

2014-2018 Capital Plan

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2 EXECUTIVE SUMMARY

The University of Lethbridge updates its Capital Plan on an annual basis. The 2014-2018 Capital Plan forms the University's request to Government for funding of priority capital projects over the next five years.

The Capital Plan continues to complement and respond to University of Lethbridge key strategic documents including but not limited to its Strategic Plan, the Comprehensive Institutional Plan, and the Campus Master 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, the Destination Project, in order to construct up to date science facilities and accommodate the University's strong commitment to research. To continue to excel in research and to fulfill its mandate as a comprehensive academic and research institution with more emphasis on graduate student education, the University requires new facilities that will provide more dedicated space for these programs and functions. New science facilities will increase the capacity for training by providing space for principal investigators, new graduate and undergraduate students, and technical support personnel. The University gratefully acknowledges the Government's confirmed \$212.7 million investment in the Destination Project.

The University currently has 43 buildings on campus totaling 199,094 gross square metres (gsm) averaging 24 years of age. The University has worked to reduce the amount of deferred maintenance on campus from \$70 million in 2011-12 to approximately \$56 million in deferred maintenance projects over the next ten years. Due to the aging of the buildings, deferred maintenance on existing facilities continues to be a matter of concern. 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. Three buildings at the University hold Silver LEED status: the 1st Choice Savings Centre for Sport & Wellness, the Alberta Water and Environmental Science Building, and Markin Hall.

2.1 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.

	PROJECTS	New Facilities	Expansion	Preservation / Renovation	Estimated Project Cost (January 2014 dollars)
1	Destination Project				
	- Academic Science Facility	275,000,000			275,000,000
	- Energy/Utility Centre	45,000,000			45,000,000
	- University Hall Renewal			45,000,000	45,000,000
	- University Hall Envelope Repairs			1,400,000	1,400,000
	- University Hall Window Replacement			4,000,000	4,000,000
	- Canadian Centre for Neuroscience Building (CCBN) Renewa	I		15,000,000	15,000,000
					385,400,000
	Confirmed Provincial funding				(212,780,731)
	TOTAL DESTINATION PROJECT				\$ 172,619,269
2	Student Residences - Aperture Park Phase IV	40,000,000			40,000,000
3	Student Apartments - Envelope Repairs			10,000,000	10,000,000
4	Student Residences - upgrade University Hall			8,230,000	8,230,000
5	Student Residences - upgrade Piikani House			15,000,000	15,000,000
6	Art Gallery	33,990,000			33,990,000
7	Alberta Water & Environmental Sciences Building - Phase 2		27,140,500		27,140,500
	TOTAL PRIORITY CAPITAL PROJECTS	393,990,000	27,140,500	98,630,000	\$ 306,979,769
	Projects in Progress				
1	Destination Project - Planning Phase				\$ 12,780,731
2	2014-15 Deferred Maintenance Projects				3,019,594
3	UCA North Patio Pavers Replacement				2,200,000
	Total Projects in Progress				\$ 18,000,325

Table 1:	Capital	Priorities	Summary
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Note - Estimated project costs are in current dollars (January 2014) and will be adjusted depending on construction start dates.

2.2 Alignment with Strategic Priorities

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 Strategic Plan 2014-2019, the Comprehensive Institutional Plan, and the Campus Master 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 <u>Alberta's 20-Year Strategic Capital</u> <u>Plan</u>:

- 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.

3 REVIEW OF PREVIOUS YEAR

3.1 Major Capital Projects

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

<u>Aperture Park 3 - Residence Complex:</u> Fall 2011 saw construction beginning on a new 259-bed, 11,589 sq ft residence complex that was completed in Summer 2013 at a cost of \$32 million.

<u>Destination Project</u>: This project is the highest capital priority project for the University. The University received \$2.7 million in planning funds from Advanced Education and Technology for the Destination Project prior to 2013 and will receive an additional \$10 million in fiscal 2014-15 year to advance the planning of the project. In December 2013, \$200 million from the Government was confirmed to support this project.

<u>Tunnel and South Plaza Replacement</u>: The tunnel connecting the 1st Choice Savings Centre and the University Library was constructed in 1971 and the south plaza above the tunnel was constructed in 1990. Both required major repairs or replacement due to their poor condition. This work will be completed in the Spring of 2014 at a total cost of \$3.5 million.

3.2 Other Capital Projects, Renovations and Repairs

<u>Dr. Foster James Penny Building:</u> A 2,862.7 gsm building located in downtown Lethbridge was donated to the University in October 2007, and the University completed renovations and officially opened the building on May 16, 2013. The building provides gallery space for Fine Arts students, and is home to the University's alumni relations and annual giving programs, the Call Centre, project space for Researchers, and eventually a University gift store and ticketing centre for University activities. It also houses two large community meeting rooms. The University entered into a partnership with Volunteer Lethbridge in order to advance the activities of promoting volunteerism for our students. The building creates a downtown presence that helps build connections with the Lethbridge community.

<u>Physical Education Building:</u> The 1st Choice Savings Centre for Sport and Wellness was added on and attached to the existing Physical Education Building, which is approximately 40 years old. Renovations to pre-existing Physical Education Building are now substantially complete after \$5.6 million funding from the Province was received for the project.

<u>Parking Lot Rehabilitation:</u> Phase 1 of the parking lot redevelopment project was completed in Fall 2012, improving drainage, lighting, and pedestrian safety. Phase II will be completed in Summer 2014, with work including landscaping and the construction of storm water management and drainage systems.

3.3 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 36% of the completed capital projects with 50% 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 to fund major capital projects.

