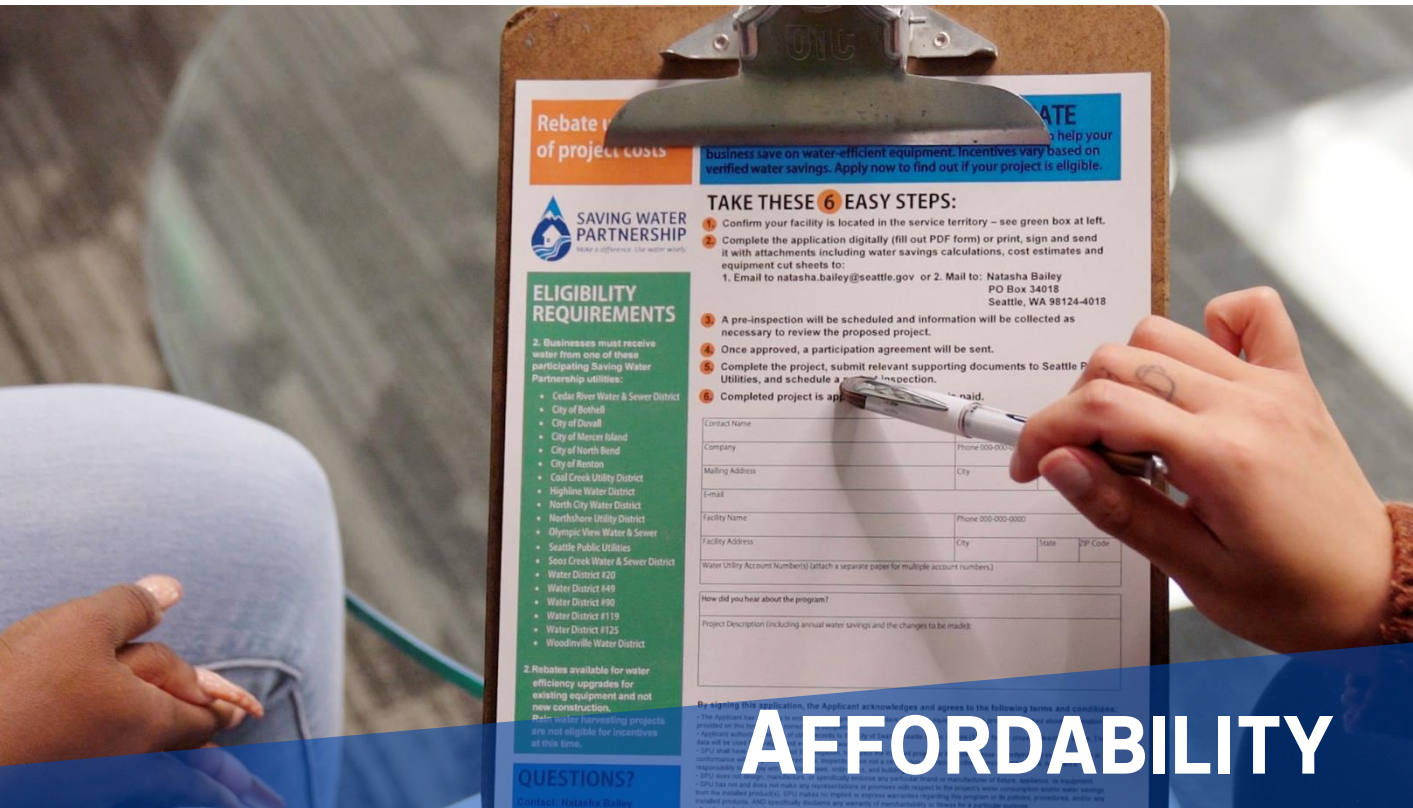


SEATTLE PUBLIC UTILITIES'



AFFORDABILITY

AND

ACCOUNTABILITY



Seattle
Public
Utilities

STRATEGIC PLAN

Accomplishments Report 2019-2021

Table of Contents

- A. Affordability + Accountability Strategic Plan - Outcomes 2
 - 1. 2019-2021 Affordability Results..... 2
 - 2. Affordability Measures..... 4
 - 3. 2019-2021 Accountability Results..... 7
- B. Affordability and Accountability Strategic Plan - Focus Area Reporting 8
 - 1. 2019-2021 Key Results by Focus Area..... 8
 - 2. 2019-2021 Actions and Learnings by Focus Area 10
- Appendix 1 15

SPU Affordability + Accountability Strategic Plan Accomplishments Report 2019-2021

SPU's Affordability and Accountability (A+A) Strategic Plan identifies the utility's strategic priorities and commitments for improving SPU's overall ratepayer affordability and business performance. This ongoing work is integral to SPU's strategic business planning and was first initiated in 2017 by Council Resolution 31760. SPU A+A commitments are updated biennially, and overall progress and accomplishments are reported on for a 3-year period.

SPU's overall goal is to deliver the highest quality service at the lowest possible predictable rate and to be transparent about how rate dollars are spent.

- **Affordability** outcomes focus on overall and individual "ability to pay." For SPU, this means providing essential services, pricing, and assistance to customers in ways that ensure everyone has access to SPU essential services based upon whatever life situation they are in.
- **Accountability** outcomes focus on meeting commitments and demonstrating results. For SPU, this means ratepayers understand how utility resources are being spent, the value for investments is clearly demonstrated, and the utility acts and makes progress on the long-range goals of the community.

Strengthening SPU affordability and accountability outcomes is also a critical expectation of our ratepayers. To strengthen SPU business practices and drive affordability and accountability outcomes, the A+A Strategic Plan prioritizes SPU commitments and improvements in key focus areas. This Plan is developed collaboratively with subject matter experts and Executive leadership across the utility to create agreement and a clear set of next steps for action.

For the 2019-2021 period, the Plan identified 12 strategies and 47 actions for improving affordability and accountability in six focus areas:

1. Capital Planning and Delivery
2. Budget and Financial Management
3. Process Efficiencies and Improvement
4. Customer Assistance
5. Partnership Opportunities
6. Regulatory Alignment

SPU also relies on our customers to do their part to keep costs low by conserving, minimizing pollution, and reducing or upcycling waste. Ultimately, SPU sees this work as a partnership where we deliver on the most reasonable balance of service for the customer's pocketbook and long-term sustainability of our infrastructure, health, and environment.

This report is divided into two parts. [Part A](#) provides a high-level overview of SPU's affordability and accountability outcomes and results for the 2019-2021 period. [Part B](#) provides detail about specific actions, accomplishments, and lessons learned within each of SPU's six focus areas for 2019-2021.

