

CITY OF KETCHIKAN, ALASKA

2009 - 2013 KETCHIKAN PUBLIC UTILITIES  
CAPITAL IMPROVEMENT PROGRAM

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**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program  
2009 Capital Budget**

Department/Division/Project	Revenues/ Reserves	Federal/State Grants	Loans/ Other	Revenue Bonds	2008 Total
<b>Administration</b>					
Financial and Accounting Information System	445,054				445,054
<b>Administration Division Total</b>	<b>445,054</b>				<b>445,054</b>
<b>Engineering</b>					
GPS Equipment	20,000				20,000
Upgrade Hansen Information System	100,000				100,000
<b>Engineering Division Total</b>	<b>120,000</b>				<b>120,000</b>
<b>Customer Service</b>					
Office Remodel	25,000				25,000
<b>Customer Service Division Total</b>	<b>25,000</b>				<b>25,000</b>
<b>Electric Division</b>					
Hydroelectric Modernization Project				4,161,103	4,161,103
Whitman Lake Hydro Plant				1,134,620	1,134,620
Metlakatla - Ketchikan Intertie	250,000				250,000
Ketchikan Plant Facility Upgrades	250,000				250,000
Beaver Falls and Silvis Facility Upgrades	260,000				260,000
URD Vault #3 Replacement	145,000				145,000
Pennock Island Submarine Cable Replacement	235,000				235,000
Bethe Substation Study	50,000				50,000
Shoal Cove Distribution Line Extension			560,000		560,000
Bailey Facility Upgrades	125,000				125,000
RTU Replacements	150,000				150,000
SCADA Protocol Converter Upgrade	60,000				60,000
Transformer Purchase	100,000				100,000
Reimbursable Projects	158,000				158,000
Distribution Pole Replacement	300,000				300,000
Automatic Meter Reading	100,000				100,000
Operating Equipment	62,000				62,000
3rd Avenue Conduit Installation	150,000				150,000
Additional Projects	150,000				150,000
Raptor Protection Program	15,000				15,000
Submarine Cable to Gravina (Lewis Reef)	97,400				97,400
<b>Electric Division Total</b>	<b>2,657,400</b>		<b>560,000</b>	<b>5,295,723</b>	<b>8,513,123</b>

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program  
2009 Capital Budget**

Department/Division/Project	Revenues/ Reserves	Federal/State Grants	Loans/ Other	Revenue Bonds	2008 Total
<b>Telecommunications Division</b>					
Normal Growth and Repair - Buildings	20,000				20,000
Normal Growth and Repair - Central Office Switching	100,000				100,000
Normal Growth and Repair - Copper Cable	79,000				79,000
Normal Growth and Repair - Fiber Cable	230,000				230,000
Normal Growth and Repair - Central Office Transmission	315,000				315,000
Normal Growth and Repair - Wireless	60,000				60,000
Normal Growth and Repair - Provisioning	25,000				25,000
Switch Cutover	100,000				100,000
Fiber to the Home	1,905,500				1,905,500
Remote Cabinets for Advanced Services	50,000				50,000
3rd Avenue Conduit	150,000				150,000
Operating Equipment	57,500				57,500
Vehicle Acquisition	200,000				200,000
PC Hardware & Software	15,000				15,000
Central Office AC Power Upgrade	75,000				75,000
Plant Records Integration	25,000				25,000
Headend Expansion	100,000				100,000
Video Set Top Boxes	75,000				75,000
<b>Telecommunications Division Total</b>	<b>3,582,000</b>				<b>3,582,000</b>
<b>Water Division</b>					
UV & Chloramine Disinfection		280,000		280,000	560,000
Alaska Avenue Watermain Replacement	517,000				517,000
Water Distribution Grid Improvements	60,000				60,000
Additional Projects	40,000				40,000
Water Service Upgrade Program	40,000				40,000
Backflow Prevention Program	40,000				40,000
Vehicles and Moving Equipment	27,500				27,500
Baranof Reservoir Replacement		50,900			50,900
Carlanna Pump Station Improvements	61,400				61,400
<b>Water Division Total</b>	<b>785,900</b>	<b>330,900</b>		<b>280,000</b>	<b>1,396,800</b>
<b>GRAND TOTAL</b>	<b>7,615,354</b>	<b>330,900</b>	<b>560,000</b>	<b>5,575,723</b>	<b>14,081,977</b>

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Division - All Years**

Division/Project	Prior Years	2009	2010	2011	2012	2013	Five Year Total	Project Total
<b>Administration</b>								
Financial and Accounting Information System	27,946	445,054					445,054	473,000
<b>Administration Total</b>	27,946	445,054					445,054	473,000
<b>Engineering</b>								
GPS Equipment		20,000					20,000	20,000
Upgrade Hansen Information System		100,000					100,000	100,000
<b>Engineering Total</b>		120,000					120,000	120,000
<b>Customer Service</b>								
Office Remodel		25,000					25,000	25,000
<b>Customer Service Total</b>		25,000					25,000	25,000
<b>Electric Division</b>								
Hydroelectric Plant Modernization Project	1,038,897	4,161,103					4,161,103	5,200,000
Whitman Lake Hydro Plant	665,380	1,134,620	2,800,000	9,000,000	4,000,000		16,934,620	17,600,000
Metlakatla - Ketchikan Intertie		250,000	6,000,000				6,250,000	6,250,000
Ketchikan Plant Facility Upgrades		250,000					250,000	250,000
BF & Silvis Facility Upgrades		260,000					260,000	260,000
Vault #3 Replacement	30,000	145,000	200,000				345,000	375,000
Pennock Island Submarine Cable Replacement		235,000					235,000	235,000
Bethe Subdivision Study		50,000					50,000	50,000
Shoal Cove Distribution Line Extension		560,000					560,000	560,000
Bailey Facility Upgrades		125,000					125,000	125,000
RTU Replacements	1,294,239	150,000	100,000				250,000	1,544,239
SCADA Protocol Convertor Upgrade		60,000					60,000	60,000
Electric Warehouse & Laydown Yard			555,000				555,000	555,000
Transformer Purchase		100,000	79,000	81,000	83,000	85,000	428,000	428,000
Reimbursable Projects		158,000	158,000	158,000	158,000	158,000	790,000	790,000
Distribution Pole Placement	1,640,055	300,000	325,000	325,000	325,000	234,945	1,509,945	3,150,000
Automatic Meter Reading	874,252	100,000	200,000	300,000	300,000	300,000	1,200,000	2,074,252
Operating Equipment		62,000	71,000	74,000	80,000	80,000	367,000	367,000
3rd Avenue Conduit		150,000					150,000	150,000

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Division - All Years**

Division/Project	Prior Years	2009	2010	2011	2012	2013	Five Year Total	Project Total
<b>Electric Division (continued)</b>								
Additional Projects		150,000	150,000	150,000	150,000	150,000	750,000	750,000
Raptor Protection Program	69,532	15,000	15,000	15,000	15,000	15,000	75,000	144,532
Electric Service Center	45,352		500,000	4,700,000			5,200,000	5,245,352
Submarine Cable to Gravina (Lewis Reef)	2,927,600	97,400					97,400	3,025,000
<b>Electric Division Total</b>	<b>8,585,307</b>	<b>8,513,123</b>	<b>11,153,000</b>	<b>14,803,000</b>	<b>5,111,000</b>	<b>1,022,945</b>	<b>40,603,068</b>	<b>49,188,375</b>
<b>Telecommunications Division</b>								
Normal Growth and Repair - Buildings		20,000	50,000	50,000	50,000	50,000	220,000	220,000
Normal Growth and Repair - CO Switching		100,000	60,000	60,000	60,000	60,000	340,000	340,000
Normal Growth and Repair - Copper Cable		79,000	100,000	100,000	100,000	100,000	479,000	479,000
Normal Growth and Repair - Fiber Cable		230,000	175,000	175,000	175,000	175,000	930,000	930,000
Normal Growth and Repair - CO Transmission		315,000	300,000	250,000	200,000	500,000	1,565,000	1,565,000
Normal Growth and Repair - Wireless		60,000	50,000	50,000	50,000	50,000	260,000	260,000
Normal Growth and Repair - Provisioning		25,000	25,000	25,000	25,000	25,000	125,000	125,000
Switch Cutover		100,000			100,000	100,000	300,000	300,000
Fiber to the Home		1,905,500	1,200,000	1,000,000			4,105,500	4,105,500
Remote Cabinets for Advanced Services		50,000	100,000	100,000	100,000	100,000	450,000	450,000
3rd Avenue Conduit		150,000					150,000	150,000
Operating Equipment		57,500	50,000	50,000	50,000	50,000	257,500	257,500
Vehicle Acquisition		200,000	100,000	100,000	100,000	100,000	600,000	600,000
PC Hardware & Software		15,000	15,000	15,000	20,000	20,000	85,000	85,000
Switch Upgrade				750,000			750,000	750,000
Gravina Island Buildout			200,000	200,000			400,000	400,000
K71 Generator								
Central Office Air Conditioner								
Central Office AC Power Upgrade		75,000					75,000	75,000
Plant Records Integration		25,000					25,000	25,000
Headend Expansion		100,000	100,000	100,000	100,000	100,000	500,000	500,000
Video Set Top Boxes		75,000	100,000	100,000	100,000	100,000	475,000	475,000
Microwave Link					1,975,000		1,975,000	1,975,000
<b>Telecommunications Division Total</b>		<b>3,582,000</b>	<b>2,625,000</b>	<b>3,125,000</b>	<b>3,205,000</b>	<b>1,530,000</b>	<b>14,067,000</b>	<b>14,067,000</b>

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Division - All Years**

Division/Project	Prior Years	2009	2010	2011	2012	2013	Five Year Total	Project Total
<b>Water Division</b>								
UV & Chloramine Disinfection	7,461,500	560,000					560,000	8,021,500
Alaska Avenue Watermain Replacement		517,000					517,000	517,000
Water Distribution Grid Improvements		60,000					60,000	60,000
Additional Projects		40,000					40,000	40,000
Water Service Upgrade Program		40,000					40,000	40,000
Backflow Prevention Program		40,000					40,000	40,000
Baranof Reservoir Replacement	398,514	50,900	750,000	2,000,000	1,000,000		3,800,900	4,199,414
Water & Electric Warehouse			175,000				175,000	175,000
Vehicles & Moving Equipment		27,500					27,500	27,500
Jackson St., 4th & 7th Ave. Water/Sewer Improvements			2,569,090				2,569,090	2,569,090
Water System SCADA			350,000				350,000	350,000
Tongass Ave. Water & Sewer Impr. Phase II			3,150,000				3,150,000	3,150,000
Adams Street Water/Sewer Improvements				100,000			100,000	100,000
Austin Street Water/Sewer Improvements				450,000			450,000	450,000
Schoenbar Road Water/Sewer Improvements					820,000		820,000	820,000
Denali Avenue Water/Sewer Improvements					240,000		240,000	240,000
Highlands Reservoir Replacement			100,000				100,000	100,000
1st Ave & Jefferson St. Water/Sewer Improvements				176,000			176,000	176,000
Buren Road Water/Sewer Improvements					104,000		104,000	104,000
Harris Street Water/Sewer Improvements					422,000		422,000	422,000
Confidence Reservoir Replacement - Design				100,000			100,000	100,000
Shoreline Service Area Water Main Extension	381,943					3,490,000	3,490,000	3,871,943
Carlanna Pump Station Improvements	13,600	61,400					61,400	75,000
<b>Water Division Total</b>	<b>8,255,557</b>	<b>1,396,800</b>	<b>7,094,090</b>	<b>2,826,000</b>	<b>2,586,000</b>	<b>3,490,000</b>	<b>17,392,890</b>	<b>25,648,447</b>
<b>TOTAL</b>	<b>16,868,810</b>	<b>14,081,977</b>	<b>20,872,090</b>	<b>20,754,000</b>	<b>10,902,000</b>	<b>6,042,945</b>	<b>72,653,012</b>	<b>89,521,822</b>

