



# 2011-2015 Capital Plan

Approved by the Board of Governors March 17, 2011

University of  
Lethbridge



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## 1.0 EXECUTIVE SUMMARY

The University of Lethbridge updates its Capital Plan on an annual basis. The 2011-2015 Capital Plan forms the University's request to Government for funding of priority capital projects over the next ten years.

The Capital Plan continues to complement and respond to University of Lethbridge key strategic documents including but not limited to: its 2009-2013 Strategic Plan; the Comprehensive Institutional Plan; the Research Plan; and the Core Campus Expansion Plan.

The University of Lethbridge Capital Plan also strives to align itself with Government goals, business plans and other key Government strategic documents. University Senior Administration communicates regularly and works closely with Ministers and other Government officials to discuss the capital needs and priorities of the institution. These relations will continue to be important as the University sets new capital priorities and deals with issues affecting existing facilities.

The highest capital priority of the University of Lethbridge is a new science complex in order to deliver up to date science programs and accommodate the University's strong commitment to research. To continue to excel in research and to adapt to the 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. New science facilities would increase the capacity for training by providing space for principal investigators, new graduate and undergraduate students, and technical support personnel.

The University currently has 43 buildings on campus totaling 188,165 gross square metres (gsm) averaging 23 years of age. The University has identified approximately \$85 million in deferred maintenance projects over the next ten years. Due to the aging of the buildings, deferred maintenance on existing facilities continues to grow. Although the data shows that the University does maintain its facilities better than most other post-secondary institutions, the large existing deferred maintenance balance is still of concern for the University.

The University believes that energy efficiency and ease of maintenance are integral to the planning of all capital projects. The University follows the principles of Leadership in Energy and Environmental Design (LEED) in building sustainable facilities that are better for the environmental and at the same time minimizing the amount of ongoing maintenance costs to the University. The 1<sup>st</sup> Choice Savings Centre for Sport and Wellness is the first building on campus to officially receive the silver level in LEED.

## CAPITAL PRIORITIES SUMMARY

The University uses Alberta Infrastructure's BLIMS system for categorizing capital projects into Preservation, Expansion or New Facilities. The following are the University's identified priority capital projects. More information is described in section 3.0 "The Plan" and Appendix C.

TABLE 1: CAPITAL PRIORITIES SUMMARY

		Estimated Project Cost (Jan 2011 dollars)
<b>New Facility Projects</b>		
1	Science Complex	
	- Planning Fees	700,000
	- Science Facility	224,300,000
	- Central Plant Facility & Distribution Systems	30,000,000
		\$ 255,000,000
2	First Nations Gathering Centre	5,000,000
3	Distributed Learning Centre	1,300,000
4	Art Learning Centre	
	- Visual Art Study Centre	4,000,000
	- Art Gallery	26,000,000
5	Office/Classroom Complex	75,000,000
6	Research Transition Facility	10,000,000
	<b>Total New Facility Projects</b>	<b>\$ 376,300,000</b>
<b>Expansion Projects</b>		
1	Student Residences	25,000,000
2	Alberta Water & Environmental Sciences Building - Phase 2	24,000,000
	<b>Total Expansion Projects</b>	<b>\$ 49,000,000</b>
<b>Preservation Projects</b>		
1	Dr. Foster James Penny Building Upgrades (downtown facility)	6,200,000
2	Physical Education Building Upgrades	5,600,000
3	Tunnel & South Plaza Replacement	3,200,000
	<b>Total Preservation Projects</b>	<b>\$ 15,000,000</b>
	<b>TOTAL PRIORITY CAPITAL PROJECTS</b>	<b>\$ 440,300,000</b>
<b>Projects in Progress</b>		
1	Deferred Maintenance Projects	12,857,500
2	CCBN Expansion	1,419,727
3	Student Residences - University Hall (62 beds)	3,476,100
4	Student Residences - Kainai Apartments (37 beds)	1,823,900
	<b>Total Projects in Progress</b>	<b>\$ 19,577,227</b>

Note - Estimated Project Costs are in current dollars (January 2011) and will be adjusted depending on construction start dates.

## 2.0 INTRODUCTION

The University of Lethbridge updates its Capital Plan on an annual basis for submission to the Government of Alberta. The Capital Plan is used to help inform the Government on key initiatives and directions of the University. This version of the Capital Plan will share information about our current situation, provide a review of the previous year and then discuss our capital priorities and key initiatives over the next ten years.

The Capital Plan continues to complement and respond to University of Lethbridge key strategic documents including but not limited to: its 2009-2013 Strategic Plan; the Comprehensive Institutional Plan; the Research Plan; and the Core Campus Expansion Plan. There are also many key drivers of the capital plan that the University monitors closely and plans for accordingly, including: additional program space requirements; staffing levels, deferred maintenance; Infrastructure Maintenance Program (IMP) funding; the University's operating budget and student enrolment expectations.

The University of Lethbridge Capital Plan also strives to align itself with Government goals, business plans and other key Government strategic documents. University Senior Administration communicates regularly and works closely with Ministers and other Government officials to discuss the capital needs and priorities of the institution. These relations continue to be important as the University sets new capital priorities and deals with issues affecting existing capital facilities.

The University of Lethbridge aligns its capital priorities with the Government of Alberta's key objectives, as outlined in the January 29, 2008 *Alberta's 20-Year Strategic Capital Plan*:

- *Expanding access to meet the projected demand in the Alberta Access Plan through individual Institution Access Plans and their inclusion in the broader Alberta Access Plan.*
- *Ensuring the necessary capital maintenance and renewal of existing and planned post-secondary facilities.*
- *Developing and enhancing technology programs to meet the demands of an increasing number of students and employers.*
- *Addressing key workforce challenges particularly in the health care field.*

### *Short-Term Plans and Priorities*

- *Accessibility for More Albertans*
- *Responding to economic growth*
- *Fostering economic diversity*

### *Medium-Term Plans and Priorities*

- *Technical Trades Training*
- *Health workforce*
- *Arts, Science and Technology*
- *Addressing ongoing needs for capital maintenance and renewal*

In addition to identifying the University's priority capital projects for Government, the Capital Plan also focuses on important issues like deferred maintenance, lights-on funding, space constraints and changing technology, all of which have an effect on the University's growing capital infrastructure.

## 2.1 REVIEW OF PREVIOUS YEAR

### 2.1.1 Major Capital Projects

The following projects were started and/or completed during the previous year:

Markin Hall: 10,383 gsm located in central campus houses the Faculties of Health Sciences and Management. \$50 million was received from the Provincial Government for this project, with the balance funded through a capital campaign and matching grants. The building was opened for the Fall 2010 semester (See Section 3.1.1 for project details).

Daycare Facility: The 418 gsm daycare facility was opened on January 4, 2010 with 54 childcare spaces, accessible for use by University students, faculty and staff. Students, faculty and the University of Lethbridge provided funding for the project.

### 2.1.2 Other Capital Projects, Renovations and Repairs

Dr. Foster James Penny Building: A 2,862.7 gsm building located in downtown Lethbridge was recently donated to the U of L. Space programming for the building will incorporate some of the needs for the Faculty of Fine Arts, University Advancement and the School of Graduate Studies, thus creating a downtown presence. Renovations are currently underway with a portion of the building now open.

### 2.1.3 Funded Capital Projects Summary

The following table shows the funded capital projects, both completed and in progress over the last ten years. Over the past 20-year period, the University funded 30% of the completed capital projects with 56% coming from government grants and research agencies. Section three of this document entitled "The Plan" will show that new, expansion and preservation projects will require the majority of funding to come from government grants and research agencies as the University does not have sufficient funds required for major capital projects.



#### 2.1.4 Highlights of Successes

2009-2013 Strategic Plan: The Updated Strategic Plan was released in January 2009. There was extensive consultation within the University community and external stakeholders in updating the plan. The updated plan will further strengthen the University's commitments of its Capital Plan. From the Strategic Plan:

*"We establish and sustain facilities for pursuing original research and creative activities, and conduct research in all disciplines, developing and sustaining centres of research excellence in areas where we have special expertise or that have particular relevance to the region.*

*We build mutually supportive relationships and partnerships with governments, institutions, communities, organizations, and individuals, to evolve and improve the value of the University to the region, the province, the country, and the world."*

Government funding for Preservation Projects: Advanced Education and Technology provided funding in part to be used for the preservation of supported infrastructure:

- \$20.5 M for the Safety Systems Upgrade project in University Hall;
- \$5.415 M for the Structure and Building Envelop project in University Hall.

Government funding for New Projects: Advanced Education and Technology provided funding of \$50.0 M for Markin Hall to accommodate the Faculty of Health Sciences and the Faculty of Management.

Other funding received for Capital Projects: The University has received funding to develop new programs and research initiatives. They include:

- \$25,000 from the Alberta Government for the Aboriginal Student Support Project.
- Dr. Bruce McNaughton was awarded \$10 M for the Polaris Award from the Alberta Heritage Foundation for Medical Research and it is projected that an additional \$10 M in matching grants will be received. He is one of the world's foremost brain scientists and will require a major renovation/addition to the Canadian Centre for Behavioural Neuroscience (CCBN) building located in Exploration Place.
- The University received \$8.1 M from Canada Foundation for Innovation (CFI) for research funding and required research capital needs at the University of Lethbridge. The grant includes funding for the Polaris Award program as well as funding for chemistry/biochemistry and biology research programs. Included in the grant is approximately \$1.5 M to be allocated to capital for the research programs.

