

**CITY OF NEWPORT  
RESOLUTION 3786**

**A RESOLUTION REPEALING AND REPLACING THE CITY OF NEWPORT'S  
SYSTEM DEVELOPMENT CHARGE METHODOLOGY,  
RATES, AND ADJUSTMENT PROCEDURE**

WHEREAS, City of Newport imposes a portion of the cost of future improvements to its water, wastewater, storm drainage, transportation, and parks capital facilities on new development and redevelopment that creates the need for or increase the demands on these capital facilities. These fees are known as System Development Charges (SDCs); and

WHEREAS, state law requires that a methodology be prepared in order to establish SDCs and that such methodology must include (a) a capital improvement plan, (b) growth projections, (c) evidence that system capacity needs to be improved to meet service needs of future users, (d) projected costs of improvements that increase system capacity, and (e) the portion of those costs attributed to future demand; and

WHEREAS, City of Newport last updated its System Development Charge methodology in 2007, and has adjusted its SDCs annually based upon the Construction Cost Index published in the Engineering News Record; and

WHEREAS, a number of the City's capital facilities plans have been updated since the 2007 SDC methodology was adopted; and

WHEREAS, it is necessary to update the City's SDC methodology to (a) ensure that fees are only being collected for growth related capital projects likely to be needed within the next 20-years, (b) establish that growth projections for that same 20-year time period are reasonably accurate, (c) confirm that formulas used to assess SDC fees accurately account for the impact new development or redevelopment has on the capital system and are proportional to the scale of the project, (d) promote affordable housing by scaling charges based upon the size of new dwellings, and (e) gauge the cumulative impact of SDC rate adjustments to ensure they are in line with other similarly situated communities; and

WHEREAS, the consulting firm FCS Group was hired to update the City of Newport's SDC methodology and the City Council appointed a technical advisory committee of key community stakeholders to assist the consultant and staff in reviewing and updating the document; and

WHEREAS, the analysis and recommendations contained in the SDC methodology prepared by FCS Group, and vetted by the advisory committee and city staff, was developed in accordance with the standards imposed by Newport Municipal Code Chapter 12.15 and Oregon Revised Statute Chapter 223; and

WHEREAS, Adjustments to SDC rates are needed to account for changes in construction costs so that, over time, the revenue generated is adequate to finance capital projects that will be needed to support new development and redevelopment; and

WHEREAS, By making rate adjustments annually to account for inflationary impacts, future increases in SDC rates should be modest in size; and

WHEREAS, the final draft of the SDC methodology was presented to the Planning Commission at a public hearing on June 26, 2017, after which the Commission recommended the methodology be adopted; and

WHEREAS, the Newport City Council held public hearings on July 17, 2017 and August 7, 2017 and, after considering public testimony, the Planning Commission's recommendation and information contained in the record, voted to adopt the SDC methodology.

WHEREAS, the City has followed all state and local procedural requirements for adopting an SDC methodology and setting rates.

Based on these findings,

THE CITY OF NEWPORT RESOLVES AS FOLLOWS:

Section 1. The System Development Charge Methodology titled "City of Newport System Development Charge Methodology," prepared by FCS Group, dated June 13, 2017 is hereby adopted.

Section 2. Effective September 6, 2017, the rates for SDCs collected by the City shall be as stated in the System Development Charge Methodology titled "City of Newport System Development Charge Methodology," prepared by FCS Group, dated June 13, 2017.

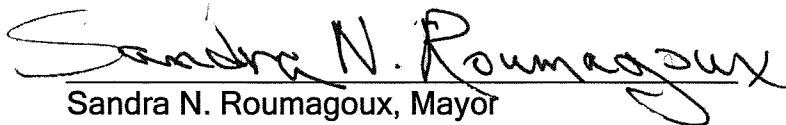
Section 3. SDC rates shall be adjusted annually by resolution at the beginning of each fiscal year to account for changes in construction costs as reflected in the Construction Cost Index published in the Engineering News Record. The adjustment shall be based upon the most recent Construction Cost Index available as of April 1<sup>st</sup>.

Section 4. All other previously adopted resolutions or enactments establishing System Development Charges, are hereby repealed to the extent that their provisions conflict with the System Development Charges set by this Resolution.

Section 5: The effective date of this resolution is September 6, 2017.

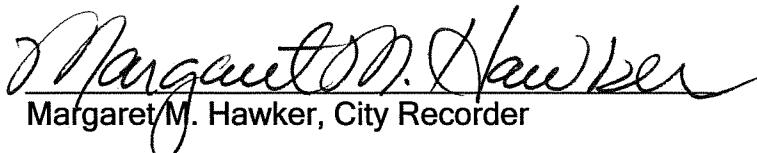
Adopted by a 4-2 vote of the Newport City Council on August 7, 2017.

Signed on August 7, 2017.



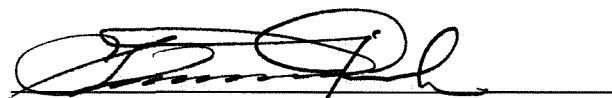
Sandra N. Roumagoux  
Sandra N. Roumagoux, Mayor

ATTEST:

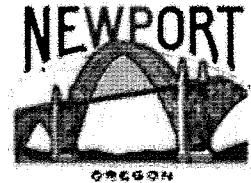


Margaret M. Hawker  
Margaret M. Hawker, City Recorder

APPROVED AS TO FORM:



\_\_\_\_\_  
Steven E. Rich, City Attorney



City of Newport

SYSTEM DEVELOPMENT  
CHARGE METHODOLOGY

June 13, 2017

FCS GROUP

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system for which it is being charged (whether cash-financed or debt-financed) and on the costs of compliance with Oregon's SDC law.

## B. SDC OVERVIEW

In general, SDCs are calculated by adding a reimbursement fee component and an improvement fee component—both with potential adjustments. Each component is calculated by dividing the eligible cost by growth in units of demand. The unit of demand becomes the basis of the charge. Below are details on the components and how they may be adjusted. **Exhibit 1.1** shows this calculation in equation format:

Exhibit 1.1 – SDC Equation				
Eligible costs of available capacity in existing facilities	Eligible costs of capacity-increasing capital improvements	Pro-rata share of costs of complying with Oregon SDC law	=	SDC per unit of growth in demand
Units of growth in demand	Units of growth in demand			

### B.1 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 calculated. **This SDC methodology recommends that Newport's reimbursement SDCs be discontinued at this time.**

### B.2 Improvement Fee

The improvement fee is the cost of planned capacity-increasing capital projects per unit of growth that those projects will serve. The unit of growth becomes the basis of the fee. 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 improvement fee, growth-related costs must be isolated, and costs related to current demand must be excluded.

**This SDC methodology is similar to the prior adopted methodology in use of the capacity approach to allocate costs to the improvement fee basis.<sup>1</sup>** Under this approach, the cost of a given capital project is allocated to growth by the portion of total project capacity that represents capacity for future users. That portion, referred to as the improvement fee eligibility percentage, is multiplied by the total project cost to determine that project's improvement fee cost basis.

### B.3 SDC Cost Basis Adjustments

Most cities in Oregon include two types of SDC cost basis adjustments that are allowed under Oregon law. The deduction of current SDC fund balances reduces the fee basis. The other adjustment increases the SDC cost basis by including administrative costs of complying with the

<sup>1</sup> Two alternatives to the capacity approach are the incremental approach and the causation approach. The incremental approach is computationally complicated because it requires the computation of hypothetical project costs to serve existing users. Only the incremental cost of the actual project is included in the improvement fee cost basis. The causation approach, which allocates 100 percent of all growth-related projects to growth is often vulnerable to legal challenge.

SDC credits that comply with the state's minimum credit policy do not create an SDC revenue gap. A policy that provides SDC credits above the legal minimum usually decreases SDC revenues and reduces the likelihood of the City to complete its long range capital improvement program.

## C.2 Exemptions

The City may exempt specific classifications of development, such as minor building alterations or Accessory Dwelling Units (ADUs) from the requirement to pay SDCs. The City may not arbitrarily exempt customers or customer types from SDCs; it must have a cost or demand-based justification.

## C.3 Discounts

The City can also apply discounts to SDCs based on local policy preference. For example, the City of Newport currently discounts parks SDCs by a factor of 50% and transportation SDCs by a factor of 90%. These discounts were based on the perceived inability for the market to bear the full weight of the SDC charges.

