City of St. Helens

RESOLUTION NO. 1956

A RESOLUTION AMENDING THE CITY OF ST. HELENS' SYSTEM DEVELOPMENT CHARGES FOR WATER, WASTEWATER, STORMWATER, AND TRANSPORTATION

WHEREAS, the City of St. Helens System Development Charge (SDC) Code (St. Helens Municipal Code (SHMC) Chapter 13.24), provides for the establishing of SDCs upon completion of an analysis of capital improvements already constructed and projected capital improvements to be constructed and adoption of a methodology explaining how the SDCs are calculated; and

WHEREAS, the St. Helens City Council has adopted water, wastewater, stormwater, and transportation capital improvement plans which includes a list of completed and proposed capital improvements which affect SDCs; and

WHEREAS, the City has prepared a methodology and schedule of SDCs for water, wastewater, stormwater, and transportation (Water, Wastewater, Stormwater, and Transportation System Development Charge Update, March 2022, Donovan Enterprises, Inc.); and

WHEREAS, the St. Helens City Council has determined the methodology and rates hereinafter specified and established are just, reasonable, and necessary.

NOW, THEREFORE, THE CITY OF ST. HELENS RESOLVES AS FOLLOWS:

Section 1. Amendment and updating of water, wastewater, stormwater, and transportation SDCs. In accordance with SHMC Chapter 13.24, this Resolution establishes the methodology and provides the basis for the water, wastewater, stormwater, and transportation SDCs that consists of a reimbursement and improvement fee.

Section 2. Scope of amendment and update of water, wastewater, stormwater, and transportation SDCs. The SDCs established by this Resolution are separate from, and in addition to, any other applicable taxes, fees, assessments, or charges, including but not limited to SDCs, which are required by the City of St. Helens or represent a condition of a land use or development approval.

Section 3. Methodology. The methodology for the water, wastewater, stormwater, and transportation SDCs described in the Water, Wastewater, Stormwater, and Transportation System Development Charge Update report dated March 2022 is

hereby adopted by the St. Helens City Council and, by this reference, hereby made a part of this Resolution.

Section 4. Effective Date. This Resolution shall become effective upon its adoption by the St. Helens City Council.

Section 5. Review. This Resolution may be reviewed at the pleasure of the City Council, and the rates may be amended as appropriate.

Section 6. Repeal. All City of St. Helens Resolutions or parts of Resolutions in conflict herewith are hereby repealed.

Section 7. Fees and charges. The City amends and updates its water, wastewater, stormwater, and transportation SDCs as follows:

Section 7A – Water SDCs

Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Water SDCs			
			Reimbursement	Improvement	Administration	Total
0.75"x 0.75" - Displacement Multi-jet	30	1.00	$ 1,007	$ 1,944	$ 148	$ 3,099
1.00 inch - Displacement Multi-jet	50	1.67	1,678	3,241	246	5,165
1.50 inch - Displacement Class I Turbine	100	3.33	3,356	6,482	492	10,329
2.00 inch - Displacement or Class I & II Turbine	160	5.33	5,369	10,371	787	16,527
3.00 inch - Displacement	300	10.00	10,067	19,445	1,476	30,988
4.00 inch - Displacement or Compound	500	16.67	16,779	32,408	2,459	51,646
6.00 inch - Displacement or Compound	1000	33.33	33,558	64,816	4,919	103,292
8.00 inch - Compound	1600	53.33	53,692	103,706	7,870	165,268

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Section 7B – Wastewater SDCs

Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Wastewater SDCs			
			Reimbursement	Improvement	Administration	Total
0.75"x 0.75" - Displacement Multi-jet	30	1.00	$ 466	$ 5,399	$ 293	$ 6,158
1.00 inch - Displacement Multi-jet	50	1.67	776	8,998	489	10,263
1.50 inch - Displacement Class I Turbine	100	3.33	1,552	17,996	977	20,525
2.00 inch - Displacement or Class I & II Turbine	160	5.33	2,483	28,794	1,564	32,841
3.00 inch - Displacement	300	10.00	4,656	53,988	2,932	61,576
4.00 inch - Displacement or Compound	500	16.67	7,760	89,980	4,887	102,627
6.00 inch - Displacement or Compound	1000	33.33	15,521	179,960	9,774	205,255
8.00 inch - Compound	1600	53.33	24,833	287,937	15,638	328,408

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Section 7C – Stormwater SDCs

Line Item Description	City-Wide Per DRU	City-Wide Per Sq. Foot
Proposed SDC components:		
Reimbursement fee	$ 348	$ 0.1391
Improvement fee	1,726	0.6904
Administration fee at 5%	104	0.0415
Total proposed stormwater SDC	$ 2,177	$ 0.8710

Drainage Residential Unit (DRU). One drainage residential unit is the impervious surface area which is estimated to place approximately equal demand on the public stormwater system as that placed by an average residential dwelling unit. One DRU equals 2,500 square feet of impervious surface.

Section 7D – Transportation SDCs

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Port and Terminal (Land Uses 000-099)							
010	Water port/Marine Terminal*	17.15	69,637	3,516	3,658	76,811	Berth
021	Commercial Airport	5.75	23,345	1,179	1,226	25,750	Average flights per day
022	General Aviation Airport	1.57	6,374	322	335	7,031	Employee
030	Intermodal Truck Terminal	1.87	7,592	383	399	8,374	1,000 square feet of gross floor area
090	Park-an-Ride Lot with Bus Service	0.43	1,746	88	92	1,926	Parking space
093	Light Rail Transit Station with Parking	1.24	5,034	254	264	5,552	Parking space
Industrial (Land Uses 100-199)							
110	General light industrial	0.63	2,558	129	134	2,821	1,000 square feet of gross floor area
120	General heavy industrial	0.68	2,761	139	145	3,045	1,000 square feet of gross floor area
130	Industrial park	0.40	1,624	82	85	1,791	1,000 square feet of gross floor area
140	Manufacturing	0.67	2,720	137	143	3,000	1,000 square feet of gross floor area
150	Warehousing	0.19	771	39	41	851	1,000 square feet of gross floor area
151	Mini-warehouse	0.17	690	35	36	761	1,000 square feet of gross floor area
154	High-Cube transload & short-term warehouse	0.10	406	21	21	448	1,000 square feet of gross floor area
155	High-Cube fulfillment center warehouse	1.37	5,562	281	292	6,135	1,000 square feet of gross floor area
156	High-Cube Parcel hub warehouse	0.64	2,598	131	136	2,865	1,000 square feet of gross floor area
157	High-Cube cold storage warehouse	0.12	487	25	26	538	1,000 square feet of gross floor area
160	Data center	0.09	365	18	19	402	1,000 square feet of gross floor area
170	Utilities	2.27	9,216	465	484	10,165	1,000 square feet of gross floor area
180	Specialty trade contractor	1.97	7,998	404	420	8,822	1,000 square feet of gross floor area
Residential (Land Uses 200-299)							
210	Single family detached housing	0.99	4,019	203	211	4,433	Dwelling unit
220	Apartment	0.56	2,274	115	119	2,508	Dwelling unit
221	Low-Rise Apartment	0.44	1,786	90	94	1,970	Dwelling unit
222	High-Rise Apartment	0.36	1,462	74	77	1,613	Dwelling unit
225	Off-Campus student apartment	0.25	1,015	51	53	1,119	Dwelling unit
231	Mid-Rise residential w/1st-floor commercial	0.36	1,462	74	77	1,613	Dwelling unit
232	High-Rise Residential w/1st-floor commercial	0.21	853	43	45	941	Dwelling unit
240	Mobile home park	0.46	1,868	94	98	2,060	Dwelling unit
251	Senior Adult Housing - Detached	0.30	1,218	62	64	1,344	Dwelling unit
252	Senior Adult Housing - Attached	0.26	1,056	53	55	1,164	Dwelling unit
253	Congregate Care Facility	0.18	731	37	38	806	Dwelling unit
254	Assisted living	0.26	1,056	53	55	1,164	Bed
255	Continuing Care Retirement Community	0.16	650	33	34	717	Unit
260	Recreational Homes	0.28	1,137	57	60	1,254	Dwelling unit
265	Timeshare	0.63	2,558	129	134	2,821	Dwelling unit
270	Residential Planned Unit Development	0.69	2,801	141	147	3,089	Dwelling unit

Section 7D – Transportation SDCs (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Lodging (Land Uses 300-399)							
310	Hotel	0.60	2,436	123	128	2,687	Room
311	All Suites Hotel	0.36	1,462	74	77	1,613	Room
312	Business Hotel	0.32	1,299	66	68	1,433	Occupied Room
320	Motel	0.38	1,543	78	81	1,702	Room
330	Resort Hotel	0.41	1,665	84	87	1,836	Room
Recreational (Land Uses 400-499)							
411	Public park	0.11	447	23	24	494	Acre
416	Campground/Recreational Vehicle Park	0.98	3,979	201	209	4,389	Acre
420	Marina	0.21	853	43	45	941	Berth
430	Golf course	2.91	11,815	597	621	13,033	Hole
431	Miniature Golf Course	0.33	1,340	68	70	1,478	Hole
432	Golf Driving Range	1.25	5,075	256	267	5,598	Tees/Driving Position
433	Batting Cages	2.22	9,013	455	473	9,941	Cage
434	Rock climbing gym	1.64	6,658	336	350	7,344	1,000 square feet of gross floor area
435	Multipurpose Recreational Facility	3.58	14,535	734	763	16,032	1,000 square feet of gross floor area
436	Trampoline park	1.50	6,090	308	320	6,718	1,000 square feet of gross floor area
437	Bowling Alley	1.30	5,278	267	277	5,822	Bowling lane
440	Adult Cabaret	2.93	11,896	601	625	13,122	1,000 square feet of gross floor area
444	Movie Theater with Matinee - Friday pm peak hou	6.17	25,050	1,265	1,316	27,631	1,000 square feet of gross floor area
445	Multiplex Movie Theater - Friday pm peak hour	4.91	19,935	1,007	1,047	21,989	1,000 square feet of gross floor area
452	Horse Racetrack	0.06	244	12	13	269	Seat
453	Automobile Racetrack - Saturday peak hour	0.28	1,137	57	60	1,254	Attendee
454	Dog Racetrack	0.15	609	31	32	672	Attendee
460	Arena*	0.47	1,908	96	100	2,104	1,000 square feet of gross floor area
462	Professional baseball stadium	0.15	609	31	32	672	Attendee
465	Ice Skating Rink	1.33	5,400	273	284	5,957	1,000 square feet of gross floor area
466	Snow Ski Area	26.00	105,560	5,330	5,545	116,435	Slopes
470	Bingo hall	0.82	3,329	168	175	3,672	Attendee
473	Casino/Video Lottery Establishment	13.49	54,769	2,765	2,877	60,411	1,000 square feet of gross floor area
480	Amusement Park	3.95	16,037	810	842	17,689	Acre
482	Water slide park Saturday peak hour generator	22.92	93,055	4,699	4,888	102,642	Acre
488	Soccer Complex	16.43	66,706	3,368	3,504	73,578	Field
490	Tennis Courts	4.21	17,093	863	898	18,854	Court
491	Racquet/Tennis Club	3.82	15,509	783	815	17,107	Court
492	Health/Fitness Club	3.45	14,007	707	736	15,450	1,000 square feet of gross floor area
493	Athletic Club	6.29	25,537	1,289	1,341	28,167	1,000 square feet of gross floor area
495	Recreational Community Center	2.31	9,379	474	493	10,346	1,000 square feet of gross floor area

Section 7D – Transportation SDCs (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Institutional (Land Uses 500-599)							
501	Military Base	0.39	1,583	80	83	1,746	Employee
520	Elementary School	1.37	5,562	281	292	6,135	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	4,831	244	254	5,329	1,000 square feet of gross floor area
530	High School	0.97	3,938	199	207	4,344	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	26,512	1,339	1,393	29,244	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	22,330	1,128	1,173	24,631	1,000 square feet of gross floor area
537	Charter elementary school	4.96	20,138	1,017	1,058	22,213	1,000 square feet of gross floor area
537	School district office	2.04	8,282	418	435	9,135	1,000 square feet of gross floor area
540	Junior/Community College	1.86	7,552	381	397	8,330	1,000 square feet of gross floor area
550	University/College	1.17	4,750	240	250	5,240	1,000 square feet of gross floor area
560	Church	0.49	1,989	100	104	2,193	1,000 square feet of gross floor area
561	Synagogue - Friday	2.92	11,855	599	623	13,077	1,000 square feet of gross floor area
562	Mosque - Friday	4.22	17,133	865	900	18,898	1,000 square feet of gross floor area
565	Day Care Center	4.89	19,865	1,003	1,043	21,911	1,000 square feet of gross floor area
566	Cemetery	0.46	1,868	94	98	2,060	Acres
571	Prison	2.91	11,815	597	621	13,033	1,000 square feet of gross floor area
575	Fire and rescue station	0.48	1,949	98	102	2,149	1,000 square feet of gross floor area
580	Museum	0.18	731	37	38	806	1,000 square feet of gross floor area
590	Library	8.16	33,130	1,673	1,740	36,543	1,000 square feet of gross floor area
Medical (Land Uses 600-699)							
610	Hospital	0.97	3,938	199	207	4,344	1,000 square feet of gross floor area
620	Nursing Home	0.59	2,395	121	126	2,642	1,000 square feet of gross floor area
630	Clinic	3.28	13,317	672	699	14,688	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	3.53	14,332	724	753	15,809	1,000 square feet of gross floor area
650	Free-Standing emergency room	1.52	6,171	312	324	6,807	1,000 square feet of gross floor area
Office (Land Uses 700-799)							
710	General office building	1.15	4,669	236	245	5,150	1,000 square feet of gross floor area
712	Small office building	2.45	9,947	502	522	10,971	1,000 square feet of gross floor area
714	Corporate Headquarters Building	0.60	2,436	123	128	2,687	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.71	6,943	351	365	7,659	1,000 square feet of gross floor area
720	Medical-dental office building	3.46	14,048	709	738	15,495	1,000 square feet of gross floor area
730	Government Office Building	1.71	6,943	351	365	7,659	1,000 square feet of gross floor area
731	State Motor Vehicles Department	5.20	21,112	1,066	1,109	23,287	1,000 square feet of gross floor area
732	United States Post Office	11.21	45,513	2,298	2,391	50,202	1,000 square feet of gross floor area
733	Government Office Complex	2.82	11,449	578	601	12,628	1,000 square feet of gross floor area
750	Office park	1.07	4,344	219	228	4,791	1,000 square feet of gross floor area
760	Research and development center	0.49	1,989	100	104	2,193	1,000 square feet of gross floor area
770	Business park	0.42	1,705	86	90	1,881	1,000 square feet of gross floor area

Section 7D – Transportation SDCs (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Services (Land Uses 900-999)							
911	Walk-in Bank	12.13	49,248	2,487	2,587	54,322	1,000 square feet of gross floor area
912	Drive-in Bank	11.40	46,297	2,338	2,432	51,067	1,000 square feet of gross floor area
918	Hair Salon	1.45	5,887	297	309	6,493	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.42	30,125	1,521	1,582	33,228	1,000 square feet of gross floor area
925	Drinking Place	11.36	46,122	2,329	2,423	50,874	1,000 square feet of gross floor area
926	Food Cart Pod	3.08	12,505	631	657	13,793	Food Cart
930	Fast Casual Restaurant	14.13	57,368	2,897	3,013	63,278	1,000 square feet of gross floor area
931	Quality Restaurant	3.32	13,459	680	707	14,846	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	3.88	15,767	796	828	17,391	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	11.27	45,737	2,309	2,402	50,448	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	13.38	54,309	2,742	2,853	59,904	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no in	4.69	19,047	962	1,000	21,009	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	14.43	58,599	2,959	3,078	64,636	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	4.77	19,374	978	1,018	21,370	1,000 square feet of gross floor area
938	Coffee/donut kiosk	9.17	37,215	1,879	1,955	41,049	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through W	28.00	113,680	5,740	5,971	125,391	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Win	19.02	77,221	3,899	4,056	85,176	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	8.70	35,322	1,784	1,855	38,961	Servicing Position
942	Automobile Care Center	3.11	12,627	638	663	13,928	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	2.26	9,176	463	482	10,121	1,000 square feet of gross floor area
944	Gasoline/service station	38.24	155,273	7,840	8,156	171,269	1,000 square feet of gross floor area
945	Gasoline/service station with convenience market	11.29	45,834	2,314	2,407	50,555	1,000 square feet of gross floor area
947	Self-Service Car Wash	5.54	22,492	1,136	1,181	24,809	Wash stall
948	Automated Car Wash	13.60	55,216	2,788	2,900	60,904	Wash stall
949	Car Wash and Detail Center	14.20	57,652	2,911	3,028	63,591	1,000 square feet of gross floor area
950	Truck Stop	22.73	92,284	4,660	4,847	101,791	1,000 square feet of gross floor area
960	Super Convenience Market/Gas Station	69.28	281,277	14,202	14,774	310,253	1,000 square feet of gross floor area
970	Winery	7.31	29,679	1,499	1,559	32,737	1,000 square feet of gross floor area

* No ITE PM peak hour trip generation for this code/category, the trip generation shown is ITE weekday average divided by ten.

