BID RESPONSE

Responding To:

Bid/Project Number: RFP 10877-25

Bid/Project Title: Park Impact Fees

Closing Date: 08/04/2025, 2pm PST

Submitted By:

Name of Company Submitting Response:
FCS, a Bowman company

Printed Name of Person Submitting Response:
John Ghilarducci

Email:
john.ghilarducci@bowman.com

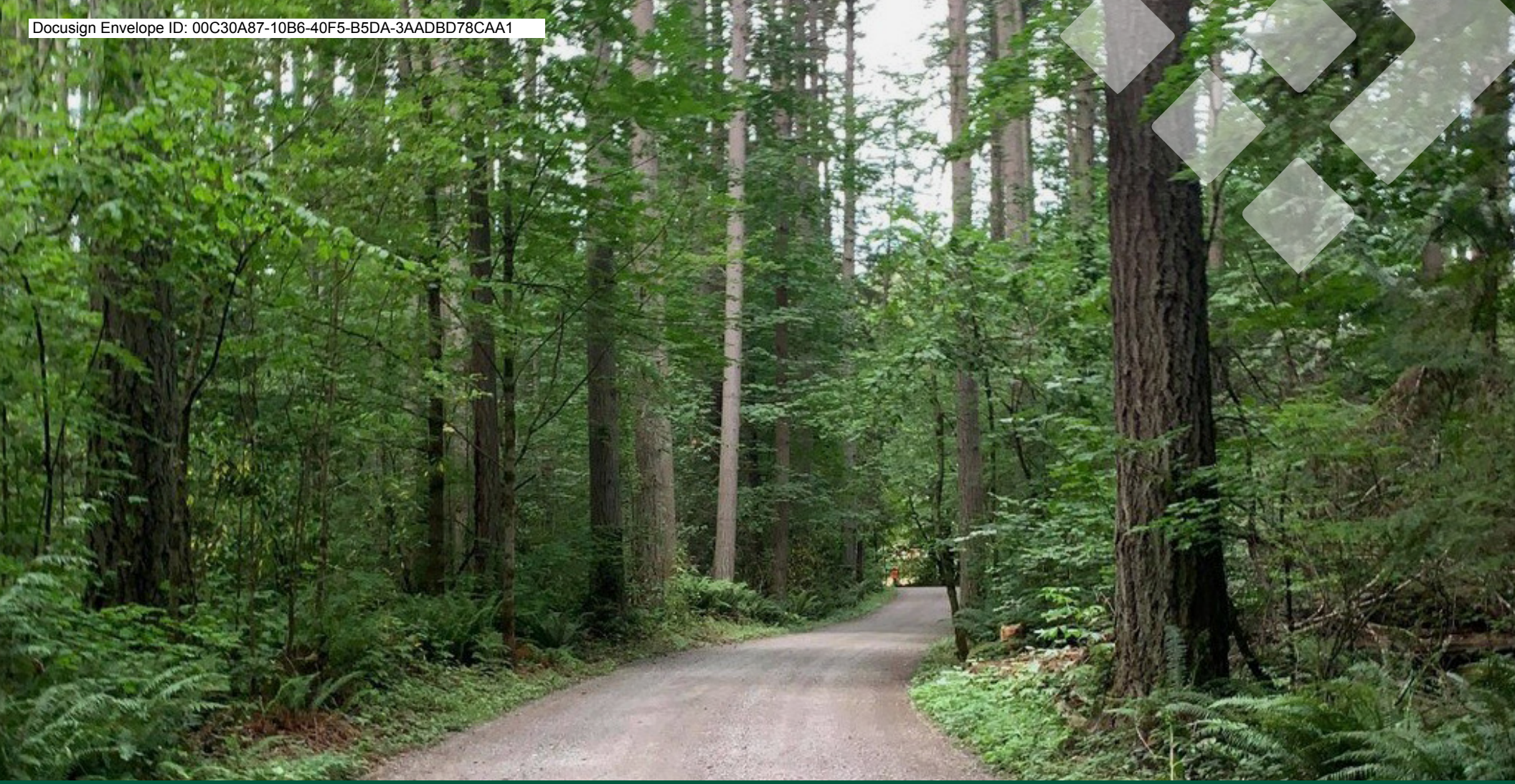
Signature of Person Submitting Response: Signed by: 658EF850124F4A2...

Date:
8/4/2025

Attach Your Bid/Proposal:

Remember to sign your bid/proposal

Attach all pages of your response here



City of Redmond

Proposal to Provide

Park Impact Fee Study

August 4, 2025

FCS
a Bowman company

fcsgroup.com | bowman.com

August 4, 2025

Vivian Nguyen, Sr. Purchasing Agent
15670 NE 85th Street
PO Box 97010
Redmond, WA 98073-9710

RE: Park Impact Fee Study – RFP 10877-25

Dear Ms. Nguyen:

The City of Redmond (City) seeks a qualified consultant to update the City's park impact fee (PIF). The FCS, a Bowman company (FCS), project team is well-suited to provide these services. First, we know the Growth Management Act as it pertains to impact fees, embodied in Revised Code of Washington (RCW) 82.02, 36.70A.636 and HB 5452. Further, the Washington state legislature recently (2023) passed additional requirements for imposing impact fees on residential development. Impact fees may no longer be imposed uniformly on a per-dwelling-unit basis but rather must be scaled by a factor such as square footage, number of bedrooms, or trip generation such that smaller dwelling units are subject to proportionally lower impact fees. In addition, the maximum impact fee for an accessory dwelling unit is one half the impact fee of its associated single-family residence. FCS already has proven approaches to helping clients comply with these new requirements.

What can you expect from FCS?

Team Qualifications

Impact fee expert John Ghilarducci will serve as principal-in-charge on this project. He will be supported by project manager Doug Gabbard, senior analyst Luke Nelson, and Steve Duh of Conservation Technix. All four individuals have recent and ongoing experience with multiple impact fee studies and parks plans throughout Washington.

John Ghilarducci has extensive impact fee consulting experience with Washington and Northwest municipalities and teaches courses on impact fees for regional associations and client forums. In addition, since 1993, John has worked on or led numerous projects for the City of Redmond and has a deep familiarity with its challenges and many attributes.

Doug Gabbard has worked with parks, fire, schools and transportation services to analyze impact fees throughout the Northwest. He is an experienced project manager and subject matter expert.

Steve Duh of Conservation Technix has extensive experience in developing parks master plans, recently for the City of Redmond, and the nearby cities of Sammamish, Mercer Island, and Edmonds, among others. Steve will bring invaluable knowledge of the City's existing and planned park system facilities.

A Firm Understanding of Region-Specific Issues

FCS has completed hundreds of impact fee studies throughout the Northwest, ranging from straightforward technical analyses to complex policy and sophisticated calculation frameworks.

Our recent work in Washington has included multiple park impact fees, and we have been and remain at the forefront of developing scaling methodologies that are compliant with RCW 82.02.060.

We recently completed or are in the process of completing park impact fee studies for Federal Way, Sammamish, Kirkland, Issaquah, Maple Valley, Bonney Lake, Camas, Fife, Bellevue, Duvall, Kent, Oak Harbor and Olympia. Most if not all of these have included scaling, and many have included nonresidential fees similar to the City of Redmond's existing PIF. Our team has a thorough understanding of the RCW as well as the policies and practices of local public agencies.

As recognized impact fee experts, we are committed to sharing knowledge for the good of Northwest communities and making sure that our solutions truly fit each city's needs. FCS served as a peer reviewer on the Department of Commerce *Residential Proportional Impact Fees and System Development Charges Guidebook,* providing substantive feedback on the document.

Value

We have the depth of knowledge and ability to meet the City's objectives for this project. Our project team has the availability and capacity to quickly and capably address your needs and soundly complete your project – backed by a 35-person firm. Time and again, our project team has realized favorable outcomes when working with citizen groups, boards, and city councils on highly technical and politically sensitive studies.

We look forward to the privilege of working with the City of Redmond. Please do not hesitate to contact me, John Ghilarducci, as the individual authorized to represent the firm at 425.336.1865 or john.ghilarducci@bowman.com.

Sincerely,

John Ghilarducci
Principal-in-Charge
425.336.1865
john.ghilarducci@bowman.com

Doug Gabbard
Project Manager
503.374.1707
doug.gabbard@bowman.com

FCS, a Bowman company
7525 166th Ave. NE, Ste. D-215
Redmond, WA 98052
425.867.1802 | fcsgroup.com | bowman.com

Table of Contents

Executive Summary & Overall Approach

The City of Redmond (City) imposes a park impact fee to provide partial recovery of the cost of park facilities that are needed to accommodate new development. The City currently charges $6,778 per single-family residence, $4,706 per multi-family residence, and $2.558 per residential suite. In addition, the City charges non-residential developments between $815 and $1,836 per 1,000 square feet of gross floor area.

Since park impact fees were last analyzed in 2017, the law has changed. The scaling of residential impact fees is now required by RCW 82.02.060, and impact fees on accessory dwelling units (ADUs) must be no greater than one half of the impact fee that would be charged to the principal residence. FCS will calculate a residential park impact fee that is scaled by dwelling unit size (square footage or bedrooms). This approach will apply not only to the dwelling unit types currently in the City's impact fee schedule, but also to middle housing and other new dwelling unit types.

FCS will also calculate impact fees for non-residential developments that recognize the differential burden that non-residential developments place upon the park system. Our differential demand model is transparent and flexible, so we can customize the calculation to reflect conditions specific to Redmond.

The graphic below outlines the steps of our Task Plan which are detailed on the following pages.

Project Approach

TASK PLAN

Task 1 – Project Kickoff

Upon execution of the contract, FCS will draft and deliver a written data request with all the data items required to complete the project. Upon delivery of the data request, FCS will collaborate with City staff to schedule a kickoff meeting via video conference. During the kickoff meeting, we will review the scope of work, identify and agree on any policy issues to be addressed, clarify the project schedule, and discuss any questions on the data request.

Task 2 – Review of Assets and Projects

With the assistance of our parks planning partner, Conservation Technix, FCS will review both existing assets and planned projects in the Park, Arts, Recreation Culture and Conservation (PARCC) Plan. The review of existing assets will include cost, geographic distribution, level of service, and an assessment of usage (based on available data). The review of planned projects will include any needed updating of cost estimates and identification of projects to be included in the impact fee cost basis. As needed, the team will prioritize planned projects and develop timelines consistent with population and development forecasts.

The evaluation of park usage will include the following steps:

- Analyze current and projected park usage trends.
- Assess service levels and capacity issues based on population growth, housing development, and user demographics.
- Evaluate the geographic distribution and accessibility of park resources.

FCS will meet with City staff up to two times via video conference to review and refine the review of assets and projects.

Task 3 – Impact Fee Calculation

FCS will begin by updating the City's current method, which we understand to be the cash investment approach. Under this approach, the current value of parks infrastructure is divided by the current population to determine the parks investment per person. This result may serve as the park impact fee, once it is "right-sized" to ensure that forecasted fee revenue will not exceed the cost of planned projects.

FCS will also calculate alternative approaches for evaluation by the City. FCS will forecast the quantity of growth to be served by existing and future facilities. This calculation will include growth in both population and employment. Next, FCS will update the impact fee cost basis based on the list of planned projects. FCS will use a level-of-service analysis (begun in Task 2) to determine the eligible (or includable) cost of each planned project (identified in Task 2). After making any necessary

Project Approach

adjustments to the cost basis, FCS will then divide the cost basis by the forecasted growth to determine the impact fee per residential equivalent.

For residential developments, FCS will use Census Bureau data on housing occupancy and City data on average home size to convert the impact fee per residential equivalent to an impact fee per square foot.

This calculated impact fee can then be used across all dwelling unit types, including middle housing. FCS will recommend a cap on chargeable square footage that represents the point at which an increase in home size is no longer associated with an increase in occupancy. If the City's preference is to scale the PIF by the number of bedrooms, FCS will apply a similar approach scale the residential fee(s) by number of bedrooms.

For non-residential developments, FCS will use data on employment density by land use to convert the impact fee per residential equivalent to an impact fee per square foot for each type of non-residential land use.

The funding plan will clarify what funding in addition to impact fees will be needed to complete the capital improvement plan.

FCS will meet with City staff up to two times via video conference to review and refine the impact fee analysis.

Task 4 – Stakeholder Engagement

FCS will deliver up to four on-site presentations to summarize findings and recommendations from Tasks 2-3 to audiences of the City's choice. PowerPoint slides will be provided in advance of each presentation.

Task 5 – Documentation

FCS will deliver a draft report that documents findings and recommendations from Tasks 2-3. The City will have an opportunity to provide feedback on the draft report before delivery of the final version.

Task 6 – Project Management

This task includes general project accounting, contract management, and monthly invoicing. Coordination with our park's planning partner is also part of this task.

Project Management, QC/QA & Reporting

Project Management Approach

Project Manager Doug Gabbard will serve as the primary point of contact for the FCS team, overseeing the project's budget, schedule, and milestones. His management approach emphasizes collaboration, education, and stakeholder engagement to foster the successful adoption of study recommendations. The process is structured around key project phases, referenced in the task plan, providing clear milestones for input and decision-making. FCS prioritizes cost control through task-specific staffing and proactive scope development, while schedule adherence is supported by detailed planning, early regulatory coordination, and strong team oversight. Upon project initiation, Doug will assess the schedule and develop a tailored project management plan including early identification of potential challenges. Check-in meetings will ensure alignment, accountability, and the timely achievement of project goals.

QUALITY CONTROL & ASSURANCE MEASURES

QA/QC is a continuous mindset that runs the course of the project and cannot be inserted intermittently or added at the end. Based on the scope of work, milestones will be tailored to exactly match the needs of each project, and for everyone involved with the project. All deliverables are reviewed first by the project manager and then by the project principal. These independent reviews ensure that the quality of our work product is maximized while errors and ambiguities are minimized. Before final delivery, a final technical and editorial review of each work product is made to ensure that the standard set at the beginning of the project has been achieved and goals have been reached.

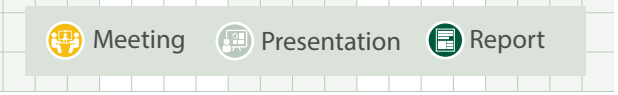
METHOD FOR PROJECT REPORTING

FCS prioritizes consistent communication with our clients, including the use of project reporting dashboards to provide timely updates on project status. These dashboards are updated at key milestones throughout the project and can be shared upon request at any time. Additionally, each invoice will include a progress summary for the billing period, while the five meetings outlined in Tasks 1–3 will provide structured opportunities to review progress and define next steps.

Proposed Schedule

Assuming notice to proceed by the end of September and timely receipt of data, we expect to comfortably complete the task plan by the end of June, 2026. Below is a schedule by task. Please note that the schedule can be compressed if needed to meet City objectives.

Project Task	On Site	Oct 2025	Nov 2025	Dec 2025	Jan 2026	Feb 2026	Mar 2026	Apr 2026	May 2026	Jun 2026
Task 1: Project Kickoff										
1.1 Data request										
1.2 Kickoff meeting via video conference										
Task 2: Review of Assets and Projects										
2.1 Review of assets / plans										
2.2 Park Usage, Demographics & Trends										
2.3 Base Mapping & Spatial Analysis										
2.4 Park & Facility Inventory Capacity Review										
2.5 LOS / Gap Analysis										
2.6 Project List Costing										
2.7 Two meetings with staff via video conference										
Task 3: Impact Fee Calculation										
3.1 Growth										
3.1 Cost basis										
3.3 Adjustments and fee schedule with scaling										
3.4 Funding plan										
3.5 Two meetings with staff via video conference										
Task 4: Stakeholder Engagement										
4.1 Four on-site presentations	4									
Task 5: Documentation										
5.1 Draft report										
5.2 Final report										
Task 6: Project Management										
6.1 Project setup										
6.2 Monthly billing										
6.3 Internal coordination										



Pricing

FCS will complete the scope of work described above for a cost that will not exceed **$79,890**. Below is a table showing a detailed derivation of this budget.