## 2.2 CURRENT SITUATION

### 2.2.1 State of Assets

The University currently has 43 buildings on campus totaling 188,164 gsm and averaging 22.8 years of age. The following chart shows the breakdown by building age and area.

FIGURE 1: NUMBER OF BUILDINGS BY AGE

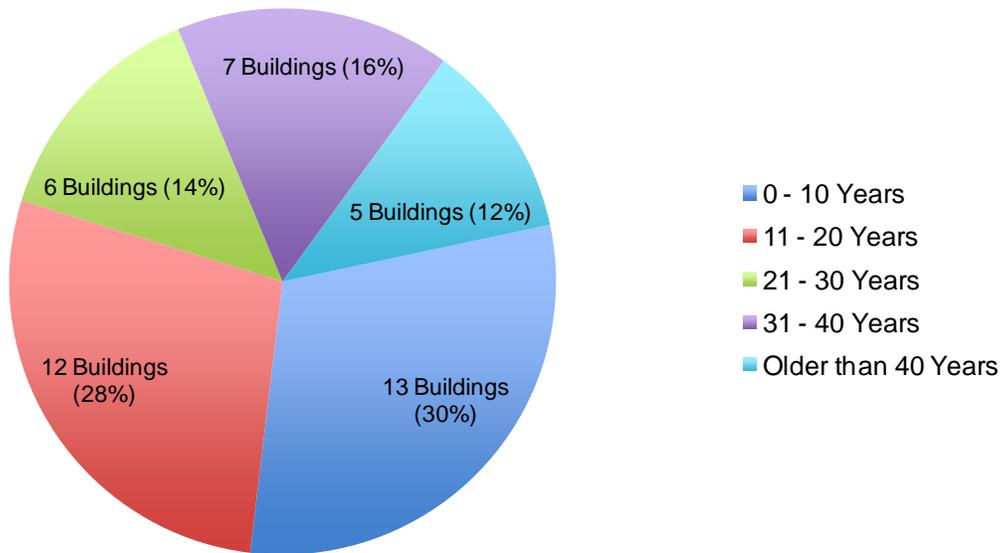
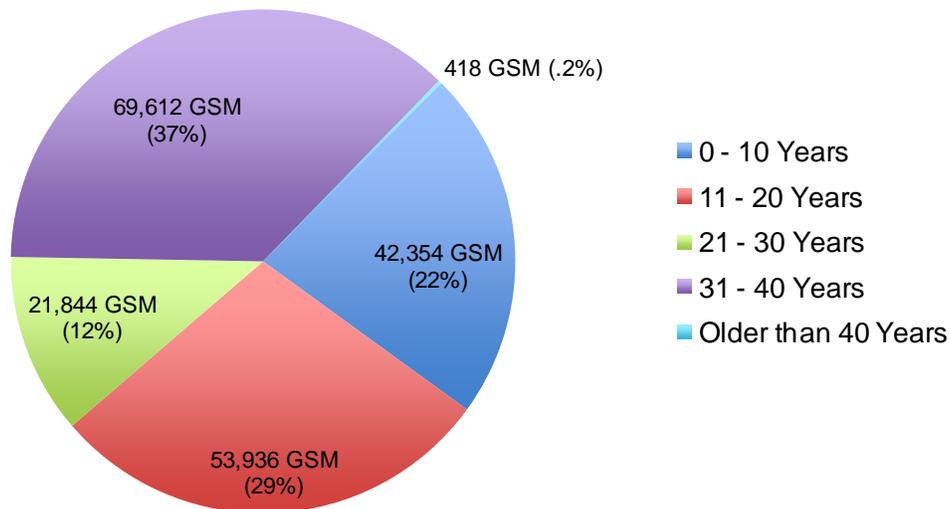


FIGURE 2: BUILDING GROSS SQUARE METRES (GSM) BY AGE



The following buildings were added over the past year:

- Daycare facility
- Markin Hall

### 2.2.2 Deferred Maintenance

In 2007 Advanced Education and Technology provided \$25,915,000 in capital grants to help address the deferred maintenance projects backlog. The majority of this funding is being used to reduce deferred maintenance in the University Hall structure, building envelope and safety system upgrades. The University has a Facility Condition Index (FCI) on all University buildings estimated at 10%.

The FCI is the ratio of the cost to correct current and future physical condition deficiencies, relative to current facility replacement values. The percentages are calculated by taking the deferred maintenance amount per facility by the facility's replacement cost.

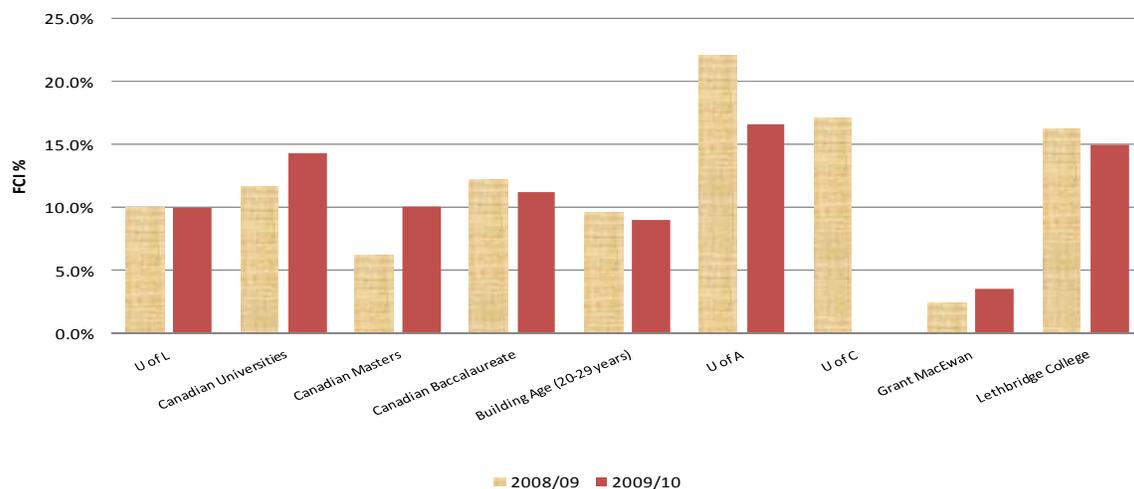
Alberta Infrastructure's interpretation of FCI values for building infrastructure is as follows (from Alberta Infrastructure's Annual Report 2009-2010):

Condition	FCI Definition	
Good	Facilities with an FCI of less than 15%	Adequate for intended use and expected to provide continued service life with average maintenance.
Fair	Facilities with an FCI that is equal to or greater than 15%, or equal to or less than 40%	Aging components are nearing the end of their life cycle and require additional expenditures for renewal or refurbishing.
Poor	Facilities with an FCI of greater than 40%	Upgrading is required to comply with minimum codes or standards and deterioration has reached the point where major repairs or replacement are necessary.

**Please Note: Data described in this section will vary slightly as a result of when it was reported and the way data is gathered for various sources.**

The following data was reported by APPA: The Association of Higher Education Facilities Officers:

FIGURE 3: DEFERRED MAINTENANCE BACKLOG BY INSTITUTION TYPE (APPA DATA)



Figures 4 and 5 show the total deferred maintenance on University buildings from data provided by Alberta Infrastructure as of March 2010. Total deferred maintenance was estimated at \$112 M. It is estimated that approximately \$49 M in deferred maintenance should be addressed between 2011 and 2014, including ancillary and residential buildings.

FIGURE 4: TOTAL DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY RENEWAL YEAR

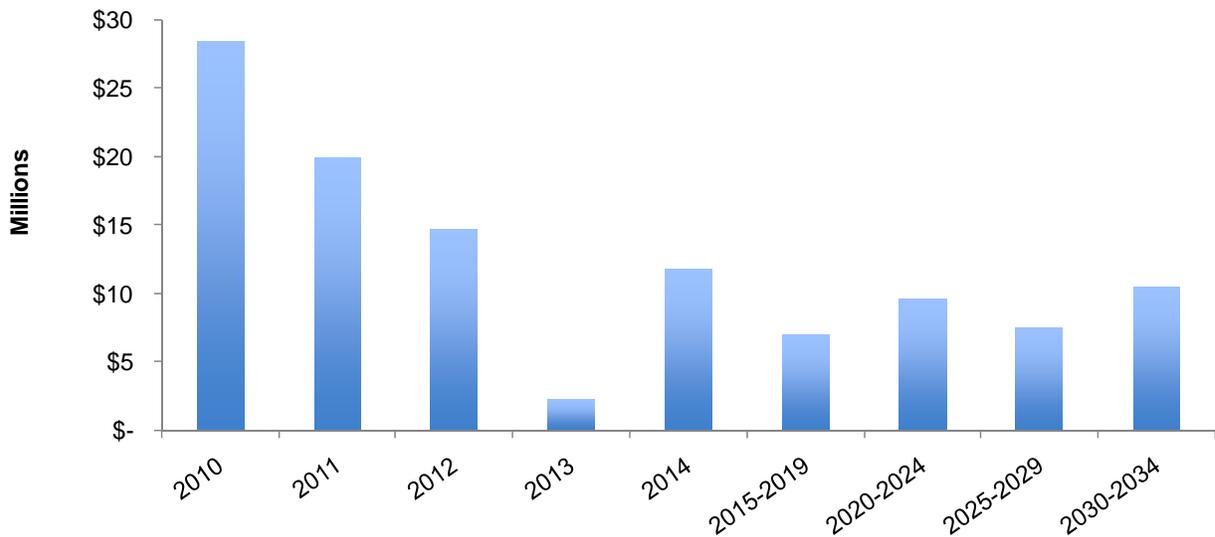


FIGURE 5: TOTAL DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY BUILDING COMPONENT

