RATE STUDY

FOR

IMPACT FEES

FOR

TRANSPORTATION

CITY OF SHORELINE, WASHINGTON

April 24, 2014

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EXECUTIVE SUMMARY

The purpose of this study is to establish the rates for impact fees for transportation[1] facilities in the City of Shoreline, Washington.

Rates

The rates for transportation impact fees for new residential development are:

Type Dwelling Unit	Impact Fee per Unit
Single Family	$ 5,567.41
Apartment	3,607.49
Condominium	3,662.61

The rates for transportation impact fees for non-residential land uses are listed in Table 5.

Impact Fees vs. Other Applicant 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 "applicant" is used as a shorthand expression to describe anyone who is obligated to pay impact fees, including builders, owners or developers.

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

Adjustments for Other Sources of Revenue for Transportation Capital Improvements

The impact fees in this study recognize the existence of other sources of revenue that are available to pay for the capital cost of transportation facilities. These other revenues are accounted for by adjusting (i.e., reducing) the amount of

[1] Throughout this study the term "transportation" refers to "public streets and roads" defined in RCW 82.02.090, including related appurtenances such as curb, gutter, sidewalk, bicycle lanes and other components of complete streets.

the impact fee rates to adjust for the portion of transportation capital project costs that are paid by the other revenues.

Credits for Other Contributions by Applicant

An applicant who contributes land, improvements or other assets that are part of one of the impact fee projects may receive a "credit" which reduces the amount of impact fee that is due. This credit is in addition to the adjustment for other revenues described in the preceding paragraph. The City has the sole right to determine what contributions are acceptable. The improvement by the applicant must be part of one or more of the projects listed in Table 1 of this study. Frontage improvements for those projects are not eligible for a credit unless the Director determines that the frontage improvement will not be replaced or significantly altered when the project is constructed.

Who Pays Impact Fees

Impact fees are paid by all types of new development that are not exempted by City Code. Impact fee rates for new development are based on, and vary according to the type of land use.

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 fee programs are not required to use multiple service areas unless such "zones" are necessary to establish the relationship between the fee and the development. Public streets and roads impact fees are collected and expended in a single service area throughout the current boundaries of the City of Shoreline because of the compact size of the City and the accessibility of its transportation system to all property within the City.

Timing of Payment of Impact Fees

Impact fees are usually collected at the time the local government issues a building permit. In the City of Shoreline the amount of the impact fees are calculated at the time the complete building application is submitted. The impact fees are paid at the time the building permit is issued unless authorized by City Code.

Uses of Impact Fee Revenue

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 engineering design studies, environmental review, land surveys, right of way acquisition, engineering, permitting, financing, administrative expenses, construction, applicable mitigation costs, and capital equipment (i.e., signals) pertaining to

transportation capital improvements. A separate administrative fee charged with the impact fee provides money to pay for the cost of administering the impact fee program.

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 82.02.050(9)), as opposed to "project improvements" (which are typically provided by the applicant on-site within the development or 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 82.02.050(6).

Expenditure Requirements for Impact Fees

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 10 years must be refunded unless the City Council makes a written finding that an extraordinary and compelling reason exists to hold the fees for longer than 10 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 revenue and expenditures.

Applicant Options

Washington law provides people who are liable for impact fees several alternatives to paying the impact fees calculated in this study. The applicant 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 applicant can appeal to the Hearing Examiner the impact fee calculation by the City of Shoreline. If the local government fails to expend the impact fee payments within 10 years of receipt of such payments, the applicant can obtain a refund of the impact fees (unless the City Council has made a written finding and extension of the deadline pursuant to RCW 82.02.060(3)(a). The applicant can also obtain a refund if the development does not proceed, no impacts are created, and the City has not expended the impact fees.

ORGANIZATION OF THE STUDY

This impact fee rate study contains four chapters, and an appendix:

- Chapter 1 summarizes the statutory basis for developing impact fees, discusses issues that must be addressed, and presents the methodology and formulas for determining the amount of the impact fee.

- Chapter 2 lists the capital improvement project costs of system improvements to transportation facilities, and subtracts non-impact fee revenues to determine the unfunded cost of eligible transportation projects.

- Chapter 3 documents the growth in trips attributable to new development, and calculates the cost per growth trip.

- Chapter 4 documents the trip generation rate for each type of land use, and calculates the transportation impact fee for each of the land use types.

