



# 2011-12 Annual Report

For the year ended March 31, 2012

University of  
Lethbridge



Facilities



# Facilities Annual Report 2011-2012

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*Mission Statement: Facilities strives to provide the highest quality environments that enhance learning, creativity and growth.*

## Executive Summary

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From replacing light bulbs to erecting buildings, Facilities plays an important role in nearly every aspect of the University of Lethbridge's physical appearance and its continued sustainability.

Facilities endeavours to reduce expenses and generate savings while providing protection of assets and continuous service improvements. Participation in a survey by the Association of Higher Education Facilities Officers (APPA) allows the department to gauge its operating costs in comparison to other universities across North America. The results showed that U of L's average operating costs were less than the Canadian and regional average and maintained one of the lowest operating costs among other Western Canadian universities.

Facilities activities, both in regular maintenance and operations, and project work, contribute directly to support the mission and strategic plan of the institution.

### Day-to-day campus operations

Under the umbrella of Facilities lie several departments that help run a consistent and harmonious operation. Leaders of Building Maintenance and Operations, Project Management Office, Infrastructure and Engineering, Campus Planning and Architecture, and Campus Safety departments communicate regularly to ensure Facilities as a whole runs as smoothly as possible. Details of each division's role and responsibilities are outlined the following pages.

A central theme within all departments is sustainability. Facilities staff works diligently to ensure that sustainable practices are the norm for every task they take on.

### Project-related activities

The 2011-12 year proved to be productive in meeting and maintaining the U of L's strategic, business, capital and master planning through the development of several campus projects.

Construction highlights include the design of the redevelopment of the campus's western parking lots, creation of the University Prairie Quad north of Markin Hall, building of the Sports Medicine Clinic in the 1<sup>st</sup> Choice Savings Centre for Sport and Wellness, the construction of new residences in Aperture Park, work on the University Centre for the Arts HVAC (heating, ventilation, and air conditioning) improvements, and Physical Education (PE) Building renovations.

Future developments include the Destination Project, University Hall renewal and Central Plant, the First Nations Gathering Centre and the Distributed Learning Centre, as well as many other significant projects that aim to diversify the campus and strengthen the U of L as comprehensive learning institution.

## Year in Review

The year kicked off with more planning work to detail the proposed 350,000 sq. ft., \$270-million Destination Project. The Destination Project involves the planning for a new science facility in order to deliver up to date science programs and accommodate the University's strong commitment to research. Although currently in the planning stages, the project is fresh on the minds of Facilities directors. A Key Parameters document was released in May, which will guide the project's scope of work, budget and timeline.

In order to address the growing requirements to plan our capital projects and to ensure valuable resources are effectively placed, a minor reorganization of the Facilities office saw the creation of the Campus Planning & Architecture (CP&A) department and the Project Management Office (PMO). This restructuring will allow for a more streamlined approach to project planning and management.

The following list summarizes current Facilities projects:

University Campus Master Plan - work on the master plan is well underway. Completion is anticipated for December 2012 following Executive and Board of Governors' approval.

President's Budget Task Force – Facilities Executive Director Chris Eagan was invited to participate in this leadership effort to reshape the budget process that aligns financial resources with strategic priorities.

### Major Capital Project Strategic Planning:

Destination Project – Currently undergoing inception planning for new building construction. A Key Parameters deliverable was completed in May 2012. The project includes a renewal of University Hall and new plant and infrastructure construction.

- University Hall inception planning is underway with a deliverable key parameters document expected in the fall of 2012.
- Plant/Infrastructure planning is currently undergoing an engineering review of existing University infrastructure. Recommendations for functional programming will start in the Fall of 2012.

Library and Learning Commons – Inception planning work for this project is currently underway.

Visual Art Gallery Centre – Work to define the optimum art collection storage and visual study building project continues.

Sustainability Management Work – The Energy Management Sustainability Committee (EMSC) completed a Scoping Report describing the framework to generate stakeholder consensus on the vision of sustainability at the U of L. The executive summary and resources requirements to undertake this work will be presented in the next University strategic planning/budget process.

### Major Capital Projects:

Aperture Park residence – In its third phase, the new residence will offer 259 additional beds on campus. The building is set to open August 2013.

Physical Education Building – This project saw major renovations to the 40-year-old facility including new doors and exteriors, solar tube lighting, mechanical and electrical upgrades.

Parking Lots – The redevelopment of the western lots included fresh paving, new lighting and electrical pedestals, landscaping and storm water management infrastructure. Phase 2 gets underway the summer of 2013.

Prairie Quad – This new public green space will function mainly as an open, casual gathering space with the ability to support various activities throughout the year.

University Centre for the Arts Ventilation – This two-part project saw major upgrades to the UCA ventilation systems in order to provide better air quality and allow for a more energy efficient operation of the building.

University Hall Fire Compartmentation – University Hall saw substantial upgrades to its fire alarm system including fire stops to existing fire walls; safety improvements to five mechanical shafts; and new fire rated doors and frames.

Penny Building - The downtown building is undergoing renovations to accommodate a student art gallery, University Advancement and other University groups.

Sports Medicine Clinic - The clinic features physiotherapy and exam rooms, treatment areas, and doctor's offices.

Minor Capital Projects – Please see the Appendix on Pages 29-30.



## Purpose of Annual Report

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The intent of this document is to present a snapshot of Facilities' operations and achievements from the previous fiscal year which took into consideration the strategic plan of the institution and the Facilities mission, values, and operating agreement.

Industry metrics and Key Performance Indicators (KPIs) will be used to benchmark our efficiency and effectiveness, the state of the infrastructure we manage, major and minor capital project work, emerging concerns and new initiatives.

Major achievements and challenges will also be reported.

## Key Performance Indicators

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KPIs are critical for measuring our performance and gauging our operations against similar institutions in the Canadian and international post-secondary education system.

Many KPIs and comparison data are generated through our participation in the annual Association of Higher Education Facilities Officers (AAPA) Facilities Core Data Survey.

APPA has more than 5,200 individual members in over 1,500 learning institutions throughout the United States, Canada, and around the world. The U of L Facilities department was instrumental in creating an APPA Chapter within Alberta that includes all post-secondary institutions across the province.

The Canadian Association of University Business Officers (CAUBO) is aligning with APPA to use the survey information and KPIs across Canada.

Facilities also participates in the Western Canadian University Physical Plant Association (WCUPPA) annual conference that provides an opportunity for members to share ideas, exchange information, and collaborate with other members across Western Canada.

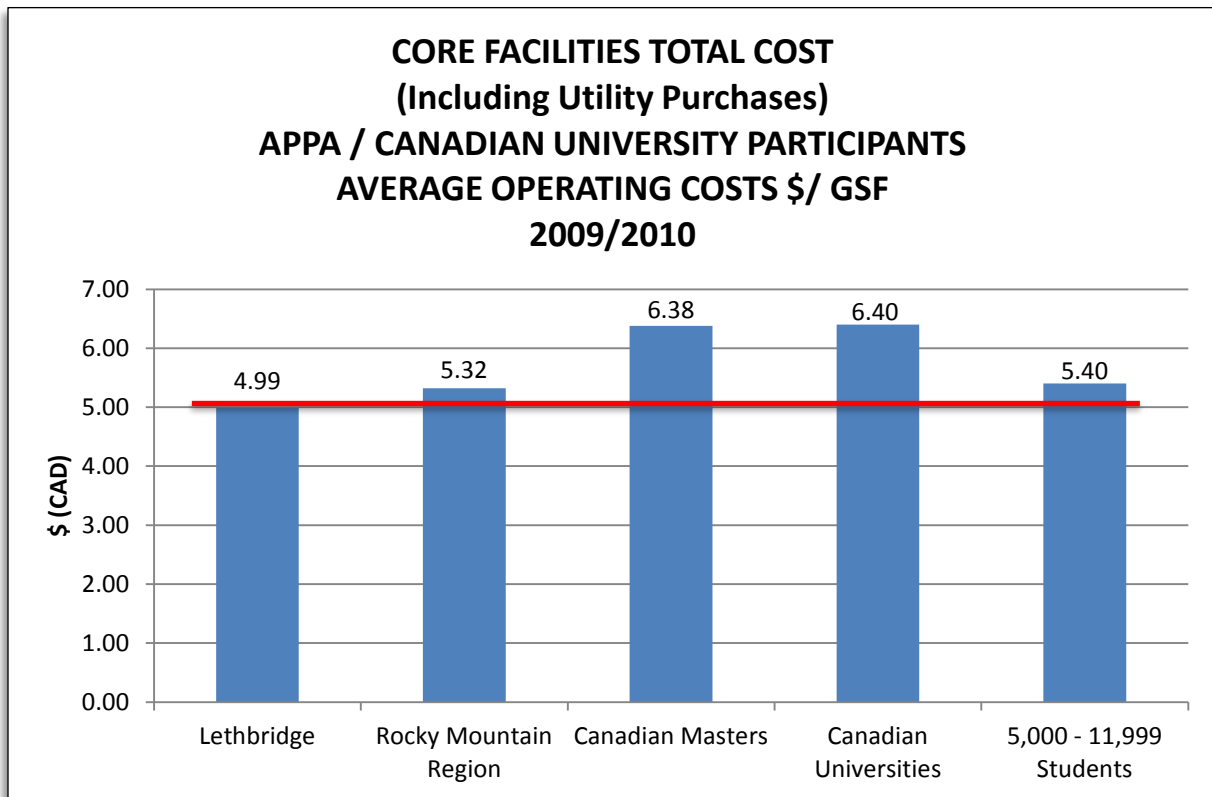
## APPA 2009-10 Facilities Core Data Survey Results

The University of Lethbridge's performance is outlined in the following graphs with data from the most recent APPA survey.