**After discussion with the Newport SDC Ad Hoc Advisory Committee, it is recommended that the City of Newport have one discount rate that is to be applied to transportation, parks, water and waste water facilities, as shown in Exhibit 1.2.**

Exhibit 1.2: SDC Discounts per City Policy		FY 2017/18
Water		45%
Sewer		45%
Transportation		45%
Stormwater		0%
Parks		45%

Many cities in Oregon may also apply a cost-based SDC reduction for area-specific SDCs, such as downtown locations, when development in such designated locations is expected to generate relatively lower public facility system demand in comparison to other locations. **This methodology includes adjusted area-specific transportation SDCs for retail developments within designated areas including the Historic Downtown, City Center/Deco District, Nye Beach area, and Wilder (South Beach area) given likelihood of generating less vehicle trips than the rest of the city based on transit service levels and pedestrian walkability.**

It should be noted that the use of discounts may result in under-collection of future SDC revenues. If discounts are used, it is recommended that cities prepare contingency plans to identify other funding sources for foregone revenues (i.e., state or federal grants, urban renewal funds, or new local funding sources such as voter-approved G.O. bonds).

## C.4 SDC Phase-In Strategies

**This SDC Methodology Report identifies the maximum SDCs that Newport can charge; as well as the recommended SDCs that the City should charge in year 1 (FY 2017/18) after discounts are applied.**

Newport can opt to phase-in the maximum defensible SDC amount over time by charging an established percentage of the maximum SDC each year. It should be noted that doing so will decrease total SDC revenue and require additional funding sources for the City to complete the SDC project list. Additional funding sources to supplant revenues lost from foregone SDCs could include street

**conduct such an independent study to estimate changes in demand caused by a proposed development (such as changes in trip generation or water/sewer usage) using methods that follow standard professional engineering practices.**

Please refer to the Newport Municipal Code (Chapter 12.15) for more detailed procedures for appealing SDCs, determining SDC credits and other procedures.

## G. UPDATING NEWPORT'S SDCS

The City contracted with FCS GROUP to perform a transportation SDC update. FCS GROUP (consultant) has led the development of SDCs throughout Oregon in over 30 cities, and leads SDC training workshops hosted by the Oregon League of Cities. This methodology report using the following general approach:

- ◆ **Framework for Charges.** In this step, consultant and City staff confirmed the approach to be used and the water, wastewater, storm drainage, transportation and parks components to be included in the analysis.
- ◆ **Technical Analysis.** In this step, consultant and City staff identified the recoverable portion of water, wastewater, storm drainage, transportation and parks facility costs and calculated SDC rates.
- ◆ **SDC Meetings and Public Education.** As part of this new SDC update, the City established an SDC Advisory Committee that included a cross-section of community stakeholder groups, including: Newport City Council and Planning Commission representatives; City public works and finance staff; Lincoln County School District; Housing Authority of Lincoln County; and private engineers, architects, lawyers, real estate brokers and construction contractors. This advisory committee met on four separate occasions to provide input to the City and consultant regarding interim SDC assumptions and report recommendations.
- ◆ **Methodology Report Preparation.** In this step, the calculation of the SDC rates are set forth and included in this report.
- ◆ **Jurisdiction Review.** In this step, the consultant compared the calculated SDC to the current fee and with other cities in Oregon. Key findings indicate that Newport's SDCs will continue to be on the low-end of the cost spectrum, with certain SDCs increasing and others decreasing.

The following sections provide detailed SDC calculation methods for each public facility type, including: water, wastewater, stormwater, transportation and parks.

to address 2017-2037 EDU growth in the City of Newport. The total cost of these capital projects is estimated at approximately \$10,731,000 (2017 dollars). The SDC eligible portion of these projects equates to 52% of the total cost or \$5,619,458.

During the study process, the City staff and Advisory Committee identified two public facility improvements that were included in the water master plan but are expected to be implemented outside the 20-year planning horizon. Those projects are also reflected in **Exhibit 2.2** and **Appendix E**, and include the Agate Beach Upper Storage Tank (\$2.26M) and the King Ridge Storage Tank (\$3.29M).

### **Exhibit 2.2**

Water SDC Capital Improvement Plan and Fee Cost Basis (2017 - 2037 time frame)					
Project Number Description	Total Cost	SDC Eligible Growth Share %	SDC Cost Share	Source Document	
				Source Document	Source Document
W1 12-inch Redundant Bay Crossing, East Option	\$3,028,961	25%	\$757,240	2008 Master Plan	
W2 NE 40th and Golf Course Drive Water Line Replacement	\$505,792	25%	\$126,448	2008 Master Plan	
W3 US 101 - NE 36th to NE 40th Water Line	\$296,956	50%	\$148,478	2008 Master Plan	
W4 US 101 - NE 40th to Circle Way Water Line Replacement	\$660,968	50%	\$330,484	2008 Master Plan	
W5 East Newport Water Line Extensions	\$2,721,270	100%	\$2,721,270	2008 Master Plan	
W6 Idaho Point Water Line Replacement and Looping	\$745,461	25%	\$186,365	2008 Master Plan	
W7 Harborton to SE 50th Water Line Extension	\$312,500	100%	\$312,500	2006 SB Nbhd Plan	
W8 SE 50th to SE 62nd Water Line	\$562,500	100%	\$562,500	2006 SB Nbhd Plan	
W9 Water Meter Conversion to Touch Read Meters	\$1,896,690	25%	\$474,172	2008 Master Plan	
<b>Total</b>	<b>\$10,731,097</b>	<b>52%</b>	<b>\$5,619,458</b>		
Other Planned Improvements Not Included in the SDC Cost Basis*					
W10 Agate Beach Upper Storage Tank 1.0 MG GFS	\$2,259,130	n/a	\$0	2008 Master Plan	
W11 King Ridge Storage Tank 1.0 MG GFS	\$3,288,795	n/a	\$0	2008 Master Plan	

Source: City of Newport staff input as of 2/28/17, compiled by FCS GROUP. \* denotes projects expected to occur beyond 20-years.

## D. SDC FUND BALANCE

The City's existing SDC fund balances are deducted from the improvement fee cost basis to determine the adjusted SDC cost basis. **Exhibit 1.1** indicates the total water SDC fund balance (\$346,501) is deducted from the SDC cost basis.

## E. COMPLIANCE COST BASIS

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." The compliance cost estimates includes expenditures such as water system plan updates and methodology updates over the next 20 years. This SDC methodology assumes compliance costs remain consistent with the prior adopted SDC Methodology, which equates to 4.18% of the total SDC cost bases.

These factors, when applied to the SDC per EDU for single family homes, results in an SDC charge that varies by home size, and one that can be assessed based on square footage, as indicated in **Exhibit 2.4**. After applying the recommended discount, the resulting SDCs would be \$0.60/SF for the first 1,700 SF; \$0.48/SF for 1,701 to 2,900 SF; and \$0.39/SF for the area above 2,900 SF.

	Exhibit 2.4: Prior vs. New SDC Comparisons per Single Family Dwelling			
	Current SDC	New SDC		
		Small Home (1,700 SF or less)	Standard Home (1,701 to 2,900 SF)	Large Home (over 2,900 SF)
New Avg. SDC (without discount)	\$2,413	\$1,354	\$2,166	\$2,978
Water SDC Per Sq.Ft.	n/a	\$1.08	\$0.87	\$0.71
Recommended SDC (FY 2017/18)	0%	45%	45%	45%
Discount		\$0.60	\$0.48	\$0.39
Water SDC per SF				

Source: prior tables.

Using this approach, single family attached structures, such as duplexes and row-houses would be assessed based on the “small home” SDC rate per square foot rate of \$0.60. For residential additions the SDC rate per SF should be charged that corresponds to the proposed increase in usable floor area. For construction of accessory dwelling units (ADUs), SDCs would be charged at the small home rate. Other types of new residential developments, such as apartments, SDCs are to be assessed based on meter size, using the EDU conversion factors shown in **Exhibit 2.5**.

### Exhibit 2.5

Meter Size Characteristics	Maximum Continuous Flow (gpm)	Flow/SDC EDU Factor
<b>Disc or Compound Meters</b>		
3/4"	15	1.00
1-inch	25	1.67
1 1/2 inch	50	3.33
2-inch	80	5.33
3-inch	160	10.67
4-inch	250	16.67
6-inch	500	33.33
8-inch	800	53.33
<b>Turbine Meters</b>		
4-inch	315	21.00
6-inch	700	46.67
8-inch	1,200	80.00

### G.2. Other Non-Residential SDCs

For non-residential developments, water SDCs are to be assessed based on EDUs added using the conversion table provided as **Exhibit 2.5**. When the table does not fit the application well, meter size equivalency factors should be used as indicated in **Exhibit 2.6**. City staff should review the new customer’s land use plans carefully to ensure that the proper meter size is being utilized in the new property.

