



City of Newport

SYSTEM DEVELOPMENT  
CHARGE METHODOLOGY  
Draft Final Report

June 7, 2017

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# ACKNOWLEDGEMENTS

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This work is made possible through the sincere input by City staff and the Newport SDC/CET Ad-hoc Advisory Committee. We appreciate the time and attention dedicated to this work by the following people:

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# SECTION I: INTRODUCTION

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This city of Newport SDC Methodology Report takes into account up-to-date growth forecasts, long-range capital improvements and local SDC calculation procedures. Newport's current system development charges (SDCs) were adopted in 2007, and subsequently indexed for inflation. Since the prior SDC methodology was adopted, the City completed several capital improvements, and has updated its public facility master plans for water (2008), wastewater (update in process), transportation (2012) and stormwater (update in process).

This section of the SDC Methodology Report describes the policy context and project scope upon which the City may create a new SDC that complies with Oregon legal requirements.

## A. SYSTEM DEVELOPMENT CHARGES

Oregon Revised Statutes (ORS) 223.297 to 223.314 authorize local governments to establish system development charges (SDCs), one-time fees on all new development paid at the time of development. SDCs are paid by developers or property owners that change a use of a parcel or structure that generates additional transportation demand.

SDCs are intended to recover a fair share of the cost of existing and planned facilities that provide capacity to serve future growth. Cities can, and most do, implement SDCs on water, wastewater, sewer, parks, stormwater, and transportation infrastructure.

ORS 223.299 defines two types of SDCs:

- ◆ 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) and on the costs of compliance with Oregon's SDC law.

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 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) 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						
$\frac{\text{Eligible costs of available capacity in existing facilities}}{\text{Units of growth in demand}}$	+	$\frac{\text{Eligible costs of capacity-increasing capital improvements}}{\text{Units of growth in demand}}$	+	$\frac{\text{Pro-rata share of costs of complying with Oregon SDC law}}{\text{Units of growth in demand}}$	=	$\text{SDC per unit of growth in demand}$

### 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

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<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 program. **This methodology includes both types of adjustments in the determination of the charges.**

Current SDC fund balances are shown in Exhibit 1.1.

**Exhibit 1.1**

Current Newport SDC Fund Balances	
	Fund Balance
Water	\$346,501
Sewer	\$313,859
Transportation	\$262,381
Stormwater	\$141,824
Parks	\$167,205

**Source:** City of Newport, FY 2015/16 audit.

ORS 223.307(5) authorizes the expenditure of SDCs for “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 the SDC calculation.

## C. CREDITS, EXEMPTIONS AND DISCOUNTS

The City of Newport SDC procedures for credits, exemptions and discounts are to be found in the Newport Municipal Code Chapter 12-15. The following narrative is provided for context.

### C.1 Credits

A credit is a reduction in the amount of the SDC for a specific development. ORS 223.304 requires that credit be allowed for the construction of a qualified public improvement which: is required as a condition of development approval; is identified in the City’s capital improvements program; and either is “not located on or contiguous to property that is the subject of development approval,” or is located “on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the particular development project....”

Additionally, a credit must be granted “only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve” the particular project up to the amount of the improvement fee. For multi-phase projects, any “excess credit may be applied against SDCs that accrue in subsequent phases of the original development project.”

In addition to these credit policies required by state law, the City may consider amendments to its current credit policy (please refer to Newport municipal code Chapter 12-15) and adopt credit policies that: provide a greater credit amount than required by state law; establish a system providing for the transferability of credits; provide a credit for a capital improvement not identified in the City’s SDC Capital Improvement Plan; or provide a share of the cost of an improvement by other means.

State statute [ORS 223.304(5)(d)] provides a sunset clause for credits limiting their use to not later than 10 years from the date the credit is given.



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.**

<b>Exhibit 1.2: SDC Discounts per City Policy</b>	<b>FY 2017/18</b>
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

utility fee surcharges, a local option levy, local improvement districts, reimbursement districts, or developer/property owner right of way dedications.

## D. INDEXING

Oregon law (ORS 223.304) also allows for the periodic indexing of SDCs for inflation, as long as the index used is:

- “(A) A relevant measurement of the average change in prices or costs over an identified time period for materials, labor, real property or a combination of the three;
- (B) Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the system development charge methodology; and
- (C) Incorporated as part of the established methodology or identified and adopted in a separate ordinance, resolution or order.”

The City of Newport currently indexes its SDCs annually. **It is recommended that the City index its charges to the *Engineering News Record Construction Cost Index 20-city average* and continue to adjust its charges annually.**

## E. OTHER SDC STATUTORY PROVISIONS

Other applicable provisions of the Oregon SDC legislation, include:

- SDCs must be based on an adopted local capital improvement program/plan (CIP) or comparable planning effort that lists qualified public improvements to be funded with SDCs and the estimated timing, cost and SDC-eligible share of each improvement to be funded with SDCs. The current CIPs that serve as the SDC cost basis used in this report are included in the Appendix.
- SDC revenues must be deposited into a dedicated individual account with annual accounting of revenues and expenditures. The annual accounting effort must include a list detailing the amount spent on each project funded, in whole or in part, by SDC revenues, including costs attributed to complying with the SDC legislation.
- Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge any expenditure of SDC revenues.
- Preclusion against challenging the SDC methodology after 60 days from the enactment of or revision to the SDC ordinance or resolution.

## F. SDC APPEALS PROCESS

While this methodology report includes a wide assortment of residential and non-residential customer types and assumptions for calculating SDCs, it cannot address all potential development or customer types and system demand levels.

**Any party (development applicant) that is subject to SDCs can contend the basis of SDC charges that have been determined using this methodology by submitting evidence, such as a traffic impact study. The independent 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 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.

## SECTION II: WATER SDCs

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

### A. GROWTH CALCULATION

Growth is the denominator in SDC calculation and measured in units that most directly reflect the source of demand. For water SDCs, the most applicable unit of growth is Equivalent Dwelling Units (EDUs). For water, 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**).

As indicated in **Exhibit 2.1**, there are currently an estimated 4,463 water customers served by the City of Newport, including 3,509 residential customers and 954 non-residential customers. According to Newport water usage statistics, these customers consume approximately 613 million gallons of water, which equates to 54,467 annual gallons per residential customer. Current equivalent dwelling units (EDUs) are calculated based on the total annual water usage divided by the average residential water demand (613,078,000 / 54,467), which equates to 11,256 EDUs. Future EDUs are assumed to increase at annual average growth rate of 1.02%, increasing to 13,792 by year 2037. The projected 20-year EDU growth of 2,536 units results in an average growth share of 18.4%. The average growth share is a measure of total water system demand that will be consumed by future growth and equates to the minimum cost share of any SDC eligible improvement.

#### Exhibit 2.1

Newport Water Demand and EDU Growth Forecast						
	2017 customers	Usage Per Customer (000 gallons)	Water Usage (000 gallons)			
Residential Customers	3,509	<b>54.5</b>	191,127			
Non-Res. Customers	954	442.3	421,951			
Total or Avg.	4,463	137.4	<b>613,078</b>			
Total System EDUs	Est. 2017	Proj. 2037	EDU Growth 2017-	Avg. Growth Share	AGR	Unit
<b>EDUs (Total Usage / Avg. Res. Demand)</b>	11,256	13,792	<b>2,536</b>	18.4%	1.02%	EDU

**Source:** City of Newport water 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.

### B. IMPROVEMENT FEE COST BASIS

Newport's Water System Master Plan (2008) and neighborhood 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 2.2**, there are 9 water 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 \$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	SDC Cost Share	Source Document
			Share %		
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.