A. Affordability + Accountability Strategic Plan - Outcomes

Overall, SPU’s affordability and accountability work is characterized by focused actions, large and small, made across the organization as part of everyday work. Foundational to this approach is our commitment to building an empowered work culture where employees collectively share in the work of lowering ratepayer costs, delivering on SPU commitments, and continuously improving employee performance.

1. 2019-2021 Affordability Results

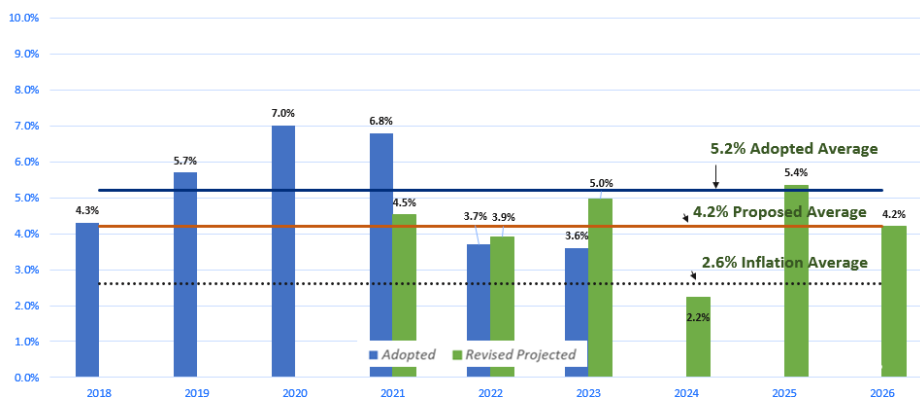
During the 2019-2021 period, SPU’s affordability work produced two critically significant results that improve utility ratepayers’ ability to pay: (1) SPU lowered the planned 6-year rate path by 20% and, (2) for individuals experiencing hardship, SPU significantly increased customer affordability assistance. Importantly, these outcomes have been achieved while ensuring SPU’s strong financial health (even during the COVID period) and meeting future regulatory and infrastructure challenges. Details behind these affordability results as well as SPU affordability measures are presented below.

Lowering of SPU’s Planned 6-year Rate Path by 20%

Savings from several large-scale affordability actions have helped SPU reduce the planned 6-year rate path by 20%, reducing annual average rate increases from 5.2% to 4.2% per year (with the possibility of more in the future). SPU is focused on managing to the 4.2% rate path or lower, using this as a performance benchmark target as SPU faces pass-through rate increases from King County’s sewer services, inflationary pressure, supply chain challenges, and updates to biennial budgets. This A+A work is helping SPU to “bend the rate curve” and align annual rate increases closer to area inflation averages (2.6%, and higher during the COVID pandemic), even though utility cost factors such as health care, construction, and labor inflate at a typically higher rate (see graphic below).

Lowering Our Overall Rate Path by 20%

2021-2026 Growth rate is projected at 4.2% - 20% lower than the previously planned growth rate of 5.2%



In 2019-2021, significant cost-saving actions contributed to SPU’s lower average rate path, including increases in alternative funding pursuit, level-setting CIP accomplishment and cost-confidence forecasting assumptions, lowering financing rates through bond refinancing, and successful contract negotiations. Highlights of key savings efforts are summarized below.

A+A Focus Area	2019-2021 Actions	Savings Amount
Capital Project Delivery	Instituted and improved cost-confidence level funding forecasting	Reduced cost overruns
	Improved capital project coordination efficiencies	varied
Budget and Financial Management	Secured WIFIA Funding	\$66 million
	Secured Washington State Revolving Fund (SRF) Loans	\$6.4 million
	Received CARES Act - Water Utility Emergency Assistance Funding	\$500,000
	Adjusted CIP Accomplishment Rate Funding Assumptions (97.5% to 85%)	\$222 million in delayed costs
	Refinanced bonds	\$35.4 million
Regulatory/ Contractual Alignment	Renegotiated Solid Waste contracts	\$5 million/year

Capital project coordination efficiencies: SPU works with other City departments to achieve project cost efficiencies. For example, reducing costs of digging up and replacing streets to install pipes by collaborating with SDOT for timing (such as for the Seattle Viaduct/Tunnel and Waterfront projects).

Water Infrastructure Finance and Innovation Act (WIFIA) funding: SPU applied for and was awarded a grant from the Federal government under the WIFIA program that offered low-interest-rate financing for the Ship Canal Water Quality Project, saving approximately \$66 million over 25 years.

Washington State Revolving Fund (SRF) loan: The Drainage and Wastewater Fund secured a \$25 million state revolving fund loan at a reduced interest rate, leading to estimated savings of \$6.4 million over the life of the loan. SPU is in the process of securing additional low-interest SRF loans.

Rate forecast cost containment efforts and savings: Since 2018, SPU has been underspending on operations and CIP. For example, more positions were held vacant than initially planned, 4% projection compared to an annual average of 10%, providing vacancy savings. No new positions were added for 2021. Additionally, the CIP has been spending at slower rates than initially planned. After examining assumed capital spending in forecasts compared to actuals for the last several years, SPU reduced financial accomplishment assumptions for rate forecasts from 97.5% to 85% (a common industry benchmark) for most projects, lowering the cash-on-hand needed for projects and saving SPU approximately \$222 million.

Bond refinancing: SPU refinanced Water Fund and Drainage and Wastewater Fund (DWF) bonds, producing significant savings over the long-term. The defeasance saved the Water Fund about \$475,000 per year through 2025 and about \$2 million per year from 2026-2034, for total savings of \$18.9 million. DWF savings was \$612,000 per year through 2027 and \$2.3 million per year from 2028-2032, for total savings of \$16.5 million.

Solid waste contract negotiations: SPU worked to negotiate new Solid Waste contracts that provide garbage, yard waste, and recycling services, saving \$5 million annually.

Increasing Customer Affordability Assistance

Ensuring equitable access to utility services is also a priority for SPU, with a focus on providing significant support to our ratepayers, especially to our most vulnerable customers during the COVID pandemic. SPU financial assistance is about \$22 million per year (with COVID payment deferrals, financial assistance is in

the range of \$37 million). In the 2019-2021 period, and especially during COVID, SPU took proactive action to increase customer affordability assistance in several key efforts summarized in the table below.

2019-2021 Actions	Result
Piloted self-certification program for Utility Discount Program (UDP)	Temporarily increased 50% bill discounts to 9,000 customers in need prior to and during COVID.
Expanded Emergency Assistance Program (EAP)	Temporarily doubled assistance to eligible households during COVID.
Provided flexible payment arrangements	Reduced down payment and length of payment barriers during COVID.
Implemented COVID moratorium on late fees	Waived late fees to all customers during COVID.
Implemented COVID moratorium on all shutoffs	Ensured all customers had essential services during COVID.
Proactively supported low-income customer with past due payments	Provided additional notice and proactive application of emergency assistance to UDP customers to prevent shutoffs.
Established a Community Donation Program.	Developed legislation, financial and website tools, and marketing for a community donation program that is now available online and through bills.
Revised Leak Adjustment policy	Provided additional \$1.65 million leak adjustment benefit to both residential and commercial customers compared to previous policy.
Applied Federal Rental Assistance money	Provided \$500,000 in additional bill relief to low-income customers during COVID.