Source: ITE, Trip Generation Manual, 10th edition

PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

APPROVED AND ADOPTED by the City Council this 1st day of June 2022, by the following vote:

Ayes: Morten, Topaz, Chilton, Birkle, Scholl

Nays: None

Rick Scholl, Mayor

Attest:

Kathy Payne, City Recorder

Presented by:

DONOVAN
enterprises, inc.

March

2022

Water, Wastewater, Stormwater, and Transportation System Development Charge Update

Final Report

Prepared for:

City of St. Helens
FOUNDED 1850
Oregon

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City of St. Helens
2022 Water, Wastewater, Stormwater, and Transportation
SDC Methodology Update

Table of Contents

Introduction/History of the Project

The City of St. Helens conducts periodic updates to its Comprehensive Plan and its various Public Facility Plans to provide orderly and sustainable growth of municipal infrastructure. A key component to funding these public facilities is the system development charge (SDC) program. The purpose of this study is to update the schedule of SDCs for current demographic and demand data along with newly adopted City-wide capital improvement plans (CIP). The City is also proposing to update and formalize SDC methodologies for its water, wastewater, stormwater, and transportation systems. Please note, an update of the parks SDC is not included in this analysis. Based on conversations with City Staff, it is likely the City will commission a new parks master plan soon with results anticipated within eighteen months. When the new parks master plan is completed, it is the City's intent to revisit the parks SDC methodology and analysis at that time.

SDCs are one-time charges for new development—designed to recover the costs of infrastructure capacity needed to serve new development. This section describes the policy context and project scope upon which the body of this report is based. It concludes with a numeric overview of the calculations presented in subsequent sections of this report for water, wastewater, stormwater, transportation, and parks SDCs.

In January of 2021, the City hired Donovan Enterprises, Inc. to review and update the water, wastewater, stormwater, and transportation SDC fees. With this review and update, the City has stated a number of objectives:

- Review the basis for charges to ensure they are consistent with the currently adopted SDC methodologies and where appropriate, propose changes and or methodology enhancements;
- Address specific policy, administrative, and technical issues which had arisen from application of the existing SDCs;
- Determine the most appropriate and defensible fees, ensuring that development is paying its way;
- Consider possible revisions to the structure or basis of the charges which might improve equity or proportionality to demand;
- Provide clear, orderly documentation of the assumptions, and results, so that City staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort and was done in close coordination with City staff and available facilities planning documents. The SDC updates comply with St. Helens Municipal Code (SMC) chapter 13.24.

Table 1 gives a component breakdown for the current and proposed residential equivalent SDCs for water, wastewater, stormwater, transportation, and parks.

Table 1 - Component Breakdown of the Proposed Residential Equivalent SDCs

Line Item Description	Service Unit	Proposed	Current	Difference
Water:	per 5/8" or 3/4" water meter			
Reimbursement fee		$1,007	$1,666	$ (659)
Improvement fee		1,944	1,535	409
Administration fee @5%		148	160	(12)
Total		$3,099	$3,361	$ (262)
Wastewater:	per 5/8" or 3/4" water meter			
Reimbursement fee		$466	$1,023	$ (557)
Improvement fee		5,399	2,898	2,501
Administration fee @ 5%		293	196	97
Total		$6,158	$4,117	$2,041
Stormwater:	per Drainage Residential Unit			
Reimbursement fee		$348	$155	$193
Improvement fee		1,726	627	1,099
Administration fee @ 5%		104	39	65
Total		$2,177	$821	$1,356
Transportation:	per detached SF residence			
Reimbursement fee		$203	$ -	$203
Improvement fee		4,019	2,370	1,649
Administration fee @ 5%		211	-	211
Total		$4,433	$2,370	$2,063
Parks:	per detached SF residence			
Reimbursement fee		$85	$85	$ -
Improvement fee		2,720	2,720	-
Administration fee @ 5%		140	140	-
Total		$2,944	$2,944	$ -
Total SDCs:				
Reimbursement fee		$2,108	$2,929	$ (821)
Improvement fee		15,808	10,150	5,658
Administration fee @ 5%		896	535	360
Total		$18,811	$13,614	$5,197

Analytical Process for the Methodology Updates

The essential ingredient in the development of an SDC methodology is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the newly formulated and adopted capital improvement plans for water, wastewater, stormwater, and

transportation. We have supplemented these data sources with City utility billing records, certified census data, and other documents that we deemed helpful, accurate, and relevant to this study. Table 2 contains a bibliography of the key documents/sources that we relied upon to facilitate our analysis and hence the resulting SDCs.

Table 2 - Data Sources for the Calculation of SDCs

Service	Master Plan Document and/or Corroborating Source Documentation
Water	• City of St. Helens Water CIP; 2022 Water System Master Plan • City of St. Helens Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2021 • City of St. Helens Water System Fixed Asset Schedule; June 30, 2021; City Records • City of St. Helens Utility Billing records for fiscal 2020-2021 • Water meters in service per City Staff; effective January 1, 2022
Wastewater	• City of St. Helens Wastewater CIP; 2021 Wastewater Master Plan • City of St. Helens Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2021 • St. Helens wastewater system fixed asset schedule; June 30, 2021; City records • City of St. Helens Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; January 1, 20221 • City of St. Helens monthly wastewater flows to lagoons reports • Portland State University, College of Urban Affairs, Population Research Center; Certified census for St. Helens, Oregon; June, 2021
Stormwater	• City of St. Helens Stormwater CIP; 2021 Stormwater Master Plan • St. Helens Residential Buildable Lands Inventory Analysis; March, 2019 • St. Helens Employment Buildable Lands Inventory Analysis; January, 2022; St. Helens Planning Department Staff • City of St. Helens Comprehensive Plan Map; 2019 update • City of St. Helens Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2021 • St. Helens stormwater system fixed asset schedule; June 30, 2021; City records
Transportation	• City of St. Helens 2015 Corridor Master Plan • City of St. Helens 2019 Riverfront Connector Plan • City of St. Helens transportation system fixed asset schedule; June 30, 2021; City records • U.S. Bureau of the Census; American Community Survey: ✓ City of St. Helens dwelling units; 2019 estimated ✓ City of St. Helens number of employees; 2019 estimated • Trip Generation Manual; Institute of Transportation Engineers; 10th Edition

The data sources shown in Table 2 were used to formulate the two (2) components of the SDCs. These components are the reimbursement and improvement fees. A brief definition of the two components is:

- *The reimbursement fee* considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.
- *The improvement fee* portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves system capacity to better serve current customers. The costs for this type of project must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of additional equivalent residential units to be served by the City's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes. The improvement fee must also provide a credit for construction of a qualified public improvement.

SDC Legal Authorization and Background

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The statute is specific in its definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development or expansion of existing development and assessed at the time of development approval or increased usage of the system. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property. Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs. In this study, the project team as paid attention to this detail to align future infrastructure costs to those responsible for paying those costs. The reasons for this attention are as follows:

- *Fund Balances* - To the extent that SDC revenue is currently available in fund balance, that revenue should be deducted from its corresponding cost basis. For example, if the city has wastewater improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the wastewater system's improvement fee cost basis to prevent charging twice for the same capacity.
- *Compliance Costs* - ORS 223.307(5) authorizes the expenditure of SDCs on "the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs.

Reimbursement Fee Methodology

The reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. Generally, if a system were adequately sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. However, staged system expansion is needed, and an improvement fee is imposed to allocate those growth-related costs. Even in those cases, the new customer also relies on capacity within the existing system, and a reimbursement component is warranted.

In order to determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to the City's customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both of these points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local facilities, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system, and not already supported by new customers. Tax supported activities fail this test since funding sources have historically been from general revenues, or from revenues which emanate, at least in part, from the properties now developing. Second, the cost basis is allocated between used and unused capacity, and, capacity available to serve growth. In the absence of a detailed asset by asset analysis, it is appropriate to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units over the planning period. This approach reflects the philosophy, consistent with the City's updated master plans, that facilities have been sized to meet the demands of the customer base within the established planning period.

Improvement Fee Methodology

There are three basic approaches used to develop improvement fee SDCs: "standards driven", "improvements-driven", and "combination/hybrid" approaches. The "standards-driven" approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards has been adopted but no specific list of projects is available. The "improvements-driven" approach is based on a specific list of planned capacity increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available, and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the "improvements driven" and "standards-driven" approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

In the past, the City has utilized the "improvements-driven" approach for the calculation of SDCs. This study continues to use this method and has relied on the capital improvement plans that are incorporated in the master plans, and plan updates for the water, wastewater, stormwater, and transportation systems.

For this SDC update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is based on the capital improvement plans established by the City for the municipal services. The costs that can be applied to the improvement fees are those that can reasonably be allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a wastewater collection line that exclusively serves a newly developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be a water distribution reservoir that both expands water storage capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the respective system's capacity to accommodate growth or increase its respective level of performance have been included in the cost basis of the fee. As part of this SDC update, City Staff and their engineering consultants were asked to review the planned capital improvement lists in order to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City's evaluation:

Figure 1 - SDC Eligibility Criteria

City of St. Helens

Steps Toward Evaluating

Capital Improvement Lists for SDC Eligibility

ORS 223

1. Capital improvements mean the facilities or assets used for:
    a. Water supply, transmission, storage, and distribution
    b. Wastewater collection, transmission, treatment, and disposal
    c. Stormwater, conveyance, detention, treatment, and disposal
    d. Transportation – intersection improvements, street reconstruction and widening, roadway enhancement, and bike/ped expansion

    This definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;
2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related;
3. An increase in system capacity is established if a capital improvement increases the "level of performance or service" provided by existing facilities or provides new facilities.

Under the City' approach, the following rules will be followed.

1. Repair costs are not to be included;
2. Replacement costs will not be included unless the replacement includes an upsizing of system capacity and/or the level of performance of the facility is increased;
3. New regulatory compliance facility requirements fall under the level of performance definition and should be proportionately included;
4. Costs will not be included which bring deficient systems up to established design levels.

In developing the improvement fee, the project team in consultation with City staff evaluated each of its CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by the City. The improvement fee is calculated as a function of the estimated number of projected additional Equivalent Residential Units for water, wastewater, and stormwater over the planning horizon.

We measure demand for transportation facilities in PM Peak Hour Vehicle Trips. An industry standard for allocating demands on a transportation system is to proportion the costs based on the relative number of trips created by a development. Trips are technically referred to as PMPHVTs, and trip rates are published by the Institute of Transportation Engineers (ITE) for various land uses. Once the future costs to serve growth

have been segregated (i.e., the numerator), they can be divided into the total number of new PMPHVTs that will use the capacity derived from those investments (i.e., the denominator).

Methodology for the Granting of Credits, Discounts, and Exemptions

SDC Credits Policy

ORS 223.304 requires that credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval, is identified in the Capital Improvement Plan, and either is not located on or contiguous to property that is the subject of development approval or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the particular development project. The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the particular project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project. In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the Capital Improvement Plan, or provide a share of the cost of an improvement by other means.

The City has adopted a policy for granting SDC credits and has codified this policy in the St. Helens Municipal Code (SHMC) §13.24.130. The adopted SDC credit policy consists of seven (7) items as follows:

SHMC §13.24.130

1. When development occurs that is subject to a system development charge, the system development charge for the existing use, if applicable, shall be calculated and if it is less than the system development charge for the use that will result from the development, the difference between the system development charge for the existing use and the system development charge for the proposed use shall be the system development charge. If the change in the use results in the system development charge for the proposed use being less than the system development charge for the existing use, no system development charge shall be required. No refund or credit shall be given unless provided for by another subsection of this section.
2. A credit shall be given to the permittee for the cost of a qualified public improvement upon acceptance by the city of the public improvement. The credit shall only be for the improvement fee charged for the type of improvement being constructed, and the applied credit shall not exceed the amount of the improvement fee. When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee, the excess credit may be applied against improvement fees that accrue in subsequent phases of the project.
3. If a qualified public improvement is located in whole or in part on or contiguous to the property that is the subject of development approval and is required to be built larger or with greater capacity than is necessary for the particular development project, a credit shall be given for the cost of the portion of the improvement that exceeds the city's minimum standard facility size or capacity needed to serve the particular development project or property. The applicant shall have the burden of demonstrating that a particular improvement qualifies for credit under this section. The request for credit shall be filed in writing no later than 60 days after acceptance of the improvement by the city.
4. Notwithstanding subsection (3) of this section, when establishing a methodology for a system development charge, the city may provide for a credit against the improvement fee, the

reimbursement fee, or both, for capital improvements constructed as part of the development which reduce the development's demand upon existing capital improvements and/or the need for future capital improvements, or a credit based upon any other rationale the council finds reasonable.

5. Credit shall not be transferable from one development to another except in compliance with standards adopted by the city council.
6. Credit shall not be transferable from one type of system development charge to another.
7. Credits shall be used within 10 years from the date the credit is given. (Ord. 3082 §7, 2008; Ord. 2836 § 13, 2001)

SDC Discount Policy

The City, at its sole discretion may discount the SDC rates by choosing not to charge a reimbursement fee for excess capacity, or by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC rates may also be applied on a pro-rata basis to any identified deficiencies, which must be funded from sources other than improvement fee SDCs. The portion of growth-required costs to be funded with SDCs must be identified in the CIP. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as user fees or general fund contributions, in order to acquire the facilities identified in the Updated Master Plan(s).

Partial and Full SDC Exemption

The City may exempt certain types of development, from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees and property taxes. As in the case of SDC credits, the City has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in SHMC §13.24.120, and is as follows:

SHMC §13.24.120

1. Structures and uses established and existing on or before June 19, 1991, are exempt from a system development charge, except water and sewer charges, to the extent of the structure or use then existing and to the extent of the parcel of land as it is constituted on that date. Structures and uses affected by this subsection shall pay the water or sewer charges pursuant to the terms of this chapter upon the receipt of a permit to connect to the water or sewer system.
2. Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the State Uniform Building Code, are exempt from all portions of the system development charge.
3. Alterations, additions, replacements, or changes in use that do not increase the parcel or structure's use of the public improvement facility are exempt from all portions of the system development charge.
4. A project financed by city revenues is exempt from all portions of the system development charge. (Ord. 2836 § 12, 2001)

Water SDCs

Water Capital Improvement Plan

The principal source document for the water capital improvement plan (CIP) was the 2022 twenty (20) year Water System Capital Improvement Plan. For this water SDC methodology update, the 2022 water CIP was reviewed for accuracy with City Staff and where appropriate amended. This amendment process consisted of two steps. The first step was to eliminate master plan projects that City Staff deemed unnecessary at the current time due to the very long lead times anticipated for their development. The second step in the CIP amendment process was to eliminate the cost of planned projects (or portions of projects) that have been funded and constructed since the adoption of the last water master plan in 2012. In this case, the planned future costs are deducted from the CIP. The actual costs spent on these projects were capitalized by the City, and now reside in the water system fixed asset inventory (i.e., balance sheet assets). These historical costs will be included in the reimbursement fee calculations.

The amended water system CIP now consists of future projects that remain a 20-year priority for the City, and only consists of projects yet to be completed. The resulting CIP that was used for this SDC methodology update is shown in summary form in Table 3.

