

Seattle Public Utilities

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 infrastructure:

- Two recycling and disposal stations (transfer stations)
- Two household hazardous waste facilities
- A fleet of trucks and heavy equipment
- Two closed landfills previously used by the City

The Solid Waste Fund (SWF) 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 \$144 million (excluding Technology) for 2014 through 2019.

The largest anticipated projects over this time period are:

- Rebuilding of the North Transfer Station (2013-2016)
- Constructing a recycling/re-use facility at the South Transfer Station (2015-2017)
- Completing the South Park Development Project

These projects comprise roughly 63% of the CIP. Other significant projects include investigation and closure of the South Park Landfill and replacement of the South Household Hazardous Waste facility.

SPU funds about 90% of the SWF CIP through the sale of revenue bonds. The remaining 10% is funded with cash. By using debt financing through bond sales, SPU is able to distribute the cost of large, expensive system improvements over several years to better address equity between current and future ratepayers. SPU plans Solid Waste Bond issues in 2014, 2015 and 2017. Cash and repayment of debt come predominantly from rate-based charges to customers whose garbage, recycling, and organics are handled by the City's solid waste infrastructure and services. Solid Waste rates were last set in 2012 for the period of 2013-2016.

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.

Logistics: Solid Waste must continue handling solid waste while it reconstructs its transfer stations. With the new South Transfer Station coming on line in March 2013, Solid Waste is now focused on reconstruction of the North Transfer Station (NTS). To adequately manage waste, the old South Transfer Station will be kept in operation until the North Transfer Station is complete. This will require diversion of waste from the northern station to the old STS. In addition, it will require Solid Waste to maintain the aged old STS through 2016.

Financial Challenges: Reconstruction of both transfer stations along with site remediation efforts puts considerable short-term financial strain on the Solid Waste Fund. At the same time that Solid Waste is funding and building these major projects, it is working to address environmental stewardship by encouraging waste reduction, which results in declining demand for services.

To address the funding needed for transfer station reconstructions and site remediation, SPU is planning bond sales in 2014, 2015, and 2017. The cost to repay or service these bonds will be paid through rate-based revenues, which also support the utility's operations, maintenance, administration, and contract costs. To assure that the SWF has adequate revenues to support debt service and core functions while demand declines, SPU anticipates using a combination of moderate rate increases and operational efficiencies.

Thematic Priorities

The SPU Solid Waste Fund places a high priority on managing environmental issues and addressing regulatory requirements related to current and historic Solid Waste facilities while protecting human health and safety. The Mayor's Walk Bike Ride initiative is also supported through design elements of the two transfer station projects

- Managing environmental issues and regulations: SPU is required to improve former landfill sites and take action as necessary when conditions change. For example, underground gas levels at these sites are monitored. When high gas levels are detected, SPU implements improvements to extract the excess gas or otherwise mitigate the environmental impacts of the gas increase. Also, the new transfer stations will greatly reduce the environmental impacts of the existing stations on neighboring communities.
- Protecting human health and safety: The old South and existing North transfer stations are at the end of their useful lives. Safety standards at these older facilities will be greatly enhanced once the rebuilds are complete, resulting in greater safety for the public and SPU employees. Well-functioning and efficient transfer stations are part of a solid waste collection system that protects human health.
- Walk Bike Ride: The new South Transfer Station will include a trail on the east side of the property as a community benefit associated with the street vacation. This trail will create a link in the corridor between South Park and the Alki neighborhoods. The design for the new North Transfer Station includes separated traffic, a separate recycling building and approximately 44,000 square feet of publicly accessible green space. SPU engaged neighbors to help program the green space.

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

SPU prioritizes its capital projects into three categories – Priorities 1, 2 and 3, with 1 being the most important and critical. Some of these projects are part of an externally driven project. Typically, SPU lacks control over the timing of such projects.

Priority rankings 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 and Kent Highlands and Midway Landfills programs.
- **External Drivers:** SPU's responsiveness to, or engagement with, the projects of other Departments or Jurisdictions, and the specific mandates of the City Council and Mayor. Examples of projects in this category include the 1% for Arts program.
- **Infrastructure:** How a project addresses infrastructure conditions or vulnerabilities. Examples of highly ranked projects in this category include the North and South Transfer Station Rebuild projects.
- **Level of Service:** The importance of this project in providing or improving services to customers. Examples of highly ranked projects in this category include the North and South Transfer Station Rebuild projects as well as the Household Hazardous Waste Relocation project.
- **Other Factors:** Other important factors include high net present value or cost-effectiveness, social or environmental benefits which were not otherwise recognized, a project already in progress or near completion, limited time opportunity, demonstration projects, community visibility, outside funding. An example of a project in this category is the SW Comp Plan Update projects.