## F. SDC CALCULATION

As indicated in **Exhibit 2.2**, after deducting current fund balances, the adjusted SDC cost basis includes \$5,272,927 for growth eligible water improvements over 20 years. When this amount is divided by the expected 2,536 increase in water EDUs, it results in an SDC of \$2,079 per EDU for the SDC improvement fee. The 4.33% compliance cost results in an additional \$87/EDU charge, bringing the total water SDC to \$2,166 per EDU (before discounts).

### Exhibit 2.2

Water SDC Calculation			
<b>Improvement Fee</b>			
Capacity Expanding CIP	\$	5,619,458	
Less Existing Fund Balance	\$	(346,501)	
SDC Cost Basis	\$	5,272,957	
Growth to End of Planning Period		2,536	EDU
Improvement Fee	\$	2,079	per EDU
<b>Total System Development Charge</b>			
Reimbursement Fee	\$	-	per EDU
Improvement Fee	\$	2,079	per EDU
SDC Subtotal	\$	2,079	per EDU
plus: Administrative	4.18%	\$	87 per EDU
<b>Total SDC before discount</b>	<b>\$</b>	<b>2,166</b>	<b>per EDU</b>

## G. WATER 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 included in a development.

### G.1. Residential SDCs

For residential developments that will result in additional EDUs, 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 water system demand requirements. Analysis of the relative demand generated by various (small, standard, and large) home sizes is included in **Exhibit 2.3**.

Exhibit 2.3: City of Newport, Adjustments by Single Family Home Size			
Type	Small Home (under 1,700 SF)	Standard Home (1,701 to 2,900 SF)	Large Home (over 2,900 SF)
Water	0.63	1.00	1.38
Sewer	0.63	1.00	1.38
Transportation	0.50	0.95	1.47
Stormwater*	0.84	1.00	1.41
Parks	0.47	0.94	1.58

**Source:** Compiled by FCS GROUP based on Appendix B-1, B-2 and B-3. \* Actual stormwater charge may be less or more depending upon construction plans.

**Abbreviations:** SF = usable floor area (excludes unfinished attics, garages and carports); ADU = accessory dwelling unit.

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)
<b>New Avg. SDC (without discount)</b>	\$2,413	\$1,354	\$2,166	\$2,978
<b>Water SDC Per Sq.Ft.</b>	n/a	\$1.08	\$0.87	\$0.71
<b>Recommended SDC (FY 2017/18)</b>				
<b>Discount</b>	0%	45%	45%	45%
Water SDC per SF		\$0.60	\$0.48	\$0.39

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.

**Exhibit 2.6**

Enterprise	EDUs	Units
Apartments	N/A	See meter sizing assessment table
Apparel Store	0.2	Per 1,000 sqft.
Athletic Club	0.3	Per 1,000 sqft.
Auto Care	0.1	Per service bay
Auto Parts Sales	0.2	Per 1,000 sqft.
Auto Sales	0.2	Per 1,000 sqft.
Bank, Drive-in	0.3	Per 1,000 sqft.
Bank, Walk-in	0.3	Per 1,000 sqft.
Building Material and Lumber Store	0.2	Per 1,000 sqft.
Cab Company	0.2	Per 1,000 sqft.
Car Wash, Automated	N/A	See meter sizing assessment table
Car Wash, Self Service	0.7	Per stall
Cemetery	0.2	Per 1,000 sqft.
Church	0.2	Per 1,000 sqft.
Convenience Market (24 hrs.)	0.2	Per 1,000 sqft.
Convenience Market (15-16 hrs.)	0.2	Per 1,000 sqft.
Convenience Market w/ Gasoline Pumps	0.2	Per 1,000 sqft.
Day Care	0.2	Per student
Drinking Establishment	0.7	Per 1,000 sqft.
Furniture Store	0.2	Per 1,000 sqft.
Hardware/Paint	0.2	Per 1,000 sqft.
Health/Fitness Club	0.3	Per 1,000 sqft.
Hospital	1	See meter sizing assessment table
Industrial	1	See meter sizing assessment table
Library	0.2	Per 1,000 sqft.
Lodge/Fraternal	0.3	Per 1,000 sqft.
Manufacturing	0.2	Per 1,000 sqft.
Medical/Dental Office	0.4	Per 1,000 sqft.
Mini-Warehouse Storage and Warehouses	0.1	Per 1,000 sqft.
Mobile Home Park	0.75	Per dwelling unit
Motel/Hotel without kitchenette	0.4	Per room
Motel/Hotel with kitchenette	0.6	Per room
Nursery Garden Center	0.2	Per 1,000 sqft.
Nursing Home	0.3	Per bed
Office Building	0.2	Per 1,000 sqft.
Retail Establishment, Shopping Center, Grocery, Etc.	0.2	Per 1,000 sqft.
Post Office	0.2	Per 1,000 sqft.
Quick Lubrication Vehicle Stop	0.1	Per bay
Recreational Facility, Multipurpose	0.3	Per 1,000 sqft.
Restaurant, any type*	N/A	See meter sizing assessment table
Schools (K through 12)	1	Per 625 gross sqft.
Schools (post secondary)	1	Per 625 gross sqft.
Service Station	0.1	Per bay
Service Station w/Convenience Market	0.1	Per pump
Single Family Detached Housing	1	Per house
Fish Processing Facility	N/A	See meter sizing assessment table
Pools and Aquatic Facilities	N/A	See meter sizing assessment table
Brewery	N/A	See meter sizing assessment table
Movie Theater	0.3	Per 100 seats
Commercial/Coin-op Laundry	N/A	See meter sizing assessment table

\* Note, if in mixed-use building with shared water meter, restaurants will also be assessed 1 EDU per 500 SF.



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

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.

## B. IMPROVEMENT FEE COST BASIS

Newport’s Wastewater System Master Plan (update in process) and neighborhood 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 3.2** and **Appendix E**, there are 13 wastewater 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 \$19,466,700. The SDC eligible portion of these projects equates to 62% of the total cost or \$12,064,320.

During the study process, the City staff and Advisory Committee identified seven public facility improvements that were included in wastewater master plans but are expected to be implemented outside the 20-year planning horizon. Those projects are also reflected in **Exhibit 3.2.**, and include \$9.4 M in capital costs.

