

University of
Lethbridge



University of Lethbridge 2008 – 2017 Capital Plan (Revised March 4, 2008)

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1.0 Executive Summary



This ten-year Capital Plan 2008– 2017 identifies the approved capital priorities of the University of Lethbridge that have been developed as a result of striving to maintain facilities and growing infrastructure needs. This ever-changing environment is the result of the demands for high quality facilities and resources. The University of Lethbridge’s vision is to strive to build the most vital and engaging learning environment in Canada, through superior teaching, research and creative achievement. The ten-year Capital Plan is designed to support the strategic and tactical needs of the institution, as described in the *University of Lethbridge: Strategic Plan, 2003 – 2008*. The University is currently in the process of updating its Strategic Plan, with the goal to having the next 5 year Strategic Plan completed in the Spring 2008.

1.1 University of Lethbridge: Key Strategic Priorities and Initiatives

The Core Campus Expansion Plan of November 2001 has been guided by the University’s strategic goals and mission and is based on an evaluation of a series of issues including space needs, phasing of projects, funding, building and landscape design, traffic and parking, utilities, facilities operations and maintenance. The need for the plan is a reflection of sustainable growth and the on-going pressures for additional space within the core campus. The plan will facilitate teaching, research and functions that support the University’s programs and its role as a key provider of services to the Lethbridge community.

One of the key strategic documents of the University of Lethbridge is the *Strategic Plan, 2003-2008, approved by the Board of Governors, February 13, 2003*.

The University of Lethbridge operates under the guidance of the Board of Governors, and is subject to the provisions of the Post-Secondary Learning Act. The General Faculties Council and the councils of the Faculties and Schools determine the University's academic programs and priorities. The University relies on a framework of policy and strategy, constructed through collegial processes, to set priorities and conduct operations promptly and responsively. The fundamental principles of The University of Lethbridge reflect its commitment to students; to society; to creativity, inquiry, and discovery; and to responsible action.

With this Strategic Plan as the framework, The University of Lethbridge commits to continuing action in the areas in which we presently excel, as outlined in our Mission statement, and in those key areas where enhancement is required. The following Strategic Priorities represent these key areas, in which the University will apply special efforts so that the institution can more successfully align itself with its Mission, Vision, and Fundamental Principles listed below.

- Students
- Diversity
- Teaching and Research
- Facilities
- Outreach

The Board of Governors, Faculties, Schools, students, administrative and support staff, and our alumni are asked to identify their role in addressing our Strategic Priorities. The units identify specific actions, targets, and dates for completing these targets. They then are asked to report back to Senior Administration annually on their progress in accomplishing these targets.

1.2 Key Capital Priorities

1.2.1 Recently completed Capital Projects

Over the past few years a few notable capital projects have been completed and are operational:

Table 1: Notable Capital Projects in the last 8 years

Project	Completed
Anderson Hall	January 2000
Canadian Centre for Behavioural Neuroscience (CCBN)	August 2001
University Library	August 2001
University Hall Vacated Library Space Renovations	August 2002
Residence Village (including Paterson Centre)	September 2003
University Hall Level 8 Psychology Lab Renovation	March 2005
CCBN Expansion	August 2005
1 st Choice Savings Centre for Sport and Wellness	February 2007
Parkway Service Complex (replace Service Buildings)	August 2007
Turcotte Hall Expansion	October 2007

The Province of Alberta created the Building and Land Information Management System (BLIMS) for post-secondary institutions to track capital expenditures. This program is used by the government to develop long-term planning and information systems to support capital funding decisions. The province has identified four individual areas for potential one-time funding of projects, or potentially for envelope funding. These categories are:

Category 1: Preservation/Renewal of Existing Facilities

These projects involve maintaining or extending the operational life of an existing infrastructure asset – to preserve the physical structure, to address functional obsolescence or enhancements to continue meeting client needs, and/or to fit an existing facility for a new use.

Category 2: Expansion and/or Replacement

This category includes projects to increase the size of an existing infrastructure asset – to meet increasing demand for an existing program, to address functional obsolescence or enhancements to continue meeting client needs, or to provide space for a new use.

Category 3: New Facilities

This describes projects to develop a new infrastructure asset, including replacement facilities.

Category 4: Capital Planning for Major Projects

This category is intended to identify major planning/programming/preliminary design activities required to develop a proposed project's vision, scope, business case and budget towards its prioritization and implementation.