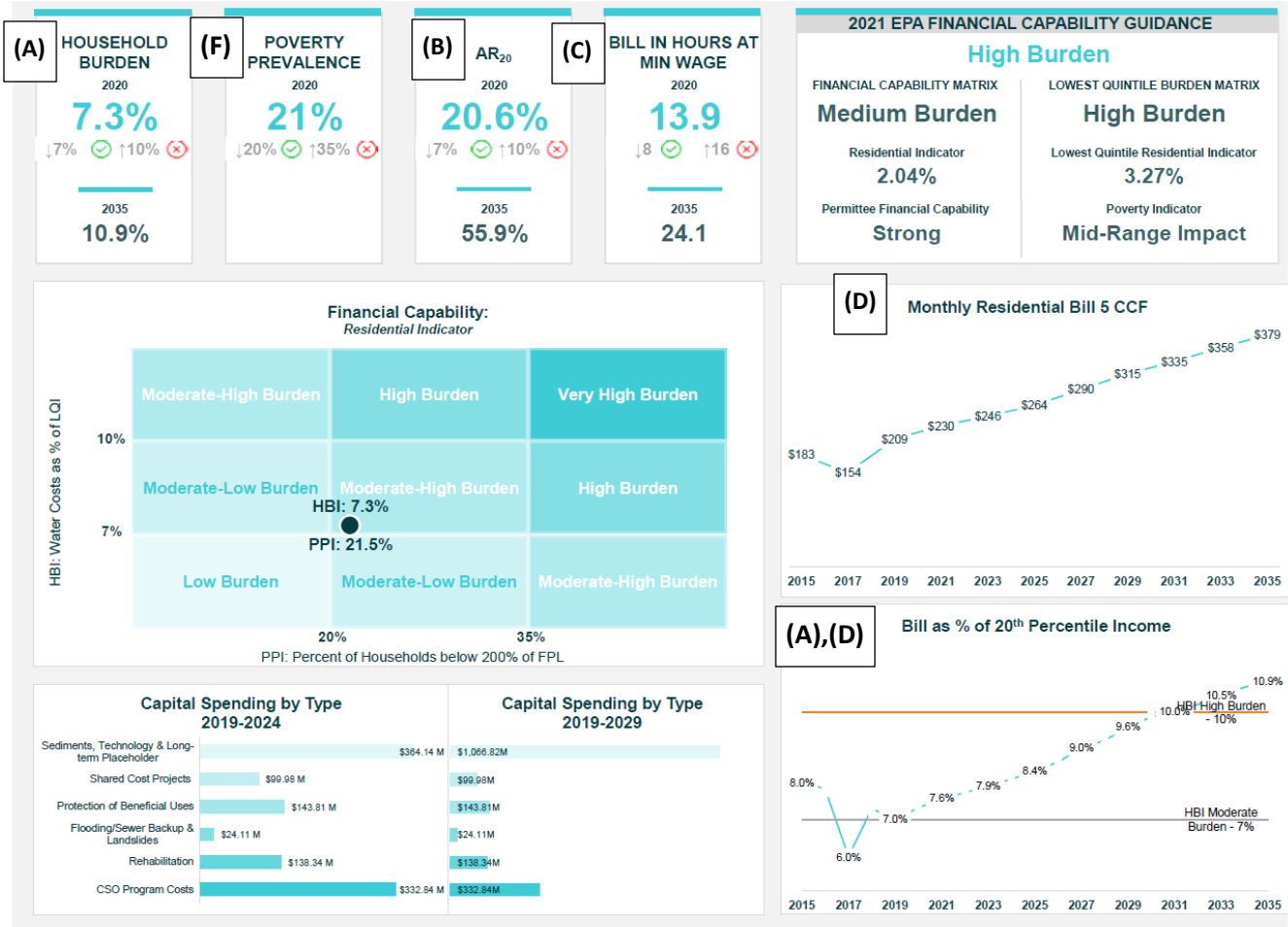
2. Affordability Measures

SPU is continuing to improve the measurement and evaluation of our customer’s ability to afford or pay for water, wastewater and drainage, and solid waste services provided by SPU. SPU is concerned about the general affordability of our rates, with the understanding that more targeted assistance is necessary for certain households. In particular, lower income households are unequally impacted by rate increases, which tend to be regressive (the increases account for a larger percentage of their income).

Utility rate affordability has typically been assessed at a household level (whether a household can afford utility services) and at a community level (how many households in a community can afford utility services; also referred to as “community economic capacity”). This dual-pronged affordability assessment has been used by the Environmental Protection Agency (EPA) as they discern the “affordable” level of prescribed water sector regulatory requirements, looking at the cost of service as a percentage of median household income (household affordability), and poverty prevalence and unemployment rate (community economic capacity). However, numerous experts have noted the limitations of these measures, especially in large metropolitan areas where cost of living is higher and income disparities are pronounced. Additional measures are thus useful to evaluate household and community affordability more thoroughly.

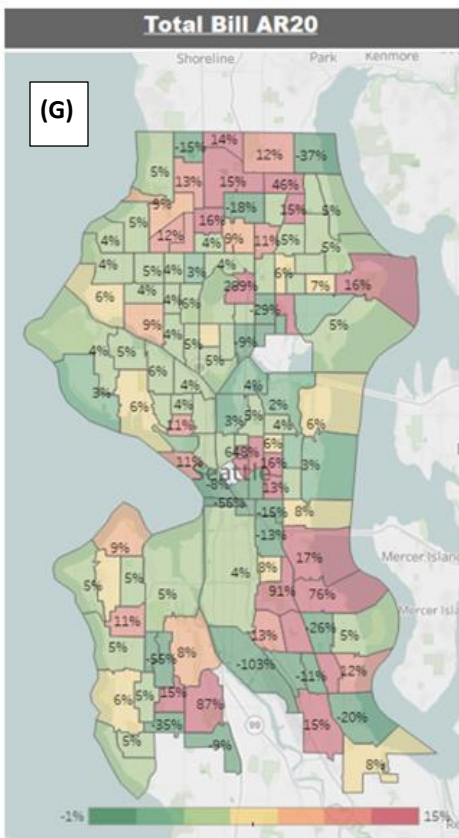
The table and dashboard graphics below reflect the household affordability and community economic capacity measures that SPU is currently tracking and assessing to better inform rate-setting, regulatory negotiation, and customer assistance practices and decision-making.

