

Warrenton, Oregon



Draft Report for
SYSTEM DEVELOPMENT
CHARGES

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SECTION I: BACKGROUND

This section describes the policy context and project scope upon which the body of this report is based.

A. POLICY

Oregon Revised Statutes (ORS) 223.297 to 223.314 authorize local governments to establish system development charges (SDCs). These are one-time fees on new development, and they are paid at the time of development. SDCs are intended to recover a fair share of the cost of existing and planned facilities that provide capacity to serve future growth.

ORS 223.299 defines two types of SDC:

- A reimbursement fee that is designed to recover “costs associated with capital improvements already constructed, or under construction when the fee is established, for which the local government determines that capacity exists”
- An improvement fee that is designed to recover “costs associated with capital improvements to be constructed”

ORS 223.304(1) states, in part, that a reimbursement fee must be based on “the value of unused capacity available to future system users or the cost of existing facilities” and must account for prior contributions by existing users and any gifted or grant-funded facilities. The calculation must “promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities.” A reimbursement fee may be spent on any capital improvement related to the system for which it is being charged (whether cash-financed or debt-financed).

ORS 223.304(2) states, in part, that an improvement fee must be calculated to include only the cost of projected capital improvements needed to increase system capacity for future users. In other words, the cost of planned projects that correct existing deficiencies or that do not otherwise increase capacity for future users may not be included in the improvement fee calculation. An improvement fee may be spent only on capital improvements (or portions thereof) that increase the capacity of the system for which it is being charged (whether cash-financed or debt-financed).

B. PROJECT

In 2011, the City contracted with FCS Group to develop an SDC methodology and recommend fees for all five of the facility types listed in ORS 223.299(1)(a): water, wastewater, stormwater, transportation, and parks.

We approached this project as a series of three steps:

- **Framework for Charges.** In this step, we worked with City staff to identify and agree on the approach to be used and the components to be included in the analysis.
- **Technical Analysis.** In this step, we worked with City staff to isolate the recoverable portion of facility costs and calculate draft SDC rates. For each of the five SDCs calculated in this report, we present the technical analysis in tabular form. In addition, for the transportation SDC, we have included trip estimates for an extensive list of land uses in **Appendix A**.
- **Draft Methodology Report Preparation.** In this step, we documented the calculation of the draft SDC rates included in this report.

SECTION II: METHODOLOGY

This section provides a non-numeric overview of the calculations that result in SDC rates for each of the five facility types.

A. REIMBURSEMENT FEE

The reimbursement fee is the cost of available capacity per unit of growth that such available capacity will serve. In order for a reimbursement fee to be calculated, unused capacity must be available to serve future growth. For facility types that do not have excess capacity, no reimbursement fee may be charged.

B. IMPROVEMENT FEE

The improvement fee is the cost of capacity-increasing capital projects per unit of growth that those projects will serve. In reality, the capacity added by many projects serves a dual purpose of both meeting existing demand and serving future growth. To compute a compliant SDC rate, growth-related costs must be isolated, and costs related to current demand must be excluded.

We have used the “capacity approach” to allocate costs to the improvement fee basis. Under this approach, the cost of a given project is allocated to growth in proportion to the growth-related capacity that projects of a similar type will create. For example, suppose that a city’s master plan included the acquisition and development of 100 acres of new neighborhood parks. Suppose further that our analysis determined that 30 acres were required to meet existing demand, and 70 acres were required to serve future users. In that case, only 70 percent of the cost for any new neighborhood park would be eligible for recovery with an improvement fee.

Growth should be measured in units that most directly reflect the source of demand. In the case of parks, the most applicable units of growth are population and, where appropriate, population equivalents. However, the units in which demand is expressed may not be the same as the units in which SDC rates are charged. Many SDCs, for example, are charged on the basis of dwelling units. Therefore, conversion is often necessary from units of demand to units of payment. For example, using an average number of residents per household, the number of new residents can be converted to the number of new dwelling units.

C. 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 SDC rates.

D. SUMMARY

In general, SDC rates are calculated by adding the reimbursement fee (if applicable) component, improvement fee component, and compliance cost component. Each component is calculated by dividing the eligible cost by the growth of units of demand. The unit of demand becomes the basis of the charge. **Figure II.1** shows this calculation in equation format:

Figure II.1 – SDC Equation

Eligible costs of available capacity in existing facilities	+	Eligible costs of capacity- increasing capital improvements	+	Costs of complying with Oregon SDC law	=	SDC per unit of growth in demand
Units of growth in demand						

Sections III-VII of this report provides detailed calculations of SDCs for the five facility types: water, wastewater, stormwater, transportation, and parks. **Section VIII** summarizes the recommended SDCs and provides a recommendation for annual adjustment.

SECTION III: WATER

This section provides detailed calculations of our recommended SDC for water facilities.

A. GROWTH

For water facilities, demand is measured in equivalent dwelling units (EDUs). An EDU represents the water demand of a typical single-family residence. In 2008, total water demand was 1,965,000 gallons per day. Based on average daily demand of 313 gallons per day per EDU, the water system served 6,278 EDUs in 2008. Using the City's projected growth rate of 1.73 percent per year, we estimate that the water system served 6,497 EDUs in 2010 (the base year of this study) and will serve 9,156 EDUs in 2030. These estimates imply growth of 2,659 EDUs over the planning period.

B. ELIGIBLE COSTS

The City has SDC-eligible costs in both its existing water facilities and its planned capital projects.

B.1 Existing Facilities

The City estimates the total cost of existing water facilities at \$9,143,614. This amount is net of any grants and donations, which are ineligible for reimbursement. Since only 40 percent of the system's capacity is being utilized, \$5,486,168 can be attributed to (and reimbursed by) growth. When this cost is divided by growth of 2,659 EDUs, the resulting reimbursement fee is \$2,063 per EDU.

B.2 Planned Capital Projects

Over the planning period, the City plans to construct water facilities with an estimated cost of \$3,050,000. However most of these projects will not serve growth exclusively. Only the growth-related portion of each project can be collected as an SDC. **Table III.1** shows the growth-related portion of the planned water projects.

CITY OF WARRENTON
SDC-Eligible Water System Projects List

Table III.1

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Years Until Start of Project)	ESTIMATED TOTAL PROJECT COST (12/2010)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(8-1/CIP 7)	Install pipelines N. 13th to Pacific/Lake, 10,000' of 18"	5	\$1,500,000	50%	\$750,000
(8-1/CIP 14)	Install new pipelines, Surf Pines, 5000' OF 8"	5	\$375,232	0%	\$0
5-year CIP	Delaura Beach Rd water line from 104 to Ridge Road	1	\$450,000	50%	\$225,000
5-year CIP	Marlin Avenue, 2,000' of 18"	1	\$350,000	100%	\$350,000
5-year CIP	SE 8th to Hwy 104 water line size increase from 1" to 8", 7,000'	10	\$372,404	50%	\$186,202
			\$3,050,000		\$1,520,000

When the SDC-eligible cost of \$1,520,000 is divided by growth of 2,659 EDUs, the resulting improvement fee is \$572 per EDU.

B.3 Compliance Costs

Based on data provided by the City, we estimate that the annual cost of compliance with Oregon's SDC law will be 7.44 percent of the reimbursement and improvement fees collected.

B.4 Summary of Costs

Table III.2 summarizes the calculation of the recommended water SDC of \$2,831 per EDU.

