

**Appendix A: New or Expanded Capital Facilities**

**Department of Parks and Recreation**

**New or Expanded Capital Facilities**

<b>Project No.</b>	<b>Project Title</b>	<b>Capacity</b>	<b>2018*</b>	<b>Location</b>
K730176	14th Avenue NW Park Boulevard Development (NW 58th to NW 62nd)	This project will provide 17,000 square feet of pedestrian and environmentally-friendly amenities such as swales, natural landscaping, and benches.	0	E 14th Ave NW/NW 58th ST/NW 62nd ST
K730309	Activating and Connecting to Greenways	This project will increase the number of miles of safe pedestrian routes for all ages.	210	Citywide
K732480	Bryant Site Development	This project will increase the waterfront parkland in Seattle by 3.9 acres.	0	1101 NE Boat ST
K730031	Community Food Gardens and P-Patches	This project adds community gardens and P-Patches to afford more opportunities to the public for growing food locally.	0	Citywide
K730308	Develop 14 New Parks at Land-Banked Sites	This project will add 14 developed parks for active recreation to help meet the City's parks and open space goals.	5,030	Citywide
K730148	East John Street Open Space Development	This project adds green, environmentally sensitive improvements in an existing park.	0	Summit AVE E/E John ST
K732391	Golf Master Plan Implementation	This project includes new driving ranges, building replacements, perimeter trails and cart paths.	0	Citywide
K730011	Green Space Acquisitions- 2008 Parks Levy	This project will acquire various new properties.	0	Citywide
K730091	Hing Hay Park Development	This project adds .31 acres of parkland to an existing neighborhood park.	0	423 Maynard AVE S
K730146	Jimi Hendrix Park Improvements	This project makes the park more inviting, usable, and environmentally friendly.	0	2400 Massachusetts ST
K730100	Marra-Desimone Park Development	This project will provide community and recreation space to the 8.7 acre site.	0	9026 4th AVE S
K730010	Neighborhood Park Acquisitions- 2008 Parks Levy	This project will acquire various new properties.	0	Multiple Locations

*\*Amounts in thousands of dollars*

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<b>Project No.</b>	<b>Project Title</b>	<b>Capacity</b>	<b>2018*</b>	<b>Location</b>
K730040	Opportunity Fund Acquisitions- 2008 Parks Levy	This project will acquire various new properties.	0	Citywide
K730306	Park Land Acquisition and Leverage Fund	This project will add acreage to Seattle's total park land acreage.	3,601	Citywide
K730153	Rainier Beach Urban Farm and Wetlands Improvements	This project develops a working organic urban farm, wetlands, and related amenities that will be open to the public.	0	5513 S Cloverdale ST
K730115	Victor Steinbrueck Park Renovation	Capacity will depend on the project scope that will be the subject of additional citizen review consistent with the Parks Department's Public Involvement Policies.	0	2001 Western AVE
K730132	Washington Park Arboretum Improvements- 2008 Parks Levy	This project renovates park areas with new horticultural displays and trails.	0	2300 Arboretum DR E

**Seattle Department of Transportation****New or Expanded Capital Facilities**

<b>Project No.</b>	<b>Project Title</b>	<b>Capacity</b>	<b>2018*</b>	<b>Location</b>
TC367420	23rd Avenue Corridor Improvements	This project will install road improvements and improve the efficiency of Seattle's transportation network and of the regional transit network.	10,217	23rd AVE S/E John ST/Rainier AVE S
TC367370	3rd Avenue Corridor Improvements	This project will increase the person-carrying capacity of Seattle's transportation network and of the regional transit network.	0	3rd AVE/S Jackson ST/Denny WAY
TC367330	Alaskan Way Main Corridor	The program will construct a new Alaskan Way surface street and public space.	16,806	Various

*\*Amounts in thousands of dollars*

## Seattle Department of Transportation

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Project No.	Project Title	Capacity	2018*	Location
TC366050	Alaskan Way Viaduct Replacement	This project funds the City's involvement in the replacement of the Alaskan Way Viaduct and Seawall.	0	ALASKAN WY VI SB/BATTERY ST TUN OFF RP
TC367220	Aurora Rapid Ride Improvements	This project implements improvements for transit speed, reliability, access and convenience, consistent with the Transit Master Plan.	0	Various
TC367390	Ballard to Downtown High Capacity Transit and Ship Canal Crossing Project	This project will increase the person-carrying capacity of Seattle's transportation network and of the regional transit network	0	Downtown Ballard/Downtown Seattle
TC366760	Bike Master Plan - Protected Bike Lanes	This program will install bike lanes and bicycle route signing, and complete links or reconstruct key sections of urban trails in order to increase bicycle safety and access.	9,480	Citywide
TC367690	Bike Share Expansion	Expand the bikeshare system to 250 stations with 2,500 bikes.	0	Citywide
TC367240	Broadway Streetcar Extension	This project will build a half-mile streetcar line.	0	Broadway E/E Denny Way/E Roy ST
TC364830	Burke-Gilman Trail Extension	This project will construct three miles of new multi-use trail.	4,931	Various
TC367100	First Hill Streetcar	The project constructs a modern, low-floor streetcar system.	0	Various
TC365850	Freight Spot Improvement Program	This project will improve mobility. Specific projects and the corresponding impacts on capacity are still to be determined.	1,500	Citywide
TC367480	Madison Street Bus Rapid Transit	This project will increase the person-carrying capacity of Seattle's transportation network and of the regional transit network.	4,050	Madison ST/Alaskan WAY/Martin Luther King Junior WAY E

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Project No.	Project Title	Capacity	2018*	Location
TC366060	Magnolia Bridge Replacement Project	This project will build a new bridge to current engineering standards to replace the existing bridge.	0	W Garfield St/15th Ave W/Thorndyke Ave W
TC365500	Mercer Corridor Project	This project will provide transportation improvements to enhance all modes of travel, including pedestrian mobility, and better utilize existing street capacity in the South Lake Union area.	0	Mercer St/Fairview Ave N/Dexter Ave N
TC367110	Mercer Corridor Project West Phase	The project will provide an east/west connection between I-5, SR99, and Elliott Ave W.	0	Mercer ST/Elliott AVE W/Dexter AVE N
TC323250	Neighborhood Traffic Control Program	This program will install traffic calming devices on neighborhood streets.	298	Citywide
TC367700	New Traffic Signals	This project will install new traffic signals to improve traffic flow, reduce the frequency and severity of traffic accidents, and support pedestrian activity.	527	Citywide
TC367350	Northgate Bridge and Cycle Track	This program will design and build pedestrian and bicycle improvements in order to increase safety and improve access to transit modes.	65	TBD
TC367380	Roosevelt Multimodal Corridor	This project will increase the person-carrying capacity of Seattle's transportation network and of the regional transit network.	2,856	Eastlake AVE/Stewart ST/NE 65th ST
TC366150	S Lander St. Grade Separation	The project will construct a grade separation of the S Lander St. roadway and the Burlington Northern mainline tracks between 1st and 4th Avenues S.	21,500	S Lander St/1st Ave S/4th Ave S
TC367410	Sound Transit - East Link	This project will provide design review, permitting, and construction support services for the Sound Transit - East Link project.	170	Citywide

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Project No.	Project Title	Capacity	2018*	Location
TC367190	Sound Transit North Link	Construct a 4.3-mile light rail line and three stations at Northgate, Roosevelt and University District.	308	Various
TC366860	Transit Corridor Improvements	This program implements projects that improve transit speed, reliability, access, and convenience, consistent with the Transit Master Plan.	4,073	Citywide
TC367520	Vision Zero	This project will upgrade existing signals and signs, and install new ADA ramps, and pedestrian safety improvements.	2,306	Citywide

## Finance and Administrative Services

### New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
A1GM902	ADA Improvements - Citywide	This is an Asset Preservation project and has no requirements under the Growth Management Act (GMA).	500	Multiple City facilities
A1ADA01	ADA Improvements - FAS	This is an Asset Preservation project and has no requirements under the Growth Management Act (GMA).	200	Multiple City facilities
A1GM116	Charles Street Campus Development	This project will provide assessment, work scoping, and predesign for the City's future development of some or all of the Charles Street Campus.	0	1030 7th Ave. S
A1PS207	Fire Station 31 Improvements		750	1319 N Northgate Way
A1FL132	Fire Station 32	This project replaces the existing Fire Station 32 with a new 20,000 square foot, 3 story facility, adding approximately 11,500 square feet.	1,400	3715 SW Alaska St

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## Finance and Administrative Services

### New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
A1GM129	Seattle Municipal Courts	This is an Asset Preservation project and has no requirements under the Growth Management Act (GMA).	200	600 5th AVE

### Seattle City Light

### New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8426	Advanced Metering Infrastructure	Rationale: City Light is at a point where replacement is unavoidable and needed in the short term due to the age and condition of its meters, meter reading equipment, and software. Approximately 50% of 350,000 residential meters in the field are at least 30 years old, which is outside the estimated lifespan for electro-mechanical meters. As of February 2009, residential electro-mechanical meters are no longer being manufactured. The software and handheld devices currently used by City Light meter readers to manually capture and record reads will no longer be supported after 2012. In addition, City Light currently employs 57 FTEs in Customer Billing and 44 FTE Meter Readers, of which 43%, or 25 FTE and 19 FTE respectively, are eligible to retire by 2014. This presents an opportunity for SCL to make operational changes that move the utility from a manual to an automated system at a time when it is needed. Alternative (s): Option 1 - Recommended	31,812	Citywide

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solution: Full AMI implementation as entered. This option's up front capital costs result in significant net savings due primarily to reduced labor costs and increased revenue. In addition, it establishes the infrastructure, technology, and capabilities for improved customer service and support for future plans and operations.

Option 2 - Status quo: Continue current meter replacement cycle using current commercially available digital meters without communication capabilities. At the current expenditure rate, between 5,000 and 7,000 meters are installed annually (replacement of failed meters, new meter growth, service changes, etc.). This option minimizes current annual capital costs, but does not provide for timely replacement of all electro-mechanical meters. In the event of accelerated failure rates from the aging meter population, capital costs would escalate.