Task Detail	On Site	Ghilarducci Principal	Gabbard PM	Nelson Sr. Analyst	S. Duh PIC, PM, Lead Planner	J. Akers Planner, AICP, PLA	M. Kunec Park Planner	Admin Support	Total Hours	Budget Estimate
Task 1 | Project Kickoff										
1.1 Data request			1	2	2				5	$1,051
1.2 Kickoff meeting via video conference		2	2	2	4	2			12	$2,760
Task 1 Subtotal		2	3	4	6	2			17	$3,811
Task 2 | Review of Assets and Projects										
2.1 Review of assets / plans			1	1	6	8			16	$3,260
2.2 Park Usage, Demographics & Trends					4	5	10		19	$3,245
2.3 Base Mapping & Spatial Analysis					4		14		18	$2,867
2.4 Park & Facility Inventory Capacity Review					4	14			18	$3,528
2.5 LOS / Gap Analysis					6	10	12		28	$4,914
2.6 Project List Costing					3	5			8	$1,607
2.7 Two meetings with staff via video conference		4	4	4					12	$3,000
Task 2 Subtotal		4	5	5	27	42	36		119	$22,420
Task 3 | Impact Fee Calculation										
3.1 Growth		1	2	8					11	$2,285
3.2 Cost basis		1	2	12					15	$3,025
3.3 Adjustments and fee schedule with scaling		1	1	4					6	$1,305
3.4 Funding plan		1	1	4	3	5			14	$2,912
3.5 Two meetings with staff via video conference		4	4	4					12	$3,000
Task 3 Subtotal		8	10	32	3	5			58	$12,527
Task 4 | Stakeholder Engagement										
4.1 Four on-site presentations	4	16	48	32	8	8			112	$25,916
Task 4 Subtotal	4	16	48	32	8	8			112	$25,916

Pricing

Task Detail	On Site	Ghilarducci Principal	Gabbard PM	Nelson Sr. Analyst	S. Duh PIC, PM, Lead Planner	J. Akers Planner, AICP, PLA	M. Kunec Park Planner	Admin Support	Total Hours	Budget Estimate
Task 5 | Documentation										
5.1 Draft report		1	4	16	4				25	$5,127
5.2 Final report		1	2	4	4				11	$2,427
Task 5 Subtotal		2	6	20	8	0	*0*	0	36	$7,554
Task 6 | Project Management										
6.1 Project setup		1	2	1				3	7	$1,320
6.2 Monthly billing			2					3	5	$810
6.3 Internal coordination		1	4	2	4	4			15	$3,293
Task 6 Subtotal		2	8	3	4	4	*0*	6	27	$5,423
Labor Total		**$11,050**	**$19,200**	**$17,760**	**$12,348**	**$11,529**	**$5,103**	**$660**		**$77,650**
Expenses										$2,000
Conservation Technix Direct Expenses										$240
Budget Estimate										**$79,890**
Cost Summary										
Total Hours		**34**	**80**	**96**	**56**	**61**	**36**	**6**	**342**	
Billing Rate		**$325**	**$240**	**$185**	**231**	**198**	**149**	**$110**		

Qualifications and Project Lead & Team

FCS OVERVIEW

FCS, a Bowman company is one of the country's oldest and most respected providers of financial, economic, and utility management services in the public sector. FCS, established in 1988, joined Bowman Consulting in 2024 and serves as the utility finance division for Bowman.

With over 4,000 economic and public finance engagements for more than 650 government clients, FCS provides best-in-class analytical solutions that offer our clients the clarity they need to solve their most complex issues in ways that are tailored to their own communities.

Our 35-person utility finance and rate development team serve clients throughout the U.S. from four offices in Longmont, CO, Redmond and Spokane, WA and Portland, OR.

We are dedicated exclusively to state and local government issues and have accumulated the expertise and perspective that make a real difference for the clients we serve.

4,000+
Local Government & Utility Finance Projects

650+
Public Agency Clients

35+
Public Finance & Utility Rate Development Specialists

4
FCS Offices

As of July 18, 2024, FCS officially joined Bowman. Bowman is a national professional services firm offering multi-disciplinary engineering, planning, energy consulting, surveying, geomatics, construction management, environmental consulting, landscape architecture, right-of-way acquisition and financial and economic services. This change provides a strong foundation for our firms to merge our comprehensive skill sets while offering the same level of commitment to deliver outstanding project results, build long-lasting relationships and leverage the growth of our organization to serve the ever-changing needs of our clients.

Qualifications and Project Lead & Team

AREAS OF EXPERTISE

Impact Fee and Rate Consulting

FCS has performed over 3,000 infrastructure-focused finance and rate development projects for local communities, including defining revenue requirements with comprehensive financial modeling tools, performing long-term capital management strategies, developing full cost-of-service rates, and legally defensible impact fees. We work with agencies large and small in urban and suburban areas, rural systems, regions with seasonal/climate sensitivities, and communities with special commercial/industrial needs. We are experts and educators in utility rate policies and practices and are attentive to legal constraints in every location we work.

We have invested time with agency staff, policymakers, stakeholders, and customers to improve your utility's long-term financial health and integrity.

Utility Management

FCS offers tailored business management solutions. We assist with the formation and merger of utilities, perform cost-benefit analyses, develop strategic business plans and negotiate complicated wholesale agreements, helping your utility maintain its resiliency in an ever-changing environment.

Economic and Funding Strategies

FCS economists help governments create vibrant sustainable communities. We model the fiscal and social return on public investments and provide creative ways of funding projects and services. Challenges turn into opportunities as we support goals aimed at fair housing and job creation.

General Government Financial Analysis

FCS financial consultants specialize in helping local and state governments, regional agencies, and public safety entities address and solve issues involving policy objectives, public finance, cost recovery, facility financing and long-term facility reinvestment funding, and organizational performance. We have a broad understanding and specific expertise on local and state government policymaking; how the many different governmental functions are performed; and what role elected officials, the public, community organizations and employees have in making governments responsive to community needs.

About Bowman

100+ Offices Nationwide
2,300+ Employees
130+ Fully Equipped Field Survey Crews
395+ Professional Engineers
70+ Professional Surveyors
75+ Right-of-Way and Land Professionals
45+ Environmental Specialists
40+ Planners and Designers
35+ Financial/Economic Specialists
25+ Registered Landscape Architects

- Multi-Discipline, Multi-Market Capabilities
- Vast Experience
- National Footprint & Deep Bench of Talent and Resources
- Regional Knowledge & Expertise
- Adept & Energetic Leadership
- Long-Standing Industry Relationships
- Jurisdictional Requirements Expertise
- Results-Oriented Attitude
- Exceptional Responsiveness

Qualifications and Project Lead & Team

CONSERVATION TECHNIX OVERVIEW

Since 2006, Conservation Technix has assisted local government and non-profit organizations in efforts to finance and conserve greenspaces through innovative solutions and dynamic strategy development. Conservation Technix specializes in developing comprehensive park system master plans that address park and recreation facilities, open space and trails, programs and services, maintenance, and future staffing and funding strategies.

Through significant and relevant experience in public administration and management, Conservation Technix's staff have "on the ground" knowledge of plan implementation, marketing and finance strategy development, along with a keen understanding of the requisite integration of capital facility planning, budgeting and operations.

Conservation Technix's approach to open space planning enables substantial public involvement and engenders guidance from policymakers to ensure an implementable plan adapted to specific community goals. At our core, we are a planning firm that embraces and respects community-based public processes and aims to use public engagement to build community understanding for and support in client projects.

The firm is registered in Washington and has completed recent park system plan updates for Redmond, Sammamish, Mercer Island and Edmonds, among others.

Qualifications and Project Lead & Team

FCS is promoting a small, focused team who will be available and committed to working on this engagement for its duration. John Ghilarducci, principal-in-charge, will anchor your team as a nationally recognized policy and impact fee development expert. He will be supported by project manager Doug Gabbard and a team of experienced analysts and project consultants. With a staff that includes over 30 rate and fee development experts, FCS maintains the necessary depth, breadth, and capacity to deliver this project on time and within budget. The following biographies summarize each individual's experience and education and project role.

John Ghilarducci | Principal-in-Charge

John is an FCS principal with over 37 years of professional experience – including 34 years with the firm. His practice focuses on all aspects of utility and general services system development charges (SDCs) and utility rate studies, from technical modeling and public involvement to ordinance drafting and implementation. He has formed stormwater and transportation utilities and has developed water, sewer, stormwater, transportation and parks rates and charges for hundreds of clients. John is a recognized technical rate and finance expert and offers litigation support/expert witness testimony throughout the Northwest.

Role

As the principal-in-charge, John will be responsible for contract negotiation, technical vision, management and review of work products, commitment of resources, quality assurance, and deliverables.

John's innovative rate making approaches have resulted in "level of service" stormwater rates, area-specific impact fees, sewer strength sub-classes, inverted block water rate structures, defensible stormwater rate credit methodologies, person-trip based transportation impact fees suitable for multi-modal transportation capital plans, and nonresidential and scaled residential park impact fees. He offers a broad knowledge of public policy and finance, and a thorough understanding of the institutional issues and options underlying the formation of utilities and the design of supporting rate and charge structures. **His project experience includes:**

- **City Of Kirkland, WA** – Parks, Transportation & Fire Impact Fees Study
- **City Of Fife, WA** – Park Impact Fee Study
- **City Of Camas, WA** – Park Impact Fee Study
- **City Of Pacific, WA** – Park Impact Fee Study
- **City Of Issaquah, WA** – Park, Transportation & Fire Impact Fees
- **City Of Kent, WA** – Park Impact Fee Study
- **City Of Federal Way** – Park Impact Fee
- **Pierce County, WA** – Park Impact Fee Work Group
- **City Of Olympia, WA** – Park Impact Fee Update
- **City Of Sammamish, WA** – Park & Transportation Impact Fees
- **City Of Astoria, OR** – Transportation, Parks, Water, Sewer & Stormwater Impact Fees

Education

MPA, Organization and Management
University of Washington

BS, Economics
University of Oregon

Qualifications and Experience

Key Point of Contact

Doug Gabbard | Project Manager

Doug is an FCS, an Bowman company, project manager with 19 years of analytical experience in municipal and private sector positions. His comprehensive financial planning experience involves extensive water, wastewater, and stormwater utility rate development, long-term financial planning, and system development charges. Doug has created detailed, interactive models that facilitate sensitivity analysis and scenario testing to determine business direction in group decision-making environments. He has also conducted economic analyses, cost-of-service analyses, and business process improvement projects.

Doug has spent the last 13 years helping local governments in the Pacific Northwest to calculate and implement impact fees and system development charges that comply with state statutes and federal case law. In Washington, Doug has developed defensible, data-driven approaches to complying with recent changes in impact fee law that require residential scaling. In fact, his method for calculating the size cap for dwelling units has found its way into the guidance being developed by the Washington State Department of Commerce. **His project experience includes:**

- **City Of Kirkland, WA** – Parks, Transportation & Fire Impact Fees Study
- **City Of Pacific, WA** – Park Impact Fee Study
- **City Of Issaquah, WA** – Park, Transportation & Fire Impact Fees
- **City Of Kent, WA** – Park Impact Fee Study
- **Pierce County, WA** – Park Impact Fee Work Group
- **City Of Olympia, WA** – Park Impact Fee Update
- **City Of Sammamish, WA** – Park & Transportation Impact Fees

Role

Doug will be responsible for project management, technical direction, project oversight, and quality assurance. He will be involved with preparing for and presenting at key meetings.

Education

MBA, Finance
University of Oregon

BA, Classical Languages
Santa Clara University

Luke Nelson | Senior Analyst

Luke is an FCS, a Bowman company senior analyst specializing in data analysis and utility modeling. His previous experience includes financial reporting, budgeting, and database management. Luke played a key role in developing approaches to complying with recent changes in Washington impact fee law. **His project experience includes:**

- **Kirkland, WA** – Park, Transportation, and Fire Impact Fee Study
- **Pasco, WA** – Fire Impact Fee Update Study
- **Valley Regional Fire Authority, WA** – Fire Impact Fee Study
- **Pacific, WA** – Park Impact Fee
- **Sammamish, WA** – Transportation and Park Impact Fee Study

Role

Luke will be responsible for data collection, financial modeling and reporting.

Education

BS in Economics
Washington State University

Qualifications and Experience

Steve Duh, CPRP | Conservation Technix

Steve is a Certified Park and Recreation Professional and has over 20 years of experience in public sector and non-profit program management. Steve brings six years of hands-on public agency experience as program manager for Vancouver-Clark Parks and Recreation Department where he helped establish a voter-approved parks district to enable a $40 million program of park development, established an off-leash dog area program, managed the park impact fee program and led several interagency plans. Steve will lead the system planning, including policy frameworks, strategies and partnership opportunities. **His project experience includes:**

Role

Steve will provide parks planning support.

- **Redmond, WA** – Park System Plan Update
- **Sammamish, WA** – Park System Plan Update
- **Edmonds, WA** – Parks, Recreation & Open Space Plan Update
- **Mercer Island, WA** – Parks, Recreation & Open Space Plan
- **Tacoma, WA** – Urban Forestry Management Plan Public Engagement
- **Happy Valley, OR** – Parks, Recreation & Open Space Plan

Education

Master's degree, Urban and Regional Planning
Portland State University

Bachelor of Science, Environmental Science
SUNY College of Environmental Science & Forestry

NRPA Rocky Mountain Revenue Management School

FCS & Conservation Technix Teaming History

Since the establishment of their partnership in 2015, FCS Group and Conservation Technix have cultivated a strong and collaborative relationship grounded in mutual expertise and a shared commitment to serving communities across the Pacific Northwest. Over the past decade, both firms have worked together extensively to support a variety of municipalities, developing a deep understanding of regional planning needs and priorities.

Their collaboration has included joint efforts on multiple Parks and Recreation impact studies for cities such as Camas, Happy Valley, Medford, North Clackamas, and Tigard. These projects have involved coordinated assessments of parks infrastructure, service levels, and funding mechanisms, contributing to data-driven planning and long-term community benefits. Through this ongoing partnership, FCS and Conservation Technix have demonstrated their capacity to deliver cohesive, regionally informed solutions tailored to the unique needs of their clients.

Project Experience

Parks, Transportation and Fire Impact Fee Studies (2022 – 2024)

City of Kirkland, WA

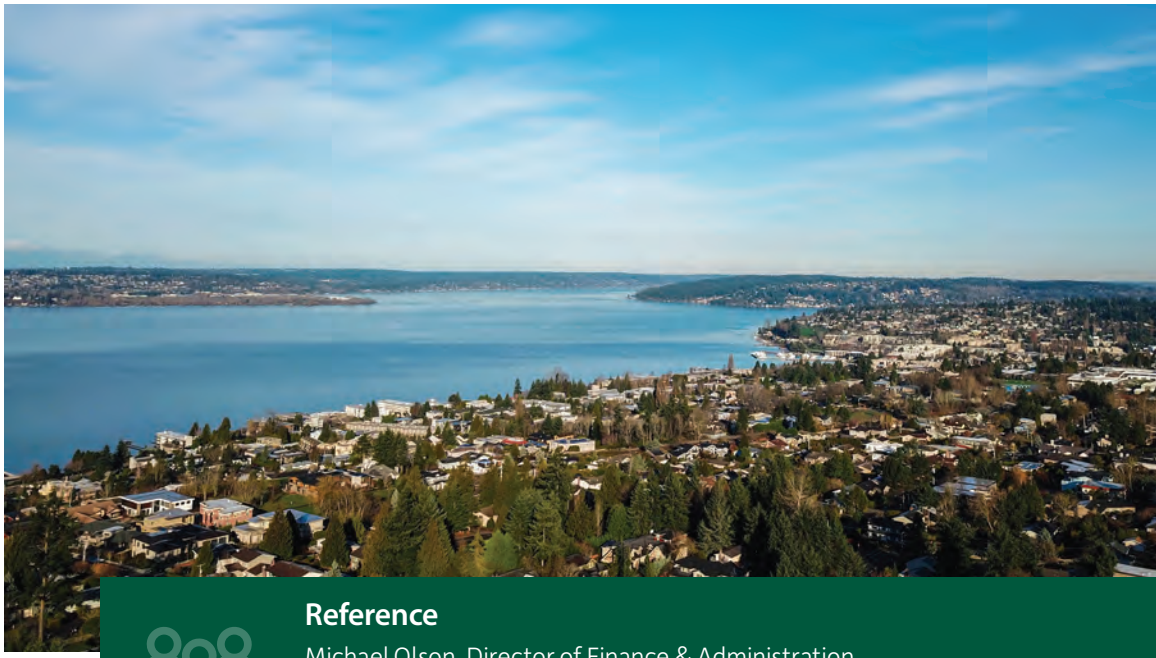
FCS recently completed a comprehensive parks, transportation, and fire impact fee update of a similar study FCS performed in 2020. FCS also completed a water, wastewater, and stormwater SDC update in 2022. **See Work Sample on page 23 for project report.**

Project Highlights

- Updated the existing transportation and park impact fees and developed the City's first fire impact fee in 2020.
- Developed residential scaling options for parks, fire, and transportation impact fees in compliance with RCW 82.02.060.
- Wrote a policy memorandum that included analysis and recommendations on such issues as impact fee indexing, low-income housing exemptions, and methodology and adjustment options for all three services.
- Incorporated King County residential scaling into the wastewater SDC schedule, varying the number of RCEs by dwelling unit square footage.
- In all cases, calculated fee and SDC options and presented them to the City Council for consideration.