Table 3 – 2022 Water Master Plan Capital Improvement Plan

Project Priority	Project ID	Project Name	Total Estimated Cost (2022 Dollars)	SDC	Rates	Total
1	1.1	Repair existing 2.0 MG reservoir	$ 590,000	0%	100%	100%
1	1.2	Install redundant Pittsburg Rd./Milton Creek Crossing	610,000	20%	80%	100%
1	1.3	High PZ low pressure study	30,000	0%	100%	100%
1	1.4	Helens Way PZ boundary modification	400,000	56%	44%	100%
1	1.5	Bayport well activation	10,000	40%	60%	100%
1	1.6	Lemont BS to Pittsburg Rd. pipeline replacement	6,000,000	55%	45%	100%
1	1.7	Backup generator for public works shop	100,000	40%	60%	100%
1	1.8	Spotted Hill and Wapiti Drive PZ boundary modificatio	160,000	0%	100%	100%
1	1.9	Full rate study	30,000	100%	0%	100%
		Subtotal priority 1 projects	$ 7,930,000			
2	2.1	Water master plan update #1	$ 200,000	100%	0%	100%
2	2.2	Elk Ridge PS condition improvements	200,000	100%	0%	100%
2	2.3	Ranney wells control upgrades	500,000	40%	60%	100%
2	2.4	Small pipe diameter replacement phase 1	15,300,000	0%	100%	100%
		Subtotal priority 2 projects	$ 16,200,000			
3	3.1	Water master plan update #2	$ 200,000	100%	0%	100%
3	3.3	Lemont PS condition improvements	1,300,000	55%	45%	100%
3	3.4	Small pipe diameter replacement phase 2	6,900,000	0%	100%	100%
		Subtotal priority 3 projects	$ 8,400,000			
Long Term pending	3.2	4.0 MG reservoir construction	24,800,000	40%	60%	100%
		Capital Improvement Plan totals	$ 57,330,000			

Water Customers Current and Future Demographics

Existing and Future Water Demand Growth

Current St. Helens water demands are based on historical customer billing records, and actual water sales and water meters in service as of January 1, 2022. Projected demands are estimated based on a forecasted annual growth rate in maximum daily demand (MDD) of 1.30 percent per year within the City's existing urban growth boundary. This annual growth factor is from the recently completed 2022 Water System Master Plan.

Estimated Demand per Equivalent 5/8" or 3/4" Water Meter

The City principally serves single-family residential customers and to a lesser extent, small commercial and industrial customers. Single-family residential water services generally have a consistent daily pattern of water use whereas water demands for multifamily residences, commercial and industrial users may vary significantly from service to service depending on the number of multifamily units per service or the type of commercial enterprise. When projecting future water demands based on maximum daily demand change, the water needs of nonresidential and multi-family residential customers are represented by comparing the water use volume at these services to the average single-family residential water service. A method to estimate this relationship is to calculate "equivalent dwelling units (EDUs)". In the case of St. Helens, the standard residential unit of demand is the rated capacity (in gallons per minute) of the 5/8" and 3/4" water meter. As of January 1, 2022, the City had 5,288 active water meters in service, 5,152 of which were 5/8" x 3/4" and 3/4" x 3/4" meters serving single family residential customers. In other words, 97% of active meters are serving single family residential or very low demand commercial customers. The process for calculating equivalent ¾" meters is shown below in Table 4.

Table 4 – Estimated ¾" Equivalent Meters in Service as of January 1, 2022

Meter Size	Total Meters in Service	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	3/4" Meter Equivalents
5/8 inch - displacement or multi-jet	8	30	1.00	8
3/4 inch - displacement or multi-jet	5,144	30	1.00	5,144
1.0 inch - displacement or multi-jet	29	50	1.67	48
1.5 inch - displacement or class I turbine	15	100	3.33	50
2.0 inch - displacement or class I & II turbine	22	160	5.33	117
3.0 inch - displacement	18	300	10.00	180
4.0 inch - displacement or compound	44	500	16.67	733
6.0 inch - displacement or compound	4	1,000	33.33	133
8.0 inch - compound	4	1,600	53.33	213
	5,288			6,628

Projected Demands

The planning horizon for the master plan is approximately 20 years, through the year 2041. That is the forecast horizon that is used for the water SDC update. In prior master plans, an estimated number of EDUs per acre for each land use type was established based on (then) current water demands by customer class and total developed land area by land use type. Land use type is analogous to customer class, which is to say the land use or zoning of a particular property reflects the type of water service, such as residential or commercial, provided to that property. The estimated number of potential EDUs per acre was applied to developable land within the existing water service area to estimate water demand.

For this SDC update, the project team did not use the old master plan strategy to forecast future water demand based on land use. With the benefit of actual meters in service, and a MDD growth forecast that is predicated on existing growth trends for the City a forecast of future equivalent ¾" meters was developed. Based upon these decision rules, the forecast of equivalent meters in use for this water SDC update are shown below in Table 5.

Table 5 – Forecast of Equivalent ¾" Meters for the 2021 Water SDC Update Study

				3/4" Meter Equivalence		
Meter Size	Total Meters in Service	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	2021	2041	Growth
5/8 inch - displacement or multi-jet	8	30	1.00	8	10	2
3/4 inch - displacement or multi-jet	5,144	30	1.00	5,144	6,660	1,516
1.0 inch - displacement or multi-jet	29	50	1.67	48	63	14
1.5 inch - displacement or class I turbine	15	100	3.33	50	65	15
2.0 inch - displacement or class I & II turbine	22	160	5.33	117	152	35
3.0 inch - displacement	18	300	10.00	180	233	53
4.0 inch - displacement or compound	44	500	16.67	733	949	216
6.0 inch - displacement or compound	4	1,000	33.33	133	173	39
8.0 inch - compound	4	1,600	53.33	213	276	63
	5,288			6,628	8,581	1,954
Annual growth rate in Max Day Demand	1.30%					

Source - St. Helens utility billing records

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities

Reimbursement Fee Calculations

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. In theory, this should be a simple calculation. Simply go to the Utility's balance sheet, find the book value of assets in service, and divide that cost by the number of forecasted new connections to the water system. That is a simple calculation, and it is wrong. In order to determine an equitable reimbursement, we have to account for some key issues of rate equity;

- First, the cost of the system to the City's existing customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources.
- Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.
- Third, the accounting treatment of asset costs generally has no relationship to the capacity of an asset to serve growth. In the absence of a detailed asset by asset analysis detailed in the balance sheet (or fixed asset schedule), a method has to be used to allocate cost to existing and future users of the asset. Generally, it is industry practice to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units (i.e., equivalent ¾" meters) over the planning period.
- Fourth, the Oregon SDC statute has strict limitations on what type of assets can be included in the basis of the reimbursement fee. ORS 223.299 specifically states that a "capital improvement" does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

For this water SDC methodology update, the following discrete calculation steps were followed to arrive at the recommended water reimbursement fee.

Step 1: Calculate the original cost of water fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of water fixed assets**.

Step 2: Subtract from the adjusted original cost of water fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of water fixed assets in service**.

Step 3: Subtract from the modified book value of water assets in service any grant funding or contributed capital. This arrives at the **modified book value of water fixed assets in service net of grants and contributed capital**.

Step 4: Subtract from the modified book value of water fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross water reimbursement fee basis**.

Step 5: Subtract from the gross water reimbursement fee basis the fund balance held in the Water Reimbursement SDC fund (if available). This arrives at the **net water reimbursement fee basis**.

Step 6: Divide the net water reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total water reimbursement fee is shown below in Table 6.

Table 6 - Calculation of the Water Reimbursement Fee

Line Item Description		Water System Totals
Utility Plant-in-Service (book value):[1]		
Land, easements & right of way	$	1,855,895
Buildings and improvements		4,614,982
Machinery and equipment		660,155
Distribution system infrastructure		4,147,338
Water storage systems		519,625
Construction Work-in-Progress		-
Total Utility Plant-in-Service		11,797,995
Eliminating entries:		
Principal outstanding on bonds, notes, and loans payable		
2013 Capital One water refunding note		3,159,000
Developer contributions		-
Grants and contributed capital from governments		-
Total eliminating entries		3,159,000
Net basis in utility plant-in-service available to serve future customers	$	8,638,995
Estimated existing and future 3/4" Meter Equivalents (MEs)		8,581
Calculated reimbursement fee - $ per 3/4"ME	$	1,007

[1] Source: St. Helens Accounting Summary Report - Capitalized Assets as of June 30, 2021

Improvement Fee Calculations

The calculation of the water improvement fee is more streamlined than the process used to calculate the water reimbursement fee. This study continues to use the improvements-driven method and has relied on the 2022 water system capital improvement plan. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.

Step 2: Subtract from the gross improvement fee basis the fund balance held in the Water Improvement SDC Fund. This arrives at **the net water improvement fee basis**.

Step 3: Divide the net water improvement fee basis by the forecasted number of growth equivalent ¾" meters over the planning period. This arrives at **the total water improvement fee**.

The actual data that was used to calculate the total water improvement fee is shown below in Table 7.

Table 7 - Calculation of the Water Improvement Fee

Master Plan ID	Project Description	Estimated Cost of Improvement in 2022 Dollars	Project Costs Cost Attributed to Existing Demands	Costs Attributed to Future Demands
	Priority 1 improvements:			
1.1	Repair existing 2.0 MG reservoir	$590,000	$590,000	$0
1.2	Install redundant Pittsburg Rd./Milton Creek Crossing	$610,000	$488,000	$122,000
1.3	High PZ low pressure study	$30,000	$30,000	$0
1.4	Helens Way PZ boundary modification	$400,000	$176,000	$224,000
1.5	Bayport well activation	$10,000	$6,000	$4,000
1.6	Lemont BS to Pittsburg Rd. pipeline replacement	$6,000,000	$2,700,000	$3,300,000
1.7	Backup generator for public works shop	$100,000	$60,000	$40,000
1.8	Spotted Hill and Wapiti Drive PZ boundary modification	$160,000	$160,000	$0
1.9	Full rate study	$30,000	$0	$30,000
	Priority 2 improvements:			
2.1	Water master plan update #1	200,000	-	200,000
2.2	Elk Ridge PS condition improvements	200,000	-	200,000
2.3	Ranney wells control upgrades	500,000	300,000	200,000
2.4	Small pipe diameter replacement phase 1	15,300,000	15,300,000	-
	Priority 3 improvements:			
3.1	Water master plan update #2	200,000	-	200,000
3.3	Lemont PS condition improvements	1,300,000	585,000	715,000
3.4	Small pipe diameter replacement phase 2	6,900,000	6,900,000	-
	Totals	$32,530,000	$27,295,000	$5,235,000

Total Improvement Fee Eligible Costs for Future System Improvements	$5,235,000
less: water SDC fund balance as of June 30, 2021	1,436,333
Adjusted Improvement Fee Eligible Costs for Future System Improvements	$3,798,667
Total Growth in 3/4" Meter Equivalents (20 year forecast)	1,954
Calculated Water Improvement Fee SDC per Meter Equivalent	$1,944

[1] Allocations from City staff

Water SDC Model Summary

The 2022 water SDC update was done in accordance with St. Helens Municipal Code Chapter 13.24, and with the benefit of adopted plan updates for water services. We recommend the City update the SDC charge to reflect the current capital improvement program. A comparison of the proposed and current water SDCs for the average single-family residential customer is shown below in Table 8.

Table 8 - Proposed and Current Water SDCs for a 5/8” or 3/4" Meter

Water SDC Components	Proposed	Current	Difference
Reimbursement fee	$ 1,007	$ 1,666	$ (659)
Improvement fee	1,944	1,535	409
Administration fee	148	160	(12)
Total water SDC	$ 3,099	$ 3,361	$ (262)

For water meters larger than ¾”, the project team has developed a schedule of SDCs based on the general design criteria for meters that are installed in the St. Helens water service area. This criterion is from the standard approach of using American Water Works Association design criteria for displacement and compound water meters.

The resulting schedule of water SDCs for the array of potential meter sizes is shown below in Table 9.

Table 9 - Proposed Schedule of Water SDCs by Potential Water Meter Size

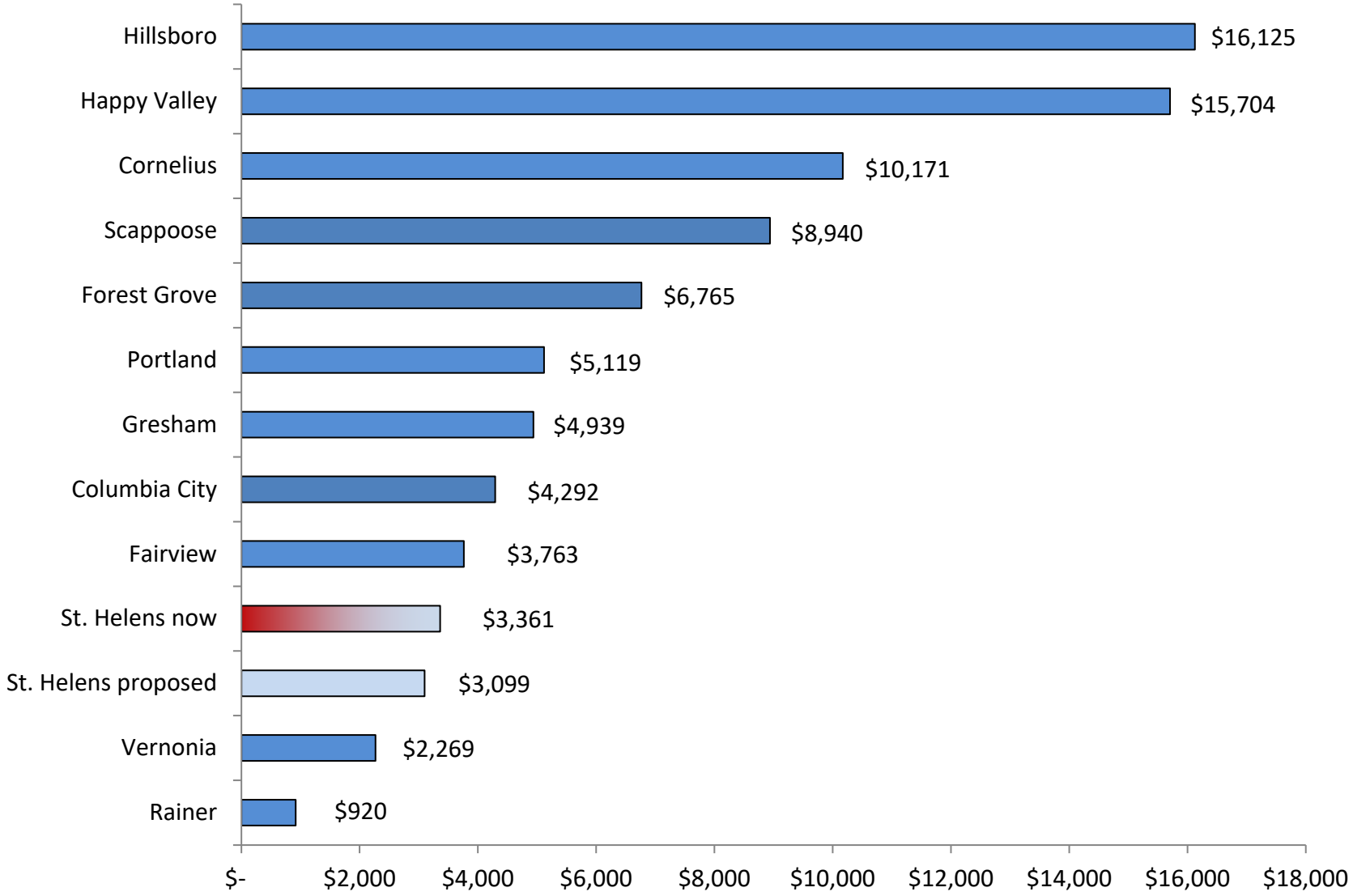
Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Water SDCs			
			Reimbursement	Improvement	Administration	Total
0.75"x 0.75" - Displacement Multi-jet	30	1.00	$ 1,007	$ 1,944	$ 148	$ 3,099
1.00 inch - Displacement Multi-jet	50	1.67	1,678	3,241	246	5,165
1.50 inch - Displacement Class I Turbine	100	3.33	3,356	6,482	492	10,329
2.00 inch - Displacement or Class I & II Turbine	160	5.33	5,369	10,371	787	16,527
3.00 inch - Displacement	300	10.00	10,067	19,445	1,476	30,988
4.00 inch - Displacement or Compound	500	16.67	16,779	32,408	2,459	51,646
6.00 inch - Displacement or Compound	1000	33.33	33,558	64,816	4,919	103,292
8.00 inch - Compound	1600	53.33	53,692	103,706	7,870	165,268

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Water SDCs in Neighboring Communities

Shown below in Figures 2 is a chart that compares the current and proposed water SDC for a single-family customer in St. Helens to the same charge in similar communities in Yamhill County.

Figure 2 - Neighboring Communities' Water SDCs (Detached Single Family) January, 2022



Wastewater SDCs

Wastewater Capital Improvement Plan

The principal source of data for the wastewater system CIP is the adopted November, 2021 Wastewater Master Plan. With the assistance of City Staff, the project team has summarized the wastewater system CIPs for this SDC update. The 2021 wastewater system CIP is shown in Table 10.