Other options previously screened out:

A. Replace failed electro-mechanical meters with working electro-mechanical meters. The cost of purchasing electro-mechanical meters is currently lower than digital units but they are no longer being manufactured. SCL would have to acquire used or refurbished replacement meters from other utilities or companies, with the risk that availability will be reduced over time.

B. Replace current electro-mechanical meters on an

*\*Amounts in thousands of dollars*

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accelerated schedule using commercially available digital meters without communication capabilities. This option carries significant capital costs for meters, although it does not require the communications and IT infrastructure. It provides limited benefits, primarily through increased meter accuracy, but provides severely limited benefits compared to AMI deployment.

C. Deploy AMI on a limited basis to Commercial and Industrial customers, plus a limited number of small services with access problems. Partial implementation would require reduced capital costs but substantially the same investment.

8307	Alaskan Way Viaduct and Seawall Replacement - Utility Relocs	<p>Rationale: The Alaskan Way Viaduct replacement includes a complex transmission and network/non-network relocation, design and construction, and is on a fast track. This work is integrated and required by the broader transportation project. The externally generated project and schedule includes significant electrical relocation work in the near term that will extend for over a decade. The utility is required to relocate for transportation relocated projects. The City's overall plan for the Alaskan Way Viaduct project includes utility funded relocations for the viaduct replacement and for rebuilding the Seawall. The series of subprojects that make up the Alaskan Way Viaduct replacement have opportunities for system improvements that will also be funded under this</p>	15,781	SR 99 / Battery St
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program. For most of the subprojects in the Alaskan Way Viaduct project, utility relocations will lead the construction. Therefore any delay in accomplishing SCL work will result in delays along the overall projects critical path. While the designs & construction schedules for the various subprojects in the Alaskan Way Viaduct program are being sequenced and detail design is underway for the immediate projects, the central waterfront elements of the overall project are beyond this budget cycle and are still in the preliminary design phases. Alternative(s): The Alaskan Way Viaduct program provides the utility with a combination of obligations and opportunities for system improvements over the next 6 years. The Alaskan Way Viaduct program will likely be the City's primary construction focus as its various projects impact traffic and roadway construction, seawall stabilization, and urban design on the waterfront. Seattle City Light facility relocations will be a part of each of these projects. The global nature of the Viaduct Program also provides the opportunity to make system improvements that will provide for increased reliability and capacity for our customers. For example, work in the south end will include system improvements that will increase feeder capacity and reliability for Port customers. Undergrounding of transmission lines near Broad Sub are being done as part of an overall SDOT street improvement with costs

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		shared based on a negotiated MOA with SDOT. The return of Aurora, north of Harrison Street to a city street, and the decommissioning of the Battery Street Tunnel provides an opportunity to extend ducts and vault across Aurora to help provide system capability to the NODO area.		
9950	Automated Utility Design Implementation	Rationale: Presently, non-Network distribution engineers use a four version old release of a drafting tool called AutoCad. This tool incorporates significant custom code, making any updates costly and impractical. It has very limited design functionality needed to produce engineering designs and drawings. AutoCad cannot retrieve essential design data from the Distribution Automated Mapping System, requiring a manual process to incorporate needed data into the final design and drawings. It also does not provide design functionality such as cost estimating, material request creation, and customer letters. These design tasks are now done using a variety of stand alone manual tools which are inefficient, error prone, and time consuming. The AUD software will provide significant design and production efficiencies at a time when the engineering work load is increasing because of a shift to the engineers of production tasks. Additionally, the AUD software will enforce common North and South Service Center engineering practices and procedures and provide an essential interface with WAMS (Work and Asset	380	System Wide

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Management System) and OMS (Outage Management System). Alternative(s): Option I. Purchase design software and consultant services: This will result in appreciable savings, efficiencies, better staff utilization, and more standard and accurate engineering drawings and supply chain data. It will also eliminate custom code, enabling easy version updates. This is the preferred option because it will result in appreciable savings, efficiencies, better staff utilization, common engineering practices, and more accurate engineering drawings and supply chain data. It will also eliminate custom code enabling easy version updates and systems integration of AutoCad data with OMS and WAMS. Option II. Do nothing: The do nothing option will perpetuate the inefficient and costly engineering practices resulting from the use of drafting tools instead of design tools in the engineering process. It will also continue reliance and use of unsupported vendor software.

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Project No.	Project Title	Capacity	2018*	Location
6493	Boundary Powerhouse Generator Step-up Transformer Replacement	Rationale: Design to begin in 2010. Closeout in 2017. First transformer delivered in 2012. Alternative(s): An alternative approach would be to repair or replace units as they fail from deferred maintenance. This approach would eventually result in a significant loss of revenue and/or fines from a regulatory agency. Accepting the risk of failure would not be in the best interest of the utility. Having a spare unit onsite would prevent such failures.	6,168	10382 Boundary Rd, Metaline, WA 99153
8203	Broad Street Substation - Network	Rationale: Customer demand for higher loads continues. Capacity of the cables serving two sub-networks is near overload, requiring immediate attention to avoid cable failure and customer outages. In the next five years, customers are projected to exceed the capacity of cables in another five network subareas. This capital project addresses the means to serve customer demand for higher capacity. Reliability measures identified in the Network Strategic System Plan are incorporated into this capacity driven work. Without this critical project it is very likely that there will be insufficient reliable electrical capacity in the very near future to hook up new customers and to serve present customers such as the Westin building. hernanju (7/29/21010): The project goal increases capacity of	3,983	319 6th AVE N

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present Broad Street Substation network feeder cables to their ultimate service build-out limit (an overall increase of just under 100 MVA) as determined by Broad Street Substation's transformer capacity. This project constructs ten vaults and ten blocks of duct banks, re-conductors and relocates three primary feeders per year, upgrades/optimizes network transformers as needed, reduces secondary bus ties (reduce the size of the secondary grid resulting in greater reliability), and performs ancillary work.

Alternative(s): Alternatives include: 1. Do nothing. Make no improvements to system reliability or additions to feeder capacity. This would allow customer load to continue growing without commensurate additions to capacity of feeders serving this area, ultimately leading to multiple cable failures and extended customer outages. This would reduce the customer reliability of the network systems from its present level, subjecting it to infrequent but lengthier outages. 2. Reduce customer demand for more loads with demand side management measures. This alternative was evaluated in the Network Strategic Systems Plan and found to have negligible ability to reduce customer demand in the network area. 3. Increase capacity of network feeders incrementally, as little as possible and as close to near-term load requirements as possible. 4. Increase capacity of network feeders to the full limit of the substations capability to deliver power. 5.

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		Add measures that improve system reliability to mitigate the severity of any network event. 6. Add measures that improve customer reliability by preventing the chain of events leading to major customer impacts.		
8465	Broadband - City Light	<p>Rationale: The Gigabit Seattle project is a priority of the Mayor, with a letter of intent already signed. It is currently in planning and implementation is expected to start 2013. The Gigabit Squared project alone may generate an additional 250 Joint Use permit applications, doubling the annual average and tripling the number of poles impacted annually. Based on the customer fee to attach to poles and potential for 10,000 poles to be impacted. Types of construction necessary include pole replacement, relocations of existing wires, equipment installation, commissioning, and inspections. All work must meet NESC, SCL, and vendor standards. A Small Works Roster, administered with the Public Works program of Finance and Administration (FAS), is being established to meet customer requests in a timely manner. Construction will be broken up into sections moving through the 14 designated neighborhoods. Approximately 20% of the preparation and installation is expected to be installed by the end of 2013. The first phase of work will include installing wireless equipment on designated roof tops throughout the identified 14 neighborhoods and extending high speed fiber from the City's fiber backbone. The</p>	35	Citywide

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remainder of the work will be executed in 2014 including the individual residential street build outs, corrective work, inspections, and close out of the initial deployment will extend into 2015. The goal for Gigabit Squared service is to reach 60,000 homes across 14 different Seattle neighborhoods. This will involve the installation of approximately 200-250 miles of fiber optic cable, impacting about 8,000 - 10,000 utility poles. The majority of the initial Gigabit Squared work will be connected to poles on arterial roadways. These poles are generally in better shape than poles along residential roadways. Additional work to bring fiber to the remaining Seattle neighborhoods is expected to be driven by another vendor that will partner with Gigabit Squared. This work is expected to Alternative(s): No Alternatives Provided.

8403	Citywide Undergrounding Initiative - City Light	Rationale: No Rationale Provided. Alternative(s): No Alternatives Provided.	10	System Wide
8430	Creston-Nelson to Intergate East Feeder Installation	Rationale: No Rationale Provided. Alternative(s): No Alternatives Provided.	426	Tukwila
8404	Denny Substation - Network	Rationale: This project is a result of a four years of advocacy by customers to make sure that the electrical distribution system has sufficient capacity to meet the projected loads in the rapidly growing area of North Downtown, and that the system has the reliability and voltage stability to support the research activities of the emerging biotech industry there. The principal stakeholders are the Fred Hutchinson Cancer Research Center, the UW School of Medicine, the Seattle	5,896	Valley Street/Denny Ave

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Biomedical Research Institute, Rosetta Inpharmatics, ZymoGenetics, Children's Hospital and Medical Center, and the startups at the Accelerator Project. This five to seven year infrastructure project is specifically tailored and designed to the core needs of this business sector in the North Downtown area. The research activities and the laboratory equipment are so sensitive to system reliability and voltage stability that this area requires an extraordinary level of service from the utility. The motto is "World class research requires world class facilities.". The utility through this project is a partner in that effort. Because existing City Light substations cannot accommodate the new network feeders, this project requires the construction of a new North Downtown substation in a three to five year period, proposed as project 7757, North Downtown Substation Development. This network project cannot exist without the new substation.