Key Personnel

John Ghilarducci, Principal-in-Charge
Doug Gabbard, Project Manager



Reference

Michael Olson, Director of Finance & Administration
425.587.3146, molson@kirklandwa.gov

Project Experience

Park Impact Fee Studies (2017 – 2022)

City of Federal Way, WA

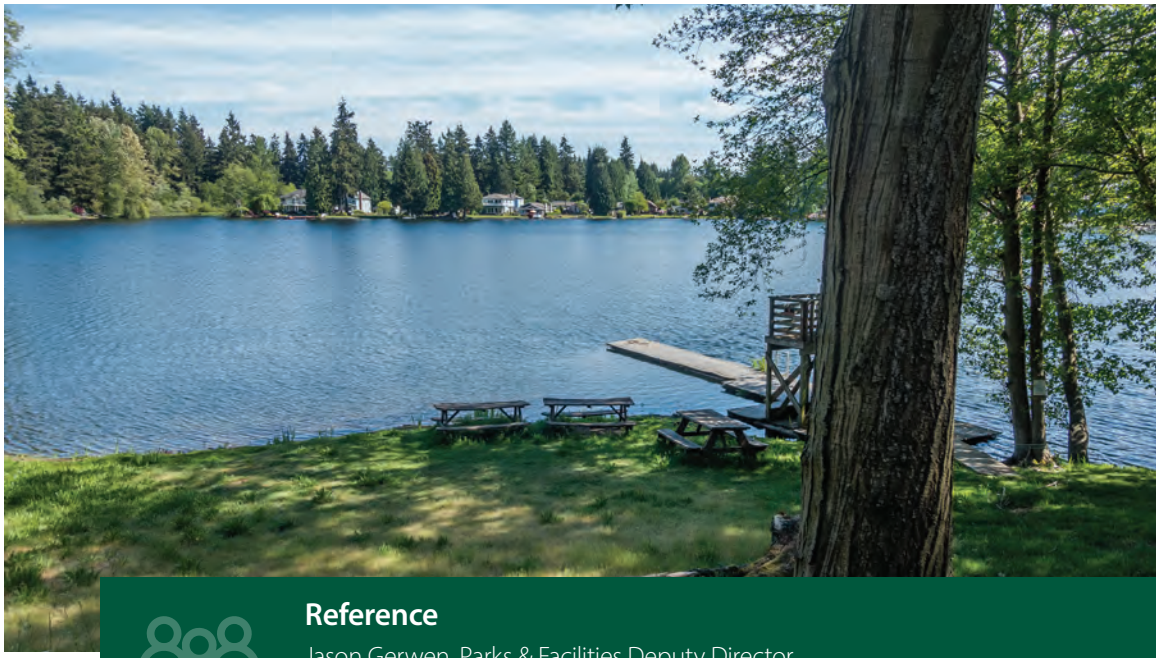
FCS recently developed a scaled park impact fee to comply with RCW 82.02.060. Previously, in 2022, FCS performed a park impact fee study for the City. The City had never had a PIF before the study and was interested in incorporating the funding of over $60 million worth of parks projects planned for the next twenty years. **See Work Sample on page 23 for project report.**

Project Highlights

- Developed a flexible and well-documented PIF model that accommodated multiple revisions.
- Calculated a competitively low impact fee, reflecting the City's mature park system and limited existing facilities due to recent incorporation.
- Collaborated closely with City staff on comprehensive planning and ordinance drafting to support smooth adoption.
- Guided the ordinance through a multi-stage adoption process, including revisions and planning alignment.
- Presented to stakeholder groups and City Council, addressing questions and supporting successful ordinance adoption.

Key Personnel

John Ghilarducci, Principal-in-Charge



Reference

Jason Gerwen, Parks & Facilities Deputy Director
253.835.6912, jason.gerwen@cityoffederalway.com

Project Experience

Park Impact Fee Study (2017 – 2022)

City of Camas, WA

In 2022 and 2025, FCS led efforts to update the Camas Park Impact Fee. FCS wrote issue papers on impact fee calculation methodologies, nonresidential PIFs, scaling, and uniform versus area-specific impact fees. A recently completed Parks Master Plan provided a baseline projects list which was augmented by construction unit costs to determine a current impact fee cost basis. The updated cost basis was divided by the number of new residential equivalents to determine a per capita park impact fee. The per capita fee was converted to a schedule applied by dwelling unit type, scaled by dwelling unit size. Recommendations and the supporting methodology were adopted by the city. The resulting schedule included nonresidential fees and a scaled residential PIF.

Project Highlights

- Refined the policy direction and analytical results with City Staff, the Parks and Recreation Commission, and the City Council across many meetings.
- Provided direction throughout the adoption process including:
    1. PIF ordinance language and adoption direction
    2. Specific credit-related code language and advice on how to implement credits to comply with state law
    3. PIF methodology report

Key Personnel

John Ghilarducci, Principal-in-Charge

Reference

Trang Lam, Parks & Recreation Manager, now with the Port of Camas-Washougal
360.835.2196, trang@portcw.com

Project Experience

Park Impact Fee Study (2023)

City of Pacific, WA

Seeking greater revenue for parks facilities than its existing impact fee of $468 per dwelling unit could provide, the City sought the help of FCS to recalculate its parks impact fee based on updated project lists and growth assumptions.

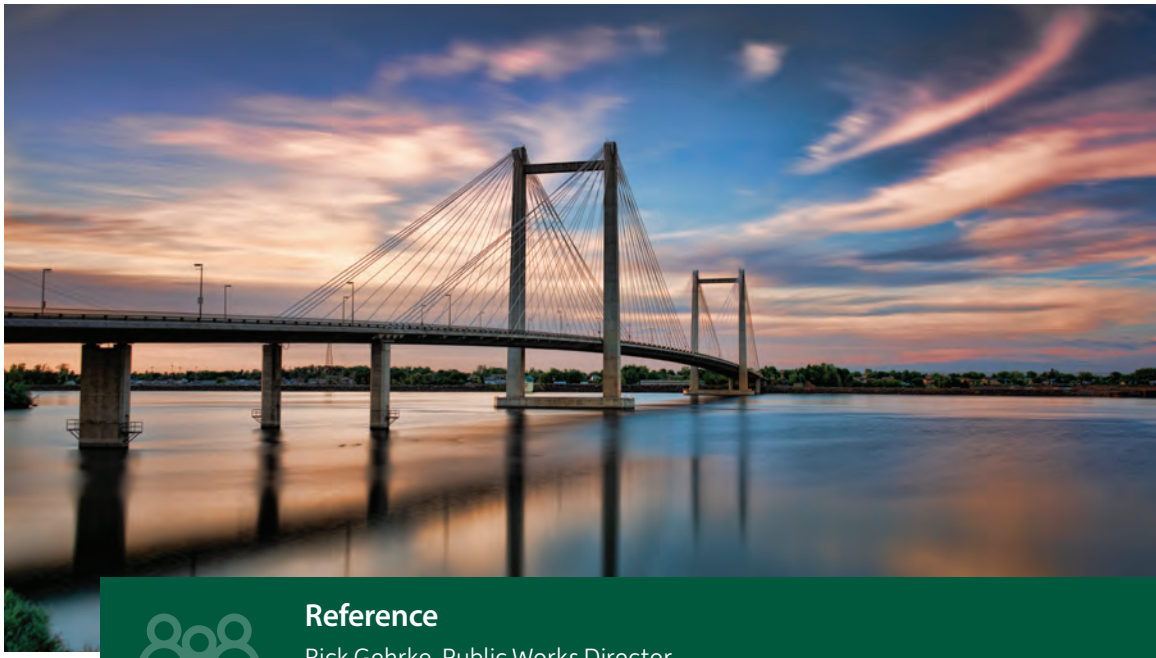
Project Highlights

Not only did FCS calculate a maximum defensible impact fee of $3,379 per dwelling unit, it guided the city council through a range of policy decisions:

- Should the maximum impact fee be implemented immediately, phased-in over a period of years, or discounted permanently?
- Should the City continue to impose a parks impact fee on non-residential development? If so, how does non-residential park demand compare with residential park demand?
- What is the best way to implement new state requirements on scaling impact fees based on the size of the dwelling unit?
- Provided clear explanations of options and helped councilors to weigh the trade-offs during an on-site presentation to City Council.
- Culminated in a 12-page report that documented not only the impact fee calculations, but also the policy issues raised by the City.

Key Personnel

John Ghilarducci, Principal
Doug Gabbard, Project Manager



Reference
Rick Gehrke, Public Works Director
253.929.1113, rgehrke@ci.pacific.wa.us

Project Experience

Park Impact Fee Study (2020 – 2021)

City of Kent, WA

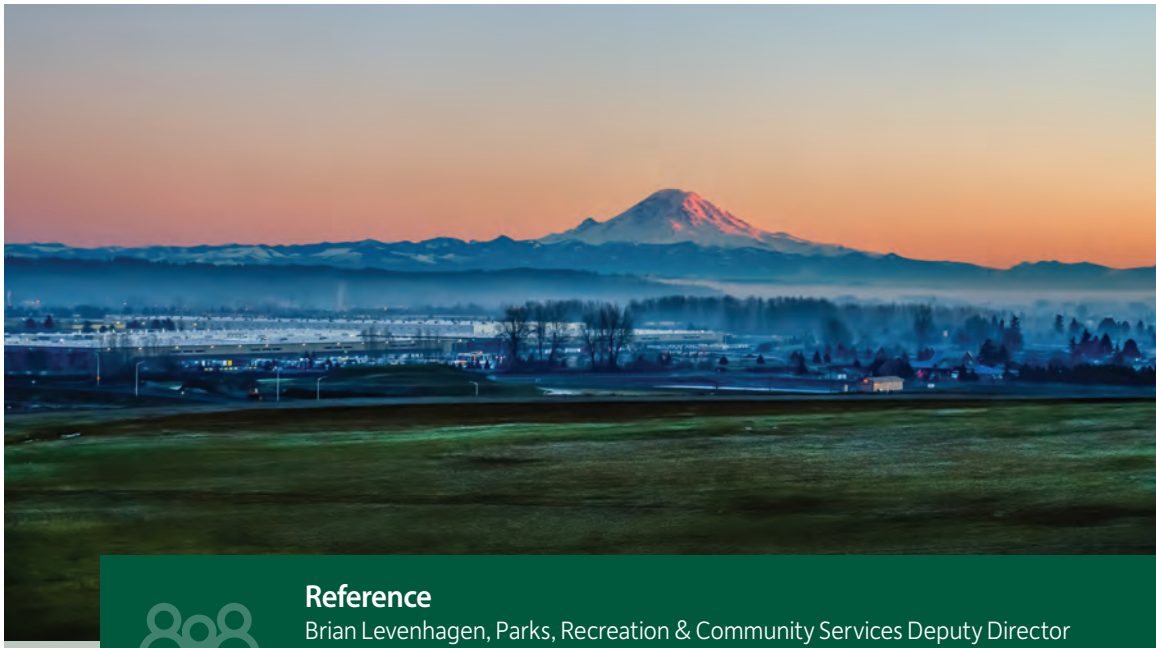
In 2021, FCS completed a park impact fee study for the City of Kent. As a rapidly growing city, with growth in residential housing and commercial development, Kent desired to implement an impact fee for its parks system to help fund future system expansion.

Project Highlights

- Conducted a detailed legal analysis of Washington's impact fee laws, focusing on statutory restrictions and limitations.
- Authored a policy memo evaluating various impact fee approaches, including integration of non-residential development into park fees and potential effects on affordable housing.
- Incorporated the City's "Recreational Value" metric into the park impact fee level of service (LOS) analysis.
- Assessed multiple LOS methodologies to identify the most appropriate for the City's context.
- Collaborated with City staff to evaluate project eligibility based on park classifications (neighborhood, urban, community, etc.).
- Developed a fee schedule grounded in actual occupancy data from the City of Kent.
- Presented analysis and recommendations to City Council alongside City staff.
- Created a funding strategy for $43M in park projects (2021–2026), with 28% of the CIP eligible for impact fee funding.
- Benchmarked proposed fees against neighboring jurisdictions, confirming alignment with regional norms.

Key Personnel

John Ghilarducci, Principal
Doug Gabbard, Project Manager



Reference
Brian Levenhagen, Parks, Recreation & Community Services Deputy Director
253.856.5116
bjlevenhagen@kentwa.gov

References

1

City of Kirkland, WA

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Director of Finance & Administration
425.587.3146
molson@kirklandwa.gov

2

City of Federal Way, WA

Jason Gerwen
Parks & Facilities Deputy Director
253.835.6912
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3

City of Camas, WA

Trang Lam, Parks & Recreation Manager
(now with the Port of Camas-Washougal)
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City of Pacific, WA

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Public Works Director
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rgehrke@ci.pacific.wa.us

5

City of Kent, WA

Brian Levenhagen
Parks, Recreation & Community Services
Deputy Director
253.856.5116
bjlevenhagen@kentwa.gov

Client List

SELECTION OF NORTHWEST IMPACT FEE CLIENTS

FCS and our proposed team have completed hundreds of impact fee studies throughout the Northwest. We have used this broad experience to inform and enhance the "best practices" we apply in Washington. The following are just a few examples of related engagements in Washington and other select states.

Client	Scaling	Parks	Transportation	EMS/ Police/ Fire	Utilities	Building/ Planning	Library/Schools
Airway Heights, WA				•	•		•
Algona, WA			•				
Auburn, WA				•	•	•	
Astoria, OR	•	•		•	•		
Aurora, CO					•		
Bellevue, WA	•	•					
Bellingham, WA		•		•	•	•	•
Bonney Lake, WA	•	•	•				
Bothell, WA					•	•	
Camas, WA	•	•		•			
Canby, OR		•	•		•	•	•
Central Point, OR		•	•		•		
Cheyenne, WY					•		
Clackamas County, OR				•			
Coburg, OR		•	•		•		
Coeur d' Alene, ID		•	•	•	•		
Corvallis, OR	•	•	•		•		
Cottage Grove, OR		•	•		•		
Duvall, WA	•	•					
Evans, CO					•		
Federal Way, WA	•	•					
Fife, WA	•	•					
Forest Grove, OR					•		•
Friday Harbor, WA				•			
Happy Valley, OR		•	•				
Hayden, ID		•	•	•	•	•	

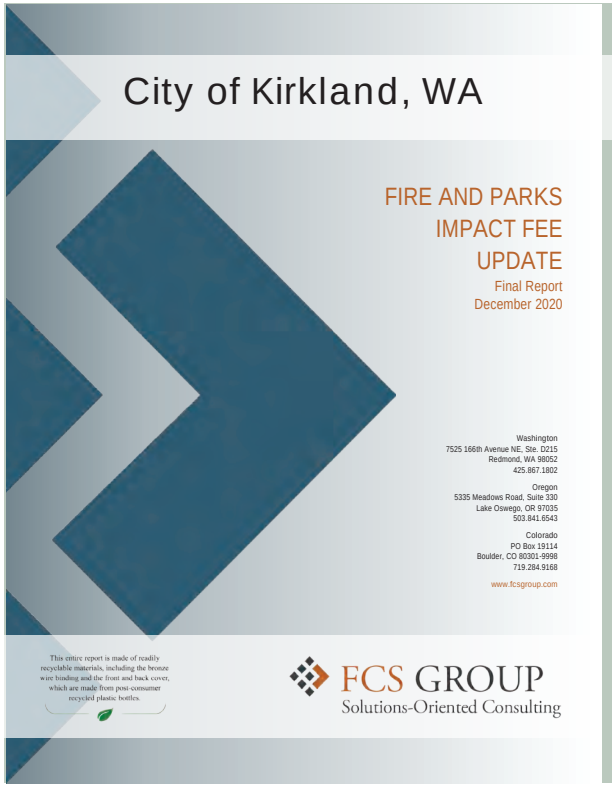
Client List

Client	Scaling	Parks	Transportation	EMS/ Police/ Fire	Utilities	Building/Planning	Library/Schools
Hillsboro, OR			•				
Hood River, OR		•	•		•		
Issaquah, WA	•	•	•	•		•	
Kennewick, WA				•			
Kent, WA		•					
Kirkland, WA	•	•	•	•	•	•	
Long Beach, CA				•			
Maple Valley, WA	•	•					
Medford, OR		•					
Nampa, ID					•		
Newport, OR	•	•	•		•		
North Bend, WA	•	•	•	•			
Oak Harbor, WA	•	•	•	•			•
Olympia, WA		•				•	
Oregon City, OR		•	•	•	•		
Pacific, WA	•	•					
Pasco, WA			•	•			
Pierce County, WA	•	•					
Post Falls, ID					•		
Puyallup, WA		•		•			
Sammamish, WA	•	•	•				
Seattle, WA		•					
Shady Cove, OR		•	•		•		
Silverton, OR	•	•	•		•		
St Helens, OR		•	•		•		
Troutdale, OR			•		•		
University Place, WA			•				
Valley Regional Fire Authority, WA	•			•			
Vancouver, WA			•	•		•	
Walla Walla, WA				•	•	•	
Whitefish, MT		•	•	•	•		

Work Samples

Please reference **Appendix A** for these work samples in their entirety.

