

December 30, 2020

FY 2021

ESHB 2322 Select Appropriations - Toll Division Allocation Analysis



**Washington State
Department of Transportation**

Prepared by:

WSDOT AFS Toll Accounting and Toll Division

Part I: Proposed Allocation Methodology and Toll Eligible Expenditures Validation

Approach, Assumptions, Proposed Allocation Methodology 2-6
Appendix A – Overview..... i
Appendix B – Washington State Patrolii
Appendix C – Programs Allocated Based on Transactionsiii

Part II: Potential Changes and Impacts to Toll Rates

Purpose, Assumptions, and Findings i-8
Appendix A – Annual Costs Impact on Toll Systemvi
Appendix B – Cost Allocation Percentage by Facilityvi
Appendix C – Cost per Transaction by Facility.....vii

Introduction

The 2020 transportation appropriations bill (ESHB 2322) included new toll-funded appropriations for expenses for the Washington State Patrol (WSP), Transportation Commission (WSTC), and six operating programs within the Washington State Department of Transportation (WSDOT). This report addresses the WSP, WSTC and four operating programs including traffic operations (Program Q); transportation management and support (Program S); transportation planning, data and research (Program T); and charges from other agencies (Program U). Appropriations of toll revenues to these programs were as follows:

ESHB 2322 CONF REPT, 2019-2021 Fiscal Biennium, General Government Agencies –Operating.

Program Q	\$ 142,000
Program S	\$ 534,000
Program T	\$ 555,000
Program U	\$ 549,000
WSP	\$5,324,000
WSTC	\$ 725,000

ESHB 2322 Section 205 for WSTC, section 207 for the WSP and Sections 216, 217, 218 and 219 for WSDOT programs Q, S, T and U respectively state that the respective appropriations are provided solely for the respective program’s “...proportional share of time spent supporting tolling operations for the respective tolling facilities”.

The proviso language under Program B, Sec. 209(9) states:

(9) The department shall develop an ongoing cost allocation method to assign appropriate costs to each of the toll funds for services provided by each Washington state department of transportation program and all relevant transportation agencies, including the Washington state patrol and the transportation commission. This method should update the toll cost allocation method used in the 2020 supplemental transportation appropriations act. By December 1, 2020, a report with the recommended method and any changes or potential impacts to toll rates shall be submitted to the transportation committees of the legislature and the office of financial management.

There are two parts to this document that are combined into the proviso response to the legislature.

1. The first part of the report is prepared by the WSDOT Accounting & Financial Services (AFS) and recommends a proposed cost allocation methodology for allocating appropriated and eligible toll expenditures among Washington’s tolled facilities. It updates the toll eligible expenditures against these appropriations in the current biennium (2019-21) and provides guidance to the Legislature on allocation of any future eligible tolling expenses for each of these programs.

2. The second part of the report is prepared by the WSDOT Toll Division will provide the Legislature any changes or potential impacts to toll rates for each individual toll facility.

Approach to Allocating Expenses among Toll Facilities

AFS has a long-established process for allocating eligible toll expenses between facilities. Once WSDOT management, in collaboration with the Office of Financial Management (OFM), determines the allocation methodology, it will continue to be utilized and consistently applied. The process includes annual review, approval, and publication.

For these new appropriations, AFS worked with program managers of affected programs to identify the most equitable, reasonable, verifiable, and consistently applied allocation method for each program.

Of the six new appropriations covered in this review, only those for WSP can be directly quantified regarding services provided to the eligible facilities. The other five programs represent common cost items which benefit multiple facilities. For these programs, WSDOT tolling leadership selected transaction count as the allocation basis. This is consistent with WSDOT's current and historically Approved Tolling Allocation Plans.

Future allocations would also need to go through a review and evaluation process to ensure funding is spent per the Toll RCWs.

Assumptions

Four operational WSDOT toll facilities are affected by this appropriation. Those facilities are State Route (SR) 16 Tacoma Narrows Bridge, SR 99 Tunnel, SR 520 Bridge, and I-405 and SR 167 ETL.

The data and supporting documentation underlying the expenditures resides with the source agency/program. Accordingly, the source agency/program is responsible for compliance with all applicable guidelines and RCW.