Alternative(s): 1. Enhance the service using non-network feeders from other substations. 2. Have individual customers invest in private reliability improvements. 3. Install network system in core service area, including the biotech industries. 4. Install network system throughout North Downtown area.

Option 1 is not feasible because the availability of feeders from adjacent substations is limited and in question over time. Option 2 has been tried recently, but

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		<p>did not meet the reliability needs of this set of customers. Option 3 is the recommended option, as it is effective in meeting the need and cost effective. Option 4 includes all customers in the area, which is not necessary and expensive.</p>		
7757	Denny Substation Development	<p>Rationale: The key premise of the North Downtown capacity plan is preparedness and flexibility to respond to future growth as it occurs and to provide the operational flexibility to operate the electrical system to serve new development and existing load. The estimates assume that the transmission and distribution getaways into North Downtown Substation will be underground. However, the figures in this project do not provide for undergrounding existing overhead circuits in the neighborhood. See project 8404, North Downtown System Network, which will construct the underground network that links the customers to the substation. City Light expects that the current and planned development of the North Downtown district requires a 200 MVA substation in the area. The factors determining the timing of this substation include actual and anticipated load growth in the North Downtown Area, and the demand for power from other substations that could possibly serve the area.</p> <p>Alternative(s): Updated by Michael Clark 6/10/11: SCL System Planning Group is working with a consultant to validate existing SCL Service Area Loads, perform a 10yr &amp; 20yr forecast for entire SCL Service area, and prepare</p>	10,849	System Wide

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		<p>small area load forecast for the North Downtown service area, with specific recommendations regarding development of a NODO Substation and NODO Network to provide service to this area. The alternatives for the NODO Substation will be:</p> <ol style="list-style-type: none"> <li>1. Do nothing.</li> <li>2. Transfer load to adjacent substations.</li> <li>3. Reinforce Broad Substation.</li> <li>4. Construct new North Downtown Substation with Radial or Network Distribution System, Voltage Level (13.8kV or 26kV), and Transmission Alternatives.</li> </ol> <p>SCL System Planning Group anticipates making formal recommendations regarding NODO Substation in QTR3 2011.</p>		
7125	Denny Substation Transmission Lines	<p>Rationale: No Rationale Provided. Alternative(s): No Alternatives Provided.</p>	5,016	System Wide

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Project No.	Project Title	Capacity	2018*	Location
9307	Distribution Area Communications Networks	<p>Rationale: The communication systems now employed are in need increased capacity, better security, faster speeds, and increased reliability to meet new regulatory requirements. This will meet our ever increasing data and voice communication needs and take us twenty years or more into the future. Maintenance costs are lower because increased redundancy and reliability as well as better system alarms and the capability to remotely troubleshoot and reprogram the system. Traffic on the network is easily rerouted until major failures can be repaired. The new requirements of security, relaying, Automated Meter Reading, Automated Distribution and other automated systems will be easier to implement at lower cost once this project is completed. The system is easily upgraded to increase capacity or take advantage of new technology as it becomes available.</p> <p>Alternative(s): Option 1 Proceed as proposed. Install/complete fiber optic rings. Option 2 Do nothing. Have an inadequate communications network, with a high expense O&amp;M component.</p>	2,681	Citywide

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Project No.	Project Title	Capacity	2018*	Location
9966	Distribution Management System	Rationale: City Light currently uses manual processes to accomplish this work, but without the same outcome. Manual processes require reviewing maps to determine system configuration and options. They also do not provide accurate estimates of customers impacted by planned outages, and require additional labor to perform planning. DMS would be installed when it is determined that City Light has enough substation automation, communication infrastructure, Advanced Metering Infrastructure (AMI), and Supervisory Control and Data Acquisition (SCADA) field switching equipment in place to benefit from its use. The labor saving benefit will be achieved by maximizing the utilization of the substation and SCADA field switching equipment linked to the DMS. Customers will receive more accurate information regarding planned outages, and in some cases, reduce the area needed for the outage because of the ability to create switching scenarios during the planning process. Alternative(s): The only alternative direction would be to delay installation of DMS or choose not to install.	0	City Wide
9101	Equipment Fleet Replacement	Rationale: As mobile equipment ages, it reaches a point where it becomes more economical to replace the equipment than to continue to repair it. In the past, the	7,639	System Wide

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mobile equipment fleet coordinator used a twenty year replacement plan to maintain City Light's vehicle pool. Due to replacement deferrals starting in the mid 90's and the budget cuts which began in 2000, that replacement plan by necessity was revised. We are now faced with replacing fleet on an as needed basis. That priority is to replace the most often used, specialized, or critical equipment to the Utility, or the most costly to maintain and least reliable vehicles first. To get back to an established plan will require seven plus years of enhanced financing. A seven year recovery plan requires \$10 million annually. That plan has been underfunded for 15 years. The planned annual purchases, per the twenty year plan for the heavy fleet equates to approximately \$8 million per year. That \$10 million replaces the equipment that normally needs to be replaced every year and addresses some of the equipment that has been deferred. The proposed \$10 million will not fully cover inflation and the increasing cost of materials as many purchases now have a steel surcharge added. There are also added emissions requirements for the coming years starting in 2007. This will require about \$10,000 per diesel engine along with design changes to accommodate space for higher heat and larger exhaust pipes. The Memorandum of Understanding between the Fleet Management Department (FMD) and

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Seattle City Light (SCL) regarding financing and management of the City Light Fleet states on June 22, 1998, the City Council adopted Resolution 29771. In that resolution is reference to Timely Replacement of Vehicles. The recommendation is to replace vehicles in a timely manner, when fully depreciated. Alternative(s): The recommended alternative is to address the backlog of City Light vehicles, heavy and light fleet, on a plan spread over 7 or more years (a \$30 million backlog currently on a \$130 million fleet) A second plan would be to not purchase fleet vehicles. This option would result in paying both higher maintenance costs for worn out vehicles and higher rental costs both for specialized vehicles and daily use vehicles currently at \$2 million annually. It also has safety ramifications when considering malfunctions and inopportune breakdowns. A third plan would be to continue to not address the back log but replace on an as needed basis. This plan requires more rental costs and time loss due to equipment down time. It also does not address the need to be more fuel efficient and environmentally friendly. This plan to replace only as needed would be less reliable for tracking or budgeting. Address the back log through a seventh year or longer plan.

8407 First Hill - Network Load Transfer

Rationale: No Rationale Provided. Alternative(s): No Alternatives Provided.

0 1100 Madison St.

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Project No.	Project Title	Capacity	2018*	Location
8442	First Hill Connector Streetcar	Rationale: This project is being set up as a separate project similar to other SDOT streetcar projects. The funding for the relocation portion of this project comes from Sound Transit, with the City of Seattle expectation that Sound Transit is covering all construction related costs. SCL is adopting a project management structure to reflect this as a special reimbursement agreement by the City. Alternative(s): Typically, SCL is required by state law to provide power relocations needed to facilitate transportation projects. With Sound Transit funding, this requires special consideration for project structure and reimbursement agreement. SDOT's First Hill Connector project team will establish the final route and placement in the road, based on traffic, utility relocations, and project costs.	2	Broadway / Boren / Jackson / King

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Project No.	Project Title	Capacity	2018*	Location
6470	Generation Federal Reliability Standards Improvements	Rationale: In June 2007, newly established standards regulating the North American bulk electric power system, which includes generation and transmission, became mandatory. Failure to comply may be punishable by financial penalties of up to \$1 million per day per violation. As of April 2008, there are 140 standards in force; 30 of these apply to Seattle City Light's (SCL) Power Production Division. SCL is in full compliance with many of the standards, but has identified elements of the new standards which require rapid mitigation to avoid financial penalty or other forms of censure. Publication of new and revised standards requires an on-going project level effort to put improvements into service which keep generation equipment and operations in full compliance. Alternative (s): No Alternatives Provided.	10	500 Newhalem Creek Rd, Marblemount, WA 98267
7756	Interbay Substation - Development	Rationale: The Broad Street Substation is reaching its capacity to serve the network and the growing South Lake Union neighborhood. The limiting factor is an inability to construct additional underground feeders to carry electrical current in to the area. The existing 26 kV distribution system and substations are becoming overloaded and a new 26-kV substation will feed the areas load growth. The 115 kV ring bus work at Broad Street and Canal Substations will provide	0	17th Ave West/West Bertona St

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the connections to the transmission system. The new substations will provide 10 to 15 new 26 kV getaways, adding to the distribution network and providing a new path for power to the area. Because City Light already owns property for a station in Interbay, it is the nearest opportunity we have to add capacity in the western part of the service area that will off-load demand from the Broad Street Substation for the South Lake Union district. Developers who are interested in projects in the SLU district want to know that City Light will be able to serve their needs reliably.

Alternative(s):

1. Not build the new substation.
2. Option one build: Contract out the design and construction
3. Option two build: Have City Light design and integrate the facility into the distribution system, and construct the facility.