Every project is rated against each criterion. Criteria ratings 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 Line of Business (LOB), with reviews by key internal stakeholders. The ranking scheme and criteria are the same for all LOBs, and are approved by the SPU Director 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.

Aligning Infrastructure with Planned Growth

The City's Comprehensive Plan incorporates the Solid Waste six-year CIP by reference to provide the infrastructure needed for the solid waste system. In addition, investments in solid waste infrastructure support the Comprehensive Plan's sustainability and zero waste goals.

The City's transfer stations are part of a comprehensive waste management system that aims to accommodate population growth while reducing the overall amount of solid waste sent to landfills. The transfer stations balance the capital cost of station construction with convenience and collection cost minimization. This is reflected in optimizing a north end transfer station and a south end transfer station as opposed to one large central station or multiple small neighborhood based stations.

The South Park Development project will result in an approved cleanup of the historic landfill and put approximately 20 acres of unused property back into productive use and create economic opportunities adjacent to the South Park Urban Village.

Future Projects/What is on the Horizon

In the seven years prior to the initiation of the transfer station rebuild projects, the Solid Waste Fund CIP Budget averaged \$4.7 million annually. In the years when the transfer station rebuild projects are included, the SWF CIP Budget averages \$21 million annually. Once the stations are completed, the core Solid Waste Fund CIP is expected to return closer to the lower, historical levels.

Once the North and South Transfer Stations are rebuilt, continued capital investments at the stations will decrease. The old South and existing North stations are at the end of their useful lives. While the old South station is being replaced, the facility continues to need maintenance while the North station continues to require major improvements each year to keep it operational and safe for both the public and SPU employees who work there. Upon completion of the new stations, annual costs for repairs and upkeep are projected to decrease initially and then increase as equipment replacement/renewal projects are required on the new facilities.

CIP Revenue Sources

SPU’s Solid Waste CIP is funded almost entirely by Solid Waste ratepayers. SPU issues bonds, serviced by ratepayers that in the current rate period cover 89% of projected CIP, with the remainder funded by current operating revenues. SPU also actively seeks grants, low interest loans, and other funding sources whenever possible. The Solid Waste Utility has faced challenges since 2008 as a result of fuel prices and the economic downturn, which have reduced demand while increasing required payments to contractors. Approved 2013-16 rates include average annual increases of 4.5% for residential and commercial customers. This includes a \$2.30 monthly increase in 2013 for typical residential customers.

CIP Spending by Major Category

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

| Solid Waste Fund | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|----------------------------------|---------------|---------------|---------------|---------------|--------------|--------------|----------------|
| New Facilities | 26,574 | 48,569 | 25,621 | 20,608 | 177 | 0 | 121,550 |
| Rehabilitation & Heavy Equipment | 45 | 25 | 425 | 25 | 25 | 425 | 970 |
| Shared Cost Projects | 2,239 | 1,682 | 1,418 | 1,847 | 1,910 | 1,917 | 11,014 |
| Technology | 5,337 | 5,269 | 3,122 | 2,443 | 2,352 | 1,482 | 20,006 |
| Total | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 153,539 |

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2014, SPU will continue the implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration. The key project drivers of the New Facilities budget category are the North and South Transfer Station Rebuild projects.

The proposed budget for this BCL has decreased by \$5.5 million for 2014 and increases by \$13.4 million in 2015 as costs shift into future years. Having a preferred design concept that has been recommended by stakeholders and approved by SPU, a design contract for the North Transfer Station (NTS) has been procured and now more is known about the construction schedule. This has resulted in a slight shift in construction timing from 2014 to 2015. The schedule for the South Park Development Project has shifted out as a result of changes to the NTS.

Rehabilitation and Heavy Equipment: This program designs and constructs projects to repair and/or upgrade solid waste facilities. The key driver of this budget category is the Kent Highlands Landfill program. Landfill improvements include the replacement of existing flares, drainage improvements, groundwater protection and water treatment as required by State environmental policy.

Shared Cost Projects: This program includes individual capital improvement projects which typically benefit multiple Lines of Business (e.g. the Water line of business and the Drainage and Wastewater line of business) and whose costs are "shared," or paid for, by more than one of SPU's utility funds.