SAMPLE REPORTS



City of Kirkland, WA

FIRE AND PARKS IMPACT FEE UPDATE

Final Report
December 2020

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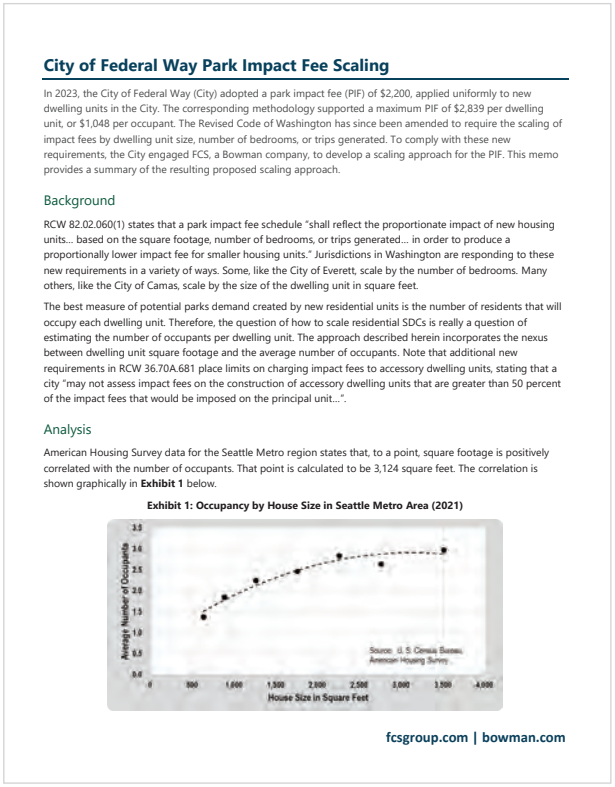


City of Federal Way Park Impact Fee Scaling

In 2023, the City of Federal Way (City) adopted a park impact fee (PIF) of $2,200, applied uniformly to new dwelling units in the City. The corresponding methodology supported a maximum PIF of $2,839 per dwelling unit, or $1,048 per occupant. The Revised Code of Washington has since been amended to require the scaling of impact fees by dwelling unit size, number of bedrooms, or trips generated. To comply with these new requirements, the City engaged FCS, a Bowman company, to develop a scaling approach for the PIF. This memo provides a summary of the resulting proposed scaling approach.

Background

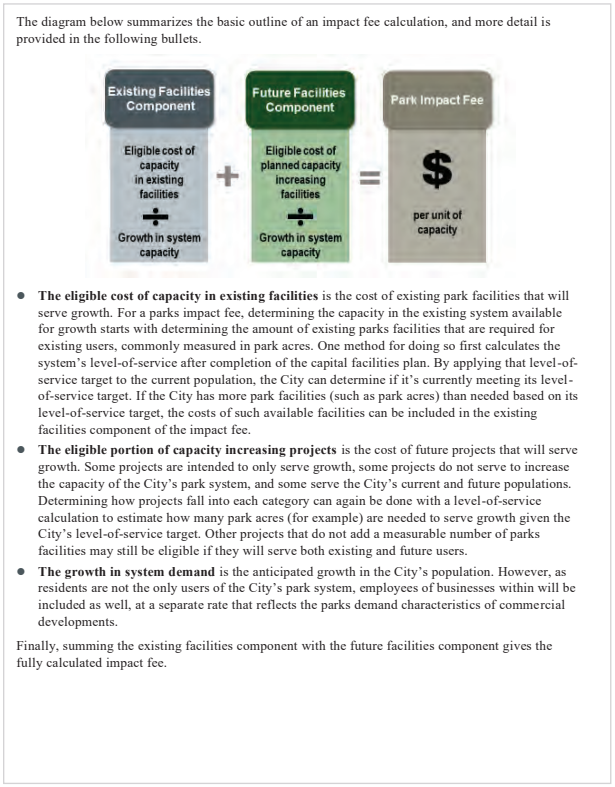
RCW 82.02.060(1) states that a park impact fee schedule "shall reflect the proportionate impact of new housing units... based on the square footage, number of bedrooms, or trips generated... in order to produce a proportionally lower impact fee for smaller housing units." Jurisdictions in Washington are responding to these new requirements in a variety of ways. Some, like the City of Everett, scale by the number of bedrooms. Many others, like the City of Camas, scale by the size of the dwelling unit in square feet.

The best measure of potential parks demand created by new residential units is the number of residents that will occupy each dwelling unit. Therefore, the question of how to scale residential SDCs is really a question of estimating the number of occupants per dwelling unit. The approach described herein incorporates the nexus between dwelling unit square footage and the average number of occupants. Note that additional new requirements in RCW 36.70A.681 place limits on charging impact fees to accessory dwelling units, stating that a city "may not assess impact fees on the construction of accessory dwelling units that are greater than 50 percent of the impact fees that would be imposed on the principal unit...".

Analysis

American Housing Survey data for the Seattle Metro region states that, to a point, square footage is positively correlated with the number of occupants. That point is calculated to be 3,124 square feet. The correlation is shown graphically in **Exhibit 1** below.

Exhibit 1: Occupancy by House Size in Seattle Metro Area (2021)



The diagram below summarizes the basic outline of an impact fee calculation, and more detail is provided in the following bullets.

- **The eligible cost of capacity in existing facilities** is the cost of existing park facilities that will serve growth. For a parks impact fee, determining the capacity in the existing system available for growth starts with determining the amount of existing parks facilities that are required for existing users, commonly measured in park acres. One method for doing so first calculates the system's level-of-service after completion of the capital facilities plan. By applying that level-of-service target to the current population, the City can determine if it's currently meeting its level-of-service target. If the City has more park facilities (such as park acres) than needed based on its level-of-service target, the costs of such available facilities can be included in the existing facilities component of the impact fee.
- **The eligible portion of capacity increasing projects** is the cost of future projects that will serve growth. Some projects are intended to only serve growth, some projects do not serve to increase the capacity of the City's park system, and some serve the City's current and future populations. Determining how projects fall into each category can again be done with a level-of-service calculation to estimate how many park acres (for example) are needed to serve growth given the City's level-of-service target. Other projects that do not add a measurable number of parks facilities may still be eligible if they will serve both existing and future users.
- **The growth in system demand** is the anticipated growth in the City's population. However, as residents are not the only users of the City's park system, employees of businesses within will be included as well, at a separate rate that reflects the parks demand characteristics of commercial developments.

Finally, summing the existing facilities component with the future facilities component gives the fully calculated impact fee.

Appendix A: Work Samples

City of Kirkland, WA

FIRE AND PARKS IMPACT FEE UPDATE

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TABLE OF CONTENTS

Section I. INTRODUCTION

The City of Kirkland, Washington (City) is a growing city with increasing demands for parks facilities. To help offset the costs that these demands place upon the City, the City imposes a Parks Impact Fee of $4,391 for a single-family home, and $3,338 for a multi-family dwelling unit. This fee was intended to recover an equitable share of system costs from growth, recognizing both the investments in infrastructure that the City has made and the future investments that the City will have to make to provide capacity to serve growth. The parks impact fee was last studied in 2015, and the City Council adopted Park Impact fees based on this study, which became effective in 2016. The fees have been indexed to inflation over the intervening time period and have thus increased every year. In 2020, the City contracted with FCS GROUP to update the fee. In addition, the City requested an initial impact fee for its fire and emergency medical services, which is included in this report. The scope of work also included updating the City's Transportation Impact Fee, but finalizing that work has been put on hold pending updates to the City's Transportation Management Plan (TMP) expected in 2021. Those results will be summarized in a separate report when the new information has been incorporated.

Consistent with these objectives, this study included the following key elements:

- **Overview of Washington Laws and Methodology Alternatives**. We worked with City staff to examine previous impact fee methodologies and evaluate alternative approaches in compliance with Washington law.

- **Develop Policy Framework**. We worked with City staff to identify, analyze, and agree on key policy issues and direction.

- **Technical Analysis**. In this step, we worked with City staff to resolve technical issues, isolate the recoverable portion of existing and planned facilities costs, and calculate fee alternatives. The most important technical consideration involves the identification and inclusion of planned capacity-increasing project costs.

- **Documentation and Presentation**. In this step, we presented preliminary findings to the City Council and summarized findings and recommendations in this report.

Section II. Impact Fee Legal Overview

Impact fees are enabled by state statutes, authorized by local ordinance, and constrained by the United States Constitution. Impact fees allow cities to recover some of the cost of expanding public facilities necessitated by growth. These fees allow "growth to pay for growth" in a fair and equitable manner. Impact fees have a specific definition and associated constraints in the state of Washington. Impact fees are allowed under RCW 82.02.050 through 82.02.110 and are permitted for:

- Public streets and roads
- Publicly owned parks, open space, and recreation facilities
- School facilities
- Fire protection facilities

The statute provides specific guidance on the permissible methodology for calculating impact fees. This guidance can be broken down into three major categories:

1. **Eligibility Requirements**. RCW 82.02.050(3) states that impact fees:
    a. Shall only be imposed for system improvements that are reasonably related to the new development;
    b. Shall not exceed a proportionate share of the costs of system improvements that are reasonably related to the new development; and;
    c. Shall only be used for system improvements that will reasonably benefit the new development.

    These requirements, which exist to protect developers, ensure that impact fees are based on—and spent for—capacity that will directly or indirectly serve new development. That is why careful scrutiny is given to the included project list. Moreover, the impact fee that a developer pays must represent that particular development's fair share of required capacity. That is why developments pay a unique fee based on land use, anticipated occupancy, and size.

    Additionally, RCW 82.02.050(5) states that "Impact fees may be collected and spent only for the public facilities . . . which are addressed by the capital facilities plan element of a comprehensive land use plan." This means that if a project is not listed in the adopted capital facilities plan element, then it is not eligible to be included in impact fee calculations.
2. **Cost Basis**. RCW 82.02.060(1) outlines the cost basis of impact fee calculations, stating that the basis must consider:
    a. The cost of public facilities necessitated by new development;
    b. An adjustment to the cost of the public facilities for past or future payments made or reasonably anticipated to be made by new development to pay for particular system improvements in the form of user fees, debt service payments, taxes, or other payments earmarked for or pro-ratable to the particular system improvement;

c. The availability of other means of funding public facility improvements;

d. The cost of existing public facilities improvements; and

e. The methods by which public facilities improvements were financed.

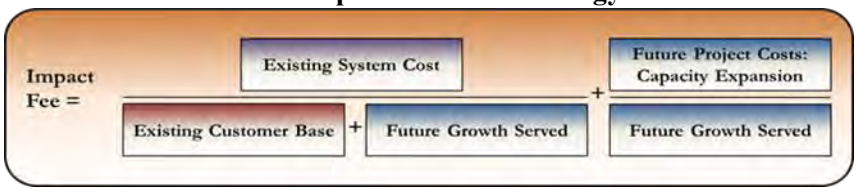
This means that adjustments to the impact fee cost basis must be made for the amount of outstanding debt that was or will be used to pay for capital facility improvements, as well as other methods of funding public facilities improvements.

3. **Customer Base**. The costs determined to be eligible must be proportionately allocated across the projected customer base.

Section III. FIRE IMPACT FEE

The City does not currently have a fire impact fee. Therefore, instead of an update using an existing methodology, a new methodology must be applied. This study uses the *buy in plus growth method*, meaning that the impact fee is comprised of two separate parts: the existing cost component and the future cost component. Conceptually, this recognizes that the new customer is not fully served by the existing system, as evidenced by the need to make additional expansion investments. An expansion charge is added to this existing system charge by dividing the expansion portion of future capacity investments by the projected growth. The existing cost component consists of the existing system cost, divided by the existing customer base *plus* the future growth served. The future cost component consists of the capacity expanding portion of future projects, divided by *only* future growth served. These two components are then added together to create the fire impact fee. This methodology is shown in **Exhibit 1**.

Exhibit 1
Fire Impact Fee Methodology



Each of these components requires explanation and is examined in detail below.

III.A. EXISTING SYSTEM COST

The existing system cost is simply the cost of the City's existing assets used to provide fire and EMS services. This primarily consists of fire apparatus (including engines, aid cars, and marine units), miscellaneous equipment, and fire stations that are currently in service. The included assets are shown in **Exhibit 2** and **3.**

Exhibit 2
Fire Apparatus

Veh #	Acquisition Date	Useful Life	Original Cost
F-612	2003	18	$ 355,048
F-613A	2005	18	169,694
F-213	2006	8	58,314
F-613B	2006	18	233,605
F403B	2007	17	4,814
F-613C	2007	17	632
F-216	2008	8	66,368
F-318A	2010	8	188,990
F-614A	2010	18	542,752
F-614B	2010	18	244
F-318B	2011	8	1,243
F-614C	2011	18	2,163
F-319A	2012	8	197,374
F-615A	2012	18	269,200
F-319B	2013	8	330
F-615B	2013	18	311,091
F-320	2014	8	211,243
F-321	2014	8	211,455
F-507A	2014	8	2,403
F-615C	2014	17	2,947
F-322A	2015	8	225,148
F-323A	2015	8	225,148
F-507B	2015	18	1,215,767
F-616A	2015	18	603,529
Marine-1	2015	10	38,690
Marine-2	2015	10	38,690
F-318C	2016	8	40,359
F-319C	2016	8	40,359
F-322B	2016	8	42,739
F-323B	2016	8	42,769
F-507C	2016	8	1,349
F-616B	2016	8	23
F-617	2017	18	665,441
F 617	2018	18	22,418
F214X	2006	8	26,964
F222	2014	8	31,265
F223	2014	8	31,265
F224	2014	8	31,265
F225	2014	8	31,265
Included Total			$ 6,184,368

The total apparatus cost is $6.2 million. The other major component of the City's assets is its fire stations, which total $8.5 million.

Exhibit 3
City Fire Stations

Station	Year Acquired	Original Cost
Fire Station #21	1998	$ 1,352,826
Fire Station #22	1980	662,700
Fire Station #26	1994	1,588,088
FS#25 (FD41 Annex)	2011	1,078,600
Fire Station #25 Renovation	2018	3,653,513
FS#27 (FD41 Annex)	2011	213,700
Total		$ 8,549,428

Combined with $379,317 in included miscellaneous equipment, the total existing cost component can be calculated as shown in **Exhibit 4** below and totaling $15,113,113.

Exhibit 4
Existing Cost Component

Asset Category	Cost
Apparatus	$ 6,184,368
Miscellaneous Equip.	379,317
Stations	8,549,428
Existing Cost Component	$ 15,113,113

III.B. CUSTOMER BASE

The next step is to calculate the existing customer base. The City provided the number of dwelling units in the City in 2015, along with the area (in square feet) of various nonresidential land use types. Based on the City's comprehensive plan, anticipated development by 2035 and annual growth rates could be calculated as shown in **Exhibit 5**. Using the compound annual growth rate, the total amount of development in 2019 could be interpolated. Development in 2019 is the existing customer base, and the estimated development between 2020 and 2035 is the future customer base.

Exhibit 5
Development

Land Use	Measurement	2015 Existing	Additional 2035 Development	Compound Annual Growth Rate	2019 Development
Commercial	Sq. Ft.	4,063,759	889,766	0.99%	4,227,905
Office & Industrial	Sq. Ft.	8,799,061	4,831,614	2.21%	9,604,008
Schools	Sq. Ft.	2,468,850	551,102	1.01%	2,570,371
Health Care	Sq. Ft.	2,017,135	450,269	1.01%	2,100,081
Government	Sq. Ft.	320,571	71,559	1.01%	333,753
Single-Family	Dwelling Unit	20,451	3,511	0.80%	21,109
Multifamily	Dwelling Unit	17,086	10,153	2.36%	18,756

The City provided response data from 2019, categorized by land use type. This was used to calculate the 2019 incident generation rate, or the number of incidents generated by each unit of development, as shown in **Exhibit 6**.

Exhibit 6
2019 Incident Generation Rate

Land Use	Measurement	2019 Development	2019 Incidents	2019 Incident Generation Rate
Commercial	Sq. Ft.	4,227,905	936	0.00022
Office & Industrial	Sq. Ft.	9,604,008	169	0.00002
Schools	Sq. Ft.	2,570,371	220	0.00009
Health Care	Sq. Ft.	2,100,081	1,092	0.00052
Government	Sq. Ft.	333,753	162	0.00049
Single-Family	Dwelling Unit	21,109	2,903	0.13754
Multifamily	Dwelling Unit	18,756	2,157	0.11500
Total			7,640	

Assuming that incident generation rates across land use types remain the same, an incident forecast for 2035 can be prepared, as shown in **Exhibit 7**.

Exhibit 7
Incident Forecast

Land Use	Measurement	2015 Existing	2035 Development	2019 Incident Generation Rate	2035 Incident Forecast
Commercial	Sq. Ft.	4,063,759	4,953,525	0.00022	1,097
Office & Industrial	Sq. Ft.	8,799,061	13,630,675	0.00002	240
Schools	Sq. Ft.	2,468,850	3,019,952	0.00009	259
Health Care	Sq. Ft.	2,017,135	2,467,404	0.00052	1,283
Government	Sq. Ft.	320,571	392,130	0.00049	191
Single-Family	Dwelling Unit	20,451	23,962	0.13754	3,296
Multifamily	Dwelling Unit	17,086	27,239	0.11500	3,133
Total					9,497

The annual number of incidents is expected to grow by 1,857 incidents between 2019 and 2035 (9,497 – 7,640 = 1,857). This results in a *growth eligibility percentage* of 19.56 percent.

$$1{,}857 \div 9{,}497 = 19.56\%$$

Unlike other City services, it is difficult to assign future investments as 100 percent growth related. Apparatus are mobile, and most of the growth within the City is projected to be infill and redevelopment. Thus, future projects will be assumed to serve both existing development and future growth. This means that future system investments will only be 19.56 percent eligible for inclusion in the future cost component.