Table 10 - 2021 Wastewater System CIP

Project No.	Project Name	Primary Purpose	Total Estimated Cost (2021)	City-Wide SDCs	Developers	Rates	Total
Priority 1 Improvements							
1.1	WWTP Influent Flow Meter	Operations	$ 68,000	10%	0%	90%	100%
1.2	Basin 4 Pipeline Upsize and Reroute	Capacity	3,600,000	0%	0%	100%	100%
1.3	Basin 5 Pipeline Upsize	Capacity	4,500,000	3%	0%	97%	100%
1.4	Install Overflow Alarms	Operations	9,000	20%	0%	80%	100%
1.5	Pump Station 3 On-site Generator	Operations	90,000	0%	0%	100%	100%
1.6	Annual I/I Reduction Program (6-Year)	Capacity	3,000,000	20%	0%	80%	100%
	Total Priority 1 Improvement Cost		**$ 11,267,000**				
Priority 2 Improvements							
2.1	Riverfront District Trunkline and Pump Station 1 Relocation	Capacity, Operations	$ 2,400,000	18%	0%	82%	100%
2.2	Relocate Pump Station 11	Capacity, Operations	3,100,000	68%	0%	32%	100%
2.3	Industrial Business Park Trunklines and Pump Station	Capacity, Operations	13,200,000	50%	50%	0%	100%
2.4	Pump Station Upgrades	Operations, Safety	700,000	20%	0%	80%	100%
2.5	Master Plan Update	Operations	300,000	100%	0%	0%	100%
2.6	Annual I/I Reduction Program (8-Year)	Capacity	4,000,000	20%	0%	80%	100%
	Total Priority 2 Improvement Cost		**$ 23,700,000**				
Priority 3 Improvements							
3.1	Basin 6 Pipeline Upsize and Reroute	Capacity	$ 6,300,000	7%	0%	93%	100%
3.2	Basin 2 Pipeline Upsize and Reroute	Capacity	9,400,000	12%	0%	88%	100%
3.3	Southern Trunkline Upsize	Capacity	3,900,000	26%	0%	74%	100%
3.4	Pump Station 7 Upgrades	Capacity	2,200,000	65%	0%	35%	100%
3.5	Basin 1 Pipeline Upsize	Capacity	1,800,000	9%	0%	91%	100%
3.6	Basin 3 Pipeline Upsize	Capacity	1,200,000	3%	0%	97%	100%
3.7	Annual I/I Reduction Program (6-year)	Capacity	3,000,000	20%	0%	80%	100%
	Total Priority 3 Improvement Cost		**$ 27,800,000**				
	Total Collection System Improvement Costs		**$ 62,767,000**				

Wastewater Customers Current and Future Demographics

Existing Wastewater Demand and Population Growth

Current St. Helens wastewater demands documented in monthly wastewater flow reports are based on Average Annual Dry Weather Flows (AADWF) to the City's facultative treatment lagoon systems. These flows are expressed in million gallons per day (MGD) figures. For the purpose of this wastewater SDC update, the project team had to translate these MGD figures into standard billing units used for charging out SDCs. In this case, those standard billing figures are expressed in EDUs. In the wastewater industry, an EDU is typically defined as the amount of wastewater a single-family residential customer contributes to the wastewater system during an average month in the winter, where winter is defined as November through April. We have estimated the winter average water consumption for the single-family residential customer class. For the winter period November, 2020 through April, 2021, we estimate the average single-family residential customer contributes 3,561 gallons of water to the wastewater system in the average winter month. This figure translates to 117 gallons per day.

Forecasted EDUs

With this historical consumption data in hand, the project team was able to calculate the number of EDUs relative to the AADWF data from the 2021 Wastewater Master Plan (Table 1-2; Projected Planning Flows). The EDU calculation methodology is shown in Table 11.

Table 11 - Forecast of Current and Future Wastewater EDUs

	2020	2040	Growth	CAGR[1]
Average Dry Weather Flow (ADWF) MGD[2]	1.1100	1.4100	0.3000	1.20%
Observed St. Helens EDU (per utility billing)				
Ccf per month - Single Family Residential	4.76	4.76		
Gallons per month - SFR	3,561	3,561		
Gallons per day - SFR	117	117		
Estimated EDUs based on ADWF and observed St. Helens SFR winter ave. metered water consumption	9,481	12,044	2,563	1.20%

[1] CAGR - Compounded Annual Growth Rate

[2] Source - City of St. Helens 2021 Wastewater Master Plan; Keller Associates; November, 2021

Reimbursement Fee Calculations

The wastewater reimbursement fee methodology mirrors that used for the water reimbursement fee. The methodological steps in its construction are restated here.

Step 1: Calculate the original cost of wastewater fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of wastewater fixed assets**.

Step 2: Subtract from the adjusted original cost of wastewater fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of wastewater fixed assets in service**.

Step 3: Subtract from the modified book value of wastewater assets in service any grant funding or contributed capital. This arrives at the **modified book value of wastewater fixed assets in service net of grants and contributed capital**.

Step 4: Subtract from the modified book value of wastewater fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This includes the principal balance on the Clean Water State Revolving loan that has yet to be repaid. This arrives a **gross wastewater reimbursement fee basis**.

Step 5: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Wastewater Reimbursement SDC fund (if available). This arrives at the **net wastewater reimbursement fee basis**.

Step 6: Divide the net wastewater reimbursement fee basis by future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total wastewater reimbursement fee is shown below in Table 12.

Table 12 - Calculation of the Wastewater Reimbursement Fee

Line Item Description	Wastewater System Totals
Utility Plant-in-Service (book value):[1]	
Construction, general costs, permits, fees, etc.	$ 20,052
Buildings and Improvements	10,558,355
Machinery and equipment	684,427
Vehicles	eliminated
Construction Work-in-Progress	-
Total Utility Plant-in-Service	11,262,834
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable	
DEQ SRF Loan R06801	1,050,000
DEQ SRF Loan R80163	3,814,953
2013 Capital One Sewer Refunding Note	790,000
Developer Contributions	-
Grants and contributed capital from governments	-
Total eliminating entries	5,654,953
Net basis in utility plant-in-service available to serve future customers	$ 5,607,881
Estimated existing and future wastewater treatment EDUs	12,044
Calculated reimbursement fee - $ per treatment EDU	$ 466

[1] Source: St. Helens Accounting Summary Report - Capitalized Assets as of June 30, 2021

Improvement Fee Calculations

The calculation of the wastewater improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the wastewater treatment, pump stations, and collection systems. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.

Step 2: Subtract from the gross improvement fee basis the fund balance held in the Wastewater Improvement SDC Fund. This arrives at **the net wastewater improvement fee basis**.

Step 3: Divide the net wastewater improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at **the total wastewater improvement fee**.

The actual data that was used to calculate the total wastewater improvement fee is shown below in Table 13.

Table 13 - Calculation of the Wastewater Improvement Fee

Project No.	Project Name	Primary Purpose	Total Estimated Cost (2021)	City-Wide SDCs	Developers	Rates	Total
Priority 1 Improvements							
1.1	WWTP Influent Flow Meter	Operations	$ 68,000	6,800	-	61,200	68,000
1.2	Basin 4 Pipeline Upsize and Reroute	Capacity	3,600,000	-	-	3,600,000	3,600,000
1.3	Basin 5 Pipeline Upsize	Capacity	4,500,000	135,000	-	4,365,000	4,500,000
1.4	Install Overflow Alarms	Operations	9,000	1,800	-	7,200	9,000
1.5	Pump Station 3 On-site Generator	Operations	90,000	-	-	90,000	90,000
1.6	Annual I/I Reduction Program (6-Year)	Capacity	3,000,000	600,000	-	2,400,000	3,000,000
	Total Priority 1 Improvement Cost		**$ 11,267,000**	**$ 743,600**	**$ -**	**$ 10,523,400**	**$ 11,267,000**
Priority 2 Improvements							
2.1	Riverfront District Trunkline and Pump Station 1 Relocation	Capacity, Operations	$ 2,400,000	432,000	-	1,968,000	2,400,000
2.2	Relocate Pump Station 11	Capacity, Operations	3,100,000	2,108,000	-	992,000	3,100,000
2.3	Industrial Business Park Trunklines and Pump Station	Capacity, Operations	13,200,000	6,600,000	6,600,000	-	13,200,000
2.4	Pump Station Upgrades	Operations, Safety	700,000	140,000	-	560,000	700,000
2.5	Master Plan Update	Operations	300,000	300,000	-	-	300,000
2.6	Annual I/I Reduction Program (8-Year)	Capacity	4,000,000	800,000	-	3,200,000	4,000,000
	Total Priority 2 Improvement Cost		**$ 23,700,000**	**$ 10,380,000**	**$ 6,600,000**	**$ 6,720,000**	**$ 23,700,000**
Priority 3 Improvements							
3.1	Basin 6 Pipeline Upsize and Reroute	Capacity	$ 6,300,000	441,000	-	5,859,000	6,300,000
3.2	Basin 2 Pipeline Upsize and Reroute	Capacity	9,400,000	1,128,000	-	8,272,000	9,400,000
3.3	Southern Trunkline Upsize	Capacity	3,900,000	1,014,000	-	2,886,000	3,900,000
3.4	Pump Station 7 Upgrades	Capacity	2,200,000	1,430,000	-	770,000	2,200,000
3.5	Basin 1 Pipeline Upsize	Capacity	1,800,000	162,000	-	1,638,000	1,800,000
3.6	Basin 3 Pipeline Upsize	Capacity	1,200,000	36,000	-	1,164,000	1,200,000
3.7	Annual I/I Reduction Program (6-year)	Capacity	3,000,000	600,000	-	2,400,000	3,000,000
	Total Priority 3 Improvement Cost		**$ 27,800,000**	**$ 4,811,000**	**$ -**	**$ 22,989,000**	**$ 27,800,000**
	Total Collection System Improvement Costs		**$ 62,767,000**	**$ 15,934,600**	**$ 6,600,000**	**$ 40,232,400**	**$ 62,767,000**

Total improvement fee-eligible costs for future system improvements	$ 15,934,600
less: wastewater SDC fund balance as of June 30, 2021	2,097,448
Adjusted improvement fee-eligible costs for future system improvements	$ 13,837,152
Growth in wastewater EDUs	2,563
Wastewater improvement fee SDC	$ 5,399

Wastewater SDC Model Summary – Single-Family Residential

The 2022 wastewater SDC update was done in accordance with St. Helens Municipal Code Chapter 13.24, and with the benefit of adopted capital improvement plans and plan updates for wastewater services. We recommend the City update the SDC charge to reflect the current capital improvement program. A comparison of the proposed and current wastewater SDCs for the average single-family residential customer is shown below in Table 14.

Table 14 - Proposed and Current Wastewater SDCs for a 3/4" Meter

Wastewater SDC Components	Proposed	Current	Difference
Reimbursement fee	$ 466	$ 1,023	$ (557)
Improvement fee	5,399	2,898	2,501
Administration fee	293	196	97
Total wastewater SDC	$ 6,158	$ 4,117	$ 2,041

For water meters larger than ¾", the schedule of wastewater SDC uses the same flow factors that were developed for the water SDCs (i.e., AWWA standards for displacement and compound meters). The complete proposed schedule of wastewater SDCs by potential meter size are shown in Table 15.

Table 15 - Proposed Schedule of Residential Wastewater SDCs by Potential Water Meter Size

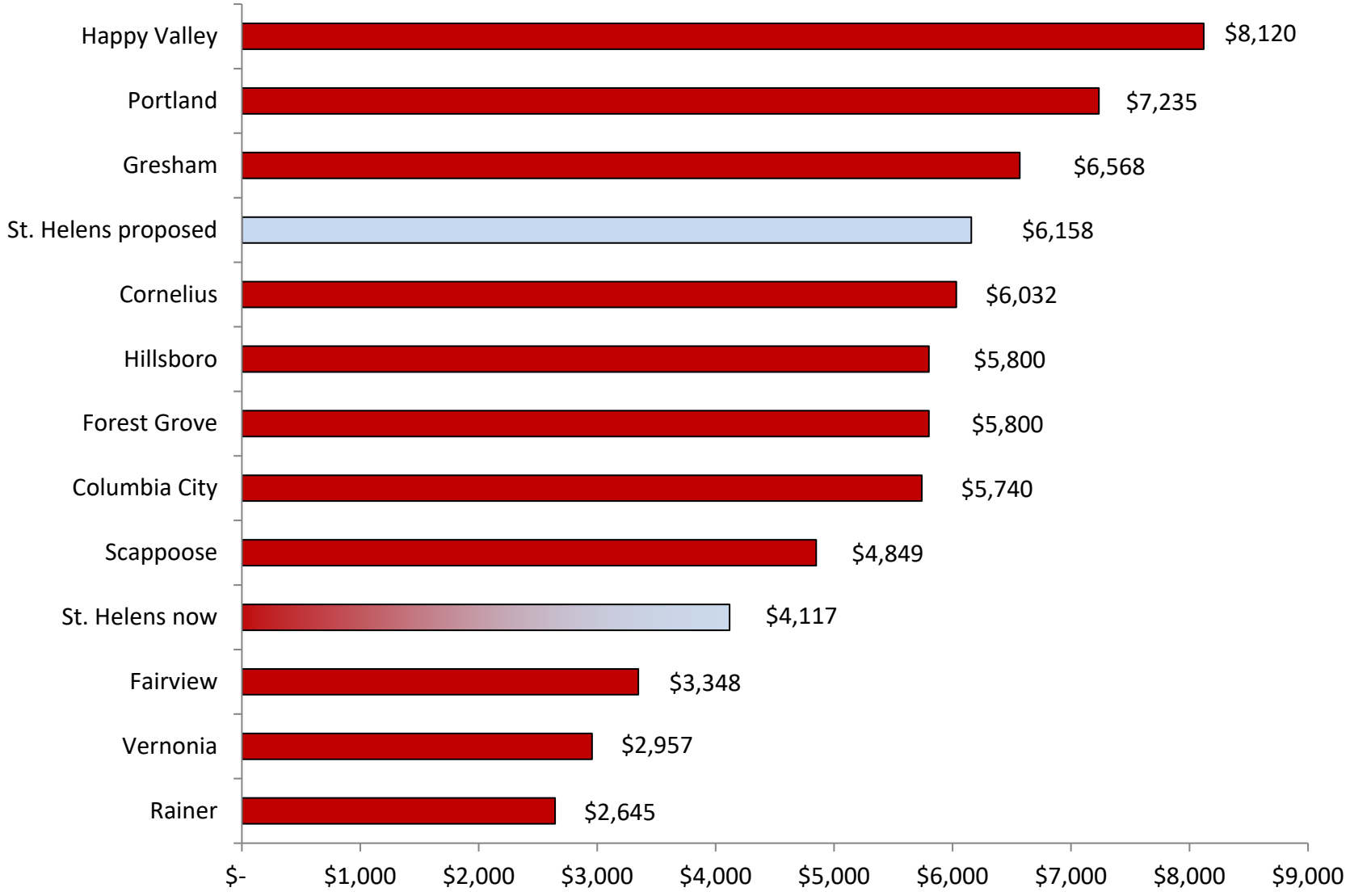
Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Wastewater SDCs			
			Reimbursement	Improvement	Administration	Total
0.75"x 0.75" - Displacement Multi-jet	30	1.00	$ 466	$ 5,399	$ 293	$ 6,158
1.00 inch - Displacement Multi-jet	50	1.67	776	8,998	489	10,263
1.50 inch - Displacement Class I Turbine	100	3.33	1,552	17,996	977	20,525
2.00 inch - Displacement or Class I & II Turbine	160	5.33	2,483	28,794	1,564	32,841
3.00 inch - Displacement	300	10.00	4,656	53,988	2,932	61,576
4.00 inch - Displacement or Compound	500	16.67	7,760	89,980	4,887	102,627
6.00 inch - Displacement or Compound	1000	33.33	15,521	179,960	9,774	205,255
8.00 inch - Compound	1600	53.33	24,833	287,937	15,638	328,408

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Wastewater SDCs in Neighboring Communities

Shown below in Figures 3 is a chart that compares the current and proposed wastewater SDC for a single-family customer in St. Helens to the same charge in similar communities in Yamhill County.

Figure 3 - Neighboring Communities' Wastewater SDCs (Detached Single Family) January, 2022



Stormwater SDCs

Stormwater Capital Improvement Plan

The principal source of data for the stormwater system CIP is the 2021 adopted Stormwater Master Plan. With the assistance of City Staff, the project team has summarized the 2021 stormwater system CIPs for this SDC update. The 2021 stormwater system CIP is shown in Table 16.