AFS will ensure each of the participating facilities' allocations are processed in accordance with RCW, GAAP, OFM policies and guidelines, and WSDOT accounting policies including:

- Revised Code of Washington (RCW), 47.56.820 Imposition of tolls on eligible toll facilities-Who may authorize, revenue expenditures. 47.56.820
- OFM State Administrative & Accounting Manual, 50.20 Cost Allocation and Indirect Cost Recoveries
<https://www.ofm.wa.gov/sites/default/files/public/legacy/policy/50.20.htm>
- OFM, State Administrative & Accounting Manual, 85.90 Interfund/Interagency Activities
<https://www.ofm.wa.gov/sites/default/files/public/legacy/policy/85.90.htm>

Initial Allocations in (thousands):

Legislative allocations were based on the estimated weighted average share of transactions between facilities, shown below:

Percentage Toll Trips by Facility (Legislative)	FY 2020	Estimated FY 2021	Average
B-2 SR 16 Tacoma Narrows Bridge	22.24%	21.32%	21.78%
B-3 SR 167 HOT Lane	2.02%	1.98%	2.00%
B-4 I-405 Express Toll Lane	20.48%	19.92%	20.20%
B-5 SR 520 Bridge	37.89%	36.74%	37.32%
SR 99 (Assumed, prior to tolling)	17.37%	20.04%	18.71%
<i>B-3 SR 167 plus B-4 I-405 Toll Trip %'s combined</i>			<i>22.20%</i>

Note: Amounts contain rounded values which may not balance to column/row totals.

Applying the estimated weighted average share of transactions to each program produced the following appropriated amounts per program and facility:

Allocation Splits By Program	% Trips	Q	S	T	U	WSP	WSTC	Totals
B-2 SR 16 Tacoma Narrows Bridge	21.78%	\$ 31	\$ 116	\$ 121	\$ 120	\$ 1,158	\$ 158	\$ 1,704
B-3 SR 167 + B-4 I-405 combined	22.20%	\$ 32	\$ 119	\$ 123	\$ 122	\$ 1,182	\$ 161	\$ 1,738
B-5 SR 520 Bridge	37.32%	\$ 53	\$ 199	\$ 207	\$ 205	\$ 1,988	\$ 271	\$ 2,923
SR 99	18.71%	\$ 27	\$ 100	\$ 104	\$ 103	\$ 996	\$ 136	\$ 1,465
Total	100.00%	\$ 142	\$ 534	\$ 555	\$ 549	\$ 5,324	\$ 725	\$ 7,829

Source: 'Backup Calculations for STC Budget' e-mail, 2/25/2020, "Toll Fund Shift" tab in the "Backup for DOT – STC Chair Budget.xlsx" file. For Program U, a proportion of tolled lane miles was used (approximately 117 tolled lane miles / 18,699 total lane miles = 0.626%) to calculate the portion of that program's budget to be shifted.

Proposed Allocation Methodology

This section describes the cost allocation formula proposed by WSDOT. AFS staff consulted with appropriate program managers for each program to identify eligible toll expenditures and the most appropriate nexus for allocation between toll facilities.

Data Sources:

- **Transportation Reporting and Accounting Information System (TRAINS)** – WSDOT's accounting system.
- **Agency Financial Reporting System (AFRS)** – Statewide accounting system maintained by OFM.
- **RITE/FASTLANE/EPICOR** – WSDOT's third party vendors, ETCC and ETAN Industries, transaction processing and accounting systems.

- **COGNOS** – WSDOT’s Data Mart that contains financial transactions data, as well as budget and spending plan details.
- **Enterprise Reporting** – OFM’s data warehouse that contains financial data from AFRS.

Cost items and eligible facilities:

In the table below, an **x** indicates that no toll-eligible expenditures were identified.

<u>Item:</u>	<u>SR16</u>	<u>SR99</u>	<u>SR520</u>	<u>I-405/SR167</u>
WSP Costs	✓	x	✓	✓
WSTC Costs	✓	✓	✓	✓
Program T Costs	x	x	x	x
Program Q, S and U Costs	✓	✓	✓	✓

Cost allocation basis:

Of the six programs with new toll-funded appropriations, only those for WSP can be quantified regarding services provided to the eligible facilities. The remainder are common cost items which benefit multiple facilities.

<u>Tolling Expense:</u>	<u>Allocation Basis:</u>
WSP non-Toll-Enforcement Costs	Time spent by facility
WSTC and Program Q, S, T and U Costs	Transaction Count of all toll transactions by facility

AFS Estimated Allocations, dollar amounts in (thousands):

Summary

The values used in the 2020 supplemental budget differ from the AFS estimates for two reasons. First, the percentages differ due to AFS’ use of more current and complete fiscal year 2020 transaction volumes. Second, the dollar amounts differ due to AFS’ validation of how toll dollars can be spent (per RCW 47.56.820) on other programs and agencies.

