Solid Waste

Overview

Seattle Public Utilities (SPU) collects and disposes of solid waste generated within the City of Seattle. To fulfill this responsibility, the City owns and manages the following significant infrastructure:

- Two transfer stations;
- One recycling and re-use facility;
- Two household hazardous waste facilities;
- A fleet of trucks and heavy equipment; and
- Three closed landfills previously used by the City, plus assistance to Seattle Parks on two other closed landfills.

The Solid Waste Fund (SWF) Capital Improvement Plan (CIP) is the planning tool for rehabilitating, replacing, improving, and expanding infrastructure, as well as constructing projects that protect, conserve, and enhance our region's environmental resources. Planned spending in the SWF CIP is approximately \$119 million over the next six years, from 2025 through 2030.

Major anticipated projects include:

- South Transfer Station Facility Redevelopment.
- Cleanup of the historic South Park Landfill at the South Park Development Project.
- North Transfer Station Compactor Replacement.
- South Transfer Station Floor Replacement.

These projects comprise approximately 46% of the SWF CIP. Other significant projects include the Waste Removal project at the Midway Landfill, Drainage & Wastewater Improvements at the Transfer Stations, replacement of two compactors at the South Transfer Station, and SPU's annual equipment investment.

Thematic Priorities

The SWF places a high priority on managing environmental issues and addressing regulatory requirements related to current and historic solid waste facilities while protecting employees and customer health and safety.

 <u>Managing environmental issues and regulations</u>: SPU is required to improve former landfill sites and act as necessary when conditions change. For example, SPU monitors underground gas levels at these sites. When increased gas levels are detected, SPU implements improvements to extract excess gas or otherwise mitigate the environmental impacts. State-led improvements to Interstate 5 also requires SPU to modify landfill infrastructure in the right-of-way, as do Sound Transit projects that impact the Midway Landfill. Additionally, the new transfer stations are designed to reduce the environmental impacts of existing stations on neighboring communities.

Project Selection Criteria

SPU identifies candidate capital projects from several sources – planning (e.g., comprehensive plans, program plans), external projects and opportunities, and emergencies or other unexpected events. Under SPU's Asset Management System, projects must be justified through a business case process that establishes that a problem or opportunity is timely and important and that the proposed solution is

2025-2030 Adopted Capital Improvement Program

superior to alternatives based on a triple bottom line analysis (economic, environmental, and social) of life-cycle benefits and costs. The process also recognizes that a project may be a "must do" project (e.g., required by regulations).

Prioritization of SPU projects are based on the following set of criteria:

- **Regulatory Mandates, Legal Agreements**: The degree to which the project is driven by Federal, State, and local laws, permit and regulatory requirements, and consent decrees; as well as by legal agreements with public and private parties. Examples of highly ranked projects in this category include the South Park Development project and Kent Highlands and Midway Landfills programs.
- External Drivers: SPU's involvement with projects led by other departments or jurisdictions, or by specific mandates of the Mayor or City Council. An example of a project in this category is the 1% for Arts program.
- Infrastructure: How a project addresses infrastructure conditions or vulnerabilities. An example of a highly ranked project in this category is the tipping floor replacement at the South Transfer Station.
- Level of Service: The importance of this project in providing or improving services to customers and neighbors. An example of a highly ranked project in this category is the replacement of two compactors at the transfer stations.
- Other Factors: Other important factors include high net present value or cost-effectiveness, social or environmental benefits that were not otherwise recognized, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, or outside funding.

Every project is rated against each criterion. Criteria are then considered in determining an overall project priority ranking, using expert judgment (rather than a formula). Priority rankings for the CIP are determined by the leads for each LOB, with reviews by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs and are approved by the SPU General Manager/CEO and Asset Management Committee. Project priority rankings are used to clarify and document which projects are most important and why, to help determine which projects at the margin will be included, excluded or deferred from the CIP, and which projects should receive priority attention if a staff or financial resource constraint should arise.