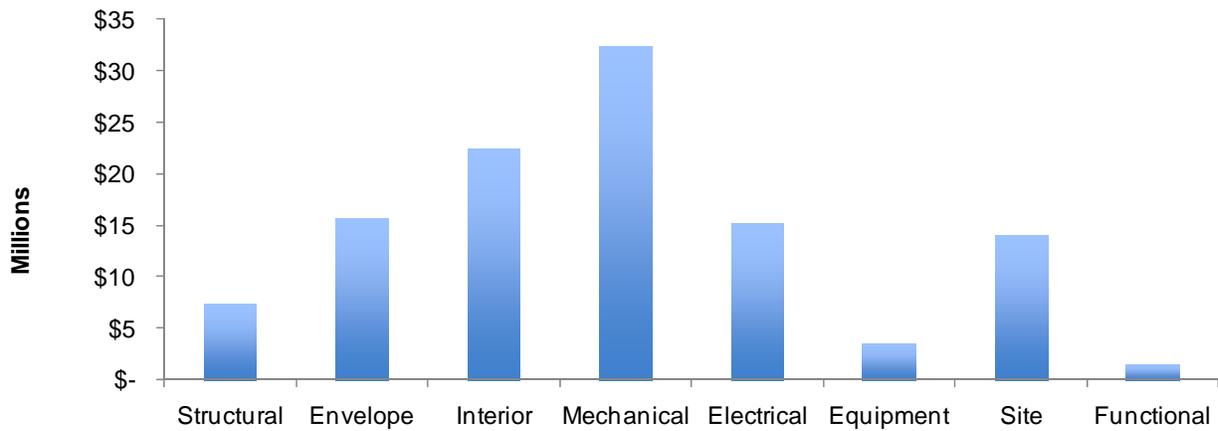
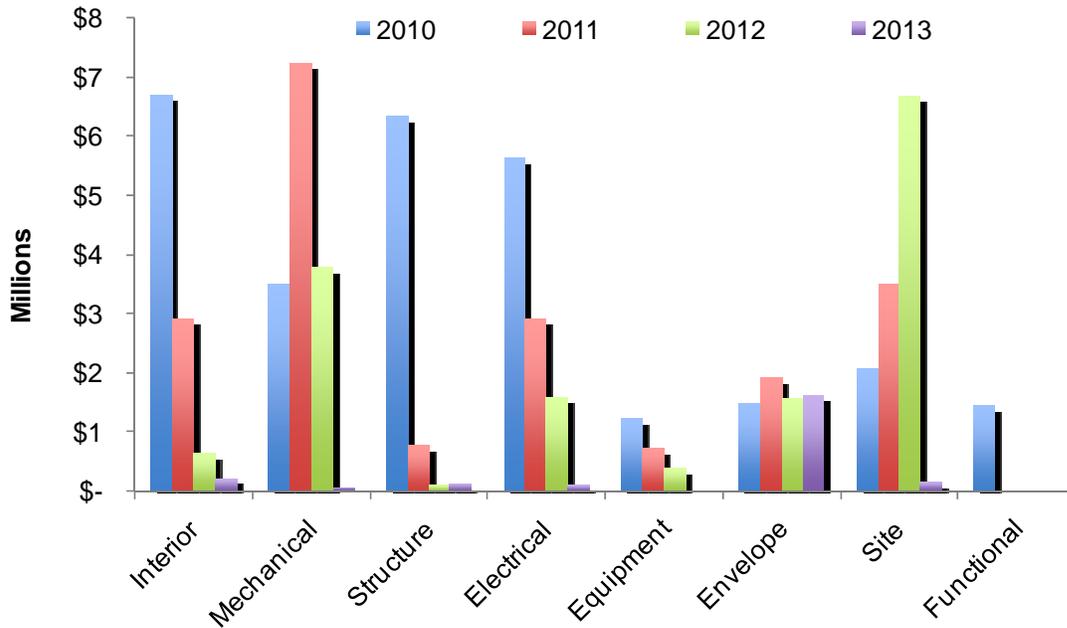


FIGURE 6: 2009-2012 DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY BUILDING COMPONENT AND RENEWAL YEAR

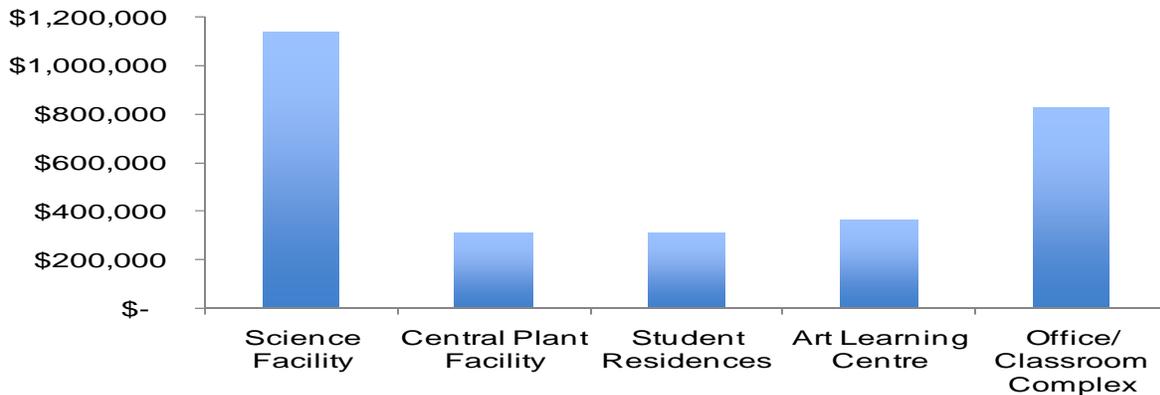


The University is grateful to Advanced Education and Technology and Alberta Infrastructure for providing funding support to help deal with these deficiencies. It continues to be a challenge to meet these escalating deficiencies.

#### Lights-on Funding

The University's Capital Plan includes the creation or expansion of the following major capital projects over the next five years: Science Facility; Central Plant Facility; Student Residences; Art Learning Centre; and an Office/Classroom Complex. It is estimated that \$3 M in lights-on-funding will be required to maintain these facilities once they are completed.

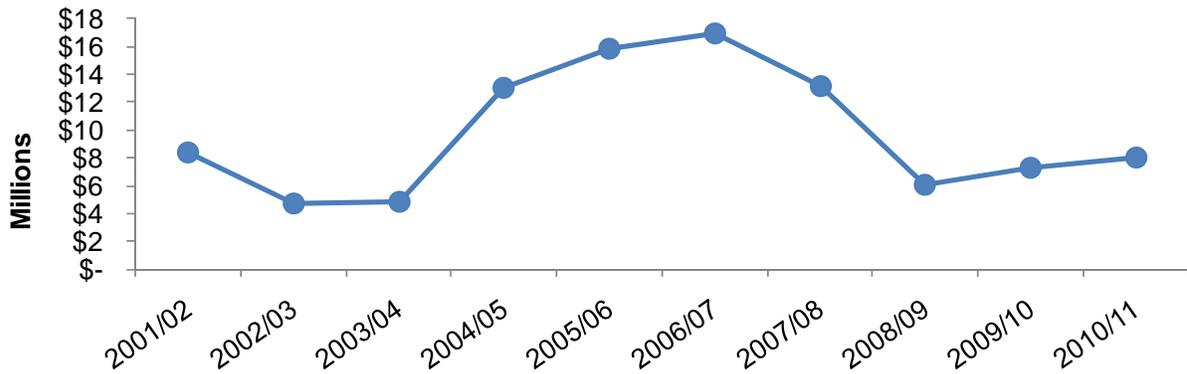
FIGURE 7: LIGHTS-ON FUNDING FOR MAJOR CAPITAL PROJECTS



### 2.2.3 Capital Reserves

University reserves are set up from time to time through one-time dollars to be used for special purposes. Over the years the reserve balances have increased and decreased in relation to the funding of various new building construction projects. In 1998/99 and 1999/2000, \$3 million was used from the capital reserves for the new Library building. The University cannot continue to rely on capital reserves to make up shortfalls in capital budgets. The following figure shows the last ten-year capital reserve balances for the University.

FIGURE 8: TEN-YEAR CAPITAL RESERVE BALANCES



## 2.2.4 Project Cost Escalations

Future cost escalations will likely continue to be an issue for the University and the Government. Shown in the table below is a forecast of what escalated construction costs may be over the next year, five years, and ten years, using a projected escalation of construction costs. Five years from the total Expansion and New Projects budget is estimated to be \$40 to \$115 million more and in ten years \$90 to \$269 million more than the current estimated construction costs.