- Appendix A documents the need for additional transportation facilities, including identification of existing deficiencies in transportation system capacity for current development, capacity of existing transportation system available for new development, and additional transportation system capacity needed for new development, as specified in RCW 82.02.050(4).

DATA USED IN THIS STUDY

This impact fee rate study is based on the most recent data provided by the City of Shoreline.

1. STATUTORY BASIS AND METHODOLOGY

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.

This study of impact fees for transportation for Shoreline, Washington describes the methodology that is used to develop the fees, presents the formulas, variables and data that are the basis for the fees, and documents the calculation of the fees. The methodology is designed to comply with the requirements of Washington State Law.

This study uses data and levels of service standards from the Transportation Element and the Capital Facilities Plan Element of the City's Comprehensive Plan.

STATUTORY BASIS FOR IMPACT FEES

The Growth Management Act of 1990 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. Two 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); and 2) the ability to charge small-scale development their proportionate share, whereas SEPA exempts small developments.

The following synopsis of the most significant requirements of the law includes 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 applicant on-site within the development). *RCW 82.02.050(3)(a) and RCW 82.02.090(6) 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(6)*

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) and RCW 82.02.060(1)*

Reductions of Impact Fee Amounts

Impact fees 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 applicant (if such facilities are in the adopted CFP and are required as a condition of development approval). *RCW 82.02.060(3)* The City has the sole right to determine what contributions are acceptable.

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 exemptions must be paid from public funds (other than impact fee accounts). *RCW 82.02.060(2)*

Applicant Options

Applicants 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(5).* Applicants can pay

impact fees under protest and appeal impact fee calculations. *RCW 82.02.060(4) and RCW 82.02.070(4) and (5).* The applicant can obtain a refund of the impact fees if the local government fails to expend or obligate the impact fee payments within 10 years, or terminates the impact fee requirement, or the applicant 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(7), 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(7)* subject to the proportionate share limitation described above.

Accounting Requirements

The local government must separate the impact fees from other monies, place them in an interest bearing account, expend or obligate the money on CFP projects within 10 years, and prepare annual reports of collections and expenditures. *RCW 82.02.070(1)-(3)*

ISSUES RELATING TO IMPACT FEES

Prior to calculating impact fee rates, several issues must be addressed in order to determine the need for, and validity of such fees: responsibility for public facilities, the need for new revenue for additional transportation facilities, and the benefit of transportation facilities to new development.

Responsibility for Public Facilities

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 transportation facilities it owns and operates within its jurisdiction. In no case may a local government charge impact fees for private streets or roads, but it may charge impact fees for some streets or roads that it does not administer if such facilities are "owned or operated by government entities" *(RCW 82.02.090 (7).* Thus, a city or county may charge impact fees for transportation, and enter into an

agreement with the State of Washington for the transfer, expenditure, and reporting of transportation impact fees for state roads. A city may not charge or use impact fees on State roads without an agreement with the State, and a City CFP that includes state road projects.

Need for Additional Transportation Capacity

The need for additional transportation system capacity is determined by using standards for levels of service for transportation facilities and other metrics, such as increase in traffic volume. The analysis of needed transportation facilities must comply with the statutory requirements of identifying existing deficiency, reserve capacity and new capacity requirements for facilities. An analysis of the need for additional transportation facilities is presented in Appendix A.

Need for New Revenue for Additional Transportation Capacity

The need for new revenue for transportation facilities is demonstrated by comparing the cost of new facilities through 2030 to the existing sources of revenue for the same time horizon. The City's Transportation Element and CFP for transportation facilities does not have enough revenues from other sources to pay needed costs without impact fees.

Determining the Benefit to Development

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 80.20.050(3)*).

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 be used by 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 trip 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, rather than the replacement cost of the facility. Carrying costs may be added to reflect the government's actual or imputed interest expense.

The third aspect of the proportionate share requirement is its relationship to the requirement to provide adjustments and credits to impact fees, where 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 "credit" requirement reduces impact fees by the value of dedicated land, improvements or construction provided by the applicant (if such facilities are in the adopted CFP 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 right of way and the quality and design of a donated transportation facilities improvement can be required to be acceptable to the local government.

Without such adjustments and credits, the fee-paying development might pay more than its proportionate share.

2. Reasonably Related to Need.

There are several 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 for transportation facilities are charged to properties that need (i.e., benefit from) new transportation facilities. The City of Shoreline provides its transportation facilities network to all kinds of property throughout the City regardless of the type of use of the property.