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Federal/State Grants	Local/ Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Administration</b>							
Financial and Accounting System	27,946	445,054					473,000
<b>Administration Total</b>		445,054					473,000
<b>Engineering</b>							
GPS Equipment		20,000					20,000
Upgrade Hansen Information System		100,000					100,000
<b>Engineering Total</b>		120,000					120,000
<b>Customer Service</b>							
Office Remodel		25,000					25,000
<b>Customer Service Total</b>		25,000					25,000
<b>Electric Division</b>							
Hydroelectric Plant Modernization Project	1,038,897				4,161,103		5,200,000
Whitman Lake Hydro Plant	665,380				16,934,620		17,600,000
Metlakatla - Ketchikan Intertie		250,000	6,000,000				6,250,000
Ketchikan Plant Facility Upgrades		250,000					250,000
BF & Silvis Facility Upgrades		260,000					260,000
Vault #3 Replacement	30,000	345,000					375,000
Pennock Island Submarine Cable Replacement		235,000					235,000
Bethe Subdivision Study		50,000					50,000
Shoal Cove Distribution Line Extension				560,000			560,000
Bailey Facility Upgrades		125,000					125,000
RTU Replacements	1,294,239	250,000					1,544,239
SCADA Protocol Convertor Upgrade		60,000					60,000
Electric Warehouse & Laydown Yard		555,000					555,000
Transformer Purchase		428,000					428,000
Reimbursable Projects		790,000					790,000
Distribution Pole Placement	1,640,055	1,509,945					3,150,000
Automatic Meter Reading	874,252	1,200,000					2,074,252
Operating Equipment		367,000					367,000
3rd Avenue Conduit		150,000					150,000

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Federal/State Grants	Local/ Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Electric Division (continued)</b>							
Additional Projects		750,000					750,000
Raptor Protection Program	69,532	75,000					144,532
Electric Service Center	45,352				5,200,000		5,245,352
Submarine Cable to Gravina (Lewis Reef)	2,927,600	97,400					3,025,000
<b>Electric Division Total</b>	<b>8,585,307</b>	<b>7,747,345</b>	<b>6,000,000</b>	<b>560,000</b>	<b>26,295,723</b>		<b>49,188,375</b>
<b>Telecommunications Division</b>							
Normal Growth and Repair - Buildings		220,000					220,000
Normal Growth and Repair - CO Switching		340,000					340,000
Normal Growth and Repair - Copper Cable		479,000					479,000
Normal Growth and Repair - Fiber Cable		930,000					930,000
Normal Growth and Repair - CO Transmission		1,565,000					1,565,000
Normal Growth and Repair - Wireless		260,000					260,000
Normal Growth and Repair - Provisioning		125,000					125,000
Switch Cutover		300,000					300,000
Fiber to the Home		4,105,500					4,105,500
Remote Cabinets for Advanced Services		450,000					450,000
3rd Avenue Conduit		150,000					150,000
Operating Equipment		257,500					257,500
Vehicle Acquisition		600,000					600,000
PC Hardware & Software		85,000					85,000
Switch Upgrade		750,000					750,000
Gravina Island Buildout		400,000					400,000
Central Office AC Power Upgrade		75,000					75,000
Plant Records Integration		25,000					25,000
Headend Expansion		500,000					500,000
Video Set Top Boxes		475,000					475,000
Microwave Link		1,975,000					1,975,000
<b>Telecommunications Division Total</b>		<b>14,067,000</b>					<b>14,067,000</b>

**Ketchikan Public Utilities**  
**2009 - 2013 Capital Improvement Program**  
**Summary of Projects by Funding Source - All Years**

Division/Project	Prior Years	Revenue Generating Fund	Federal/State Grants	Local/ Other	Revenue Bonds	State Drinking Water Loan Fund	Total
<b>Water Division</b>							
UV & Chloramine Disinfection	7,461,500		280,000			280,000	8,021,500
Alaska Avenue Watermain Replacement		517,000					517,000
Water Distribution Grid Improvements		60,000					60,000
Additional Projects		40,000					40,000
Water Service Upgrade Program		40,000					40,000
Backflow Prevention Program		40,000					40,000
Baranof Reservoir Replacement	398,514	225,000	2,625,000			950,900	4,199,414
Water & Electric Warehouse		175,000					175,000
Vehicles & Moving Equipment		27,500					27,500
Jackson St., 4th & 7th Ave. Water/Sewer Improvements		770,727	1,798,363				2,569,090
Water System SCADA		350,000					350,000
Tongass Ave. Water & Sewer Impr. Phase II			1,834,450			1,315,550	3,150,000
Adams Street Water/Sewer Improvements			70,000			30,000	100,000
Austin Street Water/Sewer Improvements			315,000			135,000	450,000
Schoenbar Road Water/Sewer Improvements			574,000			246,000	820,000
Denali Avenue Water/Sewer Improvements			168,000			72,000	240,000
Highlands Reservoir Replacement		100,000					100,000
1st Ave & Jefferson St. Water/Sewer Improvements			123,000			53,000	176,000
Buren Road Water/Sewer Improvements			73,000			31,000	104,000
Harris Street Water/Sewer Improvements			295,000			127,000	422,000
Confidence Reservoir Replacement - Design		30,000	70,000				100,000
Shoreline Service Area Water Main Extension	381,943		2,443,000	1,047,000			3,871,943
Carlanna Pump Station Improvements	13,600	61,400					75,000
<b>Water Division Total</b>	<b>8,255,557</b>	<b>2,436,627</b>	<b>10,668,813</b>	<b>1,047,000</b>		<b>3,240,450</b>	<b>25,648,447</b>
<b>TOTAL</b>	<b>16,840,864</b>	<b>24,841,026</b>	<b>16,668,813</b>	<b>1,607,000</b>	<b>26,295,723</b>	<b>3,240,450</b>	<b>89,521,822</b>

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Administration**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Financial & Accounting Information System	1	27,946	445,054		445,054					445,054		473,000
<b>Total</b>		27,946	445,054		445,054					445,054		473,000
Source of Funds		Prior Years	Reappropriated	New Funding	Total	2010	2011	2012	2013	Five Year Total	Future Years	Total Project
Revenue Generating Fund		27,946	445,054		445,054					445,054		473,000
<b>Total</b>		27,946	445,054		445,054					445,054		473,000

<b>Division:</b> Administration	<b>Project Priority:</b> 1	<b>Project Number:</b> 415-010-514-50-94
<b>Project Title:</b> Financial & Accounting Information System	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will involve the replacement or the upgrading of the City's financial and accounting information system. The City's current systems are approximately 25 years old. The City has engaged the Government Finance Officers Association's Research and Consulting Division to review the City's current systems, develop an independent needs assessment and to prepare contract solicitation documents. The total project is expected to cost \$946,000. It has been proposed that one-half of the project be paid for by General Government and one-half be paid for by KPU.		Design Land/Right-of-Way Construction Management Training and Education 70,000 Equipment Other 403,000 Project Total 473,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	27,946	445,054		445,054					445,054		473,000
<b>Total</b>	27,946	445,054		445,054					445,054		473,000

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Engineering Division**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
GPS Equipment	1			20,000	20,000					20,000		20,000
Upgrade Hansen Information System	2			100,000	100,000					100,000		100,000
<b>Total</b>				120,000	120,000					120,000		120,000

  

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			120,000	120,000					120,000		120,000
<b>Total</b>			120,000	120,000					120,000		120,000

<b>Division:</b> KPU Engineering	<b>Project Priority:</b> 1	<b>Project Number:</b>
<b>Project Title:</b> GPS Equipment	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will provide a GPS data collection unit for mapping water, electric, and telephone infrastructure. This unit will take advantage of the real time kinematic station purchased by Public Works in 2008. The existing CORS stations in the Ketchikan area are unreliable and the City now has its own base station that can be utilized with this equipment to produce much more accurate surveys.		Design Land/Right-of-Way Construction Management Construction Equipment 20,000 Other Project Total 20,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund				20,000	20,000					20,000		20,000
<b>Total</b>				20,000	20,000					20,000		20,000

<b>Division:</b> KPU Engineering	<b>Project Priority:</b> 2	<b>Project Number:</b>
<b>Project Title:</b> Upgrade Hansen Information System to Version 8	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> The Hansen Information System is used by Engineering, Building Inspections, Streets, Garage, Building Maintenance, Wastewater and by the KPU Water and Electric Divisions to maintain an accurate inventory of the infrastructure, create work orders, track time and prepare timesheets, track customer complaints, and parts warehouse. Version 8 is a major upgrade to a web-based browser system making data entry by all users easier and more reliable. The total cost of the upgrade is \$200,000. Fifty percent (50%) of the upgrade will be funded from the Public Works Sales Tax Fund and fifty percent (50%) will be funded from the KPU Enterprise Fund.		Hardware 10,000 Data Conversion 75,000 Training and Implementation 15,000 Project Total 100,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund				100,000	100,000					100,000		100,000
<b>Total</b>				100,000	100,000					100,000		100,000

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Customer Service**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Office Remodel	1		20,000	5,000	25,000					25,000		25,000
<b>Total</b>			20,000	5,000	25,000					25,000		25,000

  

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		20,000	5,000	25,000					25,000		25,000
<b>Total</b>		20,000	5,000	25,000					25,000		25,000

<b>Division:</b> Customer Service	<b>Project Priority:</b> 1	<b>Project Number:</b> 415-017-517-50-94
<b>Project Title:</b> Office Remodel	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b> Design Land/Right-of-Way Construction Management Construction Equipment Other Project Total
<b>Description:</b> Currently, there is no place for the credit department to meet privately with customers to discuss credit issues. This project proposes to relocate the Customer Service Manager's office to an area between the front counter and the first floor conference room. The Customer Service Manager's former office will be converted to create two offices for use by the credit department. This project was delayed because of the problems with the roofing project. Additional funds have been requested because of the rising costs of construction and materials.		

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		20,000	5,000	25,000					25,000		25,000
<b>Total</b>		20,000	5,000	25,000					25,000		25,000

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Electric**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
<b>Generation (Hydro and Diesel) Projects</b>												
Hydroelectric Modernization Project	1	1,038,897	4,161,103		4,161,103					4,161,103		5,200,000
Whitman Lake Hydroelectric Plant	2	665,380	334,620	800,000	1,134,620	2,800,000	9,000,000	4,000,000		16,934,620		17,600,000
Metlakatla - Ketchikan Intertie	3			250,000	250,000	6,000,000				6,250,000		6,250,000
Ketchikan Plant Facility Upgrades	4			250,000	250,000					250,000		250,000
Beaver Falls & Silvis Facility Upgrades	5		90,000	170,000	260,000					260,000		260,000
Bailey Facility Upgrades	10		30,000	95,000	125,000					125,000		125,000
<b>Transmission and Distribution Projects</b>												
URD Vault #3 Replacement	6	30,000	45,000	100,000	145,000	200,000				345,000		375,000
Pennock Island Submarine Cable Replacement	7			235,000	235,000					235,000		235,000
Bethe Substation Study	8			50,000	50,000					50,000		50,000
Shoal Cove Distribution Line Extension	9			560,000	560,000					560,000		560,000
Transformer Purchase	14			100,000	100,000	79,000	81,000	83,000	85,000	428,000		428,000
Reimbursable Projects	15			158,000	158,000	158,000	158,000	158,000	158,000	790,000		790,000
Distribution Pole Replacement	16	1,640,055		300,000	300,000	325,000	325,000	325,000	234,945	1,509,945		3,150,000
Automatic Meter Reading	17	874,252		100,000	100,000	200,000	300,000	300,000	300,000	1,200,000		2,074,252
3rd Avenue Conduit Installation	19			150,000	150,000					150,000		150,000
Submarine Cable to Gravina (Lewis Reef)	23	2,927,600	97,400		97,400					97,400		3,025,000
<b>Automation Control and Data Technologies</b>												
RTU Replacements	11	1,294,239	99,205	50,795	150,000	100,000				250,000		1,544,239
SCADA Protocol Convertor Upgrade	12			60,000	60,000					60,000		60,000
<b>General Plant Projects</b>												
Electric Warehouse & Laydown Yard	13					555,000				555,000		555,000
Operating Equipment	18			62,000	62,000	71,000	74,000	80,000	80,000	367,000		367,000
Additional Projects	20			150,000	150,000	150,000	150,000	150,000	150,000	750,000		750,000
Raptor Protection Program	21	69,532		15,000	15,000	15,000	15,000	15,000	15,000	75,000		144,532
Electric Service Center	22	45,352				500,000	4,700,000			5,200,000		5,245,352
<b>Total</b>		<b>8,585,307</b>	<b>4,857,328</b>	<b>3,655,795</b>	<b>8,513,123</b>	<b>11,153,000</b>	<b>14,803,000</b>	<b>5,111,000</b>	<b>1,022,945</b>	<b>40,603,068</b>		<b>49,188,375</b>
Source of Funds	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		5,636,410	361,605	2,295,795	2,657,400	1,853,000	1,103,000	1,111,000	1,022,945	7,747,345		13,383,755
Revenue Bonds		588,897	4,495,723	800,000	5,295,723	3,300,000	13,700,000	4,000,000		26,295,723		26,884,620
USCG Appropriation				560,000	560,000					560,000		560,000
Federal Grant		2,160,000										2,160,000
State Grant		200,000				6,000,000				6,000,000		6,200,000
<b>Total</b>		<b>8,585,307</b>	<b>4,857,328</b>	<b>3,655,795</b>	<b>8,513,123</b>	<b>11,153,000</b>	<b>14,803,000</b>	<b>5,111,000</b>	<b>1,022,945</b>	<b>40,603,068</b>		<b>49,188,375</b>