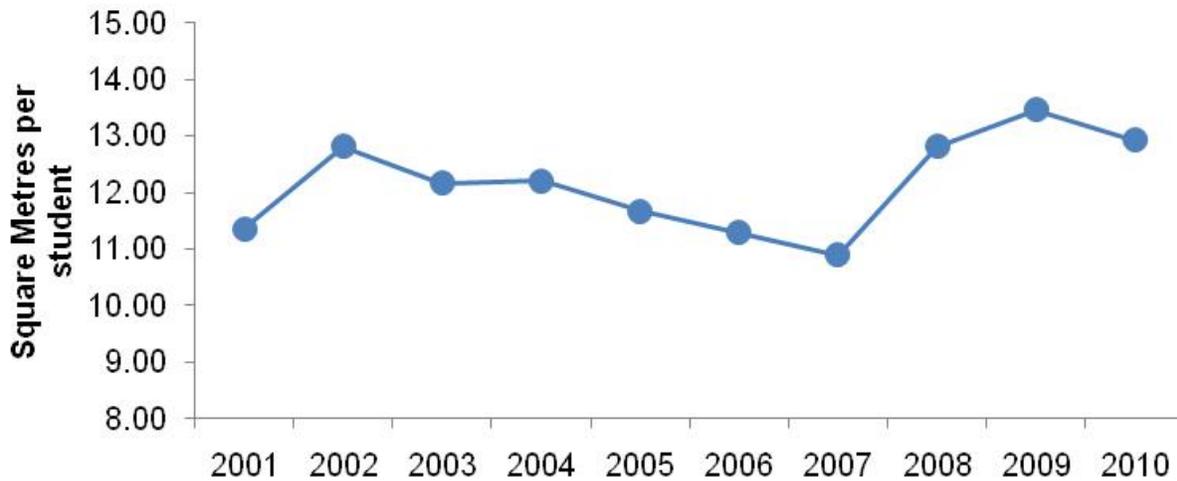
TABLE 3: FUTURE CONSTRUCTION COST ESCALATIONS

FUTURE CONSTRUCTION COST ESCALATIONS							
PROJECTS	Project Cost (Jan 2010)	Over 1 Year		Over 5 Years		Over 10 Years	
		2%	5%	2%	5%	2%	5%
<b>New Projects</b>							
Science Facility	\$ 225,000,000	229,500,000	236,250,000	248,418,181	287,163,352	274,273,744	366,501,291
Central Plant Facility	\$ 30,000,000	30,600,000	31,500,000	33,122,424	38,288,447	36,569,833	48,866,839
First Nations Gathering Centre	\$ 5,000,000						
Distributed Learning Centre	\$ 1,300,000	1,326,000	1,365,000	1,435,305	1,659,166	1,584,693	2,117,563
Art Learning Centre	\$ 30,000,000	30,600,000	31,500,000	33,122,424	38,288,447	36,569,833	48,866,839
Office/Classroom Complex	\$ 75,000,000	76,500,000	78,750,000	82,806,060	95,721,117	91,424,581	122,167,097
Research Transition Facility	\$ 10,000,000	10,200,000	10,500,000	11,040,808	12,762,816	12,189,944	16,288,946
<b>Expansion Projects</b>							
Student Residences	\$ 25,000,000	25,500,000	26,250,000	27,602,020	31,907,039	30,474,860	40,722,366
Alberta Water & Environmental Sciences Building - Phase 2	\$ 24,000,000	24,480,000	25,200,000	26,497,939	30,630,758	29,255,866	39,093,471
<b>Preservation Projects</b>							
Dr. Foster James Penny Building Upgrades	\$ 6,200,000	6,324,000	6,510,000	6,845,301	7,912,946	7,557,765	10,099,147
Physical Education Building Upgrades	\$ 5,600,000	5,712,000	5,880,000	6,182,852	7,147,177	6,826,369	9,121,810
Tunnel & South Plaza Replacements	\$ 3,200,000	3,264,000	3,360,000	3,533,059	4,084,101	3,900,782	5,212,463
<b>Total Capital Cost</b>	<b>\$ 440,300,000</b>	<b>\$ 444,006,000</b>	<b>\$ 457,065,000</b>	<b>\$ 480,606,374</b>	<b>\$ 555,565,364</b>	<b>\$ 530,628,271</b>	<b>\$ 709,057,831</b>
<b>Increase in Cost</b>		<b>\$ 3,706,000</b>	<b>\$ 16,765,000</b>	<b>\$ 40,306,374</b>	<b>\$ 115,265,364</b>	<b>\$ 90,328,271</b>	<b>\$ 268,757,831</b>

### 2.2.5 Space

Over the last few years the University has seen a growth in both enrolments and new buildings on campus. These buildings have helped to ease some of the space pressures the University has been faced with. As shown in the graph below the net assignable space per student has remained relatively the same over the last 10 years.

FIGURE 9: NET ASSIGNABLE SPACE PER STUDENT



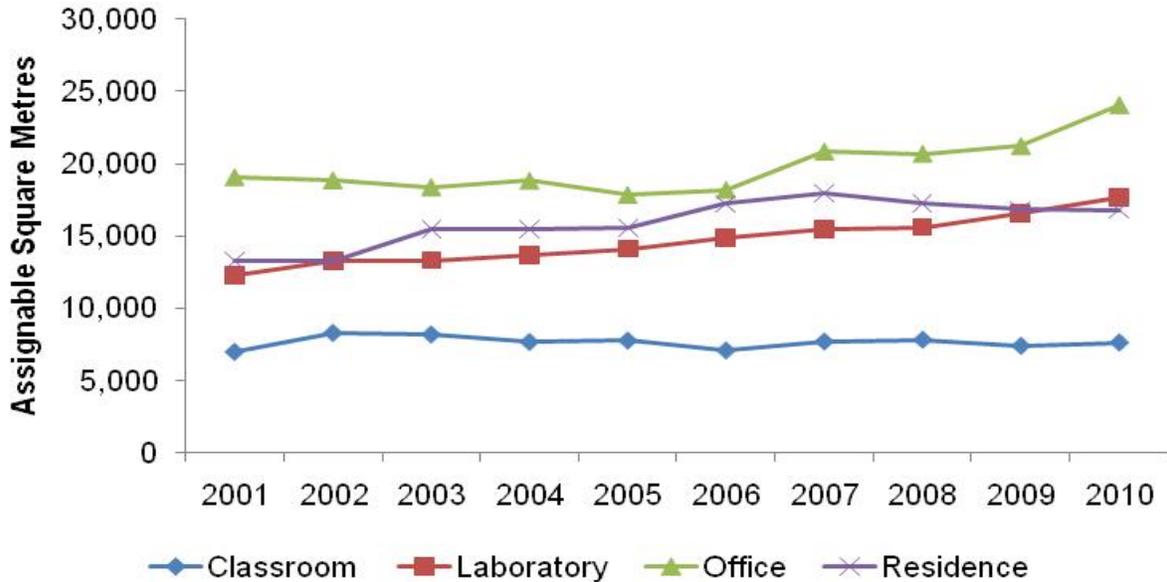
The majority of space additions over the past ten years were for Markin Hall, 1<sup>st</sup> Choice Savings Centre for Sport and Wellness, the expansion to Turcotte Hall, Library Building and classrooms and offices. There continues to be a critical need for research and student teaching lab spaces. The addition of Markin Hall in 2010 and renovations to the vacated spaces in University Hall and Anderson Hall will provide much needed additional space to accommodate our current enrolment and office needs but it will not address the extreme need for labs.

The University has developed its capital plan to address the following four primary spaces:

- Classrooms;
- Laboratory;
- Offices;
- Residences.

Figure 10's graph shows the assignable space by use category over the past 10 years.

FIGURE 10: NET ASSIGNABLE SPACE BY CATEGORY



### 2.2.6 Technology

There is an increasing dependency on technology by all University stakeholders. This requires appropriate facilities such as primary and secondary data centres with backup power and air-conditioning to ensure 24-7-365 access to technology services.

Cyber infrastructure, or technical infrastructure required by researchers, is also growing. The University expects to be required to accommodate significantly more information technology systems over the next few years requiring additional data centres or the expansion of existing centres.

Access to these technical services in the data centres requires a robust and redundant network for delivery. The core and secondary networks run essential services such as telephone and security systems. Fibre networks between buildings must be redundant to ensure service is not interrupted. We have installed some redundancy and, as the campus grows, need to add additional redundancy.

Wireless networks are also becoming increasingly important to the University. We need to increase the number of locations wireless is available, add capacity to existing locations to handle the large number of users, and increase the data transfer speed as new standards are available.

Students are increasingly bringing laptops to campus and thus require access to power in order to charge up their batteries. The University is in need of upgrading its infrastructure to allow for more electrical outlets to accommodate the students.

### 2.2.7 Facility Performance Indicators

The University continues to perform well when comparing data from the APPA survey. The Association of Higher Education Facilities Officers (APPA) has provided the most comprehensive data available on facilities management costs and staffing information in North America. The graphs below show how the University's maintenance and operations compare to other institutions (2009-10 data).

