

# 2015-2019 Capital Plan



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#### 2 EXECUTIVE SUMMARY

The University of Lethbridge updates its Capital Plan on an annual basis. The 2015-2019 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 addresses 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, accommodate the University's strong commitment to research, and address significant health and safety issues. 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 new facility is also essential in order to alleviate health and safety issues that exist as a result of having student residences in the same building as research labs. The University gratefully acknowledges the Government's confirmed \$212.7 million investment in the Destination Project – Phase I.

The University currently has 43 buildings on campus totaling 199,104 gross square metres (gsm) averaging 24 years of age. The University worked to reduce the amount of deferred maintenance on campus from \$70 million in 2011-12 to approximately \$56 million in 2013-14; however, deferred maintenance projects over the next ten years now totals over \$92 million, with an estimated total deferred maintenance of \$154 million. 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 and operating costs to the University. Three buildings at the University hold Silver LEED status: the 1<sup>st</sup> 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 5 ("Priority Capital Projects") and Appendix C.

Table 1: Capital Priorities Summary

	PROJECTS	New Facilities		Estimated Project Cost (January 2015 dollars)
1	Destination Project Phase I:			
	- Academic Science Facility	255,750,000	-	255,750,000
	- Energy/Utility Centre	41,750,000	-	41,750,000
	Destination Project Phase I Total:	297,500,000	-	297,500,000
2	Destination Project Phase II:			
	- 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 Behavioural Neuroscience (CCBN) Building	-	15,000,000	15,000,000
	- Art Gallery	-	34,300,000	34,300,000
	Destination Project Phase II Total:	-	99,700,000	99,700,000
	TOTAL DESTINATION PROJECT	297,500,000	99,700,000	397,200,000
3	Student Apartments - Envelope Repairs	_	13,200,000	13,200,000
4	Student Residences - upgrade Piikani House	-	2,250,000	2,250,000
5	Student Residences - upgrade University Hall	-	8,500,000	8,500,000
6	Student Residences - Aperture Park Phase IV	42,400,000	-	42,400,000
	·	42,400,000	23,950,000	66,350,000
	TOTAL PRIORITY CAPITAL PROJECTS	339,900,000	123,650,000	463,550,000
	Projects in Progress			
1				12,780,731
2	2014-15 Deferred Maintenance Projects			3,215,825
	Total Projects in Progress			\$ 15,996,556

Note - Estimated project costs are in current dollars (January 2015) and will fluctuate 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 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 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 addresses issues affecting existing capital facilities.

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>Destination Project – Phase I</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 – Phase I prior to 2013 and 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 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 required major repairs or replacement due to their poor condition. This work was completed in Summer of 2014 at a total cost of \$3.5 million.

<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 was completed in Summer 2014, with work including landscaping and the construction of storm water management and drainage systems. The total cost of this project was \$4.1 million.

## 3.2 Other Capital Projects, Renovations and Repairs

<u>University Centre for the Arts North Patio Concrete Pavers</u>: The patio pavers and raised bench sections on the patio north of the University Centre for the Arts were replaced. Planter boxes were installed, along with roof drains. This work was completed in Fall 2014 at a total cost of \$2.1 million.

## 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 44% of the completed capital projects with 44% 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 funding sources, both internal and through fundraising efforts, required to fund major capital projects.

Table 2: MAJOR CAPITAL PROJECTS FUNDING SOURCE SUMMARY

	COMPLETION						
PROJECT	YEAR	PROJECT COST		F	UNDING SOURC	CES	
			University	Donations	City of Leth	Gov't *	TOTAL
OMPLETED PROJECTS:							
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	30,776,265
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	54,296,753	24,500	4,272,253	-	50,000,000	54,296,753
Student Residences (Mount Blakiston House)	13/14	32,000,000	29,997,058	2,942	2,000,000	-	32,000,000
Tunnel & South Plaza Replacement	13/14	3,500,000	-	-	-	3,500,000	3,500,000
UCA North Patio Pavers Replacement	14/15	1,820,650		-	-	1,820,650	1,820,650
Parking Lots E, F, FS Design/Overlay	14/15	4,047,982	4,047,982	-	-	-	4,047,982
		\$ 241,019,998	\$105,479,170	\$19,576,061	\$11,023,439	\$104,941,329	\$241,019,998
% Total Project Cost			44%	8%	5%	44%	100
ROJECTS IN PROGRESS:							
Destination Project - Phase I - Planning	15/16	12,780,731	-	-	-	12,780,731	12,780,73
Destination Project - Phase I	18/19	284,719,269		50,000,000	-	234,719,269	284,719,269
2001.100011110012	20/ 20	297,500,000		50,000,000	-	247,500,000	297,500,000
Destination Project - Phase II	19/20	99,700,000		-	-	99,700,000	99,700,000
		\$ 397,200,000	\$ -	\$50,000,000	\$ -	\$347,200,000	
% Total Project Cost			0%	13%	0%	87%	100

<sup>\*</sup>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."