## SECTION III: WASTEWATER SDCS

This section provides the rationale and calculations supporting the proposed wastewater SDCs.

### A. GROWTH CALCULATION

Growth is the denominator in SDC calculation and measured in units that most directly reflect the source of demand. For wastewater SDCs, the most applicable unit of growth is Equivalent Dwelling Units (EDUs). **It should be noted, that given the difference in customer service area and unique demand profile and supply characteristics (such as wastewater infiltration & inflow) the EDUs for wastewater do not equate to the EDUs for water.** For these reasons, direct comparisons between water and wastewater EDU assumptions should be avoided.

As indicated in **Exhibit 3.1**, there are currently an estimated 3,910 wastewater customers served by the City of Newport, including 3,316 residential customers and 594 non-residential customers. According to Newport water usage statistics, these customers require approximately 559,206 million gallons of wastewater treatment, which equates to 39,556 annual gallons per residential customer. Current equivalent dwelling units (EDUs) are calculated based on the total annual wastewater usage divided by the average residential demand ( $559,206,000 / 39,556$ ), which equates to 14,137 EDUs.

The EDU assumptions and calculations are based on an annual average growth rate of 1.02%, which reflects the forecasted increase in housing units within the City of Newport over the 2015 to 2035 time frame (provided in **Appendix A-1**).

Future EDUs are assumed to increase to 17,322 by year 2037. The projected 20-year EDU growth of 3,185 units results in an average growth share of 18.4%. The average growth share is a measure of total wastewater system demand that will be consumed by future growth and equates to the minimum cost share of any SDC eligible improvement.

#### Exhibit 3.1

Newport Wastewater Demand and EDU Forecast

	Annual 2017 customers	Est. 2017 Usage Per Customer (000 gallons)	Water Usage (000 gallons)
Residential Customers (service connections)	3,316	<b>39.6</b>	131,168
Non-Res. Customers (commercial)	594	720.6	428,038
Total or Avg.	3,910	143.0	<b>559,206</b>
Total System EDUs	Est. 2017 EDUs (Total Usage / Avg. Res. Demand)	Proj. 2037 2037 Growth share <b>3,185</b>	Avg. AGR Customer Unit EDU
	14,137	17,322	18.4% 1.02%

**Source:** City of Newport wastewater customer data (2016); housing unit growth forecasts (Appendix A-1); compiled by FCS GROUP.

\*Consumption assumed constant across years.

Abbreviations: EDU = equivalent dwelling unit. AGR = annual average growth rate.

## D. SDC FUND BALANCE

The City's existing SDC fund balances are deducted from the improvement fee cost basis to determine the adjusted SDC cost basis. **Exhibit 1.1** indicates the total water SDC fund balance (\$313,859) is deducted from the SDC cost basis.

## E. COMPLIANCE COST BASIS

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." The compliance cost estimates includes expenditures such as water system plan updates and methodology updates over the next 20 years. This SDC methodology assumes compliance costs remain consistent with the prior adopted SDC Methodology, which equates to 4.18% of the total SDC cost bases.

## F. SDC CALCULATION

As indicated in **Exhibit 3.2**, after accounting for the current SDC fund balance, the adjusted SDC cost basis includes \$12,064,320 for growth eligible wastewater improvements over 20 years. When this amount is divided by the expected 3,185 increase in wastewater EDUs, it results in an SDC of \$3,689 per EDU for the SDC improvement fee. The compliance cost results in an additional \$154/EDU charge, bringing the total wastewater SDC to \$3,843 per EDU.

### Exhibit 3.2

Wastewater SDC Calculation	
<b>Improvement Fee</b>	
Capacity Expanding CIP	\$ 12,064,320
Less Existing Fund Balance	\$ (313,859)
SDC Cost Basis	\$ 11,750,461
Growth to End of Planning Period	3,185 EDU
Improvement Fee	\$ 3,689 per EDU
<b>Total System Development Charge</b>	
Reimbursement Fee	\$ - per EDU
Improvement Fee	\$ 3,689 per EDU
SDC Subtotal	\$ 3,689 per EDU
plus: Administrative Cost Recovery	4.18% \$ 154 per EDU
<b>Total SDC before discount</b>	<b>\$ 3,843 per EDU</b>

## G. WASTEWATER SDC ADMINISTRATION PROCEDURES

The SDC established above is based on a cost per EDU or cost per single family detached dwelling. For most residential developments, a plan review must be performed to determine the number of EDUs a development will require.

## SECTION IV: STORM DRAINAGE SDCs

This section provides the rationale and calculations supporting the proposed storm drainage (aka. Stormwater) SDCs.

### A. GROWTH CALCULATION

Growth is the denominator in SDC calculation and measured in units that most directly reflect the source of demand. For storm drainage SDCs, the most applicable unit of growth is Equivalent Dwelling Units (EDUs). Given the difference in customer demand profile characteristics the EDUs for stormwater do not equate to the EDUs for water or wastewater. For these reasons, direct comparisons between stormwater and other EDU assumptions should be avoided.

As indicated in **Exhibit 4.1**, according to the Newport Storm Drain Master Plan (2016), it is expected that 2,280 EDUs will be added over the next 20 years and this change in demand is expected to generate 6,217,560 SF of ISA. The change in future EDUs results in an average SDC growth share of 12%. The average growth share is a measure of total storm drainage system demand that will be consumed by future growth and equates to the minimum cost share of any SDC eligible improvement.

#### Exhibit 4.1

Newport Storm Drainage Demand and EDU Forecast						
Customer Type	2017	Proj. 2037	2017 to 2037 AGR	Growth 2017-2037	Growth share	Customer Unit
Impervious Surface						
Area (ISA SF)*	45,693,612	51,911,172	0.64%	6,217,560	12.0%	ISA SF
ISA per EDU	2,727	2,727				
EDUs	<b>16,756</b>	19,036	0.64%	<b>2,280</b>	12.0%	EDUs

**Source:** City of Newport Storm Drain Master Plan, 2016; compiled by FCS GROUP.

\* Reflects total estimated ISA within the City of Newport, including roadways.

Abbreviations: EDU = equivalent dwelling unit. AGR = annual average growth rate. SF = square feet.

### B. IMPROVEMENT FEE COST BASIS

Newport's Storm Drain Master Plan and related planning documents provide a detailed CIP with identification of the projects required to meet the growth needs of the City. The portion of each project that can be included in the improvement fee cost basis is determined by the extent to which each new project creates capacity for future users. As indicated in **Exhibit 4.2** and **Appendix E**, there are 8 storm drainage improvement projects that have been identified in local plans and studies that are required to address 2017-2037 EDU growth in the City of Newport. The total cost of these capital projects is estimated at approximately \$3,266,251. The SDC eligible portion of these projects equates to 83% of the total cost or \$2,714,673.

**Exhibit 4.3**

<b>Storm Drainage SDC Calculation</b>	
<b>Improvement Fee</b>	
Capacity Expanding CIP	\$ 2,714,673
Less Existing Fund Balance	\$ (141,824)
SDC Cost Basis	\$ 2,572,849
Growth to End of Planning Period	2,280 EDU
Improvement Fee	\$ 1,128 per EDU
<b>Total System Development Charge</b>	
Reimbursement Fee	\$ - per EDU
Improvement Fee	\$ 1,128 per EDU
SDC Subtotal	\$ 1,128 per EDU
plus: Administrative Cost Recovery	<u>4.18%</u> \$ 47 per EDU
<b>Total SDC per EDU</b>	<b>\$ 1,176 per EDU</b>
Increase in Impervious Surface Area (ISA) sq. ft.	6,217,560 ISA
<b>Total SDC per ISA sq.ft.</b>	<b>\$ 0.43 per ISA SF</b>

## G. SDC ADMINISTRATION PROCEDURES

Assessment of the storm drainage SDCs is a relatively simple process since it would be based on the amount of impervious surface area that is added by a new development activity.