Estimated Percentages

Using the allocation method outlined above, AFS allocation percentages are:

Percentage Toll Trips by Facility (WSDOT AFS)	Actuals as of 7/1/20
B-2 SR 16 Tacoma Narrows Bridge	28.15%
B-3 SR 167 HOT Lane	2.96%
B-4 I-405 Express Toll Lane	11.47%
B-5 SR 520 Bridge	34.69%
SR 99	22.73%

The initial allocation percentages differ from the AFS estimated ones as follows:

Facility	Legislative % Allocation	WSDOT AFS % Allocation	% Difference
B-2 SR 16 Tacoma Narrows Bridge Trips	21.78%	28.15%	6.37%
B-3 SR 167 HOT Lane Trips	2.00%	2.96%	0.96%
B-4 I-405 Express Toll Lane Trips	20.20%	11.47%	-8.73%
B-5 SR 520 Bridge Trips	37.32%	34.69%	-2.63%
SR 99 Trips	18.71%	22.73%	4.03%
Total	100.00%	100.00%	0.00%

Estimated Dollars

The analysis found that Program T and portions of Program U and WSP appropriations are not toll-eligible expenses.

All of Program T (\$555K), part of Program U (\$487K), and part of the WSP (\$3.46M) appropriations are greater than estimated allocations.

FY2020 & FY2021 Appropriations		\$ 142	\$ 534	\$ 555	\$ 549	\$ 5,324	\$ 725	\$ 7,829
Estimated Allocations by Facility	% Trips	Q	S	T	U	WSP*	WSTC	Totals
B-2 SR 16 Tacoma Narrows Bridge	28.15%	\$ 40	\$ 150	\$ -	\$ 17	\$ 77	\$ 204	\$ 489
B-3 SR 167 + B-4 I-405 combined	14.43%	\$ 20	\$ 77	\$ -	\$ 9	\$ 1,349	\$ 105	\$ 1,560
B-5 SR 520 Bridge	34.69%	\$ 49	\$ 185	\$ -	\$ 22	\$ 433	\$ 252	\$ 940
SR 99	22.73%	\$ 32	\$ 121	\$ -	\$ 14	\$ -	\$ 165	\$ 333
Totals	100.00%	\$ 142	\$ 534	\$ -	\$ 62	\$ 1,858	\$ 725	\$ 3,321
Toll Ineligible		\$ -	\$ -	\$ 555	\$ 487	\$ 3,466	\$ -	\$ 4,508

* WSP allocations based upon actual hours spent on facility.

Using the agency's recommendation, estimated allocated dollars by facility become:

Facility	Legislative \$ Allocation	WSDOT AFS \$ Allocation	\$ Difference
B-2 SR 16 Tacoma Narrows Bridge	\$ 1,704	\$ 489	\$ (1,215)
B-3 SR 167 + B-4 I-405 combined	\$ 1,738	\$ 1,560	\$ (178)
B-5 SR 520 Bridge	\$ 2,923	\$ 940	\$ (1,983)
SR 99	\$ 1,465	\$ 333	\$ (1,132)
Totals	\$ 7,829	\$ 3,321	\$ (4,508)

Appendix A – Overview

WSDOT AFS Toll Accounting						
Selected ESHB 2322, 2020 Supplemental Budget Proviso Elements*						
As of 11/17/20						
Item:	Q	S	T	U	WSP	WSTC
Program Activity:	Traffic Operations	Transportation Mgmt. & Support	Transportation Planning Data & Research	Charges from/Payments To Other Agencies	General Policing and Enforcement	Policy/Oversight
Expenditure type	Indirect	Indirect	Indirect	Indirect	Direct + Overhead	Indirect
Expenditure basis	%FTE	%FTE	%FTE	Various	GPS and time data	%FTE
Cost Allocation basis	Toll Trips	Toll Trips	Toll Trips	Toll Trips	Time on facility	Toll Trips
Appropriation Amount	\$142,000	\$534,000	\$555,000	\$549,000	\$5,324,000	\$725,000
Less Toll Ineligible Expenditures	\$0	\$0	(\$555,000)	(\$487,000)	(\$3,465,850)	\$0
Estimated New Tolling Expenditures	\$142,000	\$534,000	\$0	\$62,000	\$1,858,150	\$725,000
SAAM Reference	85.90.60.a	85.90.60.a	85.90.60.a	85.90.60.a	85.90.30	85.90.30
Notes						
- No Program T staff assigned to tolling						
- Program U includes transfers to WA Tech, AG Office						
- WSP has no jurisdiction on the SR 99 tunnel.						
- WSP has ongoing contracts for toll enforcement on I-405 and SR 167						
*Programs B and M activity not being considered in this exercise.						