Household affordability	
(A) Bill as percentage of income	<p>1) Average per household cost of wastewater services as a percentage of service area median household income. Used by the EPA to identify wastewater-related mandates that might result in “undue economic hardship,” allowing utilities to negotiate extensions to project deadlines. The EPA considers SPU’s measure of this to be “high.”</p> <p>2) Utility costs as a percentage of upper limit of the lowest income quintile of service area. Utility costs include water and wastewater; assumes 50 gallons of water consumed per person per day. Supplements EPA’s measure to account for uneven income growth, with lowest incomes experiencing slower growth.</p>
(B) Affordability ratio (AR20)	Measure of the percentage of discretionary income being spent for total annual water costs for a lowest income quintile household. A high AR20 indicates unaffordable rates. Non-discretionary income includes food, housing, transportation, and taxes, among others. Supplements income-based measures by focusing on how much income customers actually have available to spend on utilities. Developed by Professor Manny Teodoro. As of 2018, Seattle’s AR20 is among the highest in the nation.
(C) Bill in hours at minimum wage	The number of hours per month a minimum wage worker needs to work to pay the typical 4-person household water and wastewater bill. Intended to quickly evaluate what the burden is for those with the lowest earnings. SPU’s measure for this indicates an affordability burden.
(D) Growth rate of utility rates	Compared with the local consumer price index (CPI) inflation rate. Provides a snapshot of future rate affordability and effect on fixed-income customers, though it lacks the context of regulatory, asset management, and construction and labor inflationary pressures SPU faces. SPU’s utility rate has generally increased faster than inflation, though rates did not increase in 2021.
Community economic capacity	
(E) Unemployment rate	BLS measure of percentage of labor force that is unemployed. Used by the EPA to identify communities that might have limited economic capacity to pay for higher rates to meet wastewater mandates. Currently tracking on an annual basis, potential to track on a monthly basis to provide a more current measure of community economic capacity. Seattle has a low unemployment rate relative to the national average.
(F) Poverty prevalence	Percentage of households living at or below 200% of the Federal Poverty Level. The EPA is currently evaluating whether to incorporate this measure in consideration for regulatory negotiations. Seattle has a fairly low poverty rate relative to the national average.
(G) AR20 by census tract	Measuring the AR20 measure by census tract. Allows evaluations of neighborhood differences in affordability and helps identify vulnerable populations. Tracts with high a AR20 generally align with disadvantaged areas according to the Racial and Social Equity Index .
(H) Percentage of households receiving public assistance	Useful for seeing how widespread need is in community, how many people could be provided customer assistance by SPU. Potential measure to track.



SPU AffordabilityDashboard v6.1.20220119

Preliminary Draft



Above: Affordability and financial capability assessment dashboard, which includes (A) Bill as percentage of income, (B) Affordability ratio, (C) Bill in hours at minimum wage, (D) Growth rate of utility rates, and (F) Poverty prevalence
Left: Map of (G) AR₂₀ by census tract

Note: These figures are intended to be illustrative of measures tracking in SPU's dashboard, and does not necessarily contain the most up-to-date measures, particularly with respect to forecasting of future rates.

While the above affordability measures provide solid context for examining utility affordability issues broadly in Seattle, setting utility rates to these “affordable” levels is, at best, a general instrument for assessing affordability considerations. Customer rates based on affordability measures do not ensure that every individual household can afford access to services. Rather, more targeted, carefully designed customer assistance programs and broader partnerships with community benefit organizations can and must also be used (with consideration for legal or excess administrative burdens) to help address affordability issues.

SPU is working on ways to evaluate the effectiveness of our customer assistance programs on affordability. There are two parameters for evaluating whether customer assistance is helping with affordability: reach and capacity. Reach looks at whether assistance is reaching those who need it, and capacity looks at whether the assistance is sufficient in making SPU’s services affordable. To evaluate the reach of our current programs, SPU looks at what percentage of households who are likely to be eligible for our programs are enrolled or have applied for assistance. Another consideration for reach is if there are populations who need assistance that our current programs do not cover. There is no measure for this, but it is something that we regularly assess. Currently, there is no measure for capacity, but we are exploring ways to measure whether our customer assistance programs provide sufficient levels of assistance.

Rates that are truly affordable would mean minimal delinquencies and no shutoffs (there might be delinquency that is unrelated to affordability, such as forgetful customers missing a bill). SPU tracks the number of customers that are delinquent and delinquent dollar amounts, as well as the number and location of shutoffs. SPU pays close attention to shutoff “hotspots”, as these could indicate a need for better outreach about customer assistance programs or designing programs that are more suitable for the needs of these communities. Mapping these “hotspots” to climate justice and equity maps provides additional insight, ensuring that outreach strategies and customer assistance programs are done in an equitable way.

One difficulty with developing lower rates comes from the need to balance revenue from (affordable) rates with business responsibilities: it is costly to operate/maintain and expand aging infrastructure, comply with existing and emerging federal and state regulations, and develop and implement various policy initiatives such as climate mitigation and adaptation strategies, waste reduction, value-based investments, and conservation. Rates must be *both* low enough to be broadly affordable to the community *and* high enough to provide sufficient revenue to meet required regulations and necessary maintenance. Evaluating SPU’s business requirements and financial capabilities is a key aspect for assessing whether the utility can offer affordable rates while maintaining the capacity to collect sufficient revenue to address needs. Notably, all else equal, lowering rates for certain customers means higher rates for other customers, so SPU regularly looks for opportunities to reduce costs and increase non-rate revenue, such as the bond refinancing and low-interest loans mentioned above.

3. 2019-2021 Accountability Results

SPU efforts to improve ratepayer accountability during the 2019-2021 timeframe have focused in two main areas: (1) expanding the scope of SPU’s strategic business plan quarterly reporting; and (2) reporting on successful completion of SPU capital infrastructure investments. Together, these efforts help to improve transparency about how and where SPU ratepayer dollars are being spent, as well as SPU’s ability to deliver service and meet priority commitments. SPU will continue to improve results in this area.

Expanding Strategic Business Plan Reporting

As part of SPU’s 2021-2026 Strategic Business Plan (SBP) adoption, the utility committed to expanded quarterly performance reporting for the Customer Review Panel (CRP) in six areas:

1. essential service delivery metrics,
2. SBP-highlighted initiative and investment milestones,
3. SBP focus area progress,
4. capital investment portfolio progress,
5. financial performance, and
6. an annual utility accomplishments report card.

SPU is also committed to continuous improvement of SBP reporting. Current reporting details are outlined in SPU’s [SBP Appendix A](#). SPU SBP quarterly reports can be found on SPU’s [SBP plan documents](#) website.