CITY OF WARRENTON
Water System
SDC Calculation

Table III.2

	Cost Basis	Unit Basis
		EDUs
Reimbursement Fee		
SDC-Eligible Value of Unused Capacity (5.96 MGD Plant and 3.0 MGD Reservoir)	\$ 5,486,168	
Growth to End of Planning Period (20 years; 2010-2029)		2,659
Reimbursement Fee		\$ 2,063
Improvement Fee		
Total Capital Improvement Projects	\$ 3,050,000	
less: Costs for Existing Users	(1,530,000)	
Net Cost Basis for Improvement Fee	\$ 1,520,000	
Growth to End of Planning Period (20 years; 2010-2029)		2,659
Improvement Fee		\$ 572
Total Water System Development Charge		
Reimbursement Fee		\$ 2,063
Improvement Fee		\$ 572
SDC Subtotal		\$ 2,635
plus: Compliance Cost Recovery	7.44%	\$ 196
Total Water System SDC		\$2,831 per EDU

C. FEE BASIS

For the purpose of imposing a water SDC on an individual property, the number of EDUs will be determined by the size of the property's water meter, as shown in **Table III.3**.

Water SDC by Meter Size

Table III.3

Meter Size	EDUs	SDC
3/4" x 5/8"	1.0	\$ 2,831
1"	2.5	7,078
1-1/2"	5.0	14,155
2"	8.0	22,648
3"	16.0	45,296
4"	25.0	70,775
6"	50.0	141,550
8"	80.0	226,480
10"	125.0	353,875

SECTION IV: WASTEWATER

This section provides detailed calculations of our recommended SDC for wastewater facilities.

A. GROWTH

For wastewater facilities, demand is measured in EDUs. An EDU represents the wastewater demand of a typical single-family residence. In 2010, the City's wastewater system served 2,291 EDUs. Using the City's projected growth rate of 1.73 percent per year, we estimate that the water system will serve 3,229 EDUs in 2030. These estimates imply growth of 938 EDUs over the planning period.

B. ELIGIBLE COSTS

The City has SDC-eligible costs in both its existing wastewater facilities and its planned capital projects.

B.1 Existing Facilities

The City estimates the total cost of existing wastewater facilities at \$1,706,600. This amount is net of any grants and donations, which are ineligible for reimbursement. Since only 45.35 percent of the system's capacity is being utilized, \$932,685 can be attributed to (and reimbursed by) growth. When this cost is divided by growth of 938 EDUs, the resulting reimbursement fee is \$994 per EDU.

B.2 Planned Capital Projects

Over the planning period, the City plans to construct wastewater facilities with an estimated cost of \$3,680,000. However most of these projects will not serve growth exclusively. Only the growth-related portion of each project can be collected as an SDC. **Table IV.1** shows the growth-related portion of the planned wastewater projects.

CITY OF WARRENTON
SDC-Eligible Wastewater System Projects List

Table IV.1

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Start Year)	ESTIMATED TOTAL PROJECT COST (12/2010)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(6-4)	Upgrade Pump Stations	2020	\$2,045,925	50%	\$1,022,962
(6-4)	2nd/Marlin Ave force main	2020	\$258,224	0%	\$0
(6-4)	SE Marlin/101 force main	2020	\$264,845	0%	\$0
(6-4)	Shilo/101 force main	2020	\$258,224	0%	\$0
5-year CIP	Sewer System for "Twin Spruce" area	2012	\$200,000	50%	\$100,000
5-year CIP	SE 9th Pump Station Upgrade	2020	\$150,000	0%	\$0
5-year CIP	SE Jetty/SE King Gravity Collection	2020	\$500,000	0%	\$0
			\$3,680,000		\$1,130,000

When the SDC-eligible cost of \$1,130,000 is divided by growth of 938 EDUs, the resulting improvement fee is \$1,205 per EDU.

B.3 Compliance Costs

Based on data provided by the City, we estimate that the annual cost of compliance with Oregon's SDC law will be 7.44 percent of the reimbursement and improvement fees collected.

B.4 Summary of Costs

Table IV.2 summarizes the calculation of the recommended wastewater SDC of \$2,363 per EDU.

CITY OF WARRENTON
Wastewater System
SDC Calculation

Table IV.2

Reimbursement Fee	Cost Basis	Unit Basis
		EDUs
SDC-Eligible Value of Unused Capacity (Wastewater Treatment Plant - net of grant and tax funding)	\$ 932,685	
Growth to End of Planning Period (20 years; 2010-2029)		938
Reimbursement Fee		\$ 994
Improvement Fee		
Total Capital Improvement Projects	\$ 3,680,000	
less: Costs for Existing Users	(2,550,000)	
Net Cost Basis for Improvement Fee	\$ 1,130,000	
Growth to End of Planning Period (20 years; 2010-2029)		938
Improvement Fee		\$ 1,205
Total Wastewater System Development Charge		
Reimbursement Fee		\$ 994
Improvement Fee		\$ 1,205
SDC Subtotal		\$ 2,199
plus: Compliance Cost Recovery	7.44%	\$ 164
Total Wastewater System SDC		\$2,363 per EDU

C. FEE BASIS

For the purpose of imposing a wastewater SDC on an individual property, the number of EDUs will be determined by the size of the property's water meter, as shown in Table IV.3.

Wastewater SDC by Meter Size **Table IV.3**

Meter Size	EDUs	SDC
3/4" x 5/8"	1.0	\$ 2,363
1"	2.5	5,908
1-1/2"	5.0	11,815
2"	8.0	18,904
3"	16.0	37,808
4"	25.0	59,075
6"	50.0	118,150
8"	80.0	189,040
10"	125.0	295,375

SECTION V: STORMWATER

This section provides detailed calculations of our recommended SDC for stormwater facilities.

A. GROWTH

For stormwater facilities, demand is measured in EDUs. An EDU represents 2,000 square feet of impervious surface area. Based on data provided by the City, we estimate that 11,773 EDUs will be added to the stormwater system over the planning period.

B. ELIGIBLE COSTS

The City has SDC-eligible costs in its planned capital projects but not in its existing stormwater facilities.

B.1 Planned Capital Projects

Over the planning period, the City plans to construct stormwater facilities with an estimated cost of \$5,630,000. However most of these projects will not serve growth exclusively. Only the growth-related portion of each project can be collected as an SDC. **Table V.1** shows the growth-related portion of the planned stormwater projects.

CITY OF WARRENTON
SDC-Eligible Stormwater System Projects List Table V.1

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Start Year)	ESTIMATED TOTAL PROJECT COST (12/2009)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(5-1/4)	Evaluate and upgrade existing pump station adjacent to SE 3rd/4th St.	2015	\$737,228	25%	\$184,307
(5-1/5)	Refurbish existing pump station adjacent to NE 1st St.	2015	\$737,228	25%	\$184,307
(5-1/6)	Upsize storm system in west portion of Hammond Marina sub-basin	2013	\$138,791	50%	\$69,395
(5-1/7A)	Relieve stormwater drainage issue in the East Hammond/Brailier-Enterprise Ditch area	2013	\$593,648	25%	\$148,412
(5-1/7B)	Pump Station for East Hammond/Brailier-Enterprise Ditch Area	2020	\$2,037,600	25%	\$509,400
(5-1/10)	Upgrade downtown conveyance system and create definitive connection between north and south downtown pump stations	2020	\$880,261	50%	\$440,130
new	7th St/Enterprise Stormwater Upgrade	2013	\$500,000	0%	\$0
			\$5,630,000		\$1,540,000

When the SDC-eligible cost of \$1,540,000 is divided by growth of 11,773 EDUs, the resulting improvement fee is \$131 per EDU.