FIGURE 11: EXPENDITURES ON GROUNDS (\$/ACRE)

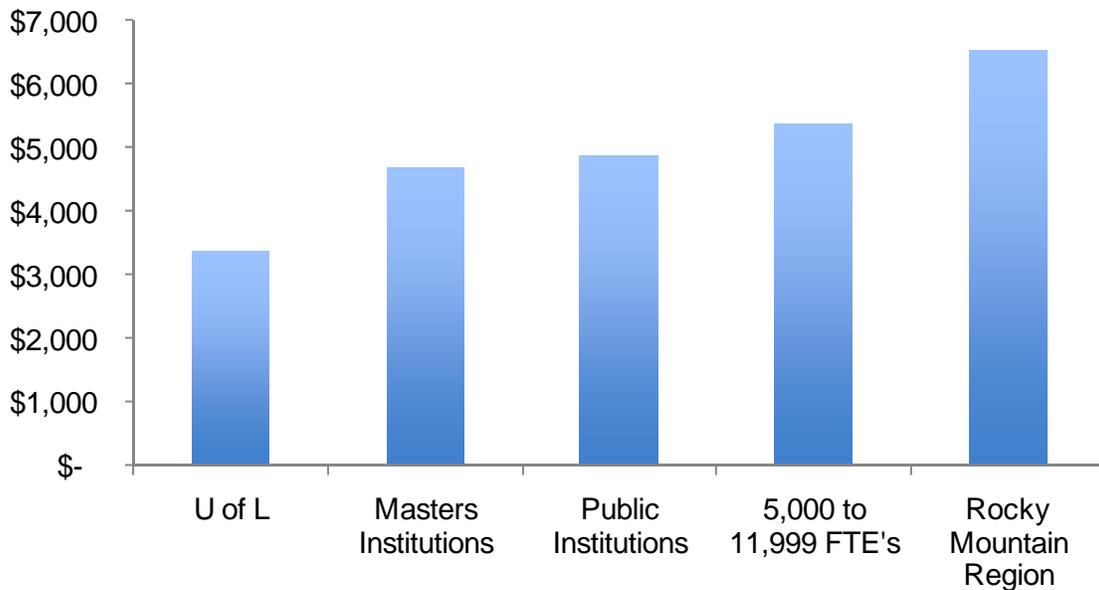


FIGURE 12: OPERATING COSTS PER STUDENT FTE

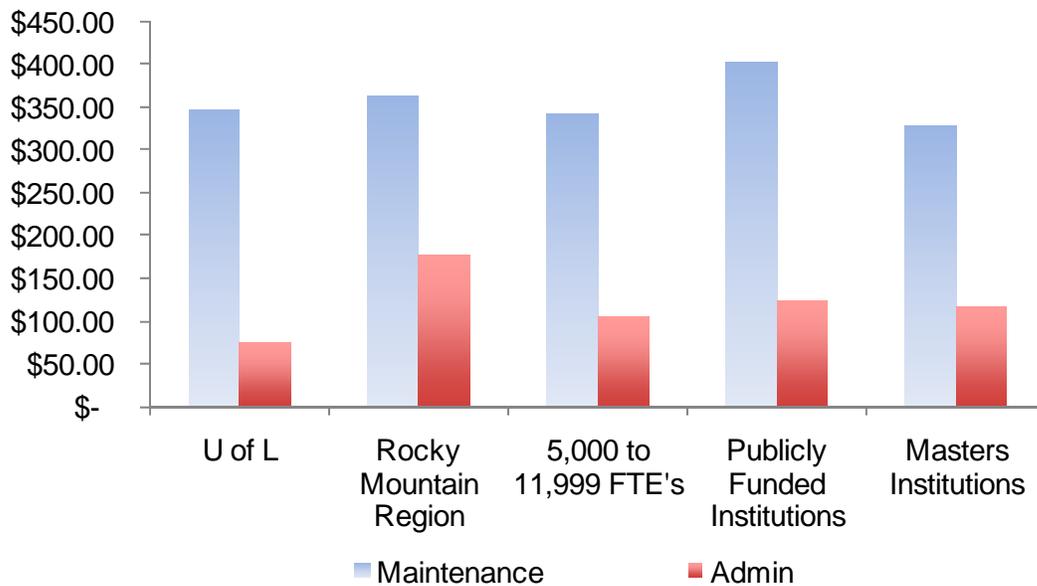


FIGURE 13: MAINTENANCE COSTS PER STUDENT

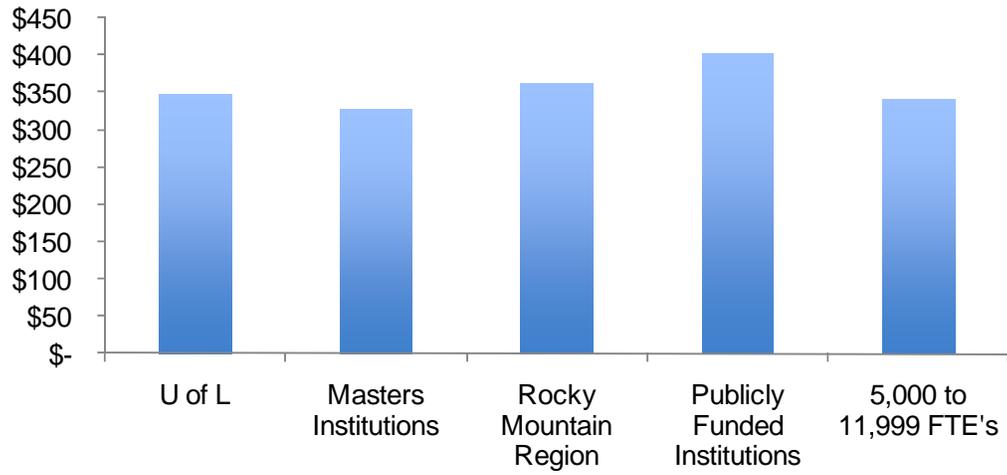


FIGURE 14: CUSTODIAL COSTS PER STUDENT

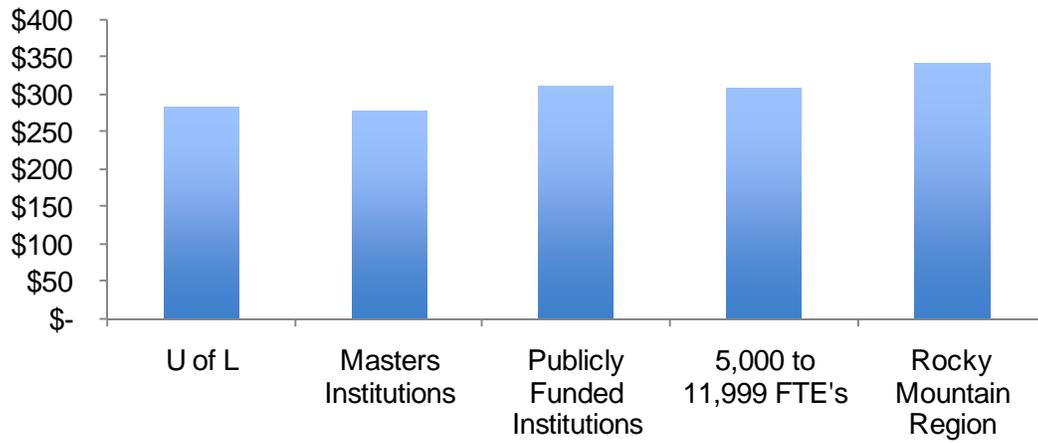


FIGURE 15: ENERGY CONSUMPTION (BTU'S/GSF)