Appendix B – Washington State Patrol

ANNUALIZED ESTIMATE OF COSTS TO THE WSP OF PATROLLING TOLL ROADS: 016, 167, 405 and 520								
	Start	End	Duration (days)					
GPS Data showing WSP presence on toll roads	5/9/2020 0:00	8/11/2020 23:59	95					
TollID	Total Hours	Billed to WSDOT (subtracted)	Remaining Hours *	Annualized**	Hourly Cost***	Total Annualized Cost	FINAL	WSP annual patrol cost
016 (Pierce)	92	0	92	353	\$ 108.64	\$ 38,349.92	016	\$ 38,349.92
167 (King)	540	0	540	2075	\$ 114.71	\$ 238,023.25	167	\$ 238,023.25
405 (King)	856	0	856	3289	\$ 114.71	\$ 377,281.19	405	\$ 436,358.97
405 (Snohomish)	140	0	140	538	\$ 109.81	\$ 59,077.78	520	\$ 216,343.06
520 (King)	491	0	491	1886	\$ 114.71	\$ 216,343.06		
Total	2119	0	2119	8141		\$ 929,075.20		
* No hours billed to WSP. WSDOT discontinued toll lane enforcement since March 2020 during the COVID19 pandemic.								
** Since WSP is 24/7 service, annualization calculation is simply 365 days in year / 95 day-span of data x Remaining Hours								
*** See table below								
TollID	King Co	Pierce Co	Snohomish Co					
Salaries/Benefits	\$ 72.67	\$ 67.99	\$ 68.88	10-year trooper and 15-year sergeant with 4% education incentive pay and appropriate county geographic pay; includes non-contract overtime				
Direct Costs****	\$ 4.31	\$ 4.30	\$ 4.31	rules-of-thumb for supplies, training, software licensing, travel, etc.				
Fuel and Vehicle Maintenance Costs	\$ 5.17	\$ 5.17	\$ 5.17	rules-of-thumb				
Equipment Replacement Costs****	\$ 8.48	\$ 8.47	\$ 8.48	rules-of-thumb for vehicles, radios, mobile-office equipment (replacement cost divided by life)				
Indirect Costs	\$ 24.08	\$ 22.71	\$ 22.97	federally-approved indirect cost rate applied against adjusted direct costs				
Total	\$ 114.71	\$ 108.64	\$ 109.81					
***Pierce County differences from King and Snohomish County in direct costs and equipment replacement costs are simply rounding errors								

Source: 'WSP Time Spent Patrolling Toll Roads' e-mail, 9/2/2020, "Sheet1" tab, in the "Toll Roads – WSP patrol costs – 2020-08-16.xlsx" file.

Appendix C – Programs Allocated Based on Transactions

Washington State Transportation Commission

Agency 410 Tolling Support Summary Table											
Program	Position Number	Class Code	Job Class	Range	Step	FY 20 Salary & Benefits	% Time on Tolling Activities	Estimated Salary & Benefits	FY 21 Salary & Benefits	% Time on Tolling Activities	Estimated Salary & Benefits
L	71025040	B4051	DEPUTY DIR. / SR FINANCIAL ANALYST, TRANSP. COMM	EMS III		137,944	80%	110,355	157,650	70%	110,355
L	71073963	B4052	JUNIOR FINANCIAL ANALYST, TRANSP. COMMISSION	EMS II		-	0%	-	118,385	35%	41,435
L	70064385	B4040	EXECUTIVE DIRECTOR, TRANSP. COMMISSION	EMS IV		177,770	40%	71,108	183,103	30%	54,931
L	70132942	B4050	SENIOR POLICY ANALYST, TRANSP. COMMISSION	EMS III		155,346	40%	62,138	13,334	10%	1,333
L	70132942	B4050	SENIOR POLICY ANALYST, TRANSP. COMMISSION	EMS III		23,841	30%	7,152	143,044	30%	42,913
L	70064391	EX051	CONF. SECRETARY			100,828	40%	40,331	103,853	30%	31,156
L	70064415	1051	ADMINISTRATIVE ASSISTANT 5		50 L	82,761	25%	20,690	85,244	15%	12,787
L	70064392	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064388	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064389	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064387	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064390	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064393	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
L	70064386	EX030	COMMISSIONER			17,638	35%	6,173	17,638	40%	7,055
			Total Salaries & Benefits				FY20	354,988		FY 21	344,296
			Travel - Object G								
			Tolling Public Meetings								23,400
			Tolling Hearings								25,500
			Total Travel								48,900
			Total Tolling Support by fiscal year					354,988			393,196
			Total Tolling Support 2019-21 Bienium								748,185
			Total Tolling Support Funds Provided in 2019-21								725,000
			Amount over tolling funds provided to be spent out of MVF								(23,185)
<p>Note (October 2020): We fully anticipate that estimates will continue to fluctuate as we proceed through FY 2021, as this just reflects current estimates of the work ahead. This work will be highly impacted by decisions of the Legislature, and potential changes brought upon us by continued impacts of the COVID 19 pandemic.</p>											