	COMPLETION						
PROJECT	YEAR	PROJECT COST		F	UNDING SOUR	CES	
			University	Donations	City of Leth	Gov't *	TOTAL
COMPLETED PROJECTS:							
Students' Union Building	89/90	\$ 10,900,000	\$ -	\$ 2,906,650	\$-	\$ 7,993,350	\$ 10,900,000
Student Residences (apartments & townhomes)	89/90	19,851,862	-	-	-	19,851,862	19,851,862
Turcotte Hall	89/90	2,901,000	-	417,000	-	2,484,000	2,901,000
Hepler Hall	98/99	747,894	747,894	-	-	-	747,894
Art Storage Vault	98/99	320,088	320,088	-	-	-	320,088
PE Classroom Annex	98/99	1,107,750	1,107,750	-	-	-	1,107,750
Anderson Hall	99/00	5,812,919	5,812,919	-	-	-	5,812,919
Library Storage Building	99/00	67,282	67,282	-	-	-	67,282
University Library	01/02	33,668,656	19,345,218	9,567,438	-	4,756,000	33,668,656
Canadian Centre for Behavioural NeuroScience (CCBN)	01/02	8,593,438	783,775	2,525	-	7,807,138	8,593,438
Student Residences (townhomes)	03/04	5,896,598	5,896,598	-	-	-	5,896,598
CCBN Expansion	06/07	3,265,148	1,030,613	301,500	-	1,933,035	3,265,148
1st Choice Savings Centre for Sport & Wellness	06/07	30,776,265	20,474,655	4,992,099	5,300,000	9,511	30,776,26
Parkway Service Complex	07/08	6,053,990	353,990	-	-	5,700,000	6,053,990
Turcotte Hall Expansion	07/08	10,866,161	8,566,161	-	-	2,300,000	10,866,161
Alberta Water & Environmental Science Building - Phase 1	08/09	24,112,903	557,658	103,325	-	23,451,920	24,112,903
Community Sports Stadium	09/10	12,098,444	4,732,951	53,979	3,723,439	3,588,075	12,098,444
Daycare Facility	09/10	1,967,078	1,612,078	280,000	-	75,000	1,967,078
Markin Hall	10/11	54,285,105	24,500	4,260,605	-	50,000,000	54,285,105
Student Residences (Aperture Park 3)	13/14	\$ 32,000,000	\$ 29,997,058	\$ 2,942	\$ 2,000,000	\$ -	\$ 32,000,000
		\$ 265,292,581	\$101,431,188	\$22,888,063	\$11,023,439	\$ 129,949,891	\$ 265,292,581
% Total Project Cosi			38%	9%	4%	49%	1009
PROJECTS IN PROGRESS:	10/14	2 500 000				2 500 000	2 500 000
Tunnel & South Plaza Replacement	13/14	3,500,000				3,500,000	3,500,000
Destination Project - Planning	15/16	12,780,731		-	-	12,780,731	12,780,73
Destination Project	20/21	372,619,269		30,000,000		342,619,269	372,619,269
		\$ 388,900,000	\$ -	\$ 30,000,000	<u>\$</u> -	\$358,900,000	\$388,900,000
% Total Project Cost	t		0%	8%	0%	92%	100

Table 2: MAJOR CAPITAL PROJECTS FUNDING SOURCE SUMMARY

*Government money includes funds from Innovation and Advanced Education, Alberta Infrastructure and Provincial/Federal Research agencies.

3.4 Highlights of Successes

<u>2014-2019 Strategic Plan</u>: The current Strategic Plan was released in Spring 2014. There was extensive consultation within the University community and external stakeholders in updating the plan. The plan strengthens the University's commitments of its Capital Plan. From the Strategic Plan:

"High quality is central to all that we do. Our commitment to maintaining high quality undergraduate and graduate academic programs is important to fostering a better society.... High quality facilities and services support our institution and its students, staff, and academic staff."

Government funding for Preservation Projects:

Innovation and Advanced Education (IAE) provided funding in part to be used for the preservation of supported infrastructure. The following table shows how much of this funding has been used to date.

Preservation Project	Funding Received from IAE	Balance Remaining (Feb 2014)	Remaining Commitments	Estimated Date for Spending Remaining Balance
Safety Systems Upgrade project in University Hall	\$17,000,000	\$6,097,728	\$770,617	December 31, 2014
Structure and Building Envelop project in University Hall	\$5,415,000	\$1,235,590	-	August 31, 2014
Renovate the University's Physical Education Building	\$5,600,000	\$246,802	\$9,814	December 31, 2013 (close out phase)

Government funding for New Projects:

Innovation and Advanced Education approved a total of \$212.78 million funding for the new science complex (Destination Project), which is the highest capital priority for the University. The Destination Project will construct up to date science facilities to accommodate the University's commitment to research, enabling the University to continue to excel in research and to further our role as a comprehensive university by providing more dedicated space for these programs and functions. New science facilities will increase capacity by providing appropriate space for principal investigators, new graduate and undergraduate students, and technical support personnel.

4 CURRENT SITUATION

4.1 State of Assets

The University currently has 43 buildings on campus totaling 199,094g gsm and averaging 24.3 years of age. The following chart shows the breakdown by building age and area.

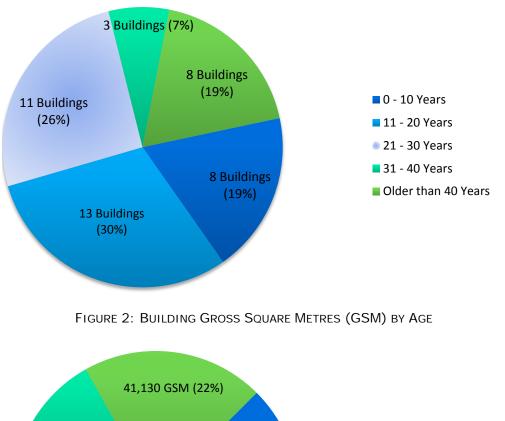
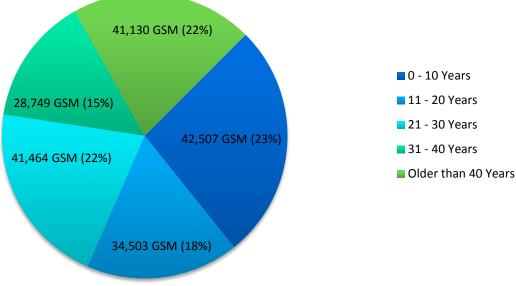


FIGURE 1: NUMBER OF BUILDINGS BY AGE



Deferred Maintenance

In 2007 Innovation and Advanced Education 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 11.1%.