It requires at least 36 months to site, contract for design, construct, and energize a distribution substation. There are several alternatives such as installing distributed generation facilities to meet load growth. City Light has considered constructing additional transmission corridors from the University Substation and/or Canal Substation. Both alternatives require crossing a body of water, which are expensive options even if environmental challenges do not delay or halt progress. Given the recognized growth in South Lake Union, City Light selected the most cost effective and achievable

*\*Amounts in thousands of dollars*

**Appendix A: New or Expanded Capital Facilities**

8365	Large Overhead and Underground Services	<p>option - constructing a station at Interbay to serve the growing load in that part of the service territory.</p> <p>Rationale: There is a continuous demand for additional electric power services as new construction and renovation work occurs. Seattle City Light provides service to new customers in a safe, reliable, timely, and cost effective manner as a means to fulfill its commitment to be a customer and community focused organization.</p> <p>Alternative(s): Each service connection may have unique aspects that would require or facilitate design, construction, and financing alternatives. Seattle City Light will fully consider alternatives as a means to fulfill its commitment to be a customer and community-focused organization.</p>	3,065	System Wide
8202	Massachusetts Street Substation - Networks	<p>Rationale: The rational for this project is to increase the capacity and reliability of present Massachusetts Street Substation network feeder cables to their ultimate service build out limit (an overall increase of 69 MVA), as determined by Massachusetts Street Substation's transformer capacity, with allowance for feeder imbalances, feeder diversity and diversity among sub-networks. The Alaska Way Viaduct project will require the relocation of all 13kV distribution feeders that are suspended from the viaduct. These include feeders serving Pioneer Square and the downtown core. Additional duct banks and electrical vaults must be built throughout the Pioneer Square area to accommodate the feeder relocations. Doing</p>	4,206	1555 Utah Ave S

*\*Amounts in thousands of dollars*

## Appendix A: New or Expanded Capital Facilities

the engineering for this relocation during 2007 will ensure that timely civil construction can be done in order to avoid many conflicts with other utilities and mitigate some of the traffic impacts that will occur during the Viaduct and Seawall construction. Alternative(s): Alternatives include: 1. Do nothing. Make no improvements to system reliability or additions to feeder capacity. This would allow customer load to continue growing without commensurate additions to capacity of feeders serving this area, ultimately leading to multiple cable failures and extended customer outages. This would reduce the customer reliability of the network systems from its present level, subjecting it to infrequent but lengthier outages. 2. Reduce customer demand for more load with demand side management measures. This alternative was evaluated in the Network Strategic Systems Plan and found to have negligible ability to reduce customer demand in the network area. 3. Increase capacity of network feeders to the full limit of the substations capability to deliver power. 4. Add measures that improve system reliability to mitigate the severity of any network event. 5. Add measures that improve customer reliability by preventing the chain of events leading to major customer impacts.

*\*Amounts in thousands of dollars*

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8366	Medium Overhead and Underground Services	<p>Rationale: There is a continuous demand for additional electric power services as new construction and renovation work occurs. Seattle City Light provides service to new customers in a safe, reliable, timely, and cost effective manner as a means to fulfill its commitment to be a customer and community focused organization.</p> <p>Alternative(s): Each service connection may have unique aspects that would require or facilitate design, construction, and financing alternatives. Seattle City Light will fully consider alternatives as a means to fulfill its commitment to be a customer and community-focused organization.</p>	14,388	System Wide
8054	Meter Additions	<p>Rationale: Background: Of the 400,000 meters in City Light's metering system, approximately 80,000 are older than 30 years. City Light's Rates Unit estimates that replacing the meters would result in an increase in revenues of more than \$450,000 annually. City Light has a fiduciary responsibility to continually update the metering system. Due to continuous budget constraints, both in labor and material, targets of 10,000 obsolete meter exchanges were reduced in 2000, 2006 and 2008 to our current level of 5300, thus the backlog of older meters continues to increase. Methodology: New Service Installations: Over the past 9 years, new or</p>	2,351	System Wide

\*Amounts in thousands of dollars

**Appendix A: New or Expanded Capital Facilities**

upgraded services have averaged 5,500 a year. Material budgeting was based on a 2006 to 2008 average and current labor figures. These project funds support the demands of new construction and upgraded services. Obsolete Meter Exchange: The life cycle of a meter is 30 years based on the electro-mechanical meter. However, current and future electronic technology may reduce this life-span up to 50%. Older meters slow with age, resulting in a loss of revenue to the Department. Obsolete meters can account for up to 3 percent loss in department revenue. The Technical Metering Unit expects to exchange 10,000 obsolete meters annually starting in 2013 through 2016. Alternative(s): 1. Continue to replace obsolete meters at current level of 5,300 annually. City Light could not accurately bill for electrical consumption. Incur loss of City Light revenue due to slow meters. Results in increasing backlog of meters over 30 years old. Increased future utility costs due to replacing obsolete meters at an accelerated pace with higher labor and material costs. 2. Continue to replace obsolete meters at higher level of 10,000 annually. Increase number of customers who receive accurate and timely bills. Reduce loss of utility revenues due to slow meters. Avoid higher cost of meter replacement when meters fail.

8429	Mobile Workforce Implementation	Rationale: No Rationale Provided. Alternative(s): No Alternatives Provided.	1,269	Citywide
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*\*Amounts in thousands of dollars*

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8383	Neighborhood Voluntary Undergrounding Program	<p>Rationale: Many residential customers have a strong interest in converting overhead power lines to underground lines. Legislation limits City Light from subsidizing this activity from the general rate base. Since the City enacted Council Ordinance 112738 in 1986, customers wishing to convert an existing service from an overhead to an underground connection have utilized the utility's Voluntary Underground Program (VUP). It requires that the customers pay all costs associated with any residential undergrounding. This is still currently a part of the Seattle Municipal Code (SMC) in Section 21.49.110.T. The Seattle City Light VUP coordinator works with any customer or customer group expressing an interest in undergrounding to form a VUP project. The purpose of the Voluntary Underground Program (VUP) is to satisfy residential customers who are interested in converting their overhead distribution system to an underground system. This project allocates customer support, design, and construction services so that the customers feel well treated whether or not they ultimately decide to go ahead with the conversion.</p> <p>Alternative(s): No Alternatives Provided.</p>	15	System Wide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8405	Network Additions and Services - Denny	Rationale: This is a mandated project that provides electrical service connections and related improvements in response to requests for service from customers. The project provides targeted civil and electrical design assistance to customers to connect existing and proposed buildings to the North Downtown network system. The conversion effort is quite large since we are installing a new network in this area. It is imperative to participate in early design discussions with customers building in the area. For existing buildings, the conversions to network service are complicated and require expert assistance. This project provides service connections to biotech industry, condominiums, office buildings, medical facilities, hotels, and commercial and apartment buildings. Alternative(s): 1. Do nothing. 2. Hook up customers as they request. Option 2 is recommended as it is most compatible with our mission of customer service.	2,836	Valley Street/Denny Ave

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8363	Network Additions and Services: Broad Street Substation	Rationale: The Broad Street Substation Network Additions and Services project connects approximately five small, four medium, and five large properties costing \$4.6 million and performs capacity additions work associated with service connections. These connections include condominiums, office buildings, medical facilities, hotels, and commercial and apartment buildings. Alternative(s): No Alternatives Provided.	7,200	319 6th AV N
8364	Network Additions and Svcs: First Hill, Mass, Union & Univer	Rationale: This Network Additions and Services project for the customers in the First Hill, Massachusetts, Union, and University District network areas provides service connections to approximately nine small, five medium, and four large properties costing \$3.5 million. These connections include condominiums, office buildings, medical facilities, hotels, and commercial and apartment buildings. Alternative(s): No Alternatives Provided.	3,270	1555 Utah AV S
8129	Network Hazeltine Upgrade	Rationale: Using the Network Hazeltine system provides reliable power by remotely monitoring the electrical vaults and electrical equipment within the entire downtown service area. The Power Dispatchers constantly monitor the real time status of the network using the Hazeltine system. This program costs \$304K per year and avoids problems that can easily exceed twice that	572	System Wide

\*Amounts in thousands of dollars



## Appendix A: New or Expanded Capital Facilities

amount for Seattle City Light and its customers. The utility's cost for one such problem can range from \$200K up to as much as \$3M.

Aggregated customer costs can range from \$100K up to \$5M. The benefit cost ratio for any one problem can range from 0.99 ( $[\$200k + \$100k]/\$304k$ ) to be as high as 26.3 ( $[\$3M + \$5M]/\$304k$ ).

We usually avoid 4 to 5 smaller problems each year and a larger problem, with combined costs of \$1.53M, every 5 years. The yearly benefit cost is then  $[4 * 0.99 + 1.53M / (304k * 5)] = 5.0$ .

Alternative(s): 1. Do nothing. Do not change existing Hazeltine system. Hazeltine has changed the production of their transmitters, forcing utilities to pay a premium for the transformers that is a fraction of the cost of upgrading to their Next Generation equipment. 2.

Upgrade to Hazeltine's Next Generation system, changing station receivers and transmitters on each transformer. Total cost is about \$2.2 million. 3. Develop SCL proprietary network EMS system, capable of monitoring plus a new function of control of NP's, BTS's, and primary switches if they are added. Total cost ranges from \$7 million to \$17 million, depending on communications option selected. This excludes developmental costs. 4. Buy any upgrades from vendors only. Wait for Hazeltine or other vendors, to develop network EMS systems with the desired control and monitoring features. No products or competitors to Hazeltine are available at this

*\*Amounts in thousands of dollars*

**Appendix A: New or Expanded Capital Facilities**

time for cost estimates. 5. Add sensors to existing or future Hazeltine system to enhance the monitoring of the network environment. This would enable system operators to detect and respond to abnormal field condition and thereby improve customer reliability. 6. Continue existing program of upgrading the sensors to match the current SCL standard. In 2007 and 2008, review the Hazeltine program and determine if more significant upgrades are feasible. Presently, this is the recommended action and funding level for 2007 and 2008. The 2009 and beyond dollars are expected expenditures for the significant Hazeltine upgrades, if approved.

9103 Office Furniture and Equipment Purchase

Rationale: Workplace and process improvements completed under program 9159, plus ongoing organizational change, require the purchase of office furniture and equipment in order to achieve the project objectives. Each year Utility Support Services completes approximately 450 service requests requiring furniture reconfiguration, at least a third of which involve ergonomic corrections. Alternative(s): 1. Fund program 9103. 2. Don't fund program 9103 and purchase all office furnishings and equipment from the O&M budget. 3. Maintain office furniture until it can no longer be sustained in acceptable condition and then replace in total with a future ad hoc program.