#### <u>Government funding for Preservation Projects:</u>

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 (Jan 2015)	Commitments	Estimated Date for Spending Commitments
Safety Systems Upgrade project in University Hall	\$17,000,000	\$4,477,090	\$578,000	December 31, 2015
Structure and Building Envelope project in University Hall	\$5,415,000	\$889,094	\$268,693	April 30, 2015
Renovate the University's Physical Education Building	\$5,600,000	\$240,566	-	2015/16

Of the remaining \$4.48 million in the Safety Systems Upgrade project, \$578,000 has been allocated to essential projects for 2015/16. These funds will continue to be evaluated on a yearly basis and committed to necessary projects; it is intended that any remaining grant funding will be left in reserve to be allocated to the University Hall upgrades necessary after portions of University Hall are vacated as a result of program moves into the new academic science facility (Destination Project).

The balance in the Structure and Building Envelope project will also continue to be evaluated on a yearly basis and committed to necessary projects, including structural monitoring and remediation work for University Hall.

With the completion of the Physical Education Building renovation project in June 2013, the balance of the grant money was transferred to Infrastructure Maintenance Programming as allowed under the terms of the grant agreement.

#### <u>Government funding for the Destination Project - Phase I:</u>

Innovation and Advanced Education approved a total of \$212.78 million funding for the new science complex (Destination Project – Phase I), 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. The new facility is also essential in order to alleviate health and safety issues that exist as a result of having student residences in the same building as research labs.

#### **4 CURRENT SITUATION**

#### 4.1 State of Assets

The University currently has 43 buildings on campus totaling 199,104 gsm and averaging 24.3 years of age. The following chart shows the breakdown by building age and area.

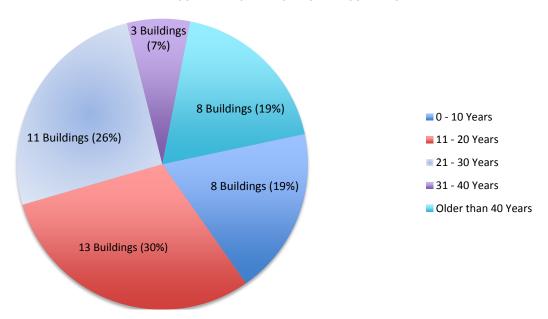
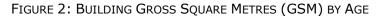
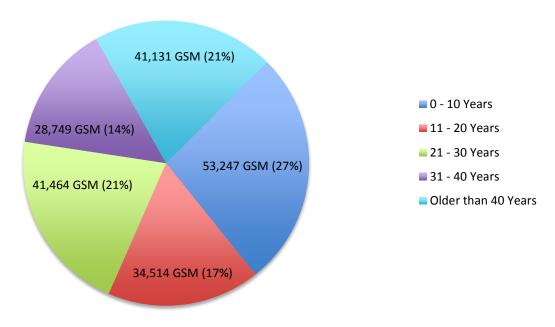


FIGURE 1: NUMBER OF BUILDINGS BY AGE





#### 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 14.7%.

The University is grateful to Innovation and Advanced Education and Alberta Infrastructure for providing funding support to help deal with these deficiencies, which the University recognises is significantly more than other Provincial Governments provide to post-secondary institutions. It continues to be a challenge to meet FCI deficiencies but the University is making progress in addressing this issue.

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 2013-2014):

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.

Note that Ancillary Services facilities, including student residences, are not included in the following data as these facilities are not reported through the Provincial Government's reporting systems as they are not considered government owned assets. The Provincial Government does not provide funding (capital, operating or deferred maintenance funds) for ancillary buildings.

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

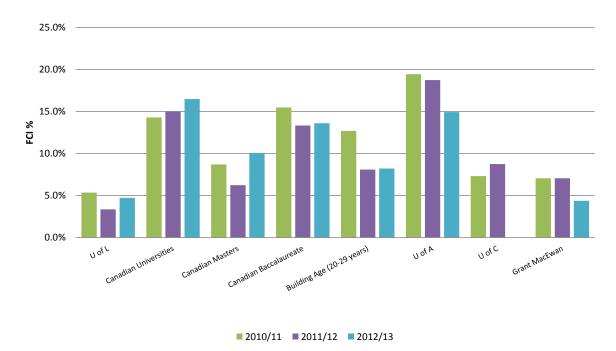


FIGURE 3: DEFERRED MAINTENANCE BACKLOG BY INSTITUTION TYPE (APPA DATA)

Figures 4 and 5 show the total deferred maintenance on University buildings from data provided by Alberta Infrastructure as of January 2015. Total deferred maintenance was estimated at \$154 million. In order to ensure facilities are maintained properly, it is recommended that as a minimum \$41 million in deferred maintenance should be addressed between 2015 and 2018, including ancillary and residential buildings.