Table 16 - 2021 Stormwater System CIP

Projec	Project Name	Total Estimated Cost (2021)	City-Wide SDCs	Developers	Rates	Total
Priority 1 Improvements						
1A	Campbell Park Detention Pond (Milton Creek	$ 300,000	0%	0%	100%	100%
1B	Columbia Boulevard Detention Pond (Milton Creek)	1,100,000	66%	0%	34%	100%
1C	Columbia Boulevard Upsize (Milton Creek)	2,800,000	14%	0%	86%	100%
1D	Middle Trunk Detention Ponds and Piping	2,000,000	5%	0%	95%	100%
1E	Upsize and Realign Tualatin Street (Middle Trunk)	5,000,000	14%	0%	86%	100%
1F	Detention Pond and Piping Between N 12th and N 7th Street (North Trunk)	1,600,000	17%	0%	83%	100%
1G	Ridgeway Loop Pipe Installation	60,000	0%	0%	100%	100%
	Total Priority 1 Improvement Cost	**$ 12,860,000**				
Priority 2 Improvements						
2A	Upsize Pipes along West Street and N 10th Street (North Trunk)	$ 1,400,000	0%	0%	100%	100%
2B	S 4th Street to Outfall CCTV Inspection (Downtown)	20,000	0%	0%	100%	100%
2C	Heinie Huemann Park Detention Pond (Greenway)	200,000	26%	0%	74%	100%
2D	Upsize from S 20th Street to Heinie Huemann Park (Greenway)	1,100,000	29%	0%	71%	100%
2E	Nob Hill Park CIP lining (Greenway)	400,000	0%	0%	100%	100%
2F	Franz Street (Milton Creek)	400,000	0%	0%	100%	100%
2G	Mayfair Drive CIP lining and Upsize (Milton Creek)	400,000	0%	0%	100%	100%
2H	Riverfront Development Stormwater Infrastructure	3,300,000	100%	0%	0%	100%
2I	Industrial Business Park Stormwater Infrastructure	8,600,000	100%	0%	0%	100%
2J	S 16th Street to Old Portland Road Upsize (Greenway)	500,000	0%	0%	100%	100%
2K	Stormwater Master Plan Update	200,000	0%	0%	100%	100%
	Total Priority 2 Improvement Cost	**$ 16,520,000**				
Priority 3 Improvements						
3A	Upsize N 13th Street to West Street (North Trunk)	$ 200,000	0%	0%	100%	100%
3B	Upsize from 6th Street Ball Park to N 10th Street (North Trunk)	900,000	0%	0%	100%	100%
3C	Upsize Milton Way at Street Helens Street (North Trunk)	600,000	75%	0%	25%	100%
3D	Upsize N 7th Street from Columbia Boulevard to Trunkline (North Trunk)	400,000	0%	0%	100%	100%
3E	Upsize N 4th Street south of West Street (North Trunk)	1,400,000	0%	0%	100%	100%
3F	Upsize and Regrade along S 14th Street (Middle Trunk)	600,000	50%	0%	50%	100%
3G	Upsize existing pipes from Heinie Huemann to Tualatin Street (Middle Trunk)	400,000	0%	0%	100%	100%
3H	Street Helens Street to South 4th Street Upsizing (Downtown)	500,000	0%	0%	100%	100%
3I	S 4th Street to Outfall Pipe Upsizing (Downtown)	2,400,000	0%	0%	100%	100%
3J	Crouse Way Upsize (Milton Creek)	1,000,000	14%	0%	86%	100%
3K	Eilertson Street (Milton Creek)	100,000	0%	0%	100%	100%
3L	N Vernonia Road from Oakwood to Ava Court (Milton Creek)	400,000	0%	0%	100%	100%
3M	Ethan Lane Upsizing (Milton Creek)	600,000	0%	0%	100%	100%
3N	Sunset Boulevard to Outfall Upsize (Milton Creek)	800,000	0%	0%	100%	100%
3O	Sunset Boulevard, Trillium Street and Salmon Street upsize (Milton Creek)	1,100,000	0%	0%	100%	100%
3P	Sykes Road Upsize from Columbia Boulevard to Outfall (McNulty Creek)	2,700,000	0%	0%	100%	100%
3Q	McBride Street Upsize (McNulty Creek)	600,000	0%	0%	100%	100%
3T	Port Avenue Upsize (McNulty Creek)	900,000	0%	0%	100%	100%
3S	Whitetail Avenue Upsize (McNulty Creek)	800,000	0%	0%	100%	100%
3T	Sykes Road Culvert near Mountain View Drive Upsize (McNulty Creek)	80,000	0%	0%	100%	100%
	Total Priority 3 Improvement Cost	**$ 16,480,000**				
	Total Collection System Improvement Costs	**$ 45,860,000**				

Stormwater Customers Current and Future Demographics

Existing Stormwater Demand and Population Growth

St. Helens' stormwater utility service charge and SDC are based on estimated impervious surface area. The average amount of impervious area on a single family residential developed lot within the City is set at 2,500 square feet. This equates to one EDU. Both rates and SDCs are calculated as a function of EDUs meaning that each property's fee is calculated as follows:

$$Estimated\ Impervious\ Surface\ \div 2{,}500\ square\ feet\ = Number\ of\ ESUs$$

The number of EDUs is then multiplied by the unit rate to determine the SDC amount. The number of EDUs currently connected to the City's system is 7,603 per utility billing records as of January 1, 2022. In order to determine the future capacity requirements of the City's stormwater system, each basin plan and facility plan forecasts the amount of additional impervious surface through the planning period. This forecast is based on future land use conditions and the corresponding runoff coefficients assigned to these various land uses. The future growth in EDUs within each of the City's existing basins and planning areas is based on these specific land use and impervious surface projections.

Forecasted Equivalent Service Units (ESUs)

With current stormwater demand estimated at 7,603 ESUs, the project team was able to calculate the number of EDUs at buildout using the City's Comprehensive Plan out to 2040. These inventories are predicted on the currently approved urban growth boundary (UGB) of the City. As discussed above, the forecast is based on the future land use conditions and the corresponding runoff coefficients assigned to the Comprehensive Plan land use designations. The forecast eliminates lands that are constrained from future development due to severe slopes, wetlands, and riparian corridors.

- *Residential lands* – Based on conversations with City planning staff, the planning standard used to calculate future residential land needs for the City is as follows:
  - ✓ Low density residential..... 4 dwelling units per acre
  - ✓ Medium density residential..... 7 dwelling units per acre
  - ✓ High density residential..... 14 dwelling units per acre
  - ✓ Commercial/mixed use residential ..... 90% impervious surface per net acre
  - ✓ Riverfront District mixed use residential..... 90% impervious surface per net acre
- *Commercial lands* – In consultation with the City's engineering staff, the project team has applied a uniform runoff coefficient of .90 (i.e., 90%) to all commercial lands within the UGB. This average value was used based on analysis of general commercial land uses over a range of soils. The data sources for this analysis included the National Resource Conservation Service's Hydrologic manual, Oregon Department of Transportation's design standards for stormwater facilities, and the Caltrans Storm Water Quality Handbook SWPPP/WPCP Preparation Manual.
- *Industrial lands* – Also in consultation with City engineering staff, a uniform runoff value of .85 (i.e., 85%) was applied to all industrial lands in the UGB. The same data sources used to arrive at the commercial runoff coefficient was used for the derivation of the industrial value.

The growth EDU forecast methodology is shown in Table 17.

Table 17 - Forecast of Growth in Stormwater ESUs

	Analysis of Buildable Lands							Impervious Surface Forecast			
Comprehensive Plan Land Use Designations	Total Acres	Committed Acres	Environmentally Constrained Acres	Gross Buildable Acres	Less Future Public Facilities	Net Buildable Acres	Dwelling Units per Net Acre	Coverage	Acres	Square Feet	EDUs
Housing Lands: [1]											
Low Density Residential	1,887	1,047	81	759	190	569	4.00	2,500 sq. ft.	131	5,692,500	2,277
Medium Density Residential	698	551	24	123	31	92	7.00	2,500 sq. ft.	37	1,614,375	646
High Density Residential	206	187	5	14	-	14	14.00	1,500 sq. ft.	7	294,000	118
Commercial/Mixed Use	314	191	20	103	-	103		90%	93	4,038,012	1,615
Riverfront District Mixed Use	24	-	-	24	-	24		90%	22	940,896	376
Employment Lands: [2]											
General Commercial	75	N/A	N/A	5	-	5		90%	5	196,020	78
Highway Commercial	68	N/A	N/A	14	-	14		90%	13	548,856	220
Light Industrial	126	N/A	N/A	40	-	40		85%	34	1,481,040	592
Heavy Industrial	837	N/A	N/A	186	-	186		85%	158	6,886,836	2,755
Totals	4,235	N/A	N/A	1,268	221	1,048			498	21,692,535	8,677

Analysis of Equivalent Drainage Units (ESDs):	Riverfront District	Rest of St. Helens	Total
Estimated EDUs as of January 1, 2022 (per utility billing records)	-	7,603	7,603
Estimated EDUs from growth	376	8,301	8,677
Estimated EDUs at buildout (assuming 1 EDU = 2,500 sq. ft. of impervious surface)	376	15,904	16,280

[1] Source: City of St. Helens Buildable Lands Inventory Methodology Summary; FCS Group; March, 2019

[2] Source: City of St. Helens Planning Department Staff

Reimbursement Fee Calculations

The stormwater reimbursement fee methodology mirrors that used for the water and wastewater reimbursement fee. The methodological steps in its construction are restated here.

Step 1: Calculate the original cost of stormwater fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of stormwater fixed assets**.

Step 2: Subtract from the adjusted original cost of stormwater assets in service any grant funding or contributed capital. This arrives at the **modified original cost of stormwater fixed assets in service net of grants and contributed capital**.

Step 3: Subtract from the modified original cost of stormwater fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross stormwater reimbursement fee basis**.

Step 4: Subtract from the gross stormwater reimbursement fee basis the fund balance held in the stormwater Reimbursement SDC fund (if available). This arrives at the **net stormwater reimbursement fee basis**.

Step 6: Divide the net stormwater reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total stormwater reimbursement fee is shown below in Table 18.

Table 18 - Calculation of the Stormwater Reimbursement Fee

Line Item Description		Stormwater System Totals
Utility Plant-in-Service (book value):[1]		
Construction, general costs, permits, fees, etc.	$	-
Buildings and Improvements		5,662,287
Machinery and equipment		-
Vehicles		-
Construction Work-in-Progress		-
Total Utility Plant-in-Service		5,662,287
Eliminating entries:		
Principal outstanding on bonds, notes, and loans payable		-
Developer Contributions		-
Grants and contributed capital from governments		-
Total eliminating entries		-
Net basis in utility plant-in-service available to serve future customers	$	5,662,287
Estimated existing and future stormwater treatment EDUs		16,280
Calculated reimbursement fee - $ per stormwater EDU	$	348
Calculate reimbursement fee - $/square foot of impervious surface	$	0.1391

[1] Source: St. Helens Accounting Summary Report - Capitalized Assets as of June 30, 2021

Improvement Fee Calculations

The calculation of the stormwater improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the stormwater systems. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.

Step 2: Subtract from the gross improvement fee basis the fund balance held in the Stormwater Improvement SDC Fund. This arrives at **the net stormwater improvement fee basis**.

Step 3: Divide the net stormwater improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at **the total stormwater improvement fee**.

The actual data that was used to calculate the total stormwater improvement fee is shown below in Table 19.

Table 19 - Calculation of the Stormwater Improvement Fee

Projec	Project Name	Total Estimated Cost (2021)	City-Wide SDCs	Developers	Rates	Total
Priority 1 Improvements						
1A	Campbell Park Detention Pond (Milton Creek	$ 300,000	$ -	$ -	$ 300,000.00	$ 300,000
1B	Columbia Boulevard Detention Pond (Milton Creek)	1,100,000	726,000	-	374,000	1,100,000
1C	Columbia Boulevard Upsize (Milton Creek)	2,800,000	392,000	-	2,408,000	2,800,000
1D	Middle Trunk Detention Ponds and Piping	2,000,000	100,000	-	1,900,000	2,000,000
1E	Upsize and Realign Tualatin Street (Middle Trunk)	5,000,000	700,000	-	4,300,000	5,000,000
1F	Detention Pond and Piping Between N 12th and N 7th Street (North Trunk)	1,600,000	272,000	-	1,328,000	1,600,000
1G	Ridgeway Loop Pipe Installation	60,000	-	-	60,000	60,000
	Total Priority 1 Improvement Cost	**$ 12,860,000**	**$ 2,190,000**	**$ -**	**$ 10,670,000**	**$ 12,860,000**
Priority 2 Improvements						
2A	Upsize Pipes along West Street and N 10th Street (North Trunk)	$ 1,400,000	$ -	$ -	$ 1,400,000	$ 1,400,000
2B	S 4th Street to Outfall CCTV Inspection (Downtown)	20,000	-	-	20,000	20,000
2C	Heinie Huemann Park Detention Pond (Greenway)	200,000	52,000	-	148,000	200,000
2D	Upsize from S 20th Street to Heinie Huemann Park (Greenway)	1,100,000	319,000	-	781,000	1,100,000
2E	Nob Hill Park CIP lining (Greenway)	400,000	-	-	400,000	400,000
2F	Franz Street (Milton Creek)	400,000	-	-	400,000	400,000
2G	Mayfair Drive CIP lining and Upsize (Milton Creek)	400,000	-	-	400,000	400,000
2H	Riverfront Development Stormwater Infrastructure	3,300,000	3,300,000	-	-	3,300,000
2I	Industrial Business Park Stormwater Infrastructure	8,600,000	8,600,000	-	-	8,600,000
2J	S 16th Street to Old Portland Road Upsize (Greenway)	500,000	-	-	500,000	500,000
2K	Stormwater Master Plan Update	200,000	-	-	200,000	200,000
	Total Priority 2 Improvement Cost	**$ 16,520,000**	**$ 12,271,000**	**$ -**	**$ 4,249,000**	**$ 16,520,000**
Priority 3 Improvements						
3A	Upsize N 13th Street to West Street (North Trunk)	$ 200,000	$ -	$ -	$ 200,000	$ 200,000
3B	Upsize from 6th Street Ball Park to N 10th Street (North Trunk)	900,000	-	-	900,000	900,000
3C	Upsize Milton Way at Street Helens Street (North Trunk)	600,000	450,000	-	150,000	600,000
3D	Upsize N 7th Street from Columbia Boulevard to Trunkline (North Trunk)	400,000	-	-	400,000	400,000
3E	Upsize N 4th Street south of West Street (North Trunk)	1,400,000	-	-	1,400,000	1,400,000
3F	Upsize and Regrade along S 14th Street (Middle Trunk)	600,000	300,000	-	300,000	600,000
3G	Upsize existing pipes from Heinie Huemann to Tualatin Street (Middle Trunk)	400,000	-	-	400,000	400,000
3H	Street Helens Street to South 4th Street Upsizing (Downtown)	500,000	-	-	500,000	500,000
3I	S 4th Street to Outfall Pipe Upsizing (Downtown)	2,400,000	-	-	2,400,000	2,400,000
3J	Crouse Way Upsize (Milton Creek)	1,000,000	140,000	-	860,000	1,000,000
3K	Eilertson Street (Milton Creek)	100,000	-	-	100,000	100,000
3L	N Vernonia Road from Oakwood to Ava Court (Milton Creek)	400,000	-	-	400,000	400,000
3M	Ethan Lane Upsizing (Milton Creek)	600,000	-	-	600,000	600,000
3N	Sunset Boulevard to Outfall Upsize (Milton Creek)	800,000	-	-	800,000	800,000
3O	Sunset Boulevard, Trillium Street and Salmon Street upsize (Milton Creek)	1,100,000	-	-	1,100,000	1,100,000
3P	Sykes Road Upsize from Columbia Boulevard to Outfall (McNulty Creek)	2,700,000	-	-	2,700,000	2,700,000
3Q	McBride Street Upsize (McNulty Creek)	600,000	-	-	600,000	600,000
3T	Port Avenue Upsize (McNulty Creek)	900,000	-	-	900,000	900,000
3S	Whitetail Avenue Upsize (McNulty Creek)	800,000	-	-	800,000	800,000
3T	Sykes Road Culvert near Mountain View Drive Upsize (McNulty Creek)	80,000	-	-	80,000	80,000
	Total Priority 3 Improvement Cost	**$ 16,480,000**	**$ 890,000**	**$ -**	**$ 15,590,000**	**$ 16,480,000**
	Total Collection System Improvement Costs	**$ 45,860,000**	**$ 15,351,000**	**$ -**	**$ 30,509,000**	**$ 45,860,000**

Total improvement fee-eligible costs for future system improvements	$ 15,351,000
less: stormwater SDC fund balance as of June 30, 2021	374,952
Adjusted improvement fee-eligible costs for future system improvements	$ 14,976,048
Growth in stormwater EDUs	8,677
Calculated stormwater Improvement Fee SDC per EDU	$ 1,726
Calculated stormwater Improvement Fee SDC per square foot of Impervious surface	$ 0.6904

Stormwater SDC Model Summary

The 2022 stormwater SDC methodology update was done in accordance with St. Helens Municipal Code Chapter 13.24, and with the benefit of adopted capital improvement plans and plan updates for stormwater services. We recommend the City implement the stormwater SDC charge and methodology to reflect the current capital improvement program. The proposed stormwater SDCs for the average single-family residential customer is shown below in Table 20.