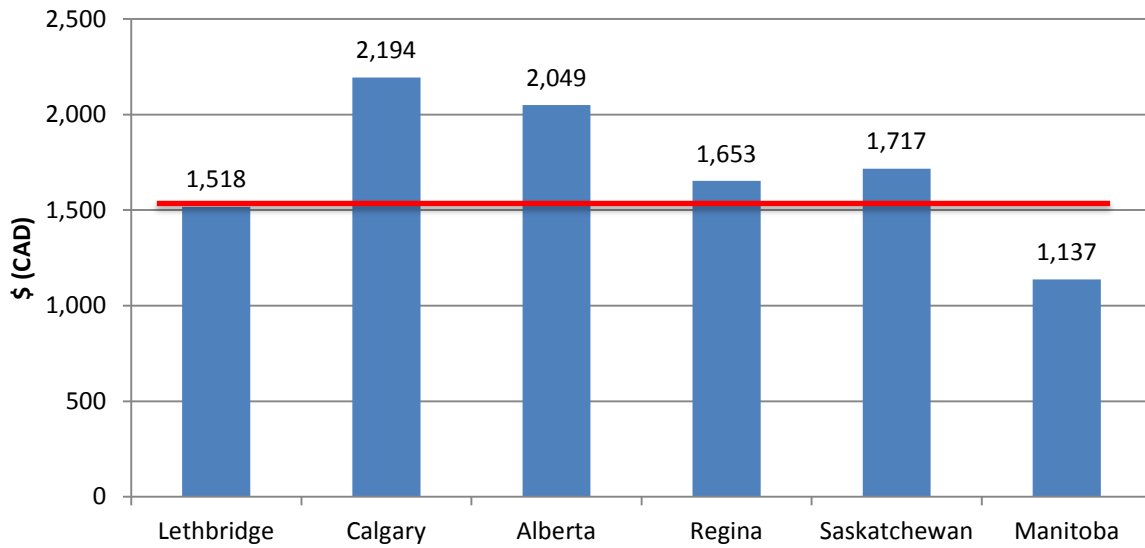
Overall, the U of L's average operating costs were less than the Canadian and regional average at \$4.99 per gross square foot (GSF) compared to the Canadian average of \$6.40 per GSF and the regional average of \$5.32 per GSF.

The U of L's average operating cost per student was \$1,518 – the second lowest average operating cost within six Rocky Mountain Region universities. The University of Calgary, had the highest average operating cost at \$2,194 per student.

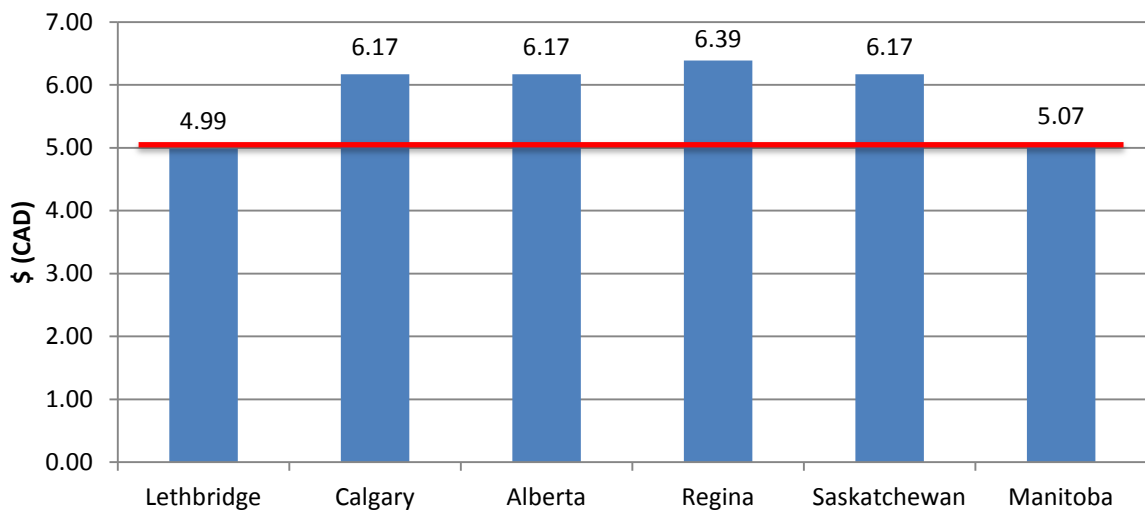
The U of L maintained the lowest average operating cost per gross square foot (GSF) at \$4.99 per GSF.



**CORE FACILITIES TOTAL COST  
(Including Utility Purchases)  
WESTERN CANADA UNIVERSITY PARTICIPANTS  
AVERAGE OPERATING COSTS \$ / STUDENT  
2009/2010**



**CORE FACILITIES TOTAL COST  
(Including Utility Purchases)  
WESTERN CANADA UNIVERSITY PARTICIPANTS  
AVERAGE OPERATING COSTS \$ / GSF  
2009/2010**





## Outlook for 2013-2014

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It's no secret that the University of Lethbridge is expanding. As noted in the 2010-2014 Business Plan, the U of L is "facing an acute space crisis, with assignable space not keeping pace with the growing number of students, faculty, and staff."

To address the need for new and enhanced space, the Facilities department has several projects underway. Some are in the planning stages, some are under construction, and others are near completion.

The 2012-2016 Capital Plan identifies the top priority projects as the Destination Project along with the required central plant, the First Nations Gathering Centre, the Art Learning Centre to house the Visual Art Study Centre and Art Gallery, and student residence expansion. Creating these new spaces will also allow the reprogramming and renovation of vacated space in University Hall.

While space, or lack of it, is an overarching theme at the U of L, Facilities is helping to build a better University with other capital projects such as the parking lot redevelopment and quad green space both already under construction.

Facilities manages many significant actions that are required to achieve the U of L's strategic priorities however, considerable challenges exist that may negatively impact our future ability to continue to provide all the current support services to the institution. That said there are no existing issues that cannot be resolved.

A few threats to achieving the University's strategic priorities include ageing infrastructure and declining maintenance resources which in turn leads to increased deferred maintenance (\$96 million unfunded backlog) and higher than desired demand maintenance.

Limited planning resources also pose a risk as they are simultaneously spread across many initiatives. In addition, increased regulatory requirements and project complexity, and the imminent retirement of senior, frontline maintenance, operations and PMO staff will also suppress the achievement of strategic goals.

Facilities is vigilant in its enterprises, however, budgetary cuts have significantly impacted the department. Staffing reductions and limited materials and resources have forced prioritization of projects leaving some on the cutting room floor until such a time they can be revived.

Meantime, Facilities consistently works to streamline its operations while ensuring alignment with policy and industry practice, and seeks opportunities to increase efficiency and effectiveness.

## Maintenance and Operations

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Maintenance and Operations is made up of several departments that collaborate to maintain and enhance all facilities on campus:

- Utilities
- Caretaking Services
- Electrical
- Mechanical
- Operations & Controls
- Grounds
- Building Maintenance

Together, these groups sustain the U of L's physical facilities and infrastructure promoting a quality campus environment that inspires excellence.

Key Performance Indicators (KPIs) are essential tools to assess our operations against other institutions across the country.

Data is produced through our participation in the annual the Association of Higher Education Facilities Officers (AAPA) Facilities Core Data Survey.