### Exhibit 3.2

Newport Wastewater SDC Capital Improvement Program and Fee Cost Basis: 2017 to 2037					
Project Number	Description	Total Cost	SDC Eligible Growth Share %	SDC Cost Share	Source Document
WW1	NE Avery Street - Upsize gravity sewer from the Bayfront force main to the Northside pump station	\$1,230,000	5%	\$ 61,500	Draft Master Plan
WW2	NW Nye Street - Upsize and rehabilitate gravity sewer from the Big Creek force main to the Northside pump station	\$1,140,000	11%	\$ 125,400	Draft Master Plan
WW3	Nye Beach pump station - Upgrade capacity to 2.74 mgd	\$2,828,000	10%	\$ 282,800	Draft Master Plan
WW4	Bayfront pump station - Upgrade to 2.59 mgd	\$3,224,000	28%	\$ 902,720	Draft Master Plan
WW5	NE Harney Street gravity sewer	\$740,000	100%	\$ 740,000	1990 Public Facilities Plan
WW7	NE 70th Place gravity sewer	\$371,000	100%	\$ 371,000	1990 Public Facilities Plan
WW9	Benson Road gravity sewer	\$1,722,600	100%	\$ 1,722,600	1990 Public Facilities Plan
WW10	Bayfront pump station - Upgrade force main to 14-inch diameter	\$490,000	28%	\$ 137,200	Draft Master Plan
WW11	Northside pump station - Upgrade capacity to 9.2 mgd	\$2,780,000	100%	\$ 2,780,000	Draft Master Plan
WW14	Harborton to SE 50th Sewer Line Extensions	\$754,800	100%	\$ 754,800	2006 SB Nbhd Plan
WW15	SE 50th to SE 62nd Sewer Line	\$1,979,500	100%	\$ 1,979,500	2006 SB Nbhd Plan
WW16	SE 62nd - Construct new pumpstation	\$1,000,000	100%	\$ 1,000,000	2006 SB Nbhd Plan
WW17	Wilder Phase 5 Sewer Line	\$1,206,800	100%	\$ 1,206,800	2006 SB Nbhd Plan
<b>Total</b>		<b>\$ 19,466,700</b>	<b>62%</b>	<b>\$12,064,320</b>	
Other Planned Improvements Not Included in the SDC Cost Basis*					
WW6	NE 52nd Street gravity sewer	\$259,000	n/a	\$0	1990 Public Facilities Plan
WW8	Yaquina Heights Drive gravity sewer	\$ 1,426,600	n/a	\$0	1990 Public Facilities Plan
WW12	SE Running Springs Drive pump station - Upgrade capacity to 0.27 mgd	\$ 1,178,000	n/a	\$0	Draft Master Plan
WW13	SE Running Springs Drive Upgrade force main to 14-inch diameter	\$ 330,000	n/a	\$0	Draft Master Plan
WW18	Surfland/Airport - Construct new gravity system	\$ 4,620,000	n/a	\$0	Draft Master Plan
WW19	Surfland/Airport - Construct new pump station	\$ 1,000,000	n/a	\$0	Draft Master Plan
WW20	Surfland/Airport - Construct new force main	\$ 612,000	n/a	\$0	Draft 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 (\$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**

<b>Wastewater SDC Calculation</b>	
<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.

## G.1. Residential SDCs

For residential developments that will result in additional EDUs, 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 wastewater 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 SDC charge that varies by home size, and one that can be assessed based on square footage, as indicated in **Exhibit 3.3**. After applying the recommended discount, the resulting SDCs would be \$1.06/SF for the first 1,700 SF; \$0.85/SF for 1,701 to 2,900 SF; and \$0.69/SF for the area above 2,900 SF.

Exhibit 3.3: 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)	\$3,969	\$2,402	\$3,843	\$5,284
Wastewater SDC Per Sq.Ft.	n/a	\$ 1.92	\$ 1.54	\$ 1.26
Recommended SDC (FY 2017/18)*				
Discount	0%	45%	45%	45%
Wastewater SDC per SF		\$1.06	\$0.85	\$0.69

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 \$1.06. 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.

For 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**.

## G.2. Other Non-Residential SDCs

For other types of non-residential developments, wastewater SDCs are to be assessed based on EDUs added using the conversion table provided as **Exhibit 2.6**. When a specific land use is not included in Exhibit 2.6, or if the table does not fit the application well, meter size equivalency factors should be used. 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 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**, there are currently an estimated 4,106 storm drainage customers served by the City of Newport, including 3,204 residential (single family) customers and 902 other customers. According to Newport storm drainage statistics, single family customers, on average, generate 2,727 square feet of impervious surface area (ISA) per customer.

Current equivalent dwelling units (EDUs) are calculated based on the number of single family customers (3,204). 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 41.6%. 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 Customer*	Impervious	Est. 2017	Proj. 2037	Growth		
		Area Per Customer (SF)*	Impervious Area (SF)	Impervious Area (SF)	2017-2037 (SF)	AGR	Growth Customer Unit
Single Family ERUs (includes SFD and mobile homes)	3,204	2,727	8,737,308	13,872,402	5,135,094		
Other (non-single family residential)	902				1,082,466		
<b>Total</b>	<b>4,106</b>				<b>6,217,560</b>		
<b>Total System EDUs</b>			Est. 2017	Proj. 2037	Growth 2017-2037	AGR	Growth Customer Unit
<b>Total EDUs</b>			3,204	5,484	<b>2,280</b>	2.72%	41.6% EDU

**Source:** Compiled by FCS based on City of Newport data, and impervious area assumptions; growth consistent with Appendix A-1.

\* customer data derived from City of Newport Stormwater Utility database, December 2016.

\*\* ISA and ERU data derived from City of Newport, Storm-Drain Master Plan Documents, 2016.

Abbreviations: EDU = equivalent dwelling unit. AGR = annual average growth rate. ISA = impervious surface area.

### 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 4.2**

Newport Stormwater SDC Capital Improvement Program and Fee Cost Basis: 2017 to 2037					
Project Number	Description	Total Cost	SDC Eligible	SDC Cost	
			Growth Share %	Share	Source Document
SD1	525 feet of 24-inch pipe along NE 73rd Street	\$243,075	50%	\$ 121,537	Draft Master Plan
SD2	124 feet of 30-inch pipe north of NW 60th Street	\$71,442	100%	\$ 71,442	Draft Master Plan
SD3	270 feet of 12-inch & 18-inch pipe along Lucky Gap Street	\$108,347	41.58%	\$ 45,046	Draft Master Plan
SD4	655 feet of culverts crossing Yaquina Bay Boulevard	\$221,220	100%	\$ 221,220	Draft Master Plan
SD5	Install 677 feet of 12, 15, and 24-inch pipe along SW Coho, SW 29th and SW 28th Street	\$679,356	50%	\$ 339,678	Draft Master Plan
SD6	Drainage ditch development, rehabilitation, and access improvements	\$1,795,182	100%	\$ 1,795,182	Draft Master Plan
SD7	55 feet of 24-inch culvert crossing SE 35th Street	\$39,385	100%	\$ 39,385	Draft Master Plan
SD8	170 feet of 36-inch pipe crossing Hwy 101 (Jack & Bore)	\$108,244	75%	\$ 81,183	Draft Master Plan
<b>Total</b>		<b>\$ 3,266,251</b>	<b>83%</b>	<b>\$ 2,714,673</b>	

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

**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 stormwater 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**, after deducting the current SDC fund balance, the adjusted SDC cost basis includes \$2,572,849 for growth-eligible storm drainage improvements over 20 years. When this amount is divided by the expected 2,280 increase in EDUs, it results in an SDC of \$1,128 per EDU for the SDC improvement fee. The compliance cost results in an additional \$47/EDU charge,

bringing the total stormwater SDC to \$1,176 per EDU. Given the planned increase of 6,217,560 SF in ISA over the next 20 years, the storm drainage SDC equates to \$0.43 per SF of ISA (\$2,572,849 / 6,217,560).

**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	4.18%	\$ 47	per EDU
<b>Total SDC per EDU</b>		<b>\$ 1,176</b>	per EDU
Increase in Impervious Surface Area (ISA) sq. ft.		6,217,560	ISA
<b>Total SDC per ISA sq.ft.</b>		<b>\$ 0.43</b>	per ISA SF

## 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**. No discount in stormwater SDCs are recommended at this time.

<b>Exhibit 4.4: Prior vs. New SDC Comparisons per Single Family Dwelling</b>				
	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>Stormwater SDC per Unit (average)</b>	\$857	\$992	\$1,176	\$1,653
<b>Equivalent SDC per Sq.Ft. of floor area*</b>		\$ 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.