<b>Division:</b> Electric	<b>Project Priority:</b> 1	<b>Project Number:</b> 415-605-94
<b>Project Title:</b> Hydroelectric Plant Modernization	<b>Start Date:</b> 01/05 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will continue the development and upgrade of existing hydroelectric facilities, including automatic voltage regulators, excitation control, runner replacement, possible replacement of the Ketchikan Plant tunnel valves and outage management systems.		Design/License 450,000 Land/Right-of-Way Construction Management 4,750,000 Equipment Other Project Total 5,200,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	450,000										450,000
Revenue Bonds	588,897	4,161,103		4,161,103					4,161,103		4,750,000
<b>Total</b>	1,038,897	4,161,103		4,161,103					4,161,103		5,200,000

<b>Division:</b> Electric	<b>Project Priority:</b> 2	<b>Project Number:</b> 410-071-607-08-xx
<b>Project Title:</b> Whitman Lake Hydro Plant	<b>Start Date:</b> 01/07 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will use water from the existing Whitman Lake reservoir to generate up to 15,000,000 kWh of electricity for KPU Electric Division customers. Projected load increases require this additional generation. FERC EA was issued in July 2008 with expected license to follow prior to year end. Upon acceptance of license KPU must begin construction within four years.		Design/License 2,000,000 Land/Right-of-Way Construction Management Construction 15,600,000 Equipment Other Project Total 17,600,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund Revenue Bonds	665,380	334,620	800,000	1,134,620	2,800,000	9,000,000	4,000,000		16,934,620		665,380 16,934,620
<b>Total</b>	665,380	334,620	800,000	1,134,620	2,800,000	9,000,000	4,000,000		16,934,620		17,600,000

<b>Division:</b> Electric	<b>Project Priority:</b> 3	<b>Project Number:</b>
<b>Project Title:</b> Metlakatla - Ketchikan Intertie	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/10	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will require the design, permitting, and construction of an overhead 34.5kV transmission line from Metlakatla to Walden Point, the installation of approximately 3/4 mile of 34.5kV submarine cable, and modifications to the KPU Mountain Point substation to interconnect KPU Electric and Metlakatla Power and Light. This will allow excess generation capacity at Metlakatla to be utilized by KPU to displace diesel generation and improve system stability for both utilities.		Design/License 250,000
		Land/Right-of-Way 500,000 Construction Management 5,500,000 Equipment Other Project Total 6,250,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund State Grants			250,000	250,000	6,000,000				250,000 6,000,000		250,000 6,000,000
<b>Total</b>			250,000	250,000	6,000,000				6,250,000		6,250,000

<b>Division:</b> Electric					<b>Project Priority:</b> 4				<b>Project Number:</b>		
<b>Project Title:</b> Ketchikan Plant Facility Upgrades					<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09				<b>Estimated Project Cost:</b>		
<b>Description:</b> <b>Transformer Replacement:</b> Ketchikan Plant 5MVA generator step up transformer continues to exhibit degrading conditions based on dissolved gas analysis. The latest sample indicates serious thermal degradation. Loss of this transformer would prevent utilization of Ketchikan Plant and eliminate approximately 20% of normal system generation. A used transformer will be procured and the existing unit will be shipped out for repair and retained as a system spare. <b>Bus Replacement:</b> This project will replace existing cable bus between 12.47kV bays in Ketchikan Substation. KPU experienced a fault in one phase terminator in the cable resulting in an extensive outage. Replacement of the cable with rigid bus will alleviate this problem and improve system reliability. <b>Radiator Replacement:</b> The existing transformer radiators have severe corrosion and pitting and require immediate replacement. Loss of radiators would force Ketchikan Substation offline or risk overheating damage to transformer.									Design Land/Right-of-Way Construction Management Construction Equipment 250,000 Other Project Total 250,000		
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			250,000	250,000					250,000		250,000
<b>Total</b>			250,000	250,000					250,000		250,000

<b>Division:</b> Electric	<b>Project Priority:</b> 5	<b>Project Number:</b>
<b>Project Title:</b> Beaver Falls and Silvis Facility Upgrades	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> <b>BF Unit #1 Slip Ring Spares:</b> Existing slip rings were cannibalized from Unit #2. Unit provides approximately 5% of system generation which would be unavailable if slip rings fail. <b>Silvis Breaker Replacement:</b> This project will install, test, and commission new substation breaker and digital relays which will improve plant reliability and ensure safe operation of the Silvis line. Equipment has been procured and is on hand. <b>Beaver Falls Residing:</b> The plant has a coating on the exterior walls that contains asbestos. It is beginning to deteriorate and this project will provide the protection the building needs without requiring an asbestos abatement process. Project is carried over from FY2008 and will require additional funding for asbestos remediation. <b>BF Control Room Roof Repair:</b> The roof has deteriorated and is a source of leaks and potential damage to the plant control equipment.		Design/License Land/Right-of-Way Construction Management Construction Equipment 260,000 Other Project Total 260,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		90,000	170,000	260,000					260,000		260,000
<b>Total</b>		90,000	170,000	260,000					260,000		260,000

<b>Division:</b> Electric		<b>Project Priority:</b> 6		<b>Project Number:</b> 415-071-605-11-xx		
<b>Project Title:</b> URD Vault #3 Replacement		<b>Start Date:</b> 01/05		<b>Estimated Project Cost:</b>		
<b>Description:</b>		<b>End Date:</b> 12/09		Design		
<p>The current vaults are badly degraded. Salt water has destroyed the reinforcing rod in the concrete walls. This project will provide the opportunity to upgrade the existing vaults to an above ground installation. Foundation and pad for cabinet have been installed. The project will require extensive street work &amp; paving.</p>				Land/Right-of-Way		
				Construction Management		
				Construction		375,000
				Equipment		
				Other		
				Project Total		375,000

  

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2009	2010	2011	2012			
Revenue Generating Fund	30,000	45,000	100,000	145,000	200,000				345,000		375,000
<b>Total</b>	30,000	45,000	100,000	145,000	200,000				345,000		375,000

<b>Division:</b> Electric		<b>Project Priority:</b> 7		<b>Project Number:</b>							
<b>Project Title:</b> Pennock Island Submarine Cable Replacement		<b>Start Date:</b> 01/09		<b>Estimated Project Cost:</b>							
<b>Description:</b> Existing service to Pennock and southern Gravina Island is via a 3-phase 2,400 VAC submarine cable. This cable has been damaged and spliced at least 5 times by barge traffic. Presently only one of three phases remain operational. Any further damage will leave these customers without power for an extended period of time.		<b>End Date:</b> 12/09		Design 10,000							
				Land/Right-of-Way							
				Construction Management							
				Construction 75,000							
				Equipment 150,000							
				Other							
				Project Total 235,000							
Source of Funds	Prior Years	Adopted 2008			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2009	2010	2011	2012			
Revenue Generating Fund			235,000	235,000					235,000		235,000
<b>Total</b>			235,000	235,000					235,000		235,000

<b>Division:</b> Electric	<b>Project Priority:</b> 8	<b>Project Number:</b>
<b>Project Title:</b> Bethe Substation Study	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> Bethe Substation is presently at nameplate capacity and requires upgrades for protection and control. With the expected growth in electrical load due to heating conversions, Bethe will be unable to meet these requirements. Several significant load centers are fed from this substation, including schools, hospital, and KPU facilities. This engineering study will determine the most cost effective method to relieve loading and define necessary improvements.		Design 50,000 Land/Right-of-Way Construction Management Construction Equipment Other Project Total 50,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund				50,000	50,000					50,000		50,000
<b>Total</b>				50,000	50,000					50,000		50,000

<b>Division:</b> Electric	<b>Project Priority:</b> 9	<b>Project Number:</b>
<b>Project Title:</b> Shoal Cove Distribution Line Extension	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/10	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will provide a new 12.47kV distribution line and substation from Shelter Cove to Shoal Cove to provide commercial electrical service to U.S. Coast Guard LORAN Station Shoal Cove. The design, permitting, and layout of the project will be funded by the USCG. Construction funding is proposed via KPU provided financing.		Design 362,540 Land/Right-of-Way 68,330 Construction Management Construction Equipment Other 129,130 Project Total 560,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
USCG Appropriation			560,000	560,000					560,000		560,000
<b>Total</b>			560,000	560,000					560,000		560,000

<b>Division:</b> Electric	<b>Project Priority:</b> 10	<b>Project Number:</b>
<b>Project Title:</b> Bailey Facility Upgrades	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b>  <b>Cooling Fan Replacement:</b> There are a total of 24 cooling fans for the generator radiators and most are showing fatigue cracks at the blade hubs and must be replaced prior to catastrophic failure.  <b>Security Fence:</b> During the recent State of Alaska Homeland Security assessment, it was recommended physical security of the Bailey plant be improved. A secure fuel facility will deter theft and pilfering of a major fuel source.  <b>BAG #3 Conductor:</b> Replace wire from Bailey #3 Generator to Bailey Substation. Wire has been degraded due to water from outside connections. To prevent potential interruption of service this wire needs to be upgraded.  <b>BAG #3 Stack Failure:</b> Bailey #3 stack coating has failed and requires replacement. Properly coated stack will ensure adequate service life of equipment.		Design/License Land/Right-of-Way Construction Management Construction Equipment 125,000 Other Project Total 125,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		30,000	95,000	125,000					125,000		125,000
<b>Total</b>		30,000	95,000	125,000					125,000		125,000

<b>Division:</b> Electric		<b>Project Priority:</b> 11		<b>Project Number:</b> 415-071-604-16-xx							
<b>Project Title:</b> RTU Replacements		<b>Start Date:</b> 01/03		<b>Estimated Project Cost:</b>							
<b>Description:</b>		<b>End Date:</b> 12/10		Design							
To replace outdated hardware. RTU replacement in the substations includes breaker/recloser control upgrades. Some of these controls have begun to exhibit erratic behavior, and, as such, cannot be relied upon to perform reliably or safely. There are four legacy Wismer-Becker RTU's that remain in the system that must be replaced.				Land/Right-of-Way							
				Construction Management							
				Construction							
				Equipment		1,544,239					
				Other							
				Project Total		1,544,239					
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	1,294,239	99,205	50,795	150,000	100,000				250,000		1,544,239
<b>Total</b>	1,294,239	99,205	50,795	150,000	100,000				250,000		1,544,239

<b>Division:</b> Electric		<b>Project Priority:</b> 12		<b>Project Number:</b>	
<b>Project Title:</b> SCADA Protocol Converter Upgrade		<b>Start Date:</b> 01/03		<b>Estimated Project Cost:</b>	
<b>Description:</b> Five Orion 16 protocol converters are at end of service and supportability life cycle. Replacement Orion 5R units will be required to maintain existing system communications and control.		<b>End Date:</b> 12/09		Design	
				Land/Right-of-Way	
				Construction Management	
				Construction	
				Equipment	
				Other	
				Project Total	
				60,000	
				60,000	

  

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			60,000	60,000					60,000		60,000
<b>Total</b>			60,000	60,000					60,000		60,000

<b>Division:</b> Electric	<b>Project Priority:</b> 13	<b>Project Number:</b>
<b>Project Title:</b> Electric Warehouse & Laydown Yard	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> Material Storage		Design 55,000
<b>Storage Building (UV Site):</b> Electric and Water Divisions have equipment, vehicles, and materials stored outside due to insufficient covered storage. Electric Division's Cable Storage Building was dismantled due to Alaska Ship and Drydock expansion. Site development for the UV Disinfection project has resulted in an area for construction of a joint Electric/Water material storage facility. Development of this project will result in improved efficiency and extended service life for equipment and materials.		Land/Right-of-Way Construction Management Construction 500,000 Equipment Other
<b>Laydown Yard:</b> Development of the KPU owned facility adjacent to the existing Electric Division Warehouse will allow permanent storage of materials and vehicle parking allowing continued use of existing building and elimination of leased storage area.		Project Total 555,000
<b>Warehouse Roof:</b> Existing roof is leaking and allowing water penetration into plant with resulting damage to substructure and potential damage to plant equipment.		