### G.1. Residential SDCs

For single family development that will result in additional impervious surface area, this SDC methodology includes a variation in SDCs based on size and type of dwelling unit. Single family detached homes have a wide range in size and stormwater system demand requirements. Analysis of the relative demand generated by various (small, standard, and large) home sizes is included in **Exhibit 2.3**.

These factors, when applied to the SDC per EDU for single family homes, results in an average estimated SDC charge that varies by home size, as indicated in **Exhibit 4.4**. Using this approach, single family dwellings (detached and attached housing) would be charged stormwater SDCs based on floor area (which includes ISA assumptions that vary by home size). For construction of accessory dwelling units (ADUs), SDCs would be charged at the small home rate.

Improvements to existing single family homes (includes single family detached and attached structures) which include additional floor area would be assessed based on the floor area added. Improvements to single family homes which do not add livable floor area (such as adding a driveway or sidewalk) would not be assessed the stormwater SDC.

Exhibit 4.4: Prior vs. New SDC Comparisons per Single Family Dwelling				
	Current SDC	New SDC		
		Small Home (1,700 SF or less)	Standard Home (1,701 to 2,900 SF)	Large Home (over 2,900 SF)
Stormwater SDC per Unit (average)	\$857	\$992	\$1,176	\$1,653
Equivalent SDC per Sq.Ft. of floor area*		\$ 0.79	\$ 0.47	\$ 0.39

Source: prior tables.

\* Stormwater charge of \$0.43 per SF of ISA would apply for other types of development.

## SECTION V: TRANSPORTATION SDCs

This section provides the rationale and calculations supporting the proposed transportation SDCs.

### A. GROWTH CALCULATION

Growth is the denominator in the improvement fee calculations, measured in units that most directly reflect the source of demand. For transportation SDCs, the most applicable and administratively feasible unit of growth is trips.

The proposed SDC methodology utilizes an average daily vehicle trip-end (ADT) basis for calculating future trip growth, with no EDU conversion. The recommended approach is one used by practically every jurisdiction in Oregon and is considered to be widely accepted as fair practice since the SDCs are directly tied to the net new vehicle trip generation attributed to a development.

**Exhibit 5.1** shows the growth in ADTs during the planning period based on detailed assumptions provided in the Appendix (see Appendix A-2 and A-3). The mix of residential and non-residential land uses within the City of Newport generated approximately 155,952 average daily vehicle trips (in and out) during year 2015. It is expected that future ADTs will grow at 1.02% annually, resulting in 35,860 net new ADT between year 2017 and 2037. This amount of growth results in an SDC growth share of 18.39%. The growth share equates to the minimum cost share of any SDC eligible improvement.

#### Exhibit 5.1

Newport Transportation Customer Base (average daily vehicle trips)					
	2015 est.	2017 est.	2037 proj.	20-Year Growth Forecast	Annual Avg. Growth % of Future Customers
Residential Uses	43,476	44,368	54,365	9,997	18.39%
Non-Res. Uses	112,477	114,786	140,649	25,863	18.39%
Total	155,952	159,154	195,014	35,860	<b>18.39%</b>

Source: compiled by FCS GROUP based on Appendix A-2 and A-3. \* Reflects adopted growth rate for population.

SDCs are to be charged based on Institute of Transportation Engineers (ITE) *Trip Generation Manual* Land Use Classifications using the ITE and local assumptions provided in **Appendix D-1 and D-2**. Given the likelihood of increased use of non-vehicle modes of travel (such as transit, bicycle, and walking trips) within the districts shown in **Appendix F**, this methodology assumes that vehicle trips within these areas will be 20% lower than that realized in other locations due to increased use of transit, walking and bicycle trips. Given increased transit, walking and bicycling dependence by residents in multifamily uses (includes apartments, condominiums and assisted living developments), this methodology assumes that multifamily classifications will generate 25% fewer vehicle trips than what the national ITE assumptions dictate.

### B. IMPROVEMENT FEE COST BASIS

Newport's Transportation System Plan and related subarea plans were used to determine the improvement fee cost basis for planned capacity-increasing capital improvements. The portion of

## C. SDC FUND BALANCE

The City's existing SDC fund balances are deducted from the improvement fee cost basis to determine the adjusted SDC cost basis. **Exhibit 1.1** indicates the total transportation SDC fund balance (\$262,381) is deducted from the SDC cost basis.

## E. COMPLIANCE COST BASIS

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." The compliance cost estimates includes expenditures such as water system plan updates and methodology updates over the next 20 years. This SDC methodology assumes compliance costs remain consistent with the prior adopted SDC Methodology, which equates to 4.18% of the total SDC cost bases.

## F. SDC CALCULATION

As indicated in **Exhibit 5.3**, after deducting the SDC fund balance, the adjusted SDC cost basis includes \$19,821,186 for growth-eligible transportation improvements over 20 years. When this amount is divided by the expected 35,860 increase in ADTs, it results in an SDC of \$553 per vehicle trip for the SDC improvement fee. The compliance cost results in an additional \$23/ADT charge, bringing the total transportation SDC to \$576 per vehicle trip.

Given the average increase of 9.45 vehicle trips per new single family detached dwelling unit (per ITE trip generation rates provided in Appendix D), the transportation SDC for an "average" or standard single family home would be \$5,440 (before discounts or credits).

### Exhibit 5.3

Transportation SDC Calculation	
<b>Improvement Fee</b>	
Capacity Expanding CIP	\$ 20,083,567
Less Existing Fund Balance	\$ (262,381)
SDC Cost Basis	\$ 19,821,186
Growth to End of Planning Period	35,860 Vehicle Trip
Improvement Fee	\$ 553 per Vehicle Trip
<b>Total System Development Charge</b>	
Reimbursement Fee	\$ - per Vehicle Trip
Improvement Fee	\$ 553 per Vehicle Trip
SDC Subtotal	\$ 553 per Vehicle Trip
plus: Administrative Cost Recovery	4.18% \$ 23 per Vehicle Trip
<b>Total SDC per Vehicle Trip</b>	\$ 575.84 per Vehicle Trip
Total SDC per Vehicle Trip (before discount)	\$ 575.84
<b>Total SDC per Vechicle Trip (after discount)</b>	\$ 316.71 discount 0.45
Increase in Vhcile Trips per Single Family Dwelling Unit	9.45
Total SDC per Single Family Dwelling Unit (before discount)	\$ 5,440
<b>Total SDC per single family dwelling unit (after discount)</b>	\$ 2,992 discount 0.45

## G.2. Non-Residential SDCs

It is recommended that all non-residential development be assessed on the trip generation rates per unit of new development using the land use table provided in **Appendix D-1 and D-2**. Using this method, a site plan for each new development must be reviewed to determine the amount of net new trips added. The resulting assessment will be equitable for each case presented to the City for consideration.

Specifically, non-residential development would be assessed during the first year of SDC implementation at the incremental rate of \$115.17 per net new average daily vehicle trip using the adjusted trip rates shown in Appendix D-1 and D-2.

Based on the adjusted trip rates assumed for the land use categories shown in Appendix D-1 and D-2, number of units within the development, the SDC rate per trip, the calculation used to arrive at the total SDC for the development uses the equation below.

$$\begin{aligned} & \text{Net New Adjusted ADVTs per Unit of Development} \times \text{Units of Development} \\ & \quad \times \text{TSDC rate per ADVT} = \text{Total SDC} \end{aligned}$$

For developments not listed in Appendix D-1 and D-2, the City SDC administrator will estimate SDCs based on estimated units of development and adjusted ADVTs. **Any development applicant that is subject to SDCs can contend the basis of SDC charges that have been determined by submitting an independent traffic impact study. The study must show that the actual impact of the development (using their documented assumptions) is different from the estimated impact (using the SDC methodology). At the election and expense of the applicant, s/he can choose to conduct such an independent study to estimate changes in average daily vehicle trips caused by a proposed development using methods that follow standard professional engineering practices.**