Source: 'Toll Allocation Proviso Report – WSTC Allocation Updates' e-mail, 11/3/2020.

Program Q

The Q program supports SR 520, SR 99, I-405/SR 167, and SR 16 with Northwest Region or Olympic Region Traffic Office services which includes Incident Response, Traffic Management Center Operations, and Traffic Engineering. These services respond to incidents, manage daily and incident traffic, and analyze and make improvements in safety and efficiency of the highways.

The level of effort is approximately 1% to 2% of the program.

Program T

No program T staff are currently assigned to activities eligible for toll funding, nor can they hire staff due to the hiring freeze. The Transportation Planning Program moved the \$555,000 in the 2020 supplemental budget from toll facility accounts into reserve status.

Program S

Program S in Support of Tolling										
Program	Position Number	Class Code	Team	Job Class	Range	Step	FY 20 Salary & Benefits	% Time on Tolling Activities	Estimated Salary & Benefits	
S	00157	105I	Admin	AA5	50	M	90,715	5%	4,536	
S	03762	100T	Admin	Sec Senior	35	I	62,251	5%	3,113	
In addition, Payroll supports Tolling activities. For cost allocation purposes, Jennifer suggested calculating the number of Tolling employees as a percentage of total WSDOT employees and apply that to the Payroll Salary and Benefits costs. Currently there are 22.5 filled FTEs in Payroll (2.5 vacant). Their combined FY20 Salary and Benefits										
2) CFO Assume 6.5 hours per month spent in tolling meetings - Based on time spent in tolling meetings in April and May 2020										
S	56447	B4380		CHIEF FINANCIAL OFFICER - DOT			\$ 204,671	4%	\$ 7,675	
3) BFA										
Budget										
S	0W246	WMS02		WMS BAND 2			\$ 131,621	40%	\$ 52,648	Time spent in tolling meetings and working on tolling issues
S	0W475	WMS04		WMS BAND 4			\$ 183,040	3%	\$ 5,575	Time spent in Tolling meetings and meetings affecting tolling (Based on estimated time from Dec.-May)
Economics Time spent on tolling during the quarterly forecasts										
S	0W086	WMS03		WMS BAND 3			167696	8%	\$ 13,416	
Financial Planning Time spent on tolling										
S	0W078	WMS03		WMS BAND 3			\$ 169,052	35%	\$ 59,168	
S	03415	543I		TPS5	69	L	\$ 133,697	30%	\$ 40,109	
S	00638	543H		TPS4	65	L	\$ 122,462	30%	\$ 36,739	
4) Risk Mgmt - 20% of time of WMS position spent on Tolling review (PDR work)										
S	0W502	WMS01		WMS BAND 1			\$ 108,562	20%	\$ 21,712	
Total Program S Funds Providing Support to Tolling							FY20	FY21	2019-21	
							259,450	264,413	523,863	
								4,963		
Tolling Funds provided to program S in 2020 Supplemental										
\$	119,000	W05/SR167								
\$	199,000	SR520								
\$	116,000	TNB								
\$	100,000	AWV								
\$	534,000	Total toll funds for 2019-21								Est amt is lower than amt provided by (10,137)

