APPENDIX A – IMPACT FEE SCHEDULE

Table 1 – Impact Fee Schedule

Land Use Group	*ITE Code*	*ITE Land Use Category*	*PM Peak Vehicle Trip Rate*[1]	*Vehicle-to-Person Trip Ratio*[2]	*PM Peak Person Trip Rate*	*% New Trips*[3]	*Net New Person Trips per Unit of Measure*[4]		*Within Urban Center Location Adjustment per person trip =*	*Within UV*[5] *or 1/2 Mile of Light Rail Station Location Adjustment per person trip =*	*All Other Seattle Locations Adjustment per person trip =*	*Unit of Measure*
									69%	*93%*	*100%*	
Industrial	110	Light Industrial	0.65	1.08	0.70	100%	0.70	1,000 sq ft	$ 6.06	$ 8.19	$ 8.19	Square foot
	140	Manufacturing	0.74		0.80	100%	0.80	1,000 sq ft	$ 6.90	$ 9.33	$ 9.33	Square foot
	150	Warehouse	0.18		0.19	100%	0.19	1,000 sq ft	$ 1.68	$ 2.27	$ 2.27	Square foot
Residential	210	Single family house	0.94	1.45	1.36	100%	1.36	dwelling	$ 11,766.68	$ 15,906.04	$ 15,906.04	dwelling
	220	Multifamily Housing (Low-Rise)	0.51		0.74	100%	0.74	dwelling	$ 6,384.05	$ 8,629.87	$ 8,629.87	dwelling
	221	Multifamily Housing (Mid-Rise)	0.39		0.57	100%	0.57	dwelling	$ 4,881.92	$ 6,599.32	$ 6,599.32	dwelling
	222	Multifamily Housing (High-Rise)	0.32		0.46	100%	0.46	dwelling	$ 4,005.68	$ 5,414.82	$ 5,414.82	dwelling
	See Note 1	Residential Suite/"Apodment"	N/A		0.62	100%	0.62	dwelling	$ 5,352.41	$ 7,235.32	$ 7,235.32	dwelling
Mix Use Comm/Res	231	1st Floor Commercial; Mid-Rise Apts	0.36	1.45	0.52	100%	0.52	dwelling	$ 4,506.39	$ 6,091.68	$ 6,091.68	dwelling
	232	1st Floor Commercial; Mid-Rise Apts	0.31		0.45	100%	0.45	dwelling	$ 3,880.50	$ 5,245.61	$ 5,245.61	dwelling
Hotel	310	Hotel	0.6	1.45	0.87	100%	0.87	room	$ 7,510.65	$ 10,152.79	$ 10,152.79	room
	320	Motel	0.36		0.52	100%	0.52	room	$ 4,506.39	$ 6,091.68	$ 6,091.68	room
Recreation	420	Marina	0.21	1.25	0.26	100%	0.26	berth	$ 2,266.14	$ 3,063.34	$ 3,063.34	berth
	444	Movie Theater	0.09		0.11	100%	0.11	seat	$ 971.20	$ 1,312.86	$ 1,312.86	seat
	492[6]	Health/Fitness Club	3.45		4.31	100%	4.31	1,000 sq ft	$ 37.23	$ 50.33	$ 50.33	Square foot
Public Education	520	Public Elementary School[7]	1.37	1.26	1.73	100%	1.73	1,000 sq ft	$ 14.90	$ 20.14	$ 20.14	Square foot
	530	Public High School[7]	0.97	1.22	1.18	100%	1.18	1,000 sq ft	$ 10.22	$ 13.81	$ 13.81	Square foot
	550	University/College[7]	1.17		1.43	100%	1.43	1,000 sq ft	$ 12.32	$ 16.66	$ 16.66	Square foot
Office	710	General Office	1.44	1.22	1.76	100%	1.76	1,000 sq ft	$ 15.17	$ 20.50	$ 20.50	Square foot
	715	1 Tenant Office	1.76		2.15	100%	2.15	1,000 sq ft	$ 18.54	$ 25.06	$ 25.06	Square foot
	720	Medical/Dental Office	3.93		4.79	100%	4.79	1,000 sq ft	$ 41.39	$ 55.95	$ 55.95	Square foot
Retail/Service	820	Shopping Center	3.4	1.25	4.25	66%	2.81	1,000 sq ft	$ 24.22	$ 32.73	$ 32.73	Square foot
	850	Supermarket	8.95		11.19	64%	7.16	1,000 sq ft	$ 61.81	$ 83.56	$ 83.56	Square foot
	851	Convenience market-24 hour	49.11		61.39	49%	30.08	1,000 sq ft	$ 259.68	$ 351.03	$ 351.03	Square foot
	912	Drive-In Bank	21.01		26.26	65%	17.07	1,000 sq ft	$ 147.37	$ 199.21	$ 199.21	Square foot
Restaurant/Drinking	932	Restaurant: sit-down	9.05	1.25	11.31	57%	6.45	1,000 sq ft	$ 55.67	$ 75.25	$ 75.25	Square foot
	934	Fast food, w/drive-up	33.03		41.29	50%	20.64	1,000 sq ft	$ 178.22	$ 240.91	$ 240.91	Square foot
Auto Retail/Services	843	Auto Care Center	4.91	1.25	6.14	100%	6.14	1,000 sq ft	$ 52.98	$ 71.62	$ 71.62	Square foot
	944	Gas station	13.91		17.39	58%	10.08	pump	$ 87,060.90	$ 117,687.80	$ 117,687.80	pump
	945	Gas Station w/convenience	18.42		23.03	44%	10.13	pump	$ 87,460.17	$ 118,227.53	$ 118,227.53	pump
	Fee Rate	**$12,597.90**										

