

Draft Park Impact Fee Rate Study - Attachment A

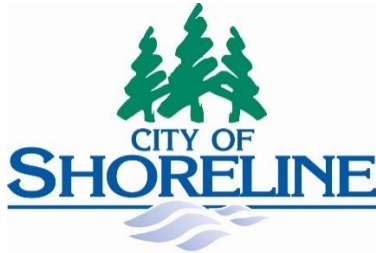
Rate Study for Impact Fees for Parks, Open Space and Recreation Facilities

DISCUSSION DRAFT

May 9, 2017

PREPARED FOR:

CITY OF SHORELINE, WASHINGTON



PREPARED BY:



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1. INTRODUCTION

The purpose of this study is to establish the rates for impact fees in the City of Shoreline, Washington for parks, open space, and recreation facilities as authorized by RCW¹ 82.02.090 (7). Throughout this study the term “parks” is used as the short name that means, parks, open space and recreation facilities, including land and developments.

Summary of Impact Fee Rates

Park impact fees are paid by all types of new development². Impact fee rates for new development are based on, and vary according to the type of land use. The following table summarizes the impact fee rates for each land use category.

Exhibit 1. City of Shoreline Park Impact Fee Rates

Type of Development	Unit	Park Impact Fee per Unit
Single Family	dwelling unit	\$ 9,894.00
Multi-Family	dwelling unit	6,489.93
Non-Residential	sq ft	5.51

Impact Fees vs. Other Developer Contributions

Impact fees are charges paid by new development to reimburse local governments for the capital cost of public facilities that are needed to serve new development and the people who occupy or use the new development. Throughout this study, the term “developer” is used as a shorthand expression to describe anyone who is obligated to pay impact fees, including builders, owners or developers.

Local governments charge impact fees for several reasons: 1) to obtain revenue to pay for some of the cost of new public facilities; 2) to implement a public policy that new development should pay a portion of the cost of facilities that it requires, and that existing development should not pay all of the cost of such facilities; and 3) to assure that adequate public facilities will be constructed to serve new development.

The impact fees that are described in this study do not include any other forms of developer contributions or exactions, such as mitigation or voluntary

¹ Revised Code of Washington (RCW) is the state law of the State of Washington.

² The impact fee ordinance may specify exemption for low-income housing and/or “broad public purposes,” but such exemptions must be paid for by public money, not other impact fees. The ordinance may specify if impact fees apply to changes in use, remodeling, etc.

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payments authorized by SEPA (the State Environmental Policy Act, RCW 43.21C); system development charges for water and sewer authorized for utilities (RCW 35.92 for municipalities; 56.16 for sewer districts; and 57.08 for water districts); local improvement districts or other special assessment districts; linkage fees, or land donations or fees in lieu of land.

Organization of the Study

This impact fee rate study contains four chapters:

- **Introduction:** provides a summary of impact fee rates for land use categories; and other introductory materials.
- **Statutory Basis and Methodology:** summarizes the statutory requirements for development of impact fees, and describes the compliance with each requirement.
- **Growth Estimates:** presents estimates of future growth of population and employment in Shoreline because impact fees are paid by growth to offset the cost of parks, open space and recreation facilities that will be needed to serve new development.
- **Park Impact Fees:** presents impact fees for parks in the City of Shoreline. The chapter includes the methodology that is used to develop the fees, the formulas, variables and data that are the basis for the fees, and the calculation of the fees. The methodology is designed to comply with the requirements of Washington state law.

2. STATUTORY BASIS AND METHODOLOGY

This chapter summarizes the statutory requirements for impact fees in the State of Washington, and describes how the City of Shoreline's impact fees comply with the statutory requirements.

Statutory Requirements for Impact Fees

The Growth Management Act of 1990 (Chapter 1117, Washington Laws, 1990, 1st Ex. Sess.) authorizes local governments in Washington to charge impact fees. RCW 82.02.050 – 82.02.100 contain the provisions of the Growth Management Act that authorize and describe the requirements for impact fees.

The impact fees that are described in this study are not mitigation payments authorized by the State Environmental Policy Act (SEPA). There are several important differences between impact fees and SEPA mitigations. Three aspects of impact fees that are particularly noteworthy are: 1) the ability to charge for the cost of public facilities that are “system improvements” (i.e., that provide service to the community at large) as opposed to “project improvements” (which are “on-site” and provide service for a particular development) whereas SEPA is used only for specific improvements that mitigate specific adverse environmental impacts of development; 2) the ability to charge small-scale development their proportionate share, whereas SEPA exempts small developments; and 3) the predictability and simplicity of impact fee rate schedules compared to the cost, time and uncertain outcome of SEPA reviews conducted on a case-by-case basis.

The following synopsis of the most significant requirements of the law include citations to the Revised Code of Washington as an aid to readers who wish to review the exact language of the statutes.

Types of Public Facilities

Four types of public facilities can be the subject of impact fees: 1) public streets and roads; 2) publicly owned parks, open space and recreation facilities; 3) school facilities; and 4) fire protection facilities. *RCW 82.02.050 (2) and (4), and RCW 82.02.090 (7)*

Types of Improvements

Impact fees can be spent on “system improvements” (which are typically outside the development), as opposed to “project improvements” (which are typically provided by the developer on-site within the development). *RCW 82.02.050 (3)(a) and RCW 82.02.090 (5) and (9)*

Benefit to Development

Impact fees must be limited to system improvements that are reasonably related to, and which will benefit new development. *RCW 82.02.050 (3)(a) and (c)*. Local governments must establish reasonable service areas (one area, or more than one, as determined to be reasonable by the local government), and local governments must develop impact fee rate categories for various land uses. *RCW 82.02.060 (7)*

Proportionate Share

Impact fees cannot exceed the development's proportionate share of system improvements that are reasonably related to the new development. The impact fee amount shall be based on a formula (or other method of calculating the fee) that determines the proportionate share. *RCW 82.02.050 (3)(b), RCW 82.02.090 (6)*

Reductions of Impact Fee Amounts

Impact fee rates must be adjusted to account for other revenues that the development pays (if such payments are earmarked for or proratable to particular system improvements). *RCW 82.02.050 (1)(c) and (2) and RCW 82.02.060 (1)(b)*. Impact fees may be credited for the value of dedicated land, improvements or construction provided by the developer (if such facilities are in the adopted CFP as system improvements eligible for impact fees and are required as a condition of development approval). *RCW 82.02.060 (4)*

Exemptions from Impact Fees

Local governments have the discretion to provide exemptions from impact fees for low-income housing and other "broad public purpose" development, but all such exempt fees must be paid from public funds (other than impact fee accounts). *RCW 82.02.060 (2) and (3)*

Developer Options

Developers who are liable for impact fees can submit data and/or analysis to demonstrate that the impacts of the proposed development are less than the impacts calculated in this rate study. *RCW 82.02.060 (6)*. Developers can pay impact fees under protest and appeal impact fee calculations. *RCW 82.02.070 (4) and (5)*. The developer can obtain a refund of the impact fees if the local government fails to expend or obligate the impact fee payments within ten years, or terminates the impact fee requirement, or the developer does not proceed with the development (and creates no impacts). *RCW 82.02.080*

Capital Facilities Plans

Impact fees must be expended on public facilities in a capital facilities plan (CFP) element or used to reimburse the government for the unused capacity of existing facilities. The CFP must conform to the Growth Management Act of 1990, and must identify existing deficiencies in facility capacity for current development, capacity of existing facilities available for new development, and additional facility capacity needed for new development. *RCW 82.02.050 (4), RCW 82.02.060 (8) and RCW 82.02.070 (2)*

New Versus Existing Facilities

Impact fees can be charged for new public facilities (*RCW 82.02.060 (1)(a)*) and for the unused capacity of existing public facilities (*RCW 82.02.060 (8)*) subject to the proportionate share limitation described above.

