

**SPU -
TECHNOLOGY
PROJECTS**

SPU - Technology Projects

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Technology										
Automated Meter Reading	C598001	479	82	125	125	125	125	10	10	1,081
Business Technology Improvements	TECH105	12,994	3,837	1,958	3,728	5,185	6,092	6,484	6,280	46,558
Customer Service Technology Improvements	TECH125	26,182	3,124	2,985	951	670	845	576	594	35,927
Engineering/CIP Tech Improvements	TECH135	6,252	2,005	1,860	1,929	1,421	50	0	0	13,517
GIS Technology Improvements	TECH155	10,244	1,017	2,196	352	226	326	180	185	14,726
Operations Technology Improvements	TECH140	7,959	958	1,026	526	0	0	0	0	10,469
Real Property Records - Water	C191004	1,234	406	209	260	0	0	0	0	2,109
Supervisory Control And Data Acquisition Upgrades (Tech)	C195008	3,288	0	0	0	0	0	0	0	3,288
Technology Total		68,632	11,429	10,359	7,871	7,627	7,438	7,250	7,069	127,675
Department Total		68,632	11,429	10,359	7,871	7,627	7,438	7,250	7,069	127,675

Note: Additional allocations for the SPU - Technology Projects are shown in the SPU - Technology section of this document.

SPU - Technology Projects

Fund Source Summary

Funding Source	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Drainage and Wastewater Fund	15,607	2,476	4,719	2,735	2,620	2,555	2,490	2,428	35,630
SPU Solid Waste Fund	10,086	3,184	2,487	1,583	1,543	1,505	1,467	1,430	23,285
SPU Water Fund	42,939	5,769	3,153	3,553	3,464	3,378	3,293	3,211	68,760
Department Total	68,632	11,429	10,359	7,871	7,627	7,438	7,250	7,069	127,675

Note: Additional allocations for the SPU - Technology Projects are shown in the SPU - Technology section of this document.

**Amounts in thousands of dollars*

SPU - Technology Projects

Automated Meter Reading

Program: Technology **Start Date:** 4th Quarter 1998
Type: New Investment **End Date:** Ongoing
Project ID: C598001

This project implements radio frequency capable meter reading equipment on meters that are the most difficult to access and most costly to read. These meters are usually located in deep meter chambers in busy streets or sidewalks, and may require confined space entry procedures, a crew instead of a single meter reader, weekend meter reading, and traffic revisions. Benefits of the project include increased employee safety, more efficient and accurate meter readings, and reduced traffic impacts.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Drainage and Wastewater Fund	230	39	60	60	60	60	5	5	519
SPU Water Fund	249	43	65	65	65	65	5	5	562
TOTAL FUNDS	479	82	125	125	125	125	10	10	1,081
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	

Business Technology Improvements

Program: Technology **Start Date:** 4th Quarter 1999
Type: New Investment **End Date:** Ongoing
Project ID: TECH105

This program includes a series of major upgrades to SPU's shared business technology infrastructure, including core system software upgrades, document management, network enhancements, security initiatives, and server and desktop upgrades. Due to the nature of technology projects, it is impossible to map out specific projects for the later years of the budget. To avoid under-budgeting technology for those years, funds have been included starting in 2005 to account for unanticipated projects. SPU will keep the Executive and the City Council informed about expenditures from this project via the Department's quarterly financial performance report.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Drainage and Wastewater Fund	1,975	719	307	602	1,379	1,978	2,115	2,042	11,117
SPU Solid Waste Fund	2,156	874	556	1,008	1,146	1,189	1,277	1,234	9,440
SPU Water Fund	8,863	2,244	1,095	2,118	2,660	2,925	3,092	3,004	26,001
TOTAL FUNDS	12,994	3,837	1,958	3,728	5,185	6,092	6,484	6,280	46,558
<i>O&M Costs (Savings)</i>			47	60	77	77	99	99	

*Amounts in thousands of dollars

SPU - Technology Projects

Customer Service Technology Improvements

Program: Technology **Start Date:** 1st Quarter 1999
Type: New Investment **End Date:** Ongoing
Project ID: TECH125

This project develops and implements technology to improve Seattle Public Utilities' customer service and emergency response, and moves the Department from a call center model to a multi-media customer contact center model. This new technology supports the Call Center, Utility Service Teams, and the Emergency Resource Center, all of which support the customer service functions of both SPU and City Light. This program includes development of web- and phone-based customer contact technology, a share of upgrades to the Consolidated Customer Service System, and development of technologies to keep the call center running in emergencies.