1. ITE Trip Generation 11th Edition: 4-6 PM Peak Hour Vehicle Trip Generation Rates for the Adjacent Street Traffic (weekday 4-6PM); This worksheet represents only the most common uses in Seattle and is NOT all-inclusive
2. The ratio of vehicle trips to person trips as extracted from the 2014 PSRC Household Travel Survey
3. Excludes pass-by trips: see "*Trip Generation Handbook: An ITE Proposed Recommended Practice*" (2014).
4. PM Peak Person Trip Rate multiplied by the % New Trips percentage
5. Urban Village
6. ITE Code 492 not in ITE 11th Ed. Daily Rate. The Daily Rate for ITE Code 495 for a Recreational Community Center, which is similar, was used instead.
7. ITE Trip Generation 10th Edition: 4-6 PM Peak Hour Vehicle Trip Generation Rates for the Adjacent Street Traffic (weekday 4-6PM) used instead of 11th Edition

Notes:

1. City of Renton trip rates.
2. Land Use Group: Categories of land use used to assess the impact fees for Seattle
3. ITE Code: Code assigned by ITE
4. PM Peak Vehicle Trip Rate: the number of PM Peak Hour vehicle trips as reported by ITE 11th Edition
5. Vehicle-to-Person Trip Rate: The ratio of vehicle trips to person trips as extracted from the 2014 PSRC Household Travel Survey
6. PM Peak Person Trip Rate: The trip rate resulting from multiplying the PM Peak Vehicle Trip Rate by the Vehicle-to-Person Trip Ratio
7. % New Trips: The percent of trips that are new (not diverted link or passing)
8. Net New Person Trips per Unit of Measure: The result of multiplying PM Peak Person Trip Rate by the % New Trips
9. Urban Center (UC) Location Adjustment: The recommended TIF rate per unit of development in the UCs.
10. Urban Village (UV) Location Adjustment: The recommended TIF rate per unit of development in the UVs or areas within ½ mile of light rail stations.
11. Seattle Location Adjustment: The recommended TIF rate per unit of development in all areas outside of UCs and UVs

APPENDIX B – EXISTING SYSTEM VALUE

MEMORANDUM

Date: June 8, 2021 (Updated)

To: Ketil Freeman, Seattle City Council Central Staff

From: Josh Steiner & Kendra Breiland, Fehr & Peers

Subject: Calculation of Existing System Value for Use in Seattle's Transportation Impact Fee Proposal