Accounting Requirements

The local government must separate the impact fees from other monies, expend or obligate the money on CFP project within ten years, and prepare annual reports of collections and expenditures. *RCW 82.02.010 (1)-(3)*

Compliance with Statutory Requirements for Impact Fees

Many of the statutory requirements listed above are fulfilled in calculation of the parks impact fee in the fourth chapter of this study. Some of the statutory requirements are fulfilled in other ways, as described below.

Types of Public Facilities

This study contains impact fees for parks. This study does not contain impact fees for transportation, fire or schools.

In general, local governments that are authorized to charge impact fees are responsible for specific public facilities for which they may charge such fees. The City of Shoreline is legally and financially responsible for the parks facilities it owns and operates within its jurisdiction. In no case may a local government charge impact fees for some public facilities that it does not administer if such facilities are “owned or operated by government entities” (*RCW 82.02.090 (7)*).

Types of Improvements

The public facilities that can be paid for by impact fees are “system improvements” (which are typically outside the development), and “designed to provide service to service areas within the community at large” as provided in *RCW 82.02.090 (9)*, as opposed to “project improvements” (which are typically provided by the developer on-site within the development or

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adjacent to the development), and “designed to provide service for a development project, and that are necessary for the use and convenience of the occupants or users of the project” as provided in RCW 82.02.090 (5). The impact fees in this study are based on system improvements that are described in the fourth chapter of this study. No project improvements are included in this study.

Impact fee revenue can be used for the capital cost of public facilities. Impact fees cannot be used for operating or maintenance expenses. The cost of public facilities that can be paid for by impact fees include land acquisition and development. The costs can also include design studies, engineering, land surveys, appraisals, permitting, financing, administrative expenses, applicable mitigation costs, and capital equipment pertaining to capital improvements.

Benefit to Development, Proportionate Share and Reduction of Fee Amounts

The law imposes three tests of the benefit provided to development by impact fees: 1) proportionate share, 2) reasonably related to need, and 3) reasonably related to expenditure (*RCW 82.02.050 (3)*). In addition, the law requires the designation of one or more service areas (*RCW 82.02.060 (7)*).

1. Proportionate Share

First, the “proportionate share” requirement means that impact fees can be charged only for the portion of the cost of public facilities that is “reasonably related” to new development. In other words, impact fees cannot be charged to pay for the cost of reducing or eliminating deficiencies in existing facilities.

Second, there are several important implications of the proportionate share requirement that are not specifically addressed in the law, but which follow directly from the law:

- Costs of facilities that will benefit new development and existing users must be apportioned between the two groups in determining the amount of the fee. This can be accomplished in either of two ways: 1) by allocating the total cost between new and existing users, or 2) calculating the cost per unit and applying the cost only to new development when calculating impact fees.
- Impact fees that recover the costs of existing unused capacity should be based on the government’s actual cost. Carrying costs may be added to reflect the government’s actual or imputed interest expense.

The third aspect of the proportionate share requirement is in its relationship to the requirement to provide adjustments and credits to impact fees, where

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appropriate. These requirements ensure that the amount of the impact fee does not exceed the proportionate share.

- The “adjustments” requirement reduces the impact fee to account for past and future payments of other revenues (if such payments are earmarked for, or proratable to, the system improvements that are needed to serve new growth). The impact fees calculated in this study include an adjustment that accounts for any other revenue that is paid by new development and used by the City to pay for a portion of growth’s proportionate share of costs. This adjustment is in response to the limitation in RCW 82.02.060 (1)(b) and RCW 82.02.050 (2).
- The “credit” requirement reduces impact fees by the value of dedicated land, improvements or construction provided by the developer (if such facilities are in the adopted CFP, identified as the projects for which impact fees are collected, and are required as a condition of development approval). The law does not prohibit a local government from establishing reasonable constraints on determining credits. For example, the location of dedicated land and the quality and design of donated land or recreation facilities can be required to be acceptable to the local government.

2. Reasonably Related to Need

There are many ways to fulfill the requirement that impact fees be “reasonably related” to the development’s need for public facilities, including personal use and use by others in the family or business enterprise (direct benefit), use by persons or organizations who provide goods or services to the fee-paying property (indirect benefit), and geographical proximity (presumed benefit). These measures of relatedness are implemented by the following techniques:

- Impact fees are charged to properties that need (i.e., benefit from) new public facilities. The City of Shoreline provides its infrastructure to all kinds of property throughout the City, therefore impact fees have been calculated for all types of property.
- The relative needs of different types of growth are considered in establishing fee amounts (i.e., different impact values for different types of land use). The fourth chapter uses different numbers of persons per dwelling unit for residential development, and the number of employees and visitors for non-residential development.
- Feepayers can pay a smaller fee if they demonstrate that their development will have less impact than is presumed in the impact fee schedule calculation for their property classification. Such reduced needs must be permanent and enforceable (i.e., via land use restrictions).

3. Reasonably Related to Expenditures

Two provisions of Shoreline's impact fee ordinance will comply with the requirement that expenditures be "reasonably related" to the development that paid the impact fee. First, the requirement that fee revenue must be earmarked for specific uses related to public facilities ensures that expenditures are on specific projects, the benefit of which has been demonstrated in determining the need for the projects and the portion of the cost of needed projects that are eligible for impact fees as described in this study. Second, impact fee revenue must be expended or obligated within ten years, thus requiring the impact fees to be used to benefit the feepayers and not held by the City.

4. Service Areas for Impact Fees

Impact fees in some jurisdictions are collected and expended within service areas that are smaller than the jurisdiction that is collecting the fees. Impact fees are not required to use multiple service areas unless such "zones" are necessary to establish the relationship between the fee and the development. Because of the compact size of the City of Shoreline, and the accessibility of its parks to all property within the City, Shoreline's parks serve the entire City, therefore the impact fees are based on a single service area corresponding to the boundaries of the City of Shoreline.

Exemptions

The City's impact fee ordinance will address the subject of exemptions. Exemptions do not affect the impact fee rates calculated in this study because of the statutory requirement that any exempted impact fee must be paid from other public funds. As a result, there is no increase in impact fee rates to make up for the exemption because there is no net loss to the impact fee account as a result of the exemption.

Developer Options

A developer who is liable for impact fees has several options regarding impact fees. The developer can submit data and/or analysis to demonstrate that the impacts of the proposed development are less than the impacts calculated in this rate study. The developer can appeal the impact fee calculation by the City of Shoreline. If the local government fails to expend the impact fee payments within ten years of receipt of such payments, the developer can obtain a refund of the impact fees. The developer can also obtain a refund if the development does not proceed and no impacts are created. All of these provisions are addressed in the City's municipal code for impact fees, and none of them affect the calculation of impact fee rates in this study.

Capital Facilities Plan

There are references in RCW to the “capital facilities plan” (CFP) as the basis for projects that are eligible for funding by impact fees. Cities often adopt documents with different titles that fulfill the requirements of RCW 82.02.050 et. seq. pertaining to a “capital facilities plan.” The City of Shoreline has adopted, and periodically updates the Capital Facilities Plan Element of the City’s Comprehensive Plan. In addition, Shoreline annually updates the Capital Improvement Program (CIP) for their budget. These two documents fulfill the requirements in the RCW, and are considered to be the “capital facilities plan” (CFP) for the purposes of this impact fee rate study. All references to a CFP in this study are references to the CIP and the Capital Facilities Plan Element documents described above.

The requirement to identify existing deficiencies, capacity available for new development, and additional public facility capacity needed for new development is determined by analyzing levels of service for each type of public facility. The fourth chapter of this study provides this analysis.

New Versus Existing Facilities, Accounting Requirements

Impact fees must be spent on capital projects contained in an adopted capital facilities plan, or they can be used to reimburse the government for the unused capacity of existing facilities. Impact fee payments that are not expended or obligated within ten years must be refunded unless the City Council makes a written finding that an extraordinary or compelling reason exists to hold the fees for longer than ten years. In order to verify these two requirements, impact fee revenues must be deposited into separate accounts of the government, and annual reports must describe impact fee revenue and expenditures. These requirements are addressed by Shoreline’s ordinance for impact fees, and are not factors in the impact fee calculations in this study.