Capital Investment Transparency and Accountability

During the 2019-2021 period, SPU completed work on 37 capital projects totaling \$139 million throughout the City and watersheds. A list of completed projects, costs, and geographic locations is provided in [Appendix 1](#) to this report. SPU is developing an interactive mapping tool that will allow external parties to view SPU information about in-progress and completed capital projects. In addition to project completion, SPU’s Ship Canal Water Quality Project is emblematic of SPU’s focused efforts to improve management and achieve successful delivery in this timeframe. This \$570 million, multi-year, multi-project investment is the largest capital project SPU has ever delivered. After almost four years of construction and the occurrence of many risk events, the budget confidence is at 60% on the \$570M budget. When the cost confidence dropped to 50% in 2020, SPU and King County undertook a significant cost reduction effort and was able to find \$11M in savings, raising the confidence level back up to 70%. The cost confidence will continue to be periodically updated as the project progresses and changes based on the level of design, the amount of contractor bids, the occurrence of risk events, etc.

B. Affordability and Accountability Strategic Plan - Focus Area Reporting

For the 2019-2021 period, SPU had priorities and commitments into six primary focus areas, identifying 12 strategies and over 47 actions to pursue. While COVID-19, staffing changes, additional analysis, and other factors resulted in the need for adjustments in SPU’s specific actions, SPU effectively advanced progress in each focus area.

1. 2019-2021 Key Results by Focus Area

The table below provides a summary of key results by plan focus area for the 2019-2021 period.

Focus Area	Key Results
Capital Planning and Delivery	<ul style="list-style-type: none">• Initiated monthly capital planning coordination in common geographies (DWW/Water) to identify opportunities for cost savings and minimize disruption to communities.• Provided quarterly capital project reporting to the Customer Review Panel to bring external transparency of progress.• Kept the \$570 million Ship Canal Water Quality project (SPU’s largest capital project ever) on schedule and on budget.

Budget and Financial Management	<ul style="list-style-type: none"> • Adopted a 20% lower 6-year rate path (4.2%, compared to 5.2% previously) in the Strategic Business Plan. • Saved ratepayers over \$70 million through successful pursuit of Federal and State infrastructure funding such as WIFIA, SRF loans for the Ship Canal Water Quality Project. • Achieved AAA bond ratings during 2021 bond refinancing, saving ratepayers millions through lower interest rates financing SPU capital projects.
Process Efficiencies and Improvement	<ul style="list-style-type: none"> • Implemented lean principles and improved work efficiencies among 5 diverse working groups, saving over 500 hours per year through the SimplifyWork training pilot. • Implemented Adobe Sign, saving thousands of trees across the utility and increasing efficiencies during COVID-related remote work. • Hired one FTE to focus on data analysis and field operations process improvements in the Drainage and Wastewater line of business.
Customer Assistance	<ul style="list-style-type: none"> • Increased new UDP enrollments by 9,000 households during COVID self-certification pilot. • During the COVID shutoff moratorium, provided \$1.5 million in Emergency Assistance to 2,243 customers; \$500,000 in Federal Emergency Relief Act Assistance to 355 customers; and ensured 0% of SPU customers shut off. • Helped 411 customers in 2020 with \$1.05 million distributed in leak adjustments, and 1,103 customers in 2021 with \$2.8 million in leak adjustments.
Partnership Opportunities	<ul style="list-style-type: none"> • Leveraged SPU’s \$100 million in South Park Capital Investments to facilitate investment and funding momentum for South Park Community that included park acquisition, affordable housing acquisition, \$850,000 in philanthropic investments, and \$7.5 million in Mayor’s Office resilience funding. • Launched SPU’s first Community Benefits Public Private Partnership (CBP3) effort for Green Stormwater Infrastructure and paved the way for State guidelines that enabled it. • Created Equity Bridge, Design and Innovation Lab (DIL), Climate Change, and Affordability and Accountability communities of practice at SPU to bring together and empower SPU employees to holistically learn from each other, align work efforts, and tackle key issues.
Regulatory Alignment	<ul style="list-style-type: none"> • Fostered partnerships with King County to advocate for adaptive regulatory practice for CSO control. • Completed SPU Financial Capability Assessment (FCA) for CSO regulation, a national benchmark evaluation of regulatory affordability issues and metrics. • Partnered with US Plastics Pact to reduce solid waste rate path impact attributable to regulatory compliance

2. 2019-2021 Actions and Learnings by Focus Area

This section highlights many of the specific actions taken for each affordability and accountability plan focus area during the 2019-2021 period, in addition to observations and lessons learned for each focus area.

Capital Planning and Delivery: SPU set strategic goals to better integrate capital planning, improve project delivery, and enhance capital reporting to streamline efforts, reduce costs, and maximize benefits of SPU capital investments. To meet these goals, SPU:

- Initiated monthly capital planning coordination in common geographies (Drainage and Wastewater/Water lines of business).
- Developed and approved a plan to improve Capital Improvement Program (CIP) planning and delivery coordination, standardization, and output in the Drainage and Wastewater line of business.
- Streamlined project approval processes to reduce time and align approval authorities.
- Established capital project expensing, rescoping, and monitoring procedures.
- Eliminated duplication of project management data entry and systems maintenance activities.
- Reduced total dollar amount of project management reserves through pooling.
- Increased efficiency and speed of consultant procurement processes.
- Instituted and improved cost confidence level forecasting and monitoring for the Ship Canal Water Quality Project.
- Developed a Drainage and Wastewater capital planning framework to consistently value multiple community and environmental benefits in CIP options analysis.
- Completed a mapping viewer for SPU capital project information and geographic locations.
- Revamped Asset Management Committee review process to save time and money.
- Developed and began quarterly CIP reporting for SPU's customer review panel.

Observations and Learnings: Significant improvements have been made in this focus area, resulting in savings to our ratepayers. The bulk of improvements came in the following areas: changes in how much cash is held for delivery, process modification/streamlining, development of new areas for collaboration, and software changes. SPU has successfully taken care of the “low-hanging fruit” and continues to work on items that have longer development times. One lesson learned is to be less conservative about the amount of money needed on-hand to deliver projects. The changes made to the assumed CIP accomplishment rate and switching to reserve pooling resulted in significant reductions in SPU's rate path.

Budget and Financial Management: SPU set strategic goals to review financial policies, revamp the budget process, and enhance financial and performance monitoring. During the 2019-2021 timeframe, SPU:

- Adopted an SPU Strategic Business Plan (SBP) that reduced SPU's 6-year adopted rate path by 20% - 5.2% to 4.2%.
- Smoothed SPU Drainage and Wastewater rate increases as part of rate study adoption; coupled with the Water Fund rate study, this further lowered SPU's 6-year adopted rate path below 4.2%.
- Aligned Water and Drainage and Wastewater rate studies to the SBP rate path.
- Reported on past rate forecasting performance as part of SBP adoption.
- Performed a comprehensive update and consideration of SPU financial policies.
- Assessed and recommended changes to SPU's emergency reserve funding.