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund						555,000				555,000		555,000
<b>Total</b>						555,000				555,000		555,000

<b>Division:</b> Electric	<b>Project Priority:</b> 14	<b>Project Number:</b>
<b>Project Title:</b> Transformer Purchase	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> KPU has historically seen demands of 3-5 kW per residence for residential service. Typically a 25kW distribution transformer has been installed to serve 5-7 residences. Due to the rapid conversion from oil heat, many residences are requiring a 10-15kW electric heating system which will quickly overload existing distribution service transformers. Many of KPU's existing service transformers will be overloaded and will require replacement.		Design Land/Right-of-Way Construction Management Construction Equipment 428,000 Other Project Total 428,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			100,000	100,000	79,000	81,000	83,000	85,000	428,000		428,000
<b>Total</b>			100,000	100,000	79,000	81,000	83,000	85,000	428,000		428,000

<b>Division:</b> Electric		<b>Project Priority:</b> 15		<b>Project Number:</b> 415-071-658-99-xx							
<b>Project Title:</b> Reimbursable Projects		<b>Start Date:</b> 01/09		<b>Estimated Project Cost:</b>							
<b>Description:</b>		<b>End Date:</b> 12/13		Design							
<p>This account represents funds for materials and labor for work that the division will be called upon to perform at the request of outside agencies. Examples of such reimbursable projects are new line extensions, damage to the electrical system resulting from accidents, negligence and vandalism. The division's expectation is that such work will be reimbursed 100%.</p>				Land/Right-of-Way							
				Construction Management							
				Construction		790,000					
				Equipment							
				Other							
		<b>Project Total</b>		790,000							
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			158,000	158,000	158,000	158,000	158,000	158,000	790,000		790,000
<b>Total</b>			158,000	158,000	158,000	158,000	158,000	158,000	790,000		790,000

<b>Division:</b> Electric	<b>Project Priority:</b> 16	<b>Project Number:</b> 415-071-604-11-xx
<b>Project Title:</b> Distribution Pole Replacement	<b>Start Date:</b> 01/05 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> This ongoing project will replace all of the deteriorated cedar poles in the distribution system.		Design Land/Right-of-Way Construction Management Construction 3,150,000 Equipment Other Project Total 3,150,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	1,640,055		300,000	300,000	325,000	325,000	325,000	234,945	1,509,945		3,150,000
<b>Total</b>	1,640,055		300,000	300,000	325,000	325,000	325,000	234,945	1,509,945		3,150,000

<b>Division:</b> Electric		<b>Project Priority:</b> 17		<b>Project Number:</b> 415-071-605-14-xx							
<b>Project Title:</b> Automatic Meter Reading		<b>Start Date:</b> 01/05		<b>Estimated Project Cost:</b>							
<b>Description:</b>		<b>End Date:</b> 12/13		Design							
Initiate Automatic Meter Reading for the KPU service area. Benefits include: reduction in labor costs, increase in useful information needed for system modeling and operations, automatic outage reporting and more accurate reading of the meters. Implementation will be extended over a longer period of time to continue technical evaluation of project.				Land/Right-of-Way							
				Construction Management							
				Construction		2,074,252					
				Equipment							
				Other							
				Project Total		2,074,252					
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	874,252		100,000	100,000	200,000	300,000	300,000	300,000	1,200,000		2,074,252
<b>Total</b>	874,252		100,000	100,000	200,000	300,000	300,000	300,000	1,200,000		2,074,252

<b>Division:</b> Electric					<b>Project Priority:</b> 18				<b>Project Number:</b>		
<b>Project Title:</b> Operating Equipment					<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13				<b>Estimated Project Cost:</b>		
<b>Description:</b> Purchase of new or replacement equipment for the Electric Engineer, warehouse, meter shop, transformer shop, maintenance, and Bailey Powerhouse. This equipment will be used in the maintenance department and for the operation and maintenance of electrical service.									Design Land/Right-of-Way Construction Management Construction Equipment 367,000 Other Project Total 367,000		
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			62,000	62,000	71,000	74,000	80,000	80,000	367,000		367,000
<b>Total</b>			62,000	62,000	71,000	74,000	80,000	80,000	367,000		367,000

<b>Division:</b> Electric		<b>Project Priority:</b> 19		<b>Project Number:</b>							
<b>Project Title:</b> 3rd Avenue Conduit Installation		<b>Start Date:</b> 01/09		<b>Estimated Project Cost:</b>							
<b>Description:</b>		<b>End Date:</b> 12/09		Design							
This project is a joint project with KPU Telephone Division that will provide a path for a 34.5kV rebuild of th main sub-transmission line from Bailey to Ketchikan Substation. This route will improve reliability and remove existing circuit from 2nd Avenue.				Land/Right-of-Way							
				Construction Management							
				Construction		150,000					
				Equipment							
				Other							
				Project Total		150,000					
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			150,000	150,000					150,000		150,000
<b>Total</b>			150,000	150,000					150,000		150,000

<b>Division:</b> Electric					<b>Project Priority:</b> 20				<b>Project Number:</b> 415-071-679-99-xx		
<b>Project Title:</b> Additional Projects					<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13				<b>Estimated Project Cost:</b>		
<b>Description:</b> This project represents funds for materials and labor for unidentified jobs that the division will be called upon to perform in 2009. Examples of additional projects include the installation of new transformers and banks of transformers, upgrading existing transformers and banks, and upgrading secondary lift poles. These non-reimbursable projects are O&M in nature but are capital since they are new installations.									Design Land/Right-of-Way Construction Management Construction 750,000 Equipment Other Project Total 750,000		
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			150,000	150,000	150,000	150,000	150,000	150,000	750,000		750,000
<b>Total</b>			150,000	150,000	150,000	150,000	150,000	150,000	750,000		750,000

<b>Division:</b> Electric	<b>Project Priority:</b> 21	<b>Project Number:</b>
<b>Project Title:</b> Raptor Protection Program	<b>Start Date:</b> 01/00 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> This program is ongoing and adds protective devices to the system at sites that have been determined to pose a risk to raptors as well as other wildlife.		Design Land/Right-of-Way Construction Management Construction 144,532 Equipment Other Project Total 144,532

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		69,532		15,000	15,000	15,000	15,000	15,000	15,000	75,000		144,532
<b>Total</b>		69,532		15,000	15,000	15,000	15,000	15,000	15,000	75,000		144,532

<b>Division:</b> Electric	<b>Project Priority:</b> 22	<b>Project Number:</b>
<b>Project Title:</b> Electric Service Center	<b>Start Date:</b> 01/00 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b> Material Storage		Design 45,352
<b>Service Center:</b> This project provides for the construction of a new Electric Division Service Center. For a number of years, the present facility located at 1065 Fair Street has been inadequate for the needs of the Electric Division.		Land/Right-of-Way
		Construction Management
		Construction 5,200,000
		Equipment
		Other
		Project Total 5,245,352

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund Revenue Bond		45,352				500,000	4,700,000			5,200,000		45,352 5,200,000
<b>Total</b>		45,352				500,000	4,700,000			5,200,000		5,245,352

<b>Division:</b> Electric	<b>Project Priority:</b> 23	<b>Project Number:</b>
<b>Project Title:</b> Submarine Cable to Gravina (Lewis Reef)	<b>Start Date:</b> 01/03 <b>End Date:</b> 1/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will install a submarine cable to Gravina Island to extend service to Lewis Reef and other Gravina Island customers. In addition, this installation will create a loop feed that will provide back-up service for the Ketchikan International Airport. This project will expand utility services to Gravina Island and will be constructed in conjunction with the KPU Telecommunications Division.		Design 140,000 Land/Right-of-Way Construction Management Construction 2,885,000 Equipment Other Project Total 3,025,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund		567,600	97,400		97,400					97,400		665,000
Federal Grant		2,160,000										2,160,000
State Grant		200,000										200,000
<b>Total</b>		2,927,600	97,400		97,400					97,400		3,025,000