CIP Highlights

2025-2030 Adopted Solid Waste Fund CIP by BSL

(In '000s; total may not sum due to rounding)

Budget Summary Level	2025	2026	2027	2028	2029	2030	Total
New Facilities	21,015	16,139	16,405	11,161	15,737	1,407	81,864
Rehabilitation and Heavy Eqpt	397	807	909	409	309	554	3,385
Shared Cost Projects	8,424	5,353	2,668	2,513	2,309	2,471	23,738
Technology	1,544	1,508	1,508	1,508	1,507	1,508	9,082
Grand Total	31,380	23,806	21,490	15,591	19,863	5,939	118,069

New Facilities: This program includes the planning, design, and construction of new facilities to enhance solid waste operations. SPU will continue to implement its Solid Waste Facilities Master Plan. The key project drivers of the New Facilities budget are the South Park Development (landfill cleanup) and the South Transfer Station operational improvements projects.

Rehabilitation and Heavy Equipment: This program includes design and construction of projects that repair and/or upgrade solid waste facilities other than the transfer stations. The key drivers of this budget level are the Midway project and new funding for the Solid Waste Comprehensive Plan Update as required by the Washington State Department of Ecology.

Shared Cost Projects and **Technology Projects**: Projects in these BCLs are cross-funded by multiple SPU ratepayer funds. Project pages for these activities are not displayed in this section. For individual project pages, please see section **"Shared and Technology Projects."**

For the Solid Waste CIP, a key driver within the Shared Costs BCL is heavy equipment purchases. This covers estimated fleet (trucks) and heavy equipment needs for transfer station operations.

For an overview of SPU's **Technology** projects, please see the SPU Drainage and Wastewater overview (Technology BCL section).

CIP Revenue Sources

Much of the SWF CIP is funded through bond proceeds and current cash contributions, the mix of which is determined by SWF financial policies, the overall financial health of the SWF, and the best value and equity to ratepayers. SPU issued debt in 2014, 2015, and 2016. SPU is not planning any SWF bond issuances and will use current cash contributions and existing cash on hand to pay for the CIP. Cash contributions to construction and repayment of debt come from rate-based charges to customers whose solid waste services are handled by the City's solid waste infrastructure and programs.

SPU also actively seeks grants, low-interest loans, and other funding sources whenever possible and prudent. The Solid Waste Utility is currently in the middle of a capital-intensive historic landfill remediation process and the South Recycling Center project. These projects are the primary drivers of CIP spending and have required rate increases for financing.

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Summary of Upcoming Budget Issues and Challenges

Solid Waste faces logistical and financial issues as it reconstructs its primary facilities and addresses site cleanup efforts.

- <u>Logistics:</u> SWF is focusing on developing the South Recycling Center and must continue to use the site for trailer parking and household hazardous waste collection during construction.
- <u>Financial Challenges</u>: Developing the South Recycling Center along with site remediation efforts puts considerable short-term financial strain on the SWF. While the SWF is funding and building these major projects, it is working to address environmental stewardship by encouraging waste reduction and recycling, which results in declining demand for services.

Future Projects/What is on the Horizon

Once the South Park Landfill cleanup work and South Transfer Station operational improvements are completed, SPU will begin a thorough planning process to guide the future redevelopment of the South Transfer Station campus. The planning will take broader City needs into consideration before selecting a redevelopment scenario. Spending for the future development will be better defined over the next 3-5 years.

Kent Highlands

Project No:	MC-SU-C2402	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Kent Highlands
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This program funds compliance activities related to the Kent Highlands landfill closure project. These activities include environmental studies to demonstrate the effectiveness of the Kent Highlands landfill closure project, as well as various landfill improvements. The environmental studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The landfill improvements include replacement of existing flares, drainage improvements, groundwater protection, water treatment and mitigating earthquake risks associated with steep slopes.