Data Sources

The data in this study of impact fees in Shoreline, Washington was provided by the City of Shoreline, unless a different source is specifically cited.

Data Rounding

The data in this study was calculated to more places after the decimal than is reported in the exhibits contained in this report. The calculation to extra places after the decimal increases the accuracy of the end results, but causes occasional minor differences due to rounding of data that appears in this study.

3. GROWTH ESTIMATES

Impact fees are meant to have “growth pay for growth” so the first step in developing an impact fee is to quantify future growth in the City of Shoreline. Growth estimates have been prepared for population and employment through the year 2035 in order to match the horizon year of the City’s updated Parks, Recreation & Cultural Services Plan, which also serves as the City’s Capital Facilities Plan for Parks.

Exhibit 2 lists Shoreline’s population and growth rates from 2000 and projections to the year 2035.

Exhibit 2. Population

Year	Population	CAGR	CAGR Years
2000	53,296		
2010	53,007	-0.1%	2000-2010
2018	56,025	0.7%	2010-2018
2035	68,316	1.2%	2018-2035

(1) *Source of population:*

- *For years 2000 and 2010: City of Shoreline Comprehensive Plan, Pages 126 and 127.*
- *For 2018 and 2035: Community Attributes Inc. estimate based on growth rates calculated from City of Shoreline, A Plan for Parks, Recreation & Cultural Services 2017-2022, Population Projections, Table 2 and Washington State Office of Financial Management.*

(2) *CAGR = Compound Annual Growth Rate.*

In addition to residential population growth, Shoreline expects businesses to grow. Business development is included in this study because businesses and their employees and customers benefit from Shoreline’s parks. For example, City parks provide places for employees and customers to take breaks from work and shopping, including restful breaks and/or active exercise to promote healthy living.

The Puget Sound Regional Council monitors “covered employment” which is employment tracked by the Washington Employment Security Department through unemployment insurance. The data is tracked for eight different major sectors of employment, such as manufacturing, retail and services.

Exhibit 3 lists employment in Shoreline from 2005 to 2014, and growth that is projected for the year 2035.

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Exhibit 3. Employment

Year	Const/Res	FIRE	Mfg	Retail	Svces	WTU	Govt	Educ	Total	CAGR
2005	742	528	124	3,031	7,042	160	2,674	2,437	16,738	0.4%
2006	825	572	161	2,794	7,093	137	2,444	2,310	16,336	-2.4%
2007	796	594	181	2,682	7,007	126	2,612	2,164	16,161	-1.1%
2008	875	621	316	2,698	7,174	146	3,132	2,086	16,879	4.4%
2009	607	483	158	2,620	7,110	152	3,125	2,120	16,374	-3.0%
2010	558	498	160	2,629	7,533	156	2,751	2,126	16,410	0.2%
2011	593	434	148	2,648	7,324	178	2,631	2,083	16,039	-2.3%
2012	611	441	140	2,645	7,427	180	2,581	1,982	16,006	-0.2%
2013	736	408	107	2,610	7,284	172	2,551	1,909	15,779	-1.4%
2014	779	402	118	2,609	7,369	218	2,599	2,069	16,164	2.4%
2015	714	409	140	2,790	7,494	259	2,443	2,228	16,477	1.9%
2016	712	416	147	2,871	7,633	272	2,449	2,295	16,796	1.9%
2017	710	424	155	2,953	7,774	286	2,456	2,364	17,122	1.9%
2018	708	432	163	3,037	7,916	301	2,462	2,435	17,453	1.9%
2035	697	472	208	3,491	8,652	384	2,487	2,818	19,210	1.9%

(1) *Const/Res = Construction & Resources; FIRE = Finance, Insurance, and Real Estate; Mfg = Manufacturing; Svces = Services; WTU = Wholesale Trade, Transportation and Utilities; Govt = Government; Educ = Education; CAGR = Compound Annual Growth Rate.*

(2) *Source of employment:*

- *For 2005 through 2014: Puget Sound Regional Council.*
- *For 2015 through 2035: Community Attributes Inc., based on 2014 PSRC data and 2014 PSRC Land Use Vision forecasted growth rates.*

It is clear from Exhibits 2 and 3 that Shoreline expects growth of population and businesses in the future, so there is a rational basis for park impact fees that would have future growth pay for parks, open space and recreation facilities that are needed to provide appropriate levels of service to new development.

Population and employment are both expected to grow, but they should not be counted equally because employees and visitors spend less time in Shoreline than residents, therefore they have less benefit from Shoreline's parks. There is a well-established and widely-used technique for accounting for these differences in impact, and it involves "equivalency." Appendix A to this study describes equivalency, and explains how the "equivalent population coefficients" were developed for this study of park impact fees for the City of Shoreline. The result allows business to pay its proportionate share of parks for growth based on the "equivalent population" that non-residential development generates.

Exhibit 4 multiplies the equivalent population coefficients (from the Appendix) by the actual population and employment data from Exhibit 2 and 3 to calculate the "equivalent" population for the base year (2018), the horizon year (2035) and the growth between 2018 and 2035.

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Exhibit 4. Growth of Equivalent Population and Employment

Land-Use Category	Equivalent Population Coefficient (1)	2018 Base Year Full Poulation (2)	2018 Base Year Equivalent Population (3)	2035 Horizon Year Full Population (2)	2035 Horizon Year Equivalent Population (3)	2018-2035 Growth Full Population (4)	2018-2035 Growth Equivalent Population (5)
Permanent Population	0.9375	56,025	52,523	68,316	64,046	12,291	11,523
Construction	0.1986	708	141	649	129	(59)	(12)
FIRE	0.5056	432	218	582	294	150	76
Manufacturing	0.5814	163	95	211	123	48	28
Retail Trade	2.0038	3,037	6,086	4,245	8,506	1,208	2,421
Services	0.5056	7,916	4,003	10,666	5,393	2,750	1,391
WTU	0.6004	301	181	390	234	89	53
Government	0.7060	2,462	1,738	2,540	1,793	78	55
Education	0.5357	2,435	1,304	3,271	1,752	836	448
Total	na	na	66,289	na	82,271	na	15,982

(1) Source: Appendix A: Equivalent Population Coefficients.

(2) Sources: Exhibits 2 and 3.

(3) Equivalent Population = Equivalent Population Coefficient x Full Population.

(4) 2018-2035 Growth Full Population = 2035 Full Population – 2018 Full Population.

(5) 2018-2035 Growth Equivalent Population = 2035 Equivalent Population – 2018 Equivalent Population.

The totals in Exhibit 4 provide the equivalent population for the purpose of development of park impact fees for Shoreline. The total equivalent population for the base year (2018) is 66,289, for the horizon year (2035) is 82,271, therefore the growth between 2018 and 2035 is 15,982.

4. PARK IMPACT FEES

Overview

Impact fees for Shoreline’s parks, recreation facilities and open space use an inventory and valuation of the existing assets in order to calculate the current investment per person (i.e., equivalent population or equivalent person). The current investment per person is multiplied by the future population to identify the value of additional assets needed to provide growth with the same level of investment as the City owns for the current population. The future investment is reduced by the amount of specific other revenues that are available and the result is the net investment needed to be paid by growth. Dividing the net investment by the growth of the equivalent population results in the investment per person that can be charged as impact fees. The amount of the impact fee is determined by charging each fee-paying development for impact fee cost per person multiplied by the equivalent population coefficient for each type of development.

These steps are described below in the formulas, descriptions of variables, exhibits, and explanation of calculations of park impact fees. Throughout this chapter the term “person” is used as the short name that means equivalent population or equivalent person.

Formula 1: Parks Capital Value per Person

The capital investment per person is calculated by dividing the value of the asset inventory by the current equivalent population.

$$(1) \frac{\textit{Value of Parks Inventory}}{\textit{Current Equivalent Population}} = \textit{Capital Value per Equivalent Person}$$

Equivalent population was described in the third chapter of this study and explained in the Appendix. There is one new variable that requires explanation: (A) Value of Parks Inventory.