- Level set rate funding forecasting assumption to better align with actual spending – reduced Capital Improvement Program (CIP) accomplishment assumptions from 97.5% to 85% (industry standard) and aligned with SPU practices.
- Refinanced bonds to lower interest rates and improved bond ratings to AAA for the Water Fund.
- Increased pursuit of alternative funding sources (WIFIA loan, SRF) to save tens of millions of dollars.
- Discussed biennial budgeting options with the City Budget Office aimed at reducing annual efforts.
- Instituted monthly financial health, fund performance, and delinquency reporting during COVID.
- Enhanced quarterly financial monitoring and reporting to the Customer Review Panel.
- Increased the frequency and dashboarding of core simple financial reporting to the Executive team and lines of business.

Observations and Learnings: SPU continues to meet financial goals through reviewing and updating our financial policies, improving bond rates and ratings, piloting changes to the budget process, and enhancing financial and performance monitoring. These actions have kept SPU (and SPU funds) in sound financial shape, despite COVID-related financial stressors, allowing SPU to support current and emerging needs. The rate path included significant reductions in SPU's annual costs, helping us meet financial policy goals while preserving rate revenues that can be used to prevent rate volatility and smooth future rates. At the same time, the SPU Finance Division continuously strives to improve its budget processes and financial results, including ongoing efforts to capture lessons learned and advance new and innovative actions.

Process Efficiencies and Improvements: SPU set a strategic goal to develop a culture of continuous improvement that is focused on enhancing value to customers and improving SPU efficiency and performance. SPU took the following actions to meet these goals in the 2019-2021 timeframe:

- Completed a SimplifyWork pilot that engaged 5 managers and their teams to find process improvements within their business unit, resulting in savings of over 500 hours per year. Outcomes include:
 - Implementing several electronic administrative process improvements, such as Adobe Sign, to create efficiencies that save time and money.
 - In Q2 2021, Corporate Performance revisiting the issues associated with estimated billing and revised previous effort to address root causes behind estimated meter reads resulting in estimated bills to customers. The initiative is currently in planning.
- Developed a scope and hiring a consultant to launch ongoing SimplifyWork training opportunities beginning in 2022.
- Hired an FTE to address process improvement and data analysis issues within Drainage and Wastewater operations. Work efforts have included:
 - Launching various continuous improvement projects with Drainage and Wastewater System Maintenance (including equipment downtime analysis, documented standard work, including video guides).
 - Developing KPI Tableau dashboards for Drainage and Wastewater System Maintenance data analysis.
 - Organizing a Kaas factory tour to see continuous improvement in action for Drainage and Wastewater System Maintenance team (Managers, Crew Chiefs, and Lead Workers participated).

Observations and Learnings: Process improvement is a discipline that takes time – it requires starting with simple processes and projects to learn the tools, and requires time and effort to build skills. SPU employees often feel “too busy to improve.” We must sometimes slow down to speed up, and we need to build time into workplans to learn and apply process improvement. Culture is a large part of process improvement; we must allow room to “fail forward.” Our small training pilot was appreciated because it allowed this safe space to fail forward and allowed for participants to really learn from each other’s challenges and successes. Finally, process improvement can be applied anywhere in the utility because no process is too small to improve; even a small change contributes to a culture of continuous improvement.

Customer Assistance: SPU set strategic goals to expand the types of, access to, and use of customer assistance programs, with a focus to align these efforts to community need. During the 2019-2021 timeframe, and accelerated because of COVID, SPU took the following actions to meet these goals and respond to community need:

- Expanded access to SPU’s Emergency Assistance Program (EAP) by increasing eligibility from 70% to 80% of State Median Income and, during COVID, through new legislation, doubled the amount of assistance that we can provide to up to \$954 per year and 100% of the customer's outstanding balance.
- Increased enrollment to the Utility Discount Program (UDP) through marking, easier online enrollment forms, and a self-certification pilot and evaluation during the COVID pandemic.
- Provided greater benefits to customers with unforeseen leaks by adopting a new leak adjustment policy that covers 100% of the difference between the cost of the leaked consumption and their regular bills.
- Successfully advocated for and applied \$500k in Federal Rental Assistance relief to low-income SPU customers with payment delinquencies.
- Provided a moratorium on utility shutoffs and a waiver of late fees and interest charges to all customers during COVID.
- Worked with Seattle City Light (SCL) to improve the current method of transferring a customer’s SPU UDP credits at SCL to SPU to prevent a water shutoff action and documented in a memo to the Mayor’s Office.
- Expanded flexibility of SPU payment plans and payment arrangements during COVID.
- Developed legislation, financial and website tools, and marketing for a community donation program to provide customers an opportunity to help others in need.
- Designed and launched a pilot to provide side sewer assistance to low-income customers in need.
- Compared UDP and EAP to other City benefits programs and eligibility levels and saw no consistency or natural alignment point.
- Analyzed old shutoff data in collaboration with MIT and shared strategies, ideas, and challenges in a nationwide peer-learning exchange (US Water Alliance 10 City Shutoff Pilot).

Observations and Learnings: Being prepared to quickly respond to customer’s needs is critical. Nothing could have prepared SPU for the extent of customer assistance needs encountered during the COVID pandemic. However, because of our affordability and accountability commitments, SPU was well-positioned to proactively respond to customer needs. During the COVID pandemic, SPU readiness and responsiveness helped keep bills affordable and prevented COVID delinquencies from being even worse than it could have

been for low-income families, through expanded assistance that was informed by earlier efforts evaluating shutoffs, UDP enrollment, and low-income customer needs.

Partnership Opportunities: SPU set a strategic goal to develop an SPU culture that nurtured innovation through partnerships across and external to the SPU organization and enhanced benefits to the communities we serve. Actions taken to meet these goals are modeled in SPU’s broader work around community-centered practice and development of partnerships inside and external to the organization. Among the key efforts, SPU:

- Ensured that Shape Our Water’s vision plan was a model for community-centered external engagement and partnership in shaping SPU’s long-range planning.
- Established ongoing internal communities of practice (e.g., Equity Bridge, Design and Innovation Lab, Climate, Affordability and Accountability) to bring SPU subject matter experts together to share information, align their work, and address critical issues.
- Adopted an SPU Strategic Business Plan that articulates a Community Centered vision and highlights the importance of building partnerships internal and external to the organization.
- Worked with Futurewise and Washington State Department of Commerce to solidify approaches to Community Benefit Public Private Partnerships (CBP3) mechanisms.
- Developed and launched SPU’s first CBP3 for Green Stormwater Infrastructure.
- Defined and made progress on Duwamish Resilience District collaborations and related efforts to leverage SPU’s South Park capital investments in a way that facilitates additional outside investment and funding momentum for the South Park Community, including park acquisition, affordable housing, and philanthropic investment.