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 dividing 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 2012-2013):

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.

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 February 2013. Total deferred maintenance was estimated at \$116 million. In order to ensure facilities are maintained properly, it is recommended that as a minimum \$40 million in deferred maintenance should be addressed between 2014 and 2017, including ancillary and residential buildings.

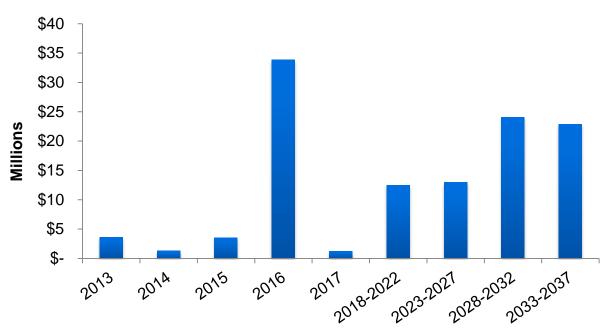
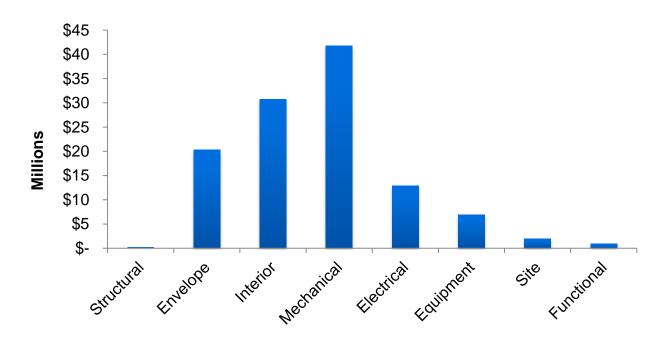


FIGURE 4: TOTAL DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY RENEWAL YEAR

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



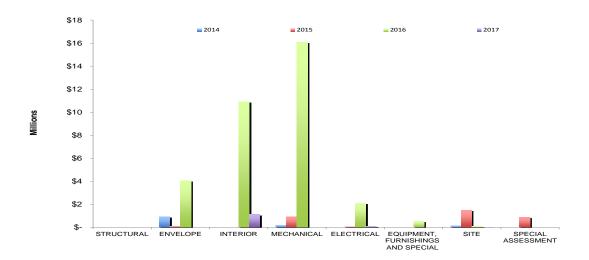
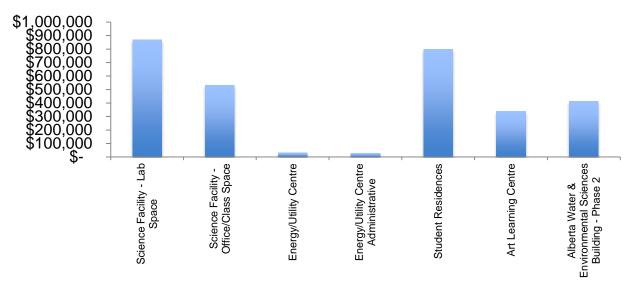


FIGURE 6: 2014-2017 DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY BUILDING COMPONENT AND RENEWAL YEAR

The University is grateful to Innovation and Advanced Education and Alberta Infrastructure for providing funding support to help deal with these deficiencies. It continues to be a challenge to meet these deficiencies but the University is making progress in addressing this issue.

4.2 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 Complex (Destination Project), Energy/Utility Centre, Student Residences, Art Learning Centre, and Alberta Water & Environmental Sciences Building – Phase 2. It is estimated that \$3 million per year in lights-on-funding will be required to maintain these facilities once they are completed.





4.3 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. 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.

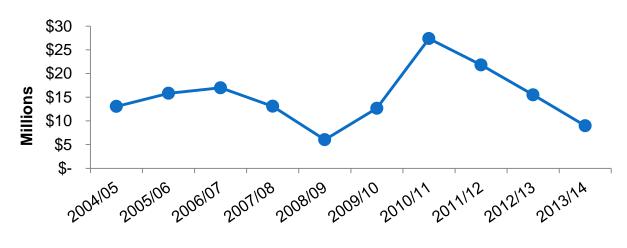


FIGURE 8: TEN-YEAR CAPITAL RESERVE BALANCES

4.4 Project Cost Escalations

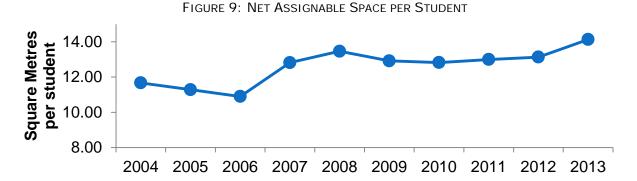
Future cost escalations will likely continue to be an issue for the University and the Government. Shown in the table below is a forecast of what escalated construction costs may be over the next year, five years, and ten years, using a projected escalation of construction costs. Using a projected inflation increase of 4-5% per year, five years from now the total New, Expansion, and Preservation Projects budget is estimated to be \$113 to \$124 million more and in ten years \$227 to \$302 million more than the current estimated construction costs.