Variable (A): Value of Parks Inventory

The value of the existing inventory of parks, recreation facilities and open space is calculated by determining the value of park land and improvements. The sum of all of the values equals the current value of the City’s park and recreation system. Exhibits 5, 6 and 7 list the inventory of park land as well as park improvements that make up the City of Shoreline’s existing park system. Exhibit 8 combines the totals from each detailed exhibit and provides the total value of Shoreline’s park inventory.

The values of parks in this rate study do not include any costs for interest or other financing. If borrowing is used to “front fund” the costs that will be

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paid by impact fees, the carrying costs for financing can be added to the costs, and the impact fee can be recalculated to include such costs.

The total value of the existing inventory of park land in the City of Shoreline is \$302,143,492.

Exhibit 5. Park Land Inventory and Capital Value

Park/Asset	Unit	
	Description	Number
Ballinger Open Space	Acres	2.63
Boeing Creek Open Space	Acres	4.41
Boeing Creek Park	Acres	33.45
Bruggers Bog	Acres	4.36
Cromwell Park	Acres	8.28
Darnell Park	Acres	0.84
Echo Lake Park	Acres	0.76
Hamlin Park	Acres	80.40
Hillwood Park	Acres	10.00
Innis Arden Reserve	Acres	22.94
James Keough Park	Acres	3.10
Kruckeberg Botanic Garden	Acres	3.81
Meridian Park	Acres	3.13
North City Park	Acres	3.96
Northcrest Park	Acres	7.31
Paramount Open Space	Acres	10.74
Park at Town Center	Acres	0.50
Richmond Beach Community Park	Acres	3.14
Richmond Beach Saltwater Park	Acres	32.06
Richmond Highlands Park	Acres	4.23
Richmond Reserve	Acres	0.11
Ridgecrest Park	Acres	3.88
Ronald Bog Park	Acres	13.36
Shoreline Civic Center	Acres	2.78
Shoreline Park	Acres	4.70
Shoreview Park	Acres	46.65
South Woods Park	Acres	15.56
Strandberg Preserve	Acres	2.59
Twin Ponds Park	Acres	21.60
Total Acres		351.28
Unit Cost		\$860,122
Park Land Capital Value		\$302,143,492

- (1) *Park land and costs per unit provided by City of Shoreline staff unless otherwise stated.*
- (2) *Unit cost for the City of Shoreline parks is based on the average land value per acre for all taxable properties in the City of Shoreline, based on King County Assessor parcel data.*

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Exhibit 6 and 7 detail the inventory of park assets within the City of Shoreline park system. The total value of Shoreline’s parks assets is \$55,039,452.

Exhibit 6. Park Asset Inventory and Capital Value

Park/Asset	Number	Unit Description	Unit Value	Estimated Value
Barbecue	14	Each	\$ 500	\$ 7,000
Bench - Wood	251	Each	750	188,250
Bike Rack	17	Each	800	13,600
Bleacher	39	Each	1,500	58,500
Bollard	445	Each	500	222,500
Botanical Garden	1	Each	1,000,000	1,000,000
Bridge - Pedestrian	10	Each	250,000	2,500,000
Bridge	2	Each	250,000	500,000
Bridge - Vehicle	4	Each	500,000	2,000,000
Building - Botanic	1	Each	500,000	500,000
Building - Outdoor Restroom	14	Each	187,500	2,625,000
Building - Pool	1	Each	4,500,000	4,500,000
Building - Recreation	1	Each	2,000,000	2,000,000
Building - Shelter	7	Each	187,500	1,312,500
Community Garden	2	Each	50,000	100,000
Court - Basketball	4	Each	75,000	300,000
Court - Handball	1	Each	75,000	75,000
Court - Multipurpose/Pickleball	1	Each	40,000	40,000
Court - Tennis	5	Each	150,000	750,000
Drinking Fountain	27	Each	4,375	118,125
Exercise Station	3	Each	10,000	30,000
Fence	53,167.39	Linear Feet	30	1,595,022
Field - Baseball	14	Each	500,000	7,000,000
Field - Soccer	5	Each	500,000	2,500,000
Field - Synthetic	3	Each	800,000	2,400,000
Firepit	2	Each	500	1,000
Gate	41	Each	1,500	61,500
Horseshoe	4	Each	200	800
Irrigation	62	Acres	25,000	1,550,000
Kiosk	10	Each	500	5,000
Landscape Area	321,768.11	Square Yards	10	3,217,681

- (1) Park assets and costs per unit provided by City of Shoreline staff unless otherwise stated.
- (2) Infrastructure costs for Outdoor Restrooms and Drinking Fountains are included in City of Shoreline staff cost estimates, based on an estimate of 25% of base cost.
- (3) City of Shoreline staff estimated cost per unit of Vehicle Bridges based on the Saltwater Park Bridge Replacement.
- (4) City of Shoreline staff estimated cost per unit for Pool Buildings from the Assessment Report, page AD/10.
- (5) City of Shoreline staff estimated cost per unit for Shelter Buildings based on the Mag Park Shelter Replacement, infrastructure costs are included based on 25% of base cost.
- (6) City of Shoreline staff estimated cost per unit for Basketball Courts and Tennis Courts based on the average value per court from the 2011-2017 Seattle Asset Management Plan Cost Estimates and the COS Project Costs 2009-2017.
- (7) City of Shoreline staff estimated cost per unit for Exercise Stations based on the RBSWP equipment costs.
- (8) City of Shoreline staff estimated cost per unit for Baseball Fields based on Lower Hamlin Park Field costs.

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(9) City of Shoreline staff estimated cost per unit for Horseshoes based on cost estimate for Echo Lake Park.

Exhibit 7 is a continuation of the detailed inventory of park assets within the City of Shoreline park system.

Exhibit 7. Park Asset Inventory and Capital Value continued

Park/Asset	Number	Unit Description	Unit Value	Estimated Value
Light - Other	6	Each	\$ 6,250	\$ 37,500
Light - Pedestrian	43	Each	1,000	43,000
Light - Security	6	Each	6,250	37,500
Light - Sport Field	63	Each	87,500	5,512,500
Light - Street	103	Each	6,250	643,750
Litter Receptacle - Other	7	Each	1,750	12,250
Litter Receptacle - Solar Compactor	9	Each	6,250	56,250
Litter Receptacle - Standard	204	Each	500	102,000
Off-Leash Dog Area	3	Each	60,000	150,000
Parking	44,233.18	Square Yards	37	1,636,628
Path - Loop	7,040.03	Square Yards	28	197,121
Path - Paved	43,131.33	Square Yards	32	1,380,202
Picnic Table	127	Each	1,500	190,500
Play Ground	24	Each	75,000	1,800,000
Public Art	27	Each	N/A	2,500,000
Railing	5,378.85	Linear Feet	90	484,096
Road	29,339.18	Square Yards	37	1,085,549
Sign - Directional	84	Each	250	21,000
Sign - Education	70	Each	1,000	70,000
Sign - Entry	70	Each	1,000	70,000
Sign - Interpretive	4	Each	2,000	8,000
Sign - Ordinance	258	Each	250	64,500
Sign - Other	13	Each	100	1,300
Sign - Plaque	26	Each	100	2,600
Sign - Regulatory	82	Each	250	20,500
Sign - Traffic	138	Each	250	34,500
Skate Park	8,574.50	Square Feet	50	428,725
Trail	42,660.11	Square Feet	3	106,650
Trees & Vegetation	200	Acres	200	40,000
Wall	29,772.44	Square Feet	38	1,131,353
Park Building and Asset Capital Value				\$55,039,452

- (1) Park assets and cost per unit provided by City of Shoreline staff unless otherwise stated.
- (2) Infrastructure costs for Lights-Other, Pedestrian Lights, Security Lights and Street Lights are included in City of Shoreline staff cost estimates, based on an estimate of 25% of base cost.
- (3) City of Shoreline staff estimated cost per unit for Sport Field Lights based on the Twin Ponds Field Lighting Cost Estimate, 2016. Infrastructure costs are included based on an estimate of 25% of the base cost.
- (4) City of Shoreline staff estimated cost per unit for Solar Compactor Litter Receptacles based on the Surface Water Quote.
- (5) City of Shoreline staff estimated cost per unit for Directional Signs, Education Signs, Ordinance Signs, Other Signs, Plaques, Regulatory Signs, and Traffic Signs based on Fast Signs.
- (6) City of Shoreline staff estimated cost per unit for Entry Signs and Interpretive Signs based on Folia.