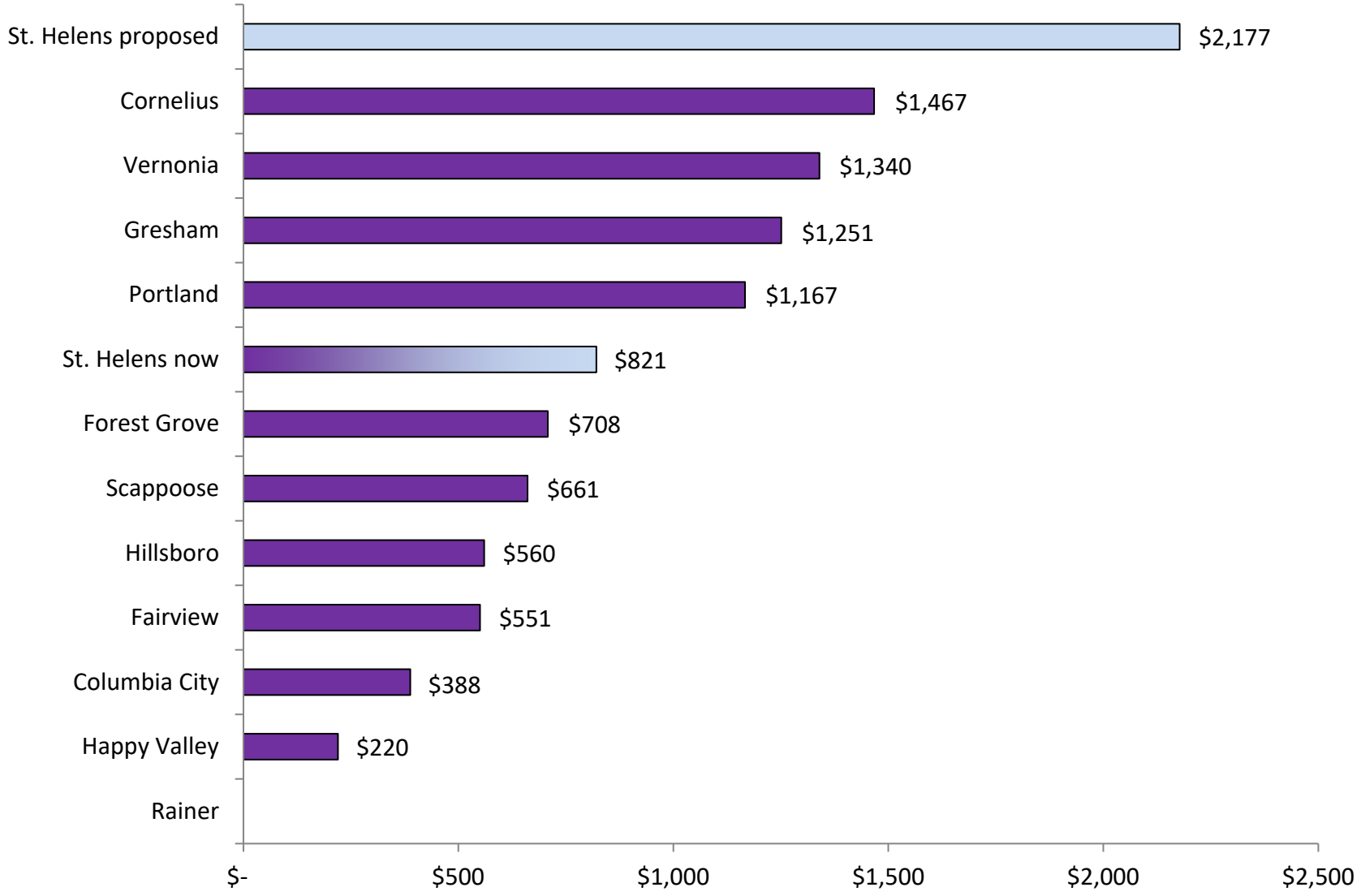
Table 20 - Proposed Stormwater SDCs per ESU and per Square Foot of Impervious Surface

Line Item Description	City-Wide Per EDU	City-Wide Per Sq. Foot
Proposed SDC components:		
Reimbursement fee	$ 348	$ 0.1391
Improvement fee	1,726	0.6904
Administration fee at 5%	104	0.0415
Total proposed stormwater SDC	$ 2,177	$ 0.8710

Stormwater SDCs in Neighboring Communities

Shown below in Figures 4 is a chart that compares the current and proposed stormwater SDC for a single-family customer in St. Helens to the same charge in similar communities in Yamhill County.

Figure 4 - Neighboring Communities' stormwater SDCs (Detached Single Family) January, 2022



Transportation SDCs

Transportation Capital Improvement Plan

The City's current Transportation System Plan was adopted by the City Council in 2011. Since that time, a number of plan updates have been commissioned, completed, and adopted that modify the underlying 2011 TSP CIP. The key planning studies that we have used to create the 2022 transportation CIP for the SDC study are as follows:

- Corridor Master Plan – 2015
- Waterfront Redevelopment Framework Plan – 2016
- Housing Needs analysis – 2019
- Riverfront Connector Plan – 2019
- Comprehensive Plan Map Amendment – 2019
- Zoning Map Amendment - 2019

At the time of this SDC study, the City is considering revisiting the issue of a new TSP. In order to pay for the TSP update, it is likely the City will apply for a Transportation Growth Management (TGM) grant. The TGM program is jointly managed by the Oregon Department of Transportation (ODOT) and the Department of Land Conservation and Development (DLCD). TGM is primarily funded by federal transportation funds, with additional funding provided by the State of Oregon. If the City is successful in securing a TGM grant, it will be eighteen months to two years before a completed TSP would be available for review and analysis relative to the calculation of transportation SDCs. In lieu of having a new TSP, the SDC project team with the assistance of City Staff, created a transportation system CIP from the projects identified in the above referenced and adopted planning studies. The resulting 2022 transportation system CIP is shown in Table 21

Table 21 - 2022 Transportation System CIP

Project Description	Project Cost	Projected Funding Sources % City-Wide SDCs	Developers	ODOT	Street Fund	Total
Corridor Master Plan:						
Highway U.S. 30 improvements	$ 3,125,000	0.0%	0.0%	100.0%	0.0%	100%
Highway U.S. 30 corridor improvements:						0%
Short term	1,200,000	10.0%	0.0%	0.0%	90.0%	100%
Long term	1,925,000	10.0%	0.0%	0.0%	90.0%	100%
Houlton & Riverfront District corridor segment improvements:						
Intersection improvements	1,980,000	10.0%	0.0%	0.0%	90.0%	100%
Roadway improvements	3,442,500	10.0%	0.0%	0.0%	90.0%	100%
Pedestrian improvements	8,032,500	10.0%	0.0%	0.0%	90.0%	100%
Riverfront Connector Plan:						
Intersection Improvements:						
Plymouth St. & 6th St.	215,550	75.0%	12.5%	0.0%	12.5%	100%
Old Portland Rd. & Plymouth St.	1,870,580	75.0%	12.5%	0.0%	12.5%	100%
Old Portland Rd. & Kaster Rd.	2,092,940	75.0%	12.5%	0.0%	12.5%	100%
Old Portland Rd. & Port Ave.	865,670	75.0%	12.5%	0.0%	12.5%	100%
Old Portland Rd. & Gable Rd.	937,360	75.0%	12.5%	0.0%	12.5%	100%
Gable Rd. & McNulty Way	480,588	75.0%	12.5%	0.0%	12.5%	100%
Gable Rd. & US 30	2,644,350	75.0%	12.5%	0.0%	12.5%	100%
Street Segment Improvements:						
Segment 1: South 1st Street	2,894,260	75.0%	12.5%	0.0%	12.5%	100%
Segment 2.1: Veneer Property	3,472,470	75.0%	12.5%	0.0%	12.5%	100%
Segment 2.2: Plymouth Street	1,406,350	75.0%	12.5%	0.0%	12.5%	100%
Segment 3: Plymouth Street	3,544,270	75.0%	12.5%	0.0%	12.5%	100%
Segment 4.1: Old Portland Road	7,555,480	75.0%	12.5%	0.0%	12.5%	100%
Segment 4.2: Gable Road	5,645,850	75.0%	12.5%	0.0%	12.5%	100%
Segment 5: Old Portland Road	8,875,550	75.0%	12.5%	0.0%	12.5%	100%
Segment 5: McNulty Way	7,003,900	75.0%	12.5%	0.0%	12.5%	100%
Segment 5: Millard Road	3,050,690	75.0%	12.5%	0.0%	12.5%	100%
City-Wide Transportation Capital Plan:						
Street overlays	250,000	100.0%	0.0%	0.0%	0.0%	100%
Safe routes to school program	500,000	0.0%	0.0%	50.0%	50.0%	100%
1st Street improvements	400,000	100.0%	0.0%	0.0%	0.0%	100%
	$ 73,410,858					

Transportation System Current and Future Demand

Existing Transportation Demand

Demand for transportation facilities is measured in PMPHVTs. One PMPHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. As discussed earlier in this report, an industry standard for allocating demands on a transportation system is to proportion the costs based on the relative number of trips created by a development. Trip rates are published by the Institute of Transportation Engineers (ITE) for various land uses. This SDC Update adopts the use of PMPHVTs as contained in the current ITE Trip Generation Manual, 10th Edition, as the basis for the trip generation standards. In addition, this update incorporates the number of shared trips and pass-by trips. This factor is an estimate of how many of the trips specific to the subject land use are linked to other destinations, where the actual trip is shared by multiple destinations or multiple stops on the same trip. Based on data from the various planning studies commissioned and adopted by the City since 2015, and from the additional work done by the SDC project team on behalf of the City, we estimate the transportation system is currently serving 10,049 PMPHVTs. The statistical process that was used to arrive at the current demand is shown in Table 22.

Table 22 – Estimated Existing Transportation System Demand Expressed in PMPHVTs

	Population	Dwelling Units	Employees	ITE Code[4]	PM Peak Hour Primary Trip Ends	Total PM Peak Hour Vehicle Trips
Estimated 2019 population:[1]	13,559					
Male	6,813					
Female	6,746					
Number of dwelling units:[2]						
Detached single family		3,799		210	0.99	3,761
Attached single family		223		210	0.99	221
Duplex		390		210	0.99	386
Three or Fourplex		375		210	0.99	371
Multifamily:						
5 to 9 units		235		220	0.56	132
10 to 19 units		206		220	0.56	115
20 to 49 units		34		220	0.56	19
50 or more units		159		220	0.56	89
Mobil home		150		240	0.46	69
Boat, RV, van, etc..		-		240	0.46	-
Number of employees:[3]						
Agriculture, forestry, fishing, hunting, and mining:						
Agriculture, forestry, fishing, hunting, and mining			110	140	0.33	36
Construction			303	180	0.72	218
Manufacturing			1,072	140	0.33	354
Wholesale trade			292	110	0.49	143
Retail trade			821	820	1.62	1,330
Transportation, warehousing, and utilities:						
Transportation and warehousing			301	130	0.42	126
Utilities			26	170	0.76	20
Information technology			71	160	0.13	9
Finance, insurance, real estate, rental, and leasing:						
Finance and insurance			400	750	0.37	148
Real estate, rental, and leasing			173	750	0.37	64
Professional, scientific, management, administration, and management services:						
Professional, scientific, and technical services			300	760	0.52	156
Administrative support, waste management/remediation			214	170	0.76	163
Educational services, health care, and social assistance:						
Educational services			292	522	1.94	566
Health care and social assistance			768	720	0.97	745
Arts, entertainment, recreation, accommodation, and food services:						
Arts, entertainment, and recreation			32	495	2.66	85
Accommodation and food service			419	310	0.89	373
Other services (except public administration)			257	710	0.63	162
Public administration			260	538	0.72	187
Totals	13,559	5,571	6,111			10,049

[1] Source: U.S. Bureau of the Census; American Community Survey; DP05, demographic and housing estimates; 2019 5-year estimates

[2] Source: U.S. Bureau of the Census; American Community Survey; Table B25024 2019 ACS 5-year estimate

[3] Source: U.S. Bureau of the Census; American Community Survey; Table S2403; Civilian employed population 16 years and over; 2019 ACS 5-year estimates

[4] Trip Generation Manual; Institute of Transportation Engineers; 10th Edition

Forecasted Transportation Demand

We are estimating the City's transportation system will serve 19,917 PMPHVTs in 2041. These estimates imply growth of 9,868 PMPHVTs over the planning period. The future demand forecast is shown below in Table 23 and in graphical form in Figure 5.

Table 23 – Forecasted Future Transportation System Demand Expressed in PMPHVTs

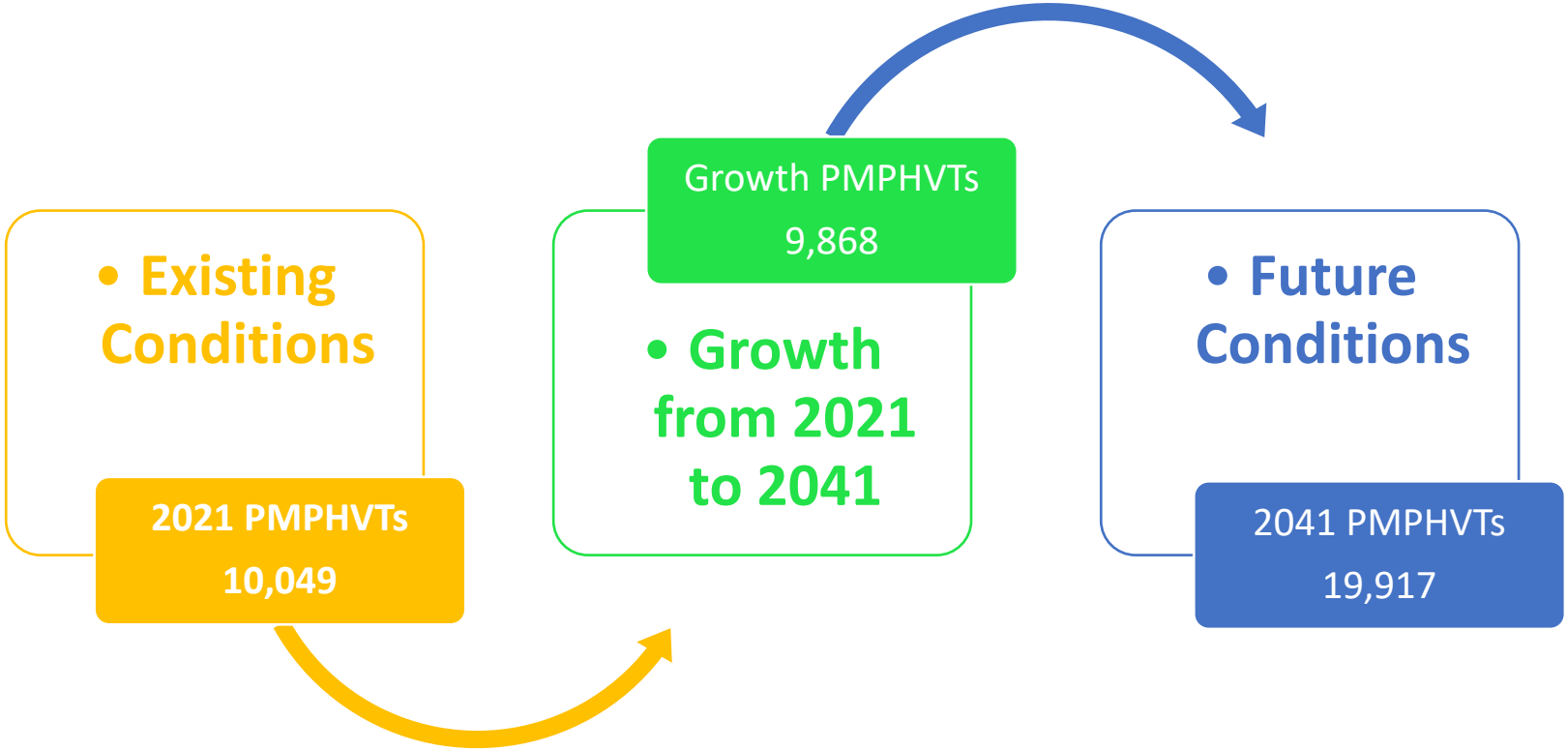
							Forecast of Future PM Peak Hour Vehicle Trips				
	Total Acres	Committed Acres	Env. Constrained Acres	Gross Buildable Acres	Future Public Facilities	Net Buildable Acres	Demand Units	Dwelling Units per Net Acre	ITE Code[3]	PM Peak Hour Trip Ends	Growth in PM Peak Hour Vehicle Trips
Housing Lands:[1]											
Low Density Residential	1,887	1,047	81	759	190	569	DU	4.00	210	0.99	2,254
Medium Density Residential	698	551	24	123	30.75	92	DU	7.00	210	0.99	639
High Density Residential	206	187	5	14	-	14	DU	14.00	220	0.56	110
Commercial/Mixed Use	314	191	20	103	-	103	PUD	20.00	270	0.69	1,421
Riverfront District Mixed Use	24	-	-	24	-	24	PUD	20.00	270	0.69	331
Employment Lands:[2]											
General Commercial	75	N/A	N/A	5	-	5	SF		820	1.62	353
Highway Commercial	68	N/A	N/A	14	-	14	SF		820	1.62	988
Light Industrial	126	N/A	N/A	40	-	40	SF		110	0.63	1,098
Heavy Industrial	837	N/A	N/A	186	-	186	SF		140	0.33	2,674
Totals	4,235	N/A	N/A	1,268	221	1,048					9,868

[1] Source: City of St. Helens Buildable Lands Inventory Methodology Summary; FCS Group; March, 2019

[2] Source: City of St. Helens Planning Department Staff

[3] Trip Generation Manual; Institute of Transportation Engineers; 10th Edition

Figure 5 - Existing and Future Transportation System Demand Expressed in PMPHVTs



Reimbursement Fee Calculations

The transportation reimbursement fee methodology mirrors that used for the water reimbursement fee. The methodological steps in its construction are restated here.