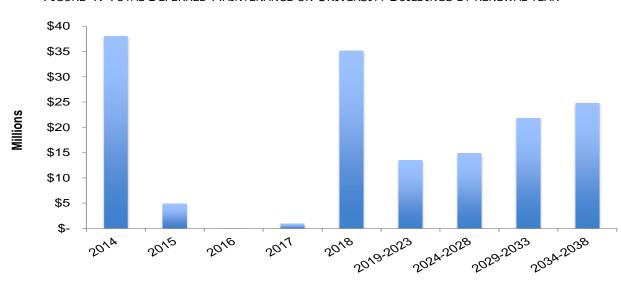


FIGURE 4: TOTAL DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY RENEWAL YEAR

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

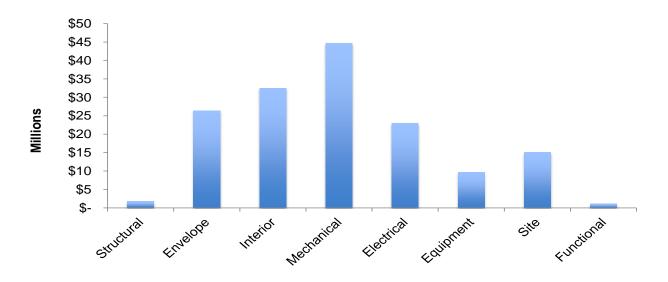
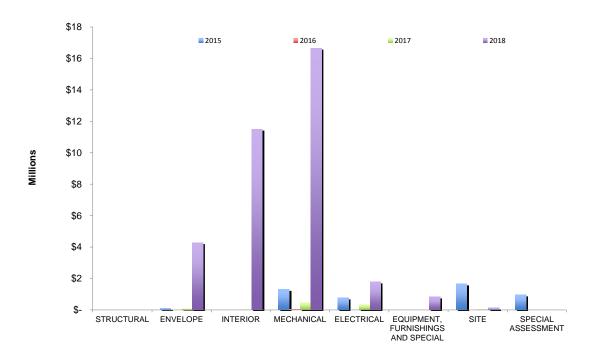


FIGURE 6: 2014-2017 DEFERRED MAINTENANCE ON UNIVERSITY BUILDINGS BY BUILDING COMPONENT AND RENEWAL YEAR



#### 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: Destination Project – Phases I & II) and Student Residences. It is estimated that \$3.4 million per year in lights-on-funding will be required to maintain these facilities once they are completed.

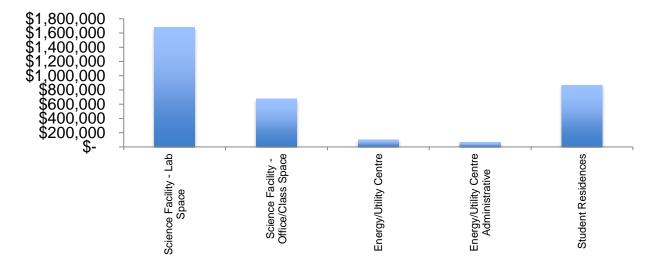


FIGURE 7: LIGHTS-ON FUNDING FOR MAJOR CAPITAL PROJECTS

## 4.3 Capital Reserves

University reserves are set up from time to time to be used for special purposes with one-time dollars realised from annual net surpluses. 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 internally designated capital reserves to make up shortfalls in capital budgets due to the current fiscal environment and restraints on operating budgets. The following figure shows the last ten-year capital reserve balances for the University.