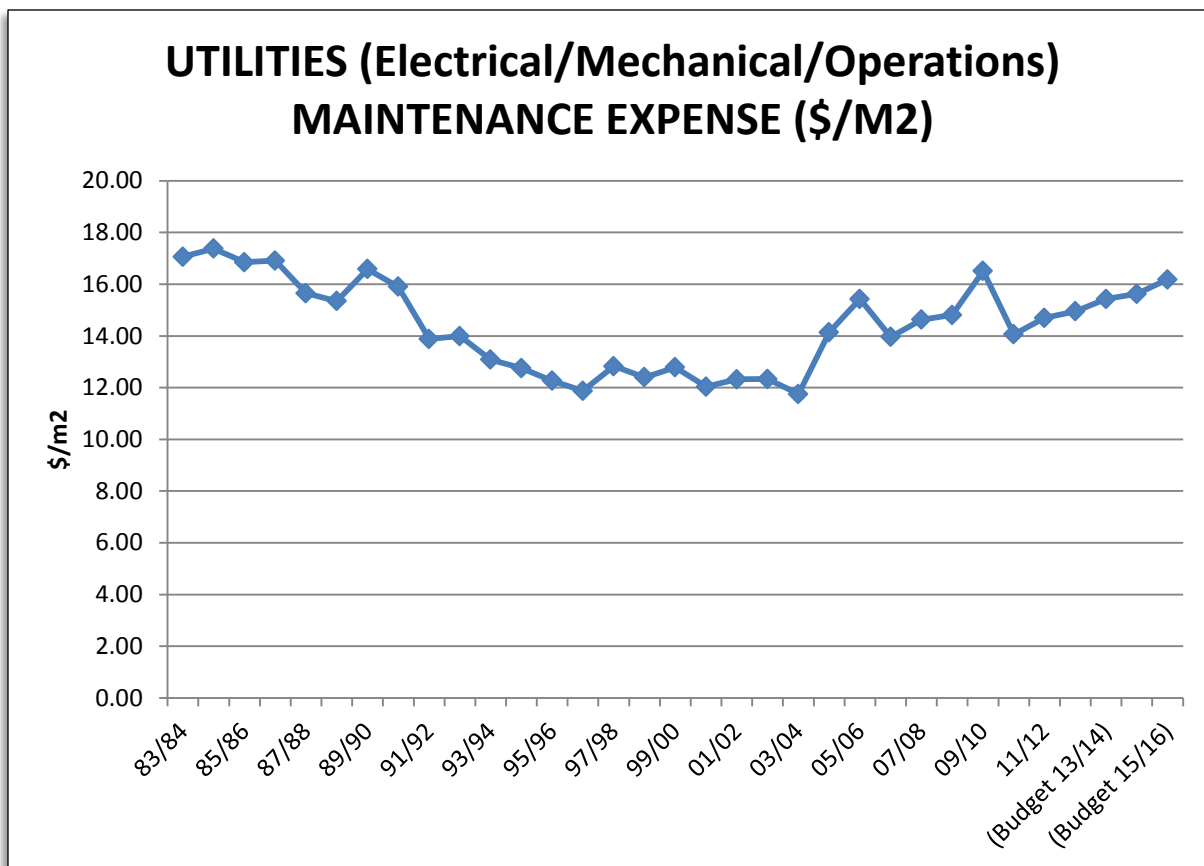
### Utilities

The University of Lethbridge Utilities department has experienced a number of changes over the last several years that continue to have a substantial impact on current and future budgets.

With the addition of new buildings on campus, total energy consumption at the U of L has steadily increased. The most recent buildings have been designed and constructed with the latest high-energy efficiency standards for the type and purpose of the building. However, planned future intensification of activities, consistent with those of a comprehensive university, will result in further increases to net utility consumption on account of extended hours of operation and energy lost through ventilation.

The most recent data shows that utility consumptions for electricity through 2011-12 was fairly steady as compared to the 2010-11 period. Natural gas and water consumption decreased by 10 percent and 2.7 per cent respectively. The positive trends of these consumptions are primarily attributed to an exceptionally warm winter during 2010-11 as well as the fact that no new buildings were brought online during that timeframe.

In order to stabilize the cost of supply for electricity, the Utilities department has executed electrical energy supply contracts. To date, natural gas continues to be purchased at spot market rates, which are significantly lower than those of short and long term contract rates. When the cost of natural gas begins to rise, the option to lock in a contract will be evaluated, or the increase can be offset by utilizing gas from our stored 60,000 GJ purchased at lower rates.

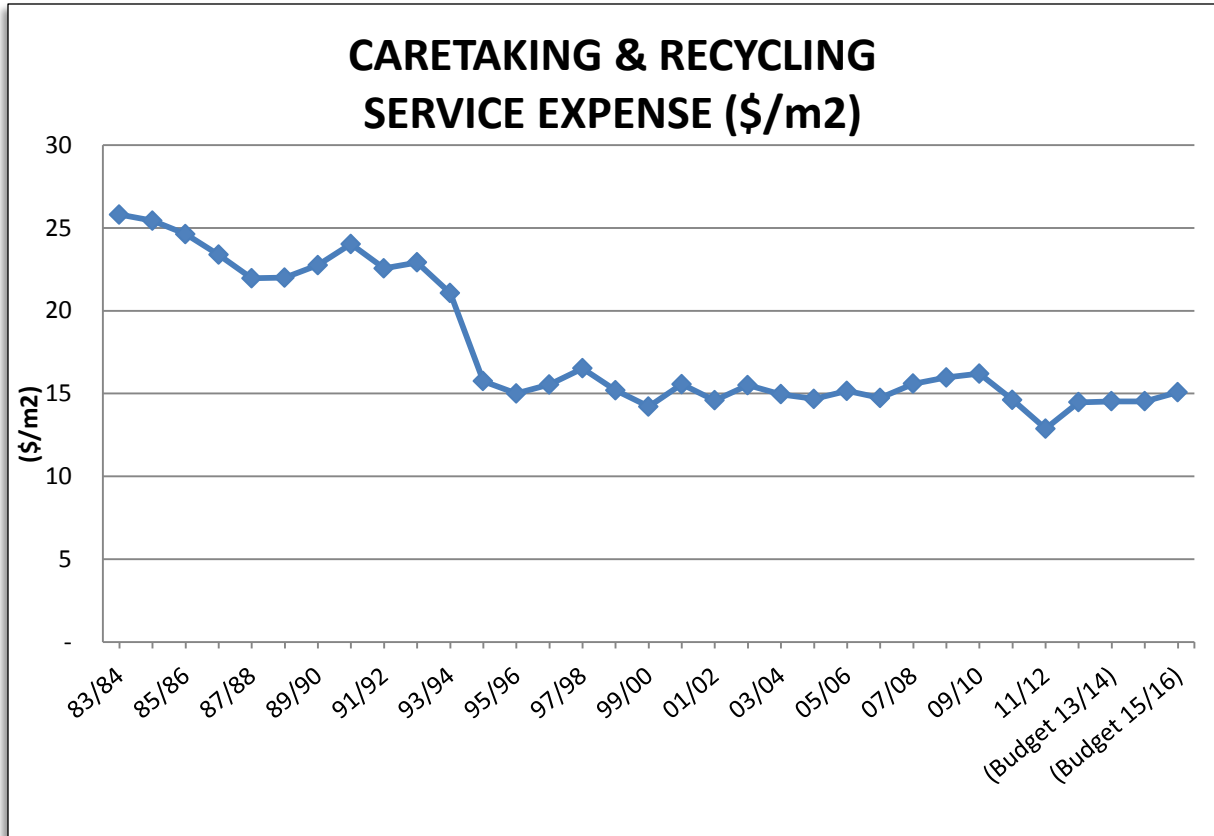


While the consumption data provides a positive outlook, the unit cost of these services continues to rise, substantially offsetting any fiscal gains made through energy reduction strategies. This is particularly true of the electrical energy utility. Recent changes in the utility’s riders and tariffs charges have resulted in a net increase in cost of 16 per cent per m<sup>2</sup> of campus. The overall net increase in total utilities costs for the entire campus is up by \$250,970 or 7.87 per cent over the 2010-2011 period. Further increases in the electrical riders and tariffs are likely in the years to come as costs for province-wide infrastructure upgrades are passed along to consumers.

### Caretaking

In addition to basic cleaning services to classrooms, offices and common spaces, Caretaking Services provides supplemental services for external events and post-construction clean up. The department is also responsible for the campus recycling programs.

Creating an environmentally friendly campus is a priority for Caretaking, which has tripled its composting program with the addition of five new stations across campus. The collection of composted material has risen from 80 gallons of per month to 800 gallons per month.



Caretaking aims to reduce costs wherever possible. A recent initiative was moving more than 85 per cent of its staff to dayshift, which has saved the annual shift premium budget approximately \$50,000. Removing all battery operated paper towel and soap dispensers was another project, which resulted in reducing environmental impacts, as well as an annual cost savings of approximately \$12,000.

Challenges facing the department include:

- Increased waste removal and recycling resulting in swelling workloads for employees.
- The addition of three new buildings in the past four years has expanded the list of spaces to keep clean.
- Caretakers often clean up construction areas once contractors are done as construction crews tend to not have the same cleaning standards as the Caretaking department.

### Electrical

In order to provide efficient, safe and cost effective electrical services to the University community and its guests, the Electrical department delivers specialized technical expertise along with problem solving and repair skills. The department maintains the electrical systems, emergency power and fire alarm systems, heating and cooling plant, card access and commissioning/project support.

A significant green initiative this past year saw the replacement of the corridor quartz track lighting with compact fluorescent lighting of the same colour. This change provided an annual savings of approximately \$8,800 to the University as well as a reduction of 98 megatons of CO2 per year.

The Electrical department is under constant pressure to maintain the numerous systems on and off campus. With the present peoplepower, timely preventive maintenance to ensure systems continue to run smoothly is extremely difficult.

As the University continues to grow, the department faces higher expectations to complete urgent demand work quickly. Unfortunately, this pushes regular, vital, or preventive maintenance activities even further back.

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2011-12 hours of work completed:

Preventive Maintenance	1,163.05
<b>Demand Maintenance</b>	<b>5,099.20</b>

*Ideally, more hours would be spent on preventive maintenance to avoid breakdowns and maintain systems at their best.*

As existing campus buildings age, their associated systems and equipment will require greater maintenance attention. Many of the main building electrical infrastructure systems have not seen an appropriate level of maintenance for up to 10 years; industry standard is two to three years.

Current challenges for the department include:

- Coordinating or acquiring appropriate resources to complete preventive maintenance during normal work hours and after hours;
- Difficulty maintaining campus systems as supplies or material costs increase while budgets remain unchanged or are reduced;
- Convincing the campus community building power shutdowns are a necessity to provide a reliable electrical infrastructure.

In 2011, fluorescent lighting costs increased nearly 250 per cent. The cost for lamps in 2011-12 was approximately \$16,000. That number is expected to increase to \$25,000 in 2012-13 with no increase in operating budget. In 2013-14 costs could rise an additional \$5,000. If the electrical operating budget becomes consumed by lighting, work in other areas will suffer.