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Telecommunications**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
<b>REGULATED</b>												
Normal Growth and Repair - Buildings	1			20,000	20,000	50,000	50,000	50,000	50,000	220,000		220,000
Normal Growth and Repair - CO Switching	2			100,000	100,000	60,000	60,000	60,000	60,000	340,000		340,000
Normal Growth and Repair - Copper Cable	3			79,000	79,000	100,000	100,000	100,000	100,000	479,000		479,000
Normal Growth and Repair - Fiber Cable	4			230,000	230,000	175,000	175,000	175,000	175,000	930,000		930,000
Normal Growth and Repair - CO Trnsmssn	5			315,000	315,000	300,000	250,000	200,000	500,000	1,565,000		1,565,000
Normal Growth and Repair - Wireless	6			60,000	60,000	50,000	50,000	50,000	50,000	260,000		260,000
Normal Growth and Repair - Provisioning	7			25,000	25,000	25,000	25,000	25,000	25,000	125,000		125,000
Switch Cutover	8			100,000	100,000			100,000	100,000	300,000		300,000
Fiber to the Home	9			1,905,500	1,905,500	1,200,000	1,000,000			4,105,500		4,105,500
Remote Cabinets for Advanced Services	10			50,000	50,000	100,000	100,000	100,000	100,000	450,000		450,000
3rd Avenue Conduit	11			150,000	150,000					150,000		150,000
Operating Equipment	12			57,500	57,500	50,000	50,000	50,000	50,000	257,500		257,500
Vehicle Acquisition	13		150,000	50,000	200,000	100,000	100,000	100,000	100,000	600,000		600,000
PC Hardware & Software	14			15,000	15,000	15,000	15,000	20,000	20,000	85,000		85,000
Switch Upgrade	15						750,000			750,000		750,000
Gravina Island Buildout	16					200,000	200,000			400,000		400,000
Central Office AC Power Upgrade	17		75,000		75,000					75,000		75,000
Plant Records Integration	18			25,000	25,000					25,000		25,000
<b>NON-REGULATED</b>												
Headend Expansion	19		100,000		100,000	100,000	100,000	100,000	100,000	500,000		500,000
Video Set Top Boxes	20			75,000	75,000	100,000	100,000	100,000	100,000	475,000		475,000
Microwave Link	21							1,975,000		1,975,000		1,975,000
<b>Total</b>			325,000	3,257,000	3,582,000	2,625,000	3,125,000	3,205,000	1,530,000	14,067,000		14,067,000
<b>Source of Funds</b>												
Revenue Generating Fund			325,000	3,257,000	3,582,000	2,625,000	3,125,000	3,205,000	1,530,000	14,067,000		14,067,000
<b>Total</b>			325,000	3,257,000	3,582,000	2,625,000	3,125,000	3,205,000	1,530,000	14,067,000		14,067,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Normal Growth and Repair - Buildings</p> <p><b>Description:</b>  This budget will provide funding for leasehold improvements for the AT&amp;T Alascom building. Few improvements have been made over the last 10 years at this site, and they are sorely needed. The main item will be to re-pave the telephone yard with asphalt. Other small interior re-moldeling projects are scheduled as well.</p>	<p><b>Project Priority:</b> 1</p> <p><b>Start Date:</b> 01/09  <b>End Date:</b> 12/13</p>	<p><b>Project Number:</b> 799-01</p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr><td>Design</td><td></td></tr> <tr><td>Land/Right-of-Way</td><td></td></tr> <tr><td>Construction Management</td><td></td></tr> <tr><td>Construction</td><td style="text-align: right;">22,000</td></tr> <tr><td>Equipment</td><td style="text-align: right;">198,000</td></tr> <tr><td>Other</td><td></td></tr> <tr><td><b>Project Total</b></td><td style="text-align: right;"><b>220,000</b></td></tr> </table>	Design		Land/Right-of-Way		Construction Management		Construction	22,000	Equipment	198,000	Other		<b>Project Total</b>	<b>220,000</b>
Design																
Land/Right-of-Way																
Construction Management																
Construction	22,000															
Equipment	198,000															
Other																
<b>Project Total</b>	<b>220,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			20,000	20,000	50,000	50,000	50,000	50,000	220,000		220,000
<b>Total</b>				20,000	20,000	50,000	50,000	50,000	50,000	220,000		220,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 2	<b>Project Number:</b> 796-99
<b>Project Title:</b> Normal Growth and Repair - Central Office Switching	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> This budget item is for swithing upgrades and additional equipment required for Central Office Switching. Specifically this year we are planning to upgrade to PIC2-400 cards in the Taqua T7000.		Design 17,000 Land/Right-of-Way Construction Management Construction 34,000 Equipment 289,000 Other Project Total 340,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			100,000	100,000	60,000	60,000	60,000	60,000	340,000		340,000
<b>Total</b>				100,000	100,000	60,000	60,000	60,000	60,000	340,000		340,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Normal Growth and Repair - Copper Cable</p> <p><b>Description:</b>  This budget item will fund the replacement of existing deteriorated cables and other minor cable projects, including line extensions. This budget item will also fund cable, cross arms and miscellaneous hardware needed to reconnect to poles replaced by the Electric Division.</p>	<p><b>Project Priority:</b> 3</p> <p><b>Start Date:</b> 01/09</p> <p><b>End Date:</b> 12/13</p>	<p><b>Project Number:</b> 790-99</p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr><td>Design</td><td style="text-align: right;">19,160</td></tr> <tr><td>Land/Right-of-Way</td><td></td></tr> <tr><td>Construction Management</td><td></td></tr> <tr><td>Construction</td><td style="text-align: right;">191,600</td></tr> <tr><td>Equipment</td><td style="text-align: right;">268,240</td></tr> <tr><td>Other</td><td></td></tr> <tr><td><b>Project Total</b></td><td style="text-align: right;"><b>479,000</b></td></tr> </table>	Design	19,160	Land/Right-of-Way		Construction Management		Construction	191,600	Equipment	268,240	Other		<b>Project Total</b>	<b>479,000</b>
Design	19,160															
Land/Right-of-Way																
Construction Management																
Construction	191,600															
Equipment	268,240															
Other																
<b>Project Total</b>	<b>479,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			79,000	79,000	100,000	100,000	100,000	100,000	479,000		479,000
<b>Total</b>				79,000	79,000	100,000	100,000	100,000	100,000	479,000		479,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 4	<b>Project Number:</b> 791-99
<b>Project Title:</b> Normal Growth and Repair - Fiber Cable	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> This budget item will provide funds that will be used to add fiber optic connectivity for various business data circuits, and other smaller fiber projects necessary for the efficient operation of the utility. Additionally, KPU will begin installing fiber drops to customers for fiber to the home which will come from this budget item.		Design 18,600 Land/Right-of-Way Construction Management Construction 558,000 Equipment 353,400 Other Project Total 930,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			230,000	230,000	175,000	175,000	175,000	175,000	930,000		930,000
<b>Total</b>				230,000	230,000	175,000	175,000	175,000	175,000	930,000		930,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Normal Growth and Repair - Central Office Transmission</p> <p><b>Description:</b>          This budget item will fund the purchase and installation of additional Intelligent Network Interface Devices (NIDS), and Optical Network Terminals (ONTS) needed to keep up with customer demand for IP video services.</p> <p>This budget item will also fund the purchase and installation of fiber ports to connect end user customers to Voice, TV and DSL services over fiber.</p> <p>This item is also for provisioning new transmission services to customers such as digital data service, T1, etc.</p>	<p><b>Project Priority:</b> 5</p> <p><b>Start Date:</b> 01/09</p> <p><b>End Date:</b> 12/13</p>	<p><b>Project Number:</b> 792-99</p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr> <td>Design</td> <td style="text-align: right;">39,125</td> </tr> <tr> <td>Land/Right-of-Way</td> <td></td> </tr> <tr> <td>Construction Management</td> <td></td> </tr> <tr> <td>Construction</td> <td style="text-align: right;">156,500</td> </tr> <tr> <td>Equipment</td> <td style="text-align: right;">1,369,375</td> </tr> <tr> <td>Other</td> <td></td> </tr> <tr> <td><b>Project Total</b></td> <td style="text-align: right;"><b>1,565,000</b></td> </tr> </table>	Design	39,125	Land/Right-of-Way		Construction Management		Construction	156,500	Equipment	1,369,375	Other		<b>Project Total</b>	<b>1,565,000</b>
Design	39,125															
Land/Right-of-Way																
Construction Management																
Construction	156,500															
Equipment	1,369,375															
Other																
<b>Project Total</b>	<b>1,565,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			315,000	315,000	300,000	250,000	200,000	500,000	1,565,000		1,565,000
<b>Total</b>				315,000	315,000	300,000	250,000	200,000	500,000	1,565,000		1,565,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 6	<b>Project Number:</b> 793-99
<b>Project Title:</b> Normal Growth and Repair - Wireless	<b>Start Date:</b> 01/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This budget item will provide funds to purchase 700 MHz radio equipment that will be used to serve remote locations within the division's serving area as well as mobile data services for the Police and Fire Departments.	<b>End Date:</b> 12/13	Design 6,500 Land/Right-of-Way Construction Management Construction 26,000 Equipment 227,500 Other Project Total 260,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			60,000	60,000	50,000	50,000	50,000	50,000	260,000		260,000
<b>Total</b>				60,000	60,000	50,000	50,000	50,000	50,000	260,000		260,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 7	<b>Project Number:</b> 794-99
<b>Project Title:</b> Normal Growth and Repair - Provisioning	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> This budget item will provide funds to continue to automate the provisioning of services in order to provide excellent customer satisfaction by providing timely service. This will also help to make our operations more efficient by automating routine tasks.		Design Land/Right-of-Way Construction Management Construction Equipment 125,000 Other Project Total 125,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			25,000	25,000	25,000	25,000	25,000	25,000	125,000		125,000
<b>Total</b>				25,000	25,000	25,000	25,000	25,000	25,000	125,000		125,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 8	<b>Project Number:</b> 776-01
<b>Project Title:</b> Switch Cutover	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This budget item will fund the equipment and labor needed to cutover the KPU customers served directly by the Nortel DMS 100 switch. This budget item will purchase and install broadband loop carriers that will be used to interface with the softswitch.		Design 7,500 Land/Right-of-Way Construction Management Construction 67,500 Equipment 225,000 Other Project Total 300,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			100,000	100,000			100,000	100,000	300,000		300,000
<b>Total</b>				100,000	100,000			100,000	100,000	300,000		300,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 9	<b>Project Number:</b> 781-01
<b>Project Title:</b> Fiber to the Home	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will deploy the fiber cable and terminals necessary to bring fiber to the home technology to Ketchikan. The project was started in 2008 concentrating on areas with long loop lengths and new subdivisions. Starting in 2009, the focus will be focused on the higher density areas within the city. The work will be primarily completed by contractors.		Design 102,638 Land/Right-of-Way Construction Management Construction 205,275 Equipment 3,797,588 Other Project Total 4,105,500

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			1,905,500	1,905,500	1,200,000	1,000,000			4,105,500		4,105,500
<b>Total</b>				1,905,500	1,905,500	1,200,000	1,000,000			4,105,500		4,105,500

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 10	<b>Project Number:</b> 782-01
<b>Project Title:</b> Remote Cabinets for Advanced Services	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b> As demand for advanced services increases, the division will need to deploy additional cabinets in specific areas so KPU can meet bandwidth requirements. Cabinets deployed will be capable of providing both DSL and fiber connectivity to subscribers. KPU will replace and upgrade existing remotes as technology dictates. Specifically this year, KPU will be placing a fiber cabinet for optical distribution frame in the main CO.		Design 11,250 Land/Right-of-Way Construction Management Construction 33,750 Equipment 405,000 Other Project Total 450,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			50,000	50,000	100,000	100,000	100,000	100,000	450,000		450,000
<b>Total</b>				50,000	50,000	100,000	100,000	100,000	100,000	450,000		450,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 11	<b>Project Number:</b>
<b>Project Title:</b> 3rd Avenue Conduit	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This project will install conduit along the 3rd avenue bypass in order to provide an alternate path to the downtown where facilities are cramped. This project will be completed in conjunction with the Electric Division.		Design 3,000 Land/Right-of-Way Construction Management Construction 87,000 Equipment 60,000 Other Project Total 147,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			150,000	150,000					150,000		150,000
<b>Total</b>				150,000	150,000					150,000		150,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Operating Equipment</p> <p><b>Description:</b>  This budget item will fund test equipment used by KPU technicians to test, repair and build high speed data and voice circuits. Anticipated purchases include:    Fiber splicing equipment  IP testing equipment    There are also funds included to purchase a new snow plow and salter.</p>	<p><b>Project Priority:</b> 12</p> <p><b>Start Date:</b> 01/09  <b>End Date:</b> 12/13</p>	<p><b>Project Number:</b> 799-04-93</p> <p><b>Estimated Project Cost:</b>  Design  Land/Right-of-Way  Construction Management  Construction  Equipment 257,500  Other  Project Total 257,500</p>
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Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			57,500	57,500	50,000	50,000	50,000	50,000	257,500		257,500
<b>Total</b>				57,500	57,500	50,000	50,000	50,000	50,000	257,500		257,500

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 13	<b>Project Number:</b> 789-02-92
<b>Project Title:</b> Vehicle Acquisition	<b>Start Date:</b> 01/08 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b>  This budget item will reappropriate funds to replace our oldest I&R bucket truck and one of our oldest vans. These purchases were postponed from the 2008 budget. The I&R bucket truck was purchased second-hand and is a 1999 model. It has experienced significant maintenance costs over the past few years. Van #37 was purchased in 1997 and is now 11 years old. The division still has a 1989 van in the yard that has been red-tagged most of the year. Chevy no longer makes the Astro van and the Express is a full size van but is available with all-wheel drive. The new funding is for a forklift, and additional fiber splice trailer.		Design Land/Right-of-Way Construction Management Construction Equipment 600,000 Other Project Total 600,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415		150,000	50,000	200,000	100,000	100,000	100,000	100,000	600,000		600,000
<b>Total</b>			150,000	50,000	200,000	100,000	100,000	100,000	100,000	600,000		600,000