B.2 Compliance Costs

Based on data provided by the City, we estimate that the annual cost of compliance with Oregon's SDC law will be 7.44 percent of the improvement fees collected.

B.3 Summary of Costs

Table V.2 summarizes the calculation of the recommended stormwater SDC of \$131 per EDU.

CITY OF WARRENTON Stormwater System SDC Calculation		Table V.2
Reimbursement Fee	Cost Basis	Unit Basis
		EDUs
SDC-Eligible Value of Unused Capacity	\$ -	\$ -
Growth to End of Planning Period (Buildout)		23,545,182
Reimbursement Fee		\$ -
Improvement Fee		
Total Capital Improvement Projects	\$ 5,630,000	
less: Costs for Existing Users	(4,090,000)	
Net Cost Basis for Improvement Fee	\$ 1,540,000	
Growth to End of Planning Period (Buildout)		23,545,182
Improvement Fee		\$ 0.07
Total Stormwater System Development Charge		
Reimbursement Fee		\$ -
Improvement Fee		0.07
SDC Subtotal		0.07
plus: Compliance Cost Recovery	7.44%	0.00
Total Stormwater System SDC		\$ 0.065406 per SFIS
Stormwater System SDC Per Dwelling Unit**		\$ 130.81 per EDU

* SFIS = Square Foot of Impervious Surface

** based on 2,000 SFIS per dwelling unit

C. FEE BASIS

For the purpose of imposing a stormwater SDC on an individual property, the number of EDUs will be determined by impervious surface area. One EDU equals 2,000 square feet of impervious surface area. However, all single-family residences will be counted as one EDU.

SECTION VI: TRANSPORTATION

This section provides detailed calculations of our recommended SDC for transportation facilities.

A. GROWTH

For transportation facilities, demand is measured in PM peak-hour person-trips (PM PHPTs). A PM PHPT represents one person beginning or ending a trip (by whatever mode) at a certain property during the afternoon rush hour. Based on data provided by the City, we estimate that the transportation system served 11,564 PM PHPTs in 2010 (the base year of this study) and will serve 15,391 PM PHPTs in 2030. These estimates imply growth of 3,826 PM PHPTs over the planning period.

B. ELIGIBLE COSTS

The City has SDC-eligible costs in its planned capital projects but not in its existing transportation facilities.

B.1 Planned Capital Projects

Over the planning period, the City plans to construct transportation facilities with an estimated cost of \$4,130,000. However not all of these projects will serve growth exclusively. Only the growth-related portion of each project can be collected as an SDC. **Table VI.1** shows the growth-related portion of the planned transportation projects.

CITY OF WARRENTON
SDC-Eligible Transportation System Projects List

Table VI.1

PLAN/ PROJECT NUMBER	DESCRIPTION	PRIORITY (Years Until Start of Project)	ESTIMATED TOTAL PROJECT COST (12/2010)	MOTOR VEHICLE			BICYCLE			PEDESTRIAN			TOTAL SDC- ELIGIBLE COSTS
				ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATED PEDESTRIAN FACILITY PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE PED %	SDC- ELIGIBLE PEDESTRIAN COSTS	
TSP (Table 5- 4 #9)	Widen SW 9th Street from Ft. Stevens Highway 104 to Ridge Road including bikelanes, sidewalks, and drainage.	2 - 3	\$1,882,426	80.00%	100.00%	\$1,505,941	10.00%	24.86%	\$46,799	10.00%	24.86%	\$37,440	\$1,590,180
TSP (Table 5- 4 #14)	Connect SW/NW Juniper Ave with Ridge Road, including sidewalks, curbs, and drainage.	11 - 15	\$609,020	80.00%	100.00%	\$487,216	0.00%	24.86%	\$0	20.00%	24.86%	\$24,226	\$511,442
TSP (Table 5- 5 #11)	Reconfigure Delaura Beach Lane & Ridge Road Intersection.	11 - 15	\$553,655	100.00%	100.00%	\$553,655	0.00%	24.86%	\$0	0.00%	24.86%	\$0	\$553,655
TSP (Table 5- 6 #16)	East Harbor Drive: Add curbs and sidewalks on both sides from US Hwy 101 to SE Marlin Avenue.	6 - 10	\$741,897	0.00%	100.00%	\$0	0.00%	24.86%	\$0	100.00%	24.86%	\$0	\$0
TSP (Table 5- 6 #17)	SE Neptune Ave.: Add sidewalks and bike lanes on both sides from US Hwy 101 to East Harbor Dr.	1 - 2	\$310,047	50.00%	100.00%	\$155,023	25.00%	24.86%	\$19,270	25.00%	24.86%	\$9,635	\$183,929
TSP (Table 5- 8, no #)	Fort Stevens Highway 104 Spur: Strip 6-foot wide bike lanes on both sides of road (includes minor widening) from Ft. Stevens Hwy 104 to US Hwy 101.	6 - 10	\$27,683	0.00%	100.00%	\$0	100.00%	24.86%	\$3,441	0.00%	24.86%	\$0	\$3,441
TOTALS (rounded)			\$4,130,000			\$2,710,000			\$70,000			\$80,000	\$2,860,000

When the SDC-eligible cost of \$2,860,000 is divided by growth of 3,826 PM PHPTs, the resulting improvement fee is \$747 per PM PHPT.

B.2 Compliance Costs

Based on data provided by the City, we estimate that the annual cost of compliance with Oregon's SDC law will be 7.44 percent of the improvement fees collected.

B.3 Summary of Costs

Table VI.2 summarizes the calculation of the recommended transportation SDC of \$803 per PM PHPT.

CITY OF WARRENTON Transportation System SDC Calculation		Table VI.2
Reimbursement Fee		
Improvement Fee Expenditures	\$	-
Unused Capacity		-
Cost of Net Unused Capacity	\$	-
Growth to End of Planning Period		3,826 PM Peak-Hour Person-Trips (PHPT)
Reimbursement Fee	\$	- per PM PHPT
Motor Vehicle Improvement Fee		
Total MV Project Costs	\$	2,710,000
less: Costs for Existing Users		-
Net MV SDC-Eligible Costs	\$	2,710,000
Growth to End of Planning Period		3,826 PM PHPT
Improvement Fee	\$	708 per PM PHPT
Bicycle/Pedestrian Improvement Fee		
Total Bike/Ped Project Costs	\$	570,000
less: Costs for Existing Users		(420,000)
Net Bike/Ped SDC-Eligible Costs	\$	150,000
Growth to End of Planning Period		3,826 PM PHPT
Improvement Fee	\$	39 per PM PHPT
Total System Development Charge		
Reimbursement Fee	\$	- per PM PHPT
MV Improvement Fee	\$	708 per PM PHPT
Bike/Ped Improvement Fee	\$	39 per PM PHPT
SDC Subtotal	\$	747 per PM PHPT
plus: Administrative Cost Recovery	7.44%	\$55.60 per PM PHPT
Total Transportation System SDC	\$	803 per PM PHPT

C. FEE BASIS

For the purpose of imposing a transportation SDC on an individual property, the number of PM PHPTs will be based on data in *Trip Generation* for the property's particular land use. **Table VI.3** shows how an SDC would be calculated for seven different land uses.