### Exhibit 6.2

Newport Parks SDC Capital Improvement Program and Fee Cost Basis, 2017 to 2037

Project Number	Description	Total Cost	Eligible Growth Share %	SDC Cost Share	Source Document
P1	West Agate Beach Park Development	\$551,973	25%	\$ 137,993	Newport SDC update
P2	Sam Moore Park Upgrade	\$364,780	25%	\$ 91,195	Newport SDC update
P3	Big Creek Reservoir Trail Development	\$270,890	100%	\$ 270,890	Newport SDC update
P4	Frank Wade Park Upgrades	\$340,371	13.21%	\$ 44,963	Newport SDC update
P5	Sport Complex Design	\$26,381	50%	\$ 13,190	Newport SDC update
P6	Sport Complex Construction	\$1,318,999	50%	\$ 659,500	Newport SDC update
P7	Ocean-to-Bay Trail Acquisition	\$131,900	50%	\$ 65,950	Newport SDC update
P8	Ocean-to-Bay Trail Development	\$329,749	50%	\$ 164,875	Newport SDC update
P9	South Beach Trail Acquisition*	\$416,715	50%	\$ 208,358	Newport SDC update
P10	South Beach Trail Development	\$461,649	50%	\$ 230,825	Newport SDC update
P11	Southeast 40th Street Area Park Acquisition**	\$469,990	50%	\$ 234,995	Newport SDC update
P12	Big Creek Park Upgrades and Expansion	\$581,187	50%	\$ 290,594	Newport SDC update
P13	Mombetsu Park Upgrade	\$105,520	13.21%	\$ 13,939	Newport SDC update
P14	Yaquina Bay Bridge Park Improvements	\$584,386	50%	\$ 292,193	Newport SDC update
P15	Coastal Gully Open Space	\$214,423	50%	\$ 107,212	Newport SDC update
<b>Total</b>		<b>\$ 6,168,913</b>	<b>46%</b>	<b>\$ 2,826,670</b>	

Source: City of Newport staff input as of 2/28/17, compiled by FCS GROUP.

\* Partial expenditure. Purchased Guin Open Space for \$23,000 in 2012

\*\* Reduced to Account for Wilder Twin Park Acquisition (Res No 3523)

## D. SDC FUND BALANCE

The City's existing SDC fund balances are deducted from the improvement fee cost basis to determine the adjusted SDC cost basis. **Exhibit 1.1** indicates the total parks SDC fund balance (\$141,824) is deducted from the SDC cost basis.

## E. COMPLIANCE COST BASIS

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." The compliance cost estimates includes expenditures such as water system plan updates and methodology updates over the next 20 years. This SDC methodology assumes compliance costs remain consistent with the prior adopted SDC Methodology, which equates to 4.18% of the total SDC cost bases.

## F. SDC CALCULATION

As indicated in **Exhibit 4.3**, the adjusted SDC cost basis includes \$2,659,465 for growth-eligible parks improvements over 20 years. When this amount is divided by the expected 1,149 increase in customer units, it results in an SDC of \$2,414 per customer unit for the SDC improvement fee. The compliance cost results in an additional \$97/unit charge, bringing the total parks SDC to \$2,411 per EDU (before discount is applied).

	Current SDC	New SDC		
		Small Home (1,700 SF or less)	Standard Home (1,701 to 2,900 SF)	Large Home (over 2,900 SF)
<b>Avg. SDC (without discount)</b>				
Parks SDC per Unit	\$5,286	\$1,137	\$2,274	\$3,821
Parks SDC per floor area (Sq.Ft.)	n/a	\$0.91	\$0.91	\$0.91
<b>Recommended SDC (FY 2017/18)*</b>				
<b>Discount</b>	50%	45%	45%	45%
Parks SDC per Unit (average)	\$2,643	\$512	\$1,023	\$1,719
Parks SDC per floor area (Sq.Ft.)	n/a	\$0.50	\$0.50	\$0.50

\* assumes SDC discount equates to difference between current SDC and new avg. SDC.

Source: prior tables.

## G.2. Non-Residential SDCs

For lodging developments, it is recommended that the parks SDC be charged on a per unit basis that is consistent with the small home rate (after discount) of \$512 per unit multiplied by an EDU conversion factor of 0.5 (\$512 x 50%). Therefore, a new hotel with 100 rooms would be assessed 50 EDUs at the small home rate when calculating a parks SDC (100 x 0.5 x \$512).

It is recommended that all other non-residential development (excluding lodging units) be exempt from the parks SDC.

It should be noted that the conversion of residential dwellings to vacation rental dwellings or (VRDs) is not expected to create an increase in parks demand, and would be exempt from the parks SDC.

2,500 SF dwelling; and \$15,100 for a 4,200 SF dwelling. In comparison, the existing SDCs in Newport are currently \$10,994 per dwelling unit, regardless of its size.

Under the new SDC methodology, single family attached dwellings such as duplexes and row houses would be charged the “small home” dwelling unit SDC rates.

Under the new SDC methodology, apartments and other types of non-exempt residential developments not listed above would be charged based on net new floor area constructed, using the SDC unit costs shown in **Exhibit 7.3**.

Construction of accessory dwelling units (ADUs) would be charged at the square foot rate that corresponds with the small home size.

Construction of additions to single family dwellings that result in net increases in usable floor area would be charged at the square foot rate that corresponds to home size.

### Exhibit 7.3

Facility Type	New SDCs After Discounts*				
	Current SDC (after discounts)	Current SDC with NO Discounts	SDC: Small Home (less than 1,700 SF)	Standard Home (1,701 to 2,900 SF)	SDC: Large Home (over 2,900 SF)
Water	\$2,413	\$2,413	\$0.60	\$0.48	\$0.39
Sewer	\$3,969	\$3,969	\$1.06	\$0.85	\$0.69
Transportation	\$1,112	\$11,120	\$1.20	\$1.14	\$1.05
Stormwater*	\$857	\$857	\$0.79	\$0.47	\$0.39
Parks	\$2,643	\$5,286	\$0.50	\$0.50	\$0.50
<b>Total Per SFD</b>		<b>\$23,645</b>	<b>\$4.15</b>	<b>\$3.43</b>	<b>\$3.02</b>
<b>Total Per SFD</b>	<b>\$10,994</b>		<b>\$5,189</b>	<b>\$9,800</b>	<b>\$15,100</b>
<b>Home Size in Example (SF)</b>			1,250	2,500	4,200

**Source:** Compiled by FCS GROUP based on prior tables. \* see discount table assumptions.

**Abbreviations:** SF = usable floor area (excludes unfinished attics, garages and carports).

### Examples<sup>22</sup>

**Example 1: construction of a 2,500 SF home.** Results in an SDC charge of \$4.15 for the first 1,700 SF (\$7,055) plus 800 SF charged at \$3.43/SF (\$2,744) for a total SDC charge of approximately \$9,800.

**Example 2: construction of a 4,200 SF home.** Results in an SDC charge of \$4.15 for the first 1,700 SF (\$5,189), the next 1,200 SF is charged at \$3.43/SF (\$4,116), and the remaining 1,300 SF is charged \$3.02/SF (\$3,926) for a total SDC charge of approximately \$13,231.

**Example 3: Accessory Dwellings.** An existing home desires to construct a 600 SF accessory dwelling unit. Results in an SDC charge of \$4.15/SF x 600 SF for a total charge of \$2,490.

**Example 4: Home Additions.** An existing 1,200 SF home desires to construct a 500 SF addition. Results in an SDC charge of \$4.15/SF x 500 SF for a total charge of \$2,075. If the same house wants a 1,000 SF addition, the SDC charge would be (\$4.15 x 500 SF) + (\$3.43 x 500 SF) = \$3,790.

<sup>22</sup> Note, these figures may not add up exactly to the amounts shown in Exhibits due to rounding.

If the discounts and EDU factors are excluded, the maximum defensible SDC for restaurants under a new methodology that is based on EDU conversion rates and no discounts for transportation or parks is estimated at approximately \$399,619.

### Exhibit 7.5

Newport, Current vs. New SDC Comparisons Apartment (60 units)			
Type	Current SDC: Meter Size Method (after discounts) Notes	Option A: New SDCs w/ Meter Size Approach, after discounts* Notes	Option B: Max Defensible SDCs (without discounts) Notes
Water	\$25,739 3" m (10.67 x \$2,143)	\$12,707 3" m (10.67 x \$2,166 x .55)	\$23,104 3" m (10.67 x \$2,166)
Sewer	\$42,336 3" m (10.67 x \$3,969)	\$22,546 3" m (10.67 x \$3,843 x .55)	\$40,993 3" m (10.67 x \$3,843)
Transportation	\$45,370 60 EDUs x .68 x \$1,112	\$92,638 4.88 ADVT x 60 x \$575.84 x .55	\$224,576 6.5 ADVT x 60 x \$575.84
Stormwater (100k ISA)	\$32,000 100,000 ISA x \$0.32	\$42,714 100,000 ISA x \$0.43	\$42,714 100,000 ISA x \$0.43
Parks	\$118,935 60 EDUs x .75 x \$2,643	\$28,145 60 DU's x 0.75 x \$1,137 x .55	\$68,231 60 DU's x \$1,137
Total	<b>\$264,379</b>	<b>\$198,751</b>	<b>\$399,619</b>

**Source:** Compiled by FCS GROUP based on prior tables and Appendix D. \* Stormwater charge may be less or more depending upon construction plans. \*\* See discount table assumptions.