Program U

Cost Center	Description of Service	Billing Methodology	Estimated Cost to Agency per 2019-2021 BN	Proration (Toll FTEs)	Sub-total
Archives and Records Management	Records management	65 percent of the total charge is allocated based on agency FTE amounts; 35 percent is based on the number of boxes each agency has stored in the Records Center.	\$ 551,000	0.77%	\$ 4,243
OFM--Core Financial Replacement (ERP Financing)	Agency budgets included the cost for core financial systems replacement planning through the One Washington project.	Allocated based on budgeted FTEs	\$ 1,377,000	0.77%	\$ 10,603
OFM--Enterprise Application		Allocated based on budgeted FTEs	\$ 730,000	0.77%	\$ 5,621
OFM--Enterprise Application	OFM Enterprise Applications Fee - Funding to cover a portion of statewide systems owned by the Office of Financial Management per the Central Service Model.	Allocated based on budgeted FTEs	\$ 730,000	0.77%	\$ 5,621
Personnel Services		Allocated based on budgeted FTEs	\$ 543,000	0.77%	\$ 4,181
Transp Building--Capital Project Surcharge		Allocation based on FTEs in Thurston County	\$ 1,046,000	0.77%	\$ 8,054
WA Tech-- (Office of) Chief Information Officer	Statewide information technology policies and oversight provided by the state Chief Information Officer	Funding for OCIO is based on actual agency IT FTEs.	\$ 523,000	0.77%	\$ 4,027
WA Tech--Cyber Security - Began 2017-19	The OCS Allocation was established to ensure consistent funding for cybersecurity policy and technology leadership for state government, as well as to promote cooperation and coordination between regional and national governments and corporations.	Agencies with 50+ FTEs pay a yearly base fee of \$2000. The remaining cost of the office is allocated based on the agency's number of budgeted FTEs.	\$ 11,000	0.77%	\$ 85
Wa Tech--Security Gateway Services	The Security Gateway Allocation funds a central point of authentication for all public-facing services provided by state agencies, enforcing security standards to ensure the protection of WA state citizen's private information when accessing the State of WA services.	Allocation funding is based on the agency's number of budgeted FTEs and the number of applications each agency has using the gateway. OFM maintains the source data for budgeted FTEs and WaTech tracks the number of applications. Additionally, agencies with 50+ FTEs pay a yearly base fee of \$1500.	\$ 600,000	0.77%	\$ 4,620
Wa Tech--State (Data) Network	State Data Network to include equipment, software, and staffing.	Annual costs to support the Network core, which was allocated based on FTEs. Annual costs to provide data transport support, which was allocated based on connectivity. From there, to use the central service model, OFM has to convert the calculations above into an allocation. So OFM took each agency's total charge (network core + connectivity = total) and divided it by the total expenditure authority for the network.	\$ 1,880,000	0.77%	\$ 14,476
Grand Total			\$ 7,991,000		\$ 61,531

ESHB 2322, Section 209(9) Proviso Report

Part II: Potential Impacts to Toll Rates

Purpose: This is the second part of the proviso report to address “any changes or potential impacts to toll rates” for each individual toll facility.

Key assumptions:

- All recommended 2019-21 biennium eligible toll expenditures (from Part I) will be spent in FY 2021, considering no expenditures occurred in FY 2020
- Assume 2.5% annual cost escalation starting FY 2021
- For Washington State Patrol costs, assume the same cost allocation percentage in FY 2021 will apply all future years
- For all other costs, the cost allocation is based on adopted toll transaction forecast in November 2020 Transportation Revenue Forecast Council (TRFC)

Findings:

Please see the table below for the summary of the findings. More details are available in Appendix II.

Year	TNB		SR 520		SR 99		I-405 & SR 167 ETLs		Toll System	
	Annual Costs	Cost per Transaction (cents)	Annual Costs	Cost per Transaction (cents)	Annual Costs	Cost per Transaction (cents)	Annual Costs	Cost per Transaction (cents)	Annual Costs	Cost per Transaction (cents)
FY 2021 ¹	\$ 540,000	3.8	\$ 905,000	6.2	\$ 297,000	3.2	\$ 1,580,000	22.0	\$ 3,322,000	7.3
FY 2022 ²	225,000	1.5	491,000	2.2	170,000	1.2	817,000	8.0	1,703,000	2.8
FY 2023	217,000	1.4	514,000	2.0	176,000	1.1	838,000	7.2	1,745,000	2.5
FY 2024	216,000	1.3	543,000	1.9	173,000	1.1	858,000	7.0	1,790,000	2.5
FY 2025	214,000	1.3	544,000	1.9	170,000	1.1	908,000	5.8	1,836,000	2.4
FY 2026	211,000	1.3	548,000	1.8	166,000	1.0	956,000	5.1	1,881,000	2.3
FY 2027	215,000	1.3	564,000	1.8	169,000	1.0	980,000	5.1	1,928,000	2.3
FY 2028	220,000	1.3	580,000	1.9	172,000	1.0	1,005,000	5.1	1,977,000	2.3
FY 2029	\$ 224,000	1.3	\$ 597,000	1.9	\$ 175,000	1.0	\$ 1,033,000	5.1	\$ 2,029,000	2.4
Total	\$ 2,282,000		\$ 5,286,000		\$ 1,668,000		\$ 8,975,000		\$ 18,211,000	
% of Total	13%		29%		9%		49%		100%	