<b>Division:</b> Telecommunications  <b>Project Title:</b> PC Hardware and Software  <b>Description:</b> This budget item will allow for the replacement of outdated computers that have not been upgraded in at least six years.	<b>Project Priority:</b> 14  <b>Start Date:</b> 01/08 <b>End Date:</b> 12/12	<b>Project Number:</b> 789-05-97  <b>Estimated Project Cost:</b> Design Land/Right-of-Way Construction Management Construction Equipment 85,000 Other Project Total 85,000
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Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			15,000	15,000	15,000	15,000	20,000	20,000	85,000		85,000
<b>Total</b>				15,000	15,000	15,000	15,000	20,000	20,000	85,000		85,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Switch Upgrade</p> <p><b>Description:</b> This budget item will provide the funds to upgrade the primary switching platform in order to offer the newest services to the division's customers.</p>	<p><b>Project Priority:</b> 15</p> <p><b>Start Date:</b> 01/11</p> <p><b>End Date:</b> 12/11</p>	<p><b>Project Number:</b></p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr> <td>Design</td> <td style="text-align: right;">18,750</td> </tr> <tr> <td>Land/Right-of-Way</td> <td></td> </tr> <tr> <td>Construction Management</td> <td></td> </tr> <tr> <td>Construction</td> <td style="text-align: right;">75,000</td> </tr> <tr> <td>Equipment</td> <td style="text-align: right;">656,250</td> </tr> <tr> <td>Other</td> <td></td> </tr> <tr> <td><b>Project Total</b></td> <td style="text-align: right;"><b>750,000</b></td> </tr> </table>	Design	18,750	Land/Right-of-Way		Construction Management		Construction	75,000	Equipment	656,250	Other		<b>Project Total</b>	<b>750,000</b>
Design	18,750															
Land/Right-of-Way																
Construction Management																
Construction	75,000															
Equipment	656,250															
Other																
<b>Project Total</b>	<b>750,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415						750,000			750,000		750,000
<b>Total</b>							750,000			750,000		750,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Gravina Island Buildout</p> <p><b>Description:</b> This budget item will provide the funds to build out telecommunications plant in the Gravina Island area as additional access and development is achieved.</p>	<p><b>Project Priority:</b> 16</p> <p><b>Start Date:</b> 01/10</p> <p><b>End Date:</b> 12/11</p>	<p><b>Project Number:</b></p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr><td>Design</td><td style="text-align: right;">10,000</td></tr> <tr><td>Land/Right-of-Way</td><td></td></tr> <tr><td>Construction Management</td><td></td></tr> <tr><td>Construction</td><td style="text-align: right;">40,000</td></tr> <tr><td>Equipment</td><td style="text-align: right;">350,000</td></tr> <tr><td>Other</td><td></td></tr> <tr><td><b>Project Total</b></td><td style="text-align: right;"><b>400,000</b></td></tr> </table>	Design	10,000	Land/Right-of-Way		Construction Management		Construction	40,000	Equipment	350,000	Other		<b>Project Total</b>	<b>400,000</b>
Design	10,000															
Land/Right-of-Way																
Construction Management																
Construction	40,000															
Equipment	350,000															
Other																
<b>Project Total</b>	<b>400,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415					200,000	200,000			400,000		400,000
<b>Total</b>						200,000	200,000			400,000		400,000

<b>Division:</b> Telecommunications  <b>Project Title:</b> Central Office AC Power Upgrade  <b>Description:</b>  This budget item will provide the funds to upgrade the primary AC feed into the main Central Office. There is currently a voltage drop in the primary circuit feeding the main Central Office. This project will correct that deficiency. Due to negotiations with the landlord, the projects will need to be re-appropriated for 2009.	<b>Project Priority:</b> 17  <b>Start Date:</b> 01/09 <b>End Date:</b> 12/09	<b>Project Number:</b> 789-07  <b>Estimated Project Cost:</b> Design 1,000 Land/Right-of-Way Construction Management Construction 4,000 Equipment 70,000 Other Project Total 75,000
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Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415		75,000		75,000					75,000		75,000
<b>Total</b>			75,000		75,000					75,000		75,000

<p><b>Division:</b> Telecommunications</p> <p><b>Project Title:</b> Plant Records Integration</p> <p><b>Description:</b>  This budget item will provide the funds to integrate Plant Records between LiveWire, and Commsoft. This integration will allow division personnel better access to plant facilities information to make operations more efficient.</p>	<p><b>Project Priority:</b> 18</p> <p><b>Start Date:</b> 01/09</p> <p><b>End Date:</b> 12/09</p>	<p><b>Project Number:</b> 799-08</p> <p><b>Estimated Project Cost:</b></p> <table border="0" style="width: 100%;"> <tr><td>Design</td><td></td></tr> <tr><td>Land/Right-of-Way</td><td></td></tr> <tr><td>Construction Management</td><td></td></tr> <tr><td>Construction</td><td></td></tr> <tr><td>Equipment</td><td style="text-align: right;">25,000</td></tr> <tr><td>Other</td><td></td></tr> <tr><td><b>Project Total</b></td><td style="text-align: right;"><b>25,000</b></td></tr> </table>	Design		Land/Right-of-Way		Construction Management		Construction		Equipment	25,000	Other		<b>Project Total</b>	<b>25,000</b>
Design																
Land/Right-of-Way																
Construction Management																
Construction																
Equipment	25,000															
Other																
<b>Project Total</b>	<b>25,000</b>															

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	415			25,000	25,000					25,000		25,000
<b>Total</b>				25,000	25,000					25,000		25,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 19	<b>Project Number:</b> 788-01
<b>Project Title:</b> Headend Expansion	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b>  This budget item will provide the funds to purchase additional equipment necessary to expand the CommVision channel lineup to with high definition channels. Other equipment necessary in the vide headend that is necessary to maintain our competitive position will also be included within this budget item.		Design 12,500 Land/Right-of-Way Construction Management Construction 50,000 Equipment 437,500 Other Project Total 500,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	420		100,000		100,000	100,000	100,000	100,000	100,000	500,000		500,000
<b>Total</b>			100,000		100,000	100,000	100,000	100,000	100,000	500,000		500,000

<b>Division:</b> Telecommunications	<b>Project Priority:</b> 20	<b>Project Number:</b> 788-02
<b>Project Title:</b> Video Set Top Boxes	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/13	<b>Estimated Project Cost:</b>
<b>Description:</b>  This budget item will provide the funds to purchase set top boxes that will be used to deploy CommVision video services. Additionally, Personal Video Recorders (PVRs) will be purchased in order to be able to support time shifted television. Set top boxes that are replaced with personal video recorders will be redeployed to new customers who do not order PVRs.		Design Land/Right-of-Way Construction Management Construction Equipment 475,000 Other Project Total 475,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	420			75,000	75,000	100,000	100,000	100,000	100,000	475,000		475,000
<b>Total</b>				75,000	75,000	100,000	100,000	100,000	100,000	475,000		475,000

<b>Division:</b> Telecommunications  <b>Project Title:</b> Microwave Link to Prince Rupert  <b>Description:</b>  This budget item will provide the funds to establish a microwave link between Ketchikan and Prince Rupert for use to transport data traffic. It is anticipated that in the short term, KPU will be able to purchase bandwidth on a contract basis, so this project has been moved out into the future. It still may be that KPU needs to build this facility.	<b>Project Priority:</b> 21  <b>Start Date:</b> 01/12 <b>End Date:</b> 12/12	<b>Project Number:</b> 788-03  <b>Estimated Project Cost:</b> Design Land/Right-of-Way Construction Management Construction 1,975,000 Equipment Other Project Total 1,975,000
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Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	420							1,975,000		1,975,000		1,975,000
<b>Total</b>								1,975,000		1,975,000		1,975,000

**Ketchikan Public Utilities  
2009 - 2013 Capital Improvement Program**

**Division: Water**

Project Title	Priority	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
UV & Chloramine Disinfection	1	7,461,500	360,000	200,000	560,000					560,000		8,021,500
Alaska Avenue Watermain Replacement	2			517,000	517,000					517,000		517,000
Water Distribution Grid Improvements	3			60,000	60,000					60,000		60,000
Additional Projects	4			40,000	40,000					40,000		40,000
Water Service Upgrade Program	5			40,000	40,000					40,000		40,000
Backflow Prevention Program	6			40,000	40,000					40,000		40,000
Baranof Reservoir Replacement	7	398,514	50,900		50,900	750,000	2,000,000	1,000,000		3,800,900		4,199,414
Water & Electric Warehouse	8					175,000				175,000		175,000
Vehicles & Moving Equipment	9			27,500	27,500					27,500		27,500
Jackson St., 4th & 7th Ave. Water/Sewer Impr	10					2,569,090				2,569,090		2,569,090
Water System SCADA	11					350,000				350,000		350,000
Tongass Ave. Water & Sewer Impr. Phase II	12					3,150,000				3,150,000		3,150,000
Adams Street Water/Sewer Improvements	13						100,000			100,000		100,000
Austin Street Water/Sewer Improvements	14						450,000			450,000		450,000
Schoenbar Road Water/Sewer Improvements	15							820,000		820,000		820,000
Denali Avenue Water/Sewer Improvements	16							240,000		240,000		240,000
Highlands Reservoir Replacement	17					100,000				100,000	4,000,000	4,100,000
1st Ave & Jefferson St. Water/Sewer Impr.	18						176,000			176,000		176,000
Buren Road Water/Sewer Improvements	19							104,000		104,000		104,000
Harris Street Water/Sewer Improvements	20							422,000		422,000		422,000
Confidence Reservoir Replacement-Design	21						100,000			100,000		100,000
Shoreline Service Area Water Main Extension	22	381,943							3,490,000	3,490,000	18,100,000	21,971,943
Carlanna Pump Station Improvements	23	13,600	61,400		61,400					61,400		75,000
<b>Total</b>		<b>8,255,557</b>	<b>472,300</b>	<b>924,500</b>	<b>1,396,800</b>	<b>7,094,090</b>	<b>2,826,000</b>	<b>2,586,000</b>	<b>3,490,000</b>	<b>17,392,890</b>	<b>22,100,000</b>	<b>47,748,447</b>
Source of Funds	Prior Years	Reappropriated	New Funding	Total	2010	2011	2012	2013	Five Year Total	Future Years	Total Project	
Revenue Generating Fund	1,950,486	61,400	724,500	785,900	1,620,727	30,000			2,436,627		4,387,113	
SFY 07 Rev. Bonds/ Drinking Water Loan Fund	3,465,600	230,900	100,000	330,900					330,900		3,796,500	
Proposed Rev. Bonds/ Drinking Water Loan Fund					1,315,550	818,000	776,000	1,047,000	3,956,550	3,915,000	7,871,550	
State Grants - Awarded					926,375				1,206,375		4,045,846	
State Grants - Proposed	2,839,471	180,000	100,000	280,000	3,231,438	1,978,000	1,810,000	2,443,000	9,462,438	15,470,000	24,932,438	
Shoreline Service Area LID										2,715,000	2,715,000	
<b>Total</b>	<b>8,255,557</b>	<b>472,300</b>	<b>924,500</b>	<b>1,396,800</b>	<b>7,094,090</b>	<b>2,826,000</b>	<b>2,586,000</b>	<b>3,490,000</b>	<b>17,392,890</b>	<b>22,100,000</b>	<b>47,748,447</b>	

<b>Division:</b> Water	<b>Project Priority:</b> 1	<b>Project Number:</b>
<b>Project Title:</b> UV & Chloramine Disinfection	<b>Start Date:</b> 1/03 <b>End Date:</b> 3/10	<b>Estimated Project Cost:</b>
<b>Description:</b> Since 2003, KPU has been working with CH2M Hill to develop an optimum solution that will reduce the amount of haloacetic acids present within the municipal water system and bring Ketchikan into compliance with the EPA regulations. Ammonia injection will be used to reduce the formation of disinfection by-products and ultraviolet light (UV) as a secondary disinfectant. These planned disinfection modifications will also meet the EPA's recently adopted Stage 2 DBPR and Long Term 2 Enhanced Surface Water Treatment Rules. Work completed in 2008 included award of the construction contract that will be completed in the spring of 2010. Although ADEC has given conditional approval to construct, the state may require additional testing by the UV equipment vendor. In 2009, the division will provide certain items including the 300kVA transformer and reimburse the Electric Division's costs while installing necessary utility poles.		Design 650,000 Land/Right-of-Way 212,000 Construction Management 750,000 Construction 4,565,000 Equipment 1,723,000 Other 121,500 Project Total 8,021,500

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	1,375,000										1,375,000
Revenue Bonds/Alaska Drinking Water Loan SFY07	3,366,500	180,000	100,000	280,000					280,000		3,646,500
Approved State Grant - SFY08	2,720,000	180,000	100,000	280,000					280,000		3,000,000
<b>Total</b>	<b>7,461,500</b>	<b>360,000</b>	<b>200,000</b>	<b>560,000</b>					<b>560,000</b>		<b>8,021,500</b>