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- (7) City of Shoreline staff estimated cost per unit for Skate Parks based on data collected from publicskateparkguide.com, publicskateparkguide.org/fundraising/how-much-do-skateparks-cost/.
- (8) City of Shoreline staff estimated cost per unit for Trees and Vegetation based on DOR 2017 Land Values.

Exhibit 8 summarizes the total value of park land and assets within the City or Shoreline park system from Exhibits 5, 6 and 7.

Exhibit 8. Total Park Land and Asset Capital Value

Park Type	Estimated Value
Park Land Capital Value	\$302,143,492
Buildings and Assets Capital Value	55,039,452
Park Capital Value	\$357,182,945

The total value of current park land and improvements owned by the City of Shoreline is \$357.18 million. Exhibit 9 lists the total capital value of parks at \$357,182,945 (from Exhibit 8) and divides it by the current equivalent population of 66,289 (from Exhibit 4) to calculate the capital value of \$5,388.27 per equivalent population for parks.

Exhibit 9. Value of Current Parks per Equivalent Population

Total Capital Value	Current (2018) Equivalent Population	Capital Value Per Equivalent Population
\$357,182,945 ÷	66,289 =	\$5,388.27

Formula 2: Value Needed for Growth

Impact fees must be related to the needs of growth, as explained in the second chapter of this report. The first step in determining growth's needs is to calculate the total value of parks that are needed for growth. The calculation is accomplished by multiplying the capital value per person by the number of new persons that are forecasted for the City's growth.

$$(2) \text{ Capital Value per Equivalent Person} \times \text{Equivalent Population Growth} = \text{Value Needed for Growth}$$

Exhibit 10 shows the calculation of the value of parks needed for growth. The current capital value per person is calculated in Exhibit 9. The growth in equivalent population is calculated in Exhibit 4. The result is that Shoreline needs to add parks valued at \$86.12 million in order to serve the growth of 15,982 additional people who are expected to be added to the City's existing equivalent population.

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Exhibit 10. Value Needed for Growth

Capital Value Per Equivalent Population	Growth of Equivalent Population	Value Needed for Growth
\$5,388.27	x 15,982	= \$86,117,362

Formula 3: Investment Needed for Growth

The investment needed for growth is calculated by subtracting the value of any existing reserve capacity from the total value of parks needed to serve growth.

$$(3) \text{ Value Needed for Growth} - \text{Value of Existing Reserve Capacity} = \text{Investment Needed for Growth}$$

There is one new variable used in Formula 3 that requires explanation: (B) Value of Existing Reserve Capacity of parks.

Variable (B): Value of Existing Reserve Capacity

The value of existing reserve capacity is the difference between the value of the City’s existing inventory of parks, and the value of those assets that are needed to provide the level of service standard for the existing population. Because the capital value per person is based on the current assets and the current population, there is no reserve capacity (i.e., no unused value that can be used to serve future population growth)³.

Exhibit 11 shows the calculation of the investment in parks that is needed for growth. The value of parks needed to serve growth (from Exhibit 10) is reduced by the value of existing reserve capacity, in this case zero, and the result shows that Shoreline needs to invest \$86.12 million in additional parks in order to serve future growth.

Exhibit 11. Investment Needed in Parks for Growth

Value Needed for Growth	Value of Existing Reserve Capacity	Investment Needed for Growth
\$86,117,362	- \$0	= \$86,117,362

³ Also, the use of the current assets and the current population means there is no existing deficiency. This approach satisfies the requirements of RCW 82.02.050 (4) to determine whether or not there are existing deficiencies in order to ensure that impact fees are not charged for any deficiencies.

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Formula 4: City Investment for Growth

The City of Shoreline has historically used a combination of state grants and local revenues, such as the Real Estate Excise Tax (REET), to pay for the cost of park and recreation capital facilities. The City’s plan for the future is to continue using grant revenue and local revenues to pay part of the costs of parks needed for growth. The City’s share of investment for growth is calculated by multiplying the total investment needed to serve growth by the City’s share of investment for growth. It is assumed that the City’s portion of investments in capacity projects for parks and open space will be the same for the impact fees as it is in the most recently adopted Capital Facilities Plan.

$$(4) \frac{\text{Investment Needed for Growth}}{\text{for Growth}} \times \frac{\text{City Share of Investment for Growth}}{\text{for Growth}} = \frac{\text{City Investment for Growth}}{\text{for Growth}}$$

There is one new variable used in Formula 4 that requires explanation: (C) City Share of Investment for Growth.

Variable (C): City Share of Investment for Growth

The City of Shoreline has historically used a combination of state grants and local revenues, such as real estate excise taxes, to pay for part of the cost of park and recreation capital facilities. The City’s plan for the future is to continue using grant revenue and some local revenues to pay part of the cost of parks needed for growth.

Revenues that are used for repair, maintenance or operating costs are not used to reduce impact fees because they are not used, earmarked or prorated for the system improvements that are the basis of the impact fees. Revenues from past taxes paid on vacant land prior to development are not included because new capital projects do not have prior costs, therefore prior taxes did not contribute to such projects.

The other potential credits that reduce capacity costs (and subsequent impact fees) are donations of land or other assets by developers or builders. Those reductions depend on specific arrangements between the developer and the City of Shoreline. Reductions in impact fees for donations are calculated on a case-by-case basis at the time impact fees are to be paid.

A detailed analysis was made of the City’s Capital Facilities Plan within the Parks, Recreation and Open Space Plan, 2017-2022 in Appendix B, which contains the details and results of the analysis. There are a total of \$151.04 million of parks projects. Among parks projects \$72.28 million add capacity, and therefore are considered projects eligible for impact fee funding. Secured funding identified by the City of Shoreline totals \$4.80 million, the non-

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capacity portion of the secured funding is the total \$4.80 million, leaving the full \$72.28 million of parks capacity projects unfunded. Currently secured funding will pay for 0% of park projects that add “capacity” to the park system.

In addition, a detailed analysis was made of the City’s 2011-2015 historical patterns of investment in parks from local sources and grants, including real estate excise taxes, conservation district and other grants. The annual average during the five years was \$350,302. Assuming that pattern will continue for the 2018-2035 period covered by this study, Shoreline will invest \$5.96 million in projects that add capacity to the park system. \$5.96 million of expected funding is 8.2% of \$72.28 million in projects that generate “capacity” for the parks system. Therefore, grants and local revenues will pay for 8.2% of capacity park projects.

Exhibit 12 shows the calculation of the City’s share of investment in parks to serve growth. The total investment needed for growth is multiplied by the City’s share of investment for growth resulting in the City investment in parks and open space for growth. The result is that the City expects to use \$7.09 million in grant and local revenues for parks projects for growth.

Exhibit 12. City Investment for Growth

Investment Needed for Growth	City Share of Investment for Growth	City Investment for Growth
\$86,117,362	x 8.2%	= \$7,094,754

Formula 5: Investment to be Paid by Growth

The future investment in parks that needs to be paid by growth may be reduced if the City has other revenues it invests in its parks. The investment to be paid by growth is calculated by subtracting the amount of any revenue the City invests in infrastructure for growth from the total investment in parks needed to serve growth.

$$(5) \quad \textit{Investment Needed for Growth} - \textit{City Investment for Growth} = \textit{Investment to be Paid by Growth}$$

Exhibit 13 shows the calculation of the investment in parks that needs to be paid by growth. The City investment for growth (from Exhibit 12) is subtracted from the total investment in parks needed to serve growth (from Exhibit 11). Exhibit 13 shows that growth in Shoreline needs \$86.12 million for additional parks to maintain the City’s standards for future growth. The City’s investment for growth is projected to be \$7.09 million in grant and local revenues towards the cost for parks. The remaining \$79.02 million for parks will be paid by growth.