- The relative needs of different types of growth are considered in establishing fee amounts (i.e., different trip generation rates for different types of land use).

- Applicants 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).

Shoreline's transportation facilities serve the entire City, therefore the impact fees for these transportation capital improvements are based on a single service area that encompasses the City.

3. Reasonably Related to Expenditures.

Two provisions of the law tend to reinforce 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 identifiable projects, the benefit of which can be demonstrated. Second, impact fee revenue must be expended or obligated within 10 years, unless the City Council makes a written finding that an extraordinary and compelling reason exists to hold the fees for longer than 10 years. This deadline ensures a benefit to the applicant by prohibiting the City from holding the money indefinitely.

METHODOLOGY AND RELATIONSHIP TO CAPITAL FACILITIES PLAN

Impact fees for transportation facilities begin with the list of projects in the City's Transportation Element and Capital Facilities Plan (CFP). The projects in the Transportation Element and CFP are analyzed to identify capacity costs attributable to new development. The costs are adjusted to reflect other sources of revenue paid by the new development (and any payments that reduce the cost of the facility that is to be paid by impact fees). The costs are calculated per growth trip. The costs per growth trip are applied to the unique trip generation rates for each type of land use. The amount of the fee is determined by charging each fee-paying development for cost of the number of growth trips that it generates.

Calculation of Impact Fee Amounts

Five formulas are used to determine the amount of impact fees for transportation facilities that are required as a result of new development:

1.	Road[2] Project Costs	-	Cost of Existing Deficiencies	-	Cost of Capacity for Growth After 2030	=	Capacity Cost for Future Growth

[2] In the formulas and tables in this study, the terms "road" or "roads" is used as a shorthand expression for "transportation" (i.e., "public streets and roads" authorized by RCW 82.02.090(7).

2.	Capacity Cost for Future Growth	-	Other Funds Committed To Projects	=	2008[3]-2030 Growth's Share of Projects	
3.	Future Trips on Road Network	-	Current Trips on Road Network	=	Growth Trips on Road Network	
4.	2008-2030 Growth's Share	÷	Growth Trips on Road Network	-	"Not Rely Solely" Adjustment	= Eligible Cost per Growth Trip
5.	Eligible Cost per Growth Trip	x	Trip Generation Rate per Land Use	=	Impact Fee for Land Use Type	

[3] 2008 is the baseline year of Shoreline's most recent traffic model. Development that has occurred between 2009 and the present, and increases in trips on Shoreline's street network since 2008 are considered "growth" for the purpose of calculating impact fee costs per trip. However, impact fees will be charged only to growth that occurs after the effective date of Shoreline's ordinance adopting impact fees, and growth between 2009 and that effective date will not be charged impact fees.

2. ROAD SYSTEM IMPROVEMENT COSTS ELIGIBLE FOR IMPACT FEES

This chapter includes a description of the first two formulas, each variable that is used in the formula, an explanation of the use of data in the formula, and the calculation of 2008-2030 growths' share of the capital cost of system improvements to transportation facilities that are eligible for impact fees.

The transportation projects listed in this chapter are eligible for impact fees because the needs analysis of the Transportation Element and CFP projects presented in Appendix A meets the requirements of RCW 82.02.

FORMULA 1: CAPACITY COST FOR FUTURE GROWTH

The cost of the capacity of eligible transportation projects for future growth is calculated by subtracting the cost of existing deficiencies and the cost of capacity not used by 2030 from the total transportation project costs as shown in the City's Transportation Element and Capital Facilities Plan (CFP) for transportation facilities.

1.	Road Project Costs	-	Cost of Existing Deficiencies	-	Cost of Capacity for Growth After 2030	=	Capacity Cost for Future Growth

There are three variables that require explanation: (A) the costs of transportation projects, (B) the cost of existing deficiencies, and (C) the cost of capacity for growth after 2030.

Variable (A) Costs of Transportation Projects

The Transportation Element and Capital Facilities Plan identify capital projects needed to maintain the City's current transportation system, and to meet the additional demands from growth. The projects in the Transportation Element and CFP were analyzed to determine which projects are needed to serve growth. Appendix A presents the results of that analysis.

The costs of transportation projects used in this study include the full cost of the project, including engineering, right of way, and construction costs.