Sample Transportation SDCs by Land Use

Table VI.3

Type of Development	Est. Peak-Hour Person-Trips*	SDC	Basis
1 Single-Family Residence	1.54 per Dwelling Unit	\$ 1,238	per Dwelling Unit
2 Multi-Family Residence	1.01 per Dwelling Unit	\$ 813	per Dwelling Unit
3 General Office Bldg.	1.95 per 1,000 sq. ft.	\$ 1,565	per 1,000 sq. ft.
4 Specialty Retail	3.72 per 1,000 sq. ft.	\$ 2,987	per 1,000 sq. ft.
5 Supermarket	11.46 per 1,000 sq. ft.	\$ 9,203	per 1,000 sq. ft.
6 Discount Superstore	4.81 per 1,000 sq. ft.	\$ 3,862	per 1,000 sq. ft.
7 Light Industry	1.63 per 1,000 sq. ft.	\$ 1,311	per 1,000 sq. ft.

* Adjusted PM Peak-Hour MV Trip Rates from Trip Generation, Institute of Transportation Engineers, 8th Ed.

PM PHPTs for additional land uses can be found in **Appendix A**.

SECTION VII: PARKS

This section provides detailed calculations of our recommended SDC for park facilities.

A. GROWTH

For park facilities, demand is measured in dwelling units (DUs). Based on data provided by the City, we estimate that Warrenton will gain 2,099 residents during the planning period. According to the 2000 Census, average household size is 2.53 persons per DU. Therefore, the estimated population growth represents a gain of 830 DUs during the planning period.

B. ELIGIBLE COSTS

The City has SDC-eligible costs in its planned capital projects but not in its existing park facilities.

B.1 Planned Capital Projects

Over the planning period, the City plans to construct park facilities with an estimated cost of \$3,500,000. These projects will serve growth exclusively by maintaining only the current level of service throughout the planning period. **Table VII.1** shows the growth-related portion of the planned park projects.

CITY OF WARRENTON		Table VII.1			
SDC-Eligible Parks System Projects List					
PARKS PLAN TABLE	DESCRIPTION	PRIORITY (Years 20__)	ESTIMATED TOTAL PROJECT COST	ESTIMATED NEW CAPACITY PORTION	ESTIMATED NEW CAPACITY PROJECT COST
Table 7.9	Land Acquisition (5 acres)	11 - 20	\$1,000,000	100%	\$1,000,000
Table 7.9	Land Acquisition (5 acres)	11 - 20	\$1,000,000	100%	\$1,000,000
Table 7.10	Land Development (5 acres)	11 - 20	\$750,000	100%	\$750,000
Table 7.10	Land Development (5 acres)	11 - 20	\$750,000	100%	\$750,000
			\$3,500,000		\$3,500,000

When the SDC-eligible cost of \$3,500,000 is divided by growth of 830 DUs, the resulting improvement fee is \$4,219 per DU.

B.2 Compliance Costs

Based on data provided by the City, we estimate that the annual cost of compliance with Oregon's SDC law will be 7.44 percent of the improvement fees collected.

B.3 Summary of Costs

Table VII.2 summarizes the calculation of the recommended parks SDC of \$4,533 per DU.

CITY OF WARRENTON Parks System SDC Calculation		Table VII.2	
Improvement Fee	Cost Basis	Unit Basis	
		Dwelling Units	
Total Capital Improvement Projects	\$ 3,500,000		
less: Costs for Existing Users	-		
Net Cost Basis for Improvement Fee	\$ 3,500,000		
Population Growth to End of Planning Period (20 years; 2010-2030)	2099		
Persons Per Occupied Dwelling Unit (2000 Census)	2.53		
Growth in Dwelling Units to end of Planning Period	830		
Improvement Fee Per Dwelling Unit		\$ 4,218.68	
Total Parks System Development Charge			
Improvement Fee		\$ 4,219	
plus: Compliance Cost Recovery	7.44%	\$ 314	
Total Parks System SDC		\$ 4,533	per DU

C. FEE BASIS

For the purpose of imposing a parks SDC on an individual property, only the number of dwelling units is considered. Therefore, non-residential property is exempt from the parks SDC.

D. PHASING

For residential properties, the parks SDC will be the largest of the five SDCs by a significant margin. However, the impact can be mitigated by phasing the implementation of the parks SDC. **Table VII.3** shows how such phasing could affect the SDCs imposed on a single-family residence if implemented over three years.

SDCs for a Single-Family Residence Table VII.3				
With Phasing of Parks SDC				
Parks percentage	0%	50%	100%	
System	Year 1	Year 2	Year 3	
Water	2,831	2,831	2,831	
Wastewater	2,363	2,363	2,363	
Stormwater	131	131	131	
Transportation	1,238	1,238	1,238	
Parks	-	2,266	4,533	
Total SDCs	6,563	8,829	11,095	

No inflationary adjustment is assumed.

SECTION VIII: CONCLUSION

This section summarizes the recommended SDCs and provides a recommendation for annual adjustment.

A. RECOMMENDED SDCS

Table VIII.1 summarizes the recommended SDCs.

Recommended SDCs			Table VIII.1
System	Fee	Per	Varies by
Water	\$2,831	EDU	Meter size
Wastewater	\$2,363	EDU	Meter size
Stormwater	\$ 131	EDU	Impervious surface area
Transportation	\$ 803	PM PHPT	Land use
Parks	\$4,533	DU	N/A

B. ANNUAL ADJUSTMENT

We recommend the adoption of SDCs with a provision for annual adjustment based on the Construction Cost Index for Seattle, which is published at monthly intervals by the *Engineering News Record*. Over the past 20 years, this index has grown at an average rate of 2.91 percent per year.

APPENDIX A

The following tables provide transportation SDC calculations for an extensive list of land uses.

ITE CODE	LAND USE CATEGORY	Total PH Person Trip-Ends*	% New Trips	Net New PH Person Trip-Ends	Total SDC Rate Per PH Trip-End	Total SDC Per Unit	Unit **
RESIDENTIAL							
210	Single Family Detached	1.54	100%	1.54	\$ 803.10	\$ 1,237.81	/dwelling unit
220	Apartment	1.01	100%	1.01	\$ 803.10	\$ 813.07	/dwelling unit
230	Residential Condominium / Townhouse	0.79	100%	0.79	\$ 803.10	\$ 631.04	/dwelling unit
240	Manufactured Housing	0.91	100%	0.91	\$ 803.10	\$ 728.12	/dwelling unit
254	Assisted Living	0.57	100%	0.57	\$ 803.10	\$ 461.14	/bed
RECREATIONAL							
411	City Park	0.24	100%	0.24	\$ 803.10	\$ 192.95	/acre
417	Regional Park	0.39	100%	0.39	\$ 803.10	\$ 315.52	/acre
430	Golf Course	5.38	100%	5.38	\$ 803.10	\$ 4,320.18	/hole
435	Multipurpose Recreation/Arcade	5.41	100%	5.41	\$ 803.10	\$ 4,344.45	/T.S.F.G.F.A.
444	Movie Theater with matinee	30.55	100%	30.55	\$ 803.10	\$24,537.67	/screen
492	Health/Fitness Club	6.13	100%	6.13	\$ 803.10	\$ 4,926.95	/T.S.F.G.F.A.
495	Recreation/Community Center	3.61	100%	3.61	\$ 803.10	\$ 2,900.35	/T.S.F.G.F.A.
INSTITUTIONAL							
520	Elementary School	0.42	100%	0.42	\$ 803.10	\$ 339.79	/student
522	Middle/Junior High School	0.47	100%	0.47	\$ 803.10	\$ 376.20	/student
530	High School	0.44	100%	0.44	\$ 803.10	\$ 351.93	/student
540	Junior/Community College	0.18	100%	0.18	\$ 803.10	\$ 145.62	/student
560	Church	1.42	100%	1.42	\$ 803.10	\$ 1,140.72	/T.S.F.G.F.A.
565	Day Care Center/Preschool	21.02	100%	21.02	\$ 803.10	\$16,880.27	/T.S.F.G.F.A.
590	Library	10.88	100%	10.88	\$ 803.10	\$ 8,737.45	/T.S.F.G.F.A.
591	Lodge/Fraternal Organization	0.05	100%	0.05	\$ 803.10	\$ 36.41	/member
610	Hospital	2.19	100%	2.19	\$ 803.10	\$ 1,759.63	/bed
620	Nursing Home	0.45	100%	0.45	\$ 803.10	\$ 364.06	/bed
* Based on MV Occupancy @ 1.4 Persons/Vehicle, and MV Travel = 92.65% of All Travel Modes							
** Abbreviations used in the "Unit" column:							
T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area							
T.S.F.G.L.A. = Thousand Square Feet Gross Leaseable Area							
V.F.P. = Vehicle Fueling Position							