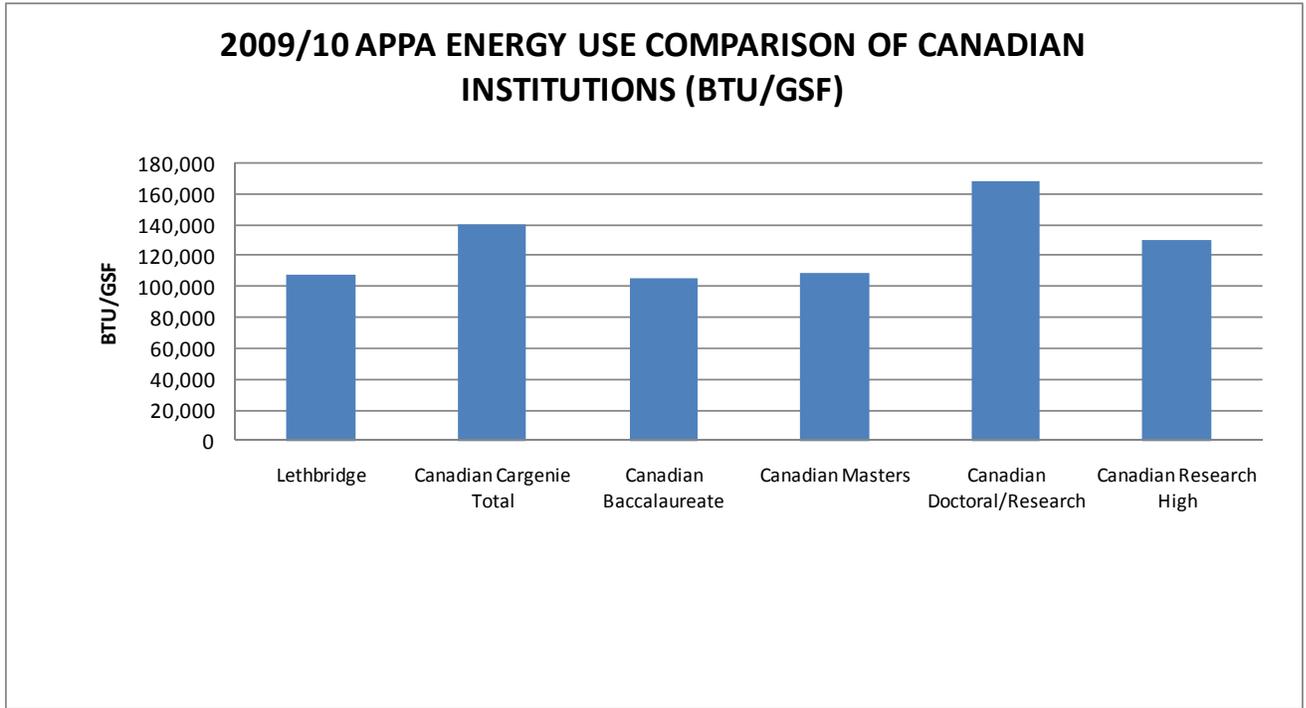
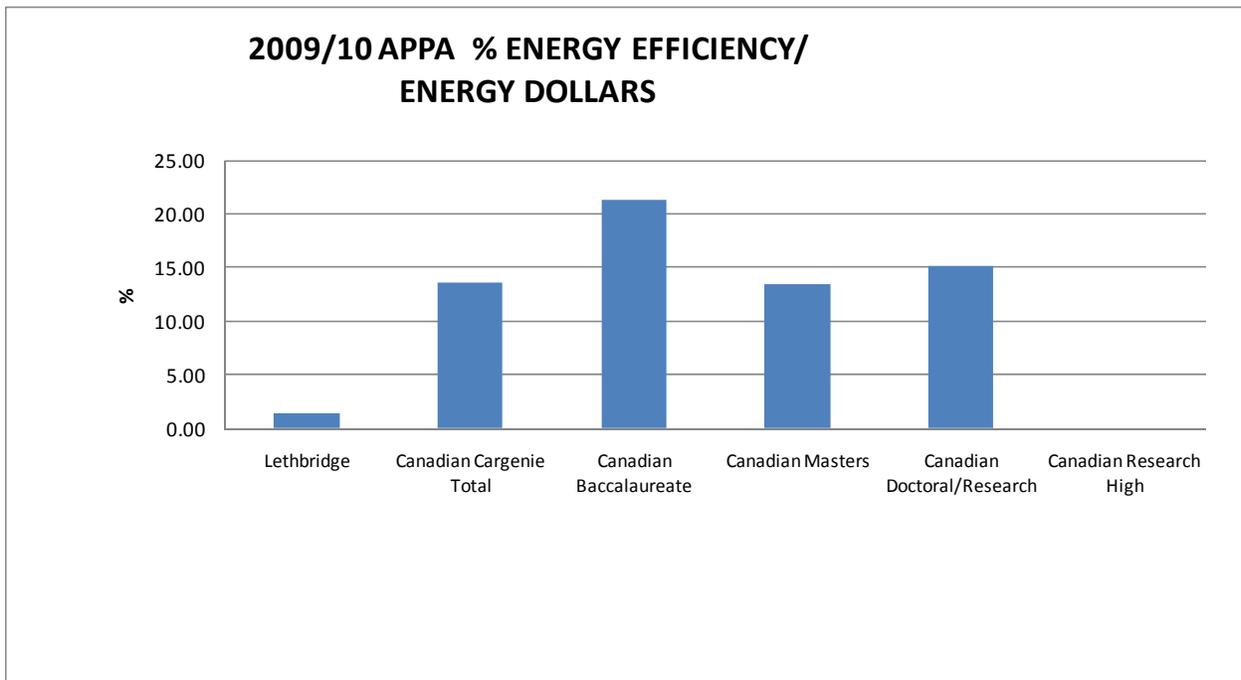


FIGURE 16: ENERGY EFFICIENCY/ENERGY DOLLARS (BTU'S/GSF)



## 2.2.8 External Influences and Challenges

As the University continually updates its capital plan the following influences and challenges continue to be important for the University to address:

- The economic environment has influenced student enrolments, recruitment of qualified staff.
- The University has achieved the highest enrolment ever in Fall 2010, despite reduced student demographics and increased competition from newly mandated degree-granting institutions. The number of graduate students has increased as well and is a result of the University's strategic priority to enhance its comprehensive status. The University's Strategic Plan will address the recruitment and retention of both students and staff.
- Despite the slowing down of the economy, renovation costs are still significant, especially in renovations to the older facilities on campus. The University is experiencing the lack of trades in the marketplace, especially in Lethbridge and Southern Alberta.
- The Provincial Government's goals of accessibility, affordability and quality education and sustainability contained in *Campus Alberta* and *Access to the Future* along with the *Government of Alberta* and *Advanced Education and Technology business plans* will continue to influence the University's capital planning process.
- As a comprehensive institution, the University will continue to grow its research mandate and research capacity, as well as grow its graduate programs in areas of strength.

### 3.0 THE PLAN

The University of Lethbridge annually reviews its capital plan and selects priority capital projects that best meets the goals and needs of the University while corresponding strongly to Government business plans and priorities.

#### 3.1 PRIORITY CAPITAL PROJECTS

When prioritizing capital projects, the University of Lethbridge follows the BLIMS category system (Alberta Infrastructure Building and Land Information Management System) by placing capital projects into "Preservation", "Expansion" or "New". The following chart shows the University's priority capital projects for the years 2011-2015.

TABLE 4: PRIORITY CAPITAL PROJECTS

		Estimated Project Cost (Jan 2011 dollars)
<b>New Facility Projects</b>		
1 Science Complex		
- Planning Fees	700,000	
- Science Facility	224,300,000	
- Central Plant Facility & Distribution Systems	30,000,000	\$ 255,000,000
2 First Nations Gathering Centre		5,000,000
3 Distributed Learning Centre		1,300,000
4 Art Learning Centre		
- Visual Art Study Centre	4,000,000	
- Art Gallery	26,000,000	30,000,000
5 Office/Classroom Complex		75,000,000
6 Research Transition Facility		10,000,000
<b>Total New Facility Projects</b>		<b>\$ 376,300,000</b>
<b>Expansion Projects</b>		
1 Student Residences		25,000,000
2 Alberta Water & Environmental Sciences Building - Phase 2		24,000,000
<b>Total Expansion Projects</b>		<b>\$ 49,000,000</b>
<b>Preservation Projects</b>		
1 Dr. Foster James Penny Building Upgrades (downtown facility)		6,200,000
2 Physical Education Building Upgrades		5,600,000
3 Tunnel & South Plaza Replacement		3,200,000
<b>Total Preservation Projects</b>		<b>\$ 15,000,000</b>
<b>TOTAL PRIORITY CAPITAL PROJECTS</b>		<b>\$ 440,300,000</b>
<b>Projects in Progress</b>		
1 Deferred Maintenance Projects		12,857,500
2 CCBN Expansion		1,419,727
3 Student Residences - University Hall (62 beds)		3,476,100
4 Student Residences - Kainai Apartments (37 beds)		1,823,900
<b>Total Projects in Progress</b>		<b>\$ 19,577,227</b>

Note - Estimated Project Costs are in current dollars (Jan 2011) and will be adjusted depending on construction start dates.

### 3.1.1 Capital Project Details

#### Science Complex

The highest capital priority of the University of Lethbridge are new science facilities in order to deliver up to date science programs and accommodate the University's strong commitment to research.

To continue to excel in research and to adapt to the 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. Some research facilities that are in the planning stages include laboratory and research spaces for Biochemistry, Chemistry, Physics, Geography and Kinesiology. These facilities would increase the capacity for training by providing space for principal investigators, new graduate and undergraduate students, and technical support personnel.

Much discussion on research facilities has centered on whether to renovate or build. It has been found to be very costly to convert an existing facility into something other than the purpose for which it was created for, especially when converting space for research labs. Renovating space in University Hall, converting office and classroom space to accommodate research space needs, is much more costly than new construction for research space. Due to the constraints of University Hall, it also may be impossible to convert the space into research labs as the facility has inherent constraints due to, for examples, the mechanical/electrical issues of the building, the vibrating of the building for sensitive research equipment and the floor loading restrictions. There is also the concern of whether it is appropriate to have significant research activities in the same building that accommodates offices, classrooms and student residences.

#### **Cons of current science space in University Hall include:**

- There are significant safety concerns with science labs that originate in the University Hall building-design.
- The facilities in University Hall are no longer suitable to attract the best and brightest faculty and students, and would require extensive renovations to accommodate the comprehensive university mandate.
- The current facilities do not allow our students to experience the requirements of a modern lab and thus put our students at a disadvantage when they progress to graduate studies, other institutions and the external work environment.

#### **Pros of a new Science Facility include:**

- Laboratories for teaching and research can be built that meet the most modern standards of safety and design.
- Build a facility where the management of supplies, including hazardous materials, is centralized and integrated into the building architecture.
- Build a facility with centralized instrumentation laboratories allowing for full sharing of "six- and seven-figure" instruments by many researchers and students.
- Re-unite scattered natural sciences Departments, which are currently in various buildings all over campus.
- Return Levels 1-4 of University Hall to its original intended use: student residences.

ESTIMATED PROJECT COST	<u>\$ 225,000,000</u>
------------------------	-----------------------

Proposed Funding Sources	
Provincial Government	<u>\$ 225,000,000</u>

The estimated project cost of \$225 M is for the construction of a new, comprehensive science facility but there may be other alternatives for facilities that may result in the same goal of replacing the existing inadequate labs. Such alternatives could allow for the constructing of replacement science facilities in smaller phases. The University would like to explore such alternatives with Advanced Education and Technology.