For other types of new residential developments, such as duplexes or apartments, SDCs are to be assessed based on net increases in impervious surface area (ISA) which equates to \$0.43.

For construction of accessory dwelling units (ADUs), SDCs would be charged at the small home rate.

## G.2. Non-Residential SDCs

It is recommended that all non-residential development be assessed on a unit basis per square foot of net new impervious surface area. Using this method, a site plan for each new development must be reviewed to determine the amount of impervious surface area added. The resulting assessment will be equitable for each case presented to the City for consideration.

Specifically, non-residential development would be assessed at the incremental rate of \$0.43 per square foot of impervious surface area added. Accommodations may be made, on a case-by-case basis, for efforts to mitigate runoff impacts by removal of existing impervious surface or the use of pervious surface materials.

During the study process, it was noted that the City currently does not charge stormwater SDCs for construction projects that add impervious surface area yet do not require a building permit (such as paving a gravel parking lot). It is also observed that while the prior adopted SDC methodology recommends that “accommodations be made, on a case-by-case basis, for efforts to mitigate runoff impacts” such as detention systems, use of pervious surface materials and others. Given these issues, this SDC methodology report recommends:

- Clarification in the definition of “impervious surface area” to include: paved areas as well as compact gravel surface areas. Hence, the resulting SDCs will be determined based on the net change in ISA as defined above.
- Creation of a pervious surface area database for the City of Newport using Geographic Information Systems (GIS). This new GIS layer would be used to determine any net change in ISA that results of new construction (through tracking of site grading permits, and site development) and used on a case-by-case basis to calculate SDCs, that result in a net increase in ISA regardless of building permit requirements.
- For private construction and maintenance of qualified public facilities that mitigate stormwater runoff, such as detention ponds and the use of pervious surface materials, it is recommended that the city implement a new stormwater utility rate approach that provides a “rate credit” on their monthly bills.



## 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	Growth as a % of Future Customers	Annual Avg. Growth Customer Rate* Unit
Residential Uses	43,476	44,368	54,365	9,997	18.39%	1.02% Vehicle Trip
Non-Res. Uses	112,477	114,786	140,649	25,863	18.39%	1.02% Vehicle Trip
<b>Total</b>	<b>155,952</b>	<b>159,154</b>	<b>195,014</b>	<b>35,860</b>	<b>18.39%</b>	Vehicle Trip

**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

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 5.2** and **Appendix E**, there are 20 street improvements and multiple pedestrian improvements that have been identified in local transportation plans and studies that are required to address 2017-2037 trip growth in the City of Newport. The total cost of these capital projects is estimated at \$32,547,253 (2016 dollars). The SDC eligible portion of these projects equates to 62% of the total cost or \$20,083,567.

During the study process, the City staff and Advisory Committee identified nine improvements that were included in various plans but are expected to be implemented outside the 20-year planning horizon or eligible for state funding (with a local match). Those projects are also reflected in **Exhibit 5.2.**, and include \$42.4 M in capital costs.

**Exhibit 5.2**

Newport Transportation SDC Capital Improvement Program and Fee Cost Basis, 2017 to 2037					
Project Number	Description	Total Cost	SDC Eligible Growth Share %	SDC Cost Share	Source Document
1	US 101 at 73rd Street - Traffic Signal	\$527,599	50%	\$263,800	SDC Methodology
2	Extend Biggs Street to NW 60th and Improve 60th to US 101	\$197,850	50%	\$98,925	SDC Methodology
3	Reconstruct NE 60th/Biggs btwn Hazel Ct and 60th	\$104,434	50%	\$52,217	SDC Methodology/TSP
4	NE 57th Street Area Improvements	\$299,970	50%	\$149,985	SDC Methodology/TSP
5	NW 56th Street Area Improvements	\$707,410	50%	\$353,705	SDC Methodology/TSP
7	US 101 at 36th Street - Traffic Signal	\$659,500	50%	\$329,750	SDC Methodology
10	NE Harney Street - 7th to NE 32nd Street	\$9,232,991	42%	\$3,877,856	SDC Methodology
12	Extend NE 6th Street to Newport Hts Road	\$1,866,480	75%	\$1,399,860	SDC Methodology/TSP
13	NE Harney Street - US 20 to 3rd Street	\$915,464	20%	\$183,093	SDC Methodology/TSP
16	US 101 at US 20 - Signal revisions realign Olive	\$1,244,320	20%	\$248,864	SDC Methodology/TSP
17	Sidewalk Along NW 6th street - Coast to Nye Street (both sides)	\$203,313	50%	\$101,657	SDC Methodology/TSP
19	US 101 at Hurbert - Widen street to provide left turn	\$267,649	100%	\$267,649	SDC Methodology
20	Extend SW Abbey to Elizabeth Street	\$156,651	75%	\$117,488	SDC Methodology/TSP
21	US 101 at Abbey - Traffic Signal	\$356,866	50%	\$178,433	SDC Methodology
22	Sidewalk Along Elizabeth Street - 2nd to Gov't (west side)	\$161,095	50%	\$80,548	SDC Methodology/TSP
24	Moore Road at SE Bay Blvd realignment and channelization	\$395,699	18.39%	\$72,764	SDC Methodology
26	Ash Street at SE 40th Street, extend to approx. 1,200-feet south	\$1,636,503	100%	\$1,636,503	TSP
27	Complete Harborton to SE 50th Street loop	\$3,760,000	100%	\$3,760,000	2006 SB Nbhhd Plan
28	New SE 50th Street Segment - Existing road to SB State Park Entrance	\$1,738,715	50%	\$869,358	TSP
29	New Road from SE 50th Street to SE 62nd Street at US 101	\$5,573,887	100%	\$5,573,887	TSP
30	Sidewalk Improvements in Key Pedestrian Areas 2	\$2,540,857	18.39%	\$467,228	TSP
<b>Total</b>		<b>\$32,547,253</b>	<b>62%</b>	<b>\$20,083,567</b>	
Other Planned Improvements Not Included in the SDC Cost Basis*					
6	SE 50th to SE 62nd Sewer Line	\$14,443,000	n/a	\$0	SDC Methodology/TSP
8	Extend NW Nye Street to Oceanview Drive	\$791,400	n/a	\$0	SDC Methodology
9	Sidewalk/Bikeway along Big Creek Road - 12th to Harney/sidewalk on 12th	\$227,755	n/a	\$0	SDC Methodology/TSP
11	Bike lanes on Eads Street - NE 12th to NE 3rd and NE 3rd	\$161,095	n/a	\$0	SDC Methodology/TSP
14	Reconstruct NE 3rd Street btwn Eads and Harney	\$269,973	n/a	\$0	SDC Methodology/TSP
15	US 20 widen to five lanes US 101 to Moore Drive	\$6,594,993	n/a	\$0	SDC Methodology
18	US 101 at Angle - Traffic Signal	\$527,599	n/a	\$0	SDC Methodology
23	Connect SE 1st Street btwn Douglas and Fogarty	\$329,749	n/a	\$0	SDC Methodology
25	US 101 widen to five lanes bridge to SE 123rd	\$19,074,463	n/a	\$0	SDC Methodology

**Source:** City of Newport staff input as of 2/28/17, compiled by FCS GROUP. Note, project 30 sidewalk improvements are identified in Appendix C.

