

**SPU -
TECHNOLOGY
PROJECTS**

SPU - Technology Projects

Project Summary

Program/Project	Project ID	LTD	2002	2003	2004	2005	2006	2007	2008	Total
Technology										
Automated Meter Reading	C598001	329	125	123	125	127	127	127	127	1,210
Business Technology Improvements	TECH105	7,902	1,162	4,215	2,317	1,197	1,136	1,001	986	19,916
Customer Service Technology Improvements	TECH125	996	1,189	3,552	3,414	1,316	1,113	806	427	12,813
Engineering/CIP Tech Improvements	TECH135	10,282	2,184	1,538	1,226	1,247	660	677	884	18,698
GIS Technology Improvements	TECH155	1,339	31	1,390	1,205	452	390	382	292	5,481
Operations Technology Improvements	TECH140	1,646	508	840	1,002	461	50	0	0	4,507
Real Property Records - Water	C191004	1,510	537	418	348	260	0	0	0	3,073
Supervisory Control And Data Acquisition Upgrades	C195008	2,852	1,971	2,689	2,212	3,291	2,505	2,575	589	18,684
Technology Total		26,856	7,707	14,765	11,849	8,351	5,981	5,568	3,305	84,382
Department Total		26,856	7,707	14,765	11,849	8,351	5,981	5,568	3,305	84,382

**Amounts in thousands of dollars*

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Fund Source Summary

Funding Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Drainage and Wastewater Fund	2,962	1,283	2,732	2,339	1,692	1,734	1,786	1,840	16,368
SPU Solid Waste Fund	3,069	1,126	3,079	2,950	860	536	374	293	12,287
SPU Water Fund	20,825	5,298	8,954	6,560	5,799	3,711	3,408	1,172	55,727
Department Total	26,856	7,707	14,765	11,849	8,351	5,981	5,568	3,305	84,382

**Amounts in thousands of dollars*

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Automated Meter Reading

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

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Drainage and Wastewater Fund	160	60	59	60	61	61	61	61	583
SPU Water Fund	169	65	64	65	66	66	66	66	627
TOTAL FUNDS	329	125	123	125	127	127	127	127	1,210
<i>O&M Costs (Savings)</i>			0	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
Location: N/A

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Drainage and Wastewater Fund	1,526	222	1,051	667	546	721	681	706	6,120
SPU Solid Waste Fund	1,818	254	663	836	100	152	120	101	4,044
SPU Water Fund	4,558	686	2,501	814	551	263	200	179	9,752
TOTAL FUNDS	7,902	1,162	4,215	2,317	1,197	1,136	1,001	986	19,916
<i>O&M Costs (Savings)</i>			22	47	60	77	77	99	382

*Amounts in thousands of dollars

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Customer Service Technology Improvements

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

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Water Fund	590	529	993	910	672	520	368	179	4,761
SPU Drainage and Wastewater Fund	195	324	794	811	346	338	273	127	3,208
SPU Solid Waste Fund	211	336	1,765	1,693	298	255	165	121	4,844
TOTAL FUNDS	996	1,189	3,552	3,414	1,316	1,113	806	427	12,813
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Engineering/CIP Tech Improvements

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

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Solid Waste Fund	684	408	488	236	268	29	0	0	2,113
SPU Water Fund	8,736	1,219	877	681	440	112	0	0	12,065
SPU Drainage and Wastewater Fund	862	557	173	309	539	519	677	884	4,520
TOTAL FUNDS	10,282	2,184	1,538	1,226	1,247	660	677	884	18,698
<i>O&M Costs (Savings)</i>			15	58	74	95	122	156	520

*Amounts in thousands of dollars

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GIS Technology Improvements

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

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Water Fund	1,339	31	741	716	258	217	199	159	3,660
SPU Drainage and Wastewater Fund	0	0	570	397	99	84	94	62	1,306
SPU Solid Waste Fund	0	0	79	92	95	89	89	71	515
TOTAL FUNDS	1,339	31	1,390	1,205	452	390	382	292	5,481
<i>O&M Costs (Savings)</i>			35	49	57	73	94	120	428

Operations Technology Improvements

Program: Technology **Start Date:** 1st Quarter 1999
Type: New Investment **End Date:** 4th Quarter 2006
Project ID: TECH140
Location: N/A

This program provides new technologies to support the field operations of SPU's Drainage, Sewer, Water, and Solid Waste Utilities, such as field staff automation, water resource management data, system control/data acquisition, and emergency response systems.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Drainage and Wastewater Fund	219	120	85	95	101	11	0	0	631
SPU Solid Waste Fund	356	128	84	93	99	11	0	0	771
SPU Water Fund	1,071	260	671	814	261	28	0	0	3,105
TOTAL FUNDS	1,646	508	840	1,002	461	50	0	0	4,507
<i>O&M Costs (Savings)</i>			44	104	133	170	218	279	948

*Amounts in thousands of dollars

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Real Property Records - Water

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

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.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Water Fund	1,510	537	418	348	260	0	0	0	3,073
TOTAL FUNDS	1,510	537	418	348	260	0	0	0	3,073
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0

Supervisory Control And Data Acquisition Upgrades

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

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 1 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 2 upgrades the field equipment, including installation of new sensors, and improves the communications system to allow for a completely redundant control room. Phase 3 integrates SCADA with other information systems, and develops a hydraulic network model that could be used for training and simulation of the water system.

Fund Source	LTD	2002	2003	2004	2005	2006	2007	2008	Total
SPU Water Fund	2,852	1,971	2,689	2,212	3,291	2,505	2,575	589	18,684
TOTAL FUNDS	2,852	1,971	2,689	2,212	3,291	2,505	2,575	589	18,684
<i>O&M Costs (Savings)</i>			0	0	0	0	0	0	0
Cash Flow		1,971	3,189	2,212	3,291	2,505	2,575	589	

*Amounts in thousands of dollars