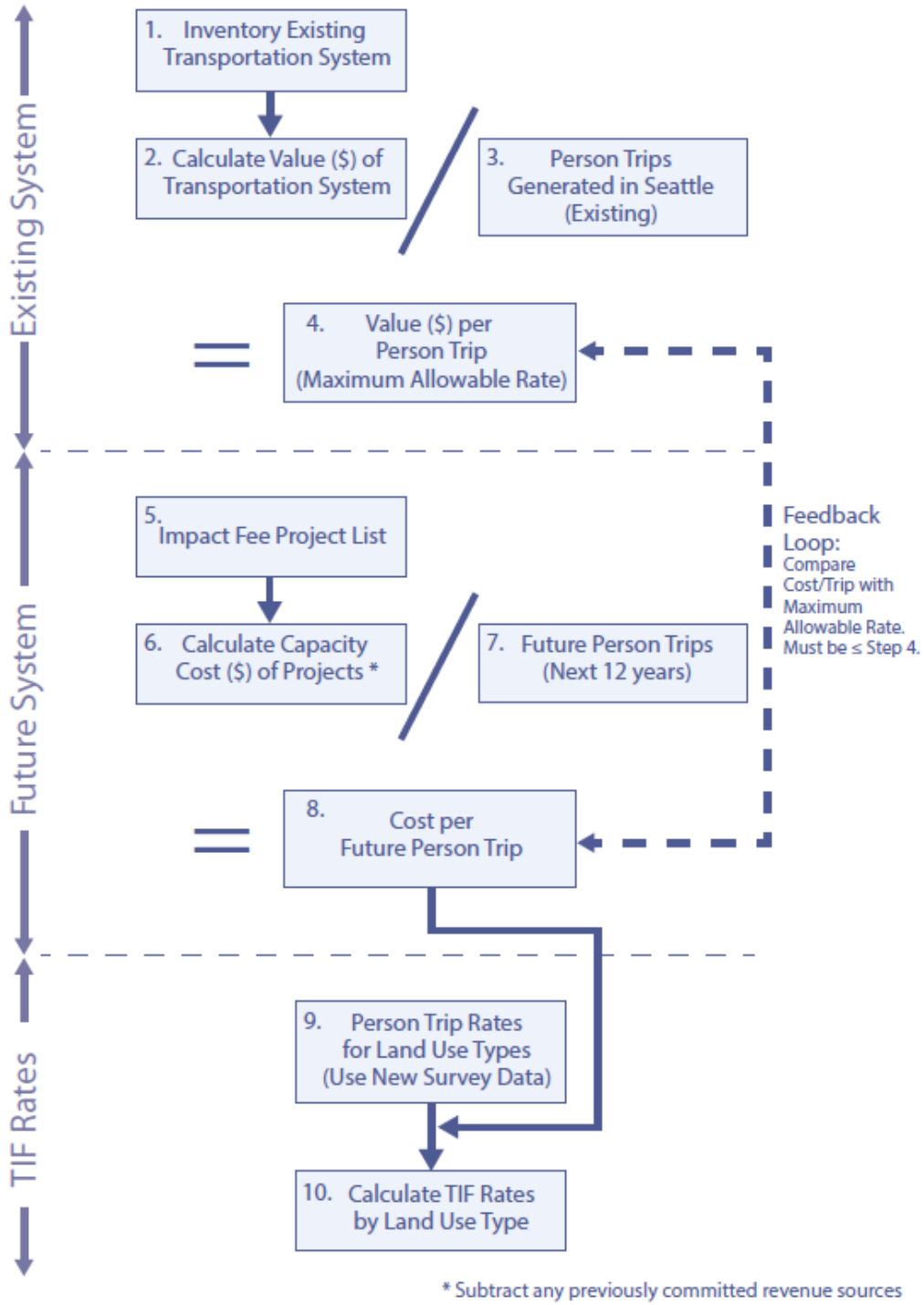
SE19-0672.01

Fehr & Peers has been working with Council Central Staff to develop a proposal for the City of Seattle to implement a transportation impact fee (TIF) program. One important aspect of this program will be establishing how the City accounts for existing deficiencies. One approach that the City may want to consider, which has been implemented in Portland, Oregon and Oakland, California, is determining the system value per trip of Seattle's existing transportation system. This is an alternative method to determining existing deficiencies which states that the City cannot charge development impact fees that exceed the value (on a cost per trip basis) of the system that is on the ground today (also normalized to a per trip basis). This memo provides specific details on two key calculations:

- **Existing system value per person trip**, which is calculated by summing the existing value of the transportation system and dividing it by the existing number of person trips per PM peak hour.
- **Future system transportation impact fee cost per person trip**, which is based on the total impact fee eligible components of the TIF project list, divided by forecast growth in PM peak hour person trips over the next 12 years.