**Abbreviations:** SF = usable floor area (excludes unfinished attics, garages and carports)

ISA = impervious surface area.

### Primary School Addition Example

**Exhibit 7.6** reflects that current school addition SDC assumptions vs. future SDCs. The findings indicate that the current SDCs would result in a total estimated SDC of \$263,305 for a 10,000 square foot addition (before credits). The proposed Option A, would result in an estimated total SDC of \$81,850. Note, the primary difference in the two methods is that the new proposed method uses a revised EDU conversion assumption that results in fewer EDUs than with the current method.

If the discounts are excluded, the maximum defensible SDC for the school addition under a new methodology that is based on EDU conversion rates and no discounts for transportation or parks is estimated at \$143,577.

### Exhibit 7.6

Newport, Current vs. New SDC Comparisons Primary School Addition (10,000 SF)			
Facility Type	Current SDC (after discounts) Notes	Option A: New Draft SDCs w/ Meter Size Approach and New EDU Assumptions after discounts* Notes	Option B: Max Defensible SDCs (current EDU assumptions and no discounts) Notes
Water	\$96,520 40 EDUs x \$2,413	\$19,061 16 EDUs x \$2,166 x .55	\$34,656 16 EDUs x \$2,166
Sewer	\$158,760 40 EDUs x \$3,969	\$33,819 16 EDUs x \$3,843 x .55	\$61,490 16 EDUs x \$3,843
Transportation	\$3,225 10 EDUs x .29 x \$1,112	\$22,563 7.12 ADVT x 10 x \$575.84 x .55	\$41,023 7.12 ADVT x 10 x \$575.84
Stormwater (15k ISA)	\$4,800 15,000 ISA x \$0.32	\$6,407 15,000 ISA x \$0.43	\$6,407 15,000 ISA x \$0.43
Parks	\$0	\$0	\$0
Total	<b>\$263,305</b>	<b>\$81,850</b>	<b>\$143,577</b>

**Source:** Compiled by FCS GROUP based on prior tables. \* School EDU conversion assumes 1 EDU per 625 SF of floor area (vs. 179 feet currently). \*\* See discount table assumptions.

**Abbreviations:** SF = usable floor area (excludes unfinished attics, garages and carports)

ISA = impervious surface area.

## APPENDICES

### Appendix A, Growth Assumptions

**Table A-1**

**Newport Population and Dwelling Unit Forecasts, select years**

	2000	2010	2015	2020	2025	2030	2037	AGR 2000-2015	AGR 2015-2037
Population	9,532	10,030	10,440	10,649	11,259	11,668	12,241	0.61%	0.73%
Dwellings	5,034	5,539	5,760	5,072	6,393	6,724	7,203	0.90%	1.02%
Residents per Dwelling	1.89	1.81	1.81	1.79	1.76	1.74	1.70	-0.29%	-0.29%

**Source:** Census estimates (2000, 2010); 2037 forecast extrapolated by FCS GROUP.

Abbreviations: AGR = average annual growth rate.

**Appendix A-2**

**Housing Units and related Average Daily Vehicle Trips, City of Newport**

Housing	ITE Land Use Code	ADTs per unit	Housing Units	ADT (trips)
1-unit, detached	210	9.45	2,916	27,548
1-unit, attached	230	5.65	284	1,605
2 units	230	5.65	374	2,114
3 or 4 units	230	5.65	450	2,543
5 to 9 units	220	6.50	498	3,237
10 to 19 units	220	6.50	160	1,040
20 or more units	220	6.50	348	2,262
Mobile home	240	4.90	542	2,657
Boat, RV, van, etc.	240	4.90	96	471
Total			<b>5,668</b>	<b>43,476</b>

**Source:** U.S. Census (2011-15 ACS) and ITE Handbook 9th Edition, compiled by FCS GROUP.

## Appendix B – System Demand Assumptions

**Table B-1**

**Water and Wastewater Adjustment Factors for Single Family Dwelling Units**

Home Size Category	Dwelling Unit Size Range (living area sq.ft.)	Avg. Home Size (SF)	Avg. People Per Dwelling (Adjusted for Local Conditions)	Max # of Occupants	Primary Fixtures*
Small	under 1,700 SF	1,250	1.04	8	5
Standard	1,701 to 2,900 SF	2,500	2.07	10	8
Large	over 2,900 SF	4,200	3.48	16	11
<b>Total/Average</b>			<b>2,650</b>	-	<b>8</b>

\* primary fixture assumptions:

Water Closets	Lavatory	Shower	Total
2	2	1	5
3	3	2	8
4	4	3	11

Source: Building code calculator; complies with 2013-2016 IBC/IPC/CPC requirements.

**Table B-2**

**Stormwater Impervious Surface Area Assumptions (SF)**

Impervious Area Assumptions	ADUs (600 SF)	Standard		
		Small Home (under 1,700 SF)	Home (1,701 to 2,900 SF)	Large Home (over 2,900 SF)
Roof top	600	1,000	1,250	1,750
Parking	350	350	350	500
<b>Total</b>	<b>950</b>	<b>1,350</b>	<b>1,600</b>	<b>2,250</b>
<b>Relative ISA Factor</b>	<b>0.704</b>	<b>0.844</b>	<b>1.000</b>	<b>1.406</b>

**Table B3**

**Transportation and Parks Adjustment Factors by Single Family Dwelling Size**

Home Size Category	Dwelling Unit Size Range (living area sq.ft.)	Avg. Home Size (SF)	ADVT per 1,000 SF	ADVT per Dwelling	TSDC Adjustment Factor (revenue neutral)	Parks SFD Adjustment Factors	
						Avg. People Per Dwelling (Adjusted for Local Conditions)	Parks SDC Adjustment Factor
Small	under 1,700 SF	1,250	4.28	5.36	0.50	1.04	0.47
Standard	1,701 to 2,900 SF	2,500	4.04	10.10	0.95	2.07	0.94
Large	over 2,900 SF	4,200	3.72	15.62	1.47	3.48	1.58
<b>Total/Average</b>	<b>2,650</b>	<b>4.02</b>		<b>10.64</b>		<b>2.20</b>	

Source: compiled by FCS Group based on: National Association of Home Builders, *Characteristics of Home Buyers*, Feb. 8, 2013; and National Cooperative Highway Research Program, Report 365: *Travel Estimation Techniques for Urban Planning*, 1998. Census, ACS 2011-15 avg. household size; Abbreviations: ADVT = average daily vehicle trips; TSDC = Transportation System Development Charge.