The cost of transportation projects does not include any costs for interest or other financing. If the City decides in the future to borrow money for transportation facilities, the carrying costs for financing can be added to the costs in this study, and the impact fee can be recalculated to include such costs.

Variable (B): Costs of Existing Deficiencies

Impact fees can be charged for growth's proportionate share of transportation projects, but impact fees cannot be charged for the portion of projects that eliminate deficiencies that existed before growth occurred. The portion of a project that eliminates an existing deficiency is not eligible for impact fees, therefore the cost of eliminating the existing deficiency is subtracted from the total cost of the project.

For transportation segments, the cost of existing deficiency is determined by dividing the current deficient traffic volume by the capacity created by the new project. The resulting percent is the portion of the project that is needed for the existing deficiency. That percent is multiplied times the total transportation project cost to determine the portion of the cost that is needed to eliminate the existing deficiency.

For intersections, the cost of existing deficiency is determined by dividing the number of seconds of delay in excess of the standard by the number of seconds allowed by the standard. The resulting percent is the portion of the project that is needed for the existing deficiency. That percent is multiplied times the total intersection project cost to determine the portion of the cost that is needed to eliminate the existing deficiency.

Variable (C) Costs of Capacity for Growth after 2030

The impact fees in this study are calculated for growth that will occur between 2008 and 2030, but some of the transportation projects in the Transportation Element and Capital Facilities Plan create more capacity than will be used up by growth through 2030. The amount of capacity that is not used by 2030 is available for long-term growth that occurs after 2030, but its cost should not be included in impact fees for short-term growth.

The cost of growth after 2030 is calculated by determining the unused ("reserve") capacity. Reserve capacity is the difference between the total capacity of the improved transportation facilities and the amount of traffic volume in the year 2030 (as forecast by the traffic model). The cost (value) of reserve capacity is determined by dividing the reserve capacity by the total capacity created by the new project. The resulting percent is the portion of the project that is unused reserve capacity in 2030. That percent is multiplied times the total project cost to determine the portion of the cost that is for capacity for growth that will occur after 2030. However, project #6, N 175th St. from Stone to Meridian is being constructed in order to relieve congestion on Meridian. As a result, the analysis of reserve capacity on N 175th is not applicable to the impact fee calculations.

CALCULATION OF CAPACITY COSTS FOR FUTURE GROWTH

The calculation of the cost of the capacity of eligible transportation projects for future growth is presented in Table 1. Columns 1 and 2 list the eligible projects and total costs from the Transportation Element and CFP. The total costs are reduced by existing deficiency costs and costs of capacity for growth after 2030 in Columns 3 and 4. These ineligible costs are subtracted from the total costs, and the balance in Column 5 is the cost of capacity for future growth.

TABLE 1
GROWTH SHARE OF FUTURE PROJECT COST

	(1)	(2)	(3)	(4)	(5)
#	Project	Project Cost	Cost of Existing Deficiency	Cost of Post-2030 Reserve Capacity	2008 - 2030 Growth Share
1.	N 185th St/Meridian Ave N: 500 ft NB/SB	$ 5,479,125	$199,241	$ 0	$ 5,279,884
2.	N 175th St/Meridian Ave N: 500 ft	5,260,356	180,502	0	5,079,854
3.	Meridian Ave N: N 145th St to N 205th St	10,108,030	0	0	10,108,030
4.	NE 185th St: 1st Ave NE to 7th Ave NE	308,068	0	211,797	96,271
5.	N 175th St: Meridian Ave N to I-5	4,269,679	0	0	4,269,679
6.	N 175th St: Stone to Meridian	13,253,502	0	0	13,253,502
	Totals	38,678,760	379,743	211,797	38,087,220

FORMULA 2: 2008-2030 GROWTH'S SHARE

The 2008-2030 growth share of transportation project cost is calculated by subtracting the value of other funds that are committed to the project and which will pay for part of growth's share of the cost (from Table 1).

2.	Capacity Cost for Future Growth	-	Other Funds Committed To Projects	=	2008-2030 Growth's Share of Projects

There is one new variable that requires explanation: (D) other funds committed to projects.