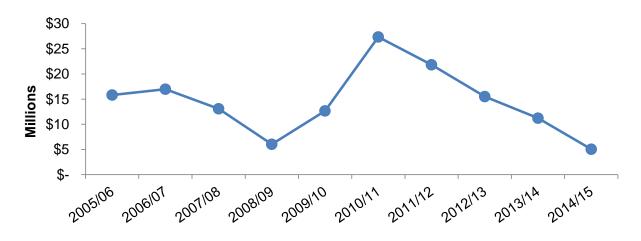


FIGURE 8: TEN-YEAR CAPITAL RESERVE BALANCES

## **4.4 Project Cost Escalations**

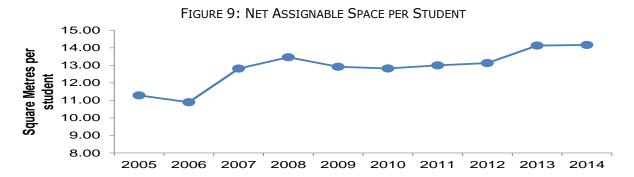
Future cost escalations are expected to continue to be an issue for the University and the Government. Shown in the table below is a forecast of what escalated construction costs may be over the next year, five years, and ten years, using both a minimal escalation of 1% to a 5% projected escalation of construction costs. Using inflation increases of 1% to 5% per year, five years from now the total New and Preservation Projects budget is estimated to be \$24 to \$128 million more and in ten years \$48 to \$292 million more than the current estimated construction costs. The below figures are illustrations of the impact of construction cost escalations on project budgets but no estimates of what the actual cost escalations will be over the next 5 to 10 years due to the volatility of the market.

TABLE 3: FUTURE CONSTRUCTION COST ESCALATIONS

PROJECTS	Project	Project Cost	Over 1 Year		Over 5	Years	Over 1	LO Years	
PROJECTS	Туре	(Jan 2015)	1%	5%	1%	5%	1%	5%	
Destination Project Phase I:	New Facilities	\$ 297,500,000	\$ 300,475,000	\$ 312,375,000	\$ 312,675,490	\$ 379,693,765	\$ 328,625,082	\$ 484,596,151	
Destination Project Phase II:	Preservation/Renovation	\$ 99,700,000	\$ 100,697,000	\$ 104,685,000	\$ 104,785,702	\$ 127,245,272	\$ 110,130,826	\$ 162,400,794	
		\$ 397,200,000	\$ 401,172,000	\$ 417,060,000	\$ 417,461,192	\$ 506,939,037	\$ 438,755,908	\$ 646,996,946	
Student Apartments - Envelope Repairs	Preservation/Renovation	\$ 13,200,000	\$ 13,332,000	\$ 13,860,000	\$ 13,873,333	\$ 16,846,917	\$ 14,581,012	\$ 21,501,409	
Student Residences - upgrade Piikani House	Preservation/Renovation	\$ 2,250,000	\$ 2,272,500	\$ 2,362,500	\$ 2,364,773	\$ 2,871,634	\$ 2,485,400	\$ 3,665,013	
Student Residences - upgrade University Hall	Preservation/Renovation	\$ 8,500,000	\$ 8,585,000	\$ 8,925,000	\$ 8,933,585	\$ 10,848,393	\$ 9,389,288	\$ 13,845,604	
Student Residences - Aperture Park Phase IV	New Facilities	\$ 42,400,000	\$ 42,824,000	\$ 44,520,000	\$ 44,562,826	\$ 54,114,338	\$ 46,835,978	\$ 69,065,132	
		\$ 66,350,000	\$ 67,013,500	\$ 69,667,500	\$ 69,734,517	\$ 84,681,282	\$ 73,291,678	\$ 108,077,158	
Total Capital Cost		\$463,550,000	\$468,185,500 \$486,727,500		\$487,195,709 \$591,620,318		\$512,047,586	\$755,074,104	
Increase in Cost			\$ 4,635,500	\$ 23,177,500	\$ 23,645,709	\$128,070,318	\$ 48,497,586	\$291,524,104	

## 4.5 Space

Over the past 10 years the University has seen a growth in new buildings on campus. These new buildings have helped to ease some of the space pressures the University has been faced with in order to accommodate teaching and research needs, as well as enhance student learning experiences. As shown in the graph below the net assignable space per student has increased slightly over the last 10 years.

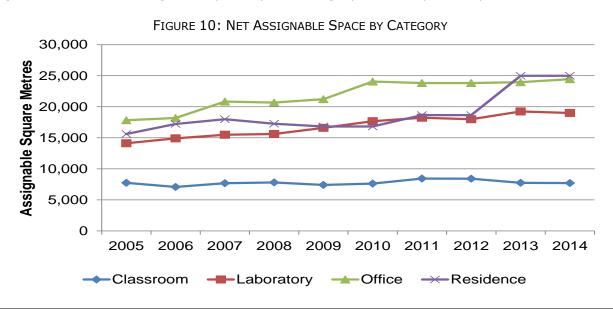


The majority of space additions over the past ten years were for Markin Hall, 1st Choice Savings Centre for Sport and Wellness, expansion to Turcotte Hall, Library Building, classrooms and offices, and new student residences in Aperture Park. There continues to be a critical need for research and student 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 completed 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