ITE CODE	LAND USE CATEGORY	Total PH Person Trip-Ends*	% New Trips	Net New PH Person Trip-Ends	Total SDC Rate Per PH Trip-End	Total SDC Per Unit	Unit **
COMMERCIAL / SERVICES							
310	Hotel	0.92	100%	0.92	\$ 803.10	\$ 740.26	/room
320	Motel	1.04	100%	1.04	\$ 803.10	\$ 837.34	/room
812	Building Materials/ Lumber	8.40	70%	5.88	\$ 803.10	\$ 4,723.08	/T.S.F.G.F.A.
813	Free-Standing Discount Superstore with Groceries	7.07	68%	4.81	\$ 803.10	\$ 3,861.95	/T.S.F.G.F.A.
815	Free-Standing Discount Store Without Groceries	8.42	83%	6.99	\$ 803.10	\$ 5,610.29	/T.S.F.G.F.A.
816	Hardware/Paint Stores	7.16	74%	5.30	\$ 803.10	\$ 4,256.59	/T.S.F.G.F.A.
817	Nursery/Garden Center	7.51	70%	5.26	\$ 803.10	\$ 4,221.89	/T.S.F.G.F.A.
820	Shopping Center	5.64	66%	3.72	\$ 803.10	\$ 2,987.48	/T.S.F.G.L.A.
841	New Car Sales	4.11	70%	2.88	\$ 803.10	\$ 2,310.57	/T.S.F.G.F.A.
848	Tire Store	4.93	72%	3.55	\$ 803.10	\$ 2,848.41	/T.S.F.G.F.A.
850	Supermarket	17.91	64%	11.46	\$ 803.10	\$ 9,203.45	/T.S.F.G.F.A.
851	Convenience Market (24 hour)	80.72	39%	31.48	\$ 803.10	\$25,282.54	/T.S.F.G.F.A.
857	Discount Club	7.19	66%	4.75	\$ 803.10	\$ 3,812.44	/T.S.F.G.F.A.
862	Home Improvement Superstore	5.02	66%	3.31	\$ 803.10	\$ 2,659.10	/T.S.F.G.F.A.
880	Pharmacy/Drugstore Without Drive-Thru Window	16.73	47%	7.86	\$ 803.10	\$ 6,313.90	/T.S.F.G.F.A.
881	Pharmacy/Drugstore With Drive-Thru Window	13.92	51%	7.10	\$ 803.10	\$ 5,700.09	/T.S.F.G.F.A.
890	Furniture Store	0.80	47%	0.38	\$ 803.10	\$ 302.29	/T.S.F.G.F.A.
911	Walk-in Bank	18.33	70%	12.83	\$ 803.10	\$10,304.12	/T.S.F.G.F.A.
912	Drive-In Bank	40.33	53%	21.38	\$ 803.10	\$17,166.30	/T.S.F.G.F.A.
925	Drinking Place	23.41	100%	23.41	\$ 803.10	\$18,797.65	/T.S.F.G.F.A.
931	Quality Restaurant (not a chain)	13.63	56%	7.63	\$ 803.10	\$ 6,129.81	/T.S.F.G.F.A.
932	High Turnover, Sit-Down Restaurant (chain or stand alone)	27.94	57%	15.93	\$ 803.10	\$12,789.81	/T.S.F.G.F.A.
* Based on MV Occupancy @ 1.4 Persons/Vehicle, and MV Travel = 92.65% of All Travel Modes							
**Abbreviations used in the "Unit" column:							
T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area							
T.S.F.G.L.A. = Thousand Square Feet Gross Leaseable Area							
V.F.P. = Vehicle Fueling Position							

ITE CODE	LAND USE CATEGORY	Total PH Person Trip-Ends*	% New Trips	Net New PH Person Trip-Ends	Total SDC Rate Per PH Trip-End	Total SDC Per Unit	Unit **
COMMERCIAL / SERVICES (continued)							
933	Fast Food Restaurant (No Drive-Thru)	79.33	50%	39.67	\$ 803.10	\$31,855.29	/T.S.F.G.F.A.
934	Fast Food Restaurant (With Drive-Thru)	69.72	50%	34.86	\$ 803.10	\$27,996.25	/T.S.F.G.F.A.
936	Coffee/Donut Shop (No Drive-Thru)	39.00	50%	19.50	\$ 803.10	\$15,660.67	/T.S.F.G.F.A.
937	Coffee/Donut Shop (With Drive-Thru)	54.64	50%	27.32	\$ 803.10	\$21,940.71	/T.S.F.G.F.A.
938	Coffee/Donut Shop (Drive-Thru Only with No Seating)	145.06	50%	72.53	\$ 803.10	\$58,249.67	/T.S.F.G.F.A.
944	Gasoline/Service Station (no Market or Car Wash)	23.65	58%	13.72	\$ 803.10	\$11,015.26	/V.F.P.
945	Gasoline/Service Station (With Convenience Market)	20.51	44%	9.02	\$ 803.10	\$ 7,245.77	/V.F.P.
946	Gasoline/Service Station (With Convenience Market and Car Wash)	22.12	70%	15.49	\$ 803.10	\$12,436.30	/V.F.P.
OFFICE							
710	General Office	1.95	100%	1.95	\$ 803.10	\$ 1,565.46	/T.S.F.G.F.A.
720	Medical-Dental Office	6.72	100%	6.72	\$ 803.10	\$ 5,400.23	/T.S.F.G.F.A.
750	Office Park	2.24	100%	2.24	\$ 803.10	\$ 1,796.03	/T.S.F.G.F.A.
760	760 Research & Development Center	1.62	100%	1.62	\$ 803.10	\$ 1,298.48	/T.S.F.G.F.A.
770	770 Business Park	1.95	100%	1.95	\$ 803.10	\$ 1,565.46	/T.S.F.G.F.A.
INDUSTRIAL							
110	110 General Light Industrial	1.63	100%	1.63	\$ 803.10	\$ 1,310.62	/T.S.F.G.F.A.
130	130 Industrial Park	1.30	100%	1.30	\$ 803.10	\$ 1,043.64	/T.S.F.G.F.A.
140	140 Manufacturing	1.13	100%	1.13	\$ 803.10	\$ 910.15	/T.S.F.G.F.A.
151	151 Mini-Warehouse	0.44	100%	0.44	\$ 803.10	\$ 351.93	/T.S.F.G.F.A.
* Based on MV Occupancy @ 1.4 Persons/Vehicle, and MV Travel = 92.65% of All Travel Modes							
**Abbreviations used in the "Unit" column:							
T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area							
T.S.F.G.L.A. = Thousand Square Feet Gross Leaseable Area							
V.F.P. = Vehicle Fueling Position							