The proposed budget for this BCL will decrease by \$117K in 2014 and increase by \$189K in 2015 compared to the adopted budget for the respective years. One of the key drivers for the change in 2014 would be the SWF SCADA program. Other changes in the budget for 2014 and 2015 were related to changes that were made in the calculation for the 1% for Arts – Solid Waste Project.

Technology: The Technology capital portfolio is managed in six program areas, which provide a department-wide view of technology investments to address SPU's strategic, business, and City-wide priorities. These areas are:

- Customer Contact and Billing
- Enterprise Information Management
- IT Infrastructure
- Project Delivery & Performance
- Science & System Performance
- Asset Information Management

Investments in 2014 and 2015 address SPU's key initiatives, which focus on:

- Improving Internal Controls,
- Improving Productivity and Performance
- Improving Customer Service
- Transitioning from Data Rich to Knowledge Rich
- Improving Project Delivery

The 2014-2019 Adopted CIP increases Technology CIP spending for all utility funds by \$2.8 million in 2014 and \$10.4 million in 2015 as compared to the 2013-2018 Adopted CIP. Solid Waste Utility's Technology CIP amount increases by \$0.45 million in 2014 and increases by \$2.95 million in 2015. These amounts are based on the Solid Waste Utility's share of benefit from these projects.

City Council Provisos to the CIP

There are no Council provisos.

SPU-Solid Waste

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|------------------------|---------------|---------------|---------------|---------------|---------------|--------------|--------------|----------------|
| New Facilities | | | | | | | | | C230B |
| Miscellaneous Station Improvements (C2303) | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| North Transfer Station Rebuild (C2306) | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| South Park Development (C2304) | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| South Recycling Disposal Station Household Hazardous Waste Relocation (C2305) | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| South Transfer Station Rebuild (C2302) | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| New Facilities | 84,166 | 10,436 | 26,574 | 48,569 | 25,621 | 20,608 | 177 | 0 | 216,151 |
| Rehabilitation and Heavy Equipment | | | | | | | | | C240B |
| Kent Highlands Landfill (C2402) | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Midway Landfill (C2403) | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Rehabilitation and Heavy Equipment | 835 | 278 | 45 | 25 | 425 | 25 | 25 | 425 | 2,084 |
| Shared Cost Projects | | | | | | | | | C410B |
| 1% for Art – SWF (C4118-SWF) | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Heavy Equipment Purchases - SWF (C4116-SWF) | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Integrated Control Monitoring Program - SWF (C4108-SWF) | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Operational Facility - Construction - SWF (C4106-SWF) | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Operations Control Center - SWF (C4105-SWF) | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Security Improvements - SWF (C4113-SWF) | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Shared Cost Projects | 10,906 | 2,257 | 2,239 | 1,682 | 1,418 | 1,847 | 1,910 | 1,917 | 24,177 |
| Technology | | | | | | | | | C510B |
| Asset Information Management (C5407) | 1,076 | 630 | 455 | 364 | 363 | 379 | 389 | 225 | 3,880 |
| Customer Contact & Billing (C5402) | 230 | 4,429 | 3,382 | 2,685 | 548 | 572 | 450 | 188 | 12,484 |
| Enterprise Information Management (C5403) | 23 | 182 | 322 | 357 | 383 | 165 | 205 | 394 | 2,031 |
| IT Infrastructure (C5404) | 452 | 379 | 464 | 338 | 465 | 293 | 555 | 330 | 3,275 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Project Summary

| BCL/Program Name/ Project Title & ID | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|---|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Project Delivery & Performance (C5405) | 788 | 559 | 533 | 776 | 613 | 716 | 426 | 345 | 4,757 |
| Science & System Performance (C5406) | 87 | 68 | 181 | 750 | 750 | 319 | 327 | 0 | 2,482 |
| Technology | 2,656 | 6,248 | 5,337 | 5,269 | 3,122 | 2,443 | 2,352 | 1,482 | 28,910 |
| Department Total*: | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Fund Summary

| Fund Name & Code | LTD Actuals | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|-----------------------------|------------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| Solid Waste Fund (45010) | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |
| Department Total*: | 98,563 | 19,220 | 34,195 | 55,546 | 30,587 | 24,924 | 4,463 | 3,823 | 271,322 |

**Amounts in thousands of dollars*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

1% for Art – SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2001 |
| Project ID: | C4118-SWF | End Date: | ONGOING |
| Location: | N/A | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | Not in an Urban Village |