693 System Wide

*\*Amounts in thousands of dollars*

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8369	Overhead and Underground Relocations	Rationale: This project provides the means to move City Light system infrastructure, located in the public right-of-way for transportation projects, including street widening and street vacation projects. This means moving distribution lines to make way for construction of buildings, bridges, airport runways, tunnels, and for other utilities. This project moves electrical lines to accommodate or take advantage of transportation-related projects being constructed by other agencies. The project builds new and replaces old line segments, installs and replaces poles, and adds or renovates underground facilities to the distribution system, as necessary, to relocate distribution systems for transportation projects, street vacations, or other projects proposed by outside (non-City Light) agencies. Some projects are paid for by City Light and some are paid for by the requesting agencies. This project provides the means to move the system for transportation projects in the public right of way, including street widening and street vacation projects. Alternative(s): The do nothing alternative leaves the distribution of facilities in their current location, which would interfere with the projects of the other agencies.	5,167	System Wide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8355	Overhead Customer Driven Capacity Additions	Rationale: This project adds capacity to the distribution system to accommodate increased load from new services. Alternative(s): The do nothing alternative leaves the existing system in place. New loads added to the system will adversely impact system reliability and voltage stability. It may be necessary, if the load increase is significant, to deny new service connections if the feeder capacity is inadequate.	4,334	System Wide
8356	Overhead System Capacity Additions	Rationale: This project adds capacity to the distribution system to maintain the reliability level for the existing customers on the system and accommodate the increased load from new services. Alternative(s): The do nothing alternative leaves the existing system in place. New loads added to the system will adversely impact system reliability and voltage stability. It may be necessary, if the load increase is significant, to deny new service connections if the feeder capacity is inadequate.	2,631	System Wide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
9970	PeopleSoft Reimplementation - City Light	Rationale: The City manages the PeopleSoft financial system and City Light needs to be involved in the configuration and implementation in order to ensure the new implementation meets City Light's business needs. The City and its departments have used PeopleSoft as its financial system since 1998, with the last software upgrade done in 2006. Vendor support for the City's current version of PeopleSoft expired on December 31, 2011. Upgrading to the most current version offered by the vendor ensures vendor support through 2021. Alternative(s): No Alternatives Provided.	2,686	System Wide
8452	Pole Attachments	Rationale: City Light is legally and contractually obligated to make space available on its facilities to government and private entities for communication and other purposes. Customers wishing to utilize space on City Light facilities are required to pay in advance for any necessary work required to provide the necessary space and minimum clearances to the electrical equipment. This ensures that the attachments meet all applicable federal, state and local safety codes. Customers are not allowed to make any attachments until all make ready work, including tree trimming, has been completed and the system made safe for the communication worker.	18,351	System Wide

\*Amounts in thousands of dollars

## **Appendix A: New or Expanded Capital Facilities**

Speed to market in the communications industry is critical for them to maintain their competitive advantage. Customers pay in advance for City Light crews to complete this work on overtime, without interrupting the normal assignments of the crews. All construction charges are deposited into the Light Fund. New wireless facilities and pole attachments generate an additional \$100,000 in rental revenue annually. Currently \$3.3 million in annual rental revenue is being generated and will continue to increase as construction and make ready work is completed. All rental revenue is deposited into the Light Fund. The communications industry and associated technology are growing at an astounding rate. City Light has experienced a 375 percent increase in pole attachment applications since 2007. All trends indicate that this growth will increase by an average of 24 percent annually. This does not take into account major initiatives such as fiber to the home, Advanced Metering Infrastructure (AMI), or vast expansion of existing networks and Distributed Antenna Systems (DAS). Completing the construction for make ready work and wireless facilities will enable City Light to fulfill its legal and contractual obligations to our customers. Customers will be provided a small measure of rate relief through increased revenue streams from these additi Alternative(s): It is possible that some or all of this construction work could be outsourced to electrical

*\*Amounts in thousands of dollars*

## **Appendix A: New or Expanded Capital Facilities**

utility construction companies. This alternative presents obstacles like logistics, compatible parts, quality control, and required electrical reviewers. These challenges negate any cost savings and sometimes take longer to construct.

*\*Amounts in thousands of dollars*

**2018 - 2023 Proposed Capital Improvement Program**

**Appendix A: New or Expanded Capital Facilities**

**New or Expanded Capital Facilities**

<b>Project No.</b>	<b>Project Title</b>	<b>Capacity</b>	<b>2018*</b>	<b>Location</b>
6385	Power Production - Network Controls	<p>Rationale: A 2003 Report from Westin Engineering identified limits to our automation, remote control and supervisory control capabilities at Skagit. Among other things, the report found that there are protocol issues within and between the facilities and between the facilities and the System Control Center.</p> <p>Improvements are necessary before supervisory control, such as remote start stop and remote loading can be achieved. The consequence of not coordinating all the individual controls and monitoring projects is that we will not resolve our protocol issues, and that we will continue to limit our ability to remotely control and operate the plants. This leads to reduced efficiencies and higher production costs.</p> <p>Project Weighted Rating-26.8, Primary Rationale-Reliability Alternative(s): Do nothing. This is not advisable as it can lead to higher maintenance costs and to unscheduled outages due to unforeseen catastrophic bearing failures. Do partial replacements. This has been the approach. However, there are incompatible pieces that cannot be replaced or replicated as some components are no longer in production. This results in greater potential of system failures due to outdated electronic components being run past their life or not updatable.</p>	890	500 Newhalem Creek Rd, Marblemount, WA 98267

*\*Amounts in thousands of dollars*



**Appendix A: New or Expanded Capital Facilities**

9202	Security Improvements	Rationale: If Seattle City Light's Security Improvements Program is underfunded, its critical facilities face increased risk to sabotage, vandalism, theft, and terrorism that can result in the loss of valuable infrastructure for generation and distribution of power, as well as noncompliance with North American Reliability Council (NERC) 1200 Standards, adopted May 2, 2006, to improve security at critical facilities that house command and control systems. Curtailment of Seattle City Light's electric operations would impact reliability of the power system in the Pacific Northwest, create lost revenues, and jeopardize public safety and emergency response due to loss of lifeline services such as medical services, water and wastewater systems, communications, law enforcement, banking, transportation system, etc. Alternative(s): Option 1, Status Quo: No centralized security system. Operate local security systems in place and use local law enforcement and private security companies to address security on a limited basis. Use private security services and/or request additional assistance from local law enforcement during times when the Federal government has raised the alert level for the nation or region, or for a situation that has occurred requiring additional security services. Option 2, Centralized Security System: Seattle City Light installs security enhancements to delay,	2,344	System Wide
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*\*Amounts in thousands of dollars*

## **Appendix A: New or Expanded Capital Facilities**

detect, and respond to security intrusions at its critical facilities that are connected to a central security monitoring center that will be staffed by trained security guards on a 24/7 basis to monitor and respond to security incidents.

Department wide response procedures will be established and coordination with local law enforcement will be established for responding to security incidents.

*\*Amounts in thousands of dollars*

**2018 - 2023 Proposed Capital Improvement Program**

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
9232	Service Center Development Project	Rationale: The existing South Service Center (SSC) is located in a seismic liquefaction zone. If a major seismic event occurred, access to and use of the site could be significantly compromised, potentially affecting City Light's ability to keep operations going. The North Service Center (NSC) is highly congested and inefficiently designed. The desired outcome is to implement the findings of the Service Center Master Planning process in a manner that addresses the existing challenges and ensures efficient customer service, operational excellence, employee performance and financial strength for the next 30 years. Alternative(s): Options under consideration include the addition of a third service center, a large single facility for all service center functions, alterations and additions to the North Service Center, and essential seismic upgrades to the existing structures at the South Service Center to address long term reliability. A future update of the Strategic Plan will include a more substantive discussion of City Light's service center options and costs.	0	TBD

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8367	Small Overhead and Underground Services	Rationale: There is a continuous demand for additional electric power services as new construction and renovation work occurs. Seattle City Light provides service to new customers in a safe, reliable, timely, and cost effective manner as a means to fulfill its commitment to be a customer and community focused organization. Alternative(s): Each service connection may have unique aspects that would require or facilitate design, construction, and financing alternatives. Seattle City Light will fully consider alternatives as a means to fulfill its commitment to be a customer and community-focused organization.	6,267	System Wide
6600	SMT AutoLab	Rationale: This project supports continued new cyber security and automation projects. The existing equipment lab is too small and the HVAC system doesn't adequately cool existing equipment. Alternative(s): The project will also look at enlarging the existing lab on SMT 35, as well as looking at alternate spaces to create a new lab. Existing IT labs will be considered.	0	System Wide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8475	Sound Transit - City Light System Upgrades	Rationale: Pursuant to its role as a utility in the State of Washington, City Light must supply Sound Transit with electric power. The system capacity work to be done under this project needs to be coordinated with City Light's other capacity planning work, so a comprehensive project will provide a better tool to manage work than would several piece-meal projects focussed on separate distribution feeder upgrades. As of the 1st quarter of 2016, some system planning work is being done on the separate Sound Transit Link projects. These separate but related efforts will probably be brought into this new project. Alternative(s): No Alternatives Provided.	0	City Wide
8450	Sound Transit Light Rail East Link - City Light	Rationale: Sound Transit is in the preliminary stages of planning a light rail line running from Seattle's International District Station to the Bellevue Redmond area. As of 2Q2010, final decisions on the alignment to be chosen have not been made by Sound Transit and SCL has not begun engineering. Per Sound Transit's official communications, the current plan states that Sound Transit's board will select the final alignment for East LINK in 2011 after the EIS is completed. As of 2Q2010, SCL has pointed out that the main area of potential concern with its facilities is the	564	I-90/International District Station/I-90 Bridge

\*Amounts in thousands of dollars

## Appendix A: New or Expanded Capital Facilities

possible crossing under SCL's eastside transmission lines in SE Bellevue, depending on the location chosen for the East LINK alignment there. Until a final alignment is chosen, SCL anticipates that we will be acting in an advisory role. So far, discussions regarding the Seattle section of the East LINK alignment have proposed locating a station somewhere in the vicinity of the 23rd Ave E & Rainier Avenue S neighborhood. Also, current plans are that the line would not be underground between the International District Station and the I-90 Bridge, although all plans are subject to change ahead of the board's vote next year. Sound Transit estimates construction could then start in late 2013 or early 2014. SCL will develop engineering estimates and a complete budget, working with Sound Transit's project team, as more details of the project move forward. Depending on the final alignment, SCL will revise our FY2011 budget as needed to fit Sound Transit's time lines. As Sound Transit readies for the board's vote on the alignment, we will work with Sound Transit on an MOA regarding SCL cost reimbursement. It is anticipated that the project will be 100% reimbursable to SCL in keeping with past work with Sound Transit.