In the 2004 budget process, Council adopted a proviso that limits to \$50,000 the amount that SPU can spend on the Consolidated Customer Service System (CCSS): SPU Additions project from funds appropriated in 2004, and a proviso that limits to \$300,000 the amount that SPU can spend on the BANNER Upgrade project. Both of these projects fall under Customer Service Technology Improvements.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Water Fund	10,079	1,410	0	0	228	287	196	202	12,402
SPU Drainage and Wastewater Fund	9,300	0	1,397	637	221	279	190	196	12,220
SPU Solid Waste Fund	6,803	1,714	1,588	314	221	279	190	196	11,305
TOTAL FUNDS	26,182	3,124	2,985	951	670	845	576	594	35,927
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Engineering/CIP Tech Improvements

Program: Technology **Start Date:** 1st Quarter 1999
Type: New Investment **End Date:** Ongoing
Project ID: TECH135

This program develops new technologies to support Engineering and Project Management, including As-Built Improvements, asset management, project cost estimating and tracking, and engineering vault imaging and management. Operations and maintenance costs shown below for 2004 are included in the Department's operating budget.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Solid Waste Fund	917	224	223	228	166	5	0	0	1,763
SPU Water Fund	3,242	944	537	560	484	15	0	0	5,782
SPU Drainage and Wastewater Fund	2,093	837	1,100	1,141	771	30	0	0	5,972
TOTAL FUNDS	6,252	2,005	1,860	1,929	1,421	50	0	0	13,517
<i>O&M Costs (Savings)</i>			58	74	95	122	156	156	

*Amounts in thousands of dollars

SPU - Technology Projects

GIS Technology Improvements

Program: Technology **Start Date:** 1st Quarter 1999
Type: New Investment **End Date:** Ongoing
Project ID: TECH155

This project funds SPU's share of long-term improvements to shared City Geographic Information Systems (GIS) along with improvements to the data and systems that help SPU locate and manage its utility infrastructure. Operations and maintenance costs shown below for 2004 are included in the Department's operating budget.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Water Fund	8,619	192	283	86	27	86	0	0	9,293
SPU Drainage and Wastewater Fund	1,477	772	1,826	266	189	208	180	185	5,103
SPU Solid Waste Fund	148	53	87	0	10	32	0	0	330
TOTAL FUNDS	10,244	1,017	2,196	352	226	326	180	185	14,726
<i>O&M Costs (Savings)</i>			49	57	73	94	120	120	

Operations Technology Improvements

Program: Technology **Start Date:** 1st Quarter 1999
Type: New Investment **End Date:** 4th Quarter 2005
Project ID: TECH140

This program provides new technologies to support the field operations of SPU's Drainage, Sewer, Water, and Solid Waste Utilities. These technologies include field staff automation, water resource management data, system control/data acquisition, and emergency response systems. Operations and maintenance costs shown below for 2004 are included in the Department's operating budget.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Drainage and Wastewater Fund	532	109	29	29	0	0	0	0	699
SPU Solid Waste Fund	62	319	33	33	0	0	0	0	447
SPU Water Fund	7,365	530	964	464	0	0	0	0	9,323
TOTAL FUNDS	7,959	958	1,026	526	0	0	0	0	10,469
<i>O&M Costs (Savings)</i>			104	133	170	218	279	279	

Real Property Records - Water

Program: Technology **Start Date:** 1st Quarter 1991
Type: New Investment **End Date:** 4th Quarter 2005
Project ID: C191004

This project provides for the re-coding and automation of information regarding 13,000 parcels of property managed by SPU. The project puts data from 14 different filing systems, dating back to the early 1900s, into a coordinated database that is usable by all City departments. This project also includes software to maintain and access the newly-automated records.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Water Fund	1,234	406	209	260	0	0	0	0	2,109
TOTAL FUNDS	1,234	406	209	260	0	0	0	0	2,109
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	

*Amounts in thousands of dollars

SPU - Technology Projects

Supervisory Control And Data Acquisition Upgrades (Tech)

Program: Technology **Start Date:** 1st Quarter 1995
Type: New Investment **End Date:** Ongoing
Project ID: C195008

This project upgrades the Supervisory Control and Data Acquisition (SCADA) system. Water system operators currently use SCADA equipment to acquire and monitor data, such as flow or pressure from remote sensors, and to remotely operate pumps or valves. Phase I of this project converts the current control room to a PC workstation-based software system, and creates new Intranet-based operations and maintenance manuals for water system operations. Phase II upgrades the field equipment, including installation of new sensors, and improves the communications system to allow for a completely redundant control room. Phase III integrates SCADA with other information systems, and develops a hydraulic network model that could be used for training and simulation of the water system. This project can now be found in the Department's Water CIP, and is shown below here for informational purposes only.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
SPU Water Fund	3,288	0	0	0	0	0	0	0	3,288
TOTAL FUNDS	3,288	0	0	0	0	0	0	0	3,288
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	

*Amounts in thousands of dollars