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Exhibit 13. Investment to be Paid by Growth

Investment Needed for Growth	City Investment for Growth	Investment to be Paid by Growth
\$86,117,362	-	\$79,022,609

Formula 6: Growth Cost per Person

The growth cost per person is calculated by dividing the investment in parks and open space that is to be paid by growth by the amount of population growth.

$$(6) \frac{\text{Investment to be Paid by Growth}}{\text{Growth of Equivalent Population}} = \frac{\text{Growth Cost}}{\text{per Person}}$$

There are no new variables used in Formula 6. Both variables were developed in previous formulas.

Exhibit 14 shows the calculation of the cost per person of parks that needs to be paid by growth. The investment in parks needed to be paid by growth (from Exhibit 13) is divided by the growth in equivalent population (from Exhibit 4), and the result shows the cost for parks to be paid by growth is \$4,944.36 per person.

Exhibit 14. Growth Cost per Person

Investment to be Paid by Growth	Growth of Equivalent Population	Growth Cost per Equivalent Person
\$79,022,609	15,982	\$4,944.36

Formula 7: Adjustment to be Consistent with Shoreline’s CFP

Impact fees must be based on and used for projects in the City’s CFP. Impact fees are limited to projects that add capacity to the park system and therefore provide additional parks for growth. Impact fees can only be charged for the portion of the cost of the capacity projects that are not paid for by other funding sources. If the unfunded cost of parks projects that add capacity is less than the investment needed for growth the impact fee calculations must include an adjustment to limit the fee to an amount that is consistent with the CFP⁴.

The adjustment is calculated by dividing the unfunded cost of CFP projects that add capacity by the amount of the investment that is needed for growth.

⁴ If future Capital Facilities Plans increase the projects for growth this adjustment can be revised in future updates of the park impact fee.

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The result is the percentage of the needed investment that is provided by the CFP.

$$\frac{\text{Unfunded Cost of (7) CFP Projects that Add Capacity}}{\text{Investment Needed for Growth}} = \text{Adjustment \%}$$

There is one new variable used in Formula 7 that requires explanation: (D) Unfunded Cost of Projects in the CFP that Add Capacity to the parks.

Variable (D): Unfunded Cost of CFP Projects that Add Capacity

The City of Shoreline's CFP has numerous projects for parks. Some of the projects add capacity to the park system by increasing acreage and/or adding improvements.

A detailed analysis was made of the City's Parks, Recreation and Open Space Plan 2017-2022, or the Capital Facilities Plan⁵. There are a total of \$151.04 million of parks system projects. Park projects costing \$72.28 million add capacity to the park system, and therefore are considered projects eligible for impact fee funding. Although the CFP has \$4.80 million in secured funding, this funding is used for non-capacity projects. The full \$72.28 million cost of park capacity projects is unfunded, and therefore the full amount is eligible to the basis of the park impact fee.

Exhibit 15 shows the calculation of the adjustment percentage. The \$72.28 million unfunded cost of CFP park projects that add capacity is divided by the \$86.12 million investment that is needed for growth in order to provide the current capital value per person to all new residential and non-residential development. The calculation is the CFP projects will provide 83.9% of the investment needed for growth for parks projects. This percentage is the adjustment percentage.

Exhibit 15. Adjustment for Consistency with CFP

Unfunded Cost of CIP Capacity Projects		Investment Needed for Growth		Adjustment %
\$72,284,500	÷	\$86,117,362	=	83.9%

⁵ The analysis is presented in Appendix B.

Formula 8: Adjusted Growth Cost per Equivalent Person

The adjusted growth cost per person is calculated by multiplying the growth cost per person by the adjustment percent to account for the portion of unfunded CFP projects that will add capacity to Shoreline’s park system.

$$(8) \frac{\text{Growth Cost per Person}}{\text{per Person}} \times \text{Adjustment \%} = \frac{\text{Adjusted Growth Cost per Person}}{\text{per Person}}$$

There are no new variables used in Formula 8. Both variables were developed in previous formulas.

Exhibit 16 shows the calculation of the cost per person adjusted for park CFP capacity projects that needs to be paid by growth. The growth cost per person (from Exhibit 14), is multiplied by the adjustment percent (from Exhibit 15), and the result shows that cost for parks to be paid by growth is \$4,150.16.

Exhibit 16. Adjusted Growth Cost per Person

Growth Cost per Equivalent	Adjustment %	Growth Cost per Person
\$4,944.36	x 83.9%	= \$4,150.16

Formula 9: Impact Fee per Unit of Development

The amount to be paid by each new development unit depends on the equivalent population coefficient. The cost per unit of development is calculated by multiplying the growth cost per person by the equivalent population for each type of development.

$$(9) \frac{\text{Adjusted Growth Cost per Person}}{\text{per Person}} \times \frac{\text{Equivalent Population Coefficient}}{\text{Coefficient}} = \frac{\text{Impact Fee per Unit of Development}}{\text{Development}}$$

There are no new variables used in Formula 9. Both variables were developed in previous formulas. However, the equivalent population coefficients from Appendix A were combined for all non-residential categories in order to provide an equitable treatment of all businesses, and avoid requiring additional impact fees when changes in use occur in existing buildings. Also, the combined population coefficient is calculated for standard increments of 1,000 square feet, but the impact fee is charged per square foot, therefore the equivalent population coefficient for non-residential development is divided by 1,000 and the result is used in Exhibit 17.

Exhibit 17 shows the calculation of the parks impact fee per unit of development. The growth cost of \$4,150.16 per person for parks from Exhibit

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15 is multiplied by the equivalent population coefficient to calculate the impact fee per unit of development for parks.

Exhibit 17. Impact Fees per Unit of Development

Type of Development	Growth Cost per Equivalent Person	Equivalent Population Coefficient	Unit of Development	Impact Fee per Unit of Development
Single-Family	\$ 4,150.16	2.3840	dwelling unit	\$ 9,894.00
Multi-Family	4,150.16	1.5638	dwelling unit	6,489.93
Non-Residential	4,150.16	0.0013	square foot	5.51

APPENDIX A: EQUIVALENT POPULATION COEFFICIENTS

What is “Equivalency”?

When governments analyze things that are different than each other, but which have something in common, they sometimes use “equivalency” as the basis for their analysis.

For example, many water and sewer utilities calculate fees based on an average residential unit, then they calculate fees for business users on the basis of how many residential units would be equivalent to the water or sewer service used by the business. This well-established and widely practiced method uses “equivalent residential unit” (ERUs) as the multiplier that uses the rate for on residence to calculate rates for businesses. If a business needs a water connection that is double the size of an average house, that business is 2.0 ERUs, and would pay fees that are 2.0 times the fee for an average residential unit.

Another use of “equivalency” that is used in public sector organizations is “full time equivalent” (FTE) employees. One employee who works full-time is 1.0 FTE. A half-time employee is 0.5 FTE. By adding up the FTE coefficients for all part-time employees, the total is the FTE (full-time equivalent) of all the part-time employees. Cities like Renton and Redmond charge business licenses on the basis of the number of employees in each business. In order to be fair to businesses with part-time employees, they convert the part-time employee count to FTE, and then pay the fee per FTE.

Equivalency and Park Impact Fees

The use of equivalency can be used to develop park impact fees that apply to new non-residential development as well as residential development. Equivalent population coefficients for park impact fees use the same principles as ERUs and FTEs to measure differences among residential population and different kinds of businesses in their availability to benefit from Shoreline’s parks. They document the nexus between parks and development by quantifying the differences among different categories of park users.

The analysis that calculates the equivalent population coefficients takes into account several factors and reports the result as a statistic that allows each category of business to include its share of growth based on the “equivalent population” that it generates. The “equivalency” calculation recognizes that employees and visitors have less time in Shoreline to benefit from Shoreline’s parks (in the same way that part-time employees spend less time on the job than full-time employees).