## Appendix D-1 – Average Daily Vehicle Trip Generation & SDC Assumptions for New Development

ITE Code	Land Use	ADT	Trip Categories					Adjusted Trip Rates	\$	316.21	
			Unit	Average	Primary By	Diverted Linked	Total	Primary Y ADT	Fed Factor*		
10 Waterport/Marine Terminal	Acre	11.93	100%				100%	11.93	11.93	\$3,778	
20 General Aviation Airport	Avg. Flights/Day	1.98	100%				100%	1.98	1.98	\$627	
30 Intermodal Truck Terminal	Acre	62.51	100%				100%	62.51	62.51	\$19,798	
110 General Light Industrial	1,000 SFGFA	5.26	100%				100%	5.26	5.26	\$1,667	
120 General Heavy Industrial	1,000 SFGFA	1.50	100%				100%	1.50	1.50	\$475	
130 Industrial Park	1,000 SFGFA	5.34	100%				100%	5.34	5.34	\$1,691	
140 Manufacturing	1,000 SFGFA	3.03	100%				100%	3.03	3.03	\$960	
150-51 Warehouse*	1,000 SFGFA	2.96	100%				100%	2.96	2.96	\$937	
160 Data Center	1,000 SFGFA	0.99	100%				100%	0.99	0.99	\$314	
170 Utilities	1,000 SFGFA	0.20	100%				100%	0.20	0.20	\$63	
210 Single Family Housing (Incl. duplex)	Dwelling unit	9.45	100%				100%	9.45	9.45	\$2,992	
220 Apartment	Dwelling unit	6.50	100%				100%	6.50	4.88	\$1,544	
230 Residential Condominium/Townhouse	Dwelling unit	5.65	100%				100%	5.65	4.24	\$1,342	
240 Mobile Home Park	ODU	4.90	100%				100%	4.90	4.90	\$1,552	
252 Senior Adult Housing	Dwelling unit	3.44	100%				100%	3.44	2.58	\$817	
254 Assisted Living	Bed	2.56	100%				100%	2.56	1.92	\$609	
310 Hotel	Room	7.86	100%				100%	7.86	7.86	\$2,488	
320 Motel	Room	5.63	100%				100%	5.63	5.63	\$1,783	
411 City Park	Acre	6.13	100%				100%	6.13	6.13	\$1,942	
412 County Park	Acre	5.10	100%				100%	5.10	5.10	\$1,614	
413 State Park	Acre	0.71	100%				100%	0.71	0.71	\$224	
417 Regional Park	Acre	4.99	100%				100%	4.99	4.99	\$1,581	
430 Golf Course	Acre	5.27	100%				100%	5.27	5.27	\$1,670	
444 Movie Theater with Matinee	Movie screen	387.03	100%				100%	387.03	387.03	\$122,577	
480 Amusement Park	Acre	104.29	100%				100%	104.29	104.29	\$33,029	
481 Zoo	Acre	114.88	100%				100%	114.88	114.88	\$36,384	
491 Health/Fitness Club	1,000 SFGFA	30.32	100%				100%	30.32	30.32	\$9,603	
492 Racquet/Tennis Club	Acre	16.19	100%				100%	16.19	16.19	\$5,128	
494 Bowling Alley	Bowling Lane	34.90	100%				100%	34.90	34.90	\$11,053	
495 Recreational Community Center	1,000 SFGFA	27.40	100%				100%	27.40	27.40	\$8,678	
520 Elementary School	1,000 SFGFA	12.07	59% 41%				100%	7.12	7.12	\$2,256	
522 Middle School/Junior High School	1,000 SFGFA	10.78	59% 41%				100%	6.36	6.36	\$2,015	
530 High School	1,000 SFGFA	10.09	59% 41%				100%	5.95	5.95	\$1,885	
540-50 University/Community College	Students	1.71	100%				100%	1.71	1.71	\$542	
560 Church	1,000 SFGFA	13.22	100%				100%	13.22	13.22	\$4,187	
565 Day Care Center	1,000 SFGFA	54.62	33% 67%				100%	18.02	18.02	\$5,709	
590 Library	1,000 SFGFA	50.46	100%				100%	50.46	50.46	\$15,982	
610 Hospital	1,000 SFGFA	12.17	100%				100%	12.17	12.17	\$3,854	

Appendix D-2 – Average Daily Vehicle Trip Generation & SDC Assumptions for Special Districts

ITE Code Land Use	ADT	Trip Categories					Adjusted Trip Rates	\$	316.71
		Unit	Average	Primary By Linked	Total	Primary ADT	Transit/ Ped Factor*		
820 Shopping Center	1,000 SFGLA	41.2	50%	34%	16%	100%	20.7	16.54	\$5,240
826 Specialty Retail Center**	1,000 SFGLA	40.6	46%	22%	32%	100%	18.7	14.97	\$4,743
830 Supermarket	1,000 SFGFA	122.2	39%	36%	25%	100%	47.3	37.87	\$11,995
851 Convenience Market (Open 24 Hours)	1,000 SFGFA	758.8	33%	61%	6%	100%	246.8	197.44	\$62,533
925 Drinking Place	1,000 SFGFA	125.7	60%	40%	10%	100%	75.4	60.34	\$19,109
931-2 Sit-Down Restaurant***	1,000 SFGFA	88.0	43%	44%	14%	100%	37.4	29.93	\$9,480
933 Fast-Food Restaurant without Drive-Through	1,000 SFGFA	40.1	43%	44%	14%	100%	17.1	13.65	\$4,322
934 Fast-Food Restaurant with Drive-Through	1,000 SFGFA	535.1	41%	50%	9%	100%	219.1	175.26	\$55,506
936 Coffee/Donut Shop without Drive-Through	100 SFGFA	598.0	43%	44%	14%	100%	254.2	203.32	\$6,439
937 Coffee/Donut Shop with Drive-Through	100 SFGFA	818.6	41%	50%	9%	100%	335.2	268.13	\$8,492

Source: ITE Trip Generation Handbook, 9th Edition; and local assumptions, compiled by FCS GROUP. \* Denotes local assumptions by City staff.

\*\* Includes development within Historic Downtown area, Nye Beach area, Deco District area, or Wilder (South Beach) area.

Abbreviations

\*\*\* denotes ITE code 931 quality restaurant.