APPENDIX B

Council Presentation Packet



City of Warrenton System Development Charges

Council Workshop

December 13, 2011

Agenda

■ System Development Charges

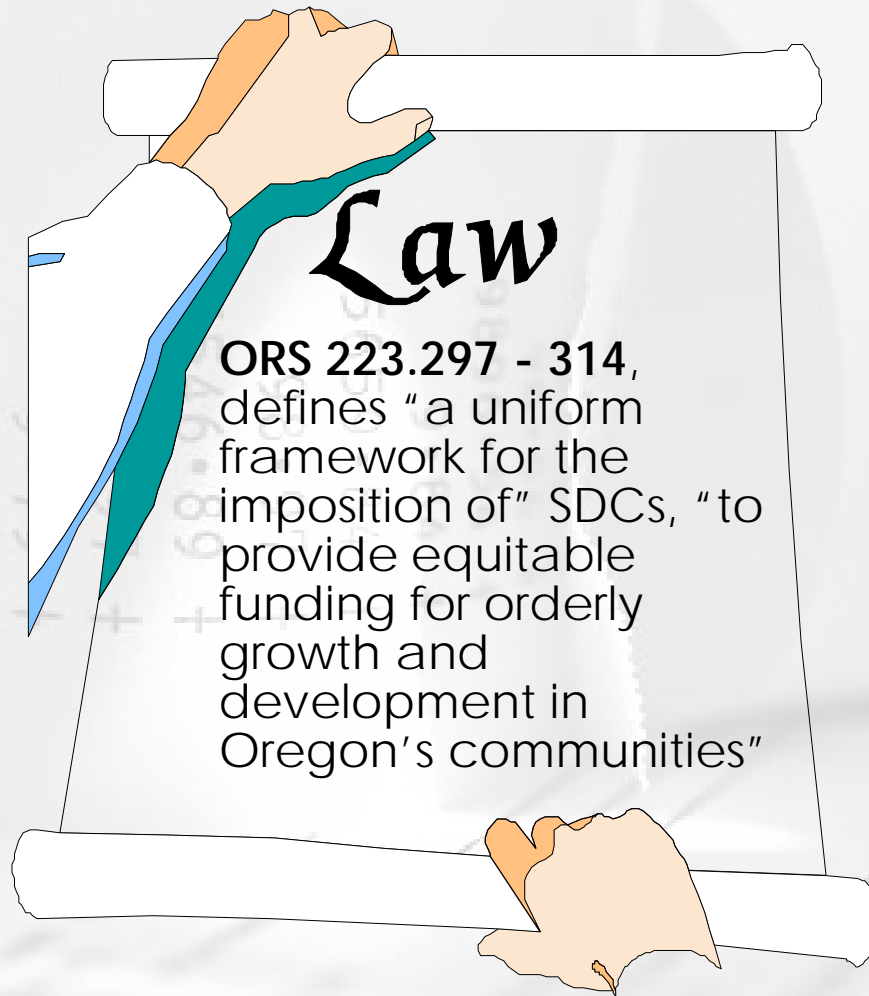
- ✓ Water
- ✓ Wastewater
- ✓ Stormwater
- ✓ Transportation
- ✓ Parks

■ Discussion

■ Next Steps

System Development Charges

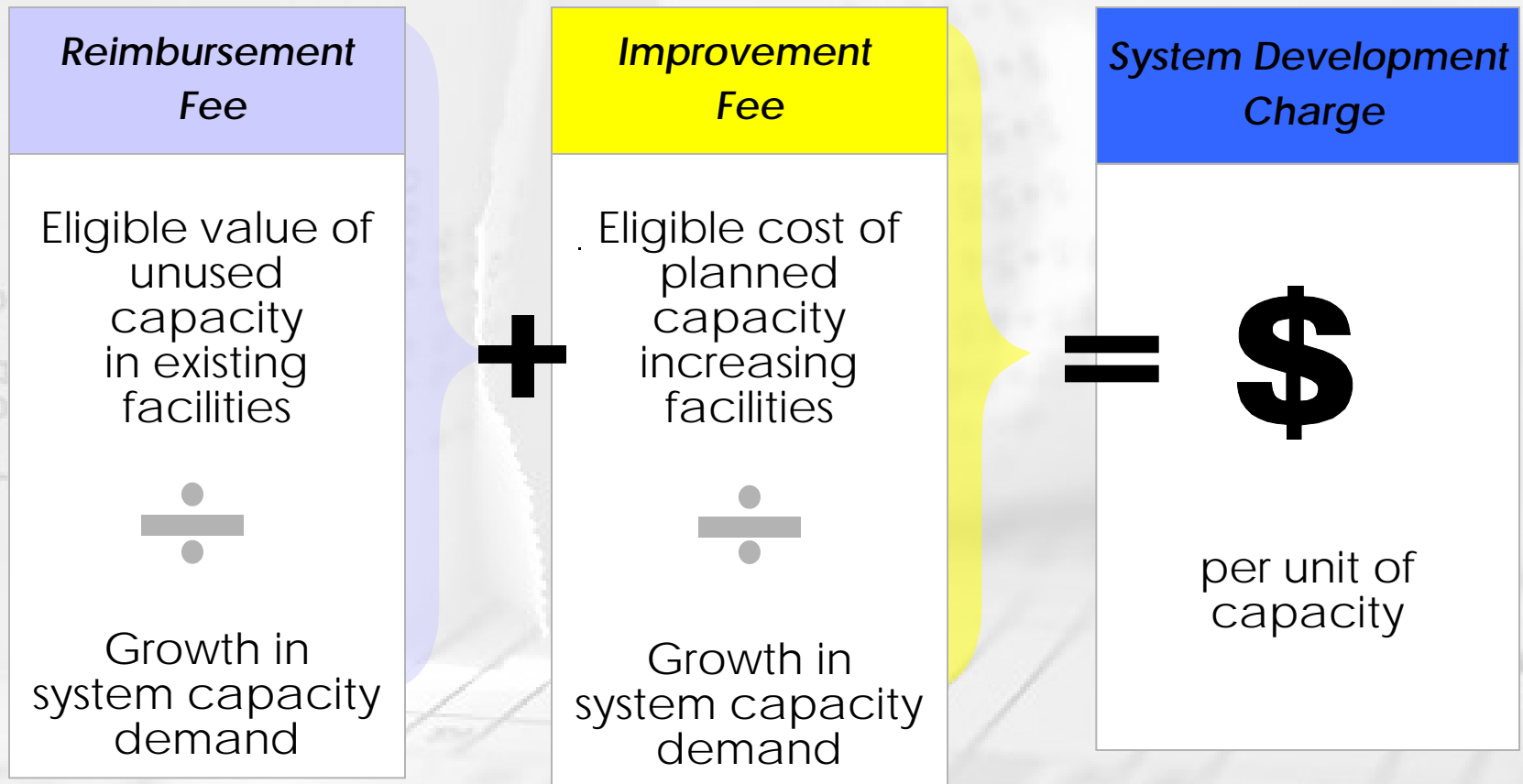
SDC Background



Key Characteristics

1. SDCs are one-time charges, not ongoing rates.
2. SDCs are for capital only, in both their calculation and in their use.
3. Properties which are already developed do not pay SDCs unless they "redevelop".
4. SDCs include both future and existing cost components.
5. SDCs are for general facilities, not "local" facilities.