Alternative(s): SCL must, if possible, facilitate the construction of this customer's project.

*\*Amounts in thousands of dollars*

**Appendix A: New or Expanded Capital Facilities**

Project No.	Project Title	Capacity	2018*	Location
8427	Sound Transit Northlink - City Light	<p>Rationale: Since Sound Transit's funding for North Link is a different package than that for the Initial Link, as are their contractual agreements, SCL as a key project participant needs to mirror Sound Transit's project management structure to best manage this project, hence the work has been managed under this PE#8427, even when the MOA's governing the project have not kept up with Sound Transit's requirements from us. The project will manage the relocations work &amp; feeder construction needed for Sound Transit to build the North Link line. SCL's current assumption is, per the draft MOA, that the service connections at the sites would be arranged and paid for by Sound Transit's contractor, under a service CIP #, business as usual. The utility relocations and power service provided to Sound Transit will enable the agency to stay on its path according to schedule once the North Link light rail project begins. Alternative(s): For the coming year, given the level of effort so far identified, the do nothing option is not a possibility, as Sound Transit can not meet their proposed schedules without SCL's significant assistance. Sound Transit may wish to modify their schedule somewhat if SCL's engineering and planning for the project offer some possibility of cost savings. We do not know enough about the construction scope to determine this as of 1Q2012.</p>	25	University District / Roosevelt / Northgate

*\*Amounts in thousands of dollars*

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
7751	Substation Capacity Additions	Rationale: We plan to design the feeder get-aways to carry power from substations as needed. Alternative(s): The alternatives to making capacity additions to existing substations are: 1. Accepting limitations on service to customers. 2. Successfully promoting voluntary power demand reductions. 3. Meeting capacity demand increases by new substations and transmission lines.	2,038	System Wide
9161	Substation Comprehensive Improvements	Rationale: 1. Reduce the risk to communications equipment and power network controls in order to sustain City Light's historically high system reliability. 2. Reduce workplace complaints among substation staff so that City Light maintains its harmonious relationship with electrical workers. Alternative (s): 1. Fund Program 9161. 2. Eliminate Program 9161 and make limited scope improvements in reaction to critical situations. 3. Eliminate Program 9161 and fund substation improvements out of other programs. 4. Make no improvements and finance increasing risk through insurance. 5. Eliminate Program 9161 and complete substation improvements as an O&M expense.	279	System Wide

\*Amounts in thousands of dollars



## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
7755	Substations Demand Driven Improvements	Rationale: Requests from other agencies typically occur without enough notice to be included in the biennial budgeting process. The Power Stations Division budgets a nominal sum for each year to cover requests and to request spending authority. Alternative(s): The alternative to implementing regional demands is failing to meet City commitments to regional agreements.	5	System Wide
9230	Technical Training Center Development	Rationale: Seattle City Light currently does not have a training center and we currently deliver our training in multiple disparate, borrowed and shared spaces. A technical training center will enable us to ensure that our workers receive essential training to continue to be a high performance workforce and deliver the high quality of service that our customers expect. Alternative(s): Our alternatives include either the status quo option of delivering training at disparate and borrowed locations or purchasing land on which to build a dedicated training center. The preferred option utilizes a vacant property that is owned by City Light on which to build the training center, which is the best option for the utility.	512	System Wide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
8360	Underground Customer Driven Capacity Additions	Rationale: This project adds capacity to the distribution system to accommodate increased load from new services. Alternative(s): The do nothing alternative leaves the existing system in place. New loads added to the system will adversely impact system reliability and voltage stability. It may be necessary, if the load increase is significant, to deny new service connections if the feeder capacity is inadequate.	2,983	System Wide
8201	Union Street Substation Networks	Rationale: The Union Street Substation Networks project provides sufficient and reliable electrical capacity for the growing power needs of our customers. It is a programmatic approach for comprehensive management of underground network assets (electrical and in some cases civil) serving customers in the area bounded by Yesler Street, Alaska Way, Pike Street, 6th Avenue, Union Street, the Freeway, University Street, 3rd Avenue and the Waterfront area from Denny to Yesler. The project goal is to increase the capacity of present Union Street Substation network feeder cables to their ultimate service build out limit (an overall increase of 128 MVA) as determined by Union Substations transformer capacity, with allowances for feeder imbalances, feeder diversity and diversity among sub-networks. We will re-conductor and re-route four	2,202	1312 Western AV

\*Amounts in thousands of dollars

## Appendix A: New or Expanded Capital Facilities

targeted service feeders by the end of 2008 and perform associated work such as feeder balancing. This includes the work in support of finishing the main stem build out and to address capacity issues in the branch portion of the feeder service cables as needed in response to specific service requests, as well as analyses of branch cable congested areas. Work in 2007 and 2008 as well as successive years is necessary to be able to pick up loads that will likely be transferred from Broad Street sub-networks in 5 years. To meet the projected new loads on the Waterfront and at specific downtown core sites we need to complete re-conductoring and re-routing of four targeted service feeders by the end of 2008 and perform associated work such as feeder balancing that will be transferred from Broad Street, and may be transferred from Massachusetts Street; build and energize a new network substation at least six years before all Downtown network capacity is used so that service cutovers can be done with minimal impact to our customers. This work is essential to meet near term load requirements of the SAM/WaMu and Four Seasons projects. This critical project Alternative(s): Alternatives include: 1. Do nothing. Make no improvements to system reliability or additions to feeder capacity. This would allow customer load to continue growing without commensurate additions to capacity of feeders serving this area, ultimately leading

*\*Amounts in thousands of dollars*

**Appendix A: New or Expanded Capital Facilities**

to multiple cable failures and extended customer outages. This would reduce the reliability of the network system from its present level, subjecting it to more lengthy outages. 2. Reduce customer demand for more load with demand side management measures. This alternative was evaluated in the Network Strategic Systems Plan and found to have negligible ability to reduce customer demand in the network area. 3. Increase capacity of network feeders incrementally, as little as possible and as close to near-term load requirements as possible. This is no longer feasible as the next increment of feeder capacity additions reach their final capacity targets. 4. Increase capacity of network feeders to the full limit of the substations capability to deliver power. 5. Add measures that improve system reliability to mitigate the severity of any network event. 6. Add measures that improve customer reliability by preventing the chain of events leading to major customer impacts.

**Seattle Public Utilities**

**New or Expanded Capital Facilities**

<b>Project No.</b>	<b>Project Title</b>	<b>Capacity</b>	<b>2018*</b>	<b>Location</b>
C4102-DWF	Alaskan Way Viaduct & Seawall Replacement Program - DWF	This project will relocate, replace and protect drainage and wastewater facilities affected by the replacement of the Alaskan Way Viaduct and Seawall with a new seawall and transportation facility.	3,286	SR 99 / Battery St
C5407	Asset Information Management	N/A	1,025	Various

*\*Amounts in thousands of dollars*

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
C3812	Broadview Long Term Plan	Program does not increase capacity.	2,624	Broadview
C3611	Combined Sewer Overflow Facility Retrofit	This project will retrofit, upgrade, and modify existing Combined Sewer Overflow reduction facilities.	8,442	Various
C5402	Customer Contact & Billing	N/A	4,373	N/A
C5403	Enterprise Information Management	N/A	755	Various
C3610	Green Stormwater Infrastructure Program	This project increases capacity to convey combined sewer flows by slowing stormwater flows and reducing volumes entering the combined system, this is achieved by slowing, infiltrating or reusing stormwater.	2,229	Citywide
C4116-DWF	Heavy Equipment Purchases - DWF	This project will replace existing heavy equipment and acquire new equipment.	2,801	Various
C4116-SWF	Heavy Equipment Purchases - SWF	This project will replace existing heavy equipment and acquire new equipment.	1,270	Various
C4116-WF	Heavy Equipment Purchases - WF	This project will replace existing heavy equipment and acquire new equipment.	3,955	Various
C4108-DWF	Integrated Control Monitoring Program - DWF	This program will upgrade the City's Supervisory Control and Data Acquisition (SCADA) computer system.	250	Various
C4108-WF	Integrated Control Monitoring Program - WF	This program will upgrade the City's Supervisory Control and Data Acquisition (SCADA) computer system.	360	Various
C5404	IT Infrastructure	N/A	979	N/A
C3802	Localized Flood Control Program	This program will provide flood control and local drainage and wastewater projects in under-served parts of Seattle to improve system capacity or increase the existing level of service.	2,270	Various