Observations and Learnings: Community-centered practice and developing partnerships with others to enhance SPU efforts and leverage SPU investments is becoming an increasingly accepted and desired way of doing business in the organization. There is no longer a need to have this as a separate focus area because it is best integrated into “how” SPU does work throughout much of the organization. Enhancing specific kinds of financial partnership continues to be an important part of SPU funding and financial management practices and will be integrated into that affordability and accountability strategy focus area in 2022-2023.

Regulatory Alignment: SPU set strategic goals to prioritize and align regulatory resources towards meeting community needs and moving from prescriptive to performance-based regulations to reduce costs and enhance community outcomes. During the 2019-2021 period, actions taken to meet these goals included:

- Inventoried State and Federal legislative priorities and developed annual State legislative agendas.
- Completed a Financial Capability Assessment (FCA) to evaluate regulatory affordability issues for CSO control and inform affordability metrics development and dialogue nationally.
- Built support with King County to build adaptive practices into the CSO consent decree negotiations, being a shared goal. Regulators have expressed support and both entities are developing proposals.
- Became part of the US Plastics Pact Partnership to drive change in plastics pollution.
- Helped put Washington State on the brink of successful legislation enacting Extended Producer Responsibility (ERP) to reduce packaging and paper pollution.
- Advocated for successful State legislation related to plastics recycled content and on-site non-potable water reuse.

Observations and Learnings: Regulatory change is slow-moving, arduous work with the opportunity for critical long-term affordability outcomes. Tying this work to comprehensive advocacy networks and legislative strategies that seek to reduce environmental externalities, downstream pollution, and costs to SPU and our ratepayers is a key arena to focus on. This focus includes efforts to reduce plastics and packaging pollution and toxin and waste from sources such as tire chemicals, which cause water quality pollution and lower salmon mortality.

Appendix 1
2019-2021 Capital Investment Accomplishments – Completed Projects

Council District	LOB	Project Name	Cost	Description
1	Drainage and Wastewater	Pump Station 72,73,7,2,9 Improvements (C316069)	\$6,288,625	Design and construction improvements to three pump stations (PS 2: 901 Lakeside Dr (Leschi); PS 72: 2600 13th Ave SW (Harbor Island); and PS 73: 1190 SW Spokane St (Harbor Island). Construction improvements included replacements to pumps, valves, pipes, electrical and interior equipment that reached end of life and was not functioning to full capability
1	Drainage and Wastewater	5th Ave S Full Sewer Line Replacement (C317034)	\$2,882,289	Locations of work include two separate sites. The first along 5th Ave S between S Donovan St and S Trenton St and between S Concord St and S Henderson St. The second locations is 31st Ave between E Cherry St and E Jefferson St. The improvement work involves replacement of 300 linear feet of 24 inch, 300 linear feet of 15-inch diameter sewer and 540 linear feet of 8-inch diameter sewer pipe with new vitrified clay pipe (VCP). Additional elements include side sewer reconnections and street right-of-way restoration.
1	Drainage and Wastewater	Delridge 99 CSO Gate Retrofit (C317005)	\$1,420,734	Reduced CSOs (as part of Consent Decree) in SPU basin 99 within the Delridge Area by upgrading to automatically actuated slide gates (valves) within existing control structures.
1	Solid Waste	South Transfer Station Track-out Control Project (C217001)	\$1,513,914	Replaced an interior wheel wash for commercial waste trucks with new systems that has ability to add coagulants and other materials to help reduce the track out from the transfer building.
1	Drainage and Wastewater	SW Avalon - Drainage and Wastewater Infrastructure (SDOT- C600140)	\$393,213	Casting replacement, mainline spot repair, inlet and catch basin connection replacement as part of SDOT project.
1	Water	SW Avalon - Water Infrastructure (SDOT - C600243)	\$1,132,917	Replace approx. 670 LF of 8-in cast iron water main in 35th Ave SW between SW Avalon Way and SW Snoqualmie St. with 12-in ductile iron. Replace 60 ft of CI LJ WM in Charlestown as part of SDOT project.

Council District	LOB	Project Name	Cost	Description
2	Drainage and Wastewater	40th Ave Full Sewer Line Replacement (C317032)	\$1,504,220	Project locations at Airport Way S between S Holgate St and S Plum St and at 40th Ave S and S Norfolk St. The project consists of replacing 209 linear feet of 8 inch and 337 linear feet of 12-inch sewer mainline pipes with new vitrified clay pipe (VCP). Additional elements include side sewer reconnections and street right-of-way restoration.
2	Drainage and Wastewater	Letitia Ave S Sewer Rehabilitation (C600539)	\$1,054,300	Emergency Repair to abandon damaged 8-inch clay pipe sewer and construct a new main in the Letitia Ave S roadway. Construct 415 LF 8-inch clay pipe, 2 maintenance holes, reconnect existing 8 side sewers and restore SDOT right of way with restoration of landscaping at sewer connection points.
2	Drainage and Wastewater	S Lander St Grade Separation - Drainage and Wastewater Infrastructure (SDOT-C416007)	\$489,242	Protect 90-inch concrete storm drain in S Lander St between 1st Ave S and 4th Ave S as part of SDOT's S Lander St Grade Separation Project. Respond to other project impacts to sewer and drainage infrastructure in S Lander St, Occidental Ave S and 3rd Ave S.
2	Water	S Lander St Grade Separation -Water (SDOT-C416006)	\$2,908,664	Relocate watermains impacted by the SDOT Lander Grade Separation Project, including the 16-in CI WM on S Lander St, the 12-in DI WM in Occidental Ave S, and the 12-in CI WM in 3rd Ave S.
3	Water	Lowell-Meany Water main replacement (SDOT- C600264)	\$655,501	Replace approx. 300 of cast iron, lead joint watermain with ductile iron as part of an SDOT "Safe Routes to School" project.
3	Drainage and Wastewater	<u>Portage Bay 138 CSO Gate & Pump Station 20</u> (C317007)	\$2,792,965	Reducing CSOs in SPU basin 138 within Portage Bay by upgrading to automatically actuated slide gates (valves) within existing control structures and increased Pump Station discharge capability as part of Consent Decree.
3	Water	Fairview Avenue Bridge Water Main Replacement (C414063)	\$140,000	SDOT replacement of the Fairview Ave N Bridge included casing and cutouts for a future watermain, relocation of water meters, new watermain and fire hydrants.
4	Drainage and Wastewater	<u>East Montlake Pump Station and Force Main Upgrade</u> (C317008)	\$7,135,387	Improve the existing pump station facility by increasing the capacity, upsizing the existing mainline, upgrading the electrical, mechanical and civil components to reduce the risk of combined sewer overflows in Union Bay. Site restoration.