SDC Methodology



Key Study Assumptions

- The average growth rate for population and equivalent dwelling units (EDUs) is estimated at 1.78% per year.
- Existing unused capacity costs are included in the reimbursement fee portion of the system development charges (SDCs).
- Planned capacity-increasing project costs are included in the improvement fee portion of the SDCs.

Water Capital Improvements

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Years Until Start of Project)	ESTIMATED TOTAL PROJECT COST (12/2010)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(8-1/CIP 7)	Install pipelines N. 13th to Pacific/Lake, 10,000' of 18"	5	\$1,500,000	50%	\$750,000
(8-1/CIP 14)	Install new pipelines, Surf Pines, 5000' OF 8"	5	\$375,232	0%	\$0
5-year CIP	Delaura Beach Rd water line from 104 to Ridge Road	1	\$450,000	50%	\$225,000
5-year CIP	Marlin Avenue, 2,000' of 18"	1	\$350,000	100%	\$350,000
5-year CIP	SE 8th to Hwy 104 water line size increase from 1" to 8", 7,000'	10	\$372,404	50%	\$186,202
			\$3,050,000		\$1,520,000

Calculation of Water SDC

Reimbursement Fee	Cost Basis	Unit Basis
		EDUs
SDC-Eligible Value of Unused Capacity (5.96 MGD Plant and 3.0 MGD Reservoir)	\$ 5,486,168	
Growth to End of Planning Period (20 years; 2010-2029)		2,659
Reimbursement Fee		\$ 2,063
Improvement Fee		
Total Capital Improvement Projects	\$ 3,050,000	
less: Costs for Existing Users	<u>(1,530,000)</u>	
Net Cost Basis for Improvement Fee	\$ 1,520,000	
Growth to End of Planning Period (20 years; 2010-2029)		2,659
Improvement Fee		\$ 572
Total Water System Development Charge		
Reimbursement Fee		\$ 2,063
Improvement Fee		\$ 572
SDC Subtotal		\$ 2,635
plus: Compliance Cost Recovery	7.44%	\$ 196
Total Water System SDC		\$2,831 per EDU

Calculated Water SDCs by Meter Size

Meter Size	Flow Factors	SDC
3/4" x 5/8"	1	\$ 2,831
1"	2.5	7,078
1-1/2"	5	14,155
2"	8	22,648
3"	16	45,296
4"	25	70,775
6"	50	141,550
8"	80	226,480
10"	125	353,875

Wastewater Capital Improvements

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Start Year)	ESTIMATED TOTAL PROJECT COST (12/2010)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(6-4)	Upgrade Pump Stations	2020	\$2,045,925	50%	\$1,022,962
(6-4)	2nd/Marlin Ave force main	2020	\$258,224	0%	\$0
(6-4)	SE Marlin/101 force main	2020	\$264,845	0%	\$0
(6-4)	Shilo/101 force main	2020	\$258,224	0%	\$0
5-year CIP	Sewer System for "Twin Spruce" area	2012	\$200,000	50%	\$100,000
5-year CIP	SE 9th Pump Station Upgrade	2020	\$150,000	0%	\$0
5-year CIP	SE Jetty/SE King Gravity Collection	2020	\$500,000	0%	\$0
			\$3,680,000		\$1,130,000

Calculation of Wastewater SDCs

Reimbursement Fee	Cost Basis	Unit Basis
		EDUs
SDC-Eligible Value of Unused Capacity (Wastewater Treatment Plant - net of grant and tax funding)	\$ 932,685	
Growth to End of Planning Period (20 years; 2010-2029)		938
Reimbursement Fee		\$ 994
Improvement Fee		
Total Capital Improvement Projects	\$ 3,680,000	
less: Costs for Existing Users	<u>(2,550,000)</u>	
Net Cost Basis for Improvement Fee	\$ 1,130,000	
Growth to End of Planning Period (20 years; 2010-2029)		938
Improvement Fee		\$ 1,205
Total Wastewater System Development Charge		
Reimbursement Fee		\$ 994
Improvement Fee		\$ 1,205
SDC Subtotal		\$ 2,199
plus: Compliance Cost Recovery	7.44%	\$ 164
Total Wastewater System SDC		\$2,363 per EDU

Calculated Wastewater SDCs by Meter Size

Meter Size	Flow Factors	SDC
3/4" x 5/8"	1	\$ 2,363
1"	2.5	5,908
1-1/2"	5	11,815
2"	8	18,904
3"	16	37,808
4"	25	59,075
6"	50	118,150
8"	80	189,040
10"	125	295,375

Stormwater Capital Improvements

PLAN/PROJECT NUMBER	DESCRIPTION	PRIORITY (Start Year)	ESTIMATED TOTAL PROJECT COST (12/2009)	ESTIMATED LOCAL NEW CAPACITY PORTION	ESTIMATED LOCAL NEW CAPACITY PROJECT COST
(5-1/4)	Evaluate and upgrade existing pump station adjacent to SE 3rd/4th St.	2015	\$737,228	25%	\$184,307
(5-1/5)	Refurbish existing pump station adjacent to NE 1st St.	2015	\$737,228	25%	\$184,307
(5-1/6)	Upsize storm system in west portion of Hammond Marina sub-basin	2013	\$138,791	50%	\$69,395
(5-1/7A)	Relieve stormwater drainage issue in the East Hammond/Brailler-Enterprise Ditch area	2013	\$593,648	25%	\$148,412
(5-1/7B)	Pump Station for East Hammond/Brailler-Enterprise Ditch Area	2020	\$2,037,600	25%	\$509,400
(5-1/10)	Upgrade downtown conveyance system and create definitive connection between north and south downtown pump stations	2020	\$880,261	50%	\$440,130
new	7th St/Enterprise Stormwater Upgrade	2013	\$500,000	0%	\$0
			\$5,630,000		\$1,540,000

Calculation of Stormwater SDC

Reimbursement Fee	Cost Basis	Unit Basis
		(SFIS*)
SDC-Eligible Value of Unused Capacity	\$ -	\$ -
Growth to End of Planning Period (Buildout)		23,545,182
Reimbursement Fee		\$ -
Improvement Fee		
Total Capital Improvement Projects	\$ 5,630,000	
less: Costs for Existing Users	<u>(4,090,000)</u>	
Net Cost Basis for Improvement Fee	\$ 1,540,000	
Growth to End of Planning Period (Buildout)		23,545,182
Improvement Fee		\$ 0.07
Total Stormwater System Development Charge		
Reimbursement Fee		\$ -
Improvement Fee		<u>0.07</u>
SDC Subtotal		0.07
plus: Compliance Cost Recovery	7.44%	<u>0.00</u>
Total Stormwater System SDC		\$ 0.07 per SFIS
Stormwater System SDC Per Dwelling Unit**		\$ 130.81 per DU