Should budget reductions continue, the impact to services on campus will be significant. Repair times will stretch, project commissioning and support will decline, and delays to already overdue maintenance will be further postponed.

Despite these challenges, the Electrical department has stayed on top of critical emergency and life safety system maintenance. Staff has been diligent in making all efforts to resolve or correct demand issues in a timely manner and have received excellent results from Customer Satisfaction Surveys.

### Mechanical

The Mechanical department is tasked with providing efficient, safe and cost effective utility services to the University community. The majority of these systems are on-site utility systems such as building plumbing and mechanical systems, area sprinkler systems, heating and cooling plants.

The department is responsible for ensuring uninterrupted operation of all mechanical systems and auxiliary equipment.

The past fiscal year has been a busy one for the department. Activities included:

- Commissioned several projects such as UCA upgrades, the Canadian Centre for Behavioural Neuroscience (CCBN) building addition, PE building mechanical upgrades, and the housing project in University Hall on Level 4 in Blocks D and E.
- Researched enhanced air filtration systems as well as plumbing fixtures (metering taps) and implemented changes to reduce costs and provide improved services.
- Ongoing work on boilers 1, 2 and 3, replacement of tubes, safety valves, pressure tests, and work with the boiler inspector (certificates, updating equipment and annual inspections).

Ongoing demands of preventive maintenance work have the Mechanical department struggling to keep its head above water. Demand maintenance situations must be addressed immediately which disrupts work schedules and introduces inefficiencies. The increasing workload on demand maintenance has caused a decrease in preventive maintenance work which leads to failures in equipment and systems, creating even more demand maintenance work.

While the Mechanical department deals with these constraints, the team continues to address demand work through prioritization and developing an effective preventative maintenance program.

The Mechanical operations budget has seen no increase in the past five years. This has led to difficulty completing preventive maintenance tasks and demand work orders in addition to project management tasks.

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2011-12 hours of work completed:

Preventive Maintenance	4,088.70
<b>Demand Maintenance</b>	<b>6,730.75</b>

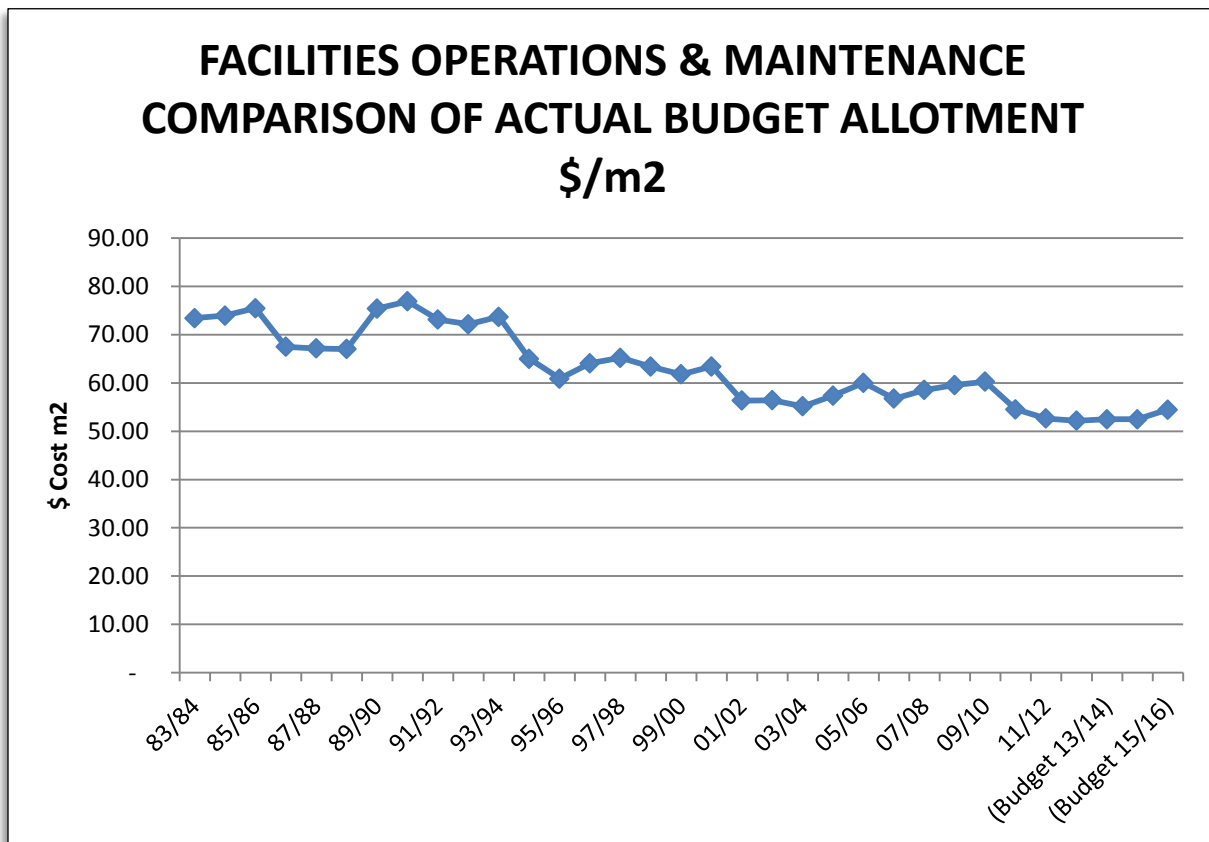
*It is preferable that more hours be spent on preventive maintenance to ensure systems are running smoothly.*

Should budget cuts continue, the workload for other workers who clean the mechanical, electrical, central plant and offices will increase. Preventive maintenance on fire hose cabinets, fire zone valves, kitchen grease traps will likely fall behind affecting the safe operations and the requirements of our insurer and fire inspectors.

### Operations and Controls

The Operations and Controls department’s responsibilities are made up of three components:

- Respond to demand and emergency requests for all building mechanical and control systems;
- Carry out preventive maintenance of all control and building environment systems;
- Oversee the major and minor projects that the department is directly involved in from infancy to completion, and monitor the project once it’s complete.



A significant achievement this past year was the changeover of the Central Plant boiler controls with updated technology. The existing boiler controllers were no longer supported with retrofits and required the assembly of a new controller with the necessary components and wiring. Performing this task in-house provided a significant cost savings to the University.

Going forward, the department will face more challenges as existing infrastructure in older campus buildings come to end of life. System components are beginning to fail and need to be replaced. The age of the equipment means direct replacement components are not always available and new technology devices or components have to be retrofitted or completely replaced.

Lack of resources and peoplepower has been a challenge for the Operation and Controls department for a number of years. At present, the department has been trying to maintain the needs of the University community with six staff, one of which is tasked on all major and minor projects enabling the other five staff to focus on the demand and preventative maintenance work requests. The trend in this regard is a continuous cycle of dealing with immediate demand maintenance tasks leaving less time to do preventive maintenance that would keep systems from failing unexpectedly.

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2011-12 hours of work completed:

Preventive Maintenance	601.00
<b>Demand Maintenance</b>	<b>4,755.15</b>

*When demand maintenance hours outweigh preventive maintenance hours, systems are in a position to deteriorate quicker than if they were frequently maintained, thus starting a cycle of continuous demand work with no time for regular maintenance.*

With the continued growth of the campus and the staffing status quo, the expectations of the Operation and Controls department will need to be re-examined as the department is not able to complete tasks in a timely manner which was previously expected.

### Grounds

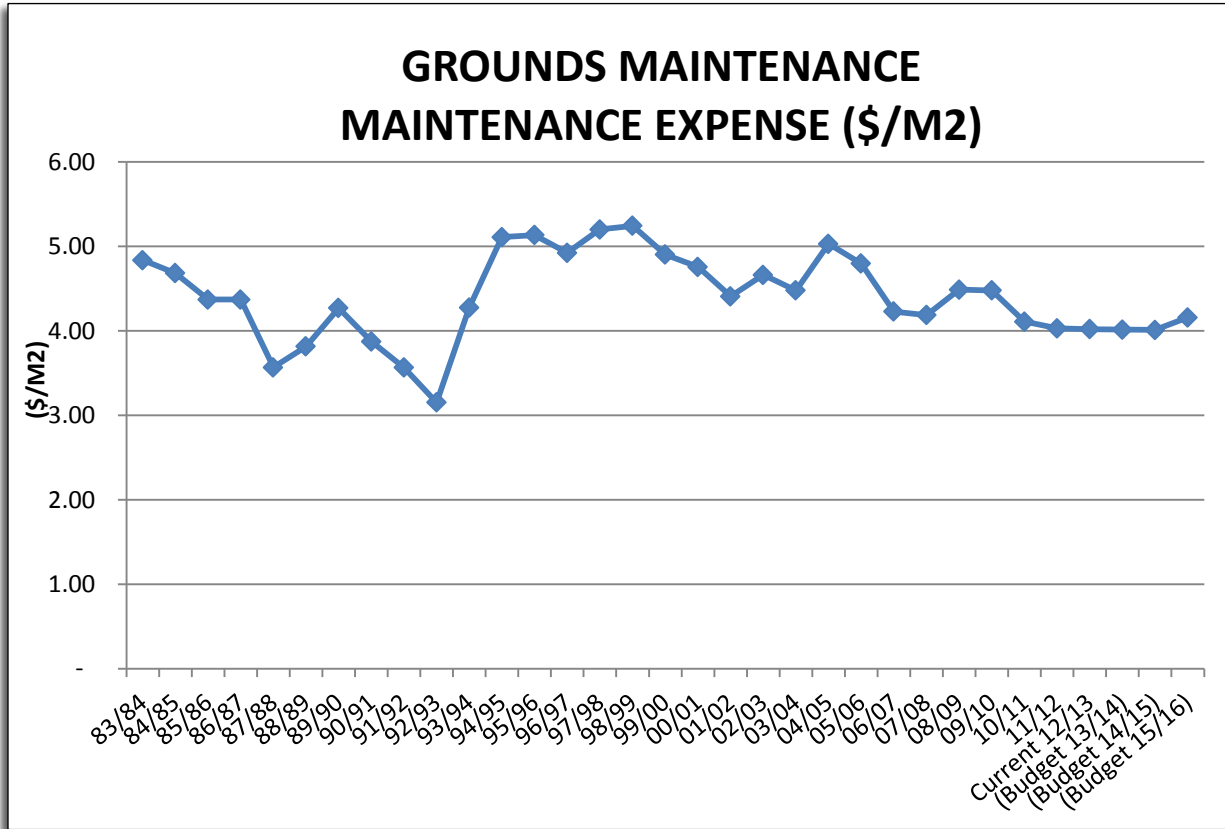
The Grounds department is responsible for developing and maintaining campus exteriors including landscaping, grounds cleanliness and signage.