Variable (D): Other Funds Committed to Projects

Impact fee rate calculations must recognize and reflect all known sources of revenue from new development that are earmarked or proratable to a particular impact fee project. These sources of revenue can include locally generated revenues (e.g., taxes, fees or charges, interest, etc.), state and/or

federal grants, bonds, or other revenue sources, which are committed to transportation capital improvement projects. The City's Transportation Element and CFP list specific sources of revenue for each project. The City of Shoreline's impact fee calculations include all non-impact fee revenue, whether paid by new development, or paid by existing residents and businesses.

The sources of revenue listed in the City's Transportation Element and CFP are available to pay for the City's "share" of projects, as well as growth's "share." The City's share includes the costs of variables B and C listed above: costs of existing deficiencies, and cost of capacity for growth after 2030. The revenues in the City's plan were analyzed to determine the portion that was available for the City's share and the portion that was for growth's share. The City has no revenue that applies to growth's share of project costs.

Revenues that are used for repair, maintenance or operating costs are not included because impact fees are not used for such expenses. Revenues for payments of *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.

If an applicant believes that past tax payments were made by his/her property and such taxes meet the criteria of RCW 82.02.060(1)(b), an applicant can submit documentation and request a special review.

CALCULATION OF 2008-2030 GROWTH'S SHARE

The 2008-2030 growth share of transportation project cost is presented in Table 2. Column 1 lists the eligible projects from the Transportation Element and CFP. Column 2 lists the capacity cost for future growth (from Table 1, column 5). The capacity costs in Column 1 are reduced by the other revenue that pays for growth's share (Column 3). The result is shown in Column 4: 2008-2030 growth's share of the transportation improvement projects.

TABLE 2
NET GROWTH SHARE ELIGIBLE FOR IMPACT FEES

	(1)	(2)	(3)	(4)
#	Project	2008 - 2030 Growth Share	Other Funds Committed to Projects	Net Growth Share (Eligible for Impact Fees)
1.	N 185th St/Meridian Ave N: 500 ft NB/SB	$ 5,279,884	$ 0	$ 5,279,884
2.	N 175th St/Meridian Ave N: 500 ft	5,079,854	0	5,079,854
3.	Meridian Ave N: N 145th St to N 205th St	10,108,030	0	10,108,030
4.	NE 185th St: 1st Ave NE to 7th Ave NE	96,271	0	96,271
5.	N 175th St: Meridian Ave N to I-5	4,269,679	0	4,269,679
6.	N 175th St: Stone to Meridian	13,253,502	0	13,253,502
	Totals	38,087,220	0	38,087,220

3. 2008-2030 GROWTH COST PER GROWTH TRIP

In this chapter the 2008-2030 growth's share of the cost of eligible transportation projects from Chapter 2 is converted to a cost per growth trip. As in the previous chapter, this chapter includes a description of each formula and each variable that is used in the formulas, an explanation of the use of data in the formula, and the calculation of the unfunded cost per growth trip, using formulas 3 and 4.

FORMULA 3: GROWTH TRIPS

The growth of trips on Shoreline's transportation system is calculated by subtracting the number of trips currently on the transportation system from the number of trips that are forecast to be on the transportation system in the year 2030:

3.	Future Trips on Road Network	-	Current Trips on Road Network	=	Growth Trips on Road Network

There is one new variable used in formula 3 that requires explanation: (E) trips.

Variable (E) Trips (Current and Future)

A traffic demand model is used to analyze traffic on transportation facilities. Shoreline's model was run by the City's transportation planning consultant, DKS Associates, and the results used to calculate current and future trips on Shoreline's transportation facilities. The data from the model is presented here as p.m. peak hour trips.

CALCULATION OF GROWTH TRIPS

Table 3 shows the future and current trips and calculates the growth trips.

TABLE 3
GROWTH TRIPS (P.M. PEAK HOUR) IN SHORELINE

(1) Origin - Destination	(2) 2008 Trips	(3) 2030 Trips	(4) Growth Trips (Increase in Trips)
internal to internal	2,444	3,352	908
internal to external	7,009	8,846	1,837
external to internal	8,168	9,766	1,598
external to external	8,011	9,700	1,689
Total Trips	25,632	31,664	6,032

FORMULA 4: COST PER GROWTH TRIP

The 2008-2030 growth share of cost of transportation projects per growth trip is calculated by dividing the 2008-2030 growth share of cost of transportation projects by the number of growth trips:

4.	2008-2030 Growth's Share	÷	Growth Trips on Road Network	-	"Not Rely Solely" Adjustment	=	Eligible Cost per Growth Trip

There is one new variable used in formula 3 that requires explanation: (F) "not rely solely on impact fees."