This ongoing program provides the Solid Waste funding for Seattle Public Utilities' 1% for Arts contribution. Eligibility is determined at the individual project level, with payment occurring from this program. Funds contributed to the 1% for Art program allow the commission, purchase, and installation of art in City-owned properties that are accessible to the public. The Municipal Arts Plan, prepared annually, describes the status of ongoing art projects and establishes the scope of work and allocations for new art projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Total: | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| Total*: | 852 | 332 | 292 | 276 | 10 | 82 | 80 | 82 | 2,007 |
| O & M Costs (Savings) | | | 20 | 20 | 20 | 20 | 20 | 20 | 120 |

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SPU-Solid Waste

Heavy Equipment Purchases - SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | ONGOING |
| Project ID: | C4116-SWF | End Date: | ONGOING |
| Location: | N/A | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | Not in an Urban Village |

This ongoing program provides SPU's Solid Waste Utility crews with new and replacement heavy equipment that is used throughout Seattle and in parts of King County. Typical purchases include loaders, dozers, class 8 trucks, rail container chassis, yard waste and metal trailers, backhoes, and yard "goats" (a type of tractor.) These equipment purchases provide safe and efficient loading, transfer and short haul transportation of garbage, yard waste, metal, and other recyclables to the rail yard for "long haul" to the landfill and to contracted recycling processors. This project is one of four SPU fund-specific heavy equipment CIP projects.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Total: | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| Total*: | 5,975 | 1,525 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 14,880 |
| O & M Costs (Savings) | | | 149 | 149 | 149 | 149 | 149 | 149 | 893 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 794 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 8,174 |
| Total: | | 794 | 1,380 | 1,200 | 1,200 | 1,200 | 1,200 | 1,200 | 8,174 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Integrated Control Monitoring Program - SWF

| | | | |
|-------------------------------|--------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | New Investment | Start Date: | Q1/2013 |
| Project ID: | C4108-SWF | End Date: | Q4/2014 |
| Location: | Kent, WA | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | Not in an Urban Village |

The current telemetry used to monitor the environmental control systems at the Kent Highlands Landfill and the Midway Landfill, both Superfund sites, are nearly obsolete and the equipment is no longer supported. In addition, the current system only transmits alarm conditions and does not have any data acquisition functionality. This program funds a replacement system that will allow remote data acquisition as well as alarm functionality.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Total: | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| Total*: | 0 | 50 | 200 | 0 | 0 | 0 | 0 | 0 | 250 |
| O & M Costs (Savings) | | | 3 | 3 | 3 | 3 | 3 | 3 | 15 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |
| Total: | | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 200 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Kent Highlands Landfill

| | | | |
|-------------------------------|------------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation and Heavy Equipment | BCL/Program Code: | C240B |
| Project Type: | Improved Facility | Start Date: | Q1/2005 |
| Project ID: | C2402 | End Date: | ONGOING |
| Location: | N/A | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | Not in an Urban Village |

This program funds compliance activities related to the Kent Highlands landfill closure project. These activities include environmental and feasibility studies to demonstrate the effectiveness of the Kent Highlands landfill closure project, as well as various landfill improvements. The environmental and feasibility 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 and water treatment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Total: | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| Total*: | 727 | 253 | 20 | 25 | 25 | 25 | 25 | 425 | 1,525 |
| O & M Costs (Savings) | | | 15 | 15 | 15 | 15 | 15 | 15 | 92 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 349 | 20 | 25 | 25 | 25 | 25 | 425 | 894 |
| Total: | | 349 | 20 | 25 | 25 | 25 | 25 | 425 | 894 |

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SPU-Solid Waste

Midway Landfill

| | | | |
|-------------------------------|------------------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Rehabilitation and Heavy Equipment | BCL/Program Code: | C240B |
| Project Type: | Improved Facility | Start Date: | Q1/2005 |
| Project ID: | C2403 | End Date: | Q4/2016 |
| Location: | N/A | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Not in a Neighborhood District | Urban Village: | Not in an Urban Village |

This program funds compliance activities related to the Midway landfill closure project. These activities include environmental and feasibility studies to demonstrate the effectiveness of the Midway landfill closure project as well as retrofits to the existing Midway flare facility. 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.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Total: | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| Total*: | 109 | 25 | 25 | 0 | 400 | 0 | 0 | 0 | 559 |
| O & M Costs (Savings) | | | 6 | 6 | 6 | 6 | 6 | 6 | 34 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Miscellaneous Station Improvements