<b>Division:</b> Water	<b>Project Priority:</b> 2	<b>Project Number:</b>
<b>Project Title:</b> Alaska Avenue Watermain Replacement	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> Alaska Avenue's cast iron water main has been in service since 1969 and has failed at least six times between the Bryant and Tower intersections. The most recent failure this past October occurred when a 3-inch x 12-inch piece of the cast iron main ruptured and hydraulically undermined an extensive amount of asphalt pavement that will have to be replaced. It also washed out a recently repaired homeowner's driveway that had been destroyed in a previous water main break in the same location. This segment of the water main that was removed exhibited extensive electrolytic pitting corrosion all along the underside of the pipe as well as on repair bands installed from an even earlier failure. This water main has reached the end of its useful service life and if not replaced in a timely manner, further failures are imminent. The existing water main will be replaced with corrosion-resistant, high-density polyethylene pipe.		Design 50,000 Land/Right-of-Way Construction Management Construction 420,000 Equipment Other (10% contingency) 47,000 Project Total 517,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			517,000	517,000					517,000		517,000
<b>Total</b>			517,000	517,000					517,000		517,000

<b>Division:</b> Water	<b>Project Priority:</b> 3	<b>Project Number:</b>
<b>Project Title:</b> Water Distribution Grid Improvements	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> Each year the division has, in conjunction with the work of other agencies, unexpected opportunities to undertake repairs to improve the municipal water system. This account provides the funding for such improvements. In 2008, it provided the source of funding for the necessary asphalt repavement repairs made after water main failures occurred in Baranof, Denali and Dale Streets.		Design Land/Right-of-Way Construction Management Construction 60,000 Equipment Other Project Total 60,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			60,000	60,000					60,000		60,000
<b>Total</b>			60,000	60,000					60,000		60,000

<b>Division:</b> Water	<b>Project Priority:</b> 4	<b>Project Number:</b>
<b>Project Title:</b> Additional Projects	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This account provides for the cost of fire hydrants and other related materials, which are provided by the Utility in water line extensions and are then incorporated into the municipal water system. It also provides a source of funds for raising or replacing valve boxes in City streets when General Government repaving projects occur. Examples of this program in 2008 include supplying new valves and hydrants for the new water main serving the Berth IV project. Hydrants have also been supplied to Cedar Point Development's project adjacent to the former Burger King site. Although specific streets have not been selected for asphalt paving in 2009, there will likely be some paving next year.		Design Land/Right-of-Way Construction Management Construction 40,000 Equipment Other Project Total 40,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			40,000	40,000					40,000		40,000
<b>Total</b>			40,000	40,000					40,000		40,000

<b>Division:</b> Water	<b>Project Priority:</b> 5	<b>Project Number:</b>
<b>Project Title:</b> Water Service Upgrade Program	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> The water service upgrade program was initiated in 1997, in order to allow a number of residents to upgrade their individual water services. The division proposes to continue offering this program in 2009 and requests that the City Council authorize funding. Numerous water services, from the main to the residence, are in need of replacement to KPU standards. After completion of the work and inspection by KPU, this program allows the customer to provide cost documentation to receive a grant-in-aid. \$500 is available for work undertaken on private property and up to \$4,000 is available for work undertaken within the right-of-way. As a result of homeowners participating in the program, KPU will assume full responsibility for future repairs within the right-of-way as long as they are not caused by negligence by the property owner.		Design Land/Right-of-Way Construction Management Construction 40,000 Equipment Other Project Total 40,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			40,000	40,000					40,000		40,000
<b>Total</b>			40,000	40,000					40,000		40,000

<b>Division:</b> Water	<b>Project Priority:</b> 6	<b>Project Number:</b>
<b>Project Title:</b> Backflow Prevention Program	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> This grant-in-aid program was established in 1995, in order to encourage businesses to install backflow preventers to help protect the municipal water system. The division proposes to continue offering this program in 2009 and requests that the City Council authorize funding. This program is part of ADEC's mandated cross-connection control regulations, which require the Utility to be responsible for system-wide protection. Until 2001, Ketchikan's lack of adoption and enforcement of the Uniform Plumbing Code allowed many substandard installations to be constructed within the community. These deficiencies are still being discovered and must be corrected by the property owner.		Design Land/Right-of-Way Construction Management Construction 40,000 Equipment Other Project Total 40,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropiated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund			40,000	40,000					40,000		40,000
<b>Total</b>			40,000	40,000					40,000		40,000

<b>Division:</b> Water	<b>Project Priority:</b> 7	<b>Project Number:</b>
<b>Project Title:</b> Baranof Reservoir Replacement	<b>Start Date:</b> 10/07 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b> Construct replacement of the wooden reservoir located at the intersection of Jackson and Fairview Streets. Property acquisition was completed in 2007 followed by design of the reservoir in 2008. Application for a SFY10 70% Municipal Matching Grant request for the site development of the project was submitted in August 2008. If approved, site development can begin in the summer of 2010 while the division continues to seek sources of construction funding. Beginning in February 2009, the division intends to submit a SFY11 Drinking Water Loan request followed by a subsequent August 2009 application for a SFY11 70% Matching Grant request for the remainder of the construction funding. If both are approved, construction will begin in 2011 and be completed about a year later.		Design 150,000 Land/Right-of-Way 290,000 Construction Management 3,000,000 Construction 9,414 Equipment 750,000 Other 4,199,414 Project Total

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reapprop-riated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	299,414				225,000				225,000		524,414
State Grant - Proposed - SFY10					525,000				525,000		525,000
State Grant - Proposed - SFY11						1,400,000	700,000		2,100,000		2,100,000
Revenue Bonds/Alaska Drinking Water Loan Fund	99,100	50,900		50,900		600,000	300,000		950,900		1,050,000
<b>Total</b>	398,514	50,900		50,900	750,000	2,000,000	1,000,000		3,800,900		4,199,414

<b>Division:</b> Water	<b>Project Priority:</b> 8	<b>Project Number:</b>
<b>Project Title:</b> Water & Electric Warehouse	<b>Start Date:</b> 1/10 <b>End Date:</b> 12/10	<b>Estimated Project Cost:</b>
<b>Description:</b> Both Electric and Water Divisions have equipment, vehicles, and materials stored outside in the weather that should be under cover to extend their useful service life. Electric's Cable Storage Building had to be dismantled to provide needed property for Alaska Ship & Drydock's second shiplift with the result that wooden cable reels are deteriorating to the point that they can't be safely used and the wire will be only fit for scrap. Site development for the UV Disinfection Facility project on Schoenbar Road has opened up far more property than was originally proposed. All of the underlying muskeg has been removed and replaced with shot rock. As with Electric's Transformer Shop now located in the Water Warehouse, both Divisions would share this warehouse too and fund the new building equally.		Design Land/Right-of-Way Construction Management Construction 175,000 Equipment Other Project Total 175,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund - Water						175,000				175,000		175,000
<b>Total</b>						175,000				175,000		175,000

<b>Division:</b> Water	<b>Project Priority:</b> 9	<b>Project Number:</b>
<b>Project Title:</b> Vehicles & Moving Equipment	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> The two small Kubota Backhoes purchased equally by the three operating divisions have been very successful and are being used throughout the Utility's service area from Beaver Falls to the Second Waterfall on an as-needed basis. If the only trailer used to move these backhoes is out of the City Limits and a water main failure occurs outside normal working hours, the Water Division has no way to transport the remaining backhoe to the job site. Tyler Rental, if available, has to be contacted and hired. This trailer would be funded equally by the three operating divisions at \$5,000 each. The proposed vehicle will be used by the KPU Inspector who also provides winter snow plowing services in employee parking lots, facility access roads, substations, etc. for the Electric and Water Divisions. The Inspector's present vehicle was purchased in 1995 and is completely worn out.		Design Land/Right-of-Way Construction Management Construction Equipment 27,500 Other Project Total 27,500

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund				27,500	27,500					27,500		27,500
<b>Total</b>				27,500	27,500					27,500		27,500

<b>Division:</b> Water	<b>Project Priority:</b> 10	<b>Project Number:</b>
<b>Project Title:</b> Jackson Street, 4th & 7th Ave. Water & Sewer Improvements	<b>Start Date:</b> 09/08 <b>End Date:</b> 10/10	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 1,800 feet of 8-inch water main along Jackson Street between Fourth and Seventh Avenues; and then along Fourth Avenue to Madison Street. In addition, install 720 feet of 16-inch water main along Seventh Avenue between Jackson and Madison Streets. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. KPU and the Wastewater Division submitted an application for funding in August 2008 under ADEC's 70% Municipal Matching Grant program. Remaining funding would be either obtained through a SFY11 Drinking Water & Clean Water Loan request submitted in February 2009 or Enterprise Fund Reserves. Project design will commence in the fall of 2008.		Design Land/Right-of-Way Construction Management Construction 2,569,090 Equipment Other Project Total 2,569,090

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reapprop-riated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund State Grant - Proposed - SFY 10 Revenue Bonds/Alaska Drinking Water Loan Fund					770,727 1,798,363				770,727 1,798,363		770,727 1,798,363
<b>Total</b>					2,569,090				2,569,090		2,569,090

<b>Division:</b> Water	<b>Project Priority:</b> 11	<b>Project Number:</b>
<b>Project Title:</b> Water System SCADA	<b>Start Date:</b> 1/10	<b>Estimated Project Cost:</b>
<b>Description:</b> This project is for the purpose of providing a Supervisory Control and Data Acquisition (SCADA) system for the complete control of the water treatment and distribution system. Emergency call outs will be automated when alarms arise. The system will be controlled from one central PC server.	<b>End Date:</b> 12/10	Design 150,000
		Land/Right-of-Way Construction Management Construction Equipment 200,000 Other Project Total 350,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund					350,000				350,000		350,000
<b>Total</b>					350,000				350,000		350,000

<b>Division:</b> Water	<b>Project Priority:</b> 12	<b>Project Number:</b>
<b>Project Title:</b> Tongass Avenue Water & Sewer Replacement - Phase II	<b>Start Date:</b> 01/10 <b>End Date:</b> 10/10	<b>Estimated Project Cost:</b>
<b>Description:</b> Replace 2,715 feet of 10-inch cast iron water main along Tongass Avenue between The Landing Hotel and Third Avenue. This is the second segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. This work will be done in conjunction with the Wastewater Division's planned replacement of gravity and force main sewers in the project area. In addition to an already approved SFY07 Municipal Matching Grant, additional funding has been sought. A SFY09 Drinking Water Loan application submitted in February 2007 scored 17th out of 22 projects on ADEC's priority list. If approved by the Legislature and the Governor, funds would be available in August 2009. Further, in August 2008, an application was submitted for a SFY10 70% Municipal Matching Grant. The design is complete and this phase is anticipated to be advertised for construction in the spring of 2010.		Design Land/Right-of-Way Construction Management Construction 3,150,000 Equipment Other Project Total 3,150,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund					926,375				926,375		926,375
50% State Grant - Awarded SFY07					908,075				908,075		908,075
70% State Grant - Proposed SFY10					1,315,550				1,315,550		1,315,550
Revenue Bonds/Alaska Drinking Water Loan Fund											
<b>Total</b>					3,150,000				3,150,000		3,150,000

<b>Division:</b> Water	<b>Project Priority:</b> 13	<b>Project Number:</b>
<b>Project Title:</b> Adams St. Water & Sewer Improvements	<b>Start Date:</b> 1/09 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 150 feet of 6-inch main between 4th and 5th Avenues. The remainder of the Adams Street water main between Tongass and 1st Avenue was rebuilt in 1987. Another segment between 2nd and 3rd Avenues was replaced in 2001. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. If the design is completed by July 2009, KPU and the Wastewater Division intend to submit an application in August 2009 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY11. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2010. If funding is approved, construction would begin in 2011.		Design Land/Right-of-Way Construction Management Construction 100,000 Equipment Other Project Total 100,000

Source of Funds	Fund No.	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
			Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund State Grant - Proposed - SFY 11 Revenue Bonds/ Alaska Drinking Water Loan Fund							70,000 30,000			70,000 30,000		70,000 30,000
<b>Total</b>							100,000			100,000		100,000