	Project			1 Year	Over 5 Years	Over 10	Voarc
PROJECTS	,	Project Cost					
	Туре	(Jan 2014)	4%	5%	4% 5%	4%	5%
Destination Project							
- Academic Science Facility	New Facilities	\$ 275,000,000	\$ 286,000,000	\$ 288,750,000	\$ 334,579,548 \$ 350,977,430	\$ 407,067,178	\$ 447,946,022
- Energy/Utility Centre	New Facilities	\$ 45,000,000	\$ 46,800,000	\$ 47,250,000	\$ 54,749,381 \$ 57,432,670	\$ 66,610,993	\$ 73,300,258
- University Hall Renewal	Preservation/Renovation	\$ 45,000,000	\$ 46,800,000	\$ 47,250,000	\$ 54,749,381 \$ 57,432,670	\$ 66,610,993	\$ 73,300,258
- University Hall Envelope Repairs	Preservation/Renovation	\$ 1,400,000	\$ 1,456,000	\$ 1,470,000	\$ 1,703,314 \$ 1,786,794	\$ 2,072,342	\$ 2,280,452
- University Hall Window Replacement	Preservation/Renovation	\$ 4,000,000	\$ 4,160,000	\$ 4,200,000	\$ 4,866,612 \$ 5,105,126	\$ 5,920,977	\$ 6,515,579
- Canadian Centre for Neuroscience Building (CCBN) Renewal	Preservation/Renovation	\$ 15,000,000	\$ 15,600,000	\$ 15,750,000	\$ 18,249,794 \$ 19,144,223	\$ 22,203,664	\$ 24,433,419
		\$ 385,400,000	\$ 400,816,000	\$ 404,670,000	\$ 468,898,029 \$ 491,878,914	\$ 570,486,147	\$ 627,775,989
Student Residences - Aperture Park Phase IV		\$ 40,000,000	\$ 41,600,000	\$ 42,000,000	\$ 48,666,116 \$ 51,051,263		\$ 65,155,785
Student Apartments - Envelope Repairs	Preservation/Renovation	\$ 10,000,000	\$ 10,400,000	\$ 10,500,000	\$ 12,166,529 \$ 12,762,816	\$ 14,802,443	\$ 16,288,946
Student Residences - upgrade University Hall	Preservation/Renovation	\$ 8,230,000	\$ 8,559,200	\$ 8,641,500	\$ 10,013,053 \$ 10,503,797	\$ 12,182,410	\$ 13,405,803
Student Residences - upgrade Piikani House	Preservation/Renovation	\$ 15,000,000	\$ 15,600,000	\$ 15,750,000	\$ 18,249,794		
Art Gallery	New Facilities	\$ 33,990,000	\$ 35,349,600	\$ 35,689,500	\$ 41,354,032 \$ 43,380,810	\$ 50,313,503	\$ 55,366,128
Alberta Water & Environmental Sciences Building - Phase 2	Expansion	\$ 27,140,500	\$ 28,226,120	\$ 28,497,525	\$ 33,020,568 \$ 34,638,920	\$ 40,174,570	\$ 44,209,015
Total Capital Cost		\$519,760,500	\$ 540,550,920	\$545,748,525	\$632,368,121 \$644,216,520	\$747,168,845	\$822,201,666
Increase in Cost			\$ 20,790,420	\$ 25,988,025	\$112,607,621 \$124,456,020	\$227,408,345	\$ 302,441,166

TABLE 3: FUTURE CONSTRUCTION COST ESCALATIONS

4.5 Space

Over the past 10 years the University has seen 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 increased slightly over the last 10 years.

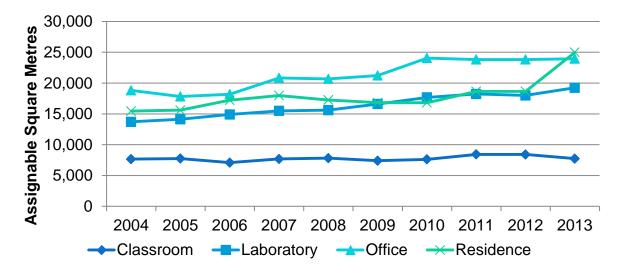


The majority of space additions over the past ten years were for Markin Hall, 1st Choice Savings Centre for Sport and Wellness, expansion to Turcotte Hall, Library Building, classrooms and offices, and new student residences in Aperture Park. There continues to be a critical need for research and student teaching lab spaces. The addition of Markin Hall in 2010 and renovations to the vacated spaces in University Hall and Anderson Hall provided much needed additional space to accommodate our current enrolment and office needs. With the approval of the Destination Project, once it is built this should go a long way to addressing our current space needs.

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

- Classrooms;
- Laboratory;
- Offices; and,
- Residences.

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





4.6 Information Technology

Information Technology (IT) continues to play a critical role in the University's delivery of its strategic objectives, while also driving efficiency and effective use of resources in support of sustainability. The rapid growth of mobile device usage, the consumerization of IT, mainstream adoption of cloud services, and the increased use of technology in the delivery of higher education requires that information technology continually adapt to changing stakeholder needs in order to remain relevant. The University will invest in the areas of network infrastructure improvements, enhanced student experience, improved process and controls, administrative systems enhancements, IT governance, and information management and security in order to meet the demands of faculty, students, and staff and support its strategic direction.

Network Infrastructure Improvements:

Significant upgrades were made to core network infrastructure over the past year to refresh aging equipment and increase bandwidth and reliability. Continued investment (\$1.04M) is planned in this area over the next year to extend the bandwidth and reliability improvements beyond the core network. Planned enhancement include transition the core campus data network from 1 Gbps to 10 Gbps to improve performance and reducing potential bottle network bottlenecks. Wireless density in high use areas will be increased to provide a more reliable student experience and better device support. In order to improve disaster recovery capabilities and better support research we are negotiating an increase in our Cybera network connection from 1 Gbps to 10 Gbps. This will allow faster access to services such as WestGrid, while also providing high bandwidth low latency access to other post-secondary data processing facilities enabling expanded provincial collaboration.

Enhanced Student Experience:

A student portal will be launched this year (\$0.5M) to improve the student experience and provided enhanced access to University services. This will provide easier access to timely and relevant information related to their learning activities and enable us to support single sign on for commonly accessed systems. Also, Google Apps for Education cloud based email is being implemented (\$70K) for students and alumni to provide a more modern and robust email experience. We will also being investing (\$.5M) in refreshing computer lab and classroom technology as part of our ongoing commitment to providing effective teaching spaces and improving student experience.