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The equivalent population coefficients are used in two ways. First, they are multiplied by the number of employees in different types of businesses in Shoreline to count employees and visitors to businesses as “equivalent population” in Shoreline. This provides a total population of residents, employees and visitors that will be used to calculate the park and open space value per equivalent population. Second, the adjusted park or open space growth cost per equivalent population is multiplied by the combined equivalent population coefficient for all businesses to calculate the impact fee rate for all non-residential categories into a single impact fee rate provides equitable treatment of all businesses and avoids the need for additional impact fees to be paid when changes in use occur in existing non-residential buildings.

Calculation of Equivalent Population Coefficients for Park Impact Fees

There are two parts to the equivalent population coefficient: (1) employees, and (2) visitors.

Exhibit A1⁶ presents the data for the following factors used in analyzing employees: the number of days per week and hours per day that different types of business are typically open, the percent of hours that the employees are typically at the business location, and the resulting number of hours per week that each employee is in their business location in Shoreline and therefore proximate to Shoreline’s parks.

Exhibit A1. Employee Hours in Location (per Employee)

Land-Use Category	Employees			
	Days per Week at Location (1)	Hours per Day at Location (1)	Percent of Time at Location (1)	Hours in Location per Person (2)
Construction	5	9	25.0%	11
FIRE	5	9	80.0%	36
Manufacturing	5	9	100.0%	45
Retail Trade	7	9	100.0%	63
Services	5	9	80.0%	36
WTU	5	9	100.0%	45
Government	5	9	80.0%	36
Education	5	9	100.0%	45

⁶ The original version of Exhibit A1 through A3 was developed by Dr. Arthur C. Nelson, a leading scholar and researcher in the field of impact fees. The table appeared in Nelson’s 2004 *Planner’s Estimating Guide*. The underlying employee data has been updated to the most recent edition (2008) of *Trip Generation* by the Institute of Transportation Engineers.

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- (1) Assumptions from Planner’s Estimating Guide.
- (2) Hours in Location per Person = (# days per week x # hours per day x % of time at location).
- (3) FIRE – Finance, Insurance and Real Estate.
- (4) WTU = Wholesale Trade, Transportation and Utilities.

Exhibit A2 presents the data for the following factors used in analyzing visitors: the number of days per week that different types of businesses are typically open, the number of hours that visitors are typically at the business location, the number of visitors per employee at different types of businesses, and the resulting number of visitor hours per employee that visitors are in the business location in Shoreline and therefore proximate to Shoreline’s parks.

Exhibit A2. Visitor Hours in Location (per Employee)

Visitors				
Land-Use Category	Days per Week at Location (1)	Hours per Day at Location (1)	Visitors per Employee (2)	Visitor Hours in Location per Employee (3)
Construction	5	1	1.0872	5.4360
FIRE	5	1	1.2948	6.4740
Manufacturing	5	1	0.7668	3.8340
Retail Trade	7	1	15.0461	105.3227
Services	5	1	1.2948	6.4740
WTU	5	1	1.0872	5.4360
Government	5	1	4.6605	23.3025
Education	5	na	na	0.0000

- (1) Assumptions from Planner’s Estimating Guide.
- (2) Visitors per Employee from Planner’s Estimating Guide, does not include tourists, which are important to Shoreline, but for which no data is available that measures tourists per employee by type of business.
- (3) Visitor Hours per Location per Employee = (# days per week x # hours per day x # visitors per employee).

Exhibit A3 presents the last step in calculating the equivalent population coefficient for different types of businesses. Employee hours are added to visitor hours per employee for each type of business. The total is divided by 84 hours per week. Parks are considered a “daytime” public facility that is assumed to be available 12 hours per day, 7 days per week, for a total of 84 hours⁷. The result of this calculation is the daytime equivalent population coefficient for each type of business.

⁷ By way of comparison, police and fire facilities are considered to be “24-hour” public facilities, therefore 24x7=168 hours for their equivalent population coefficient calculations.

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Exhibit A3. Non-Residential Equivalent Population Coefficients

Land-Use Category	Total Total Hours in Location per Employee (1)	Daytime Equivalent Population Coefficient (2)
Construction	16.6860	0.1986
FIRE	42.4740	0.5056
Manufacturing	48.8340	0.5814
Retail Trade	168.3227	2.0038
Services	42.4740	0.5056
WTU	50.4360	0.6004
Government	59.3025	0.7060
Education	45.0000	0.5357

(1) *Total Hours in Location per Employee = Employee Hours + Visitor Hours.*

(2) *Daytime Equivalent Population Coefficient = Total Hours in Location per Employee ÷ Daytime Hours (84 hours).*

For the last step in the impact fee calculation, the equivalent population coefficients for non-residential development are combined as a single weighted average coefficient that is multiplied by the growth cost per equivalent population to calculate the impact fee rate for non-residential development. As noted earlier, the single rate provides equity among all types of businesses and avoids the need for impact fees for changes of use of existing buildings.

Exhibit A4 presents the calculation of the weighted coefficient for equivalent population for all non-residential development. The growth of equivalent employment in each land use category from Exhibit 3 is divided by the total of all growth equivalent employment (4,460) to determine the percent that each land use category is of the total. The percent for each land use is then multiplied by the land use coefficient for that land use (from Exhibit A3) to calculate the weighted coefficient for each land use. Lastly, the sum of the weighted coefficients is calculated as the combined non-residential coefficient that is used in Exhibit 17 to calculate the impact fee for all non-residential development.

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Exhibit A4. Weighted Average Equivalent Population Coefficient for Non-Residential Development

Land-Use Category	Weighted			
	Growth of Equivalent Employees	Percent of Total Employee	Land Use Coefficient	Weighted Coefficient
Construction	(12)	-0.26%	0.1986	(0.0005)
FIRE	76	1.70%	0.5056	0.0086
Manufacturing	28	0.63%	0.5814	0.0036
Retail Trade	2,421	54.28%	2.0038	1.0877
Services	1,391	31.18%	0.5056	0.1577
WTU	53	1.20%	0.6004	0.0072
Government	55	1.23%	0.7060	0.0087
Education	448	10.04%	0.5357	0.0538
Combined Non-Residential	4,460	100.00%	na	1.3268

The equivalent population coefficient for residential development is based on the same methodology, but without a separate factor for visitors because residences do not have regular visitors that can be quantified like a business. The residential coefficient assumes 7 days a week, 15 hours per day, 75% at the location for a total of 78.75 hours in location. Dividing 78.75 by 84 hours for daytime facilities (described above) produces an equivalent population coefficient of 0.9375 for residential development. When calculating the impact fee, the coefficient is multiplied by the average number of persons per dwelling unit for each type of unit. Exhibit A5 presents the residential equivalent population coefficients per housing unit by type. For example, a single-family housing unit has 2.54 persons per housing unit, so the equivalent population coefficient is $0.9375 \times 2.54 = 2.3840$.

Exhibit A5. Residential Equivalent Population Coefficients

Type of Dwelling Unit	Equivalent Population Coefficient	Persons per Dwelling Unit	Residential Equivalent Population Coefficient
Single-Family	0.9375	2.54	2.3840
Multi-Family	0.9375	1.67	1.5638

- (1) *Persons per Dwelling Unit includes both occupied and vacant units. Total units rather than occupied units are better for impact fees because it accounts for vacancies during the life of the unit.*
- (2) *Source data represents the Seattle MSA geography. This geography is adjusted to represent the City of Shoreline using a 5-year adjustment factor based on average persons per household for the Seattle MSA and the City of Shoreline using data from the American Community Survey 5-Year estimates. A 5-year adjustment is used rather than any single year to minimize year-to-year volatility in the data.*
- (3) *Persons per dwelling unit data are sourced from the 2013 American Housing Survey.*

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As noted previously, the equivalent population coefficients are used in two ways. First, they are multiplied by the number of employees in each type of business and the residential population to calculate the total equivalent population in Shoreline. Second, the adjusted park or open space growth cost per equivalent population is multiplied by the combined equivalent population coefficient for all businesses to calculate the impact fee rate for all non-residential development.