III.C. FUTURE COST COMPONENT

The City provided a capital improvement plan (CIP) that included both funded and unfunded projects. However, after discussions with City staff, it was determined that the unfunded portion of the CIP should be included in the impact fee cost basis only if the City's Proposition #1 levy failed at

the November 2020 election. The levy passed, so the projects listed in the unfunded portion of the CIP will be funded with levy funds instead, and not included in the impact fee study. The included CIP projects are shown in **Exhibit 8**.

Exhibit 8
Future Projects

Project Number	Project Title	Prior Year(s) (not included)	2019-2024 Total	Impact Fee Eligibility	Impact Fee Eligibile Cost
FIRE					
PSC 06300	Air Fill Station Replacement		86,200	19.56%	16,857
PSC 06600	Thermal Imaging Cameras		93,400	19.56%	18,265
PSC 07100	Self Contained Breathing Apparatus (SCBA)		1,017,600	19.56%	198,999
PSC 07600	Personal Protective Equipment		1,320,500	19.56%	258,233
PSC 08000	Emergency Generators	120,000	120,000	19.56%	46,934
PSC 08100	Fire Station 26 Training Prop		290,000	19.56%	56,712
PSC 08200	Water Rescue Craft Storage & Lift		87,900	19.56%	17,189
FACILITIES					
PSC 30021	*Fire Station 24 Land Acquisition*	*4,437,530*	5,737,530	19.56%	1,989,804
PSC 30022	*Fire Station 24 Replacement*	*10,133,300*	16,890,908	19.56%	5,284,772
Total Funded Public Safety Projects		$ 14,690,830	$ 25,644,038		$ 7,887,764

The future cost to be included is $25.6 million. When multiplied by the growth eligibility percentage calculated above, the future cost basis is $7.9 million.

III.D. IMPACT FEE CALCULATION

All the cost bases of the impact fee have now been calculated. However, as the impact fee will be charged based on individual land use type, each cost component must be distributed across the various land use types. This is done on the percentage of incidents in the relevant year (2019 for the current cost basis and 2035 for the future cost basis). **Exhibit 9** shows the distribution and resulting impact fee for apparatus costs.

Exhibit 9
Apparatus Fee Calculation

Land Use Type	Unit of Development	2019 Incidents	2019 Incident Breakdown	Cost Basis: $ 6,184,368	2035 Development	Fee
Commercial	Sq. Ft.	936	12.25%	$ 757,740	4,953,525	$ 0.15
Office & Industrial	Sq. Ft.	169	2.21%	136,642	13,630,675	0.01
Schools	Sq. Ft.	220	2.88%	178,344	3,019,952	0.06
Health Care	Sq. Ft.	1,092	14.29%	883,735	2,467,404	0.36
Government	Sq. Ft.	162	2.12%	131,318	392,130	0.33
Single-Family	Dwelling Unit	2,903	38.01%	2,350,415	23,962	98.09
Multifamily	Dwelling Unit	2,157	28.24%	1,746,174	27,239	64.11
Total		7,640	100.00%	$ 6,184,368		

Exhibit 10 shows the distribution and resulting impact fee for fire stations and miscellaneous equipment costs.

Exhibit 10
Stations and Miscellaneous Equipment Fee Calculation

Land Use Type	Unit of Development	2019 Incidents	2019 Incident Breakdown	Cost Basis $8,928,745	2035 Development	Fee
Commercial	Sq. Ft.	936	12.25%	$ 1,093,995	4,953,525	$ 0.22
Office & Industrial	Sq. Ft.	169	2.21%	197,278	13,630,675	0.01
Schools	Sq. Ft.	220	2.88%	257,486	3,019,952	0.09
Health Care	Sq. Ft.	1,092	14.29%	1,275,901	2,467,404	0.52
Government	Sq. Ft.	162	2.12%	189,592	392,130	0.48
Single-Family	Dwelling Unit	2,903	38.01%	3,393,435	23,962	141.62
Multifamily	Dwelling Unit	2,157	28.24%	2,521,057	27,239	92.55
Total		7,640	100.00%	$ 8,928,745		

Finally, the future cost basis is distributed in **Exhibit 11**. As the future cost basis is divided only by future growth, the incidents, incident breakdown, and development are different than in **Exhibits 9** and **10**.

Exhibit 11
Future Projects Fee Calculation

Land Use Type	Unit of Development	2035 Projected Incidents	2035 Incident Breakdown	Cost Basis $ 7,887,764	Growth by 2035	Fee
Commercial	Sq. Ft.	1,097	11.55%	$ 910,885	889,766	$ 1.02
Office & Industrial	Sq. Ft.	240	2.52%	198,977	4,831,614	0.04
Schools	Sq. Ft.	259	2.73%	214,989	551,102	0.39
Health Care	Sq. Ft.	1,283	13.51%	1,065,320	450,269	2.37
Government	Sq. Ft.	191	2.01%	158,301	71,559	2.21
Single-Family	Dwelling Unit	3,296	34.70%	2,737,444	3,511	779.68
Multifamily	Dwelling Unit	3,133	32.99%	2,601,849	10,153	256.26
Total		9,497	100.00%	$ 7,887,764		

The total fire impact fee is the sum of these three calculated fees, shown below in **Exhibit 12**.

Exhibit 12
Fire Impact Fee Schedule

Land Use Type	Existing Fee Component	Future Fee Component	Total Fee	Unit of Development
Commercial	$ 0.37	$ 1.02	$ 1.40	per Sq. Ft.
Office & Industrial	0.02	0.04	0.07	per Sq. Ft.
Schools	0.14	0.39	0.53	per Sq. Ft.
Health Care	0.88	2.37	3.24	per Sq. Ft.
Government	0.82	2.21	3.03	per Sq. Ft.
Single-Family	239.71	779.68	1,019.38	per Dwelling Unit
Multifamily	156.66	256.26	412.92	per Dwelling Unit

Finally, the calculated fire impact fees can be multiplied by anticipated growth to forecast the revenue the City will receive if it fully adopts the fire impact fee.

Exhibit 13
Fire Impact Fee Revenue Forecast

Land Use Type	Total Fee	Unit of Development	Growth by 2035	Existing Component Revenue	Future Component Revenue
Commercial	$ 1.40	per Sq. Ft.	889,766	$ 332,614	$ 910,885
Office & Industrial	0.07	per Sq. Ft.	4,831,614	118,363	198,977
Schools	0.53	per Sq. Ft.	551,102	79,533	214,989
Health Care	3.24	per Sq. Ft.	450,269	394,105	1,065,320
Government	3.03	per Sq. Ft.	71,559	58,562	158,301
Single-Family	1,019.38	per Dwelling Unit	3,511	841,610	2,737,444
Multifamily	412.92	per Dwelling Unit	10,153	1,590,558	2,601,849
Total Revenue Generated				$ 3,415,346	$ 7,887,764

The total revenue generated is $11.3 million. This represents 44% of the 2019-24 CIP shown in **Exhibit 8**.

FCS GROUP also surveyed neighboring jurisdictions to determine how the City's calculated fire impact fees fit into a regional context. The results of this survey are shown in **Exhibit 14**. Fire impact fees are not as common as other types of impact fees, but Kirkland's calculated fee is in line with those imposed by other Western Washington jurisdictions.

Exhibit 14
Fire Impact Fee Survey

City	SFR	MFR
Issaquah	$ 2,213	$ 2,485
Shoreline	2,187	1,895
Kirkland	1,019	413
Renton	830	965
Redmond	125	149
Sammamish	N/A	N/A
Bellevue	N/A	N/A
Sammamish	N/A	N/A
Vancouver	N/A	N/A

Section IV. Parks Impact Fee

This section provides the detailed calculations of the maximum defensible parks impact fee. As the City already has an existing parks impact fee, this study uses the same investment-based methodology as was previously used. This approach is based on the total value of the City's park system, divided by the total applicable customer base. One change was made to the previous calculation. This impact fee uses residential equivalents (described below) that is added to the city population to account for the impacts of nonresidential development on City infrastructure.

IV.A. CUSTOMER BASE

The first step is to calculate the parks capital value per person, or the value of the existing system divided by the user base. The City currently defines the user base of its park system as the City's population. However, an alternative methodology is based on *residential equivalents*, which measures and includes the additional impact of employees of businesses within the City on the parks system. The calculation of residential equivalents is shown below.

IV.A.1. Residential Equivalents

To charge parks impact fees to both residential and non-residential developments, we must estimate both (1) how much availability non-residential occupants (i.e., employees) have to use parks facilities and (2) how that availability differs from residential occupants (i.e., residents).

The calculation begins with the most recent data for both population and employment in Kirkland. As shown below, in 2017 (the most recent year for which both population and employment data were available), 86,080 residents lived in Kirkland, and 47,834 employees worked in Kirkland. Of these, 5,484 people both lived and worked in Kirkland, as shown in **Exhibit 15.**

Exhibit 15
Residents and Employees in Kirkland (2017)

	Living Inside Kirkland	Living Outside Kirkland	Total
Working inside Kirkland	5,484	42,350	47,834
Working outside Kirkland	39,184		
Not working	41,412		
Total	86,080		

Source: WA OFM Population Statistics, US Census Bureau: OnTheMap Application

Next, we estimate the number of hours per week that each category of person would be available to use the parks facilities in Kirkland. For example, a resident of the City who was not working would have 112 hours per week available to use park facilities (7 days x 16 hours per day). The table below shows FCS GROUP's estimate of maximum time available for use. It is not an estimate of actual use.

Exhibit 16
Available Hours by Category

Hours per Week of Park Availability per Person, Residential Demand	Living Inside Kirkland	Living Outside Kirkland
Working inside Kirkland	72	N/A
Working outside Kirkland	72	N/A
Not working	112	N/A
Hours per Week of Park Availability per Person, Non-Residential Demand	**Living Inside Kirkland**	**Living Outside Kirkland**
Working inside Kirkland	10	10
Working outside Kirkland	N/A	N/A
Not working	N/A	N/A

Source: FCS GROUP

When the hours of availability above are multiplied by the population and employee counts presented earlier, we can determine the relative parks demand of residents and employees. As shown in **Exhibit 17**, the parks demand of one employee is equivalent to the parks demand of 0.11 resident. Another way of understanding this is that the parks demand of 9.12 employees is equivalent to the parks demand of one resident.

Exhibit 17
Total Available Hours by Class

Total Hours per Week of Park Availability, 2017	Residential Hours	Non-Residential Hours	Total Hours
Working inside Kirkland	394,848	478,340	873,188
Working outside Kirkland	2,821,248		2,821,248
Not working	4,638,144		4,638,144
Total	7,854,240	478,340	8,332,580
Hours per resident	91.24		
Hours per employee		10.00	
Employee Residential Equivalent			0.110

Source: Previous tables

IV.A.2. Growth

The current (2020) demand for parks facilities is 96,121 residential equivalents. That number is the sum of 90,660 residents (based on the Washington State Office of Financial Management's official state population projections), and 5,461 residential equivalents for 49,832 employees. The number of employees is based on the 2017 number of employees, inflated to 2020 based on the City's planning data.

During the forecast period from 2020 to 2024, chosen to match the capital plan, residential population is expected to grow by 983 residents to a total of 91,643 residents. Population growth was forecast at 0.27 percent annually, and growth in employees forecast at 1.37 percent annually. As

shown in **Exhibit 18**, residential equivalents will grow by 1,289 residential equivalents to a total of 97,410 residential equivalents.

Exhibit 18
Growth in Residential Equivalents

	2017	2020	2024	Growth from 2020 to 2024
Population	86,080	90,660	91,643	983
Employees	47,834	49,832	52,627	2,795
Residential Equivalent Employees	5,242	5,461	5,768	306
Total Residential Equivalents	91,322	96,121	97,410	1,289

As of the time of this report, the City had not determined whether to use residential equivalents as the customer base, which would allow it to charge nonresidential development, or to retain its current approach and charge only residential development. This report shows each calculation in parallel, so the differences between the two approaches are clear.

IV.B. IMPACT FEE CALCULATION

The next step is to calculate the capital value per person or residential equivalent. This study is based on the previous valuations of the City park system, inflated by the actual rise in property assessed values in Kirkland between 2014 and 2020 (80.74 percent). This is shown in **Exhibit 19**.

Exhibit 19a
Park System Inventory

	2014			2020			
Name	Land Value	Improvement Value	2014 Total Value	Inflated Land Value	Inflated Improvement Value	Additional CIP Improvements	2020 Total Value
132nd Square Park	$ 466,000	$ 2,462,121	$ 2,928,121	$ 842,264	$ 4,450,121	$ 9,058	$ 5,301,444
Beach Property	45,000	-	45,000	81,335	-		81,335
Brookhaven Park	622,100	24,725	646,825	1,124,405	44,688		1,169,093
Carillon Woods	9,634,000	180,920	9,814,920	17,412,823	327,001		17,739,824
Cedar View Park	465,500	101,500	567,000	841,361	183,455		1,024,815
Cotton Hill Park	803,000	-	803,000	1,451,370	-		1,451,370
Crestwoods Park	13,784,500	2,457,493	16,241,993	24,914,579	4,441,756		29,356,336
David E. Brink Park	15,379,000	648,124	16,027,124	27,796,534	1,171,442		28,967,975
Edith Moulton Park	3,648,000	287,940	3,935,940	6,593,521	520,433	1,878,356	8,992,310
Everest Park	5,812,800	3,918,638	9,731,438	10,506,255	7,082,680	409	17,589,344
Forbes Creek Park	2,852,000	524,875	3,376,875	5,154,803	948,677		6,103,480
Forbes Lake Park	1,382,000	-	1,382,000	2,497,874	-	140,602	2,638,476
Heritage Park	16,215,500	2,091,641	18,307,141	29,308,452	3,780,504		33,088,956
Heronfield Wetlands	2,128,200	16,100	2,144,300	3,846,582	29,100		3,875,682
Highlands Park	1,271,000	351,584	1,622,584	2,297,249	635,465		2,932,714
Houghton Beach Park	30,150,000	2,238,895	32,388,895	54,494,147	4,046,656		58,540,803
Juanita Bay Park	25,880,200	4,886,922	30,767,122	46,776,764	8,832,790	2,759	55,612,312
Juanita Beach Park	10,752,000	9,210,079	19,962,079	19,433,535	16,646,614	688,569	36,768,717
Juanita Heights Park	1,168,000	5,600	1,173,600	2,111,083	10,122	736,033	2,857,238
Kingsgate Park	1,293,000	5,000	1,298,000	2,337,013	9,037		2,346,050
Kiwanis Park	8,282,000	16,000	8,298,000	14,969,172	28,919		14,998,091
Lake Ave W Street End Park	5,513,278	12,700	5,525,978	9,964,888	22,954		9,987,843
Marina Park	12,000,000	5,573,669	17,573,669	21,689,213	10,074,040	11,798	31,775,051
Mark Twain Park	624,000	874,062	1,498,062	1,127,839	1,579,810		2,707,649
Marsh Park	16,950,000	705,526	17,655,526	30,636,013	1,275,192	18,937	31,930,142
McAuliffe Park	2,888,800	523,408	3,412,208	5,221,316	946,026		6,167,342
Neil-Landguth Wetland Park	140,000	5,000	145,000	253,041	9,037		262,078
North Kirkland Com Ctr Park	3,172,800	7,196,029	10,368,829	5,734,628	13,006,349		18,740,977
North Rose Hill Woodlands Park	1,944,000	1,100,505	3,044,505	3,513,652	1,989,091		5,502,743
Ohde Avenue Pea Patch	666,000	2,250	668,250	1,203,751	4,067		1,207,818
Open Space 1138020240	189,000	-	189,000	341,605	-		341,605
Open Space 1437900440	1,000	-	1,000	1,807	-		1,807
Open Space 3295730200	1,000	-	1,000	1,807	-		1,807
Open Space 3326059150	988,000	-	988,000	1,785,745	-		1,785,745
Open Space 6639900214	177,000	-	177,000	319,916	-		319,916
Open Space 3326059136	1,060,900	-	1,060,900	1,917,507	-		1,917,507
Open Space 2426049132	651,000	-	651,000	1,176,640	-		1,176,640
Open Space 2540800430	1,000	-	1,000	1,807	-		1,807
Open Space 3261020380	5,000	-	5,000	9,037	-		9,037
Open Space 3275740240	1,000	-	1,000	1,807	-		1,807
Open Space 3754500950	476,000	-	476,000	860,339	-		860,339
Open Space 6619910290	240,000	-	240,000	433,784	-		433,784

Exhibit 19b
Park System Inventory cont.