Past year activities included:

- Replaced 17 dead trees west of the Alberta Water and Environmental Science Building with new trees from our nursery.
- 837.5 hours were spent on repairing the irrigation system in all zones, as well as evaluating the precipitation rate. However, more work is required as there was not enough peoplepower to properly assess precipitation rates and watering efficiency.
- Limited parts of the campus were fertilized to correct soil deficiencies with good results.
- Helped with setup for events including Chillin' for Charity, Last Class Bash and more.



- 75 elm trees were moved from the site of the new residence. These required staking, pruning, fertilizing and mulching. These should add to the beauty of campus for many years. Some of the trees were placed into a nursery for later use.



Due to the routine nature of its tasks, Grounds is one of the few departments in Facilities where preventive maintenance hours outweigh demand maintenance.

2011-12 hours of work completed:

Preventive Maintenance	10,998.75
<b>Demand Maintenance</b>	<b>1,661.25</b>

*Preventive maintenance in this department is the norm in order to continually upkeep the campus’s physical outdoor environment. Rarely does Grounds get a call for demand work, such as emergency lawn mowing.*

Due to rising input costs, and no increase in funding to run the department, Grounds has had to make concessions in delivered services.

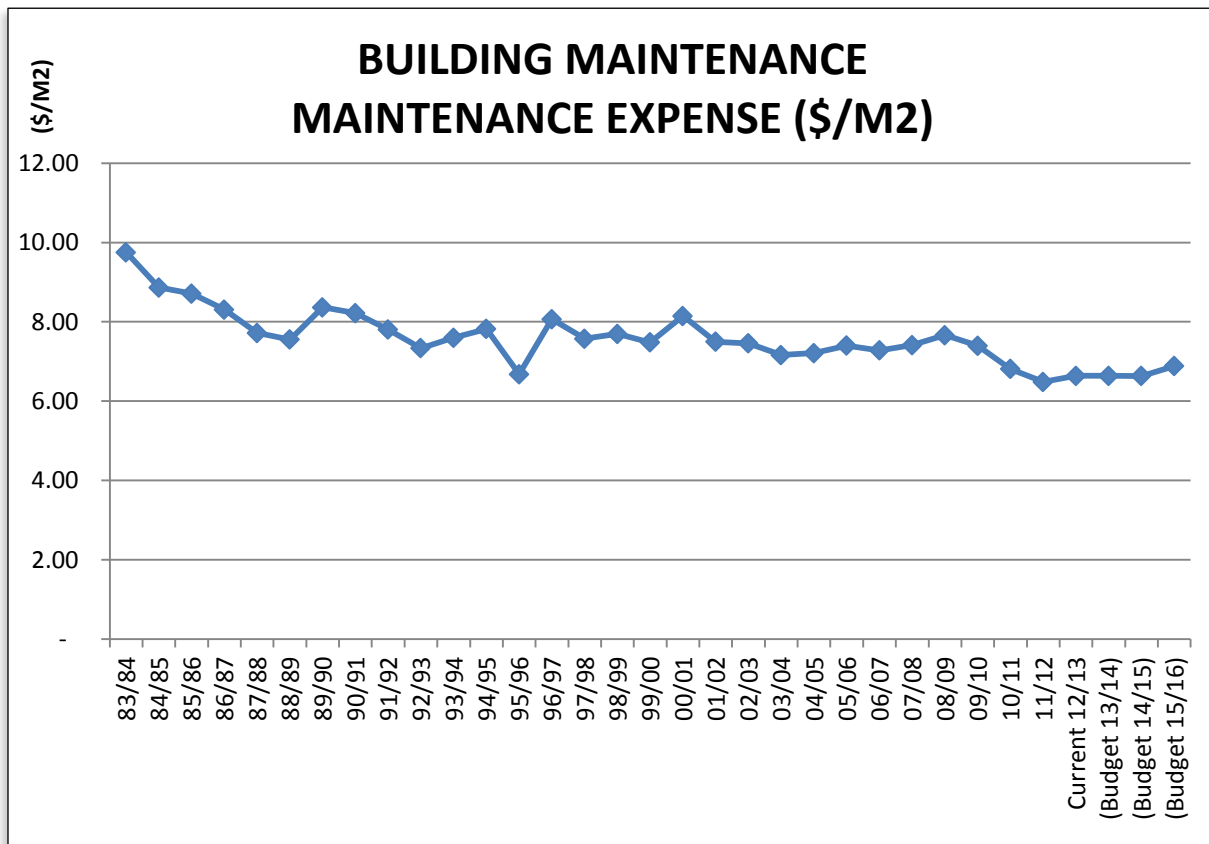
In order to address the limited peoplepower, staff worked on sustainability initiatives throughout the summer of 2012 to “re-naturalize” the campus. Existing materials were removed or replaced so grounds can be more easily maintained next year with less staff.

Should budget cuts lead to staff reduction, the result will be a continued deterioration of exterior maintenance represented by less frequent mowing, increased weed invasion and diminished appearance impacting students, staff, faculty recruitment and retention.

### Building Maintenance

The Building Maintenance department carries out demand, preventive, emergency or corrective maintenance on building site system components that form the integral part of the normal building. This includes interior finishes, flooring, ceilings, architectural and structural issues and building exteriors.

Other related responsibilities include distribution of goods on campus, special event set-ups, facility signage, drywall repairs and painting, furniture replacement, office furniture relocations, and issuance of keys.



The past year was a challenging one for the department due in part to the expanding workload of supporting and commissioning services provided for capital projects, as well as taking on a number of smaller in-house renovation and restoration projects. As well, several larger capital projects were managed by the department.

The addition of new campus buildings over the past several years has increased the Building Maintenance department’s volume of work. Despite the challenges, Building Maintenance diligently worked to sustain the condition of the facilities in a safe, functional and inviting environment.

The department has been fortunate to be able to maintain all demand and preventive maintenance, and repair tasks including special event set-ups in a timely manner without any backlogged work orders.

2011-12 hours of work completed:

Preventive Maintenance	6,908
Demand Maintenance	2,665

*It is preferable that more hours be spent on preventive maintenance to ensure tasks are completed in a reasonable amount of time.*

Although Building Maintenance has been able to keep up with maintenance requests, potential departmental budget cuts could affect the services normally provided. Priority would be given to emergency and safety-related work orders. Backlogs will likely occur for work orders for furnishings, office rearranging, minor building repairs, and lamp replacements in corridors, offices and classrooms. In order to keep up with the volume of demand work orders, preventive maintenance inspections of roofs, washrooms, corridors and classrooms will also be backlogged, if performed at all.



*Facilities is made up of more than 130 staff that work together to provide quality service to sustain the U of L’s physical facilities while enhancing the campus environment to inspire excellence among the University community.*

## Campus Planning & Architecture

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Campus Planning and Architecture (CP&A) is a newly created unit within the Facilities department.

In October 2011 the former Planning and Capital Projects department was segregated into the Project Management Office (PMO) and the CP&A. The separation was an acknowledgement of the unique differences between the planning and implementation of capital project work.

The CP&A department is tasked with campus space management which is applied through two distinct avenues. One is the initiation and planning of all capital projects and renovations. The other is the analysis and provision of data, and guiding space planning decisions. These initiatives are accomplished through capital project definition and development, capital and space planning, and campus planning and analysis. The department ensures the effective and efficient use of space and guides growth by adhering to the Campus Master Plan and supporting strategic initiatives led by senior leadership.

The department is currently involved with several initiatives including a significant update to the University Campus Master Plan, strategic planning for projects such as the Destination Project, which includes the subsequent University Hall renewal; the Library and Learning Commons project; a First Nations Gathering Centre; and a Visual Arts Study Centre.

### Current Projects

**Campus Master Plan** – Three conceptual design alternatives of the campus plan were presented to Facilities representatives and senior leadership on May 1, 2012. A public open house was also held, and presentation material was provided on the website. A draft Master Plan was presented for final review and adoption in December 2012.