APPENDIX B. CFP PROJECTS THAT ADD CAPACITY 2018-2035

The Capital Facilities Plan within the Parks, Recreation and Open Space Plan, 2017-2022 contains 42 parks projects. Their project names are listed in column one of Exhibit B1. The cost of the projects listed in column two totals \$151.04 million. The third column lists the percent of each project that adds capacity to the park system by increasing acreage and/or adding improvements. These additions increase the value of the park system, and therefore provide value that serves growth. The capacity cost of the projects is determined by multiplying the capacity share in the third column by the total cost in the second column. The resulting capacity cost is listed in the fourth column, totaling \$72.28 million across all projects. The non-capacity cost is the difference between total cost and the capacity cost, and represents repairs, remodeling, renovation and other costs that take care of current assets, but do not add to the capacity of the assets. The non-capacity costs are listed in the fifth column. Non-capacity costs total \$78.76 million.

Draft Park Impact Fee Rate Study - Attachment A

Exhibit B1. Shoreline CFP Park Projects that Add Capacity – 2018-2035

Project Name	Cost (1)	% Capacity (2)	Capacity Cost (3)	Non Capacity Cost (4)
Park Ecological Restoration Program	\$ 560,000	0%	\$ 0	\$ 560,000
Parks Minor Repair and Replacement Project	1,572,995	0%	0	1,572,995
Kruckeberg Env Ed Center (Residence Stabilization)	265,000	0%	0	265,000
Turf & Lighting Repair and Replacement	2,678,000	0%	0	2,678,000
Boeing Creek-Shoreview Park Trail Repair & Replacement Project	1,892,000	0%	0	1,892,000
Richmond Beach Community Park Wall Repair Project	1,154,000	0%	0	1,154,000
Richmond Beach Saltwater Park Fire Suppression Development Project	491,000	0%	0	491,000
Aquatic-Community Center Development	75,362,000	28%	21,371,000	53,991,000
Park Facility Recreation Amenities Planning	150,000	50%	75,000	75,000
Richmond Highlands Recreation Center Outdoor Basketball Court	50,000	100%	50,000	0
Soccer Field Conversion (Shoreview Park)	3,615,000	0%	0	3,615,000
Briarcrest Neighborhood Park @ Upper Hamlin & 25th Av NE Development	817,000	100%	817,000	0
Brugger's Bog Park Development Project	1,210,000	0%	0	1,210,000
Hillwood Park Master Plan & Development Project	3,823,000	0%	0	3,823,000
Lower Shoreview Park Development Project	4,937,000	0%	0	4,937,000
North City Neighborhood Park Adventure Playground @ Hamlin	437,000	100%	437,000	0
Park at Town Center Phase 1	980,000	50%	490,000	490,000
James Keough Park Development Project	972,000	50%	486,000	486,000
Ridgecrest Park Development Project	1,153,000	50%	576,500	576,500
Westminister Playground Project	209,000	0%	0	209,000
195th Street Ballinger Commons Trails	69,000	0%	0	69,000
Kruckeberg Env Ed Center Development - Match Foundation	500,000	0%	0	500,000
Twin Ponds Trail Development	219,000	100%	219,000	0
Paramount Open Space Trail Development	195,000	100%	195,000	0
Hamlin Wayfinding and Interpretive Signage	166,000	0%	0	166,000
Cedarbrook Acquisition	2,779,000	100%	2,779,000	0
Rotary Park Expansion Acquisition	3,992,000	100%	3,992,000	0
Rotary Park Development	1,406,000	100%	1,406,000	0
145th Station Area Acquisition	6,291,000	100%	6,291,000	0
145th Station Area Development	1,113,000	100%	1,113,000	0
185th & Ashworth Acquisition	1,203,000	100%	1,203,000	0
185th & Ashworth Development	520,000	100%	520,000	0
5th & 165th Acquisition	7,041,000	100%	7,041,000	0
5th & 165th Development	4,456,000	100%	4,456,000	0
Paramount Open Space Acquisition	3,734,000	100%	3,734,000	0
Paramount Open Space Improvements	257,000	100%	257,000	0
Cedarbrook Playground	503,000	100%	503,000	0
Aurora - I-5 155th - 165th Acquisition	9,931,000	100%	9,931,000	0
Aurora - I-5 155th - 165th Development	1,615,000	100%	1,615,000	0
DNR Open Space Access Acquisition	2,027,000	100%	2,027,000	0
DNR Open Space Access Development	616,000	100%	616,000	0
Ronald Bog Park to James Keough Pk Trail	84,000	100%	84,000	0
Totals	\$151,044,995		\$72,284,500	\$78,760,495

(1) Data sourced from the City of Shoreline Parks, Recreation and Open Space Plan, 2017-2022.

(2) Capacity shares based on City staff feedback.

(3) Capacity Cost = Cost x % Capacity (share of project that generates capacity).

(4) Non Capacity Cost = Cost – Capacity Cost.

Draft Park Impact Fee Rate Study - Attachment A

Exhibit B2 lists secured funding for each project. The sources of secured funding include REET, less the portion allocated to the City Hall Debt Service, and the King County Trail Levy Funding Renewal. Funding sources are not committed to specific projects. The total secured funding for all projects is \$4.80 million. Exhibit B2 also lists all unsecured funding sources for parks projects, which total \$103.26 million.

Exhibit B2. Shoreline CIP Park Project Secured and Unsecured Funding – 2018-2035

Source	2018-2035
<i>Secured Funding Sources</i>	
General Capital Fund - REET 1	\$ 8,554,835
City Hall Debt Service	-3,994,156
KC Trail Levy Funding Renewal	240,000
Total Secured Funding	4,800,679
<i>Unsecured Funding Sources</i>	
Soccer Field Rental General Fund Contribution	780,000
Repair and Replacement General Fund Contribution	300,000
KC Trail Levy Funding Rerenewal	480,000
King Conservation District Grant	80,000
King Conservation District	300,000
Other Governmental Contribution	2,500,000
Recreation & Conservation Office	3,050,000
King County Youth Sports Facility Grant	450,000
Future Funding	95,315,503
Total Unsecured Funding	103,255,503
Total Funding	\$ 108,056,182

(1) Data sourced from the City of Shoreline Capital Improvement Program, 2018-2023, feedback from City of Shoreline staff and City of Shoreline Parks, Recreation and Open Space Plan, 2017-2022.

A total of \$4.80 million of secured funding is available for non-capacity park project costs. The unfunded capacity cost is calculated by subtracting the secured funding in row one from the total cost in Exhibit B1. This is calculated by applying the secured funding first to the non-capacity costs (see row two), then to the capacity costs (see row four). Any amount of capacity projects that is unfunded is therefore a capacity cost, and it is eligible for impact fees paid by new development. The total for all projects is \$72.28 million.

Draft Park Impact Fee Rate Study - Attachment A

Exhibit B3. City Investment for Growth

	2018-2035
Secured Non Impact Fee Funding (1)	\$ 4,800,679
Non Capacity Portion of Secured Non Impact Fee Funding (2)	4,800,679
Unfunded Non Capacity Portion (3)	73,959,816
Secured Non Impact Fee Funding Available for Capacity Portion (4)	0
Unfunded Capacity Portion (Eligible for Impact Fee Funding) (5)	72,284,500

- (1) *Secured non impact fee funding is the sum of all secured funding less the City Hall Debt Service from the CFP.*
- (2) *Non Capacity Portion of Secured Funding = Non Capacity Cost (if Secured Non Impact Fee Funding is greater than Non Capacity Cost) less any project specific secured funding, of which there is none.*
- (3) *Unfunded Non Capacity Portion = Non Capacity Cost – Non Capacity Portion of Secured Funding.*
- (4) *Secured Non Impact Fee Funding Available for Capacity Portion = Secured Impact Fee Funding Available for Capacity Portion – Capacity Cost.*
- (5) *Unfunded Capacity Portion (Eligible for Impact Fee Funding) = Secured Non Impact Fee Funding Available for Capacity Portion – Capacity Cost.*

Specific totals derived from this analysis are used in Formulas 4 and 7 in the Park Impact Fees chapter of this study.