ADT average daily vehicle trips

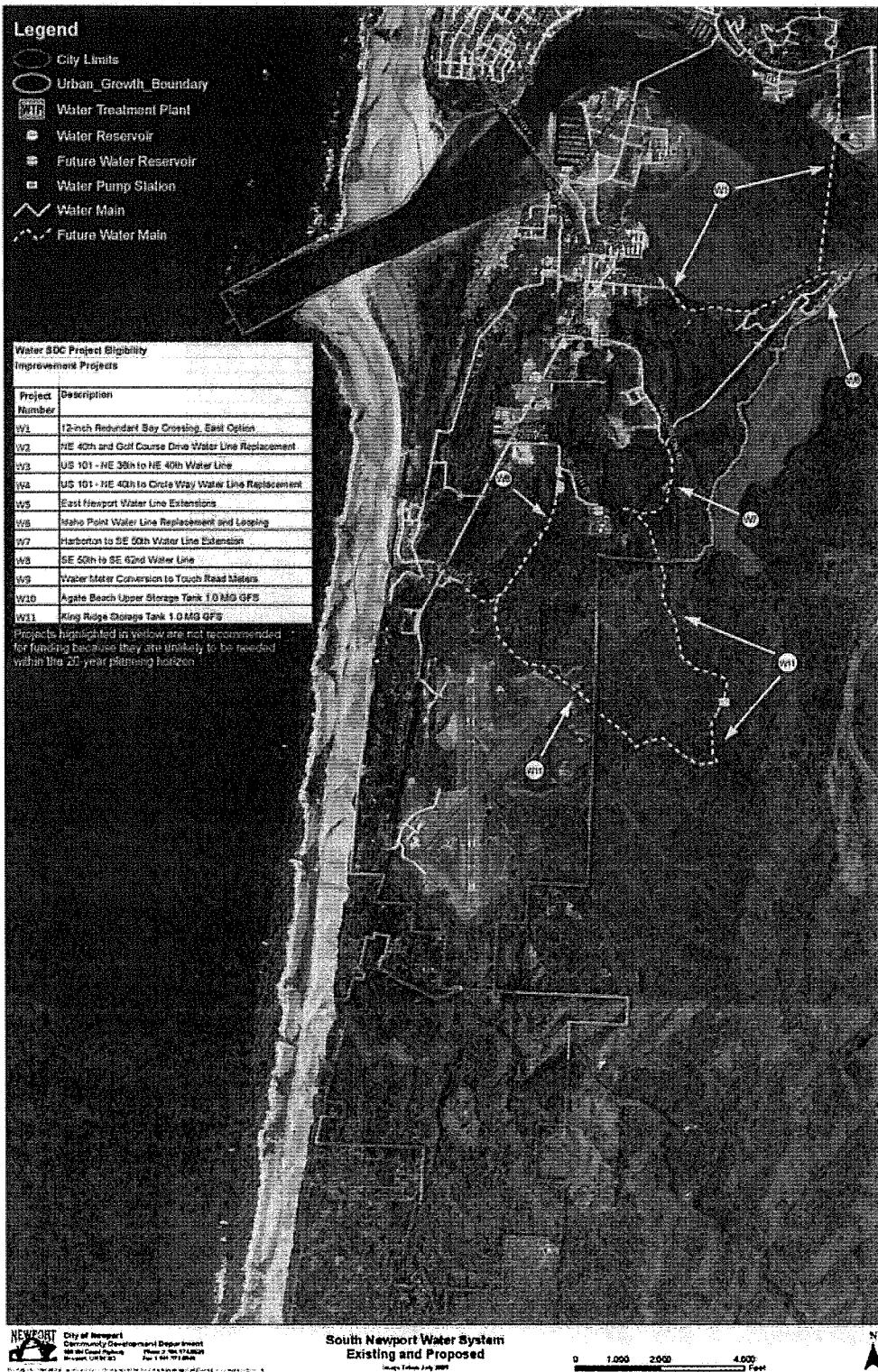
ODU occupied dwelling unit

SFGFA square feet of gross floor area

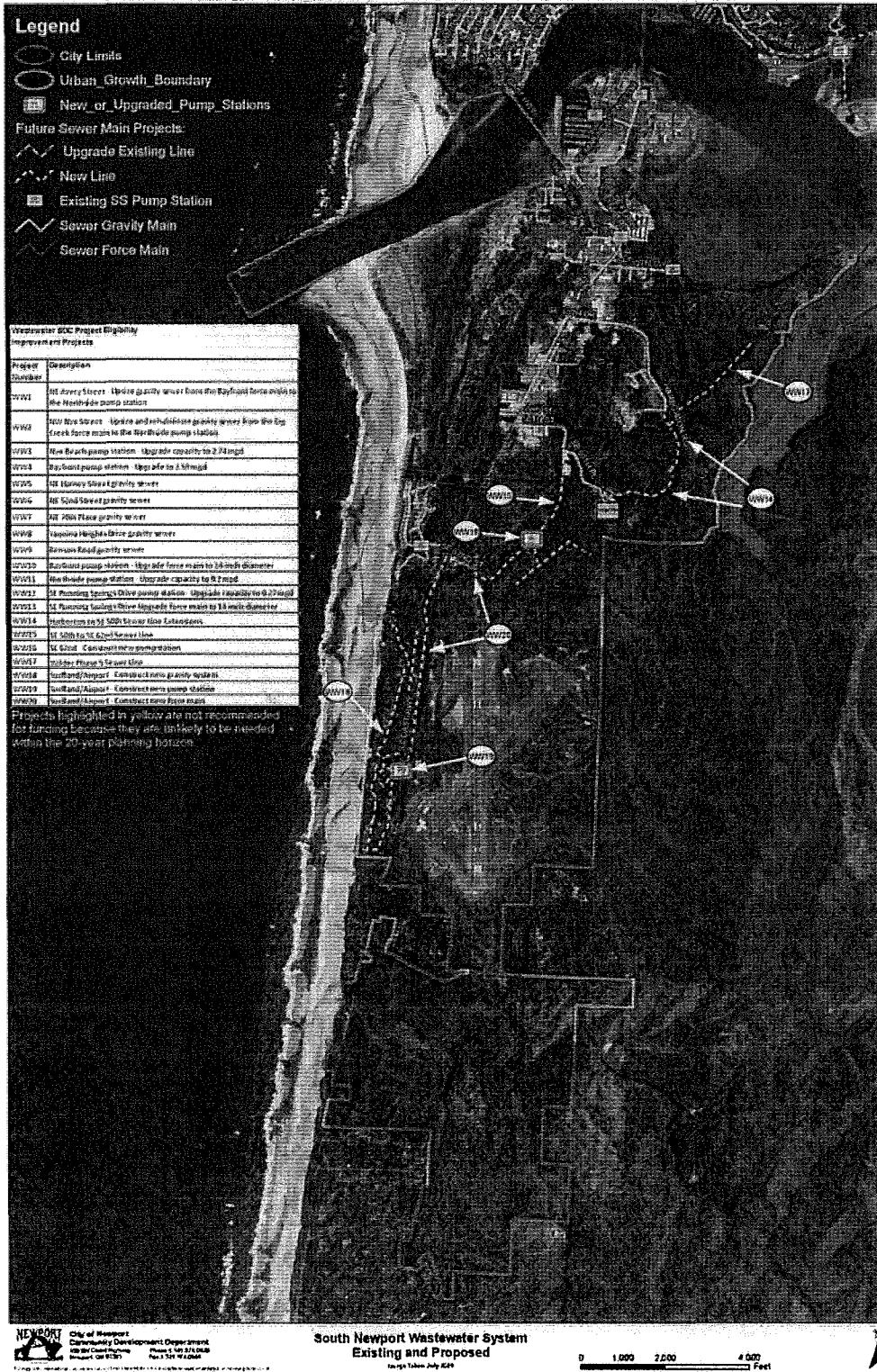
SFGLA square feet of gross leasable area

VFP vehicle fueling position

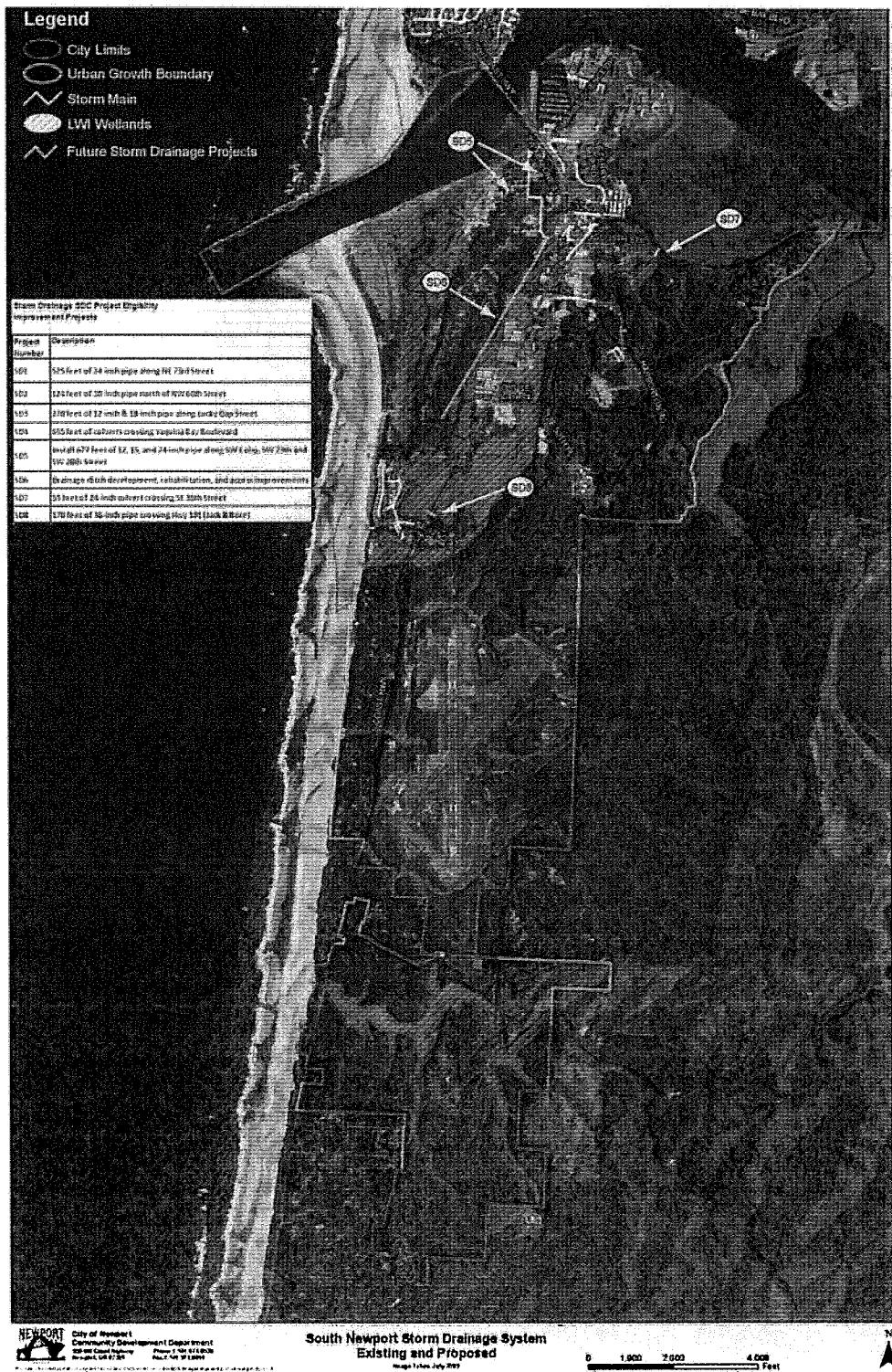
## Water Capital Improvements



## Wastewater Capital Improvements



## Storm Drainage Capital Improvements



## **Transportation Capital Improvements**



## Parks Capital Improvements