	2014			2020			
Name	Land Value	Improvement Value	2014 Total Value	Inflated Land Value	Inflated Improvement Value	Additional CIP Improvements	2020 Total Value
Open Space 7016100600	536,000	-	536,000	968,785	-		968,785
Open Space 7016300061	1,000	-	1,000	1,807	-		1,807
Open Space 7955060320	164,000	-	164,000	296,419	-		296,419
Open Space 9527000610	1,000	-	1,000	1,807	-		1,807
Open Space 1119000270	1,000	-	1,000	1,807	-		1,807
Open Space 3558910830	1,000	-	1,000	1,807	-		1,807
Peter Kirk Park	27,181,400	17,367,453	44,548,853	49,128,597	31,390,532	78,596	80,597,726
Phyllis A Needy - Houghton Nbr	422,000	363,653	785,653	762,737	657,278		1,420,015
Reservoir Park	718,000	150,300	868,300	1,297,738	271,657		1,569,395
Rose Hill Meadows	1,888,000	452,044	2,340,044	3,412,436	817,040		4,229,476
Settler's Landing	1,800,000	506,400	2,306,400	3,253,382	915,285		4,168,667
Snyders Corner Park	772,000	-	772,000	1,395,339	-		1,395,339
South Norway Hill Park	2,553,400	-	2,553,400	4,615,103	-		4,615,103
South Rose Hill Park	450,000	480,721	930,721	813,345	868,872		1,682,217
Spinney Homestead Park	3,896,000	718,878	4,614,878	7,041,764	1,299,324		8,341,088
Street End Park	299,891	-	299,891	542,033	-		542,033
Terrace Park	865,700	397,787	1,263,487	1,564,696	718,974	815	2,284,485
Tot Lot Park	763,000	138,205	901,205	1,379,072	249,796	4,372	1,633,241
Van Aalst Park	1,788,000	260,160	2,048,160	3,231,693	470,222		3,701,915
Watershed Park	10,248,900	-	10,248,900	18,524,214	-		18,524,214
Waverly Beach Park	6,605,500	1,761,240	8,366,740	11,939,008	3,183,325	1,301,710	16,424,042
Windsor Vista Park	977,000	-	977,000	1,765,863	-		1,765,863
Wiviott Property	131,000	-	131,000	236,774	-		236,774
Yarrow Bay Wetlands	3,209,600	-	3,209,600	5,801,141	-		5,801,141
Cross Kirkland Corridor Trail	1,000,000	4,102,560	5,102,560	1,807,434	7,415,108		9,222,542
2015 Dock Shoreline			-	-	-	106,060	106,060
2017 Neighborhood Park Land Acq			-	-	-	1,683,120	1,683,120
2013 Dock Shoreline			-	-	-	344,061	344,061
Totem Lk/CKC Land Acquisition			-	-	-	181,569	181,569
2016 Dock Shoreline			-	-	-	300,184	300,184
OO Denny Park Improvements			-	-	-	150,605	150,605
Parks Maintenance Center			-	-	-	10,816,907	10,816,907
PK Pool Liner Replacement			-	-	-	214,855	214,855
2017 Dock Shoreline			-	-	-	212,341	212,341
2018 Neighborhood Park Land Acqu			-	-	-	65,124	65,124
2015 Dock Shoreline			-	-	-	328	328
Totem Lk/CKC Land Acquisition			-	-	-	125	125
Totem Lake Park Master Plan Ph. 1			-	-	-	996,231	996,231
15/17/18 City School Partnership			-	-	-	161,253	161,253
2018 City-School Partnership			-	-	-	161,253	161,253
Neighborhood Park Land Acquisi			-	-	-	3,000	3,000
[extra]			-	-	-		-
Total	$ 265,996,969	$ 72,120,702	$ 338,117,671	$ 480,772,071	$ 130,353,437	$ 20,269,029	$ 631,394,537

As shown, the value of the park system has increased from about $338 million to $631 million. This results in an increase in the capital value per person or residential equivalent, as shown in **Exhibit 20**.

Exhibit 20
Capital Value per Person / Residential Equivalent

	Previous Study	Current Study (w/o nonresidential)	Current Study (w/nonresidential)
Value of Parks Inventory	$ 338,118,273	$ 631,394,537	$ 631,394,537
Population / Residential Equivalents	82,590	90,660	96,121
Capital Value Per Person / RE	$ 4,094	$ 6,964	$ 6,569

Now that the capital value per resident or residential equivalent has been calculated, the next step is to calculate the value of parks needed for growth. This is the capital value calculated above,

multiplied by the forecasted growth. This represents the total investment that is eligible to be recovered through impact fees.

Exhibit 21
Value Needed for Growth

	Previous Study	Current Study (w/o nonresidential)	Current Study (w/nonresidential)
Capital Value per Person / RE	$ 4,094	$ 6,964	$ 6,569
Growth of Population / REs	4,320	983	1,289
Investment Needed for Growth	$ 17,685,809	$ 6,843,223	$ 8,466,310

The investment needed for growth has decreased from the previous study, due to the relatively short remaining planning period, and an anticipated decrease in the population growth rate. However, these values also need to be adjusted for consistency with the CIP. Under Washington state law, impact fees can only recover the growth-related cost of CIP projects that add capacity to the park system. The City provided a list of projects that would be completed through 2024, as well as an estimate of how much of each project would increase the capacity of the park system. This is shown in **Exhibit 22**.

Exhibit 22
Capital Improvement Program

Project Number	Project Title	2019-2024 Total	Capacity Share	Eligible Cost
PKC 04900	Open Space, Park Land & Trail Acq Grant Match Program	100,000	100%	$ 100,000
PKC 06600	*Parks, Play Areas & Accessibility Enhancements*	1,115,000	0%	-
PKC 08711	Waverly Beach Park Renovation Phase II	515,000	0%	-
PKC 11901	*Juanita Beach Park Bathhouse Replacement*	1,208,311	13%	157,080
PKC 11903	Juanita Beach Park Playground	366,000	58%	212,280
PKC 12100	Green Kirkland Forest Restoration Program	600,000	0%	-
PKC 13310	*Dock & Shoreline Renovations*	1,660,000	0%	-
PKC 13330	Neighborhood Park Land Acquisition	5,418,000	100%	5,418,000
PKC 13400	*132nd Square Park Playfields Renovation*	5,672,200	50%	2,836,100
PKC 13420	132nd Square Park Master Plan	135,000	80%	108,000
PKC 13530	Juanita Heights Park Trail	243,800	100%	243,800
PKC 13902	*Totem Lake Park Development - Expanded Phase I*	6,159,200	90%	5,543,280
PKC 14200	Houghton Beach & Everest Park Restroom Repl. Design	85,000	0%	-
PKC 14700	*Parks Maintenance Center*	2,958,351	14%	414,169
PKC 15100	Park Facilities Life Cycle Projects	950,000	0%	-
PKC 15400	Indoor Recreation & Aquatic Facility Study	160,000	100%	160,000
PKC 15500	Finn Hill Neighborhood Green Loop Trail Master Plan	160,000	100%	160,000
PKC 15600	Park Restrooms Renovation/Replacement Program	1,583,000	0%	-
PKC 15700	Neighborhood Park Development Program	1,583,000	100%	1,583,000
Total Funded Park Projects		30,671,862	Total	$ 16,935,710

The total growth-related portion of the CIP is about $16.9 million. As this value exceeds the investment needed for growth calculated in **Exhibit 21**, no adjustment is needed to reduce the investment needed for growth -- the adjustment percentage is 100 percent, as shown in **Exhibit 23**.

Exhibit 23
CIP Adjustment

	Previous Study	Current Study (w/o nonresidential)	Current Study (w/nonresidential)
Cost of CIP Projects that Add Capacity	$ 6,857,400	$ 16,935,710	$ 16,935,710
Investment Needed for Growth	17,685,809	6,843,223	8,466,310
Adjustment Percentage	39%	100%	100%

The penultimate step is to multiply the adjustment percentage by the capital value per person or residential equivalent calculated in **Exhibit 20**. This is the growth cost per person or residential equivalent, shown in **Exhibit 24**.

Exhibit 24
Growth Cost per Person / Residential Equivalent

	Previous Study	Current Study (w/o nonresidential)	Current Study (w/nonresidential)
Capital Value per Person / RE	$ 4,094	$ 6,964	$ 6,569
Adjustment Percentage	39%	100%	100%
Growth Cost per Person / RE	$ 1,587	$ 6,964	$ 6,569

Finally, the growth cost per person or residential equivalent is multiplied by the Kirkland-specific average occupancy rates of various residential units or the residential equivalence (if applicable) to determine the parks impact fee.

Exhibit 25
Occupancy Rates by Dwelling Unit

	Previous Study Value	Current Study
Single-Family	2.5	2.5
Multi-Family	1.9	1.7
Residential Suite	N/A	0.9
Residential Equivalence	N/A	0.1

This results in the calculated impact fees shown below.

Exhibit 26
Impact Fee per Unit of Development

	Previous Study	Current Study (w/o nonresidential)	Current Study (w/nonresidential)
Single-Family	$ 3,968	$ 17,496	$ 16,501
Multi-family	3,016	11,845	11,172
Residential Suite	N/A	6,268	5,912
Per Employee	N/A	N/A	720

The calculated impact fee represents a sizeable increase over the existing parks impact fee. This is driven primarily by the low growth forecasted within the city through 2024 (based on past projections), as well as the large increase in the assessed value of the parks system. Thus, the high impact fee appropriately reflects the high cost of developing new parks within Kirkland. It should be

reiterated that this represents the *maximum allowable impact fee*, and the City is not under any obligation to adopt the calculated fee.

Finally, FCS GROUP compared the calculated park impact fee to other regional jurisdictions.

Exhibit 27
Park Impact Fee Survey

Parks Impact Fee Comparison	Single Family Residence	Multi-Family
Kirkland (calculated maximum)	$ 16,501	$ 11,172
Issaquah	9,107	5,591
Sammamish	6,739	4,362
Redmond	4,738	3,289
Kirkland (existing)	4,391	3,338
Shoreline	4,090	2,683
Renton	3,946	2,801
Vancouver	2,379	1,739
Bellevue	N/A	N/A

The calculated maximum for the City (including non-residential) is significantly higher than any other surveyed jurisdiction.

Section V. INDEXING

The City already annually indexes its impact fees to the *Engineering News-Record* Construction Cost Index. We recommend that the City continue this practice for its parks impact fee and institute it for its fire and EMS impact fee, as it provides an adjustment which at least partially responds to the cost basis over time. We also recommend that the City continue its practice of periodically updating its impact fees to ensure that they recover the full cost of growth's impacts on City facilities.

FCS
a Bowman company

CITY OF FEDERAL WAY

Park Impact Fee Scaling

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December 2024

City of Federal Way Park Impact Fee Scaling

In 2023, the City of Federal Way (City) adopted a park impact fee (PIF) of $2,200, applied uniformly to new dwelling units in the City. The corresponding methodology supported a maximum PIF of $2,839 per dwelling unit, or $1,048 per occupant. The Revised Code of Washington has since been amended to require the scaling of impact fees by dwelling unit size, number of bedrooms, or trips generated. To comply with these new requirements, the City engaged FCS, a Bowman company, to develop a scaling approach for the PIF. This memo provides a summary of the resulting proposed scaling approach.

Background

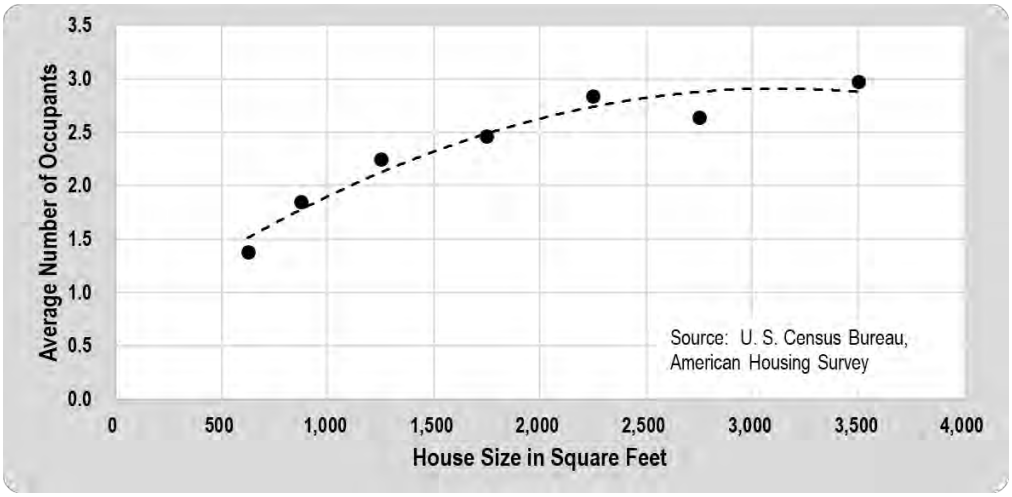
RCW 82.02.060(1) states that a park impact fee schedule "shall reflect the proportionate impact of new housing units… based on the square footage, number of bedrooms, or trips generated… in order to produce a proportionally lower impact fee for smaller housing units." Jurisdictions in Washington are responding to these new requirements in a variety of ways. Some, like the City of Everett, scale by the number of bedrooms. Many others, like the City of Camas, scale by the size of the dwelling unit in square feet.

The best measure of potential parks demand created by new residential units is the number of residents that will occupy each dwelling unit. Therefore, the question of how to scale residential SDCs is really a question of estimating the number of occupants per dwelling unit. The approach described herein incorporates the nexus between dwelling unit square footage and the average number of occupants. Note that additional new requirements in RCW 36.70A.681 place limits on charging impact fees to accessory dwelling units, stating that a city "may not assess impact fees on the construction of accessory dwelling units that are greater than 50 percent of the impact fees that would be imposed on the principal unit…".

Analysis

American Housing Survey data for the Seattle Metro region states that, to a point, square footage is positively correlated with the number of occupants. That point is calculated to be 3,124 square feet. The correlation is shown graphically in **Exhibit 1** below.

Exhibit 1: Occupancy by House Size in Seattle Metro Area (2021)



To apply this data to local Federal Way conditions, the City provided permit data going back to its incorporation showing the dwelling unit sizes of its residential developments. These developments included both single-family and multi-family types. Square footage related to basement areas, decks, and garages were excluded for this analysis. The resulting average dwelling unit size in the City is 1,686 square feet (SF). City planning data indicated that the average occupancy in the City is 2.71 per dwelling unit. Therefore, the average occupancy per 1,000 SF is 1.61 occupants. These calculations are shown in **Exhibit 2** below.

Exhibit 2: Federal Way Dwelling Unit Statistics

Dwelling Unit Statistics	
Average Dwelling Unit Size (all Dwellings Units)	**1,686**
Average Occupancy per Dwelling Unit	2.71
Average Occupancy per 1,000 SF	1.61

Source: *City staff (average dwelling unit size); PIF Methodology (occupancy per dwelling unit)*

The minimum expected number of occupants of a dwelling unit is 1. Based on the average occupancy per 1,000 SF of 1.61, the average dwelling unit size needed to support 1 occupant in Federal Way is 622 square feet. Furthermore, if occupancy scales in a manner like the data from the American Housing Survey for the Seattle Metro region, the occupancy at the maximum size of 3,124 SF is 5.02. Intermediate values can be calculated using the ratio described above of 1.61 occupants per 1,000 SF.

The PIF methodology supported a charge of $2,839 per dwelling unit which when applied to the occupancy figures above results in a (rounded) charge of $1.68 per square foot. This approach is summarized in **Exhibit 3** below. The City could also use the calculations described below to develop a schedule using square footage tiers.

Exhibit 3: Federal Way PIF Scaling by Square Footage

	Square Footage	Occupancy	PIF
PIF per Square Foot	1	0.0016	$1.68
Minimum PIF	622	1.0000	$1,045
Maximum PIF	3124	5.0220	$5,248

Source: *Previous tables (occupancy); PIF Methodology (PIF per occupant)*

As an example of applying this charge, a dwelling unit of 1,500 square feet would pay 1,500 × $1.68 = $2,520 for the PIF. A dwelling unit of 500 square feet would pay the minimum PIF of $1,045. A dwelling unit of 4,000 square feet would pay the maximum PIF of $5,248.

Conclusion

The analysis section provides one method for scaling the PIF by square footage that is tied to underlying statistics about average dwelling unit size and occupancy in the City of Federal Way. This scaling method will allow the City to comply with new legal requirements in the RCW by scaling the park impact fee with the size of the dwelling unit. Note that a further requirement in RCW 36.70A.681 states that the City "may not assess impact fees on the construction of accessory dwelling units that are greater than 50 percent of the impact fees that would be imposed on the principal unit…" The City will also need to comply with this statute when it imposes the scaling methodology. Finally, the City may in the future modify its established PIF per occupant (as for inflation) and use the scaling approach described above with the updated rate.

City of Federal Way

Park Impact Fee Study

Final Report
May 10, 2023

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Section I. INTRODUCTION

The City of Federal Way (City) is looking to implement a parks impact fee (PIF) to provide partial funding for the capital needs of its parks system. In 2022, the City engaged FCS GROUP to calculate a PIF based on recent growth estimates, its parks project lists, and inventory data. The City provides parks and recreation services for all residents in its boundaries, and the City's park planning efforts extend throughout the same boundaries. Given the City-wide planning and provision of parks services, as well as the City's relatively limited geographic scope, the City park system is a single service area for the purposes of the PIF study. The following sections provide the policy background upon which the PIF is based, as well as a general overview of the PIF calculation. The rest of the report details the specific data inputs and results of the PIF calculation.

I.A. POLICY

Park impact fees are enabled by state statutes, authorized by local ordinance, and constrained by the United States Constitution.