**The Destination Project** – To continue to excel in research and to grow our comprehensive institution with more emphasis on graduate student education, the U of L requires new facilities that will provide more dedicated space for these programs and functions. The final Key Parameters draft document was published in May 2012. The next stage of the process will include a detailed functional programming phase and involve upwards of 15 consultative task/user groups from across campus with specific mandates (i.e. learning spaces, research labs, etc.).

**University Hall Renewal** – Inception planning for this next component of the Destination Project is now underway. The first round of consultations with current University Hall users has already taken place. The consultants will begin to formulate a concept for the building's use for review and contemplation with senior leadership at a later date.

**Library and Learning Commons** – The first meeting of senior leadership consultation took place this in the spring of 2012. Four meetings over a period of at least eight weeks brought about a Key Parameters document which defined the project. Consultation with stakeholders and user groups will take place throughout 2013 after which a budget request will be submitted in order to move on to Phase 2.

**First Nations Gathering Centre** – Preliminary internal planning work has begun. A modified inception planning/key parameters process is anticipated this year, which will involve the consultation of key groups on campus as well as with local First Nations communities.

In addition to these projects, development work is underway for more than 40 requests, including the ventilation upgrades to CCBN, the Transgenic Mice Facility in CCBN, further development in the Penny Building, and storage and seating in PE110.

Currently, the unit is facing challenges in the development and implementation of intensive planning processes and addressing the volume of planning initiatives. With the expanded focus on planning, the unit is adjusting processes to accommodate planning models which translates into impacts on efficiencies. Also, with several major initiatives underway, as noted earlier, the resources of the unit are currently beyond capacity which will be remedied over time.



*The CP&A department presented a comprehensive University Campus Master Plan in December 2012 to the Board of Governors. The plan aims to provide a compact campus with a pedestrian focus.*

## Project Management Office

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The Project Management Office (PMO) was formed in October of 2011 combining the Major Construction Projects Unit and the Project Management Unit. The PMO has 7.5 employees that will oversee more than \$30 million in construction in the 2012-13 fiscal year.

The PMO is responsible for the project management phase of campus construction and renovation projects. Its primary role is to work with CP&A to turn stakeholder requirements and requests into functional and programmable spaces. To accomplish this, the PMO develops project budgets, prepares tender and contract documents, and negotiates and manages professional services agreements with consultants and contractors. Once a contractor has been selected, the department then oversees and administers all aspects of the construction work up to and including the final move in.

### Projects

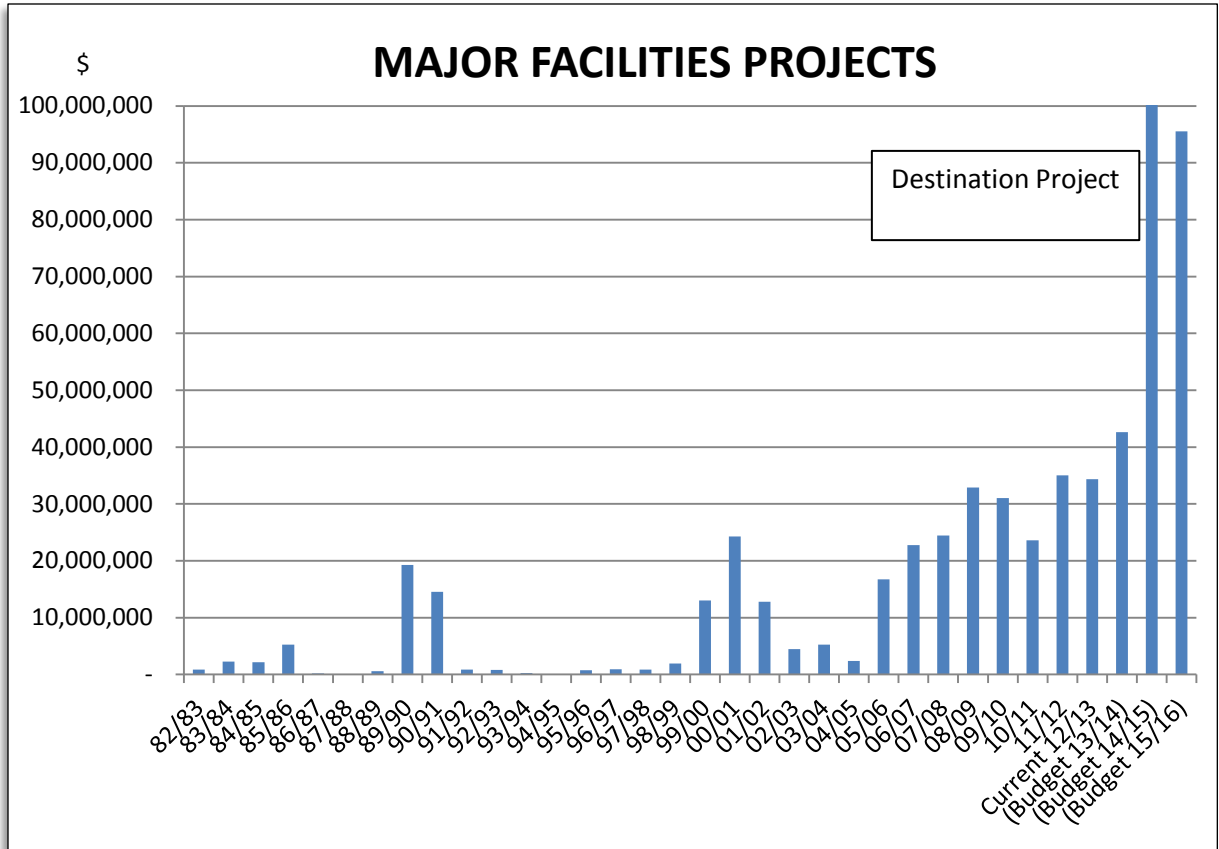
The PMO manages both major (>\$1 million) and minor (<\$1 million) projects, with each project manager being responsible for at least one major, and between four and eight minor projects in a fiscal year.

*The following is a list of the major projects that the department has been involved with over the past year:*

- Regional Aquatic Centre Facility Upgrade (\$5.4m)
- University Centre for the Arts Air Quality Environmental Deficiency Phase 1 (\$4.6m)
- University Hall Level 4 C, D, E Renovation for Residence (\$3.4m)
- Kainai House Interior Renovation (\$1.9m)
- CCBN Westside Addition (\$1.3m)



*The construction of a new, 259-bed, apartment-style residence is one of the PMO's largest capital projects. The new facility is set to open August 2013.*



The department is very active with several large projects, as well as numerous smaller renovation and alteration projects. The end of the 2011-12 academic year saw the Project Management Office implement the construction phase of eight significant projects in addition to numerous other minor projects already underway.

Details of these minor projects are shown in Appendix 1 on Pages 29-30.

The PMO continues to work hard to ensure all projects are delivered on time, on budget, and to the satisfaction of the stakeholders. One of the main challenges for the PMO is renovating aging buildings and infrastructure to meet the continuously evolving teaching and research needs at the U of L. . A major challenge is also renovating spaces with users and stakeholders in close proximity or while the space is occupied and the PMO strives to keep disruptions to a minimum. The growing sophistication of stakeholder needs has caused the PMO to increasingly rely upon external consultants for many services. This has led to continual pressure on project timelines and issues regarding the quality of work being received from the consultants.

The PMO is working towards incorporating enhanced technology into its current project management methodology to ensure a consistent and coherent approach. The department is also reviewing all of its processes, with the aim of utilizing existing and new software to streamline the way projects are managed.

## Infrastructure & Engineering

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Infrastructure and Engineering is responsible for developing and maintaining the structural monitoring program for University buildings and their deferred maintenance backlog and budget; prioritizing deferred maintenance work for submission and capital approval; and executing approved infrastructure projects.

The department works closely with the Alberta Infrastructure to coordinate accurate funding data and reporting requirements.

The 2011-12 year saw completion of engineering audits of building systems and components for CCBN and University Hall.

The 2011 budget was set at \$13.5 million for 48 projects, 14 of which were completed with a value of \$12.5 million.

Projects included:

- University Hall Exterior Rehabilitation (\$2 million)
- Ventilation, Lighting and Elevator Upgrades (\$5.5 million)

Although the department strives to reduce its deferred maintenance backlog, lack of staff means the department cannot catch up as quickly as it would like. Total deferred maintenance is currently more than \$96 million.

As a result of limited processes and tools, developing, administering and supervising budgets, programs and projects has been a challenge. Even so, consolidation of engineering and financial project tracking requirements remains a priority.

Enhancing environmental sustainability and lowering operating costs for approved work is another challenge.

A substantial amount of hours has been invested in researching, sourcing, and completing costs and emissions analysis for mechanical and electrical equipment that can be replaced for lower capital, operating and maintenance costs, while also increasing life cycle and reducing environmental impacts.

Looking ahead, monetary and peoplepower requirements will continue to escalate as the number of University assets increase and age. Supervisory and control requirements of the various processes and programs to maintain those assets will also need to be addressed.



## Security & Parking

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Security and Parking Services is committed to providing and maintaining a safe and secure environment that serves to enhance the quality of life for students, employees and visitors to our campus.

During the last two years, the department has undergone significant changes to address the evolving needs of the campus community and to ensure that services are delivered to match the University's strategic direction in an efficient manner.