Figure 1 on the next page summarizes the proposed approach, with details provided below. Note that the two main calculations described in this memo are the maximum allowable impact fee per person trip (Steps 1-4) and recommended impact fee per person trip (Steps 5-8).

Figure 1: TIF Rate Calculation Flow Chart



EXISTING SYSTEM VALUE TIF RATE

This rate is calculated by summing the value of the City's existing transportation system and dividing it by the existing number of person trips per PM peak hour, as shown in Steps 1-4 in **Figure 1**. The resulting rate will be considered the maximum allowable TIF rate per PM peak hour person trip, even if the value is lower than the rate calculated using the future (12-year) project list and trip growth.

The inventory of the existing transportation system was based on data to be included in the Seattle Department of Transportation's *Asset Management: Seattle Status and Condition Report from 2021*. This report includes an inventory of the existing transportation system, along with the replacement value and condition for each facility type. The following facilities were included in the calculation of the transportation system value:

- Pavement (arterials only)
- Pedestrian System
- Structures
- Signals
- Streetcars
- Street Signs
- Pavement Markings
- Right-of-Way (ROW)

The value of the existing transportation system was calculated by adding the infrastructure value and ROW value. The ROW value was calculated using King County Assessor data from 2017 to establish the value of commercial and residential land. Using this methodology, we estimate Seattle's total land value at roughly $44.9 billion. Personal communications with the SDOT Traffic Engineer, Dongho Chang, indicated that approximately 28% of the City's land is ROW and 40% of that ROW is made up of arterials. This establishes a total arterial ROW value of approximately $5 billion.

The value of the existing transportation system was calculated to be $21.2 billion, as itemized in **Figure 2**. This value includes applicable ROW value.

The City of Seattle travel demand model provided the basis for the existing year PM peak hour person trips. The travel demand model provides 2015 and 2035 PM peak hour person trip estimates, and 2022 and 2034 trip estimates were interpolated. As of 2022, the City of Seattle generates approximately 643,668 person trips during the PM peak hour.

Dividing the $21.2 billion by the 699,266 PM peak hour person trips results in a system value of $30,297 per PM peak hour person trip. This rate can be considered the maximum allowable TIF rate.

FUTURE SYSTEM TIF RATE

The future system TIF rate is calculated by summing the eligible costs of the recommended TIF project list and dividing it by the forecast number of new person trips added to Seattle's transportation system over the next 12 years – the expected timespan of Seattle's impact fee program (see Steps 5-8 in **Figure 1**).

The City of Seattle travel demand model was used to estimate growth in PM peak hour person trips over the next 12 years. Over that period, it is expected that Seattle will see PM peak hour person trips grow by around 85,100 trips.