Improved Process and Controls:

In order to reduce risks, increase value realization, and improve system and service stability the institution will be integrating more parts of the ITM Control Framework into ongoing operations. Additional enhancement will be made to the Service Management, Change Management, and Problem Management processes to ensure effective and efficient IT service delivery within the University.

Administrative System Enhancements:

Significant investments (\$2.68M over two years) are being made in Banner revitalization in Financial Services, Human Resources, University Advancement, and the Registrar's Office and Student Services that will improve efficiency, streamline business process, and streamline admissions processes. When complete these changes will make the administrative systems easier to support and better position the institution to address future organizational challenges.

IT Governance:

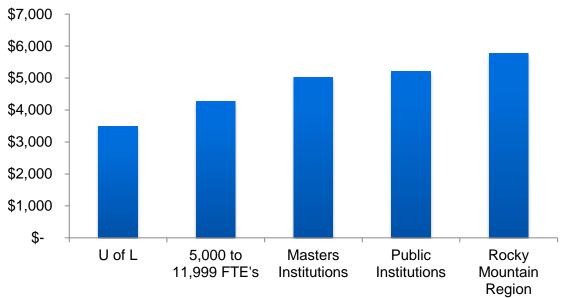
A review of IT governance processes will be completed in the coming year to increase transparency, accountability, and stakeholder engagement. This process is already underway with the launch of a common IT project review process and we will be implementing a new web governance process as a result of a review completed in the past year.

Information Management and Security:

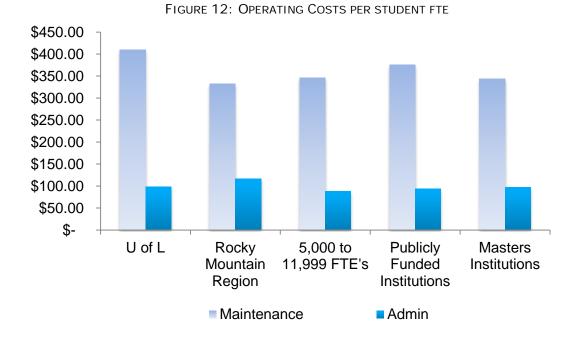
The volume and complexity of data the university captures and managed continues to grow. In order to effectively utilize this resource, investments are being made in the areas of Business Intelligence (\$1M) and Data Governance. When complete this investment will provide for robust data analytics and data-driven decision making. Information security continues to be an area of focus. The recent lunch of an information security awareness training program is equipping faculty, staff, and students with the knowledge and tools to protect themselves and the University's information assets from various threats. The planned expansion and formalization of data governance is further demonstration of the University's commitment to data security.

4.7 Facility Performance Indicators

The University continues to perform well when comparing data from the Association of Higher Education Facilities Officers (APPA) survey. APPA provides 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 (2011-12 data) (this is the latest data available).







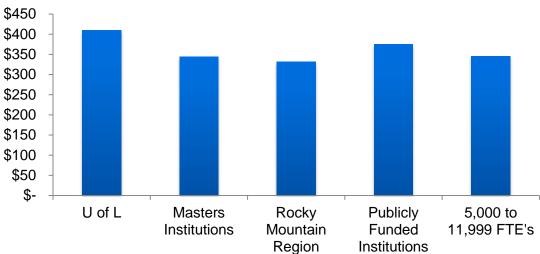
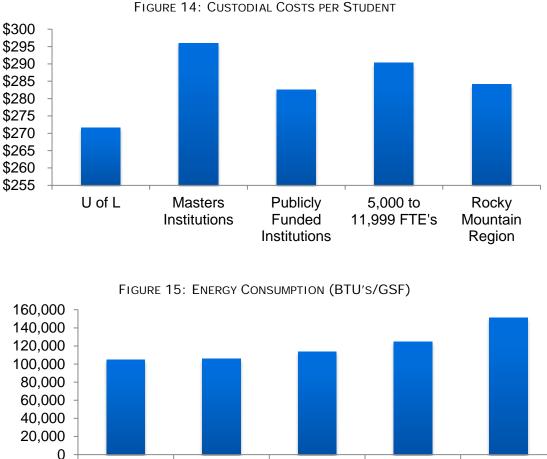
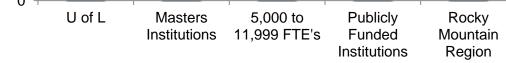


FIGURE 13: MAINTENANCE COSTS PER STUDENT





4.8 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:

- Reductions or less than inflation growth in Campus Alberta operating grants and Infrastructure Maintenance Program Grants will challenge the University's ability to achieve its capital priorities and maintain its current infrastructure.
- As the University continues to develop as a comprehensive academic and research institution, the number of graduate students has increased, with projections for further increases. Graduate students require increased space in relation to labs and classrooms, which also puts additional strain on the institution in accommodating these needs.
- Renovation costs continue to be 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 *Innovation and Advanced Education business plans* will continue to influence the University's capital planning process.
- Technology requirements will continue to escalate in the future, making it very difficult for the University to stay abreast of the growing technology needs for the faculty, students, researchers and administration.

5 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 2014-2018.

