
Urbanized Area Formula Program Grants (5307)	\$ 6.06	\$ 5.50	\$ 6.06	\$ 6.06
State of Good Repair Grants (5307)	\$ 6.85	\$ 8.51	\$ 7.20	\$ 7.20
Discretionary and Allocated Programs	\$ 10.00	\$ -	\$ -	\$ -

Forecast Contacts

Washington State Department of Transportation unless otherwise noted

Economic Variables and Fuel Price Forecast

Scott Smith, WSDOT-HQ 360-705-7991 smithsc@wsdot.wa.gov

Motor Fuel Tax Revenue Forecast

Scott Smith, WSDOT-HQ 360-705-7991 smithsc@wsdot.wa.gov

Motor Vehicle Licenses, Permits & Fees Revenue Forecast

David Ding, WSDOT-HQ 360-705-7502, dingdav@wsdot.wa.gov 4

Alice Vogel, Washington State Department of Licensing, 360-902-3986 avogel@dol.wa.gov

Olga Novikova, Washington State Department of Licensing, 360-902-0121, onovikova@dol.wa.gov

Driver Related Revenue Forecasts

Alice Vogel, Washington State Department of Licensing, 360-902-3986 avogel@dol.wa.gov

Robert A. Plue, Washington State Department of Licensing, 360-902-3643 rplue@dol.wa.gov

Jean Du, Ph.D. Washington State Department of Licensing, 360-902-3641 jdu@dol.wa.gov

Olga Novikova, Washington State Department of Licensing, 360-902-0121, onovikova@dol.wa.gov

Other Transportation Related Revenue Forecast

Vehicle Sales & Rental Car Tax

Lance Carey, Washington State Economic and Revenue Forecast Council, 360-534-1564
lancec@dor.wa.gov

Studded Tire Fee

Kasi Reeves, WSDOT-HQ 360-705-7935 reevesk@wsdot.wa.gov

Business and Other Revenue

Heather Jones, WSDOT-HQ 360-705-7944 jonesh@wsdot.wa.gov

Walter Hamilton, WSP (360) 596-4083 Walter.Hamilton@wsp.wa.gov

Aeronautics Revenue

Scott Smith, WSDOT-HQ 360-705-7991 smithsc@wsdot.wa.gov

Alice Vogel, Washington State Department of Licensing, 360-902-3986 avogel@dol.wa.gov

Washington State Ferries Ridership and Revenue Forecast

Ray Deardorf, WSDOT – Ferry Division 206-515-3491 deardorf@wsdot.wa.gov

Toll Operations Traffic and Revenue

Yanming Yao, WSDOT-Toll Division, 206-464-1196, YaoY@wsdot.wa.gov

Federal Funds Forecast

Kasi Reeves, WSDOT-HQ 360-705-7935 reevesk@wsdot.wa.gov

Appendix

Tables Related to the November 2019 Forecast

Impact to Select Transportation Accounts

Figure 25: 2019 HB 2042 Revenues and Expenditures – Tracking Sheet

E2SHB 2042 - 2019		Actuals			Estimates						
		2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Alternate Fuel Vehicle Sales Tax Exemptions											
Multimodal Trans	Retail Sales	(1,584,448)	(5,197,456)	(8,184,597)	(2,057,868)	-	0	0			0
Electric Vehicle Account	Retail Sales					(10,824,000)	(13,352,000)	(11,371,000)	(13,376,000)	(13,178,000)	(15,676,000)
Alternate Fuel Commercial Vehicle Tax Credits											
Multimodal Trans	PUT & B&O	-	(460,703)	(485,658)	(650,941)	(407,000)	(559,000)	(490,000)	(594,000)	(583,000)	(695,000)
Total Revenue Distributed Out of Accounts											
Multi Modal		(1,584,448)	(5,658,159)	(8,670,255)	(2,708,809)	(407,000)	(559,000)	(490,000)	(594,000)	(583,000)	(695,000)
Electric Vehicle Account transfers to GF		-	-	-	-	(10,824,000)	(13,352,000)	(11,371,000)	(13,376,000)	(13,178,000)	(15,676,000)
Revenue Going into Electric Vehicle Account *						8,025,800	11,204,200	12,287,800	13,479,200	14,720,600	16,016,600
\$ Amount Remaining in Electric Vehicle Account						(2,798,200)	(2,147,800)	916,800	103,200	1,542,600	340,600