Resources	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	904	50	211	511	162	112	162	447	2,559
Total:	904	50	211	511	162	112	162	447	2,559
Fund Appropriations / Allocations *	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
		-	2025 211	2026 511	2027 162	2028 112	2029 162	2030 447	Total 2,559

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

Midway Landfill

Project No:	MC-SU-C2403	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Kent
Current Project Stage:	N/A	Council District:	Outside City of Seattle
Start/End Date:	N/A	Neighborhood District:	Not in a Neighborhood District
Total Project Cost:	N/A	Urban Village:	Not in an Urban Village

This program funds compliance activities related to the Midway landfill closure project. These activities include environmental studies to demonstrate the effectiveness of the Midway landfill closure project. The studies are required under the existing Consent Decree with the State Department of Ecology and validate that current environmental controls are effective and reduce the likelihood of additional capital or O&M expenditures. The flare improvements are also a regulatory requirement. To ensure that SPU maintains regulatory compliance, a smaller flare or new technology will be required as the landfill ages and methane concentrations change over time. The largest effort under this program is the Midway landfill improvement project that funds removal of waste in the WSDOT Right of Way to allow construction of two additional lanes on I-5 and the Sound Transit Federal Way Link project. This is a joint project involving Sound Transit, WSDOT and SPU it is regulated by the Department of Ecology under a Consent Decree Amendment.

	LTD	2024							
Resources	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	13,185	660	106	196	547	97	97	57	14,945
Water Rates	-	1,500	-	-	-	-	-	-	1,500
Total:	13,185	2,160	106	196	547	97	97	57	16,445
Fund Appropriations / Allocations *	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Fund	13,185	2,160	106	196	547	97	97	57	16,445
Total:	13,185	2,160	106	196	547	97	97	57	16,445

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

Miscellaneous Station Improvement

Project No:	MC-SU-C2303	BSL Code:	BC-SU-C230B
Project Type:	Ongoing	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	Multiple
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

This project provides modifications, upgrades, and wear replacement for the two new City Transfer Stations. The new facilities will require periodic capital upgrades and replacement to extend the useful life of these assets. Examples of this work include replacement of the wear surface on the STS tipping floor, replacement of the large refuse compactors and replacement of HVAC/Life Safety components.

Resources	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	6,700	14,674	12,614	5,181	7,500	2,400	7,300	300	56,669
Total:	6,700	14,674	12,614	5,181	7,500	2,400	7,300	300	56,669
Fund Appropriations / Allocations *	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Fund	6,700	14,674	12,614	5,181	7,500	2,400	7,300	300	56,669
Total:	6,700	14.674	12.614	5,181	7,500	2,400	7,300	300	56,669

O&M Impacts: This is an ongoing program and any O&M needed as a result of this program is included in SPU's Operating Budget.

North Transfer Station Rebuild

Project No:	MC-SU-C2306	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	N. 34th St.
Current Project Stage:	Stage 6 - Closeout	Council District:	Council District 4
Start/End Date:		Neighborhood District:	Lake Union
Total Project Cost:	\$111,015	Urban Village:	Not in an Urban Village

The project constructs a new North Recycling and Disposal Station to replace the existing, aging facility. The new facility will meet customer and employee needs, regulatory requirements, and waste management goals for at least the next 50 years. Safety, operational, and capacity concerns at the existing transfer station necessitate building a new facility. The new facility will benefit the public by providing reliable transfer of solid waste from the City and preventing the accumulation of waste and unsanitary conditions within the City.

	LTD	2024							
Resources	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	110,234	(3)	-	-	-	-	-	-	110,231
Total:	110,234	(3)	-	-	-	-	-	-	110,231
Fund Appropriations / Allocations *	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
			2025	2026	2027	2028 -	2029	2030	Total 110,231

O&M Impacts: Any O&M needed as a result of this project is included in SPU's Operating Budget.