	PROJECTS	New Facilities	Expansion	Preservation / Renovation	Estimated Project Cost (January 2014 dollars)
1	Destination Project				
	- Academic Science Facility	275,000,000			275,000,000
	- Energy/Utility Centre	45,000,000			45,000,000
	- University Hall Renewal			45,000,000	45,000,000
	- University Hall Envelope Repairs			1,400,000	1,400,000
	- University Hall Window Replacement			4,000,000	4,000,000
	- Canadian Centre for Neuroscience Building (CCBN) Renewa			15,000,000	15,000,000
					385,400,000
	Confirmed Provincial funding				(212,780,731)
	TOTAL DESTINATION PROJECT				\$ 172,619,269
2	Student Residences - Aperture Park Phase IV	40,000,000			40,000,000
3	Student Apartments - Envelope Repairs			10,000,000	10,000,000
4	Student Residences - upgrade University Hall			8,230,000	8,230,000
5	Student Residences - upgrade Piikani House			15,000,000	15,000,000
6	Art Gallery	33,990,000			33,990,000
7	Alberta Water & Environmental Sciences Building - Phase 2		27,140,500		27,140,500
	TOTAL PRIORITY CAPITAL PROJECTS	393,990,000	27,140,500	98,630,000	\$ 306,979,769
-	Projects in Progress				
1	Destination Project - Planning Phase				\$ 12,780,731
2	2014-15 Deferred Maintenance Projects				3,019,594
3	UCA North Patio Pavers Replacement				2,200,000
	Total Projects in Progress				\$ 18,000,325

TABLE 4:	PRIORITY	CAPITAL	PROJECTS
		• <i>·</i> ····	

Note - Estimated Project Costs are in current dollars (Jan 2014) and will be adjusted depending on construction start dates.

Top Three Projects:

- (1) Destination Project
- (2) Student Residences Aperture Park Phase IV
- (3) Art Gallery

5.1 Destination Project

This is the highest capital priority of the University of Lethbridge in order to construct up to date science facilities and accommodate the University's strong commitment to research. Alberta Innovation and Advanced Education's commitment of \$212.7 million to date is gratefully acknowledged as a significant step towards achieving this priority.

Academic Science Facility

To continue to excel in research and to adapt to the comprehensive institution with more emphasis on graduate student education, the University requires new facilities that will provide more dedicated space for these programs and functions. These facilities would increase the capacity for training by providing space for principal investigators, new graduate and undergraduate students, and technical support personnel. Some facilities that are in the planning stages include laboratory and research spaces for Biological Sciences, Chemistry & Biochemistry, Neuroscience, Psychology, Physics & Astronomy, Mathematics & Computer Science; expansion space for Kinesiology and Health Sciences; shared research cores; space for K-12 outreach activities; student support spaces; and general and specialized classroom spaces.

Energy/Utility Centre

This total comprehensive Destination Project will require a new Energy/Utility Centre. A new Energy/Utility Centre is required for the development of the Destination Project and other future facilities and will accommodate their infrastructure needs. It is also required for the replacement of the aging infrastructure that currently is housed in University Hall.

University Hall Renewal

Most of the facilities that will be housed in the new Academic Science Facility are currently housed in University Hall, and moving them to the Destination Project will allow existing space in University Hall to be repurposed to include such things as more informal learning spaces, a TA Centre, an Art Learning Centre (art storage and study space), student support spaces, classrooms and academic programming space, building support services, and administrative space. The repurposed space will also include a First Nations Gathering Centre. One of the Strategic Priorities identified in the University's 2014-19 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.

University Hall Envelope Repairs and Window Replacement

In 2013 Crosier Kilgour & Partners completed an assessment of the University Hall building envelope, which identified the need to replace every window frame and insulated glass unit in University Hall. This will also require the appropriate tie-in modifications to be made to properly integrate the new windows with the existing wall systems for the best thermal resistance and air tightness. The report emphasized that this window replacement must be integrated with any renovation/renewal work for University Hall. A restoration contractor is also required to perform remediation work to repair areas and face seal/caulk all precast joints (90% of which have failed) and a penetrating sealer treatment (roll applied) is required to control carbonization of the pre-cast concrete cladding.

Canadian Centre for Behavioural Neuroscience Building (CCBN) Renewal

Some of the facilities that will be housed in the new Academic Science Facility are currently located in the CCBN building. Moving them to the Academic Science Facility will allow that space to be repurposed to better meet other academic and research priorities.

For more details of the project, refer to the **Destination Project website**.

The University is currently in the planning phase of the project, utilizing the \$12.7 million planning grant from Alberta Innovation and Advanced Education.

ESTIMATED PROJECT COST Destination Project	
 Academic Science Facility Energy/Utility Centre University Hall renewal University Hall Envelope Repairs University Hall Window Replacement CCBN Renewal 	\$275,000,000 \$45,000,000 \$1,400,000 \$4,000,000 \$45,000,000 \$15,000,000
Confirmed Provincial funding	<u>\$(212,780,731)</u>
Remaining Project cost	<u>\$172,619,269</u>
Proposed Funding Sources	\$142,619,269
Provincial Government	<u>\$30,000,000</u>
Fundraising	<u>\$172,619,269</u>

5.2 Student Residences

The University only has available student residence beds for approximately 13% 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 proposing renovations to University Hall and to the Piikani Apartment Building as well as further development of the Aperture Park Residence Complex (Phase IV) that will allow for more student residences to be built in accordance with the University Strategic Plan. Envelope repairs for student apartments are also required. New residences are also required in order to accommodate the anticipated shutdown of the residences in University Hall for at least one year during the construction of the Destination Project, as well as the renovations to University Hall and the envelope repairs for Piikani and Kainai Apartments. Without new residences the University may not be able offer oncampus residence space at the same capacity as currently exists.

	<u>Aperture Park</u> <u>Phase IV</u>	<u>University</u> <u>Hall</u>	<u>Piikani</u> House	<u>Student</u> <u>Apartments</u>
				<u>Envelope</u> <u>Repairs</u>
ESTIMATED PROJECT COST	<u>\$40,000,000</u>	<u>\$8,230,000</u>	<u>\$15,000,000</u>	<u>\$10,000,000</u>
Proposed Funding Sources Financing Supported by Housing Rents	<u>\$40,000,000</u>	<u>\$8,230,000</u>	<u>\$15,000,000</u>	<u>\$10,000,000</u>

5.3 Art Gallery

The University art collection is recognized as one of the finest in Canada, with over 14,000 works of art. In building the collection, the University 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 University's Museum Studies students with experience necessary for careers in the cultural sector. The expansion of the gallery will also allow more access to students, from the University and from other institutions, in this field of study and research.