The University of Lethbridge continues to invest in Information Technology (IT) recognizing the critical role it plays in the delivery of its strategic objectives, while also driving efficiency and effective use of resources in support of sustainability. The University of Lethbridge will continue projects started related to network infrastructure improvements, enhanced student experience, improved process and controls, administrative systems enhancements, IT Project 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:

The Network Infrastructure Improvements project has made significant progress with wireless enhancements improving wireless services across campus learning spaces, and also improving services for students residing on campus. This year the project will upgrade additional segments of the network from 1 Gbps to 10 Gbps to improve performance and reducing potential network bottlenecks building on the work completed last year. While there was a planned upgrade to increase our Cybera network connection from 1 Gbps to 10 Gbps this was delayed by a year due to Cybera budget constraints, and is now expected to be completed in 2015. 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:

2014 saw the student experience enhanced with the successful launch of the student portal and mobile application providing greater access to University services. This will continue with new features and functions planned for both the portal and mobile applications.

#### Improved Process and Controls:

The institution is continuing with implementation of the Information and Technology Management (ITM) Control Framework into operations to ensure effective and efficient IT service delivery within the University of Lethbridge.

#### Administrative System Enhancements:

The Banner Revitalization program is continuing as planned, entering its second year with progress being made in all project areas including Financial Services, Human Resources, University Advancement, and the Registrar's Office and Student Services.

#### IT Governance:

Continued progress has been made on IT Governance with a proposed governance framework currently being reviewed by the University. One aspect of the IT Governance program has already been implemented: an IT Projects Review committee has been established to centrally review and prioritize all IT related project requests, thereby improving project success and project oversight.

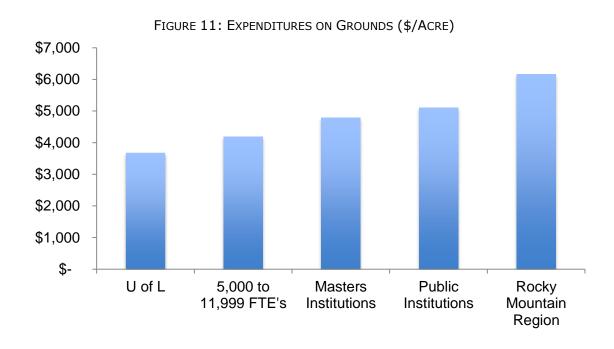
#### Information Management and Security:

The University of Lethbridge recognizes the importance of information security and will continue to build upon it successful education and awareness program launched last year. The information security awareness training program is equipping faculty, staff, and students with the knowledge and tools to protect themselves and the University of Lethbridge's information assets from various threats.

## **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 (2012-13 data) (this is the latest data available).

It is important to note that in some of the graphs, the U of L data shows that our expenditures on a per Full Time Equivalent (FTE) student basis are higher than comparable institutions. There are a number of factors that influence these data. The comparisons do not take into account regional factors, in particular the funding levels in various regions. In the primarily US based Rocky Mountain APPA institutions were faced with much more significant fiscal reductions in the past few years than the U of L and this is reflected in the funding levels for facilities operations. The labour costs in Alberta also tend to be higher than in other regions. The U of L enrollment also has declined slightly in the past few years and this is reflected in the data. When comparing against Alberta and Western Canadian institutions, the U of L fairs well in comparison of coasts.



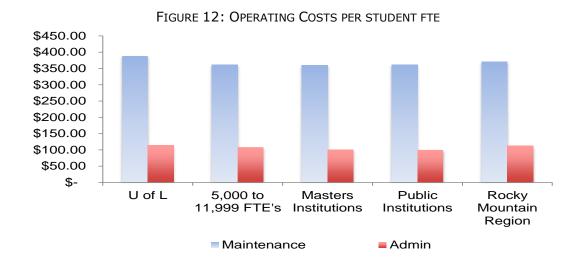


FIGURE 13: MAINTENANCE COSTS PER STUDENT FTE

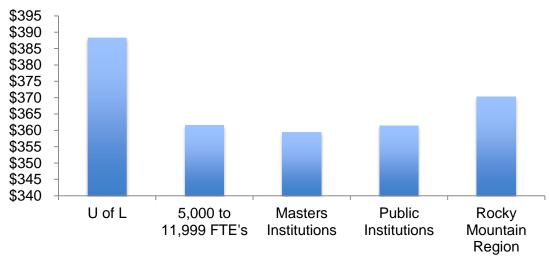
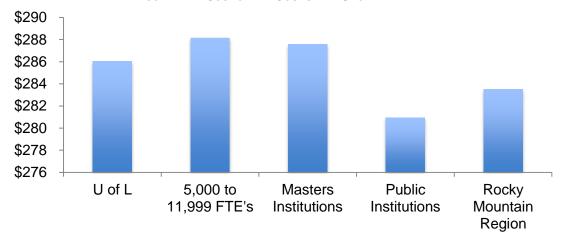
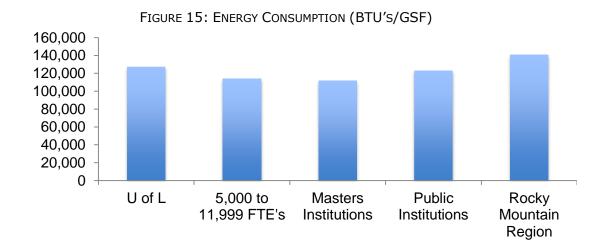