Security and Parking Services manages five generic areas:

- Security Operations - providing 24-7, campus-wide patrols, static building security, communications dispatch and electronic security monitoring and response.
- Secure Access - providing installation and technical support for intrusion alarm systems, cameras and card access control services.
- Crime Prevention and Community Relations - providing campus safety initiatives and crime prevention programs focused on education and awareness, outreach and training. Community relations provides aftercare services to those who have experienced a personal security situation, operates the campus lost and found services, and facilitates the Safe Walk program.
- Parking Operations - providing special event services to enhance community access and safety, maintain traffic flow and ensure compliance with community standards.  
Risk and Safety Services – providing accident/incident reporting, waivers, insurance administration; alcohol services monitoring, hazard assessments, occupational health and safety, and international travel programs. The unit is also responsible for the risk evaluation of activities; providing specialist advice, procedures, and programs designed to mitigate the risk and enhance the safety and reputation of the university.

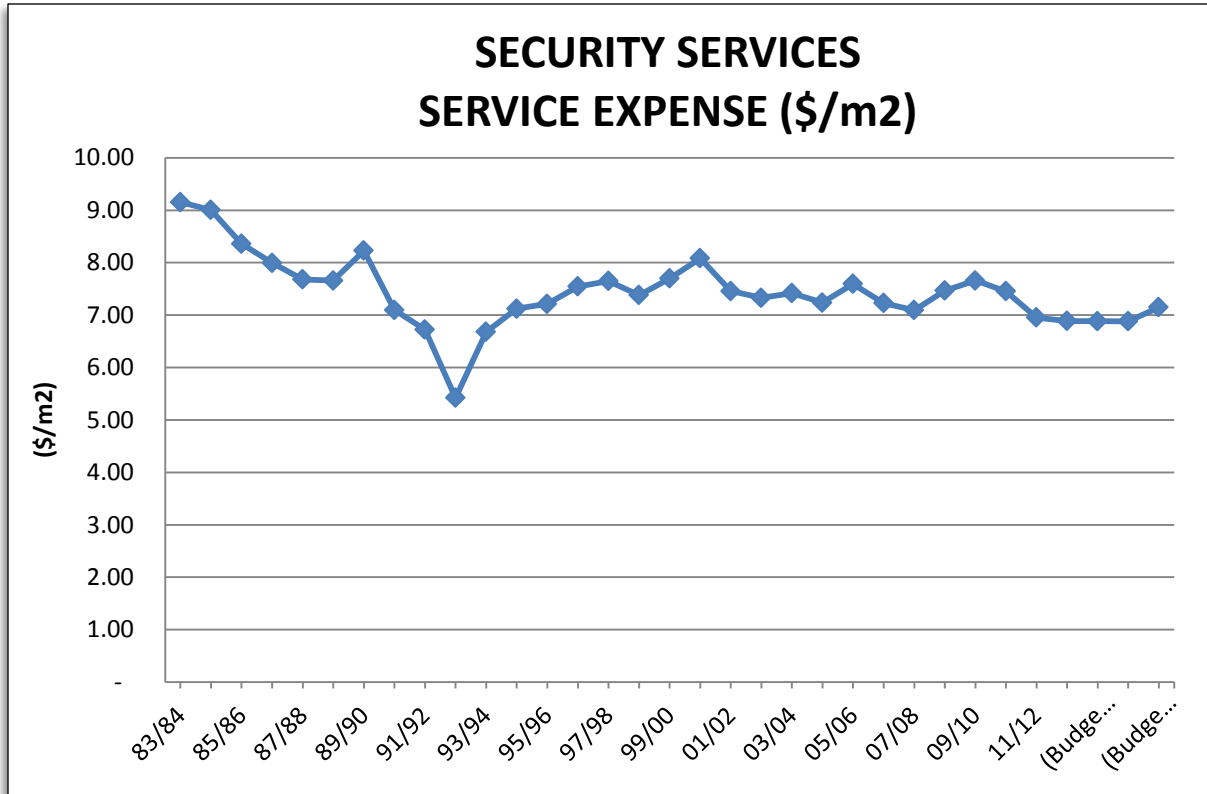
### Security Operations

During 2011, the department was led through a series of transitions resulting in structural, operational and cultural changes. Some examples of the recent and continuing changes include:

- The appointment of front-line Shift Commanders.
- Realignment and renaming of Security Investigators to Security Supervisors to more accurately reflect the work of these positions.
- A change in the department hiring strategy.
- Transfer of duties from the Security Manager to the Security Supervisors.
- Part-time operation of a Security Command Centre.

The three main challenges Security faces are retention and recruitment, increased demand for services, and competition.

While the department has been successful in stabilizing the turnover rate, we continue to compete with the oil and gas sector where wages are much more competitive (\$15 per hour locally vs. \$25 per hour in oil and gas).



In 2010, Security provided assistance to 302 on-campus events, in 2011 this increased to 322. As the University continues to grow, more community-based safety and crime prevention programming need to be considered.

Major deliverables for Security Services in the next year will include:

- Leading a project to develop and design an all-hazard Emergency Response Plan.
- Reviewing and implementing the recommendations of the 2011 Security audit.
- Complete the Fire Safety Information Centre (FSIC) program.
- Implement a risk-based intelligence led patrolling strategy.

### Parking Operations

For the 2011-12 fiscal year, Parking Services generated revenue to closely match its budget request. Excess revenue was placed into reserves to fund future capital requirements.

During the same year, the department issued 4,826 term permits. This total includes permits issued to students, faculty and staff for annual eight-month and semester permits.

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Revenue sources:

Cash sale term permits	\$744,678
Payroll deduction permits	\$343,193
Dispensers, meters and visitors	\$182,852
Parking ticket fines	\$93,200
Total	\$1,363,923

Capital improvement expenses were \$421,038. Efforts this year were directed towards access improvements to the Lot L (Level 6) parking area at the north end of University Hall. The cost of construction was \$319,747. In addition, \$178,403 was expended for consultant engineering and design fees related to the redevelopment of parking areas on the west side of campus. The primary reason for the redevelopment of the parking lots was to improve storm water management and pedestrian safety. Construction within this project will be completed by the end of summer 2013.



*A significant redevelopment of the western parking lots saw the construction of storm water management systems, as well as newly paved roadways and a new entrance to Lot E.*

## Conclusion

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As our mission statement reads, Facilities strives to provide the highest quality environments for the University's students, faculty and staff. We enjoy an engaged and motivated front line staff who produce tremendous results as demonstrated by our KPIs. As our most experienced staff near retirement it will be critical that succession planning take place and we attract the next generation of Facilities professionals.

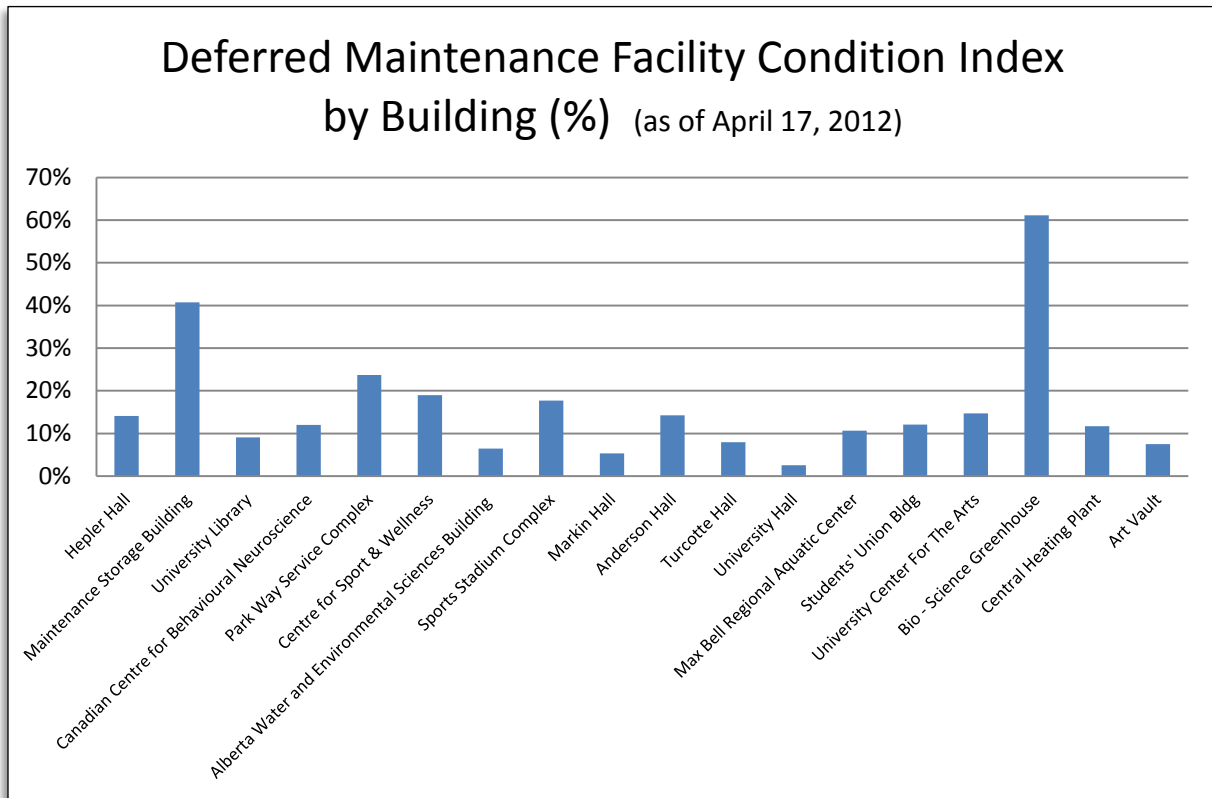
During recruitment, first impressions of the physical campus play a big role in a potential student's decision on whether or not to attend the University of Lethbridge. Their perception of the U of L is reality and our opportunity to influence that decision is directly related to the ability of Facilities to carry out its mandate.