ESTIMATED PROJECT COST Art Gallery	<u>\$33,990,000</u>
Proposed Funding Sources	
Provincial Government	\$8,990,000
Research Granting Agencies	\$10,000,000
Fundraising	<u>\$15,000,000</u>
-	\$33,990,000

5.4 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>\$27,140,500</u>
Proposed Funding Sources	
Federal Government	\$13,570,250
Research Granting Agencies	<u>\$13,570,250</u>
	<u>\$27,140,500</u>

5.5 Learning Commons and Collegia Program

North American academic libraries have changed from places focused on print collections to places focused on people. The concept of a Learning Commons came from seminal research done by an anthropologist and a librarian in 2004. Since that time best practices for creating a Learning Commons have been established.

A Learning Commons is a combination of philosophy, principles, partnerships, design elements and services. The design principles behind a Learning Commons are: learning rather than instruction; engagement and interaction; service; technology integration; experimentation and innovation, and user involvement. The Commons are based on a philosophy of "one stop shopping" creating partnerships with other student service partners and positioning the services within the library. Students want a "universal service point", a "physical Google."

Partners with the library include combinations of: IT, tutors, faculties, student services, food services and security. Common, across the "commons" are group work rooms for collaboration; a variety of study spaces; a wide range of seating styles; different levels of lighting; smart rooms; multimedia development spaces; lending of laptops, e-readers and digital equipment, and areas that are open 24/7.

The first Canadian Learning Commons developed at the University of Guelph. The U of G website states, "The Learning Commons is based on a partnership model designed to support and enhance undergraduate and graduate student learning, writing, research, numeracy, and technology at the University of Guelph...in recognition of the Library as the central gathering place for students to study, engage in writing and research, and learn in collaborative settings."

The University of Lethbridge is exploring ways to enhance learning services through the implementation of a dispersed inter-disciplinary learning commons model on campus to build on existing library and existing 24-hour resources facility. A learning commons is a priority strategy to provide a centre of learning as a welcoming, service-oriented, tech-rich environment that is open for extended hours on a regular basis for learners to access resources and services that support their learning needs.

Collegia Program: The University of Lethbridge is primarily a commuter campus with only 13% of the full-time student population living in Campus Housing at the Lethbridge home campus. There is a need for a central space to be designed to encourage personal and professional networking and facilitate an initial transition to University with learners meeting others in their cohort and an enriching environment where student assistants are welcoming, resourceful, and contribute to a sense of belonging. Acknowledging the importance of community in student retention and success, collegia establish intentional learning communities on campus and emphasize providing a home away from home during the day for the commuter learner. As with other university collegia models, each collegium will be designed for cohorts within particular years of study.

6 CAPITAL BUDGET AND FORECAST

Over the next 6 years the University proposes to significantly expand its facilities. This campus expansion consists primarily of the proposed Destination Project, supported by a new Energy/Utility Centre. Figure 17 shows the capital forecast over this time. See Appendix A for more details.

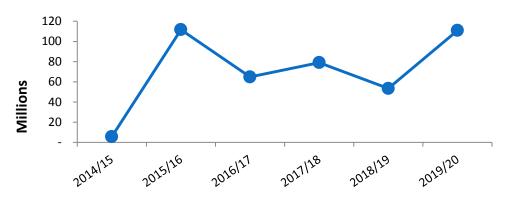
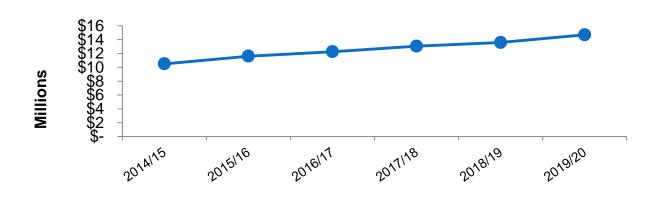
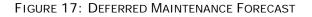


FIGURE 16: SIX-YEAR CAPITAL FORECAST

As the University continues to expand its capital infrastructure, deferred maintenance remains a concern. 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 has significantly contributed to reducing the deferred maintenance at the University.

With the new capital infrastructure planned over the next six years, the annual deferred maintenance costs are expected to be approximately \$14 million over the annual current funded levels. See Appendix A for details.





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 A – 6 Year Capital Forecast (January 2014 dollars) (\$000)