Notes:

1. FY 2021 costs include AFS recommended toll eligible expenditures for both FY 2020 and FY 2021, considering no expenditures were allocated in FY 2020.
2. Assume 2.5% annual cost escalation starting FY 2022.

- FY 2021 is the year when toll system receives the biggest rate impact from the new added costs: on average every toll trip pays **7.3 cents** for the costs. The impact is exacerbated this year due to two factors: a) the whole biennium appropriations are expected to be spent in one year; b) toll traffics are significantly lower than normal year level due to COVID-19.
- I-405 and SR 167 ETLs pay for the highest share of the new added costs: **49%**. This is due to the fact State Patrol costs represent 56% of the total new expenditures, and ETLs (with longest miles) pay for 73% of the patrol costs. In FY 2021, the additional rate impact to ETLs is **22 cents** per transaction.
- From 2022 to FY 2029, on average the cost impact to the toll system is about **two cents** per toll transaction. For SR 99, TNB, and SR 520, the impact ranges between **one to two** cents per transaction; for I-405 and SR 167 ETLs, the impact ranges from **five to eight** cents per transaction.

Appendix II: A – Annual Costs Impact on Toll System

	WSDOT Programs				Commission (WSTC)	State Patrol (WSP)	Total
	Q	S	U	Sub-total			
FY 2021 ¹	\$ 142,000	\$ 534,000	\$ 62,000	\$ 738,000	\$ 725,000	\$ 1,858,000	\$ 3,321,000
FY 2022 ²	73,000	274,000	32,000	379,000	372,000	952,000	1,703,000
FY 2023	75,000	281,000	33,000	389,000	381,000	976,000	1,746,000
FY 2024	77,000	288,000	34,000	399,000	391,000	1,000,000	1,790,000
FY 2025	79,000	295,000	35,000	409,000	401,000	1,025,000	1,835,000
FY 2026	81,000	302,000	36,000	419,000	411,000	1,051,000	1,881,000
FY 2027	83,000	310,000	37,000	430,000	421,000	1,077,000	1,928,000
FY 2028	85,000	318,000	38,000	441,000	432,000	1,104,000	1,977,000
FY 2029	87,000	326,000	39,000	452,000	443,000	1,132,000	2,027,000
Total	\$ 4,056,000				\$ 3,977,000	\$ 10,175,000	\$ 18,208,000
% of Total	22%				22%	56%	100%

Notes:

1. FY 2021 costs include AFS recommended toll eligible expenditures for both FY 2020 and FY 2021, considering no expenditures were allocated in FY 2020.
2. Assume 2.5% annual cost escalation starting FY 2022.

Appendix II: B – Cost Allocation Percentage by Facility

	(Nov 2020 TRFC) Forecasted Toll Traffic					Toll System Cost/Transaction (cents)
	TNB	SR 520	SR 99	I-405 & SR 167 ETLs	Total	
FY 2021	14,390,000	14,688,000	9,228,000	7,187,000	45,493,000	7.3
FY 2022	15,092,000	21,849,000	13,812,000	10,273,000	61,026,000	2.8
FY 2023	15,776,000	25,681,000	15,763,000	11,593,000	68,813,000	2.5
FY 2024	16,142,000	28,581,000	15,958,000	12,211,000	72,892,000	2.5
FY 2025	16,345,000	29,037,000	16,157,000	15,581,000	77,120,000	2.4
FY 2026	16,508,000	29,669,000	16,282,000	18,924,000	81,383,000	2.3
FY 2027	16,673,000	30,547,000	16,492,000	19,353,000	83,065,000	2.3
FY 2028	16,839,000	31,334,000	16,704,000	19,807,000	84,684,000	2.3
FY 2029	17,008,000	31,998,000	16,850,000	20,255,000	86,111,000	2.4