Previous year's budget reductions have stretched our resources and increased risks to operations and projects. Facilities has been peeling at its resources to diligently streamline services in an efficient and effective manner. However, the time will arrive where the department can no longer continue on that path. We are at the tipping point where in the future we will "do less with less."

An area of increasing risk to our mission is the accumulated deferred maintenance workload. Currently there is more than \$96 million in deferred maintenance costs within campus buildings that will need to be addressed before they become a hindrance to the University.



## Facilities Condition Index



*The Facility Condition Index (FCI) is an indicator of the relative condition of a facility expressed as the percent of deferred maintenance compared to its replacement value. A high index indicates a state of condition that requires attention. (Government of Alberta Ministry of Infrastructure)*

U of L's Facility Condition Index (FCI) for supported building sits at eight per cent, which means all buildings on campus are in need of repair.

Evaluation of preventive and demand maintenance across the Facilities department shows an unbalanced operation. Should this trend continue, more and more systems will breakdown resulting in an increasing inability to provide timely and efficient services to other areas on campus. In short, the negative impacts will completely overshadow the positive influences Facilities has at the U of L. We look forward to the coming year and the challenges and opportunities that will develop.

We remain confident in our ability to effectively support the mission and strategic goals of the University.

## Appendix – 2012-13 Minor Capital Project Dashboard



### 2012-13 Minor Capital Project Dashboard

December 2012

	Project Sponsor	Approved Budget	Project Status	Project Health	Project Manager
<b>Project Management Office</b>					
CSW Climbing Wall Ventilation Upgrade	Sandy Slavin	25,000	Close out		Bill Hudgins
AWESB Fish Lab Pipe Installation	Chris Eagan	20,000	Close out		Bill Hudgins
RAC Heat Exchange Revision	Brian Sullivan	20,000	In progress		Bill Hudgins
Stadium Electronic Signage	Sandy Slavin	50,000	In progress		Bill Hudgins
Power Point Helen Christou Gallery	Fred Greene	700	In progress		Bill Hudgins
Tim Horton's Cabinet	Jim Booth	5,000	In progress		Bill Hudgins
UCA L6 Interactive Gallery Wall	Fred Greene	3,100	In progress		Bill Hudgins
Structural Monitoring Program	Chris Eagan	380,000	In progress	\$	Brad Robinson
UH Breezeway Drainage Improvements	T.J. Hanson	100,000	Planning		Brad Robinson
Boneyard Electrical Cabling Replacement	T.J. Hanson	50,000	In progress		Brian Sullivan
UH Administrative Centres for A&S	Arts & Science	105,000	Close out		Greg Lacey
UH D724 Lab Equipment Install	Arts & Science	15,300	In progress		Greg Lacey
UH D710A Envelope Restoration	Arts & Science	10,000	In progress		Greg Lacey
WE1030 Lab Renovation	Arts & Science	200,000	In progress		Gene Lublinkhof
W850 Cabling and Card Access	Desmond Rochfort	20,000	In progress		Gene Lublinkhof
Food Services Infrastructure Consult	Jim Booth	50,000	Planning		Gene Lublinkhof
WE2001 Fire Curtain Replacement	T.J. Hanson	30,000	Planning		Gene Lublinkhof
TH Level 4 Education Alteration	Rick Mrazek	15,000	In progress		Jason Baranec
<b>Infrastructure &amp; Engineering</b>					
CAW Campus-wide telecom UPS Upgrade	Craig Bullock	225,000	In progress		Herb Wenzel
UH emergency power upgrade	T.J. Hanson	1,000,000	In progress		Herb Wenzel
PI Air Handling Unit	Herb Wenzel	8,600	In progress		Rod Gelleny
PI Domestic Water System	Herb Wenzel	16,000	In progress		Rod Gelleny
UH Roof Drains Replacement	Herb Wenzel	25,000	In progress		Rod Gelleny
CP Gas Metering Regulators	Herb Wenzel	30,000	Planning		Rod Gelleny
CP water cooling towers replacement	T.J. Hanson	340,000	Planning		Rod Gelleny
SU water heater replacement	T.J. Hanson	50,000	In progress		Rod Gelleny
UH Lab plumbing fixture replacement	T.J. Hanson	30,000	In progress		Rod Gelleny
UCA W6S2 Sprinkler System Preaction Valve	Herb Wenzel	12,000	Planning		Rod Gelleny
SU Replace Heating and Cooling System Pumps	Herb Wenzel	40,000	Planning		Rod Gelleny
<b>Maintenance and Operations</b>					
CP Upgrade Existing BMS 803468	T.J. Hanson	80,000	In progress		Rick Peter
HH M-Cell Controls Replacement	T.J. Hanson	100,000	Planning		Rick Peter
AH M-Cell Controls Replacement	T.H. Hanson	200,000	Planning		Rick Peter
WE2018/WE2024 DUCT Modification	Rick Peter	4,000	Close out		Rick Peter
UH Window Replacement	T.J. Hanson	44,342	In progress		Marty Gadd
UCA Floor Finishes Replacement	T.J. Hanson	89,023	In progress		Marty Gadd
GU Gushel Studio / Cottage Upgrade	T.J. Hanson	19,000	Planning		Marty Gadd
UH Floor Replacement	T.J. Hanson	21,000	In progress		Marty Gadd
UCA North Patio Concrete Pavers	T.J. Hanson	50,000	Planning		Marty Gadd

\$ Budget

🕒 Scope

🕒 Schedule

	Project Sponsor	Approved Budget	Project Status	Project Health	Project Manager
<b>Maintenance and Operations con't</b>					
UH Sewage Lift Fire Alarm System and Lighting	T.J. Hanson	5,000	In progress		Tal Meidinger
13.8Kv Fuse Breaker Coordination and Flash Study	T.J. Hanson	21,000	In progress		Tal Meidinger
CP Chiller 1 & 2 Breaker Replacement	T.J. Hanson	60,000	In progress		Tal Meidinger
Campus SCADA System	T.J. Hanson	53,000	In progress		Tal Meidinger
Energy Efficiency Lighting Conversion	T.J. Hanson	50,000	In progress		Tal Meidinger
UH Level 6A Open Area Lighting Upgrade	T.J. Hanson	5,500	In progress		Tal Meidinger
UCA Air Compressor Replacement	Terry Sutton	20,000	Planning		Terry Sutton
TH Upgrade washroom fixtures	T.J. Hanson	15,000	Planning		Terry Sutton
Replace Automatic Faucets (CSW)	Herb Wenzel	8,500	Planning		Terry Sutton
CP Chiller Overhaul	T.J. Hanson	55,000	In progress		Terry Sutton
CP Central Heating System Restoration	T.J. Hanson	250,000	In progress		Terry Sutton

	Project Sponsor	ESTIMATED Budget	Project Phase	Project Health
<b>Campus Planning &amp; Architecture</b>				
First Nations Gathering Centre	Andy Hakin	380,000	Pre-design	
Learning Commons Space Study	Andy Hakin	50,000	Initiation	
Destination Project	Andy Hakin	2,700,000	Initiation	
Campus Master Plan	Nancy Walker	125,000	Initiation	
Visual Art Study Centre	Andy Hakin	13,000,000	Initiation	
UH Fire Safety Upgrades	Chris Eagan	N/A	Pre-design	
UH Life Safety Projects	Chris Eagan	N/A	Pre-design	
ROSS Administrative Suite Enhancement (SUB1)	Judith Lapadat	N/A	Pre-design	
Tim Horton's Kiosk Location	Jim Booth	30,000	Initiation	
W570 Recital Hall Analysis and Estimate	Desmond Rochfort	25,000	Initiation	
Office of the AVP (Students)	Judith Lapadat	390,000	Initiation	
L1109 Remodel	Sheila Gilker	10,000	Initiation	
Campus Map Signage Upgrade	Nancy Walker	45,000	Pre-design	
Aperture Park Sidewalk Replacement	Jim Booth	400,000	Initiation	
Prentice Institute Suite Expansion	Dan Weeks	650,000	Initiation	
Informal Learning Spaces Planning Initiative	Nancy Walker	150,000	Initiation	
E620 IT Renovation	Clark Ferguson	95,000	Initiation	
Residence Precinct Planning Study	Nancy Walker	50,000	Initiation	
UH L6 Food Services Renovation	Jim Booth	20,000	Initiation	
M2100 Managment Renovation	Robert Ellis	70,000	Initiation	
UH Sewage Lift Alternator	T.J. Hanson	27,500	Initiation	
UH L6 Power Densification & Tiered Seating	Chris Eagan	N/A	Initiation	
SU Loading Dock Modification	Jim Booth	30,000	Initiation	
CCBN Chiller Overhaul	T.J. Hanson	60,000	Initiation	
L1172C Archive Fire System	Library Archivist	35,000	Pre-design	
UCA North Patio Renovation	Chris Eagan	1,200,000	Initiation	
UH Pre-cast Panels Connectors Study	Chris Eagan	100,000	Initiation	
UH Architectural Building Lighting Replacement	Chris Eagan	750,000	Initiation	

\$ Budget

📏 Scope

🕒 Schedule