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
C3604	Long Term Control Plan	This project will determine size and location of all future CSO control facilities within the City.	1,000	Various
C4101-DWF	Meter Replacement - DWF	This program replaces failing or obsolete water meters.	554	Citywide
C4119-DWF	Move Seattle - DWF	This program will fund projects for drainage and wastewater utility improvements and relocations associated with SDOT's "Move Seattle" program.	17,360	Various
C4119-WF	Move Seattle - WF	This program will fund projects for water utility improvements and relocations associated with SDOT's "Move Seattle" program.	14,657	Various
C1133	Multiple Utility Relocation	N/A	505	Citywide
C4106-DWF	Operational Facility - Construction - DWF	This program will renovate, rehabilitate, and replace existing buildings and construct new facilities at various locations to address deficiencies and functional changes in SPU's Lines of Business.	20,588	Citywide
C4106-SWF	Operational Facility - Construction - SWF	This program will renovate, rehabilitate, and replace existing buildings and construct new facilities at various locations to address deficiencies and functional changes in SPU's Lines of Business.	496	Citywide
C4106-WF	Operational Facility - Construction - WF	This program will renovate, rehabilitate, and replace existing buildings and construct new facilities at various locations to address deficiencies and functional changes in SPU's Lines of Business.	5,050	Citywide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
C4105-DWF	Operations Control Center - DWF	This program will improve facilities at the Operations Control Center.	0	2700 Airport Way S
C4105-SWF	Operations Control Center - SWF	This program will improve facilities at the Operations Control Center.	0	2700 Airport Way S
C4105-WF	Operations Control Center - WF	This program will improve facilities at the Operations Control Center.	800	2700 Airport Way S
C4123-DWF	Other Major Transportation Projects - DWF	This program will relocate, replace and protect drainage and wastewater infrastructure affected by major transportation projects.	627	Various
C4123-WF	Other Major Transportation Projects - WF	This program will relocate, replace and protect water infrastructure affected by major transportation projects.	250	Various
C3708	Outfall Rehabilitation Program	N/A	647	Various
C5405	Project Delivery & Performance	N/A	7,707	N/A
C3703	Pump Station and Force Main Improvements	This program will provide wastewater pump station improvements, upgrades, repairs and rehabilitation.	11,214	Various
C4107-WF	Regional Facility - WF	This program will improve facilities at SPU's regional sites.	5,449	Various
C1504	Regional Water Conservation Program	This project will extend SPU's water supply by up to 11 MGD using demand reduction from customer upgrades in water-using facilities and equipment to be more water efficient.	1,441	Citywide and Regional

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
C3609	S Henderson Combined Sewer Overflow Storage	This project will construct or modify facilities to manage Combined Sewer Overflow control volumes totaling approximately 26 million gallons. Estimates are from the Draft CSO 2010 Plan Update.	251	S Henderson St.
C3804	Sanitary Sewer Overflow Capacity	This project will add capacity to the existing sanitary sewer collection system to improve service and accommodate growth.	6,943	Various
C5406	Science & System Performance	N/A	1,570	N/A
C1505	Seattle Direct Service Additional Conservation	This project will upgrade water-using facilities to be more water efficient and accelerate conservation savings by 3 million gallons per day in conjunction with reservoir covering, other system efficiencies, and upgrades to low income customer facilities.	714	Citywide and Direct Service
C4113-DWF	Security Improvements - DWF	This program will provide increased security and protection at SPU facilities.	113	Citywide Citywide
C4113-SWF	Security Improvements - SWF	This program will provide increased security and protection at SPU facilities.	100	Citywide Citywide Citywide
C3503	Sediment Remediation - DWF	N/A	6,489	Various
C4135-DWF	Sound Transit - North Link - DWF	N/A	149	Various
C4135-WF	Sound Transit - North Link - WF	N/A	250	Various
C4125	Sound Transit - Water Betterment	This project will fund the relocation or replacement of water mains and other facilities related to the development of Sound Transit's Light Rail system.	60	Central & South areas of Seattle

\*Amounts in thousands of dollars



## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
C4122-DWF	Sound Transit-East Link	This program will fund projects for utility improvements and relocations associated with the development of Sound Transit's Light Rail system.	50	Various
C4122-WF	Sound Transit-East Link	This program will fund projects for utility improvements and relocations associated with the development of Sound Transit's Light Rail system.	50	Various
C3806	South Park Stormwater Program	New Pump Station with capacity of 44 cubic feet per sec, an associated stormwater filtration facility will treat flows up to 11 CFS, with the balance of higher flows bypassing filtration and pumped directly to the river.	4,729	698 S Riverside DR/Holden/Austin
C2302	South Transfer Station Rebuild	This project will replace the existing facility to increase the capacity to recycle more solid waste and improve the transfer capability of non-recyclable materials.	2,286	8100 2nd AVE S
C1134	Tank Improvements	N/A	729	Citywide
C1308	Tolt Bridges	Not applicable.	1	Tolt River Watershed
C1603	Upland Reserve Forest Restoration	N/A	82	Cedar River Watershed
C1112	Water Infrastructure - New Hydrants	This project will improve fire protection by increasing the number of fire hydrants in the city.	13	Citywide
C1111	Water Infrastructure - Watermain Extensions	This project will install approximately 8,000 feet of new watermains per year.	862	Citywide

\*Amounts in thousands of dollars

## New or Expanded Capital Facilities

Project No.	Project Title	Capacity	2018*	Location
S0501	Lot 2 Development	This project adds a 10,500 square foot skatepark.	0	5th Ave N/Republican St
S0302	Mercer Arena Redevelopment	Seattle Opera is building a new 102,000 SF facility at 4th Avenue and Mercer Street on the Seattle Center campus on the site formerly occupied by the 108,000 SF Mercer Arts Arena. The new building, scheduled to open in 2018, will include Seattle Opera's administrative offices along with rehearsal, technical support, education and community spaces.	0	363 Mercer St

*\*Amounts in thousands of dollars*

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**DEPARTMENT OF PARKS AND RECREATION**

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**Project ID:** K730122  
**Project Title:** Seattle Asian Art Museum Renovation  
**Location:** Volunteer Park  
**2018 Proposed Budget (000's):** \$14,000  
**Description:** This project provides 2008 Parks Levy funds to support the renovation of the city-owned Seattle Asian Art Museum in Volunteer Park in partnership with the Seattle Art Museum. Levy funds, which are anticipated to cover approximately 40 percent of the total renovation costs, will not be released until future Council action by ordinance.

**Project ID:** K730302  
**Project Title:** Saving our City Forests  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$2,308  
**Description:** This ongoing project restores and maintains Seattle's 2,500 acres of urban forests. Seattle's trees are aging and inundated with invasive plants, including English ivy, Himalayan blackberry, Scot's broom, and knotweed. This project expands Parks' capacity to restore forest land, and to provide the ongoing monitoring and maintenance work necessary to keep restored areas from being overrun by invasive plants. A healthy urban forest contributes significantly to the health of the environment by cleaning air and water, filtering and retaining storm water, and providing a respite from the built environment. This project is part of the Metropolitan Parks District measure put before voters in 2014.

**Project ID:** K732492  
**Project Title:** Aquarium Expansion  
**Location:** Downtown  
**2018 Proposed Budget (000's):** \$2,370  
**Description:** The Seattle Aquarium is owned by Seattle Parks and Recreation and operated by the non-profit Seattle Aquarium Society (SEAS). SEAS are planning a major expansion to the Aquarium's existing footprint to add new programming and visitor capacity. This project will provide a new 'Ocean Pavilion' that will integrate with improvements made by The Office of the Waterfront along the Central Waterfront. SEAS also intend to make improvements to piers 59 and 60 to improve exhibit space and operations efficiency. Design and construction of the project is led by SEAS and coordinated with City investments by the Parks Department and Office of the Waterfront. This project is part of the overall waterfront improvement program and appropriates City matching funds for SEAS' project. Funding depicted in the table below represents committed funding for design. The City has committed to provide up to \$34 million to SEAS for design and construction, contingent upon provision of a detailed funding plan for review by the City by 2018.

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**FINANCE AND ADMINISTRATIVE SERVICES**

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**Project ID:** A1GM118  
**Project Title:** City Hall and Seattle Municipal Tower Tenant Improvements  
**Location:** City Hall  
**2018 Proposed Budget (000's):** \$1,285  
**Description:** This project provides predesign, design, and construction services for developing or reconfiguring space and other adjacent functions in the Downtown Civic Campus. Work may include, but is not limited to, working with project sponsors to catalog space and equipment needs, energy efficiency improvements, developing planning options, developing project cost estimates, and construction. Work may also include analysis of how vacated space in other facilities might be utilized for another city uses.

**Project ID:** A1PS101  
**Project Title:** Police Facilities  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$2,500  
**Description:** This ongoing project preserves or extends the useful life or operational capacity and provides for improvements to FAS-owned Police facilities including, but not limited to, the East Precinct, the North Precinct, the West Precinct, the Mounted Patrol Facility, the Harbor Patrol Facility, and the K-9 Facility. Typical work may include, but is not limited to, upgrades to heating, ventilation, air conditioning upgrades, equipment replacement, siting, pre-design, test-to-fit analyses, and structural assessments and repairs. These improvements support police service by extending the operational life of old police facilities, complying with regulatory requirements, or addressing capacity problems.

**Project ID:** A1PS117  
**Project Title:** Seattle Police Department North Area Interim and Long-Term Facilities  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$11,600  
**Description:** This project funds planning, design and construction for long-term facility needs as well as interim upgrades and potential expansions at the existing North Precinct to accommodate growth of the Seattle Police Department. This project includes, but is not limited to, planning, design and construction for long-term police facilities needs in the North and funding for interim needs including, but not limited to, building upgrades, system maintenance, facility maintenance and temporary facilities.

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**SEATTLE CITY LIGHT**

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**Project ID:** 6351  
**Project Title:** Boundary Powerhouse - Unit 51 Generator Rebuild  
**Location:** Outside City Limits  
**2018 Proposed Budget (000's):** \$11,024  
**Description:** This project provides the rewinding and refurbishing of the Unit 51 generator to extend its useful life, which is part of a programmatic series of projects to maintain the Utility's aging generators. It also replaces the carbon dioxide fire-suppression system with a water sprinkler system to enhance worker safety. If technology is sufficiently advanced, it may also include a rotor-mounted scanner or other diagnostic equipment.

**Project ID:** 6520  
**Project Title:** Skagit Facilities Plan  
**Location:** Outside City Limits  
**2018 Proposed Budget (000's):** \$1,860  
**Description:** This project implements a comprehensive facility plan to optimize buildings and structures at two Skagit town sites. The project preserves essential facilities that support SCL's power production needs, and retains important civic, cultural, and historic features in keeping with the historic preservation requirements of the Skagit FERC Licensing agreement. The project will reduce operational costs by dismantling and removing surplus facilities that require significant on-going maintenance.