FIGURE 2: EXISTING SYSTEM VALUE

Facility	Quantity	Measurement	unit cost	Replacement Value	Include for Impact Fees	Deficiency	Value for Impact Fees
Pavement							
Arterial	1,548	lane mile	$ 3,021,964	$ 4,678,000,000	$ 4,678,000,000		$ 4,678,000,000
Total	1,548			**$ 4,678,000,000**	**$ 4,678,000,000**	**$ -**	**$ 4,678,000,000**
Pedestrian System							
Sidewalks	16,065	block faces	$ 151,121	$ 2,427,803,381	$ 2,427,803,381		$ 2,427,803,381
Stairways	497		$ 59,817	$ 29,729,210	$ 29,729,210		$ 29,729,210
Marked Crosswalks	5,649		$ 657	$ 3,713,050	$ 3,713,050		$ 3,713,050
Total				**$ 2,461,245,642**	**$ 2,461,245,642**	**$ -**	**$ 2,461,245,642**
Bicycle Network							
Bikeways							
Structures							
Bridges	122		$ 58,557,377	$ 7,144,000,000	$ 7,144,000,000		$ 7,144,000,000
Retaining Walls	606		$ 2,246,226	$ 1,361,213,000	$ 1,361,213,000		$ 1,361,213,000
Guardrails	925	units	$ 10,163	$ 9,401,000	$ 9,401,000		$ 9,401,000
Elevator	2		$ 1,500,000	$ 3,000,000	$ 3,000,000		$ 3,000,000
Tunnel	1		$ 2,624,000	$ 2,624,000	$ 2,624,000		$ 2,624,000
Total				**$ 8,520,238,000**	**$ 8,520,238,000**	**$ -**	**$ 8,520,238,000**
Signals							
Signals	1,118		$ 262,500	$ 293,475,000	$ 293,475,000		$ 293,475,000
Communications Network	150	miles	$ 547,487	$ 82,123,000	$ 82,123,000		$ 82,123,000
Network Hubs	14		$ 76,714	$ 1,074,000	$ 1,074,000		$ 1,074,000
Total				**$ 293,475,000**	**$ 293,475,000**	**$ -**	**$ 293,475,000**
Streetcar							
Streetcar	2	Lines	$ 66,703,892	$ 133,407,783	$ 133,407,783		$ 133,407,783
Total				**$ 133,407,783**	**$ 133,407,783**	**$ -**	**$ 133,407,783**
Street Signs							
Street Signs	76,148		Varies ($250 - $3,500)	28,788,718	28,788,718		$ 28,788,718
Total				**$ 28,788,718**	**$ 28,788,718**	**$ -**	**$ 28,788,718**
Pavement Markings							
Pavement Markings				$ 1,923,225	$ 1,923,225		$ 1,923,225
Total				**$ 1,923,225**	**$ 1,923,225**	**$ -**	**$ 1,923,225**
Total Infrastructure				**$ 16,158,676,868.00**	**$ 16,158,676,868.00**	**$ -**	**$ 16,158,676,868.00**
						0%	
Total Right-of-Way							$ 5,026,936,600
TOTAL SYSTEM VALUE				**$ 16,158,676,868**	**$ 16,158,676,868**		**$ 21,185,613,468**
					Existing (2022) PM Peak Hr Person Trip Ends		699,266
					Cost/PM Person Peak Hr Trip Ends		$ 30,297

APPENDIX C – PROJECT LIST AND COST ALLOCATION RESULTS

The table on the following pages describe all the projects with costs included in the multimodal TIF and how the impact fee project costs (shown in **Table 1**) were divided into growth-related costs attributable to the City. The first adjustment is for existing deficiencies, as described in the report text. The next adjustment is to calculate the 'Percent of Growth within Seattle', which contains the results of the analysis to separate Seattle and non-Seattle growth. For motorized projects, the City's travel demand model was used to identify the portion of trips associated with Seattle and non-Seattle traffic. A technique called "select-link analysis" was used to isolate the vehicle trips in five different areas based on project location. The growth percentages for pedestrian and bicycle improvement projects are also applied, as described in the report text. The final column of the table shows the growth cost for each project that can be allocated to impact fees.