I.A.1. State Statutes

Impact fees are authorized by state law in RCW 82.02.050 through 82.02.110. By law, revenue from park impact fees shall be used for park system improvements that will reasonably benefit new development. The money may not be used to address system deficiencies, or maintenance and repair costs. The fees cannot exceed new development's proportionate share of the improvement costs, and the revenue may be spent only for the public facilities which are addressed by the capital facilities plan element of an adopted comprehensive land use plan. Impact fee revenue must be spent within ten years after collection. In addition, the City cannot depend entirely on impact fees to fund capital costs; there must be some amount of funding from other local sources.

I.A.2. Local Ordinance

The City of Federal Way is implementing code updates to support the PIF calculated in this report.

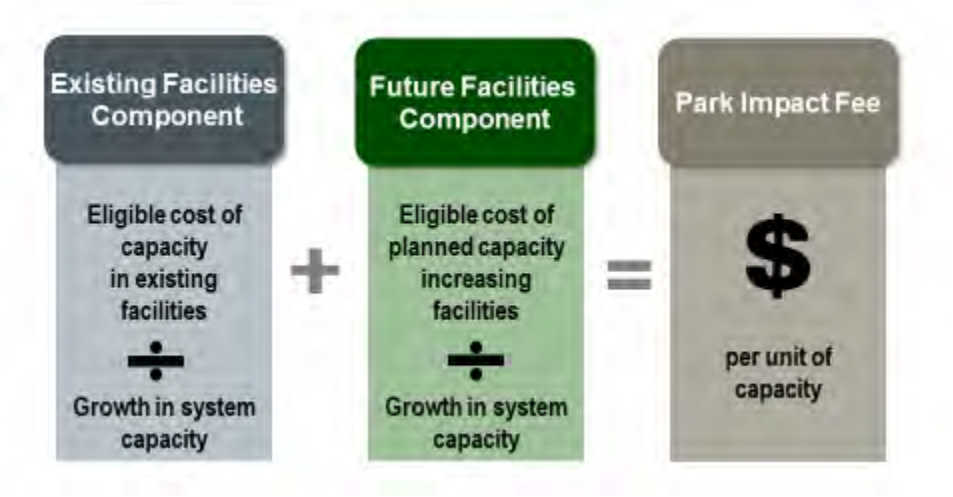
I.A.3. United States Constitution

The United States Supreme Court has determined that impact fees and other exactions that comply with state and/or local law may still violate the United States Constitution if they are not proportionate to the impact of the development. The PIF calculated in this report are designed to meet such constitutional and statutory requirements.

I.B. CALCULATION OVERVIEW

In general, impact fees are calculated by adding an existing facilities fee component and a future facilities fee component—both with potential adjustments. Each component is calculated by dividing the eligible cost by growth in units of demand. The unit of demand becomes the basis of the charge.

The diagram below summarizes the basic outline of an impact fee calculation, and more detail is provided in the following bullets.



- **The eligible cost of capacity in existing facilities** is the cost of existing park facilities that will serve growth. For a parks impact fee, determining the capacity in the existing system available for growth starts with determining the amount of existing parks facilities that are required for existing users, commonly measured in park acres. One method for doing so first calculates the system's level-of-service after completion of the capital facilities plan. By applying that level-of-service target to the current population, the City can determine if it's currently meeting its level-of-service target. If the City has more park facilities (such as park acres) than needed based on its level-of-service target, the costs of such available facilities can be included in the existing facilities component of the impact fee.
- **The eligible portion of capacity increasing projects** is the cost of future projects that will serve growth. Some projects are intended to only serve growth, some projects do not serve to increase the capacity of the City's park system, and some serve the City's current and future populations. Determining how projects fall into each category can again be done with a level-of-service calculation to estimate how many park acres (for example) are needed to serve growth given the City's level-of-service target. Other projects that do not add a measurable number of parks facilities may still be eligible if they will serve both existing and future users.
- **The growth in system demand** is the anticipated growth in the City's population. However, as residents are not the only users of the City's park system, employees of businesses within will be included as well, at a separate rate that reflects the parks demand characteristics of commercial developments.

Finally, summing the existing facilities component with the future facilities component gives the fully calculated impact fee.

Section II. PIF ANALYSIS

This section provides the detailed calculations of the maximum allowable PIF in the City of Federal Way.

II.A. GROWTH

The calculation of projected growth begins with defining the units by which current and future demand will be measured. Then, using the best available data, we quantify the current level of demand and estimate a future level of demand. The difference between the current level and the future level is the growth in demand that will serve as the denominator in the PIF calculations.

II.A.1. Unit of Measurement

A good unit of measurement allows an agency to quantify the incremental demand of development or redevelopment that creates additional demand for park facilities. A more precise unit of measurement allows an agency to distinguish different levels of demand added by different kinds of development or redevelopment.

II.A.1.a Options

For parks impact fees, demand that can be attributed to individual developments is usually measured in the number of people who will occupy a development. For residential developments, the number of occupants means the number of residents. We use data from the U. S. Census Bureau to estimate the number of residents for different kinds of dwelling units. For non-residential developments, the number of occupants means the number of employees. We use industry data to estimate the number employees per square foot for different kinds of non-residential developments.

When an agency chooses to impose a PIF on both residential and non-residential developments, the demand of one additional resident must be carefully distinguished from the demand of one additional employee. This is usually accomplished by the calculation of a residential equivalent. One resident is equal to one residential equivalent, and one employee is typically less than one residential equivalent.

Non-residential developments are a source of demand for parks facilities in Federal Way, and the City is intending to charge PIFs for both residential and non-residential developments using residential equivalents as the unit of growth.

II.A.2. Demand Adjustment for Non-Residential Users

To charge PIFs to both residential and non-residential developments, we must estimate both (1) how much availability non-residential occupants (i.e., employees) have to use parks facilities and (2) how that availability differs from residential occupants (i.e., residents).

The calculation begins with the most recent counts for population and employment in Federal Way. As shown in **Exhibit 2.1** below, in 2019 (the most recent year for which both population and employment data were available), 96,526 residents lived in Federal Way, according to the Census

Bureau's American Community Survey. Also, according to the Census Bureau, 28,063 employees worked in Federal Way for their primary occupation. Of these, 4,320 people both lived and worked in Federal Way.

Exhibit 2.1 – 2019 Population and Employment in Federal Way

Population and Employment, 2019	Living Inside Federal Way	Living Outside Federal Way	Total
Working Inside Federal Way	4,320	23,743	28,063
Working Outside Federal Way	37,152		
Not Working	55,054		
Total	96,526		

Source: *U.S. Census Bureau, OnTheMap Application, 2019 Inflow/Outflow analysis (employment); U.S. Census Bureau, 2019 American Community Survey 5-year estimates, Table B01003 (population)*

Next, we estimate the number of hours per week that each category of person would be available to use the parks facilities in Federal Way. **Exhibit 2.2** below shows an estimate of maximum availability. It assumes that 8 hours each day are used for sleeping for all residents of the City. For those who are not working, the remaining 16 hours of each day are available for use of the parks system, giving a total of 112 hours per week of parks system availability. For workers, 8 hours of each day are assumed to be spent at work, which leaves the remaining 8 hours per weekday available for residential use of the parks system. In addition, workers have 16 hours of residential demand each weekend day, for a total of 72 hours per week of residential demand. During work, 1 hour is assumed to be available for workers to use the parks system, giving 5 hours per week of non-residential demand. These estimates are not of actual use, but maximum availability.

Exhibit 2.2 – Demand Estimates by Category of Parks User

Hours per Week of Park Availability Per Person, Residential Demand	Living Inside Federal Way
Working Inside Federal Way	72
Working Outside Federal Way	72
Not Working	112

Source: *FCS GROUP.*

Hours per Week of Park Availability Per Person, Non-Residential Demand	Living Inside Federal Way	Living Outside Federal Way
Working Inside Federal Way	5	5
Working Outside Federal Way		
Not Working		

Source: *FCS GROUP.*

When the hours of availability above are multiplied by the counts presented earlier, we can determine the relative demand of residents and employees. As shown in **Exhibit 2.3** below, the parks demand of one employee is equivalent to the parks demand of about 0.05 residents. To put it another way, the parks demand of about 18.96 employees is equivalent to the parks demand of one resident.

Exhibit 2.3 – Total Hours per Week of Park Availability

Total Hours per Week of Park Availability, 2019	Residential hours	Non-residential hours	Total Hours
Working Inside Federal Way	311,040	140,315	451,355
Working Outside Federal Way	2,674,944		
Not Working	6,313,216		
Total	9,299,200	140,315	451,355
Hours per resident	95		
Hours per employee		5	
Residents per employee			0.05

Source: *Previous tables*

II.A.3. Growth in Demand

The current (2023) demand for parks facilities is 103,385 residential equivalents. That number is the sum of 101,534 residents and 1,851 residential equivalents for 35,092 employees according to the Puget Sound Research Council (PSRC). Note that these 2019 population and employment estimates differ from the Census Bureau estimates. This is acceptable because the 2019 Census Bureau data is used only to determine the residential equivalency factor.

During the forecast period from 2023 to 2044, the residential population is expected to grow by 21,808 residents. If total residential equivalents remain proportionate to the residential population, then residential equivalents will grow by 22,774 to a total of 126,159 residential equivalents. Therefore, 22,774 residential equivalents will be the denominator for the PIF calculations later in this report.

Exhibit 2.4 below summarizes these calculations:

Exhibit 2.4 – Growth in Demand

	2019	2023	2044	Growth (2023-2044)	CAGR	Growth Share
Population	97,840	101,534	123,342	21,808	0.93%	17.68%
Employees	32,394	35,092	53,412	18,320	2.02%	34.30%
Residential-equivalent employees	1,708	1,851	2,817	966	2.02%	34.30%
Residential equivalents	99,548	103,385	126,159	**22,774**	0.95%	18.05%

Source: *Puget Sound Research Council (population and employee estimates); Previous tables (resindetial-equivalent employee factor)*

II.B. FUTURE FACILITIES FEE

The future facilities fee is the eligible cost of planned projects per unit of growth that such projects will serve. Since we have already calculated growth (denominator) above, we will focus here on the future facilities fee cost basis (numerator).

II.B.1. Eligibility

A project's eligible cost is the product of its total cost and its eligibility percentage. The eligibility percentage represents the portion of the project that creates capacity for future users.

For park impact fees, eligibility is often determined by a level-of-service analysis that quantifies the park facilities that are needed for growth (and are therefore eligible to be included in the future facilities cost basis). Park facilities can be measured by sorting them into categories such as neighborhood, community, or open space, or by considering their respective units of measurement (e.g., acres). Further, in either approach, the current or future level of service may be targeted. These two separate choices create four distinct and equally defensible ways of calculating the eligibility percentage of each project.

Each method will be examined in the sections below.

II.B.1.a Current Level of Service (By Category and by Unit of Measurement)

Determining PIF eligibility for parks projects using the current level of service requires determining the quantity of parks facilities needed to maintain the current level of service. Any projects that add facilities in excess of that quantity are ineligible.

The City has five relevant parks categories for determining its level of service by category. These are shown in the upper panel of the first column in **Exhibit 2.5**. Each category receives its own level of service. Using community parks as an example, the City currently has 486.94 acres of community parks. Using the 2023 population discussed above, this implies that there is 4.80 acres of community parks per 1,000 residents. The parks project list, when completed, will add 7.00 acres of community parks. Based on the 2044 population and the current level of service, 63.67 additional acres of community parks are needed. So, all the additional park acres can be used to accommodate growth, and therefore are eligible for inclusion in the parks impact fee.

The same line of reasoning is used to develop the eligibility percentages for other parks categories. Calculating eligibility using level of service by unit of measurement (e.g., acres, miles), instead of by park type, also follows the same approach. The eligibility percentage for each parks category or unit of measurement is shown in the last column of **Exhibit 2.5**.

Exhibit 2.5 – Eligibility under the Current Level of Service

	Units	2023 Quantity	2023 Units per 1,000 Residents	Change in Quantity	Additional Needed to Maintain LoS	Eligibility
By Category:						
Community Park	Acres	486.94	4.80	7.00	63.67	100.00%
Neighborhood Park	Acres	108.05	1.06	0.00	14.13	0.00%
Open Space	Acres	436.16	4.30	0.00	57.03	0.00%
Special Use Facilities	Number	6.00	0.06	0.00	0.78	0.00%
Trail	Miles	12.07	0.12	0.00	1.58	0.00%
By Unit of Measurement:						
Park or Natural Area	Acres	1031.15	10.16	7.00	134.83	100.00%
Special Use Facility	Number	6.00	0.06	0.00	0.78	0.00%
Trail	Miles	12.07	0.12	0.00	1.58	0.00%

Source: *2019 PROS Plan Table 3.1, City staff*

II.B.1.b Future Level of Service (By Category and Unit of Measurement)

To determine PIF eligibility using the future level of service, the proposed additional quantity of planned parks facilities is added to the current quantity of parks facilities. Using the future population, a future level of service is then calculated. That level of service is compared to the current parks system to determine if any deficiencies exist against the current population. Only the portions of parks projects that do not cure existing deficiencies are considered eligible for the future facilities fee cost basis under this method.

As in the previous section, calculating PIF eligibility based on future level of service can be done both when measuring parks facilities by category and when measuring by unit of measurement. **Exhibit 2.6** below outlines both methods using the future level of service. Using community parks as an example again, the City currently has 486.94 acres of community parks. The parks project list, when completed, will add 7.00 acres of community parks. This results in a future level of service of 4.30 acres of community parks per 1,000 residents in 2044. If that level of service was applied to the 2023 population, a minimum of 436.82 acres would be needed. However, there are already 486.94 acres of community parks. So, the additional acres added by the project list are not needed for existing users, and therefore 100 percent are includable in the future facilities fee.

The same approach is used to develop the eligibility percentages for other parks categories. Calculating eligibility using level of service by unit of measurement (e.g., acres, miles), instead of by park type, follows the same logic. The eligibility percentage for each parks category or unit of measurement is shown in the "Eligibility" column of **Exhibit 2.6** below.

Exhibit 2.6 – Eligibility under the Future Level of Service

	Units	2023 Quantity	2023 Units per 1,000 Residents	Change in Quantity	2044 Units per 1,000 Residents	2023 Minimum Quantity	Eligibility	Reimbursable Quantity
By Category:								
Community Park	Acres	486.94	4.80	7.00	4.30	436.82	100.00%	50.12
Neighborhood Park	Acres	108.05	1.06	0.00	0.94	95.56	0.00%	12.49
Open Space	Acres	436.16	4.30	0.00	3.80	385.72	0.00%	50.44
Special Use Facilities	Number	6.00	0.06	0.00	0.05	5.31	0.00%	0.69
Trail	Miles	12.07	0.12	0.00	0.11	10.67	0.00%	1.40
By Unit of Measurement:								
Park or Natural Area	Acres	1031.15	10.16	7.00	9.04	918.10	100.00%	113.05
Special Use Facility	Number	6.00	0.06	0.00	0.05	5.31	0.00%	0.69
Trail	Miles	12.07	0.12	0.00	0.11	10.67	0.00%	1.40

Source: *2019 PROS Plan Table 3.1, City staff*

The final column of **Exhibit 2.6** shows the reimbursable quantity of each park category and unit of measurement. The quantity of such park facilities exceeds the existing needs of the park system when measuring by the future level of service, and as such, can be used to provide capacity for future users. Since those facilities will benefit future users, a share of their cost can be included in the existing facilities cost basis.

II.B.2. Expansion Projects

The first of the City's two project lists includes projects that will expand the inventory of the parks system and are therefore subject to the eligibility calculations described above. The total cost of these projects is $16.5 million, and eligibility is based on the level-of-service calculation chosen. These projects are summarized in **Exhibit 2.7** below. The eligibility percentage and eligible cost columns assume the future-by-unit approach to level of service.

Exhibit 2.7 – Expansion Projects

Location	Type	Year	Cost	Eligibility (Future by Unit)	Eligible Cost	Additional Acres
Downtown Park Expansion	Community Park	2027-2031	$ 5,500,000	100%	$ 5,500,000	3.00
South Light Rail Station Park	Community Park	2027-2031	11,000,000	100%	11,000,000	4.00
		Total	$ 16,500,000		**$ 16,500,000**	7.00

Source: *City staff*

II.B.3. Infill List

The second of the City's two project lists includes projects that will not expand the inventory of the parks system by adding acres but that will nevertheless add capacity for future users by adding amenities. The project list is shown in **Appendix A** and has a total cost of $44.3 million. Each project is assigned one of two eligibility percentages: zero percent if the project is for repair or replacement of existing assets and 18.05 percent if the project adds new amenities. That 18.05 percent represents the share of total future users made up of new users (in 2044), and assigning a project that percent recognizes that existing and future users are expected to share new amenities in existing parks proportionately. The total eligible cost of the infill list is approximately $6.3 million.

II.B.4. Calculated Future Facilities Fee Cost Basis

After determining the costs dedicated to expanding capacity, the future facilities fee cost basis is calculated by multiplying those costs by their respective eligibility percentages. As discussed above, eligibility for capacity-expanding costs on the project list were determined through level-of-service calculations, and projects on the infill list were assigned either 0 or 18.05 percent. As all methods of determining level-of-service result in the same eligibility percentages, the future facilities cost basis is $22.8 million under all scenarios.

