Seattle Public Utilities - Solid Waste

Overview of Facilities and Programs

Seattle Public Utilities (SPU) is responsible for the collection and disposal of solid waste generated within the City of Seattle. To fulfill this responsibility the City owns two recycling and disposal stations, two household hazardous waste facilities, and a fleet of trucks and heavy equipment. In addition, the Solid Waste Capital Improvement Plan (CIP) supports post-closure projects on two landfills previously used by the City.

The City's solid waste collection system consists of the South Recycling and Disposal Station (SRDS), located in the South Park area of the city, and the North Recycling and Disposal Station, located just north of the Lake Washington Ship Canal near Stone Way. The South Household Hazardous Waste facility is located on the same site as the SRDS, while the North Household Hazardous Waste facility is located at North 125th Street, adjacent to the City-owned Haller Lake shops.

Private contractors collect household refuse and recyclables and deliver the waste to the recycling and disposal stations for its ultimate disposal. Private contractors also collect the City's commercial waste and deliver some of that waste to the City's recycling and disposal stations. Self-haulers, private individuals, and small contractors can also deliver their own refuse to the stations. Once deposited at a station, the trash is processed through a large compaction machine and placed in a sealed shipping container. This container is hauled by solid waste fleet trucks to the Union Pacific Railhead where it is placed on a train. Six times a week, the trains carry the loaded containers to a privately-owned regional landfill in eastern Oregon, where final disposal is accomplished. The trains return with empty containers to be refilled. Self-haulers may also bring their recyclables to the recycling and disposal stations. Materials are separated by the customer and placed in large bins. Once the bins are full, Solid Waste Field Operations personnel haul these bins to private recyclers for processing. Large goods (refrigerators, stoves, etc.) may also be brought to the stations for recycling. Customers can also bring unused pesticides and solvents to one of the two household hazardous waste sites. The City contracts with a private company to pick up and dispose of these materials.

The Solid Waste CIP is funded through solid waste rates and revenue bonds. Overhead costs for the CIP (such as rent and utilities) are currently budgeted in SPU's operating budget and then repaid as CIP expenditures are incurred.

Highlights

Facilities Master Plan Implementation: The Solid Waste Facilities Master Plan is a 30-year plan that guides the construction of facilities that provide the citizens of Seattle with sufficient recycling and solid waste services. In 2008, this project was broken down into two separate projects: the South Transfer Station Rebuild and North Transfer Station Rebuild. Investments in these facilities will modernize solid waste operations, enhance worker safety, and allow for greater recycling opportunities as Seattle pursues aggressive new waste reduction strategies to minimize waste the City collects and disposes. Costs for both rebuilds include State Environmental Policy Act (SEPA) evaluations, permitting, property acquisition, design, construction, and purchase of facility equipment. The 2009-2010 Proposed Budget includes funding significant portions of the South Transfer Station rebuild.

Project Selection Process

SPU has adopted an Asset Management approach for selecting which projects to build. This is a triple bottom line approach in which projects are evaluated on their economic, social, and environmental costs and benefits, as well as the ability to meet customer service levels. The approach provides an elaborate analytical and modeling framework to find the most economic balance between capital investments and operation and maintenance expenditures so as to minimize life-cycle costs of any facility.

The Asset Management Committee, a committee of senior SPU executives, reviews each project valued at \$250,000 or more and assures that only projects that meet the benefit criteria move forward. Several projects have been dropped, as their costs were higher than their benefits. Several cost-effective master planning efforts

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have been approved to create up-to-date improvement and upgrade plans for various groups of assets. Other projects have been expanded or expedited because the benefits exceed the costs.

Program Category Summaries

The Solid Waste Proposed CIP is approximately \$27.0 million in 2009 and \$57.1 million in 2010 (including Technology projects funded by the Solid Waste Fund, displayed in a separate section of this CIP). In the New Facilities BCL, the 2009 budget for the South and North Transfer Station Rebuild is \$28.4 million higher through 2014 than the amount shown in the 2008-2013 Adopted CIP. This increase is the result of updated cost estimates, fully reflecting the impact of inflationary construction cost increases. In the Rehabilitation and Heavy Equipment BCL, the most significant increase relative to the 2008-2013 Adopted CIP is the purchase of the yard waste and disposal carts which is part of the agreement in the new collection contracts.

The increase in the Technology BCL is partly due to the increase in support needed for the new Solid Waste contracts and services. The Customer Relationship Management Program budget increases in 2009 for the new Transfer Station Billing System. The Commercial Solid Waste data system is in the process of being replaced and modified given the data needs with the new collection contracts. The Solid Waste Fund's share of cross functional applications includes the new fixed assets and financial reporting systems.

The Solid Waste CIP is composed of four program categories, which are summarized below.

New Facilities: This program plans, designs, and constructs new facilities to enhance solid waste operations. In 2009-2010, SPU continues the implementation of its Solid Waste Facilities Master Plan, which features a two-station configuration.

Rehabilitation and Heavy Equipment: This program designs and constructs projects to repair and/or upgrade solid waste facilities.

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. In 2009-2010 the funding from the Solid Waste Fund includes money for the Operations Control Center Upgrade, Security Improvements, and Heavy Equipment Purchases.

Technology: This program makes use of recent technology advances to increase efficiency and productivity in addition to replacing vital systems that will no longer be supported beyond 2009. This program also includes Solid Waste portion of shared fund technology projects.

Anticipated Operating Expenses Associated with Capital Facilities Projects

When appropriate, the projects in the Solid Waste Fund CIP include operations and maintenance cost estimates. These estimates are refined after project completion and are included as part of SPU's Operating and Maintenance (O&M) Proposed Budget submittals.