## 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**

<b>Transportation SDC Calculation</b>		
<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 Vehicle Trip (after discount)</b>	\$ 316.71	discount 0.45
Increase in Vehicle 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. SDC ADMINISTRATION PROCEDURES

Assessment of the transportation SDCs should be based on average daily person trips added to the transportation system.

### G.1. Residential SDCs

For single family development that will result in additional vehicle trips, 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 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 average 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 of net new floor area, as indicated in **Exhibit 5.4**. After applying the recommended discount, the resulting SDCs for new single family homes would be: \$1.20/SF for the first 1,700 SF; \$1.14/SF for 1,701 to 2,900 SF; and \$1.05/SF for the area above 2,900 SF.

The choice of assessment methods for new single family homes is to be based on the size of the unit added. For additions to existing development and accessory dwelling units, the SDC is to be assessed based on square footage of usable floor area added.

For other types of new residential developments, such as duplexes or apartments, SDCs are to be charged based on Institute of Transportation Engineers (ITE) *Trip Generation Manual* Land Use Classifications for dwelling types (e.g., single family detached, townhomes, apartments), which are provided in **Appendix D-1 and D-2**.

Exhibit 5.4: 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)
<b>Avg. SDC (without discount)</b>				
Transportation SDC per Unit	\$11,120	\$2,738	\$5,165	\$7,988
Transportation SDC per floor area (Sq.Ft.)	n/a	\$2.19	\$2.07	\$1.90
Transportation SDC per ADVT	n/a	\$575.84	\$575.84	\$575.84
<b>Recommended SDC (FY 2017/18 after discount)*</b>				
<b>Discount</b>	90%	45%	45%	45%
Transportation SDC per Unit (average)	\$1,112	\$1,506.02	\$2,840.81	\$4,393.37
Transportation SDC per floor area (Sq.Ft.)	n/a	\$1.20	\$1.14	\$1.05
Transportation SDC per ADVT	n/a	\$316.71	\$316.71	\$316.71

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

Source: prior tables.

For construction of accessory dwelling units (ADUs), SDCs would be charged at the small home rate.

## 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.

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

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.**

## SECTION VI: PARKS SDCs

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

### A. GROWTH CALCULATION

Growth is the denominator in SDC calculation and measured in units that most directly reflect the source of demand. For parks SDCs, the most applicable unit of growth is the combination of housing and lodging units (customer units).

As indicated in **Exhibit 6.1**, there are currently an estimated 7,551 customer units served by the City of Newport, including 5,869 housing units and 1,682 lodging units.

Customer unit growth over the next 20 years is expected to equate to 1.02% annually. This results in an increase of 1,149 customer units over the next 20-years, and results in an average SDC growth share of 13.21%. The average growth share is a measure of total parks system demand that will be consumed by future growth and equates to the minimum cost share of any SDC eligible improvement.

#### Exhibit 6.1

	2015 est.	2017 est.	2037 proj.	Growth 2017-2037	Growth as % of Future Customers	Annual Avg. Growth Customer Rate* Unit
Housing Units	5,751	5,869	6,639	770		1.02% Units
Lodging Units	n/a	1,682	2,061	379		1.02% Units
<b>Resident &amp; Lodging Units</b>		<b>7,551</b>	<b>8,700</b>	<b>1,149</b>	<b>13.21%</b>	Units

**Source:** Compiled by FCS based on housing unit estimates and growth forecasts in Appendix A-1; and City of Newport (2017 lodging room count).

### B. IMPROVEMENT FEE COST BASIS

Newport's Parks Master Plan, subarea planning documents and stakeholder input during the SDC update process, were used to 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 6.2** and **Appendix E**, there are 15 park improvement projects that have been identified and are required to address 2017-2037 growth in the City of Newport. The total cost of these capital projects is estimated at approximately \$6,168,913. The SDC eligible portion of these projects equates to 46% of the total cost or \$2,826,670.

## 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).

**Exhibit 6.3**

<b>Parks SDC Calculation (before discounts or credits)</b>	
<b>Improvement Fee</b>	
Capacity Expanding CIP	\$ 2,826,670
Less Existing Fund Balance	\$ (167,205)
SDC Cost Basis	\$ 2,659,465
Growth to End of Planning Period	1,149 Units
Improvement Fee	\$ 2,314 per Units
<b>Total System Development Charge</b>	
Reimbursement Fee	\$ - per Units
Improvement Fee	\$ 2,314 per Units
SDC Subtotal	\$ 2,314 per Units
plus: Administrative Cost Recovery	4.18% \$ 97 per Units
<b>Total SDC per Units</b>	<b>\$ 2,411 per Units</b>
Total SDC per Unit (before discount)	\$ 2,411
Total SDC per Unit (after discount)	\$ 1,085 w/45% discount

The recommended parks SDC discount of 45% is similar to Newport’s current SDC policy. Also, the ability to utilize SDC funding (after discounts) to leverage other local funding, state grants or other funding appears feasible at this time.

## G. SDC ADMINISTRATION PROCEDURES

Assessment of the parks SDCs is a relatively simple process as indicated below.

### G.1. Residential SDCs

For new single family developments, 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 parks 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 average parks SDC per standard size single family homes, results in an SDC charge that varies by home size, as indicated in **Exhibit 6.4**. After accounting for the recommended discount, the resulting parks SDC would range from \$512 to \$1,719 for a single family home.

Using this approach, single family attached structures, such as duplexes and row-houses would be assessed based on the “small home” SDC rate. Hence, a duplex would be assessed as follows: (2 units x \$512 per unit).

For other types of residential developments, such as apartments, SDCs are to be assessed based on the small home rate (after discounts) multiplied by an EDU conversion factor of 0.75. Therefore, a 60 unit apartment would be assessed parks SDCs as follows (60 x .75 x \$512).

For accessory dwelling units, it is recommended that parks SDCs are to be assessed based on the small home rate (after discounts).



<b>Exhibit 6.4: Prior vs. New SDC Comparisons per Single Family Dwelling</b>				
	<b>Current SDC</b>	<b>New SDC</b>		
		<b>Small Home (1,700 SF or less)</b>	<b>Standard Home (1,701 to 2,900 SF)</b>	<b>Large Home (over 2,900 SF)</b>
<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.

## SECTION VII: SUMMARY

This section provides additional information comparing current SDCs with proposed SDCs for residential and non-residential developments in the City of Newport.

### A. RESIDENTIAL SDCS

This SDC methodology report includes recommendations for revising Newport's maximum defensible SDCs, as well as recommendations for year 1 SDCs after applying discounts for parks and transportation.

The resulting total (average) SDCs per typical single family home in Newport are shown in **Exhibit 7.1**. As noted, the recommended SDC for an average single family home would be approximately \$8,799, down 20% from the current SDC amount of \$10,994.