FIGURE 14: CUSTODIAL COSTS PER STUDENT FTE





## 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:

- The increase to the Infrastructure Maintenance Program grant, announced in the 2015-16 Provincial budget, will assist the University in maintaining its current infrastructure. However, reductions in Campus Alberta operating grants will challenge the University's ability to achieve its capital priorities.
- 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 2015-2019.

TABLE 4: PRIORITY CAPITAL PROJECTS

	TABLE 4: PRIORITY CAPITA	AL PROJECTS		
	PROJECTS	New Facilities		Estimated Project Cost (January 2015 dollars)
1	Destination Project Phase I:			
	- Academic Science Facility	255,750,000	-	255,750,000
	- Energy/Utility Centre	41,750,000	-	41,750,000
	Destination Project Phase I Total:	297,500,000	-	297,500,000
2	Destination Project Phase II:			
	- 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 Behavioural Neuroscience (CCBN) Building	-	15,000,000	15,000,000
	- Art Gallery	-	34,300,000	34,300,000
	Destination Project Phase II Total:	-	99,700,000	99,700,000
	TOTAL DESTINATION PROJECT	297,500,000	99,700,000	397,200,000
3	Student Apartments - Envelope Repairs	-	13,200,000	13,200,000
4	Student Residences - upgrade Piikani House	-	2,250,000	2,250,000
5	Student Residences - upgrade University Hall	-	8,500,000	8,500,000
6	Student Residences - Aperture Park Phase IV	42,400,000	-	42,400,000
		42,400,000	23,950,000	66,350,000
	TOTAL PRIORITY CAPITAL PROJECTS	339,900,000	123,650,000	463,550,000
	Projects in Progress			
1	Destination Project - Planning Phase			12,780,731
2	2014-15 Deferred Maintenance Projects			3,215,825
	·			. ,
	Total Projects in Progress			\$ 15,996,556

Note - Estimated Project Costs are in current dollars (Jan 2015) and will fluctuate depending on construction start dates.

#### **Top Three Projects:**

- (1) Destination Project
- (2) Student Residences Envelope Repairs
- (3) Student Residences upgrade Piikani House

#### **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 (Phase I)

To continue to excel in research and to adapt to the comprehensive institution with more emphasis on graduate student education and providing adequate undergraduate student teaching labs, 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. The new facility is also essential in order to alleviate health and safety issues that exist as a result of having student residences in the same building as research labs. The new facility includes laboratory and research spaces for the departments of Biological Sciences, Chemistry & Biochemistry, Neuroscience, Psychology, Physics & Astronomy; shared research cores; space for K-12 outreach activities ("Agility" program); student support spaces; and general and specialized classroom spaces. From the outset, the intention of the University has been to develop a facility that dissolves traditional boundaries between departments and creates an environment that enables collaboration and cross fertilization; an environment that enables "Transdisciplinary Teaching and Research".

## Energy/Utility Centre (Phase I)

This total comprehensive Destination Project will require a new Energy/Utility Centre, constructed as part of the Academic Science Facility. A new Energy/Utility Centre is required to accommodate infrastructure needs for the development of the Destination Project and other future facilities on the University campus. It is also required for the replacement of the aging energy infrastructure that currently is housed in University Hall.

#### University Hall Renewal (Phase II)

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 Teaching Assistance 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 place that is welcoming and will support their academic and social needs. The University is committed to increasing the enrollment and retention of FNMI students.

#### University Hall Envelope Repairs and Window Replacement (Phase II)

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 (CCBN) Building (Phase II)

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.

#### Art Gallery (Phase II)

The University art collection is recognized as one of the finest in Canada, with over 13,000 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. It is proposed that the needed Art Gallery space be relocated into the renovated University Hall.

For more details of the project, refer to the <u>Destination Project website</u>.