Council District	LOB	Project Name	Cost	Description
4	Drainage and Wastewater	Ravenna NE Emergency Combined Sewer Repair (C316085)	\$1,915,508	This emergency project replaced a broken combined 8-inch sewer and an existing water main that settled due to the broken 8-inch sewer. Site restoration and ADA.
4	Water	12th Ave NE Watermain Replacement (C6000684)	\$460,000	This opportunity watermain project related to the U District Link Light Rail Station replaced 570-LF of 8" CI watermain with 12" ductile iron and new fire hydrants.
5	Drainage and Wastewater	Meadowbrook Pond Rehabilitation (C317027)	\$3,949,094	Removed approximately 3,800 cubic yards of sediment from Meadowbrook Pond to restore water quality and flood prevention function of the facility and installed a permanent overflow bypass line for future maintenance operations.
6	Drainage and Wastewater	24th Ave NW Sewer Rehabilitation (C600478)	\$675,869	Emergency Spot repair of 4 LF 6 in Cem. Concrete sewer main 12 ft downstream of MH 230-162. Construct 4 LF concrete sewer main, design and construct temporary shoring system, remove and replace 120 SF concrete block wall, construct and restore temporary access pathway at 9624 26th Ave NW.
6	Drainage and Wastewater	Ship Canal Water Quality Project Site Prep (C315509)	\$8,139,562	Remediation of contaminated soils at the West Shaft/TEPS site in Ballard, including a water service relocation/main extension in 24th Ave NW.
6	Drainage and Wastewater	Ship Canal Water Quality Project Advance Utilities (C315510)	\$1,313,418	Relocation and replacement of existing PSE and SCL utilities in advance of SCWQ storage tunnel construction.
6	Water	Third Ave W Water Feeder Replacement (C113063)	\$10,116,657	Replaced failing 24inch diameter water transmission main and appurtenances within 100+ year tunnel
7	Drainage and Wastewater	Pump Station 22 Retrofit and Sewer Force Main Replacement (C315071)	\$9,991,038	Retrofit the existing pump station facility to increase the capacity from 0.86 mgd to 4 mgd. The facility received electrical, mechanical and ventilation upgrades in addition to new instrumentation and controls, a new generator, and interior paint coating improvements. The existing force main was upsized with a new 12-inch diameter force main.

Council District	LOB	Project Name	Cost	Description
7	Drainage and Wastewater	Viaduct-Seawall-Drainage and Wastewater Infrastructure (C410020)	\$20,199,623	Excavation for the new wall on Alaska Way between Washington St and Virginia St. disrupted existing sewers, requiring construction of new side sewers, collector sewers and connections to remaining sewers further east on Alaskan Way at SPU expense. SPU was also responsible for the cost of temporary side sewer service to the piers during construction. The project also protected in place the outfalls at Washington St and Madison St, and replaced the Pine, University and Seneca St outfalls at SPU expense.
7	Water	Viaduct-Seawall-Water Mains(C410019)	\$16,387,676	Excavation for the new wall disrupted existing water services to piers, which must be replaced. SPU installed a new 12" watermain close to the new seawall from Yesler Way to Virginia St due to conflicts with construction of the restored Alaskan Way and also in anticipation of conflicts with the subsequent Waterfront Seattle Project. SPU was also responsible for the costs of extensive temporary water service to the piers during construction.
2,3	Water	23rd Ave S Watermain Replacement (SDOT-C415053)	\$2,759,331	This project included retiring the 8-inch diameter water main on 23rd Ave S from South Jackson to South Norman and replacing it with a 12-inch water main. This project also includes replacement of appurtenances (e.g., valves, hydrant branches, etc.) and transferring services from the retired watermain to the new watermain.
6, 7	Drainage and Wastewater	Pump Station 43 Emergency Sewer force main Replacement (C600087)	\$6,107,921	Installation of a temporary sewer bypass system to alleviate leakage of sewage into the Lake Washington Ship Canal and to assess the pipe conveying wastewater across the Shilshole Waterway to the King County Transmission line. Following the assessment, replacement of the underwater portion of the force main by Horizontal Directional Drilling (HDD) to reduce surface impacts and to complete the channel crossing. The project included necessary upgrades including new vaults and appurtenances.
Multiple	Drainage and Wastewater	2016 Sewer Lining Contract 1 Implementation (C315092)	\$4,621,226	This project consists of 16,000 linear feet of sewer mainline cured-in-place pipe repairs. The "no-dig" project will employ CIPP to rehabilitate existing sewer and combined sewer and storm pipes primarily located north of Ship Canal Bridge in the Ravenna neighborhood.
Multiple	Drainage and Wastewater	2015 Spot Sewer Lining Contract 1 Implementation (C315080)	\$4,818,910	The project was to spot repair and line the existing sewer and drainage pipes at 28 different sites throughout the City. The project is completed and is in closeout phase.

Council District	LOB	Project Name	Cost	Description
Multiple	Drainage and Wastewater	2017 Sewer Lining Large Diameter Implementation (C317019)	\$1,268,069	This project rehabilitated 8,700 LF of sewer mainline greater than 12" diameter using cured-in-place pipe (CIPP) method. The project sites (17 sites) located with the majority in SE and SW districts of Seattle.
Outside City	Water	Beverly Park Water Tank Improvements (C115164)	\$5,273,587	Replaced failing exterior and interior coating systems; Repaired steel components; Installed WQ system; Upgraded electrical system
Outside City	Water	Cascades Dam Monitoring System (C116010)	\$356,621	Installation of a new system allowing real time monitoring and verification of the condition, status, and integrity of Cascades Dam, from the SPU Control Center.
Outside City	Water	Tolt Water Supply Pipeline Landslide Improvements (C113010)	\$5,974,014	Installed system of 85 horizontal groundwater drains to dewater steep slope and reduce slow-creeping landslide motion compromising Tolt raw water supply since early 2000's. 15 months of post-project monitoring show project has reduced slope movement to near-zero across unstable area, removing the threat to the pipelines crossing the slope.
Outside City	Water	Tolt Reservoir Valve 15 Leak Improvement (C117016)	\$3,147,499	Federal Energy Regulatory Commission (FERC) identified the replacement of an existing 48-inch valve at the Tolt Reservoir. The existing valve was leaking to an extent that interfered with routine dam safety inspection.

SPU PDEB CIP

Substantially
Completed
2019 - 2021