#### Exhibit 7.1

City of Newport, Current vs. Proposed SDCs, Average Single Family Rates before Adjustments for Unit Size				
Facility Type	Current SDC (after discounts)	New Avg. SDC (before discounts)	New FY 2017/18 SDC (average after discounts)	Notes
Water	\$2,413	\$2,166	\$1,191	Assumes 45% discount
Sewer	\$3,969	\$3,843	\$2,114	Assumes 45% discount
Transportation	\$1,112	\$5,440	\$2,992	Assumes 45% discount
Stormwater	\$857	\$1,176	\$1,176	Current charge of \$0.32/SF would go to \$0.43/SF ISA
Parks	\$2,643	\$2,411	\$1,326	Assumes 45% discount
<b>Total</b>	<b>\$10,994</b>	<b>\$15,036</b>	<b>\$8,799</b>	

**Source:** Compiled by FCS GROUP based on prior tables.

**Abbreviations:** GPD - gallons used per day; ISA - square feet of impervious surface area.

The recommended level of discounts included in this SDC methodology are shown in **Exhibit 7.2**

#### Exhibit 7.2

SDC Charge Summary, Single Family Rates, After Discounts (Average)						
Facility Type	Reimbursement Fee	Improvement Fee	Compliance Fee	Total SDC	Discounts	
Water	\$ -	\$ 1,144	\$ 48	\$ 1,191	45%	
Sewer	\$ -	\$ 2,029	\$ 85	\$ 2,114	45%	
Transportation	\$ -	\$ 2,872	\$ 120	\$ 2,992	45%	
Stormwater	\$ -	\$ 1,128	\$ 47	\$ 1,176	0%	
Parks	\$ -	\$ 1,273	\$ 53	\$ 1,326	45%	
<b>Total</b>				<b>\$ 8,799</b>		

**Source:** Compiled by FCS GROUP. **Abbreviations:** GPD - gallons used per day; ISA - square feet of impervious surface area. ADVT = avg. daily vehicle trip.

As noted, this SDC methodology report recommends varying the SDC by single family dwelling unit size since size has been found to have a bearing on system demand. Using the examples provided in

**Exhibit 7.3**, the resulting SDCs would range from: \$5,189 for a 1,250 SF dwelling; \$9,800 for a 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**

Current vs. New SDC Comparisons per Single Family Home (with floor area sq.ft. rates)			New SDCs After Discounts*		
Facility Type	Current SDC (after discounts)	Current SDC with NO Discounts	SDC: Small Home (less than 1,700 SF)	SDC: 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>			<b>1,250</b>	<b>2,500</b>	<b>4,200</b>

**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>2</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.

## B. NON-RESIDENTIAL SDCS

In light of the city’s desire to maintain a competitive cost environment for attracting private apartment and restaurant development and public investment, three development prototypes were evaluated. The following tables provide a comparison of the current SDCs with the proposed SDCs for 2,500 SF restaurant, a 60-unit apartment, and a 10,000 square foot school addition under two options. The SDC options reflect the maximum defensible SDC amount and the recommended SDC amount after discounts are applied. Option A shows the proposed SDCs after discounts are applied to transportation and parks elements. Option B indicates a maximum defensible SDC amount based on the new SDC methodology contained in this report.

### Restaurant Example

**Exhibit 7.4** reflects that current restaurant SDC assumptions vs. future SDCs. The findings indicate that the current SDCs would result in a total estimated SDC of \$94,665 for a 2,500 square foot restaurant (after discounts). The proposed Option A (after discounts but before credits) would result in an estimated total SDC of \$35,998 inside designated special districts and \$41,924 for other areas in the city.

If the discounts are excluded, the maximum defensible SDC for restaurants under a new methodology that is based on EDU conversion rates and no discounts is estimated at \$75,181.

It should be noted, that this SDC study examined other methods that considered a higher SDC adjustment for restaurants based on their wastewater discharge and level of treatment required. The results indicate that such an approach may be justified based on the effluent discharge levels. However, the resulting SDCs would likely be on par or higher than the current SDC amounts. Hence, such an approach is not being recommended at this time. Instead, it is recommended that the costs of wastewater treatment be recouped through the city’s utility rate structure.

### Exhibit 7.4

Newport, Current vs. New SDC Comparisons Restaurant (2,500 SF)			
Facility Type/Location	Current SDC (after discounts) Notes	Option A. New SDCs w/ Meter Size Approach, after discounts* Notes	Option B. Max Defensible SDCs (without discounts or special districts) Notes
Water	\$24,130 4 EDUs x 2.5 x \$2,413	\$3,971 1.5" m (3.33 x \$2,166 x .55)	\$7,220 1.5" m (3.33 x \$2,166)
Sewer	\$39,690 4 EDUs x 2.5 x \$3,969	\$7,046 1.5" m (3.33 x \$3,843 x .55)	\$12,810 1.5" m (3.33 x \$3,843)
Transportation	\$29,885 10.75 x 2.5 x \$1,112		\$53,870 37.42 ADVT x 2.5 x \$575.84
Special Districts**		\$23,700 29.93 ADVT x 2.5 x \$575.84 x .55	
Rest of City		\$29,625 37.42 ADVT x 2.5 x \$575.84 x .55	
Stormwater (3k ISA)	\$960 3,000 ISA x \$0.32	\$1,281 3,000 ISA x \$0.43	\$1,281 3,000 ISA x \$0.43
Parks	\$0 n/a	\$0 n/a	\$0 n/a
<b>Total in Special Districts</b>	<b>\$94,665</b>	<b>\$35,998</b>	<b>\$75,181</b>
<b>Total in Rest of City</b>	<b>\$94,665</b>	<b>\$41,924</b>	<b>\$75,181</b>

**Source:** Compiled by FCS GROUP based on prior tables. \* Stormwater charge may be less or more depending upon construction plans. \*\* Assumes development occurs within Historic Downtown area, Nye Beach area, Deco District area, or Wilder (South Beach) area.

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

ISA = impervious surface area. K ISA = 1000 square feet of impervious surface area.

### Apartment Example

**Exhibit 7.5** reflects that current apartment SDC assumptions vs. future SDCs. The findings indicate that the current SDCs would result in a total estimated SDC of \$264,379 for a 60-unit apartment (after discounts but before credits). The proposed Option A would result in an estimated total SDC of approximately \$198,751.

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 DUs x 0.75 x \$1,137 x .55	\$68,231 60 DUs x \$1,137
<b>Total</b>	<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 x10 x \$575.84 x .55	\$41,023 7.12 ADVT x10 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
<b>Total</b>	<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.

## C. COMPARISON WITH OTHER CITIES

The following **Exhibit 7.7** provides a comparison of the current SDCs with the proposed SDCs for single family dwelling units in selected cities. As noted, Newport is currently on the low-end of the range for SDC charges for cities in Oregon, with a total estimate of \$10,994 per dwelling unit.

With this new SDC methodology, the average SDC in Newport would be \$8,799.

However, if we apply the recommended discounts for parks and transportation, and adjust the SDC by dwelling unit size, the resulting total estimated SDCs for Newport would range from:

- Small Home (1,700 SF): \$5,189
- Standard Home (2,500 SF): \$9,800
- Large Home (4,200 SF): \$15,100