**Note: This total comprehensive Science Facility must be built in conjunction with a second Central Plant Facility.**

Central Plant Facility

Any additional new future facilities will require the addition of another central plant facility to accommodate their infrastructure needs.

ESTIMATED PROJECT COST	<u>\$ 30,000,000</u>
Proposed Funding Sources	
Provincial Government	<u>\$ 30,000,000</u>

**Note: This Facility is a requirement of a new comprehensive Science Facility.**

Dr. Foster James Penny Building Upgrades

The University was donated a building in downtown Lethbridge in 2007. The building is in good physical condition although there are some renovations that will be required in order to bring the building up to current building codes and to facilitate University use of the space. The University intends to put Faculty of Fine Arts programming, including student artwork exhibits and possibly Faculty of Health Sciences Community Wellness programming into the facility. The general consensus for use of the building is to connect with the Lethbridge community.

ESTIMATED PROJECT COST	<u>\$ 6,200,000</u>
Proposed Funding Sources	
Provincial Government	<u>\$ 6,200,000</u>

Physical Education Building Upgrades

The 1<sup>st</sup> Choice Savings Centre for Sport and Wellness was added on and attached to the existing Physical Education Building, which is approximately 40 years old. Some of the old facility was not renovated with the new building addition and thus needs to be upgraded.

ESTIMATED PROJECT COST	<u>\$ 5,600,000</u>
Proposed Funding Sources	
Provincial Government	<u>\$ 5,600,000</u>

Tunnel and South Plaza Replacement

The tunnel connecting the 1<sup>st</sup> Choice Savings Centre and the University Library was constructed in 1971 and the south plaza above the tunnel was constructed in 1990. Both need major repairs or replacement due to their poor condition.

ESTIMATED PROJECT COST	<u>\$ 3,200,000</u>
Proposed Funding Sources	
Provincial Government	<u>\$ 3,200,000</u>

### Student Residences

The U of L only has available student residence beds for approximately 8% of its current Lethbridge campus student population. It is a well-known fact that students who live in on-campus residences perform better academically, integrate better into campus life programs and generally have a more positive post-secondary learning experience. The University had set a goal many years ago that it would provide up to 20% of its on-campus student population with residence accommodations. The University is planning for an additional 200 to 250 residence beds, depending on the cost, to be completed for Fall 2013.

ESTIMATED PROJECT COST	<u>\$ 25,000,000</u>
Proposed Funding Sources	
Financing, supported by housing rents	<u>\$ 25,000,000</u>

Renovations are currently under construction in the vacated University Hall to accommodate an additional 62 residence beds, to be ready for occupancy in Fall 2011. University Hall was vacated by the Faculty of Management after their move to Markin Hall. Interior renovations are also taking place to accommodate an additional 37 beds in the Kainai Apartments, to be ready for occupancy in Fall 2011.

### Alberta Water and Environmental Science Building (AWESB) – Phase 2

Phase I of the AWESB was officially opened on November 13, 2008. Phase I initially accommodates more than 20 researchers and up to 150 supporting technicians, graduate students and doctoral candidates from the Departments of Biological Science, Geography and Physics and Astronomy. The building also contains numerous individual and shared laboratory spaces, and an aquatic research facility. This facility is situated in Exploration Place, near the Canadian Centre for Behavioral Neuroscience.

Phase 1 of the AWESB facilitates the base program for water-based research. Phase 2 (3200 gsm) is for future growth of the base program and to accommodate externally funded programs.

ESTIMATED PROJECT COST	<u>\$ 24,000,000</u>
Proposed Funding Sources	
Research Granting Agencies	<u>\$ 24,000,000</u>

### First Nations Gathering Centre

One of the Strategic Priorities identified in the University's 2009-13 Strategic Plan is to enhance the experience of First Nations, Métis and Inuit (FNMI) students. One specific action to accomplish this goal is to develop a FNMI social and cultural gathering space. This space will provide students with a space that is welcoming and will support their academic and social needs. The University is committed to increasing the attraction and retention of FNMI students.

ESTIMATED PROJECT COST	<u>\$5,000,000</u>
Proposed Funding Sources	
Provincial Government	\$2,500,000
Federal Government	<u>\$2,500,000</u>
	<u>\$5,000,000</u>

### Distributed Learning Centre

The University of Lethbridge is actively working towards the adoption of 21st century learning systems and technologies. One of the central strategies involves providing support for blended learning opportunities across all programs of instruction and research environments at the University. "Blended learning" means the application of both physical and virtual learning methodologies to facilitate learning. The goals are twofold: to accommodate a variety of learning styles; and to provide increased access to learning opportunities. In doing so, the University can both support the individual learning needs of those who are taking courses on our campus as well as provide learning opportunities to those who are unable to physically attend the campus.

Blended learning will need dedicated physical space in the form of a "Distributed Learning Centre" (DLC). The DLC would represent a significant enhancement to the activities currently being conducted through the Curriculum Development Resource Centre (CDRC). The DLC would include space for enhanced video-conferencing facilities, dedicated production rooms to produce videos and pod-casts, a web design and interface lab and user support space.

ESTIMATED PROJECT COST	<u>\$ 1,300,000</u>
Proposed Funding Sources	
Provincial Government	<u>\$ 1,300,000</u>

### Art Learning Centre

The U of L art collection is recognized as one of the finest in Canada, with over 14,000 works of art. In building the collection, the U of L committed to making the collection accessible for teaching and research. A larger, more accessible exhibition space, including space for conservation and exhibition preparation, will make the collection available to a wider public through exhibitions and public programs, and will provide the U of L's Museum Studies students with experience necessary for careers in the cultural sector. The expansion of the gallery would also allow more access to students, from the U of L and from other institutions, in this field of study and research.

ESTIMATED PROJECT COST	
Visual Art Study Centre	\$ 4,000,000
Art Gallery	<u>\$ 26,000,000</u>
	<u>\$ 30,000,000</u>
Funding Sources	
Provincial Government	5,000,000
Research Agencies	10,000,000
Fundraising	<u>15,000,000</u>
TOTAL FUNDING	<u>\$30,000,000</u>

### Office/Classroom Complex

It is expected that over the next 10 years the U of L will require the addition of another office/classroom complex in order to meet the facility demands of the student population and associated faculty offices and research space.

ESTIMATED PROJECT COST	<u>\$ 75,000,000</u>
Proposed Funding Sources Provincial Government	<u>\$ 75,000,000</u>

### Research Transition Facility

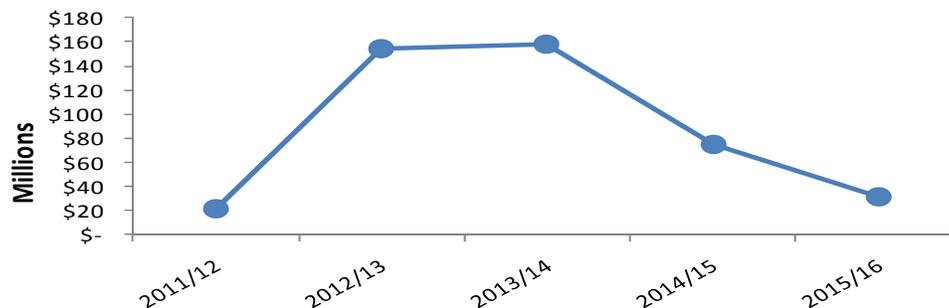
The *Roles and Mandates Framework for Alberta's Provincially Funded Research and Innovation System Consultation* calls for increased support for knowledge-based industries. The development of commercialization support provider services would stimulate innovation and commercialization. A regional centre is congruent with this vision. The University of Lethbridge is well suited to accommodate such a facility on its campus and would promote the research innovation mandate of the Province.

ESTIMATED PROJECT COST	<u>\$ 10,000,000</u>
Proposed Funding Sources Provincial Government	<u>\$ 10,000,000</u>

## 3.2 CAPITAL BUDGET AND FORECAST

Over the next 5 years the University proposes to significantly expand its facilities. This campus expansion consists primarily of a new Science Complex, Office/Classroom/Cultural complex, all supported by a new Central Plant Facility. Figure 17 shows the capital forecast over this time. See Appendix A for more details.

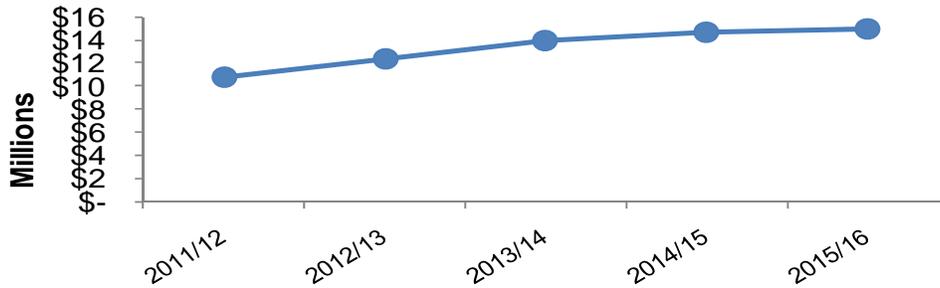
FIGURE 17: FIVE-YEAR CAPITAL FORECAST



As the University continues to expand its capital infrastructure so does its deferred maintenance concerns. Deferred maintenance costs continue to be an outstanding issue for the University. **The University is grateful to Alberta Infrastructure and Transportation for the one-time deferred maintenance grants received in 2007-08 of \$25.915 Million, which will significantly contribute to reducing the deferred maintenance at the University.**

With the new capital infrastructure planned over the next four years, the annual deferred maintenance costs are expected to be approximately \$10 Million over the annual current funded levels. See Appendix A for details.