Variable (F) "Not Rely Solely on Impact Fees"

RCW 82.02.050(7) provides that "…the financing for system improvements to serve new development … cannot rely solely on impact fees." The statute provides no further guidance, and "not rely solely" could be anything between 0.1% and 99.9%, thus additional analysis is presented below.

As noted previously, the total cost of all eligible projects is $38.1 million, and 0.99% of that is for existing deficiencies. In addition, the future reserve capacity equals 0.55% of total costs. The City is required to pay for existing deficiencies and reserve capacity costs. The City may or may not eventually recoup the costs of future reserve capacity from development that occurs after the 2030 planning horizon for the transportation improvements. Arguably the 0.99% and the 0.55% that will be paid by the City provide sufficient compliance with the requirement to "not rely solely on impact fees." However, in the event that the intent of the statute is more narrowly construed to mean that the City should "not rely solely on impact fees" for the $38,087,220 cost that is eligible for impact fees, an additional 3% reduction ($1,142,617) is made to the impact fee calculation. This is accomplished at the end of Table 4, by reducing the cost per trip by 3%, and the resulting net cost per trip will be used as the basis for the remaining calculations of the transportation impact fee for Shoreline.

CALCULATION OF COST PER GROWTH TRIP

Table 4 shows the calculation of the cost per growth trip by dividing the 2008-2030 growth share of cost of transportation projects that are eligible for impact fees (from Table 2) by the number of growth trips (from Table 3) to produce the total cost per growth trip. The last step in Table 4 is to subtract an amount equal to 3% of the total cost per trip in order to determine the eligible cost per trip.

TABLE 4 COST PER GROWTH TRIP (1) Description	(2) Amount
Growth Share of Project Costs	$ 38,087,220
P.M. Peak Hour Growth Trips	6,032
Cost per P.M. Peak Hour Growth Trip	$ 6,314.19
RCW 82.02.050 (2) "cannot rely solely on impact fees"	-3.00%
Net Cost per P.M. Peak Hour Growth Trip	$ 6,124.77

4. IMPACT FEE RATES FOR SPECIFIC LAND USES

In this chapter the eligible cost per growth trip (from chapter 3) is converted to an impact fee rate per unit of development for a variety of land use categories. As in the previous chapter, this chapter includes a description of the formula and each variable that is used in the formula, an explanation of the use of data in the formula, and the calculation of the impact fee, using formula 5.

FORMULA 5: IMPACT FEE RATES FOR SPECIFIC LAND USES

The impact fee for each category of land use is determined by multiplying the cost per growth trip times the number of trips generated per unit of development of each category of land use:

5.	Eligible Cost per Growth Trip	x	Trip Generation Rate per Land Use	=	Impact Fee for Land Use Type

The formula uses different trip generation rates for different types of land uses (i.e., single family houses, office buildings, etc.). There is one new variable used in formula 4 that requires explanation: (G) trip generation rates.

Variable (G) Trip Generation Rates

This rate study uses the data reported in Trip Generation, compiled and published by the Institute of Transportation Engineers (ITE). The report is currently in its 8th edition. The report is a detailed statistical compilation of hundreds of surveys of trip origins and destinations conducted throughout the United States. The data is reported on several variables (i.e., type of land use, units of development, number of employees, hour of day, etc.). The data used in this impact fee rate study is for trips generated during the p.m. peak hour, since that is the same basis as the trip data for the City's level of service. Impact fee rates are calculated in this study for many frequently used types of land use (i.e., dwellings, offices, retail, restaurants, etc.). Impact fees can be calculated for other land uses not listed in this rate study by referring to the data in the ITE report.

Trip generation data is reported initially as the total number of trips leaving and arriving at each type of land use (i.e., trip ends). There are two adjustments made to each trip generation rate before it is used to calculate the impact fee.

The first adjustment is to reduce the number of trips charged to land uses that are incidental attractors and generators of trips. For example, if a person leaves work to return home at the end of the workday, the place of employment is the origin, and the home is the destination. But it the person stops enroute to run an errand at a store, the ITE data counts the stop at the store as a new destination (and a new origin when the person leaves the store). In reality, the work-to-

home trip was going to occur regardless of the incidental stop, therefore the trip rate of the store should not be charged as an additional impact on the transportation system. The adjustment is based on the number of "pass-by" trips that stop at the store instead of "passing by." In Table 5, these trips are eliminated by counting only the trips that are truly "new" trips (i.e., a person made a special trip to the store). The adjustment is shown in the rate table as "Percent New Trips."