Step 1: Calculate the original cost of transportation fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of transportation fixed assets**.

Step 2: Subtract from the adjusted original cost of transportation fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of transportation fixed assets in service**.

Step 3: Subtract from the modified book value of transportation assets in service any grant funding or contributed capital. This arrives at the **modified book value of transportation fixed assets in service net of grants and contributed capital**.

Step 4: Subtract from the modified book value of transportation fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross transportation reimbursement fee basis**.

Step 5: Subtract from the gross transportation reimbursement fee basis the fund balance held in the Transportation Reimbursement SDC fund (if available). This arrives at the **net transportation reimbursement fee basis**.

Step 6: Divide the net transportation reimbursement fee basis by the sum of existing and future ELNDTs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total transportation reimbursement fee is shown below in Table 24.

Table 24 - Calculation of the Transportation Reimbursement Fee

Line Item Description		Transportation System Totals
Utility Plant-in-Service (book value):[1]		
Construction, general costs, permits, fees, etc.	$	354,914
Buildings and Improvements		62,967
Machinery and equipment		487,847
Street improvements		3,754,893
Construction Work-in-Progress		-
Total Utility Plant-in-Service	$	4,660,620
Eliminating entries:		
Principal outstanding on bonds, notes, and loans payable:		
US Bank street lighting replacement note payable		572,436
Developer Contributions		-
Grants and contributed capital from governments		-
Total eliminating entries		572,436
Net basis in utility plant-in-service available to serve future customers	$	4,088,184
Estimated existing and future PMPHVTs		19,917
Calculated reimbursement fee - $ per PMPHVT	$	205

[1] Source: St. Helens Accounting Summary Report - Capitalized Assets as of June 30, 2021

Improvement Fee Calculations

The calculation of the transportation improvement fee also follows the logic that was used to calculate the water improvement fee. As in the case of water, this study continues to use the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the transportation infrastructure. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.

Step 2: Subtract from the gross improvement fee basis the fund balance held in the Transportation Improvement SDC Fund. This arrives at **the net transportation improvement fee basis**.

Step 3: Divide the net transportation improvement fee basis by the forecasted number of growth PM PHVTs over the planning period. This arrives at **the total transportation improvement fee**.

The actual data that was used to calculate the total transportation improvement fee is shown below in Table 25.

Table 25 - Calculation of the Transportation Improvement Fee

		Projected Funding Sources %				
Project Description	Project Cost	City-Wide SDCs	Developers	ODOT	Street Fund	Total
Corridor Master Plan:						
Highway U.S. 30 improvements	$ 3,125,000	-	-	3,125,000	-	3,125,000
Highway U.S. 30 corridor improvements:						
Short term	1,200,000	120,000	-	-	1,080,000	1,200,000
Long term	1,925,000	192,500	-	-	1,732,500	1,925,000
Houlton & Riverfront District corridor segment improvements:						
Intersection improvements	1,980,000	198,000	-	-	1,782,000	1,980,000
Roadway improvements	3,442,500	344,250	-	-	3,098,250	3,442,500
Pedestrian improvements	8,032,500	803,250	-	-	7,229,250	8,032,500
Riverfront Connector Plan:						
Intersection Improvements:						
Plymouth St. & 6th St.	215,550	161,663	26,944	-	26,944	215,550
Old Portland Rd. & Plymouth St.	1,870,580	1,402,935	233,823	-	233,823	1,870,580
Old Portland Rd. & Kaster Rd.	2,092,940	1,569,705	261,618	-	261,618	2,092,940
Old Portland Rd. & Port Ave.	865,670	649,253	108,209	-	108,209	865,670
Old Portland Rd. & Gable Rd.	937,360	703,020	117,170	-	117,170	937,360
Gable Rd. & McNulty Way	480,588	360,441	60,074	-	60,074	480,588
Gable Rd. & US 30	2,644,350	1,983,263	330,544	-	330,544	2,644,350
Street Segment Improvements:						
Segment 1: South 1st Street	2,894,260	2,170,695	361,783	-	361,783	2,894,260
Segment 2.1: Veneer Property	3,472,470	2,604,353	434,059	-	434,059	3,472,470
Segment 2.2: Plymouth Street	1,406,350	1,054,763	175,794	-	175,794	1,406,350
Segment 3: Plymouth Street	3,544,270	2,658,203	443,034	-	443,034	3,544,270
Segment 4.1: Old Portland Road	7,555,480	5,666,610	944,435	-	944,435	7,555,480
Segment 4.2: Gable Road	5,645,850	4,234,388	705,731	-	705,731	5,645,850
Segment 5: Old Portland Road	8,875,550	6,656,663	1,109,444	-	1,109,444	8,875,550
Segment 5: McNulty Way	7,003,900	5,252,925	875,488	-	875,488	7,003,900
Segment 5: Millard Road	3,050,690	2,288,018	381,336	-	381,336	3,050,690
City-Wide Transportation Capital Plan:						
Street overlays	250,000	250,000	-	-	-	250,000
Safe routes to school program	500,000	-	-	250,000	250,000	500,000
1st Street improvements	400,000	400,000	-	-	-	400,000
Totals	$ 73,410,858	$ 41,724,894	$ 6,569,482	$ 3,375,000	$ 21,741,482	$ 73,410,858

Total improvement fee-eligible costs for future system improvements	$ 41,724,894
less: transportation SDC fund balance as of June 30, 2021	1,663,687
Adjusted improvement fee-eligible costs for future system improvements	$ 40,061,207
Growth in PMPHVTs	9,868
Calculated transportation improvement fee - $/PMPHVT	$ 4,060

Transportation SDC Model Summary

The 2021 transportation SDC update was done in accordance with St. Helens Municipal Code Chapter 33, and with the benefit of adopted capital improvement plans and plan updates for transportation services. The proposed transportation SDCs per PMPHVT is shown below in Table 26.

Table 26 - Proposed Transportation SDCs per PMPHVT

Unit costs per PM Peak Hour Vehicle Trip:

Reimbursement fee	$	205
Improvement fee		4,060
Administration fee @ 5%		213
Total transportation SDC	$	4,478

To charge the appropriate SDC, the City must estimate how many PMPHVTs will be generated by the development in question. That number can then be multiplied by total transportation SDC per PMPHVT to determine the amount of SDC owed by new development projects.

The number of PMPHVTs that a property will generate is a function of the increase in scope and scale of activities that will occur on that property. By "scope of activities," we mean land use. For example, a new single-family residence will generate trip-ends differently from a new retail store of the same size. By "scale of activities," we mean some measure of quantity. For residential land uses, the number of dwelling units is an appropriate measure of scale. For many commercial and industrial land uses, building floor area is the best measure. For example, a 20,000-square-foot store is likely to generate twice the number of trip-ends as a 10,000-square-foot store of the same type. Table 27 presents proposed transportation SDCs per unit of scale for land uses in the 9th edition of Trip Generation Manual, published by the Institute of Transportation Engineers (ITE):

Table 27 - Proposed Transportation SDCs by ITE Code

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Port and Terminal (Land Uses 000-099)							
010	Water port/Marine Terminal*	17.15	69,637	3,516	3,658	76,811	Berth
021	Commercial Airport	5.75	23,345	1,179	1,226	25,750	Average flights per day
022	General Aviation Airport	1.57	6,374	322	335	7,031	Employee
030	Intermodal Truck Terminal	1.87	7,592	383	399	8,374	1,000 square feet of gross floor area
090	Park-an-Ride Lot with Bus Service	0.43	1,746	88	92	1,926	Parking space
093	Light Rail Transit Station with Parking	1.24	5,034	254	264	5,552	Parking space
Industrial (Land Uses 100-199)							
110	General light industrial	0.63	2,558	129	134	2,821	1,000 square feet of gross floor area
120	General heavy industrial	0.68	2,761	139	145	3,045	1,000 square feet of gross floor area
130	Industrial park	0.40	1,624	82	85	1,791	1,000 square feet of gross floor area
140	Manufacturing	0.67	2,720	137	143	3,000	1,000 square feet of gross floor area
150	Warehousing	0.19	771	39	41	851	1,000 square feet of gross floor area
151	Mini-warehouse	0.17	690	35	36	761	1,000 square feet of gross floor area
154	High-Cube transload & short-term warehouse	0.10	406	21	21	448	1,000 square feet of gross floor area
155	High-Cube fulfillment center warehouse	1.37	5,562	281	292	6,135	1,000 square feet of gross floor area
156	High-Cube Parcel hub warehouse	0.64	2,598	131	136	2,865	1,000 square feet of gross floor area
157	High-Cube cold storage warehouse	0.12	487	25	26	538	1,000 square feet of gross floor area
160	Data center	0.09	365	18	19	402	1,000 square feet of gross floor area
170	Utilities	2.27	9,216	465	484	10,165	1,000 square feet of gross floor area
180	Specialty trade contractor	1.97	7,998	404	420	8,822	1,000 square feet of gross floor area
Residential (Land Uses 200-299)							
210	Single family detached housing	0.99	4,019	203	211	4,433	Dwelling unit
220	Apartment	0.56	2,274	115	119	2,508	Dwelling unit
221	Low-Rise Apartment	0.44	1,786	90	94	1,970	Dwelling unit
222	High-Rise Apartment	0.36	1,462	74	77	1,613	Dwelling unit
225	Off-Campus student apartment	0.25	1,015	51	53	1,119	Dwelling unit
231	Mid-Rise residential w/1st-floor commercial	0.36	1,462	74	77	1,613	Dwelling unit
232	High-Rise Residential w/1st-floor commercial	0.21	853	43	45	941	Dwelling unit
240	Mobile home park	0.46	1,868	94	98	2,060	Dwelling unit
251	Senior Adult Housing - Detached	0.30	1,218	62	64	1,344	Dwelling unit
252	Senior Adult Housing - Attached	0.26	1,056	53	55	1,164	Dwelling unit
253	Congregate Care Facility	0.18	731	37	38	806	Dwelling unit
254	Assisted living	0.26	1,056	53	55	1,164	Bed
255	Continuing Care Retirement Community	0.16	650	33	34	717	Unit
260	Recreational Homes	0.28	1,137	57	60	1,254	Dwelling unit
265	Timeshare	0.63	2,558	129	134	2,821	Dwelling unit
270	Residential Planned Unit Development	0.69	2,801	141	147	3,089	Dwelling unit