Project Name	***Project Description***	***Cost Estimate 2022***	Ineligible Costs %	Ineligible Costs Totals	Growth Accomodating Costs	% Seattle Trips	**Fee Program Cost Estimate**	Levy Amt 2022
Northgate-Ballard-Downtown Transit Improvements	This project will design and construct transit speed and reliability improvements and upgraded bus stop passenger facilities. Improvements to the route, which connects Downtown, South Lake Union, Fremont, Ballard, and Northgate, will support conversion to RapidRide service by partner agency King County Metro.	$ 24,166,000.00	0%	$0	$24,166,000	84%	**$13,727,642.15**	$ 7,732,000
Madison Street Bus Rapid Transit (TC367480)	This project will include concept design and environmental review of multimodal improvements in the Madison corridor between Alaskan Way and Martin Luther King Jr. Way, connecting the Central Area with the First Hill, Downtown, and Waterfront neighborhoods.	$ 144,482,354.00	0%	$0	$144,482,354	79%	**$102,375,999.05**	$ 15,000,000
Market / 45th Transit Improvement Project (TC367790)	This project enhances transit speed and reliability on one of the city's primary east-west corridors and most chronically congested routes. The project adds intelligent transportation systems such as transit signal priority to improve bus travel times. It installs upgrades to transit stops and offers other rider amenities and enhances connections to northwest Seattle as well as the Ballard-Interbay Manufacturing Industrial Center.	$ 15,054,000.00	0%	$0	$15,054,000	83%	**$5,440,530.14**	$ 8,504,000
Rainier / Jackson Complete Street (TC367770)	This project enhances transit speed and reliability. The project will upgrade bus stops and add transit signal priority at intersections and improve facilities for people who walk along the corridor.	$ 8,461,000.00	0%	$0	$8,461,000	73%	**$704,391.68**	$ 7,499,000
Roosevelt to Downtown Complete Street (TC367380)	This project will develop and implement a range of transit and street improvements in the Eastlake Avenue corridor connecting the University District, Eastlake and South Lake Union neighborhoods between Downtown and the Roosevelt Link LRT station area. This project will identify, prioritize, design and construct the highest priority "speed and reliability" improvements to existing bus service without excluding the potential for longer-term implementation of High Capacity Transit options. The project will also consider an improved ROW profile to best accommodate the corridor's multimodal demands, along with the recommendations reflected in each of the City's adopted modal transportation plans and the respective neighborhood plans.	$ 113,457,000.00	0%	$0	$113,457,000	83%	**$94,338,838.50**	
Accessible Mt Baker (TC367800)	This project will implement pedestrian and bicycle capacity improvements identified in the Accessible Mt. Baker plan.	$ 3,900,000.00	0%	$0	$3,900,000	73%	**$2,860,792.24**	
E Marginal Way Heavy Haul Network Improvements (TC367590)	This program supports freight mobility by funding roadway improvements on the Heavy Haul Network (Ordinance 124890) to meet the needs of freight transported on our streets between Port facilities, rail yards, and industrial businesses. Current projects include E Marginal Way between S Atlantic St and S Michigan St. The Port of Seattle, through Memorandum of Understanding, is to provide partnership funding. Improvements will include rebuilt roadways, signal and ITS enhancements and safety measures to reduce conflicts between freight and non-motorized users.	$ 64,394,725.00	0%	$0	$64,394,725	49%	**$28,616,190.82**	$ 6,502,000
Bike Master Plan Implementation (TC367910 and TC366760)	This ongoing program implements the Seattle Bicycle Master Plan. Typical improvements may include creating and enhancing the bikeway system by installing bike lanes and sharrows, bicycle route signing, completing key links in the urban trails network, adding bicycle/pedestrian signals to complete the network, and reconstructing key sections of the trails. The goals of the program are to increase the number of people walking and biking; and to improve walking and biking access to schools, trails, parks, transit, places of employment, and neighborhood businesses. This program includes funding for street improvement and trail construction and is consistent with the focus in the City's Transportation Strategic Plan (TSP) on encouraging walking and biking.	$ 418,580,000.00	0%	$0	$418,580,000	75%	**$313,935,000.00**	
Pedestrian Master Plan Implementation (TC367150, TC367600, and TC367170)	These ongoing programmatic investments implements the Pedestrian Master Plan. Typical improvements may include the installation of new marked crosswalks, curb bulbs, pedestrian signals, curb ramps, and pedestrian lighting. The goals of the program are to make Seattle a more walkable city for all through equity in public engagement, service delivery, accessibility, and capital investments; develop a pedestrian environment that sustains healthy communities and supports a vibrant economy; and enhance citywide pedestrian systems to increase walking as a transportation mode.	$ 200,200,000.00	0%	$0	$200,200,000	90%	**$180,180,000.00**	