II.C. EXISTING FACILITIES FEE

The existing facilities fee is the eligible cost of the park facilities available for future users per unit of growth that such facilities will serve. Growth was calculated in Section II.A and **Exhibit 2.6** shows the quantity of facilities available for inclusion in the existing facilities fee. The remaining piece of the fee calculation is the original cost of eligible park facilities.

II.C.1. Existing Facilities Fee Cost Basis

The City provided records for historical expenditures on its parks system going back to 1991, which are totaled by category and unit of measurement in the fourth column of **Exhibit 2.10** below. Dividing those historical expenditures by the quantity of park acres and trail miles yields a calculation of investment per unit. By multiplying that investment per unit by the number of eligible units shown in **Exhibit 2.6**, the eligible cost of those park facilities is calculated to be approximately $2.3 million when measuring by category and approximately $3.4 million when measuring by unit of measurement. However, an adjustment must be made for growth's share of outstanding debt related to that investment. Such an adjustment is necessary to make sure that growth isn't paying twice for the same capacity; once in the PIF, and once through property taxes. Growth's share of outstanding principal is estimated to be $2.4 million, and so the total eligible amount is either $0 or $1.0 million depending on the method used for determining level of service.

Exhibit 2.10 – Existing Facilities Fee Cost Basis

	Units	Historical City Investment per Unit	Eligible Number of Units	Unadjusted Eligible Amount	Growth's Share of Outstanding Principal on Parks-related Debt	Total Eligible Amount
By Category:						
Community Park	Acres	$ 24,293	50.12	$ 1,217,495		
Neighborhood Park	Acres	15,345	12.49	191,732		
Open Space	Acres	1,294	50.44	65,262		
Special Use Facilities	Number	1,253,616	0.69	869,772		
Trail	Miles	-	1.40	-		
Total				$ 2,344,261	$ 2,400,184	$ -
By Unit of Measurement:						
Park or Natural Area	Acres	$ 22,668	113.05	$ 2,562,570		
Special Use Facility	Number	1,253,616	0.69	869,772		
Trail	Miles	-	1.40	-		
Total				$ 3,432,341	$ 2,400,184	**$ 1,032,158**

Source: *City staff (historical investment, oustanding debt); previous tables*

II.D. CALCULATED PIF

This section combines the eligible cost from the future facilities fee cost basis and the existing facilities fee cost basis. **Exhibit 2.11** below summarizes the PIF calculation for all four measures of level of service.

Exhibit 2.11 – Calculated PIF

Calculated PIF		Current by Category	Future by Category	Current by Unit	Future by Unit
Cost Basis:					
Future Facilities		$ 22,825,243	$ 22,825,243	$ 22,825,243	$ 22,825,243
Existing Facilities		-	-	-	1,032,158
Total Cost Basis		$ 22,825,243	$ 22,825,243	$ 22,825,243	$ 23,857,401
Growth in Residential Equivalents		22,774	22,774	22,774	22,774
Future Facilities Fee per Residential Equivalent		$ 1,002	$ 1,002	$ 1,002	$ 1,002
Existing Facilities Fee per Residential Equivalent		-	-	-	45
Total Parks Impact Fee per Residential Equivalent		**$ 1,002**	**$ 1,002**	**$ 1,002**	**$ 1,048**
Fee Schedule:	Residential Equivalents				
Dwelling Unit	2.71	$ 2,716	$ 2,716	$ 2,716	$ 2,839
Employee	0.05	53	53	53	55

Source: *Census Bureau, 2021 American Community Survey, Tables B25024 and B25033 (residents per dwelling unit); previous tables*

As shown above, the maximum allowable PIF is $1,048 per residential equivalent under the future level of service by unit of measurement. The resulting PIF is $2,839 for a residential dwelling unit, based on an average occupancy of 2.71 residents per Census data.

The rate per employee is $55 based on the equivalency calculated in **Section II.A**. The non-residential PIF can be charged using an estimate of employee density per 1,000 square feet. **Exhibit 2.12** below provides a schedule for the non-residential PIF for all four level-of-service calculations based on employee density estimates from the Portland Metro regional government.

Exhibit 2.12 – Calculated Non-residential PIF

Employment Density				By Category		By Unit of Measurement	
	Industry Type (SIC)	S.F. per Employee	Employees per 1,000 S.F.	Current (PIF per 1,000 S.F.)	Future (PIF per 1,000 S.F.)	Current (PIF per 1,000 S.F.)	PIF per 1,000 S.F.
Ag., Fish & Forest Services; Constr.; Mining	1-19	590	1.695	$ 89.58	$ 89.58	$ 89.58	$ 93.63
Food & Kindred Projects	20	630	1.587	83.89	83.89	83.89	87.69
Textile & Apparel	22, 23	930	1.075	56.83	56.83	56.83	59.40
Lumber & Wood	24	640	1.563	82.58	82.58	82.58	86.32
Furniture; Clay, Stone & Glass; Misc.	25, 32, 39	760	1.316	69.54	69.54	69.54	72.69
Paper & Allied	26	1,600	0.625	33.03	33.03	33.03	34.53
Printing, Publishing & Allied	27	450	2.222	117.45	117.45	117.45	122.76
Chemicals, Petroleum, Rubber, Leather	28-31	720	1.389	73.41	73.41	73.41	76.73
Primary & Fabricated Metals	33, 34	420	2.381	125.84	125.84	125.84	131.53
Machinery Equipment	35	300	3.333	176.18	176.18	176.18	184.14
Electrical Machinery, Equipment	36, 38	400	2.500	132.13	132.13	132.13	138.11
Transportation Equipment	37	700	1.429	75.50	75.50	75.50	78.92
TCPU--Transportation and Warehousing	40-42, 44, 45, 47	3,290	0.304	16.06	16.06	16.06	16.79
TCPU--Communications and Public Utilities	43, 46, 48, 49	460	2.174	114.90	114.90	114.90	120.09
Wholesale Trade	50, 51	1,390	0.719	38.02	38.02	38.02	39.74
Retail Trade	52-59	470	2.128	112.45	112.45	112.45	117.54
Finance, Insurance & Real Estate	60-68	370	2.703	142.85	142.85	142.85	149.31
Non-Health Services	70-79	770	1.299	68.64	68.64	68.64	71.74
Health Services	80	350	2.857	151.01	151.01	151.01	157.84
Educational, Social, Membership Services	81-89	740	1.351	71.42	71.42	71.42	74.65
Government	90-99	530	1.887	99.72	99.72	99.72	104.23

***Source**: Metro, "1999 Employment Density Study," Table 4.*

Section III. IMPLEMENTATION

This section addresses practical aspects of implementing PIFs and provides comparisons to other jurisdictions.

III.A. INDEXING

We recommend that the City index its charges to the Engineering News Record Construction Cost Index for the City of Seattle and adjust its charges annually.

III.B. FUNDING PLAN

Even if the City implements the parks impact fees calculated previously, impact fee revenues will not be sufficient to fund the project list. An additional $36.9 million will need to be raised from other, non-impact fee, sources. This is shown in **Exhibit 3.1**.

Exhibit 3.1 – Funding Plan

Funding Plan		
Resources		
Beginning Fund Balance	$	-
Impact Fee Revenue		23,857,401
Other Needed Revenue		36,899,266
Total Resources:	**$**	**60,756,667**
Requirements		
Project List (Total Cost)	$	60,756,667
Ending Fund Balance		-
Total Requirements:	$	60,756,667

III.C. COMPARISONS

Exhibit 3.2 below shows a comparison of PIFs calculated for single-family homes for some relevant jurisdictions.

Exhibit 3.2 – PIF Comparisons

Jurisdiction	PIF for a SFR*
Issaquah	$10,533
Kirkland	$6,822
Sammamish	$6,739
Redmond	$5,884
Shoreline	$5,227
Kent	$3,904
Auburn	$3,500
Renton	$3,276
Everett**	$3,180
Federal Way (Proposed)	**$2,839**

Source: *FCS GROUP Survey, 3/27/2023*

**SFR = Single-family residence*

***Assumes a three-bedroom house*

APPENDIX A: INFILL PROJECT LIST

Location	Type	Year	Cost	PIF Eligibility	PIF-Eligible Cost
Adelaide	Formalize picnic areas/install picnic shelters (2)	2033	$ 167,000	18.05%	$ 30,147
Alderbrook Park	Playground Replacement	2023	150,000	18.05%	27,078
Alderdale park	Playground Replacement	2027	150,000	18.05%	27,078
BPA	Add a fitness trail and equipment	2026	143,000	18.05%	25,814
BPA	Repair asphalt trail	2030-2040	-	0.00%	-
BPA	Install monument sign	2028	7,000	18.05%	1,264
BPA	Install directional signage/wayfinding	2030	12,000	18.05%	2,166
Brooklake	Demo Hall & Green Storage Buildings	2023	8,000	0.00%	-
Brooklake	Electrical upgrades	2023	20,000	18.05%	3,610
Brooklake	Facility/Feasibility Assessment - Master Plan	2023	4,000	18.05%	722
Cedar Grove Park	Playground Replacement	2031	175,000	18.05%	31,591
Celebration	Convert To Artificial Turf	2032	11,500,000	18.05%	2,075,971
Celebration	Sand based turf replacement	2026	500,000	18.05%	90,260
Celebration	Replace field fence	2035	119,000	0.00%	-
Celebration park	Playground Replacement	2024	450,000	18.05%	81,234
City Hall	add ADA door control @ Court Entry	2023	60,000	18.05%	10,831
City Hall	Card control replacement/upgrade	2027	125,000	18.05%	22,565
City Hall	Carpet replacement	2027	250,000	0.00%	-
City Hall	City Hall Water Heaters (5)	2028	75,000	0.00%	-
City Hall	Court bench refurbish	2025	8,500	0.00%	-
City Hall	Elevator	2024	185,000	0.00%	-
City Hall	HVAC	2025	400,000	0.00%	-
City Hall	Reception Counters - replace Formica	2026	10,000	0.00%	-
City Hall	Roof replacement	2026	500,000	0.00%	-
City Hall	Security Fence Around Entire P/E Parcel/Lot	2024	75,000	18.05%	13,539
City Hall	Sidewalk ADA upgrades	2023-2027	240,000	0.00%	-
Coronado Park	Playground Replacement	2028	150,000	18.05%	27,078
Fisher Pond	Prepare master plan	2028	12,000	18.05%	2,166
Fisher Pond	Install picnic shelter	2030	83,000	18.05%	14,983
Fisher Pond	Decommission on-site well	2030	12,000	0.00%	-
French Lake	Develop/Install Shelter	2028	60,000	18.05%	10,831
FWCC	Exercise Equipment (full replace)	2026	150,000	0.00%	-
FWCC	Locker Rooms/Cabanas Restoration	2023	250,000	0.00%	-
FWCC	Replace Pool Water Slide/Play Equipment	2023	1,200,000	0.00%	-
FWCC	Re-plaster Lap Pool	2027	400,000	0.00%	-
FWCC	Pool/slide repairs	2023	298,000	0.00%	-
FWCC	Replace pool and play equipment	2023	60,000	0.00%	-
FWCC	Outdoor areas	2033	119,000	18.05%	21,482
Heritage Woods park	Playground Replacement	2029	175,000	18.05%	31,591
Lake Grove Park	Playground Replacement	2032	200,000	18.05%	36,104
Lakota	Parking Lot Replacement	2023	170,000	0.00%	-
Lakota	Upgrade soccer field to artificial turf	2021	1,489,000	18.05%	268,793
Lakota	Upgrade running track to rubber	2021	238,000	18.05%	42,964
Lakota	Upgrade field lighting	2032	893,000	18.05%	161,204
Lakota	Upgrade restrooms and increase parking	2032	953,000	18.05%	172,035

(continued next page)

Location	Type	Year	Cost	PIF Eligibility	PIF-Eligible Cost
Laurelwood	Prepare master plan	2025	36,000	18.05%	6,499
Laurelwood	Perform master plan improvements	2027-2037	-	18.05%	-
Laurelwood	Install 1/2 basketball court	2030	60,000	18.05%	10,831
Madrona Park	Playground Replacement	2030	175,000	18.05%	31,591
Mirror Lake	Replace and improve playground	2020	143,000	18.05%	25,814
Monument Signs	Complete sign implementation program	2023-2033	48,000	18.05%	8,665
Olympic View	Formalize Joe's Creek social trail	2035	-	18.05%	-
Olympic View	Improve neighborhood entrances (6)	2035	36,000	18.05%	6,499
Olympic View	Install 1/2 basketball court	2030	60,000	18.05%	10,831
Olympic View Park	Playground Replacement	2025	125,000	18.05%	22,565
Palisades	Repair/replace asphalt basketball court	2028	6,000	0.00%	-
Palisades	Install picnic shelter	2030	83,000	18.05%	14,983
Palisades Park	Playground Replacement	2026	200,000	18.05%	36,104
Sacajawea	Artificial turf replacement - SAC	2026	700,000	0.00%	-
Sacajawea	Natural Turf Replacement (ballfields)	2023	300,000	0.00%	-
Sacajawea	Renovate Ballfield Drainage	2024	50,000	0.00%	-
Sacajawea	Replace Rubber running track	2024	340,000	0.00%	-
Sacajawea	Tennis Court Replacement	2025	200,000	0.00%	-
Sacajawea	Wood Pole Replacement	2029	150,000	0.00%	-
Sacajawea	Replace water service line	2028	18,000	0.00%	-
Sacajawea	New restroom - sewer lift station	2035	89,000	18.05%	16,066
Sacajawea	Install picnic shelter	2030	83,000	18.05%	14,983
Safety & Security	Parking lot lighting improvements (LED) at Sacaja	2028	-	18.05%	-
Safety & Security	Install security cameras in parking lots at Scajawe	2028	-	18.05%	-
Saghalie	Artificial turf replacement - Soccer Field	2032	600,000	0.00%	-
Saghalie	Tennis Court Renovation/Resurface	2025	40,000	0.00%	-
Saghalie	Replace Rubber running track	2023-2032	505,000	18.05%	91,162
Saghalie	Install artificial turf on football field	2035	1,429,000	18.05%	257,962
Saghalie	Renovate basketball courts	2026	71,000	0.00%	-
Saghalie	Overlay parking lot	2028	48,000	0.00%	-
Steel Lake	Develop a master plan	2033	149,000	18.05%	26,897
Steel Lake	Instal new shelters (Sites 2-5)	2028-2033	292,000	18.05%	52,712
Steel Lake	Re-pipe annex and beach house restrooms	2026	238,000	0.00%	-
Steel Lake Annex	Artificial Turf Replacement - Karl Grosch	2032	700,000	0.00%	-
Steel Lake Annex	Parking Lot Repairs	2024	10,000	0.00%	-
Steel Lake Park	Artificial turf - Site #5	2032	1,300,000	18.05%	234,675
Steel Lake Park	Dock Replacement	2027	1,250,000	0.00%	-
Steel Lake Shop	New Maintenance Shop (Parks Share, 33%)	2032	11,666,667	18.05%	2,106,058
Steel Lake Shop	Shop - Backup power generator	2025	40,000	18.05%	7,221
Steel Lake Shop	Shop - Electrical Service - new panel	2024	7,500	18.05%	1,354
Steel Lake Shop	Shop Roof	2026	75,000	18.05%	13,539
Steel Lake Shop	Storage House - New Garage Doors	2024	7,000	18.05%	1,264
Steel Lake Shop	Storage House Roof	2024	20,000	18.05%	3,610
Town Square	Install shade covers	2025	89,000	18.05%	16,066
Town Square	Install 2nd shelter	2030	83,000	18.05%	14,983
Town Square	Band shell	2028	-	18.05%	-
Town Square	Veteran memorial	2025	-	18.05%	-
Wayfinding Signs	Implementation of wayfinding signage program	2030-2040	-	18.05%	-
Wedgewood	Replace and improve playground	2019	167,000	18.05%	30,147
West Hylebos	Renovate caretaker access road	2033	12,000	0.00%	-
West Hylebos	Make parking lots repairs	2025	48,000	0.00%	-
West Hylebos	Expand parking lot	2033	149,000	18.05%	26,897
West Hylebos	Replace maintenance garage	2030	89,000	0.00%	-
Wildwood	Repair asphalt trail	2026	12,000	0.00%	-
Wildwood	Upgrade park fixture	2035	12,000	18.05%	2,166
		Total	$ 44,256,667		**$ 6,325,243**

Source: *2019 PROS Plan Table 7.2, City staff*

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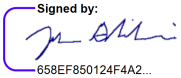
John Ghilarducci john.ghilarducci@bowman.com FCS, a Bowman company Security Level: Email, Account Authentication (None)	Signed by:  658EF850124F4A2... Signature Adoption: Uploaded Signature Image Using IP Address: 50.201.190.74	Sent: 8/4/2025 1:13:07 PM Viewed: 8/4/2025 1:22:32 PM Signed: 8/4/2025 1:28:03 PM

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