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

#### ESTIMATED PROJECT COST

Destination	Project (Phase I)	
- Aca	demic Science Facility	\$255,750,000
- Ene	ergy/Utility Centre	\$41,750,000
		\$297,500,000
Cor	nfirmed Provincial funding	<u>\$(212,780,731)</u>
Rer	maining funding required	<u>\$84,719,269</u>
Propos	ed Funding Sources	
Provinci	al Government	\$34,719,269
Fundrai	sing	\$50,000,000
		<u>\$84,719,269</u>
Destination	n Project (Phase II)	
- Uni	versity Hall renewal	\$45,000,000
- Uni	versity Hall Envelope Repairs	\$1,400,000
- Uni	versity Hall Window Replacement	\$4,000,000
- CCI	BN Renovations	\$15,000,000
	Gallery	<u>\$34,300,000</u>
Destina	tion Project Phase II Total:	<u>\$99,700,000</u>
Propos	ed Funding Sources:	
Provinci	al Government	\$99,700,000

#### **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 the aging student apartments (Piikani and Kainai) are also required. New residences are required in order to accommodate the anticipated shutdown of the residences in University Hall for at least one year during the renovations to University Hall and the envelope repairs for Piikani and Kainai Apartments. Without new residences the University may not be able offer on-campus residence space at the same capacity as currently exists.

	<u>Student</u> <u>Apartments</u> <u>Envelope</u> Repairs	<u>Piikani</u> <u>House</u>	<u>University</u> <u>Hall</u>	<u>Aperture</u> <u>Park Phase</u> <u>IV</u>
ESTIMATED PROJECT COST	\$13,200,000	\$2.250,000	\$8,500,000	<u>\$42,400,000</u>
Proposed Funding Sources Financing Supported by Housing Rents	<u>\$13,200,000</u>	<u>\$2,250,000</u>	<u>\$8,500,000</u>	<u>\$42,400,000</u>

#### **6 CAPITAL BUDGET AND FORECAST**

Over the next six 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.

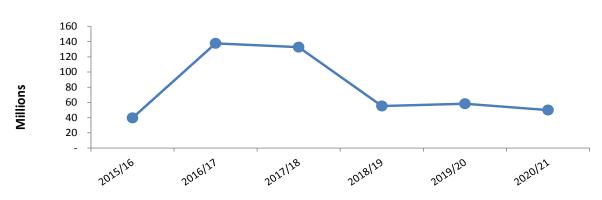


FIGURE 16: SIX-YEAR CAPITAL FORECAST

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 total 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 \$15 million over the annual current funded levels. See Appendix A for details.

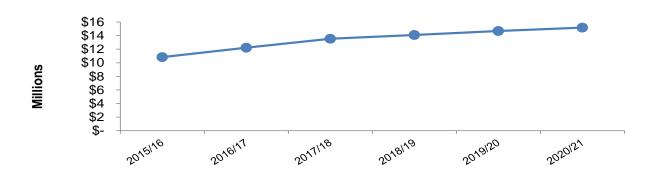


FIGURE 17: DEFERRED MAINTENANCE FORECAST

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 A – 6 Year Capital Forecast (January 2015 dollars) (\$000)

(January 2015 donars) (\$000)											
	Project Type	Estimated Project Cost	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	Total	Start Date	Completion Date
Destination Project Phase I:	New Facilities	297,500	26,924	123,403	75,476	60,155	2023/20		285,957	Mar 2016	Mar 2019
Destination Project Phase II:	Preservation/Renovation	99,700				00/200	49,850	49,850	99,700	Sep 2019	Aug 2021
	Trace vacon, renormator	397,200	26,924	123,403	75,476	60,155	49,850	49,850	385,657	0 op 2022	7.09 2022
Student Apartments - Envelope Repairs	Preservation/Renovation	13,200	6,600	6,600	-	-	-		13,200	May 2015	Aug 2017
Student Residences - upgrade Piikani House	Preservation/Renovation	2,250	-	2,250	-	-	-		2,250	May 2016	Aug 2017
Student Residences - upgrade University Hall	Preservation/Renovation	8,500	-	-	-	-	8,500		8,500	May 2019	Aug 2020
Student Residences - Aperture Park Phase IV	New Facilities	42,400	-	-	42,400	-	-		42,400	May 2017	Aug 2018
		66,350	6,600	8,850	42,400	-	8,500	-	66,350		
										Sep 2019	Aug 2021
TOTAL CAPITAL PROJECTS	3	463,550	33,524	132,253	117,876	60,155	58,350	49,850	452,007		
PROPOSED CAPITAL PROJECTS FUNDING											
Provincial Capital Funding			16,924	113,403	70,476	60,155	49,850	49,850	360,657		
Other Funding Sources			16,600	18,850	47,400	-	8,500	-	91,350		
·			33,524	132,253	117,876	60,155	58,350	49,850	452,007		
DEFERRED MAINTENANCE											
Buildings Capital Asset Replacement Value (\$000)		1,043,950	1,077,474	1,209,727	1,327,603	1,387,757	1,446,107	1,495,957			
Annual Deferred Maintenance Requirement (1% of building capital	asset value)		10,775	12,097	13,276	13,878	14,461	14,960	64,487		
ANNUAL PROVINCIAL CAPITAL REQUIREMENT REQUEST											
Gross Provincial Capital Funding Required			16,924	113,403	70,476	60,155	49,850	49,850	360,657		
Provincial Funding Confirmed			-	-	5,000	20,000	45,000	130,000	200,000		
Net New Capital Funding Request			16,924	113,403	65,476	40,155	4,850	(80,150)	160,657		
Annual Deferred Maintenance Request			10,775	12,097	13,276	13,878	14,461	14,960	79,446		
TOTAL			27,698	125,500	78,752	54,032	19,311	(65,190)	240,103		