The second adjustment is the "Trip Length Factor." Not all trips are the same length. Longer trips need more transportation facilities, so they are considered to have a greater impact than shorter trips. The ITE report's trip generation data is adjusted by a factor that compares the average trip length of each type of development to the average trip length of all trips. Some land uses have factors greater than 1.0 (i.e., hospitals are factored at 1.28 because their trips are 28% longer than average) while other land uses have factors less than 1.0 (i.e., 24-hour convenience markets trips are factored at 0.44 because their trips are only 44% the length of an average trip).

CALCULATION OF IMPACT FEE RATES FOR SPECIFIC LAND USES

Table 5 shows the calculation of impact fee rates for twenty-eight frequently used categories of land use that are listed in column 1. The ITE trip rate in column 2 is multiplied times the percent new trips in column 3, and the result is multiplied times the trip length factor in column 4. Column 5 reports the net new trips that are the result of these calculations. The impact fee rates in column 6 are calculated by multiplying the net new trips from column 5 times the eligible cost per growth trip (from Table 4, and repeated in the column heading of column 6). If the trip generation rate in column 5 is reported per 1,000 square feet, the calculation of rates for column 6 includes a step of dividing by 1,000 in order to calculate the impact fee rate per square foot.

An applicant for a building permit will be assessed an impact fee that is determined as follows:
1. Select the appropriate land use category from Table 5, and find the impact fee rate per unit in column 6.
2. Determine the number of "units" of development, such as dwelling units, or square feet of buildings the applicant proposes to build. (Specific "units" used for impact fees are listed in the right portion of column 6 of Table 5).
3. Multiply the rate per unit by the number of units to be built. The result is the impact fee.

TABLE 5
IMPACT FEE RATES

ITE Code	(1) Land Use Category/ Description	(2) Trip Rate[1]	(3) % New Trips[2]	(4) Trip Length Factor[3]	(5) Net New Trips Per Unit of Measure		(6) Impact Fee Per Unit @ $6,124.77 per Trip	
90	Park-and-ride lot w/ bus svc	0.62	75%	1.00	0.47	parking spce	2,848.02	per parking spce
110	Light industrial	0.97	100%	1.31	1.27	1,000 sq ft	7.78	per square foot
140	Manufacturing	0.73	100%	1.31	0.96	1,000 sq ft	5.86	per square foot
151	Mini-warehouse	0.26	100%	1.31	0.34	1,000 sq ft	2.09	per square foot
210	Single family house (includes townhouse and duplex)	1.01	100%	0.90	0.91	dwelling	5,567.41	per dwelling unit
220	Apartment (includes accessory dwelling unit)	0.62	100%	0.95	0.59	dwelling	3,607.49	per dwelling unit
230	Condominium	0.52	100%	1.15	0.60	dwelling	3,662.61	per dwelling unit
240	Mobile home park	0.59	100%	0.72	0.42	dwelling	2,601.80	per dwelling unit
251	Senior housing	0.27	100%	0.72	0.19	dwelling	1,190.65	per dwelling unit
255	Continuing care retirement	0.29	100%	1.00	0.29	dwelling	1,776.18	per dwelling unit
310	Hotel	0.59	100%	1.03	0.61	room	3,722.02	per room
320	Motel	0.47	100%	1.03	0.48	room	2,965.00	per room
444	Movie theater	3.80	85%	0.59	1.91	1,000 sq ft	11.67	per square foot
492	Health/fitness club	3.53	90%	0.79	2.51	1,000 sq ft	15.37	per square foot
530	School (public or private)	0.97	80%	0.95	0.74	1,000 sq ft	4.52	per square foot
540	Junior/community college	2.54	80%	0.95	1.93	1,000 sq ft	11.82	per square foot
560	Church	0.55	95%	0.95	0.50	1,000 sq ft	3.04	per square foot
565	Day care center	12.46	75%	0.51	4.77	1,000 sq ft	29.19	per square foot
590	Library	7.30	75%	0.44	2.41	1,000 sq ft	14.75	per square foot
610	Hospital	1.14	80%	1.28	1.17	1,000 sq ft	7.15	per square foot
710	General office	1.49	90%	1.31	1.76	1,000 sq ft	10.76	per square foot
720	Medical-dental office	3.46	75%	1.23	3.19	1,000 sq ft	19.55	per square foot
731	State motor vehicles dept	17.09	90%	1.00	15.38	1,000 sq ft	94.21	per square foot
732	United States post office	11.12	75%	0.44	3.67	1,000 sq ft	22.48	per square foot
820	General retail and personal services (includes shopping center)	3.73	66%	0.54	1.33	1,000 sq ft	8.14	per square foot
841	Car sales	2.59	80%	1.18	2.44	1,000 sq ft	14.97	per square foot
850	Supermarket	10.50	64%	0.54	3.63	1,000 sq ft	22.23	per square foot
851	Convenience market-24 hr	52.41	39%	0.33	6.75	1,000 sq ft	41.31	per square foot
854	Discount supermarket	8.90	77%	0.54	3.70	1,000 sq ft	22.67	per square foot
880	Pharmacy/Drugstore	8.42	47%	0.54	2.14	1,000 sq ft	13.09	per square foot
912	Bank	25.82	53%	0.38	5.20	1,000 sq ft	31.85	per square foot
932	Restaurant: sit-down	11.15	57%	0.59	3.75	1,000 sq ft	22.97	per square foot
934	Fast food	33.84	50%	0.51	8.63	1,000 sq ft	52.85	per square foot
937	Coffee/donutshop	42.93	50%	0.51	10.95	1,000 sq ft	67.05	per square foot
941	Quick lube shop	5.19	75%	1.00	3.89	service bay	23,840.66	per service bay
944	Gas station	13.87	58%	0.44	3.54	pump	21,679.38	per pump
948	Automated car wash	11.64	65%	1.00	7.57	1,000 sq ft	46.34	per square foot