South Park Development

Project No:	MC-SU-C2304	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	8100 2nd Ave S
Current Project Stage:	Stage 3 - Design	Council District:	Council District 1
Start/End Date:	2007 - 2027	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$22,377	Urban Village:	Greater Duwamish

This project studies, plans, designs and constructs remediation of the historic South Park Landfill site to minimize environmental impacts. SPU owns a portion of the site on which the landfill once operated, and was a historic operator of the landfill at one time. This project will meet the requirements of a Consent Decree with the Washington Department of Ecology for remediation of the historic South Park Landfill. This project is tied to the STS 2 project and some redesign of remedial elements will be required and along with the other scope changes mentioned previously, construction has been further delayed to 2026.

	LTD	2024							
Resources	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	6,196	7,277	1,840	4,396	3,640	3,592	3,399	398	30,736
Total:	6,196	7,277	1,840	4,396	3,640	3,592	3,399	398	30,736
Fund Appropriations /	LTD	2024							
Allocations *	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Fund	6,196	7,277	1,840	4,396	3,640	3,592	3,399	398	30,736
Total:									

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

South Recycling Center

Project No:	MC-SU-C2302	BSL Code:	BC-SU-C230B
Project Type:	Discrete	BSL Name:	New Facilities
Project Category:	Improved Facility	Location:	8100 2nd AVE S
Current Project Stage:	Stage 5 - Construction	Council District:	Council District 1
Start/End Date:	2006 - 2027	Neighborhood District:	Greater Duwamish
Total Project Cost:	\$43,202	Urban Village:	Greater Duwamish

SPU postponed South Transfer Station phase construction and a smaller project is proceeding to complete cleanup work at the old South Park Landfill. SPU decided to postpone development plans (including the construction of the recycling facility) to allow a more holistic evaluation of future needs and job opportunities that best support our zero-waste vision. A recycling facility may still be included in the future plans, but partial development of the site at this time could severely limit what we can do in the future. The scope of the project has been reduced to only include the remediation of the South Park Landfill (required under a Consent Decree), minimal operational improvements, and a path along 5th Avenue to mitigate the street vacation at the new South Transfer Station. The reduced STS2 project will be designed during 2021-2022 and constructed in 2023.

Future site development plans will happen over the next 5 years in a parallel process.

Resources	LTD Actuals	2024 Revised	2025	2026	2027	2028	2029	2030	Total
Water Rates	-	(1,500)	-	-	-	-	-	-	(1,500)
Total:	9,708	2,388	6,562	6,562	5,265	5,170	5,038	709	41,402
Fund Appropriations /	LTD	2024							
Allocations *	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Fund	9,708	2,388	6,562	6,562	5,265	5,170	5,038	709	41,402
Total:	9,708	2,388	6,562	6,562	5,265	5,170	5,038	709	41,402

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.

SW Comprehensive Plan Update

Project No:	MC-SU-C2407	BSL Code:	BC-SU-C240B
Project Type:	Ongoing	BSL Name:	Rehabilitation & Heavy Equipment
Project Category:	Improved Facility	Location:	Citywide
Current Project Stage:	N/A	Council District:	Multiple
Start/End Date:	N/A	Neighborhood District:	Multiple
Total Project Cost:	N/A	Urban Village:	Multiple

A Seattle Solid Waste Management Plan is required by Washington State Code. The plan must be updated every five years. The Comprehensive Plan guides the City's solid waste management.

	LTD	2024							
Resources	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
Solid Waste Rates	829	(132)	80	100	200	200	50	50	1,377
Total:	829	(132)	80	100	200	200	50	50	1,377
Fund Appropriations /	LTD	2024							
			2025	2026	2027	2028	2029	2030	Total
Allocations *	Actuals	Revised	2025	2026	2027	2028	2029	2030	Total
			2025 80	2026 100	2027 200	2028 200	2029 50	2030 50	Total 1,377

O&M Impacts: Any O&M needed as a result of this project will be included and/or identified as part of SPU's Operating Budget.