## Appendix B – Capital Maintenance Budget 2015-16

Source of Funds		
Infrastructure Maintenance Program (IMP) G	Grant \$	2,525,680
Innovation and Advanced Education		7,678,000
University Reserves - Housing		239,000
		10.110.000
Total Funding	\$	10,442,680
Proposed Capital Expenditures		
Aperture Place		239,000
Campus Wide (Interior)		198,577
Anderson Hall		375,000
Destination Project		7,000,000
Gushul Studios		30,000
Maintenance Buildings		88,000
Site Systems (Circ./Land./Util.)		75,000
Student's Union Building		850,000
University Centre for the Arts		225,000
University Hall		618,000
Contingency		744,103
T. 15 10 11 15 11		10 110 000
Total Proposed Capital Expenditures	\$	10,442,680

Appendix C - Capital Budget (\$000)

		2015-16 Proposed Budget	2016-17 Proposed Budget	2017-18 Proposed Budget
Sources of Fund	)\$			
	Capital Projects:			
	Provincial Government	16,924	113,403	70,476
	Fund Raising/External Sources	10,000	10,000	5,000
	Federal Government	-	_	-
	Research Agencies	_	-	-
	University Contributions	6,600	8,850	42,400
		33,524	132,253	117,876
Infras	tructure Maintenance Program (IMP) Grant	2,526	2,526	2,526
Indirect Research Costs Grant		100	100	100
	University contributions		2,835	2,883
University Capital Reserves		2,938 1,230	335	200
TOTAL FUNDING	Sity Capital Nesel ves	\$ 40,318	\$ 138,049	\$ 123,585
		ψ 10/310	Ψ 130/013	Ψ 123/303
CAPITAL EXPENDIT	TURES			
Major	Capital Projects:			
	Destination Project - Planning Phase	5,000	-	-
	Destination Project (Phase I)	21,924	123,403	75,476
:	* Student Apartments - Envelope Repairs	6,600	6,600	-
:	* Student Residences - upgrade Piikani House	-	2,250	-
:	* Student Residences - Aperture Park Phase IV	-	-	42,400
		33,524	132,253	117,876
Capita	I Maintenance & Facility Upgrade (includes deferred maintenance)	2,526	2,526	2,526
Equip				
	Arts and Science	115	115	115
	Education	55	55	55
	Management	-	-	-
	Fine Arts	-	-	-
	Health Sciences	-	-	-
	Administrative Support Units	-	-	-
	Sports and Recreation/Athletics	6	6	$\epsilon$
	Motor Vehicles	-	-	-
	Information Technology	299	299	299
	Library	2,241	2,241	2,241
	Facilities	104	104	104
		2,820	2,820	2,820
Ancilla	aries			
	Parking	1,000	335	200
	Bookstore	150	80	45
	Printing	68	20	118
	Housing	230	-	-
	Catering and Food Services	-	-	-
	Conference Services	-	5	-
	Ancillary Services Director	_	10	
		1,448	450	363
TOTAL CARTAL T	ADEAIDTE IDEC	40.045	4.20.046	# 420 FC-
TOTAL CAPITAL EX	PENDITURES	\$ 40,318	\$ 138,049	\$ 123,585

<sup>\*</sup>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 2013-2014

University of Lethbridge, Strategic Plan 2014-2019

University of Lethbridge, Comprehensive Institutional Plan (2015-16)

#### **External Key Documents**

Government of Alberta 2014-17 Strategic Plan

APPA, Facilities Performance Indicators Report 2012-2013

Alberta Infrastructure BLIMS Submission 2014

Alberta Innovation and Advanced Education Business Plan 2014-2017

Alberta Advanced Education and Technology, Roles and Mandates Policy Framework for Alberta's Publicly Funded Advanced Education System, Nov 2007

#### **ACKNOWLEDGEMENTS**

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