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q4/2003 |
| Project ID: | C2303 | End Date: | Q4/2015 |
| Location: | 8101 2nd Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project provides repairs to the existing City solid waste transfer stations. The existing City solid waste transfer stations were constructed in the mid-1960s and are nearing the end of their useful lives. This funding allows short term actions to ensure that these facilities operate reliably and safely, pending construction of the new North and South Transfer Stations. The work includes drainage modifications, emergency equipment rehabilitation, and temporary replacement/refurbishment of aging crew facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Total: | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| Total*: | 2,776 | 300 | 600 | 581 | 0 | 0 | 0 | 0 | 4,257 |
| O & M Costs (Savings) | | | 43 | 43 | 43 | 43 | 43 | 43 | 255 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

North Transfer Station Rebuild

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | New Facility | Start Date: | Q1/2006 |
| Project ID: | C2306 | End Date: | Q4/2016 |
| Location: | 1350 N 34th St | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Lake Union | Urban Village: | Not in an Urban Village |

This project provides for the replacement of the existing North Recycling and Disposal Station (NRDS) in Wallingford. The existing station was built in 1967 and is outdated and nearing the end of its useful life. The project includes the demolition of the existing transfer station and warehouse building on the adjacent property to the east. The new transfer station campus includes the tipping floor, recycling facility, educational center, new administrative building and employee facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|--------|--------|-------|------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Total: | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| Total*: | 4,777 | 7,751 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 85,542 |
| O & M Costs (Savings) | | | 958 | 958 | 958 | 958 | 958 | 958 | 5,751 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 7,049 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 80,063 |
| Total: | | 7,049 | 23,731 | 45,926 | 3,357 | 0 | 0 | 0 | 80,063 |

**This detail is for information only. Funds are appropriated in the budget at the Budget Control Level. Amounts are in thousands of dollars.*

2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Operational Facility - Construction - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2004 |
| Project ID: | C4106-SWF | End Date: | ONGOING |
| Location: | Citywide | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | In more than one District | Urban Village: | Not in an Urban Village |

This ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at various locations within the city limits to address deficiencies, failures, and functional changes in the SPU Lines of Business. Typical improvements include, but are not limited to, roof replacements, exterior wall or cladding replacements, and improvements to administrative office space, crew and shop space, lighting, heating and ventilation systems, and facilities structures. These improvements increase the useful life of the facilities, preserve the value of the assets, and provide a safe working environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Total: | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| Total*: | 2,499 | 158 | 80 | 140 | 90 | 392 | 450 | 405 | 4,213 |
| O & M Costs (Savings) | | | 42 | 42 | 42 | 42 | 42 | 42 | 253 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 159 | 80 | 140 | 90 | 392 | 450 | 405 | 1,715 |
| Total: | | 159 | 80 | 140 | 90 | 392 | 450 | 405 | 1,715 |

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SPU-Solid Waste

Operations Control Center - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | ONGOING |
| Project ID: | C4105-SWF | End Date: | ONGOING |
| Location: | 2700 Airport Way S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This ongoing facilities program renovates, rehabilitates, replaces existing buildings, and constructs new facilities at the Operations Control Center located at 2700 Airport Way South to improve the efficiency and effectiveness of the field crews delivering utility services to customers. Typical improvements include, but are not limited to, roof and other exterior replacements, improvements to public spaces, office and crew spaces and lighting, and heating and ventilation systems. These improvements increase the useful life of the facility, preserve the value of the asset, and provide a safe work and public space environment.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Total: | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| Total*: | 690 | 24 | 152 | 2 | 18 | 63 | 68 | 68 | 1,084 |
| O & M Costs (Savings) | | | 11 | 11 | 11 | 11 | 11 | 11 | 65 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 19 | 152 | 2 | 18 | 63 | 68 | 68 | 389 |
| Total: | | 19 | 152 | 2 | 18 | 63 | 68 | 68 | 389 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

Security Improvements - SWF

| | | | |
|-------------------------------|----------------------------|----------------------------------|-------------------------|
| BCL/Program Name: | Shared Cost Projects | BCL/Program Code: | C410B |
| Project Type: | Improved Facility | Start Date: | Q1/2007 |
| Project ID: | C4113-SWF | End Date: | ONGOING |
| Location: | Citywide | Neighborhood Plan Matrix: | N/A |
| Neighborhood Plan: | Not in a Neighborhood Plan | Urban Village: | Not in an Urban Village |
| Neighborhood District: | In more than one District | | |