**Exhibit 7.7**

SDC Comparison per Single Family Detached Home						
City	Transportation	Parks	Storm	Sewer	Water	Total
Milwaukie	\$1,921	\$3,985	\$845	\$1,075	\$1,788	\$9,614
Saint Helens	\$2,383	\$1,362	\$709	\$3,738	\$2,511	\$10,703
<b>Newport (current)</b>	<b>\$1,112</b>	<b>\$2,643</b>	<b>\$857</b>	<b>\$3,969</b>	<b>\$2,413</b>	<b>\$10,994</b>
Lincoln City	\$718	\$2,066	\$409	\$5,822	\$2,044	\$11,059
Lebanon	\$1,773	\$3,247	\$213	\$3,894	\$2,330	\$11,457
Ashland	\$2,044	\$1,041	\$461	\$1,750	\$7,398	\$12,693
Hood River	\$1,835	\$3,072	\$662	\$1,902	\$5,919	\$13,390
Cottage Grove	\$1,794	\$2,031	\$742	\$1,328	\$7,848	\$13,743
Corvallis	\$2,471	\$5,197	\$205	\$5,456	\$1,964	\$15,292
Depoe Bay	\$2,976	\$634	\$1,472	\$4,666	\$5,645	\$15,393
Brookings	\$1,537	\$1,718	\$1,044	\$10,710	\$2,419	\$17,428
Silverton	\$3,984	\$4,901	\$879	\$5,014	\$5,504	\$20,282
<b>Newport (recommended SDC @ 1,250 SF)</b>	<b>\$1,506</b>	<b>\$625</b>	<b>\$992</b>	<b>\$1,321</b>	<b>\$745</b>	<b>\$5,189</b>
<b>Newport (recommended SDC @ 2,500 SF)</b>	<b>\$3,248</b>	<b>\$1,430</b>	<b>\$1,344</b>	<b>\$2,416</b>	<b>\$1,265</b>	<b>\$9,800</b>
<b>Newport (recommended SDC @ 4,200 SF)</b>	<b>\$5,227</b>	<b>\$2,500</b>	<b>\$1,967</b>	<b>\$3,458</b>	<b>\$1,948.82</b>	<b>\$15,100</b>

**Source:** Compiled by FCS GROUP (4/1/2017). Note, actual stormwater SDC will vary by 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	10,849	11,259	11,668	12,241	0.61%	0.73%
Dwellings	5,034	5,539	5,760	6,072	6,393	6,724	7,203	0.90%	<b>1.02%</b>
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
<b>Total</b>			<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 A-3**

**Analysis of Jobs and Related Average Daily Vehicle Trips, City of Newport**

Employment Sector	ITE Land Use Code	ADTs per job	Jobs	ADT (trips)
Agriculture, Forestry, Fishing and Hunting	140	1.70	43	73
Mining, Quarrying, and Oil and Gas Extraction	140	1.70	28	48
Utilities	110	2.26	93	210
Construction	140	1.70	195	331
Manufacturing	140	1.70	345	586
Wholesale Trade	130	2.60	62	161
Retail Trade	815	30.69	939	28,814
Transportation and Warehousing	30	5.33	46	245
Information	710	2.48	77	191
Finance and Insurance	912	25.63	140	3,588
Real Estate and Rental and Leasing	710	2.48	92	228
Professional, Scientific, and Technical Services	710	2.48	208	516
Management of Companies and Enterprises	710	2.48	7	17
Admin. & Support, Waste Mgmt. and Remediation	710	2.48	189	469
Educational Services	530	15.42	518	7,988
Health Care and Social Assistance	720	7.03	1,001	7,037
Arts, Entertainment, and Recreation	430	21.59	169	3,649
Accommodation and Food Services	310	13.27	1,097	14,557
Other Services (excluding Public Administration)	710	2.48	245	608
Public Administration	710	2.48	755	1,872

**Total (2014)** 6,249 71,188

**Total Intra-City Avg. Daily Vehicle Trip-ends (2015 est.)\*** **71,915**

**Adjusted Total Avg. Daily Vehicle Trips (2015 est.)\*\*** **112,477**

**Source:** U.S. Census On the Map and ITE Handbook 9th Edition, compiled by FCS GROUP. \* Based on annual avg. growth rate of 1.02%.

\*\* Assumes 58% trip inflow adjustment.



## 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>-</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	Standard			
	ADUs (600 SF)	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**

**Parks SFD Adjustment Factors**

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	<b>0.50</b>	1.04	<b>0.47</b>
Standard	1,701 to 2,900 SF	2,500	4.04	10.10	<b>0.95</b>	2.07	<b>0.94</b>
Large	over 2,900 SF	4,200	3.72	15.62	<b>1.47</b>	3.48	<b>1.58</b>
<b>Total/Average</b>		<b>2,650</b>	<b>4.02</b>	<b>10.64</b>		2.20	

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 C – Sidewalk Improvement Program, City of Newport

Newport Transportation SDC Sidewalk Capital Improvement Program, 2017 to 2037						
Project	Location	Description	Total Cost	SDC Eligibility	SDC Cost	
					Share	Source Document
NW 11th Street	NW Spring Street to US 101	Complete sidewalk gaps on both sides of the street	\$ 144,430	100%	\$ 144,430	2008 Ped. Bike Plan
NW 6th Street	NW Coast Street to NW Nye Street	both sides	\$ 203,313	100%	\$ 203,313	2008 Ped. Bike Plan
NE 12th Street	US 101 to NE Benton Street	Complete sidewalk gaps on south side	\$ 66,660	100%	\$ 66,660	2008 Ped. Bike Plan
NE 7th Street	US 101 to NE Eads Street	one side of the street	\$ 144,430	100%	\$ 144,430	2008 Ped. Bike Plan
NE 4th Street	US 101 to NE Douglas Street	both sides of the street	\$ 188,870	100%	\$ 188,870	2008 Ped. Bike Plan
NE 3rd Street	NE Eads Street to NE Harney Street	Complete sidewalk gaps on both sides	\$ 155,540	100%	\$ 155,540	2008 Ped. Bike Plan
SE 1st Street	US 101 to SE Douglas Street	south side	\$ 116,655	100%	\$ 116,655	2008 Ped. Bike Plan
SE 2nd Street	SE Benton Street to SE Douglas Street	south side	\$ 51,106	100%	\$ 51,106	2008 Ped. Bike Plan
SE Benton Street	SE 1st Street to US 20	west side	\$ 19,998	100%	\$ 19,998	2008 Ped. Bike Plan
SE 2nd Street	SE Fogarty Street to SE Harney Street	south side	\$ 49,995	100%	\$ 49,995	2008 Ped. Bike Plan
SE 4th Street	SE Fogarty Street to SE Harney Street	south side	\$ 49,995	100%	\$ 49,995	2008 Ped. Bike Plan
SE Harney Street	SE 4th Street to SE 2nd Street	east side	\$ 43,329	100%	\$ 43,329	2008 Ped. Bike Plan
SW Harbor Drive	SW Bay Street to SW 11th Street	west side	\$ 56,661	100%	\$ 56,661	2008 Ped. Bike Plan
SW Neff Way / SW Alder St.	US 101 to SW 2nd Street	both sides	\$ 188,870	100%	\$ 188,870	2008 Ped. Bike Plan
SW Elizabeth Street	SW Government Street to SW Abbey Street	west side	\$ 161,095	100%	\$ 161,095	2008 Ped. Bike Plan
SE 35th Street	SE Ferry Slip Road to end of street	one side	\$ 444,400	100%	\$ 444,400	2008 Ped. Bike Plan
NW Nye Street	NW 15th Street to SW 2nd Street	Construct bicycle lanes on both sides of street and complete sidewalk gaps on east side of street	\$ 216,645	100%	\$ 216,645	2008 Ped. Bike Plan
NE 7th Street	NE Eads Street to NE 6th Street	Construct bicycle lanes and sidewalks on both sides of street and sidewalks on south side of street	\$ 238,865	100%	\$ 238,865	2008 Ped. Bike Plan
<b>Total</b>			\$ 2,540,857		\$ 2,540,857	

Source: City of Newport, capital improvement plan as of Feb. 28, 2017.