	Droject Tyme	Estimated	2014/15	2015/16	2016/17	2017/18	2010/10	2010/20	Total	Start Data	Completion Date
Destination Project	Project Type	Project Cost	2014/15	2015/16	2010/17	2017/18	2018/19	2019/20	Total	Start Date	Completion Date
- Academic Science Facility	New Facilities	275,000	4,950	37,400	51,425	67,925	45,925	40,975	248,600	Mar 2016	Aug 2019
- Energy/Utility Centre	New Facilities	45,000	810	6,120	8,415	11,115	7,515	6,705	40,680	Mar 2016	Aug 2019
- University Hall Renewal	Preservation/Renovation	45,000	-	-	-	-	-	22,500	22,500	Sep 2019	Aug 2021
- University Hall Envelope Repairs	Preservation/Renovation	1,400	-	-	-	-	-	700	700	Sep 2019	Aug 2021
- University Hall Window Replacement	Preservation/Renovation	4,000	-	-	-	-	-	2,000	2,000	Sep 2019	Aug 2021
- Canadian Centre for Neuroscience Building (CCBN) Renewal	Preservation/Renovation	15,000	-	-	-	-	-	7,500	7,500	Sep 2019	Aug 2021
		385,400	5,760	43,520	59,840	79,040	53,440	80,380	321,980		
Student Residences - Aperture Park Phase IV	New Facilities	40,000		40,000	-	-	-	-	40,000	May 2015	Aug 2016
Student Apartments - Envelope Repairs	Preservation/Renovation	10,000	-	5,000	5,000	-	-	-	10,000	May 2015	Aug 2017
Student Residences - upgrade University Hall	Preservation/Renovation	8,230	-	8,230	-	-	-	-	8,230	May 2015	Aug 2016
Student Residences - upgrade Piikani House	Preservation/Renovation	15,000	-	15,000	-	-	-	-	15,000	May 2015	Aug 2016
Art Gallery	New Facilities	33,990	-	-	-	-	-	16,995	16,995	Sep 2019	Aug 2021
Alberta Water & Environmental Sciences Building - Phase 2		27,141	-	-	-	-	-	13,570	13,570	Sep 2019	Aug 2021
TOTAL CAPITAL PROJECTS		519,761	5,760	111,750	64,840	79,040	53,440	110,945	425,775		
PROPOSED CAPITAL PROJECTS FUNDING											
Provincial Capital Funding			760	33,520	49,840	74,040	53,440	84,875	296,475		
Other Funding Sources			5,000	78,230	15,000	5,000	-	26,070	129,300		
			5,760	111,750	64,840	79,040	53,440	110,945	425,775		
DEFERRED MAINTENANCE											
Buildings Capital Asset Replacement Value (\$000)		1,043,950	1,049,710	1,161,460	1,226,300	1,305,340	1,358,780	1,469,725			
Annual Deferred Maintenance Requirement (1% of building capital	asset value)		10,497	11,615	12,263	13,053	13,588	14,697	75,713		
ANNUAL PROVINCIAL CAPITAL REQUIREMENT REQUEST											
Gross Provincial Capital Funding Required			760	33,520	49,840	74,040	53,440	84,875	296,475		
Provincial Funding Confirmed			12,781	-	-	100,000	100,000	-	212,781		
Net New Capital Funding Request			(12,021)	33,520	49,840	(25,960)	(46,560)	84,875	83,694		
Annual Deferred Maintenance Request			10,497	11,615	12,263	13,053	13,588	14,697	75,713		
TOTAL			(1,524)	45,135	62,103	(12,907)	(32,972)	99,572	159,408		

Appendix B – Capital Maintenance Budget 2014-15

Source of Funds			
Infrastructure Maintenance Program (IMP) Grant	\$ 1,781,577		
Innovation and Advanced Education	10,808,000		
University Reserves - Housing	220,000		
Total Funding	\$ 12,809,577		
Proposed Capital Expenditures			
Aperture Park	220,000		
Campus Wide (Interior) 42			
Central Plant			
Centre for Sport & Wellness	125,000		
Gushul Studios	25,000		
Parkway Service Complex 50			
Site Systems 2,14			
University Centre for the Arts 63			
University Hall	9,113,000		
Total Proposed Capital Expenditures	\$ 12,809,577		

Appendix C – Capital Budget (\$000)

		2014-15 Proposed Budget	2015-16 Proposed Budget	2016-17 Proposed Budget
SOURCES OF FUNDS				
Major Ca	pital Projects:			
	rovincial Government	760	33,520	49,84
F	und Raising/External Sources	5,000	10,000	10,00
	ederal Government	_	-	
	esearch Agencies	_	_	
	Iniversity Contributions	_	68,230	5,00
		5,760	111,750	64,84
Infrastruc	cture Maintenance Program (IMP) Grant	1,782	1,782	1,78
Indirect F	Research Costs Grant	100	100	10
University	/ contributions	2,873	2,754	2,78
University	/ Capital Reserves	2,455	1,000	33
OTAL FUNDING		<u>\$ 12,970</u>	<u>\$ 117,386</u>	<mark>\$ 69,8</mark> 4
		_		
APITAL EXPENDITUR				
	pital Projects:			
	estination Project - Planning Phase	5,000	5,000	-
	estination Project	760	38,520	59,84
	Student Residences - Aperture Park Phase IV	-	40,000	-
*	Student Apartments - Envelope Repairs	-	5,000	5,00
* 9	Student Residences - upgrade University Hall	-	8,230	-
*	Student Residences - upgrade Piikani House	-	15,000	-
*	Art Gallery	-	-	-
*	Alberta Water & Environmental Sciences Building - Phase 2	-	-	-
		5,760	111,750	64,84
Capital M	aintenance & Facility Upgrade (includes deferred maintenance)	1,782	1,782	1,78
		-		
Equipmer				
	rts and Science	115	115	1'
	ducation	35	35	3
	lanagement	-	-	-
	ine Arts	-	-	-
H	lealth Sciences	-	-	-
A	dministrative Support Units	-	-	-
S	ports and Recreation/Athletics	10	10	1
N	lotor Vehicles	-	-	-
I	nformation Technology	299	299	29
L	ibrary	2,359	2,359	2,35
F	acilities	6	6	
		2,824	2,824	2,82
Ancillarie		_		
P	arking	1,825	1,000	33
B	ookstore	-	-	۷
P	rinting	49	20	1
н	lousing	630	-	-
C	atering and Food Services	100	-	-
	onference Services	-	-	-
	ncillary Services Director	-	10	_
A	-			
A		2,604	1,030	30
A		2,604	1,030	30

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

BIBLIOGRAPHY

University Key Documents

University of Lethbridge, University Campus Master Plan (2012) University of Lethbridge, Annual Report to Alberta Advanced Education 2012-2013 University of Lethbridge, Strategic Plan 2014-2019 University of Lethbridge, Comprehensive Institutional Plan (2014-15)

External Key Documents

Government of Alberta 2013-16 Strategic Plan APPA, Facilities Performance Indicators Report 2011-2012 Alberta Infrastructure BLIMS Submission 2012 Alberta's 20-Year Strategic Capital Plan, January 29, 2008 Alberta Innovation and Advanced Education Business Plan 2013-2016 Alberta Advanced Education and Technology, Roles and Mandates Policy Framework for Alberta's Publicly Funded Advanced Education System, Nov 2007

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