* SFIS = Square Foot of Impervious Surface

** based on 2,000 SFIS per dwelling unit

Transportation Capital Improvements

PLAN/ PROJECT NUMBER	DESCRIPTION	PRIORITY (Years Until Start of Project)	ESTIMATED LOCAL NEW CAPACITY PROJECT COST	MOTOR VEHICLE			BICYCLE			PEDESTRIAN		
				ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATED PEDESTRIAN FACILITY PORTION OF PROJECT	GROWTH REQUIRED SDC- ELIGIBLE PED %	SDC- ELIGIBLE PEDESTRIAN COSTS
TSP (Table 5- 4 #9)	Widen SW 9th Street from Ft. Stevens Highway 104 to Ridge Road including bikelanes, sidewalks, and drainage.	2 - 3	\$1,882,426	80.00%	100.00%	\$1,505,941	10.00%	24.86%	\$46,799	10.00%	24.86%	\$37,440
TSP (Table 5- 4 #14)	Connect SW/NW Juniper Ave with Ridge Road, including sidewalks, curbs, and drainage.	11 - 15	\$609,020	80.00%	100.00%	\$487,216	0.00%	24.86%	\$0	20.00%	24.86%	\$24,226
TSP (Table 5- 5 #11)	Reconfigure Delaura Beach Lane & Ridge Road Intersection.	11 - 15	\$553,655	100.00%	100.00%	\$553,655	0.00%	24.86%	\$0	0.00%	24.86%	\$0
TSP (Table 5- 6 #16)	East Harbor Drive: Add curbs and sidewalks on both sides from US Hwy 101 to SE Marlin Avenue.	6 - 10	\$741,897	0.00%	100.00%	\$0	0.00%	24.86%	\$0	100.00%	24.86%	\$0
TSP (Table 5- 6 #17)	SE Neptune Ave.: Add sidewalks and bike lanes on both sides from US Hwy 101 to East Harbor Dr.	1 - 2	\$310,047	50.00%	100.00%	\$155,023	25.00%	24.86%	\$19,270	25.00%	24.86%	\$9,635
TSP (Table 5- 8, no #)	Fort Stevens Highway 104 Spur: Strip 6-foot wide bike lanes on both sides of road (includes minor widening) from Ft. Stevens Hwy 104 to US Hwy 101.	6 - 10	\$13,841	0.00%	100.00%	\$0	100.00%	24.86%	\$3,441	0.00%	24.86%	\$0
TOTALS			\$4,120,000			\$2,710,000			\$70,000			\$80,000

Calculation of Transportation SDCs

Reimbursement Fee

Improvement Fee Expenditures	\$	-	
Unused Capacity		-	
Cost of Net Unused Capacity	\$	-	
Growth to End of Planning Period			3,826 PM Peak-Hour Person-Trips (PHPT)
Reimbursement Fee	\$	-	per PM PHPT

Motor Vehicle Improvement Fee

Total MV Project Costs	\$	2,710,000	
less: Costs for Existing Users		-	
Net MV SDC-Eligible Costs	\$	2,710,000	
Growth to End of Planning Period			3,826 PM PHPT
Improvement Fee	\$	708	per PM PHPT

Bicycle/Pedestrian Improvement Fee

Total Bike/Ped Project Costs	\$	570,000	
less: Costs for Existing Users		(420,000)	
Net Bike/Ped SDC-Eligible Costs	\$	150,000	
Growth to End of Planning Period			3,826 PM PHPT
Improvement Fee	\$	39	per PM PHPT

Total System Development Charge

Reimbursement Fee	\$	-	per PM PHPT
MV Improvement Fee	\$	708	per PM PHPT
Bike/Ped Improvement Fee	\$	39	per PM PHPT
SDC Subtotal	\$	747	per PM PHPT
plus: Administrative Cost Recovery		7.44%	\$55.60 per PM PHPT
Total Transportation System SDC	\$	803	per PM PHPT

Transportation SDC: Application Examples

Type of Development	Est. Peak-Hour Person-Trips*	SDC	Basis
1 Single-Family Residence	1.54 per Dwelling Unit	\$ 1,238	per Dwelling Unit
2 Multi-Family Residence	1.01 per Dwelling Unit	\$ 813	per Dwelling Unit
3 General Office Bldg.	1.95 per 1,000 sq. ft.	\$ 1,565	per 1,000 sq. ft.
4 Specialty Retail	3.72 per 1,000 sq. ft.	\$ 2,987	per 1,000 sq. ft.
5 Supermarket	11.46 per 1,000 sq. ft.	\$ 9,203	per 1,000 sq. ft.
6 Discount Superstore	4.81 per 1,000 sq. ft.	\$ 3,862	per 1,000 sq. ft.
7 Light Industry	1.63 per 1,000 sq. ft.	\$ 1,311	per 1,000 sq. ft.

* Adjusted PM Peak-Hour MV Trip Rates from Trip Generation, Institute of Transportation Engineers, 8th Ed.

Partial list only

Parks Capital Improvements

PARKS PLAN TABLE	DESCRIPTION	PRIORITY (Years 20__)	ESTIMATED TOTAL PROJECT COST	ESTIMATED NEW CAPACITY PORTION	ESTIMATED NEW CAPACITY PROJECT COST
Table 7.9	Land Acquisition (5 acres)	11 - 20	\$1,000,000	100%	\$1,000,000
Table 7.9	Land Acquisition (5 acres)	11 - 20	\$1,000,000	100%	\$1,000,000
Table 7.10	Land Development (5 acres)	11 - 20	\$750,000	100%	\$750,000
Table 7.10	Land Development (5 acres)	11 - 20	\$750,000	100%	\$750,000
			\$3,500,000		\$3,500,000

Calculation of Parks SDC

Improvement Fee	Cost Basis	Unit Basis
		Dwelling Units
Total Capital Improvement Projects	\$3,500,000	
less: Costs for Existing Users	-	
Net Cost Basis for Improvement Fee	\$3,500,000	
Population Growth to End of Planning Period (20 years; 2010-2030)	2099	
Persons Per Occupied Dwelling Unit (2000 Census)	2.53	
Growth in Dwelling Units to end of Planning Period	830	
Improvement Fee Per Dwelling Unit		\$ 4,218.68
Total Parks System Development Charge		
Improvement Fee		\$ 4,219
plus: Compliance Cost Recovery	7.44%	\$ 314
Total Parks System SDC		\$ 4,533 per DU

Phasing of Parks SDC

SDCs for a Single-Family Residence With Phasing of Parks SDC

Parks percentage	0%	50%	100%
System	Year 1	Year 2	Year 3
Water	\$ 2,831.00	\$ 2,831.00	\$ 2,831.00
Wastewater	2,363.00	2,363.00	2,363.00
Stormwater	130.81	130.81	130.81
Transportation	1,237.81	1,237.81	1,237.81
Parks	-	2,266.34	4,532.68
Total SDCs	\$ 6,562.62	\$ 8,828.96	\$ 11,095.29

No inflationary adjustment is assumed.

Commercial Examples

Name **Taco Bell**
 Description Construction of a fast-food restaurant with drive-thru on a site of 31,295 square feet

System	Calculation	Fee
Water	Fee for 1.5" water meter	\$ 14,155.00
Wastewater	Fee for 1.5" water meter	11,815.00
Stormwater	23,674 impervious square feet / 2,000 impervious square feet x \$130.81	1,548.43
Transportation	97.82 peak-hour person-trips x \$803.10 per peak-hour person-trip	78,557.47
Parks	0 dwelling units x \$4,532.68 per dwelling unit	-
Total SDCs		\$ 106,075.90

Project data from All County Surveyors and Planners, Inc.

Commercial Examples

Name **Fred Meyer**
Description Expansion of existing discount superstore that adds 39,545 square feet of floor area and fueling station

System	Calculation	Fee
Water	No new water service	\$ -
Wastewater	No new water service	-
Stormwater	113,038 new impervious square feet / 2,000 impervious square feet x \$130.81	7,393.38
Transportation	190.16 new peak-hour person-trips x \$803.10 per peak-hour person-trip	152,720.94
Parks	0 dwelling units x \$4,532.68 per dwelling unit	-
Total SDCs		\$ 160,114.32

Project data from Group Mackenzie

Discussion

Next Steps

- **Make Calculation Methodology Available for Public Review for 60 days**
- **Public Hearing/Council Action**
- **Implementation**