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Lodging (Land Uses 300-399)							
310	Hotel	0.60	2,436	123	128	2,687	Room
311	All Suites Hotel	0.36	1,462	74	77	1,613	Room
312	Business Hotel	0.32	1,299	66	68	1,433	Occupied Room
320	Motel	0.38	1,543	78	81	1,702	Room
330	Resort Hotel	0.41	1,665	84	87	1,836	Room
Recreational (Land Uses 400-499)							
411	Public park	0.11	447	23	24	494	Acre
416	Campground/Recreational Vehicle Park	0.98	3,979	201	209	4,389	Acre
420	Marina	0.21	853	43	45	941	Berth
430	Golf course	2.91	11,815	597	621	13,033	Hole
431	Miniature Golf Course	0.33	1,340	68	70	1,478	Hole
432	Golf Driving Range	1.25	5,075	256	267	5,598	Tees/Driving Position
433	Batting Cages	2.22	9,013	455	473	9,941	Cage
434	Rock climbing gym	1.64	6,658	336	350	7,344	1,000 square feet of gross floor area
435	Multipurpose Recreational Facility	3.58	14,535	734	763	16,032	1,000 square feet of gross floor area
436	Trampoline park	1.50	6,090	308	320	6,718	1,000 square feet of gross floor area
437	Bowling Alley	1.30	5,278	267	277	5,822	Bowling lane
440	Adult Cabaret	2.93	11,896	601	625	13,122	1,000 square feet of gross floor area
444	Movie Theater with Matinee - Friday pm peak hou	6.17	25,050	1,265	1,316	27,631	1,000 square feet of gross floor area
445	Multiplex Movie Theater - Friday pm peak hour	4.91	19,935	1,007	1,047	21,989	1,000 square feet of gross floor area
452	Horse Racetrack	0.06	244	12	13	269	Seat
453	Automobile Racetrack - Saturday peak hour	0.28	1,137	57	60	1,254	Attendee
454	Dog Racetrack	0.15	609	31	32	672	Attendee
460	Arena*	0.47	1,908	96	100	2,104	1,000 square feet of gross floor area
462	Professional baseball stadium	0.15	609	31	32	672	Attendee
465	Ice Skating Rink	1.33	5,400	273	284	5,957	1,000 square feet of gross floor area
466	Snow Ski Area	26.00	105,560	5,330	5,545	116,435	Slopes
470	Bingo hall	0.82	3,329	168	175	3,672	Attendee
473	Casino/Video Lottery Establishment	13.49	54,769	2,765	2,877	60,411	1,000 square feet of gross floor area
480	Amusement Park	3.95	16,037	810	842	17,689	Acre
482	Water slide park Saturday peak hour generator	22.92	93,055	4,699	4,888	102,642	Acre
488	Soccer Complex	16.43	66,706	3,368	3,504	73,578	Field
490	Tennis Courts	4.21	17,093	863	898	18,854	Court
491	Racquet/Tennis Club	3.82	15,509	783	815	17,107	Court
492	Health/Fitness Club	3.45	14,007	707	736	15,450	1,000 square feet of gross floor area
493	Athletic Club	6.29	25,537	1,289	1,341	28,167	1,000 square feet of gross floor area
495	Recreational Community Center	2.31	9,379	474	493	10,346	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Institutional (Land Uses 500-599)							
501	Military Base	0.39	1,583	80	83	1,746	Employee
520	Elementary School	1.37	5,562	281	292	6,135	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	4,831	244	254	5,329	1,000 square feet of gross floor area
530	High School	0.97	3,938	199	207	4,344	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	26,512	1,339	1,393	29,244	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	22,330	1,128	1,173	24,631	1,000 square feet of gross floor area
537	Charter elementary school	4.96	20,138	1,017	1,058	22,213	1,000 square feet of gross floor area
537	School district office	2.04	8,282	418	435	9,135	1,000 square feet of gross floor area
540	Junior/Community College	1.86	7,552	381	397	8,330	1,000 square feet of gross floor area
550	University/College	1.17	4,750	240	250	5,240	1,000 square feet of gross floor area
560	Church	0.49	1,989	100	104	2,193	1,000 square feet of gross floor area
561	Synagogue - Friday	2.92	11,855	599	623	13,077	1,000 square feet of gross floor area
562	Mosque - Friday	4.22	17,133	865	900	18,898	1,000 square feet of gross floor area
565	Day Care Center	4.89	19,865	1,003	1,043	21,911	1,000 square feet of gross floor area
566	Cemetery	0.46	1,868	94	98	2,060	Acres
571	Prison	2.91	11,815	597	621	13,033	1,000 square feet of gross floor area
575	Fire and rescue station	0.48	1,949	98	102	2,149	1,000 square feet of gross floor area
580	Museum	0.18	731	37	38	806	1,000 square feet of gross floor area
590	Library	8.16	33,130	1,673	1,740	36,543	1,000 square feet of gross floor area
Medical (Land Uses 600-699)							
610	Hospital	0.97	3,938	199	207	4,344	1,000 square feet of gross floor area
620	Nursing Home	0.59	2,395	121	126	2,642	1,000 square feet of gross floor area
630	Clinic	3.28	13,317	672	699	14,688	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	3.53	14,332	724	753	15,809	1,000 square feet of gross floor area
650	Free-Standing emergency room	1.52	6,171	312	324	6,807	1,000 square feet of gross floor area
Office (Land Uses 700-799)							
710	General office building	1.15	4,669	236	245	5,150	1,000 square feet of gross floor area
712	Small office building	2.45	9,947	502	522	10,971	1,000 square feet of gross floor area
714	Corporate Headquarters Building	0.60	2,436	123	128	2,687	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.71	6,943	351	365	7,659	1,000 square feet of gross floor area
720	Medical-dental office building	3.46	14,048	709	738	15,495	1,000 square feet of gross floor area
730	Government Office Building	1.71	6,943	351	365	7,659	1,000 square feet of gross floor area
731	State Motor Vehicles Department	5.20	21,112	1,066	1,109	23,287	1,000 square feet of gross floor area
732	United States Post Office	11.21	45,513	2,298	2,391	50,202	1,000 square feet of gross floor area
733	Government Office Complex	2.82	11,449	578	601	12,628	1,000 square feet of gross floor area
750	Office park	1.07	4,344	219	228	4,791	1,000 square feet of gross floor area
760	Research and development center	0.49	1,989	100	104	2,193	1,000 square feet of gross floor area
770	Business park	0.42	1,705	86	90	1,881	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Retail (Land Uses 800-899)							
810	Tractor Supply Store	1.40	5,684	287	299	6,270	1,000 square feet of gross floor area
811	Construction Equipment Rental Store	0.99	4,019	203	211	4,433	1,000 square feet of gross floor area
812	Building Materials and Lumber Store	2.06	8,364	422	439	9,225	1,000 square feet of gross floor area
813	Free Standing Discount Super Store	3.07	12,482	630	656	13,768	1,000 square feet of gross floor area
814	Variety Store	4.51	18,328	925	963	20,216	1,000 square feet of gross floor area
815	Free Standing Discount Store	2.31	9,364	473	492	10,329	1,000 square feet of gross floor area
816	Hardware/Paint Store	1.19	4,842	244	254	5,340	1,000 square feet of gross floor area
817	Nursery (Garden Center)	6.94	28,176	1,423	1,480	31,079	1,000 square feet of gross floor area
818	Nursery (Wholesale)	5.18	21,031	1,062	1,105	23,198	1,000 square feet of gross floor area
820	Shopping Center	1.91	7,756	392	407	8,555	1,000 square feet of gross leasable area
823	Factory Outlet Center	2.29	9,297	469	488	10,254	1,000 square feet of gross floor area
840	Automobile Sales (New)	2.43	9,866	498	518	10,882	1,000 square feet of gross floor area
841	Automobile Sales (Used)	3.75	15,225	769	800	16,794	1,000 square feet of gross floor area
842	Recreational Vehicle Sales	0.77	3,126	158	164	3,448	1,000 square feet of gross floor area
843	Automobile Parts Sales	2.16	8,771	443	461	9,675	1,000 square feet of gross floor area
848	Tire Store	2.73	11,096	560	583	12,239	1,000 square feet of gross floor area
849	Tire Superstore	2.11	8,567	433	450	9,450	1,000 square feet of gross floor area
850	Supermarket	3.58	14,537	734	764	16,035	1,000 square feet of gross floor area
851	Convenience Market	20.88	84,792	4,281	4,454	93,527	1,000 square feet of gross floor area
853	Convenience Market with Gasoline Pumps	7.98	32,419	1,637	1,703	35,759	1,000 square feet of gross floor area
854	Discount Supermarket	4.68	18,985	959	997	20,941	1,000 square feet of gross floor area
857	Discount Club	2.63	10,692	540	562	11,794	1,000 square feet of gross floor area
858	Farmers market - weekday pm peak hour	179.84	730,150	36,867	38,351	805,368	Acres
860	Wholesale Market	1.76	7,146	361	375	7,882	1,000 square feet of gross floor area
861	Sporting Goods Superstore	2.02	8,201	414	431	9,046	1,000 square feet of gross floor area
862	Home Improvement Superstore	1.21	4,919	248	258	5,425	1,000 square feet of gross floor area
863	Electronics Superstore	1.15	4,670	236	245	5,151	1,000 square feet of gross floor area
864	Toy/Children's Superstore	5.00	20,300	1,025	1,066	22,391	1,000 square feet of gross floor area
865	Baby Superstore	1.82	7,389	373	388	8,150	1,000 square feet of gross floor area
866	Pet Supply Superstore	3.55	14,413	728	757	15,898	1,000 square feet of gross floor area
867	Office Supply Superstore	2.77	11,246	568	591	12,405	1,000 square feet of gross floor area
868	Book Superstore	15.83	64,270	3,245	3,376	70,891	1,000 square feet of gross floor area
869	Discount Home Furnishing Superstore	1.57	6,374	322	335	7,031	1,000 square feet of gross floor area
872	Bed and Linen Superstore	2.22	9,013	455	473	9,941	1,000 square feet of gross floor area
875	Department Store	1.95	7,917	400	416	8,733	1,000 square feet of gross floor area
876	Apparel Store	4.12	16,727	845	879	18,451	1,000 square feet of gross floor area
879	Arts and Crafts Store	6.21	25,213	1,273	1,324	27,810	1,000 square feet of gross floor area
880	Pharmacy/Drugstore without Drive-Through	3.60	14,626	739	768	16,133	1,000 square feet of gross floor area
881	Pharmacy/Drugstore with Drive-Through	3.91	15,875	802	834	17,511	1,000 square feet of gross floor area
882	Marijuana Dispensary	21.83	88,630	4,475	4,655	97,760	1,000 square feet of gross floor area
890	Furniture Store	0.19	774	39	41	854	1,000 square feet of gross floor area
895	Beverage container recycling depot -PM peak hr	10.10	41,006	2,071	2,154	45,231	1,000 square feet of gross floor area
897	Medical Equipment Store	1.24	5,034	254	264	5,552	1,000 square feet of gross floor area
899	Liquor store	16.37	66,462	3,356	3,491	73,309	1,000 square feet of gross floor area

Table 26 - Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Services (Land Uses 900-999)							
911	Walk-in Bank	12.13	49,248	2,487	2,587	54,322	1,000 square feet of gross floor area
912	Drive-in Bank	11.40	46,297	2,338	2,432	51,067	1,000 square feet of gross floor area
918	Hair Salon	1.45	5,887	297	309	6,493	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.42	30,125	1,521	1,582	33,228	1,000 square feet of gross floor area
925	Drinking Place	11.36	46,122	2,329	2,423	50,874	1,000 square feet of gross floor area
926	Food Cart Pod	3.08	12,505	631	657	13,793	Food Cart
930	Fast Casual Restaurant	14.13	57,368	2,897	3,013	63,278	1,000 square feet of gross floor area
931	Quality Restaurant	3.32	13,459	680	707	14,846	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	3.88	15,767	796	828	17,391	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	11.27	45,737	2,309	2,402	50,448	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	13.38	54,309	2,742	2,853	59,904	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no in	4.69	19,047	962	1,000	21,009	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	14.43	58,599	2,959	3,078	64,636	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	4.77	19,374	978	1,018	21,370	1,000 square feet of gross floor area
938	Coffee/donut kiosk	9.17	37,215	1,879	1,955	41,049	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through W	28.00	113,680	5,740	5,971	125,391	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Win	19.02	77,221	3,899	4,056	85,176	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	8.70	35,322	1,784	1,855	38,961	Servicing Position
942	Automobile Care Center	3.11	12,627	638	663	13,928	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	2.26	9,176	463	482	10,121	1,000 square feet of gross floor area
944	Gasoline/service station	38.24	155,273	7,840	8,156	171,269	1,000 square feet of gross floor area
945	Gasoline/service station with convenience market	11.29	45,834	2,314	2,407	50,555	1,000 square feet of gross floor area
947	Self-Service Car Wash	5.54	22,492	1,136	1,181	24,809	Wash stall
948	Automated Car Wash	13.60	55,216	2,788	2,900	60,904	Wash stall
949	Car Wash and Detail Center	14.20	57,652	2,911	3,028	63,591	1,000 square feet of gross floor area
950	Truck Stop	22.73	92,284	4,660	4,847	101,791	1,000 square feet of gross floor area
960	Super Convenience Market/Gas Station	69.28	281,277	14,202	14,774	310,253	1,000 square feet of gross floor area
970	Winery	7.31	29,679	1,499	1,559	32,737	1,000 square feet of gross floor area

* No ITE PM peak hour trip generation for this code/category, the trip generation shown is ITE weekday average divided by ten.

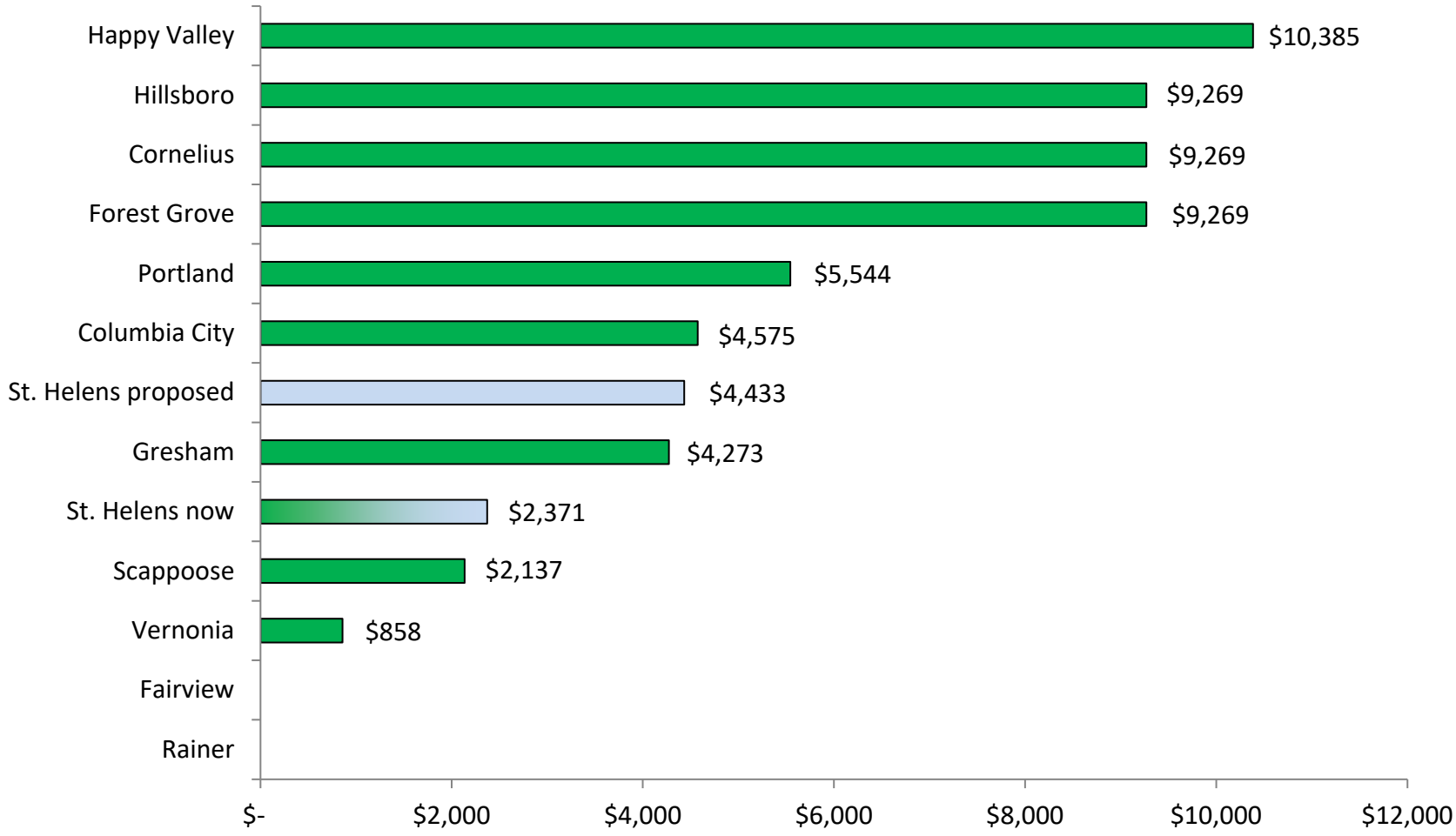
Source: ITE, Trip Generation Manual, 10th edition

PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

Transportation SDCs in Neighboring Communities

Shown below in Figures 6 is a chart that compares the current and proposed transportation SDC for a single-family customer in St. Helens to the same charge in similar communities in Yamhill County.

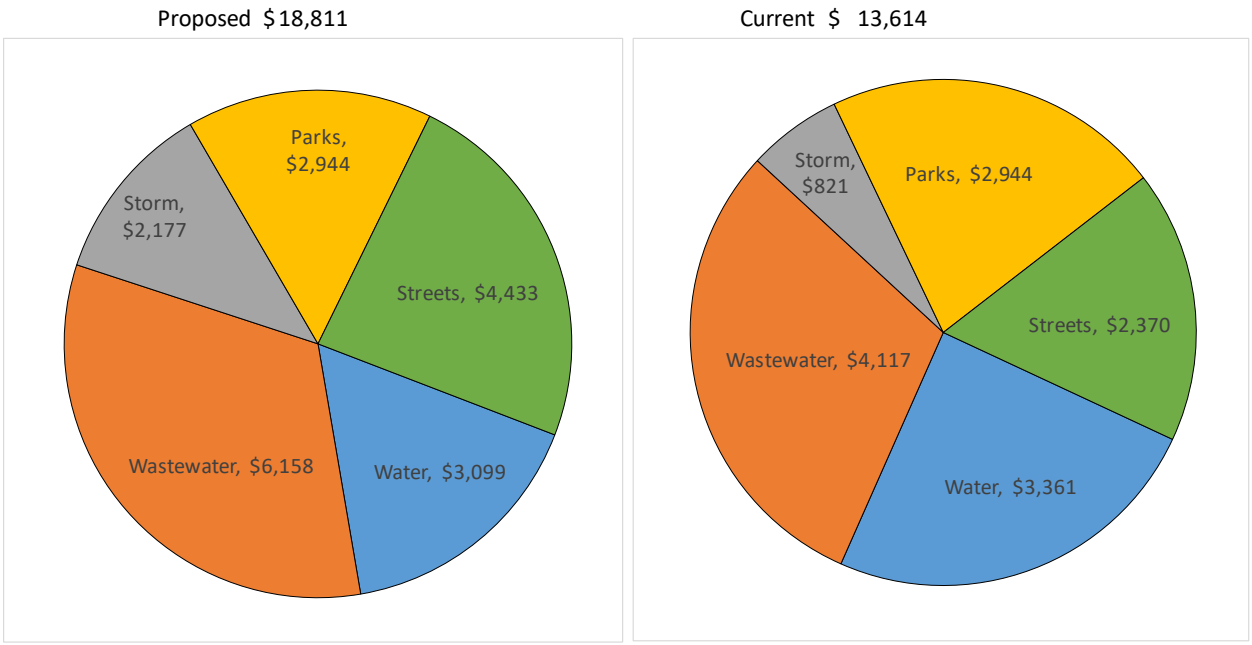
Figure 6 - Neighboring Communities' transportation SDCs (Detached Single Family) January, 2022



Conclusions and Recommendations

The 2021 SDC update was done in accordance with SMC Chapter 13.24, and with the benefit of adopted plans and plan updates for municipal services. A graphic side by side comparison of the proposed and current schedule of SDCs is shown blow in figure 8.

Figure 7 - Proposed and Current Schedule of SDCs



Finally, we recommend the City adopt a policy of reviewing its suite of SDCs every five years. Between the review dates, the city should apply a cost adjustment index to the SDC rates annually to reflect changes in costs for land and construction. This policy should be codified in the St. Helens Municipal Code (SMC §13.24). We suggest the City consider the following language for that section of the SMC:

1. Notwithstanding any other provision, the dollar amounts of the SDC set forth in the SDC methodology report shall on January 1st of each year be adjusted to account for changes in the costs of acquiring and constructing facilities. The adjustment factor shall be based on:

    a. The change in construction costs according to the Engineering News Record (ENR) Construction Cost Index (CCI) (20 City Average).

    b. The system development charges adjustment factor shall be used to adjust the system development charges, unless they are otherwise adjusted by the city based on a change in the costs of materials, labor, or real property; or adoption of an updated methodology.

Neighboring Communities' SDCs

Shown below in Figure 9 is a chart that compares the current SDCs for a single-family customer in St. Helens to the same charges in similar communities in western Oregon.

Figure 8 - Neighboring Communities' SDCs (Detached Single Family) January, 2022