[1] ITE Trip Generation (8th Edition): 4-6 PM Peak Hour Trip Ends
[2] Excludes pass-by trips: see "Trip Generation Handbook: An ITE Proposed Recommended Practice" (1988) and other sources.
[3] Ratio to average trip length

APPENDIX A: ANALYSIS OF NEEDS FOR ROAD IMPROVEMENTS

Need for Transportation to Serve Growth in Shoreline

RCW 82.02 requires impact fees to be based on the City's Capital Facilities Plan which must identify existing deficiencies in transportation system capacity for current development, capacity of existing transportation system available for new development, and additional transportation system capacity needed for new development. Shoreline's Capital Facilities Plan for transportation projects is found in the Transportation Element of the City's Comprehensive Plan.

Existing deficiencies and reserves were summarized in Table 2 of this study. The purpose of this appendix is to summarize needs for additional capacity for new development based on data provided in the Transportation Element of the City's Comprehensive Plan.. Specifically, Figure A-4 denotes roadway projects to accommodate growth. Tables 8.2 and 8.3 speak to 2008 and 2030 increased in time delay (for LOS) in % and Appendix E, Figures E-2, E-3, E-4, and E-5 all speak to growth with 2008 and 2030 vehicle counts and % growth calculations being presented.

The need for additional transportation facilities is determined by using several criteria, including increases in traffic volume, increases in transportation system capacity and determination that the capacity increases are needed for growth. Table A-1 lists the transportation projects from Shoreline's Transportation Element and CFP that are eligible for impact fees because of the results of one or more criteria.

TABLE A-1
ANALYSIS OF NEED FOR ROAD PROJECTS TO SERVE GROWTH

#	(1) Project	(2) Description	(3) Volume Increase 2008 - 2030	(4) Capacity Increase 2008 - 2030	(5) Capacity Increase Needed to Serve Growth
1.	N 185th St/Meridian Ave N: 500 ft NB/SB	Add/Drop Lanes	50%	380 vph	X
2.	N 175th St/Meridian Ave N: 500 ft	NB Add lane, Restripe WB Approach	44%	380 vph	X
3.	Meridian Ave N: N 145th St to N 205th St	Add two way left turn lane	39%	140 vph	X
4.	NE 185th St: 1st Ave NE to 7th Ave NE	Add two way left turn lane	38%	160 vph	X
5.	N 175th St: Meridian Ave N to I-5	Roadway widening and sidewalks	22%	160 vph	X
6.	N 175th St: Stone to Meridian	Roadway widening, sidewalks and vertical realignment	40%	160 vph	X