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

City of Newport Transportation SDCs, FY 2017/18		ADT	Trip Categories				Adjusted Trip Rates		\$	316.71	
ITE Code	Land Use	Unit	Average	Primary	Pass By	Diverted Linked	Total	Primary ADT	Transit/Ped Factor*	Adjusted ADT	SDC per Unit
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	Warehouse	1,000 SFGFA	3.56	100%			100%	3.56		3.56	\$1,127
151	Mini-Warehouse	1,000 SFGFA	2.37	100%			100%	2.37		2.37	\$752
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	25%	4.88	\$1,544
230	Residential Condominium/Townhouse	Dwelling unit	5.65	100%			100%	5.65	25%	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	25%	2.58	\$817
254	Assisted Living	Bed	2.56	100%			100%	2.56	25%	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	Junior/Community College	1,000 SFGFA	21.41	100%			100%	21.41		21.41	\$6,782
550	University/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

City of Newport Transportation SDCs, FY 2017/18			Trip Categories						Adjusted Trip Rates	\$
ITE Code	Land Use	ADT	Primary	Pass By	Diverted Linked	Total	Primary ADT	Transit/Ped Factor*	Adjusted ADT	SDC per Unit
620	Nursing Home	1,000 SFGFA	7.21	100%		100%	7.21		7.21	\$2,284
710	General Office Building	1,000 SFGFA	8.38	100%		100%	8.38		8.38	\$2,654
715	Single Tenant Office Building	1,000 SFGFA	11.65	100%		100%	11.65		11.65	\$3,690
720	Medical-Dental Office Building	1,000 SFGFA	27.31	100%		100%	27.31		27.31	\$8,649
730	Government Office Building	1,000 SFGFA	68.93	100%		100%	68.93		68.93	\$21,831
731	State Motor Vehicles Department	1,000 SFGFA	120.90	100%		100%	120.90		120.90	\$38,290
732	United States Post Office	1,000 SFGFA	88.35	100%		100%	88.35		88.35	\$27,981
750	Office Park	1,000 SFGFA	8.50	100%		100%	8.50		8.50	\$2,692
760	Research and Development Center	1,000 SFGFA	6.22	100%		100%	6.22		6.22	\$1,971
770	Business Park	1,000 SFGFA	9.44	100%		100%	9.44		9.44	\$2,988
812	Building Materials and Lumber Store	1,000 SFGFA	43.13	100%		100%	43.13		43.13	\$13,659
813	Free-Standing Discount Superstore	1,000 SFGFA	53.42	72%	28%	100%	38.46		38.46	\$12,181
814	Variety Store	1,000 SFGFA	64.03	48%	17%	35%	30.57		30.57	\$9,683
815	Free-Standing Discount Store	1,000 SFGFA	59.09	48%	17%	35%	28.22		28.22	\$8,936
816	Hardware/Paint Store	1,000 SFGFA	58.23	45%	26%	30%	25.91		25.91	\$8,207
817	Nursery (Garden Center)	1,000 SFGFA	82.86	100%		100%	82.86		82.86	\$26,242
818	Nursery Wholesale	Acre	19.50	100%		100%	19.50		19.50	\$6,176
820	Shopping Center	1,000 SFGFA	41.24	50%	34%	16%	20.68		20.68	\$6,550
826	Specialty Retail Center	1,000 SFGFA	40.58	100%		100%	40.58		40.58	\$12,853
841	Automobile Sales	1,000 SFGFA	29.27	100%		100%	29.27		29.27	\$9,269
843	Automobile Parts Sales	1,000 SFGFA	61.91	44%	43%	13%	27.24		27.24	\$8,627
848	Tire Store	1,000 SFGFA	24.87	69%	28%	3%	17.08		17.08	\$5,409
850	Supermarket	1,000 SFGFA	122.18	39%	36%	25%	47.34		47.34	\$14,994
851	Convenience Market (Open 24 Hours)	1,000 SFGFA	758.79	33%	61%	6%	246.81		246.81	\$78,166
857	Discount Club	1,000 SFGFA	42.35	100%		100%	42.35		42.35	\$13,411
862	Home Improvement Superstore	1,000 SFGFA	38.03	44%	48%	8%	16.73		16.73	\$5,300
880	Pharmacy/Drugstore without Drive-Through	1,000 SFGFA	90.06	42%	53%	5%	38.13		38.13	\$12,075
881	Pharmacy/Drugstore with Drive-Through	1,000 SFGFA	96.91	38%	49%	13%	36.83		36.83	\$11,663
890	Furniture Store	1,000 SFGFA	4.98	37%	53%	10%	1.83		1.83	\$579
912	Bank with Drive-Through	1,000 SFGFA	122.71	27%	47%	26%	33.54		33.54	\$10,623
925	Drinking Place	1,000 SFGFA	125.70	60%	40%	100%	75.42		75.42	\$23,886
931-2	Sit-Down Restaurant**	1,000 SFGFA	88.04	43%	44%	14%	37.42		37.42	\$11,850
933	Fast-Food Restaurant without Drive-Through	1,000 SFGFA	40.14	43%	44%	14%	17.06		17.06	\$5,402
934	Fast-Food Restaurant with Drive-Through	1,000 SFGFA	535.05	41%	50%	9%	219.07		219.07	\$69,383
936	Coffee/Donut Shop without Drive-Through	100 SFGFA	598.00	100%	0%	0%	598.00		598.00	\$18,939
937	Coffee/Donut Shop with Drive-Through	100 SFGFA	818.58	41%	50%	9%	335.16		335.16	\$10,615
944	Gasoline/Service Station	VFP	168.56	35%	42%	23%	59.00		59.00	\$18,685
945	Gasoline Station with Convenience Market	VFP	162.78	13%	56%	31%	20.80		20.80	\$6,587
946	Gasoline/Service Station with Car Wash	VFP	152.84	24%	49%	27%	36.51		36.51	\$11,564

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

**Abbreviations**

- 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

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

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

Newport Special District Transportation SDCs, FY 2017/18**		ADT		Trip Categories					Adjusted Trip Rates		\$	316.71
ITE Code	Land Use	Unit	Average	Primary	Pass By	Diverted Linked	Total	Primary ADT	Transit/ Ped Factor*	Adjusted ADT	SDC per Unit	
820	Shopping Center	1,000 SFGLA	41.2	50%	34%	16%	100%	20.7	20%	16.54	\$5,240	
826	Specialty Retail Center	1,000 SFGLA	40.6	100%			100%	40.6	20%	32.47	\$10,282	
850	Supermarket	1,000 SFGFA	122.2	39%	36%	25%	100%	47.3	20%	37.87	\$11,995	
851	Convenience Market (Open 24 Hours)	1,000 SFGFA	758.8	33%	61%	6%	100%	246.8	20%	197.44	\$62,533	
925	Drinking Place	1,000 SFGFA	125.7	60%	40%		100%	75.4	20%	60.34	\$19,109	
931-2	Sit-Down Restaurant***	1,000 SFGFA	88.0	43%	44%	14%	100%	37.4	20%	29.93	\$9,480	
933	Fast-Food Restaurant without Drive-Through	1,000 SFGFA	40.1	43%	44%	14%	100%	17.1	20%	13.65	\$4,322	
934	Fast-Food Restaurant with Drive-Through	1,000 SFGFA	535.1	41%	50%	9%	100%	219.1	20%	175.26	\$55,506	
936	Coffee/Donut Shop without Drive-Through	100 SFGFA	598.0	100%	0%	0%	100%	598.0	20%	478.40	\$15,151	
937	Coffee/Donut Shop with Drive-Through	100 SFGFA	818.6	41%	50%	9%	100%	335.2	20%	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

- 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

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

## Appendix E – Public Facility Improvements

(Included under separate cover)

Appendix F – Newport SDC Special Districts