	WSDOT Programs & WSTC Costs					WSP Costs			
	TNB	SR 520	SR 99	I-405 & SR 167 ETLs	Sub-total	TNB	SR 520	I-405 & SR 167 ETLs	Sub-total
FY 2021	31.6%	32.3%	20.3%	15.8%	100%	4.1%	23.3%	72.6%	100%
FY 2022	24.7%	35.8%	22.6%	16.8%	100%	4.1%	23.3%	72.6%	100%
FY 2023	22.9%	37.3%	22.9%	16.8%	100%	4.1%	23.3%	72.6%	100%
FY 2024	22.1%	39.2%	21.9%	16.8%	100%	4.1%	23.3%	72.6%	100%
FY 2025	21.2%	37.7%	21.0%	20.2%	100%	4.1%	23.3%	72.6%	100%
FY 2026	20.3%	36.5%	20.0%	23.3%	100%	4.1%	23.3%	72.6%	100%
FY 2027	20.1%	36.8%	19.9%	23.3%	100%	4.1%	23.3%	72.6%	100%
FY 2028	19.9%	37.0%	19.7%	23.4%	100%	4.1%	23.3%	72.6%	100%
FY 2029	19.8%	37.2%	19.6%	23.5%	100%	4.1%	23.3%	72.6%	100%

Appendix II: C – Cost per Transaction by Facility

	TNB				SR 520				SR 99		I-405 & SR 167 ETLs				Toll System	
	WSDOT & WSTC Costs	WSP Costs	Sub-total	Cost per Transaction (cents)	WSDOT & WSTC Costs	WSP Costs	Sub-total	Cost per Transaction (cents)	WSDOT & WSTC Costs	Cost per Transaction (cents)	WSDOT & WSTC Costs	WSP Costs	Sub-total	Cost per Transaction (cents)	Annual Costs	Cost per Transaction (cents)
FY 2021 ¹	\$ 463,000	\$ 77,000	\$ 540,000	3.8	\$ 472,000	\$ 433,000	\$ 905,000	6.2	\$ 297,000	3.2	\$ 231,000	\$ 1,349,000	\$ 1,580,000	22.0	\$ 3,322,000	7.3
FY 2022 ²	186,000	39,000	225,000	1.5	269,000	222,000	491,000	2.2	170,000	1.2	126,000	691,000	817,000	8.0	1,703,000	2.8
FY 2023	177,000	40,000	217,000	1.4	287,000	227,000	514,000	2.0	176,000	1.1	130,000	708,000	838,000	7.2	1,745,000	2.5
FY 2024	175,000	41,000	216,000	1.3	310,000	233,000	543,000	1.9	173,000	1.1	132,000	726,000	858,000	7.0	1,790,000	2.5
FY 2025	172,000	42,000	214,000	1.3	305,000	239,000	544,000	1.9	170,000	1.1	164,000	744,000	908,000	5.8	1,836,000	2.4
FY 2026	168,000	43,000	211,000	1.3	303,000	245,000	548,000	1.8	166,000	1.0	193,000	763,000	956,000	5.1	1,881,000	2.3
FY 2027	171,000	44,000	215,000	1.3	313,000	251,000	564,000	1.8	169,000	1.0	198,000	782,000	980,000	5.1	1,928,000	2.3
FY 2028	174,000	46,000	220,000	1.3	323,000	257,000	580,000	1.9	172,000	1.0	204,000	801,000	1,005,000	5.1	1,977,000	2.3
FY 2029	\$ 177,000	\$ 47,000	\$ 224,000	1.3	\$ 333,000	\$ 264,000	\$ 597,000	1.9	\$ 175,000	1.0	\$ 211,000	\$ 822,000	\$ 1,033,000	5.1	\$ 2,029,000	2.4
Total	\$ 1,863,000	\$ 419,000	\$ 2,282,000		\$ 2,915,000	\$ 2,371,000	\$ 5,286,000		\$ 1,668,000		\$ 1,589,000	\$ 7,386,000	\$ 8,975,000		\$ 18,211,000	
% of Total			13%				29%		9%				49%		100%	

Notes:

1. FY 2021 costs include AFS recommended toll eligible expenditures for both FY 2020 and FY 2021, considering no expenditures were allocated in FY 2020.
2. Assume 2.5% annual cost escalation starting FY 2022.