Project Name	***Project Description***	***Cost Estimate 2022***	Ineligible Costs %	Ineligible Costs Totals	Growth Accomodating Costs	% Seattle Trips	**Fee Program Cost Estimate**	Levy Amt 2022
Freight Spot Improvements (FMP Implementation)	This project includes small scale mobility improvements to the City's street system to improve connections between port facilities, railroad intermodal yards, industrial businesses, the regional highway system, and the first and last miles in the supply chain. Project types include turning radius adjustments, channelization changes, left-turn improvements, and signage to direct freight to destinations and alert drivers to steep grades or sharp turns.	$ 21,000,000.00	0%	$0	$21,000,000	50%	**$10,500,000.00**	
Greenwood Phinney, 67th to Fremont Complete Street	The Greenwood Complete Street project expands on a transit-oriented corridor to improve safety and traffic operations for all modes by upgrading existing sidewalks and adding new sidewalks to fill numerous gaps in pedestrian connectivity; improving transit speed and reliability through signal coordination and active traffic management; and building transit station upgrades, bus bulbs, and rider/pedestrian amenities.	$ 90,300,000.00	70%	$63,210,000	$27,090,000	75%	**$20,183,656.71**	
Yesler/Jefferson Complete Streets	The Yesler Way Complete Street project will complete the trolley (bus) system along a key transit corridor and reroute several high-ridership routes to improve traffic efficiency. This project also improves stops and stations and operational improvements for buses and incorporates protected bike lanes.	$ 23,100,000.00	20%	$4,620,000	$18,480,000	83%	**$15,356,659.42**	
1st/1st Av S Corridor	The 1st Ave/1st Ave S project improves operating efficiency and safety for all modes by adding extensive intelligent transportation systems including traffic cameras, vehicle detection, and traffic responsive signals; improving freight flow on a key Port of Seattle and Duwamish industrial district route; and upgrading existing sidewalks and adding pedestrian crossings.	$ 12,000,000.00	40%	$4,800,000	$7,200,000	63%	**$4,532,587.64**	
23rd Av - Phase 4	Extending improvements within Phases 1-3, the Phase 4 project reconstructs 23rd Ave to a consistent 3-lane cross-section throughout the corridor. This includes redesigned intersections and allows for wider cross-sections at areas with unique traffic demands and promotes safe and efficient operations for all modes, emphasizing safe traffic interactions for people who bike and walk.	$ 33,000,000.00	80%	$26,400,000	$6,600,000	82%	**$5,398,080.43**	
Aurora Avenue Complete Street	The Aurora Avenue Complete Street project redesigns a major transit and freight arterial with a strong focus on safety, access, and transit operations. The project supports development of Rapid Ride Line E, streamlines traffic operations and promotes safe interactions for all modes, ensures reliable business access and loading, and adds sidewalks and shorter pedestrian crossings.	$ 130,000,000.00	0%	$0	$130,000,000	70%	**$91,047,228.99**	
Beacon/12th/Broadway Complete Streets	The Beacon/12th/Broadway Complete Streets project updates obsolete infrastructure and roadway designs to provide smooth and integrated traffic flow for all modes. This includes capacity upgrades bicycle facilities and sidewalk improvements and improvements to transit services with features like queue jump or transit-only lanes, bus bulbs, and rider amenities.	$ 131,000,000.00	50%	$65,500,000	$65,500,000	84%	**$55,115,100.37**	
Fauntleroy Way/California Transit Corridor	The Fauntleroy Transit Corridor project enhances transit services and rider amenities along one of west Seattle's primary transit corridors. The project adds real-time arrival information at all bus stops and transit centers, links discontinuous bus-only lanes along the corridor to complete the transit-priority system, and installs a full transit station on Fauntleroy near the West Seattle Bridge.	$ 90,300,000.00	80%	$72,240,000	$18,060,000	75%	**$13,501,841.26**	
Lake City Way Complete Street	The Lake City Way Complete Street project reinvents an obsolete street design to enhance transit efficiency, non-motorized access, and safety for all modes. The project installs traffic-adaptive signalization and transit signal priority to improve traffic flow, adds sidewalks and bus stops for transit users and people who walk along the corridor, and redesigns intersections, driveways, and pedestrian crossings to maximize safety for vulnerable users.	$ 12,600,000.00	80%	$10,080,000	$2,520,000	70%	**$1,766,686.57**	