**Project ID:** 8470  
**Project Title:** Center City Connector Streetcar - City Light  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$4,286  
**Description:** This project provides power relocations & service for the proposed SDOT Center City Connector Streetcar project. City Light has buried primary distribution power cables, some of which are encased in old clay tile ducts, which do not meet current standards, and are unlikely to be able to withstand the forces generated by the streetcar's operation. Any streetcar alignment to be built across such old facilities would likely need a reinforced roadbed for SCL facilities to withstand the additional weight.

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**Project ID:** 9960  
**Project Title:** IT Security Upgrades  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$1,119  
**Description:** The ongoing project updates or replaces information security systems that are at high risk of failure. The project enhances vulnerability and intrusion detection as well as response capabilities and procedures. The project provides (by way of illustration but not limitation) for implementation of systems to replace or upgrade firewalls, routers, switches, operating systems, intrusion detection capabilities, security information and event management, Linux patching procedures, Dynamic Host Configuration Protocol server, Domain Name System server, internal vulnerability scanning, and physical security cameras and networks for SCL locations.

**Project ID:** 9976  
**Project Title:** Western Energy Imbalance Market  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$9,464  
**Description:** This project provides funding to allow City Light to participate in the Western energy imbalance market (EIM) run by the California Independent System Operator (CAISO). City Light will need IT systems, an implementation agreement with CAISO, possible additional staff and training to participate in the market. Participation will allow City Light to more efficiently use generation and transmission assets, buy and sell energy in shorter term increments, and use pricing to match loads and resources across more buyers and sellers than existing markets currently permit. By doing this, City Light will more effectively integrate renewable energy across the West due to its flexible hydro capacity. City Light is planning to begin participating in the market in the spring of 2019.

**SEATTLE DEPARTMENT OF TRANSPORTATION**

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**Project ID:** TC365060  
**Project Title:** Bridge Load Rating  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$599  
**Description:** This project rates bridges for safe load-carrying capacity, as part of a federally-mandated program. The work on this project, performed by both City staff and consultants, ensures public safety. Additional funding was added to this program as of the 2015-2020 Proposed CIP due to new load rating standards for specialized hauling vehicles that were issued by the Federal Highway Administration on November 13, 2013. These new standards require an additional investment of \$300,000 a year for seven years (2015-2021).

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**Project ID:** TC365880  
**Project Title:** SR-520 Project  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$931  
**Description:** This project provides policy, planning, and technical analysis support to the Seattle Department of Transportation Director and elected officials to review and comment on the Environmental Impact Statement and the design for SR-520. This regional project included the work associated with the replacement of the SR-520 bridge with a six-lane bridge, new freeway interchanges at Montlake Boulevard and Lake Washington Boulevard, and other improvements.

**Project ID:** TC367200  
**Project Title:** Fauntleroy Way SW Boulevard  
**Location:** West Seattle Junction  
**2018 Proposed Budget (000's):** \$11,860  
**Description:** This project transforms Fauntleroy Way SW into a boulevard. The project elements include: a planted median, signature lighting fixtures, a protected bicycle facility, a pedestrian zone with sidewalks and planting areas including street trees, pedestrian lighting, potential stormwater infrastructure and art, as well as safety improvements for crossing movements for all modes, including bicycle and pedestrian crossings, signals, reconfigured intersections and bulbs, and pavement improvements.

**Project ID:** TC367380  
**Project Title:** Roosevelt Multimodal Corridor  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$2,856  
**Description:** This project will develop and implement a range of transit and street improvements in the Eastlake Avenue corridor connecting the University District, Eastlake and South Lake Union neighborhoods between Downtown and the Roosevelt Link LRT station area. The corridor is identified as a priority in the Transit Master Plan. This project will identify, prioritize, design and construct the highest priority "speed and reliability" improvements to existing bus service without excluding the potential for longer-term implementation of High Capacity Transit options. The project will also consider an improved ROW profile to best accommodate the corridor's multi-modal demands, along with the recommendations reflected in each of the City's adopted modal transportation plans and the respective neighborhood plans.

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**Project ID:** TC367450  
**Project Title:** Bridge Rehabilitation and Replacement Phase II  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$2,362  
**Description:** This project addresses the major maintenance backlog for the City's bridge infrastructure. Planning for the rehabilitation or replacement of the Cowen Park and Magnolia bridges will continue in 2018.

**Project ID:** TC367580  
**Project Title:** Signal Major Maintenance  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$1,526  
**Description:** This project addresses major work related to the basic infrastructure at traffic signals such as poles, span wires, mast arms, wiring, equipment interconnectivity, video equipment and cabinets to improve and upgrade the traffic signal system. The project also is used for replacement of signal cabinets. In addition, this project rebuilt approximately 10 additional signals in 2016. The expected life of a signal is 30 years; at this time there are more than 1,000 signals within the City.

**Project ID:** TC367770  
**Project Title:** Rainier/Jackson Multimodal Corridor  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$1,400  
**Description:** This project enhances transit speed and reliability, as well as improving the bus rider experience along a critical transit corridor. The project will upgrade bus stops and add transit signal priority at intersections, improve facilities for people who walk along the corridor, leverage paving investments and extend the useful life of the existing roadway.

**SEATTLE INFORMATION TECHNOLOGY**

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**Project ID:** D601TC009  
**Project Title:** Criminal Justice Information System Projects  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$5,349  
**Description:** This project provides funds to plan and implement upgrades to the City's Criminal Justice Information Systems. This project was previously named the Municipal Court Information System (MCIS) Replacement project. The project was renamed in 2018 to more accurately reflect efforts beyond MCIS replacement.



**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**Project ID:** D601TCDOT  
**Project Title:** Applications Development- SDOT  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$1,501  
**Description:** This project provides funds to develop and implement software applications used by the Seattle Department of Transportation (SDOT). Improved applications seek to enhance project tracking, field work, and coordination with public and private partners. These applications will help SDOT facilitate ongoing projects including those enabled by the Move Seattle levy.

**Project ID:** D601TCPSI  
**Project Title:** Permit System Integration  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$3,755  
**Description:** This project provides funding to develop, implement, support a cross-department platform for the City's regulatory oversight. The platform will provide internal and external stakeholders with streamlined processes and accessibility. In addition, the project seeks to automate labor-intensive processes while establishing tracking and reporting of performance metrics.

**Project ID:** D601TCSPD  
**Project Title:** Applications Development- SPD  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$3,614  
**Description:** This project provides funds to develop and implement software applications used by the Seattle Police Department (SPD). The applications will improve personnel oversight and deployment, in addition to enhancing the accessibility and quality of SPD data. These applications will support ongoing efforts to achieve improved transparency and compliance.

**Project ID:** D913TC000  
**Project Title:** SPD Body Worn Video  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$690  
**Description:** The project includes the procurement and implementation of the Seattle Police Department's body-worn camera program. The project includes funding for equipment, operating and maintenance costs, and personnel costs for 2017 and 2018. Additional staff resources will be identified once a system is selected through the RFP process. SPD plans to issue the first cameras to patrol officers in early 2017. SPD developed a proposed approach for implementation, largely informed by the pilot program conducted in 2015.

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

**SEATTLE PUBLIC UTILITIES**

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**Project ID:** C1134  
**Project Title:** Tank Improvements  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$729  
**Description:** This ongoing project implements water quality, seismic, and other improvements to steel water tanks in Seattle. Functional water tanks are essential to public health protection as they assure that the distribution system is under pressure at all times, even when pump stations or control valves malfunction. Depressurization of the water system may result in siphoning back contaminants from faulty private systems and from the ground into the water pipes.

**Project ID:** C1208  
**Project Title:** Cathodic Protection Program  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$1,977  
**Description:** This ongoing project installs corrosion protection systems that prevent external corrosion of water transmission pipelines located in Seattle and throughout King County. The cathodic protection systems extend the life of buried pipelines made of ductile iron, steel, and concrete cylinder pipe.

**Project ID:** C1511  
**Project Title:** Hatchery Works  
**Location:** Outside City Limits  
**2018 Proposed Budget (000's):** \$5,280  
**Description:** This ongoing project provides improvements to the sockeye salmon hatchery, including improvements to the Broodstock collection facility, improvements to the hatchery spring water pumps, improvements to adult holding ponds, and additions for water redundancy. These facilities are a requirement of the Landsburg Mitigation Agreement and the Muckleshoot Settlement Agreement.

**Project ID:** C4119-DWF  
**Project Title:** Move Seattle - DWF  
**Location:** Citywide  
**2018 Proposed Budget (000's):** \$17,360  
**Description:** This multi-year project funds assessments, repairs, and improvements to SPU's drainage and wastewater utility infrastructure at sites chosen by the Seattle Department of Transportation (SDOT) for bridge improvements and pedestrian and bicycle safety improvements within its "Move Seattle" program. SPU assesses the condition of its utility infrastructure at SDOT's project sites and conducts repairs

**Appendix B: Capital Projects passing the \$5 million threshold with the 2017 Adopted Budget allocation.**

and improvements as needed. This project was formerly titled "Bridging the Gap - DWF."

**Project ID:** C4130-DWF  
**Project Title:** Streetcar Related Projects - DWF  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$9,032  
**Description:** This project plans and relocates drainage and wastewater facilities that will be impacted by the SDOT-led First Hill Streetcar project and related streetcar projects, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. It is currently in the construction phase. This project was formerly titled "First Hill Streetcar - DWF."

**Project ID:** C4130-WF  
**Project Title:** Streetcar Related Projects - WF  
**Location:** Multiple  
**2018 Proposed Budget (000's):** \$15,938  
**Description:** This project plans and relocates water facilities that will be impacted by the SDOT-led First Hill Streetcar project and related streetcar projects, which will connect major employment centers on First Hill to the regional light rail system stations on Capitol Hill and in the International District. It is currently in the construction phase. This project was formerly titled "First Hill Streetcar - WF."