FIGURE 18: DEFERRED MAINTENANCE FORECAST



On a regular basis the University reviews and updates its capital priorities to best correspond to the Government's strategic goals. This is done through the regular BLIMS submission, this Capital Plan and other important documents. Informing and working with the Government on emerging trends and needs will continue to be a priority for the University of Lethbridge.

## APPENDIX

### Appendix A – 5-Year Capital Forecast (January 2011 dollars) (\$000)

	Estimated Project Cost	2011/12	2012/13	2013/14	2014/15	2015/16	Total	Start Date	Completion Date
<b>New Facility Projects</b>									
Science Complex	\$ 225,000	\$ 700	\$ 125,000	\$ 99,300	\$ -	\$ -	\$ 225,000	Sept 30-2011	Sept 30-2014
Central Plant Facility	\$ 30,000	\$ -	\$ 10,000	\$ 20,000	\$ -	\$ -	\$ 30,000	Sept 30-2011	Sept 30-2014
First Nations Gathering Centre	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -	\$ -	\$ 5,000		
Distributed Learning Centre	\$ 1,300	\$ 1,300	\$ -	\$ -	\$ -	\$ -	\$ 1,300		
Art Learning Centre	\$ 30,000	\$ -	\$ -	\$ 5,000	\$ 15,000	\$ 10,000	\$ 30,000	Sept 30-2012	Sept 30-2015
Office/Classroom Complex	\$ 75,000	\$ -	\$ -	\$ 7,000	\$ 47,000	\$ 21,000	\$ 75,000	Sept 30-2012	Sept 30-2015
Research Transition Facility	\$ 10,000	\$ -	\$ 500	\$ 7,500	\$ 2,000	\$ -	\$ 10,000	Sept 30-2010	Sept 30-2012
	<b>\$ 376,300</b>	<b>\$ 7,000</b>	<b>\$ 135,500</b>	<b>\$ 138,800</b>	<b>\$ 64,000</b>	<b>\$ 31,000</b>	<b>\$ 376,300</b>		
<b>Expansion Projects</b>									
Student Residences	\$ 25,000	\$ 9,000	\$ 12,000	\$ 4,000	\$ -	\$ -	\$ 25,000	Sept 30-2010	Sept 30-2011
Alberta Water & Environmental Sciences Building - Phase 2	\$ 24,000	\$ -	\$ 1,000	\$ 12,000	\$ 11,000	\$ -	\$ 24,000	May 1-2011	Sept 30-2012
	<b>\$ 49,000</b>	<b>\$ 9,000</b>	<b>\$ 13,000</b>	<b>\$ 16,000</b>	<b>\$ 11,000</b>	<b>\$ -</b>	<b>\$ 49,000</b>		
<b>Preservation Projects</b>									
Dr. Foster James Penny Building Upgrades (downtown facility)	\$ 6,200	\$ 6,200	\$ -	\$ -	\$ -	\$ -	\$ 6,200	Sept 1-2011	Sept 30-2012
Physical Education Building Upgrades	\$ 5,600	\$ -	\$ 2,800	\$ 2,800	\$ -	\$ -	\$ 5,600	May 1-2012	Sept 30-2013
Tunnel & South Plaza Replacement	\$ 3,200	\$ -	\$ 3,200	\$ -	\$ -	\$ -	\$ 3,200	May 1-2012	Sept 30-2013
	<b>\$ 15,000</b>	<b>\$ 6,200</b>	<b>\$ 6,000</b>	<b>\$ 2,800</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 15,000</b>		
							\$ -		
<b>TOTAL CAPITAL PROJECTS</b>	<b>\$ 440,300</b>	<b>\$ 22,200</b>	<b>\$ 154,500</b>	<b>\$ 157,600</b>	<b>\$ 75,000</b>	<b>\$ 31,000</b>	<b>\$ 440,300</b>		
<b>PROPOSED CAPITAL PROJECTS FUNDING</b>									
Provincial Capital Funding Request		\$ 13,200	\$ 142,500	\$ 148,600	\$ 65,000	\$ 21,000	\$ 390,300		
Other Funding Sources		\$ 9,000	\$ 12,000	\$ 9,000	\$ 10,000	\$ 10,000	\$ 50,000		
		\$ 22,200	\$ 154,500	\$ 157,600	\$ 75,000	\$ 31,000	\$ 440,300		
<b>DEFERRED MAINTENANCE</b>									
Buildings Capital Asset Replacement Value (\$000)	\$ 1,053,607	\$ 1,075,807	\$ 1,230,307	\$ 1,387,907	\$ 1,462,907	\$ 1,493,907			
Annual Deferred Maintenance Requirement (1% of building capital asset value)		\$ 10,758	\$ 12,303	\$ 13,879	\$ 14,629	\$ 14,939	\$ 66,508		
<b>ANNUAL PROVINCIAL CAPITAL REQUIREMENT REQUEST</b>									
New Capital Funding Request		\$ 13,200	\$ 142,500	\$ 148,600	\$ 65,000	\$ 21,000	\$ 390,300		
Annual Deferred Maintenance Request		\$ 10,758	\$ 12,303	\$ 13,879	\$ 14,629	\$ 14,939	\$ 66,508		
<b>TOTAL</b>		<b>\$ 23,958</b>	<b>\$ 154,803</b>	<b>\$ 162,479</b>	<b>\$ 79,629</b>	<b>\$ 35,939</b>	<b>\$ 456,808</b>		



Appendix C – Capital Budget  
(\$000)

	2011-12	2012-13	2013-14	2014-15	2015-16
<b>SOURCES OF FUNDS</b>					
Major Capital Projects:					
Provincial Government	10,700	141,500	139,100	56,500	26,000
Fund Raising/External Sources			2,500	7,500	5,000
Federal Government	3,920	-	-	-	-
Research Agencies	-	1,000	12,000	11,000	-
University Contributions	14,300	12,000	4,000	-	-
	28,920	154,500	157,600	75,000	31,000
Infrastructure Maintenance (IMP) Grant	5,316	6,000	6,000	6,000	6,000
Advanced Education & Technology	3,396	-	-	-	-
Indirect Research Costs Grant	300	300	300	300	300
University contributions	470	370	370	370	370
University Capital Reserves	5,825	1,780	1,780	1,780	1,780
<b>TOTAL FUNDING</b>	<b>\$ 44,228</b>	<b>\$ 162,950</b>	<b>\$ 166,050</b>	<b>\$ 83,450</b>	<b>\$ 39,450</b>
<b>CAPITAL EXPENDITURES</b>					
Major Capital Projects:					
* Science Complex	700	125,000	99,300	-	-
* Central Plant Facility	-	10,000	20,000	-	-
* Dr. Foster James Penny Building (Downtown)	6,200	-	-	-	-
* Physical Education Building upgrades	-	2,800	2,800	-	-
* Tunnel & South Plaza Replacement	-	3,200	-	-	-
* Student Residences	9,000	12,000	4,000	-	-
* Alberta Water & Environmental Sciences Bldg - Phase 2	-	1,000	12,000	11,000	-
* First Nations Gathering Centre	5,000	-	-	-	-
* Distributed Learning Centre	1,300	-	-	-	-
* Art Learning Centre	-	-	5,000	15,000	10,000
* Office/Classroom Complex	-	-	7,000	47,000	21,000
* Research Transition Facility	-	500	7,500	2,000	-
CCBN expansion	1,420	-	-	-	-
Student Residences (University Hall)	3,476	-	-	-	-
Student Residences (Kainai Apartments)	1,824	-	-	-	-
	28,920	154,500	157,600	75,000	31,000
Capital Maintenance & Facility Upgrade (includes deferred maintenance)	12,858	6,000	6,000	6,000	6,000
Equipment					
Arts and Science	400	400	400	400	400
Education	100	100	100	100	100
Management	70	70	70	70	70
Fine Arts	200	200	200	200	200
Health Sciences	25	25	25	25	25
Administrative Support Units	160	160	160	160	160
Sports and Recreation/Athletics	150	150	150	150	150
Motor Vehicles	35	35	35	35	35
Information Technology	520	520	520	520	520
Library	20	20	20	20	20
Facilities	100	100	100	100	100
	1,780	1,780	1,780	1,780	1,780
Ancillaries					
Parking	500	500	500	500	500
Bookstore	10	10	10	10	10
Printing	50	50	50	50	50
Housing	50	50	50	50	50
Catering and Food Services	50	50	50	50	50
Conference Services	5	5	5	5	5
Ancillary Services Director	5	5	5	5	5
	670	670	670	670	670
<b>TOTAL CAPITAL EXPENDITURES</b>	<b>\$ 44,228</b>	<b>\$ 162,950</b>	<b>\$ 166,050</b>	<b>\$ 83,450</b>	<b>\$ 39,450</b>

\*Note – The Board of Governors has not formally approved these major capital projects. They have been submitted to Alberta Advanced Education and Technology as the University's capital priorities.

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