This ongoing program funds physical, integrated security system components at Solid Waste infrastructure sites throughout the City. Components may include, but are not limited to, fences, gates, access control card readers, intercoms, lighting, door and hatch contacts, CCTV cameras, motion detection devices, and fiber and conduit. In addition, this program enhances protection of SPU's critical infrastructure and addresses vulnerabilities identified in U.S. Environmental Protection Agency (EPA) mandated vulnerability assessments.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|------|------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Total: | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| Total*: | 890 | 167 | 135 | 65 | 100 | 110 | 113 | 163 | 1,742 |
| O & M Costs (Savings) | | | 17 | 17 | 17 | 17 | 17 | 17 | 105 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 266 | 135 | 65 | 100 | 110 | 113 | 163 | 951 |
| Total: | | 266 | 135 | 65 | 100 | 110 | 113 | 163 | 951 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

South Park Development

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q2/2006 |
| Project ID: | C2304 | End Date: | Q4/2017 |
| Location: | 8100 2nd Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project complies with a Washington State Department of Ecology Agreed Order to conduct a Remedial Investigation and Feasibility Study of the historic South Park Landfill site and covers investigation and eventual remediation of the landfill site to protect human health and the environment. Final cost allocation among potentially liable parties will occur at a later stage.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|--------|-------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Total: | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| Total*: | 2,427 | 670 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 27,025 |
| O & M Costs (Savings) | | | 270 | 270 | 270 | 270 | 270 | 270 | 1,622 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 2,425 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 26,354 |
| Total: | | 2,425 | 744 | 385 | 13,228 | 9,572 | 0 | 0 | 26,354 |

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SPU-Solid Waste

South Recycling Disposal Station Household Hazardous Waste Relocation

| | | | |
|-------------------------------|----------------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | Improved Facility | Start Date: | Q1/2015 |
| Project ID: | C2305 | End Date: | Q4/2018 |
| Location: | 8105 5th Ave S | | |
| Neighborhood Plan: | Not in a Neighborhood Plan | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This project relocates the South Household Hazardous Waste (SHHW) facility and makes facility improvements required by code and ensures other South Recycling and Disposal Station (SRDS) redevelopment efforts are not constrained. Work on the North Transfer Station and South Transfer Station projects must be completed before this project can start.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|------|------|-------|-------|------|------|-------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Total: | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| Total*: | 0 | 0 | 0 | 177 | 1,036 | 1,036 | 177 | 0 | 2,425 |
| O & M Costs (Savings) | | | 24 | 24 | 24 | 24 | 24 | 24 | 146 |

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2014 - 2019 Adopted Capital Improvement Program

SPU-Solid Waste

South Transfer Station Rebuild

| | | | |
|-------------------------------|------------------|----------------------------------|----------|
| BCL/Program Name: | New Facilities | BCL/Program Code: | C230B |
| Project Type: | New Facility | Start Date: | Q1/2006 |
| Project ID: | C2302 | End Date: | Q4/2017 |
| Location: | 8100 2nd AVE S | | |
| Neighborhood Plan: | Duwamish | Neighborhood Plan Matrix: | N/A |
| Neighborhood District: | Greater Duwamish | Urban Village: | Duwamish |

This program provides for the replacement of the existing South Recycling and Disposal Station (SRDS) in South Park. The existing solid waste transfer station was built in 1966 and is outdated and nearing the end of its useful life. The design and construction of replacement facilities is a two phase project. The first phase includes the development of a new transfer station and associated facilities adjacent to the existing facility on a 9.1 acre parcel to the northwest of the existing station. The second phase includes demolition of the existing facilities and development of new recycling and reuse facilities, a household hazardous waste facility, and other utility facilities.

| | LTD Actuals | 2013 Rev | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Total |
|--|----------------|-------------|-------|-------|-------|--------|------|------|--------|
| Revenue Sources | | | | | | | | | |
| Solid Waste Rates | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Total: | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Fund Appropriations/Allocations | | | | | | | | | |
| Solid Waste Fund | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| Total*: | 74,186 | 1,716 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 96,901 |
| O & M Costs (Savings) | | | 969 | 969 | 969 | 969 | 969 | 969 | 5,814 |
| Spending Plan by Fund | | | | | | | | | |
| Solid Waste Fund | | 2,550 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 23,550 |
| Total: | | 2,550 | 1,500 | 1,500 | 8,000 | 10,000 | 0 | 0 | 23,550 |

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