Project Name	***Project Description***	***Cost Estimate 2022***	Ineligible Costs %	Ineligible Costs Totals	Growth Accomodating Costs	% Seattle Trips	**Fee Program Cost Estimate**	Levy Amt 2022
15th Ave W Spot Improvements at W Dravus St and W Emerson St	This project addresses turn radii issues for trucks and enhanced multimodal operations through small-scale geometric and intersection operational improvements along 15th Ave W. Trucks of all sizes experience challenges traveling on the elevated structures at W Emerson St and W Dravus St. 15th Ave W, W Emerson St, and W Dravus St are vital connections for freight traveling to and from the Ballard-Interbay-Northend Manufacturing/Industrial Center (BINMIC). This project includes two components to implement changes at these locations. •The W Emerson St ramp over 15th Ave W serves trucks going to and from W Nickerson St. This component includes moving the centerline on the ramp to provide a greater turning radius for trucks and making adjustments to the stop bars channelization at the intersection on the west side of the ramp. •W Dravus St is used by trucks of all sizes, including overlegal vehicles unable to pass underneath the bridge on 15th Ave W. Northbound trucks have particular difficulty turning left onto W Dravus St from the off-ramp. This component of the project includes upgrading signal timing and hardware at the ramp terminals to ensure vehicle queues on the bridge clear to allow trucks adequate space to turn at the intersection. This project can be bundled with Ballard Bridge Access improvements	$ 40,000,000.00	0%	$0	$40,000,000	87%	**$34,851,685.76**	
W Galer St Interchange Ramp	Construct ramp to improve access over BNSF mainline tracks and storage yard	$ 25,000,000.00	0%	$0	$25,000,000	87%	**$21,817,923.65**	
S Massachusetts St Rebuild (access road - Colorado Ave S to 1st Ave S)	Reconstruct S Massachusetts St to improve safety and access to North SIG Yard, while maintaining two-way operations. Seek to provide separated travel lanes for general purpose and truck traffic. Provide improved truck access/operations at the 1st Ave S / S Massachusetts St intersection	$ 6,300,000.00	0%	$0	$6,300,000	79%	**$4,998,425.26**	
6th Ave at I-5	Mobility along I-5 - req working with WSDOT, there's lots of vegetation. Yesler Way over I-5. The pork chop between Yesler, 6th, and I-5 can be used to help build capacity where there is often a bottleneck	$ 50,000,000.00	0%	$0	$50,000,000	78%	**$39,144,042.79**	
Intersection improvements at 4th Ave N, Westlake Ave N, Dexter Ave N, and Nickerson St	Intersection improvements at 4th Ave N, Westlake Ave N, Dexter Ave N, and Nickerson St to improve freight mobility.	$ 7,350,000.00	0%	$0	$7,350,000	90%	**$6,582,498.42**	
BINMIC Truck Route Improvements (Area bounded by W Dravus St, W Nickerson St, NW Market St, and Fremont Ave N)	This project will evaluate truck freight movements to identify projects to address geometric and operating challenges for trucks. The projects will be focused on readily implementable improvements with primary consideration given to safety and freight connectivity. They may include signal timing adjustments, additional signage or wayfinding, larger intersection turn radii, lane width adjustments, and joint use of bus lanes. - Phase I: Collect data on needs through a detailed assessment of truck volumes, truck sizes, and over-dimensional truck activity. Build from the forecasts developed in the Freight Access Project and work with stakeholders to identify and prioritize specific truck route projects. - Phase II: Implement top priority projects given funding availability and opportunities. Develop a long-term budget and funding strategy to implement remaining projects.	$ 250,000.00	0%	$0	$250,000	87%	**$218,535.44**	
6th Ave S Reconstruction	Make operational, ITS, and multimodal improvements to 6th Ave S.	$ 8,400,000.00	0%	$0	$8,400,000	73%	**$4,883,035.20**	$1,700,000
	TOTAL	$1,673,295,079		$246,850,000	$1,426,445,079		**$ 1,072,077,372.48**	

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