<b>Division:</b> Water	<b>Project Priority:</b> 14	<b>Project Number:</b>
<b>Project Title:</b> Austin Street Water/Sewer Replacement	<b>Start Date:</b> 01/09 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b> This project is driven primarily by the immediate need to replace the leaking and collapsing municipal sewers beneath this street. Excavation to replace the substandard side sewers will also be necessary, which will destroy most of the existing asphalt pavement. Consequently, this is an ideal time to simultaneously replace the failure-prone, brittle, cast-iron water mains. As a joint project, General Government and KPU will share equally in the pavement restoration costs. In conjunction with the Wastewater Division, this project will replace both water and sewer mains in a three-block segment of Austin Street between Tongass and Third Avenues. KPU and the Wastewater Division intend to submit an application in August 2009 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY11. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2010. Design must be completed by July 2009 to obtain maximum scoring points on the funding applications. If approved, construction would start in 2011.		Design Land/Right-of-Way Construction Management Construction 450,000 Equipment Other Project Total 450,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund						315,000			315,000		315,000
State Grant - Proposed - SFY 11						135,000			135,000		135,000
Revenue Bonds/Alaska Drinking Water Loan Fund											
<b>Total</b>						450,000			450,000		450,000

<b>Division:</b> Water					<b>Project Priority:</b> 15				<b>Project Number:</b>		
<b>Project Title:</b> Schoenbar Road Water/Sewer Improvements					<b>Start Date:</b> 01/10 <b>End Date:</b> 12/12				<b>Estimated Project Cost:</b>		
<b>Description:</b> The Wastewater Division intends to replace the sewers along Schoenbar Road between the easterly intersection of Fairy Chasm and Park Avenue. Although some of the water mains have been replaced earlier, this project will allow 1,200 feet of undersized cast-iron mains to be replaced between Valley Forge and Schoenbar Trail intersections. The Schoenbar Road water main is the primary route from the Bear Valley Reservoir to Stedman Street. The expanding fish processing industries located along Stedman Street are consuming more water every year. Supplying the fish processors on Stedman Street is beginning to tax the ability of the Utility to supply their needs. KPU and the Wastewater Division intend to submit an application in August 2010 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY12 followed by a Drinking Water Loan request in February 2011. Design would need to be completed in early 2010 to obtain maximum scoring points on the funding applications. If approved, construction would start in 2012.									Design 60,000 Land/Right-of-Way Construction Management 760,000 Construction Equipment Other Project Total 820,000		
Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappro-priated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund							574,000		574,000		574,000
State Grant - Proposed - SFY 12							246,000		246,000		246,000
Revenue Bonds/Alaska Drinking Water Loan Fund											
<b>Total</b>							820,000		820,000		820,000

<b>Division:</b> Water	<b>Project Priority:</b> 16	<b>Project Number:</b>
<b>Project Title:</b> Denali Street Water/Sewer Improvements	<b>Start Date:</b> 01/10 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 650 feet of 6-inch water main along Denali Avenue between Tower to Hill Road. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously wherever possible. KPU and the Wastewater Division intend to submit an application in August 2010 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY12. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2011. Design would need to be completed in early 2010 to obtain maximum scoring points on the funding applications. If approved, construction would start in 2012.		Design Land/Right-of-Way Construction Management Construction 240,000 Equipment Other Project Total 240,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
State Grant - Proposed - SFY 12 Revenue Bonds/Alaska Drinking Water Loan Fund							168,000 72,000		168,000 72,000		168,000 72,000
<b>Total</b>							240,000		240,000		240,000

<b>Division:</b> Water	<b>Project Priority:</b> 17	<b>Project Number:</b>
<b>Project Title:</b> Highlands Reservoir Replacement	<b>Start Date:</b> 1/10	<b>Estimated Project Cost:</b>
<b>Description:</b>	<b>End Date:</b> 12/15	Pre Design 100,000
Construct a modern replacement for the wooden reservoir located on the northerly slope above the intersection of Forest Avenue and the Third Avenue Extension. The existing reservoir is too small to provide adequate fire protection for the State Jail and adjacent residential area that the reservoir serves. Ketchikan is located in Seismic Zone 3 (major damage). This type of wooden reservoir will not survive a significant earthquake, nor can it be economically retrofitted with additional shear protection. Additional property at the site needs to be acquired and a large, modern 650,000 gallon reservoir constructed. KPU intends to submit an application in August 2011 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY13 followed by a Drinking Water Loan request in February 2012. Design of the project to obtain maximum scoring points on the funding applications would begin in 2010 and determine the amount of property required. If approved, construction would start in 2014.		Land/Right-of-Way
		Construction Management
		Construction 4,000,000
		Equipment
		Other
		Project Total 4,100,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund					100,000				100,000		100,000
State Grant - Proposed - SFY 13										2,800,000	2,800,000
Revenue Bonds/Alaska Drinking Water Loan Fund										1,200,000	1,200,000
<b>Total</b>					100,000				100,000	4,000,000	4,100,000

<b>Division:</b> Water	<b>Project Priority:</b> 18	<b>Project Number:</b>
<b>Project Title:</b> 1st Avenue & Jefferson St. Water/Sewer Improvements	<b>Start Date:</b> 01/10 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 260 feet of 6-inch water main along First Avenue between Madison to Jefferson and beyond. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. KPU and the Wastewater Division intend to submit an application in August 2010 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY12. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2011. Design would need to be completed in early 2010 to obtain maximum scoring points on the funding applications. If approved, construction could start as early as July 2011.		Design Land/Right-of-Way Construction Management Construction 176,000 Equipment Other Project Total 176,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
State Grant - Proposed - SFY 12 Revenue Bonds/Alaska Drinking Water Loan Fund						123,000 53,000			123,000 53,000		123,000 53,000
<b>Total</b>						176,000			176,000		176,000

<b>Division:</b> Water	<b>Project Priority:</b> 19	<b>Project Number:</b>
<b>Project Title:</b> Buren Road Water/Sewer Improvements	<b>Start Date:</b> 01/10 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 300 feet of 6-inch water main between Baranof and Alaska Avenues. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. KPU and the Wastewater Division intend to submit an application in August 2010 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY12. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2011. Design would need to be completed in early 2010 to obtain maximum scoring points on the funding applications. If approved, construction would start in 2012.		Design Land/Right-of-Way Construction Management Construction 104,000 Equipment Other Project Total 104,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
State Grant - Proposed - SFY 12 Revenue Bonds/Alaska Drinking Water Loan Fund							73,000 31,000		73,000 31,000		73,000 31,000
<b>Total</b>							104,000		104,000		104,000

<b>Division:</b> Water	<b>Project Priority:</b> 20	<b>Project Number:</b>
<b>Project Title:</b> Harris Street Water/Sewer Replacement	<b>Start Date:</b> 01/11 <b>End Date:</b> 12/12	<b>Estimated Project Cost:</b>
<b>Description:</b> In conjunction with the Wastewater Division, install 880 feet of 6-inch water main along Harris Street. This is another segment of a multi-year program jointly developed by KPU and the General Government to replace substandard, defective utilities simultaneously whenever possible. KPU and the Wastewater Division intend to submit an application in August 2010 under ADEC's 70% Municipal Matching Grant program requesting funds in SFY12. The remaining funds would be obtained through a Drinking Water & Clean Water Loan request submitted in February 2011. Design would need to be completed in early 2010 to obtain maximum scoring points on the funding applications. If approved, construction would start in 2012.		Design Land/Right-of-Way Construction Management Construction 422,000 Equipment Other Project Total 422,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
State Grant - Proposed - SFY 11 Revenue Bonds/Alaska Drinking Water Loan Fund							295,000 127,000		295,000 127,000		295,000 127,000
<b>Total</b>							422,000		422,000		422,000

<b>Division:</b> Water	<b>Project Priority:</b> 21	<b>Project Number:</b>
<b>Project Title:</b> Confidence Reservoir Replacement	<b>Start Date:</b> 01/10 <b>End Date:</b> 12/11	<b>Estimated Project Cost:</b>
<b>Description:</b>  In the 1998 Comprehensive Plan, the cost of replacing the Confidence Zone Reservoir is estimated (in 1998 dollars) to cost \$2.94 million dollars. The area that it serves was originally expected to be a commercial zone (3,500 gpm for 4 hours fire fighting). Instead, it has become primarily a residential zone. Before investing significant amounts of money in a new reservoir, the sizing needs to be thoroughly investigated before design commences and suitable property acquired. The existing 21,380 gallon bolted steel reservoir was installed in 1992 as a temporary expedient planned to serve only the Solid Waste Handling Facility. Instead, this has become Ketchikan's fastest growing residential area. The division intends to submit an application in August 2010 under the 70% Municipal Matching Grant program requesting design funds for the proper size reservoir in 2011 (SFY12). If approved, funds would be released in summer 2011.		Design 100,000 Land/Right-of-Way Construction Management Construction Equipment Other Project Total 100,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappro- riated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund State Grant - Proposed - SFY 09						30,000 70,000			30,000 70,000		30,000 70,000
<b>Total</b>						100,000			100,000		100,000

<b>Division:</b> Water	<b>Project Priority:</b> 22	<b>Project Number:</b>	
<b>Project Title:</b> Water Main Extension to former Shoreline Service Area	<b>Start Date:</b> 8/03	<b>Estimated Project Cost:</b>	
<b>Description:</b>	<b>End Date:</b> 12/15	Design 381,943	
<p>This infrastructure project is a multi-year project that will extend water and sewer utilities into the former Shoreline Service Area (SSA) that was previously annexed into the City Limits. The design was completed in 2006. Funding for this project will be a challenge requiring participation by the SSA property owners to form a LID for 15% of the cost. Given the massive capital requirement, this is a long-term project that will take several years just to get the funding in place. In 2007 dollars, the water main to Shoreline is estimated to be \$3.49-million and the water mains within the service area another \$18.1-million. KPU and General Government will begin submitting applications in August 2010 for the extension to Shoreline Drive and February 2011 for the remainder under ADEC's 70% Municipal Matching Grant program. Ballot propositions in October 2011 would include acceptance of the loans and formation of the LID. If approved, construction for the extension to Shoreline Drive would start in 2012. Subsequent grant and loan requests would be made beginning in 2012 until the construction project is funded.</p>		Land/Right-of-Way	
			Construction Management
			Construction 21,590,000
			Equipment
			Other
		<b>Project Total</b> 21,971,943	

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	262,472										262,472
State Grant - Proposed - SFY 12								2,443,000	2,443,000	12,670,000	15,113,000
Revenue Bonds/Alaska Drinking Water Loan Fund								1,047,000	1,047,000	2,715,000	3,762,000
Shoreline Service Area LID (15%)										2,715,000	2,715,000
State Grant - Awarded - #48184	119,471										119,471
<b>Total</b>	<b>381,943</b>							<b>3,490,000</b>	<b>3,490,000</b>	<b>18,100,000</b>	<b>21,971,943</b>

<b>Division:</b> Water	<b>Project Priority:</b> 23	<b>Project Number:</b>
<b>Project Title:</b> Carlanna Pump Station Improvements	<b>Start Date:</b> 01/08 <b>End Date:</b> 12/09	<b>Estimated Project Cost:</b>
<b>Description:</b> When the Carlanna Pump Station was designed in 1987, there were substantially fewer residences served by this pressure zone. In the 20 years since the pumps were designed, there has only been a moderate increase in water demand in this zone. However, with the addition of the large Tlingit-Haida 24-unit Housing Project above Fairview Avenue, the existing pumps are no longer adequate. Fortunately, the switchgear was designed for future expansion and only requires larger line starters. The pumps, motors, and some wiring and conduit will need to be changed. Design of this project commenced in Spring 2008 as part of a multi-project design contract administered by the Engineering Division. Construction would be completed in 2009.		Design 15,000 Land/Right-of-Way Construction Management Construction 60,000 Equipment Other Project Total 75,000

Source of Funds	Prior Years	Adopted 2009			Projected Requirements				Five Year Total	Future Years	Total Project
		Reappropriated	New Funding	Total	2010	2011	2012	2013			
Revenue Generating Fund	13,600	61,400		61,400					61,400		75,000
<b>Total</b>	13,600	61,400		61,400					61,400		75,000