1.2.2 Capital Priorities

The University of Lethbridge is annually involved in planning exercises for preservation, expansion and growth of its facilities. As shown below the University has taken steps to categorize its projects as outlined in the Province of Alberta BLIMS system.

Table 2: 2008-2017 PRIORITY CAPITAL PROJECTS**2007-2011 PRIORITY CAPITAL PROJECTS**

Estimated Project Cost

Category I: Renewal/Preservation Projects

1 Penny Building Upgrades (downtown facility)	4,700,000
2 Physical Education Building Upgrades	5,000,000
3 University Hall Renovations - vacated Faculty of Management space	5,835,600
4 Anderson Hall Renovations - vacated Health Sciences space	1,574,700
Total Renewal/Preservation Projects	\$ 17,110,300

Category II: Expansion/Replacement Projects

1 Alberta Water & Environmental Sciences Building - Phase 2	7,150,000
2 Alberta Water & Environmental Sciences Building - Phase 3	8,960,000
Total Expansion/Replacement Projects	\$ 16,110,000

Category III & IV: New Facilities & Capital Planning

1 Science Complex*	180,000,000
2 Central Plant Facility	24,000,000
3 Student Residences	10,600,000
4 Art Gallery	60,000,000
5 Office/Classroom Complex	60,000,000
Total New Facilities & Capital Planning	\$ 334,600,000

TOTAL PRIORITY CAPITAL PROJECTS**\$ 367,820,300****Projects in Progress**

1 Markin Hall (for Health Sciences & Management)	65,000,000
2 Alberta Water & Environmental Sciences Building - Phase 1	26,750,000
3 Deferred Maintenance Projects	18,415,000
4 Sports Stadium	8,250,000
Total Projects in Progress	\$ 118,415,000

* Science Complex in the planning stages includes a remote sensing institute and an agricultural biotechnology laboratory.

NOTE – Estimated Project Costs are in current dollars (as of December 2007) and will be adjusted depending on construction start dates.

In following the government category groupings, the University of Lethbridge has categorized all its capital projects in the BLIMS program.

The Alberta Water & Environmental Sciences Building – Phase 1 is currently under construction. The University's next capital priorities are ranked above with a new Science Complex ranked as the highest academic space need and the Alberta Water & Environmental Sciences Building (phases 2 and 3) as the highest research facility project.

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 the current escalation of construction costs. Throughout this report, all project budgets are using current estimated construction costs, but this table provides a look at what construction costs may be in the future. Five years from now the total University capital costs on major projects is estimated to cost \$204 - \$338 million more and ten years from now \$533 - \$1,019 million more than the current estimated construction costs.

Table 3: FUTURE CONSTRUCTION COST ESCALATIONS (in thousands)

Expansion/Replacement/ New Projects	Project Cost (December 1/07)	Over 1 Year		Over 5 Years		Over 10 Years	
		10%	15%	10%	15%	10%	15%
1 Alberta Water & Environmental Science Building	\$ 16,110	17,721	18,527	25,945	32,403	41,785	65,174
2 Science Complex	\$ 180,000	198,000	207,000	289,892	362,044	466,874	728,200
3 Central Plant Facility	\$ 24,000	26,400	27,600	38,652	48,273	62,250	97,093
4 Student Residences	\$ 10,600	11,660	12,190	17,071	21,320	27,494	42,883
5 Art Gallery	\$ 60,000	66,000	69,000	96,631	120,681	155,625	242,733
6 Office/Classroom Complex	\$ 60,000	66,000	69,000	96,631	120,681	155,625	242,733
Total Capital Cost	\$ 334,600	\$ 368,060	\$ 384,790	\$ 538,877	\$ 673,000	\$ 867,866	\$ 1,353,644
Change in Cost	\$ -	\$ 33,460	\$ 50,190	\$ 204,277	\$ 338,400	\$ 533,266	\$ 1,019,044

2.0 Introduction

The University of Lethbridge continues to build on its reputation as an exceptional teaching and research University.

With a focus on liberal education, small class sizes, co-op placements, excellence in teaching, and student involvement in research, The University of Lethbridge provides top-quality education. Our faculty and students are recognized nationally and internationally through their achievements and as recipients of awards, scholarships, and professional appointments.

2.1 Key Opportunities

The University of Lethbridge identifies four key opportunities in the coming years:

- Moderate enrolment growth
- Leadership in research
- Leadership in technology
- Leadership in First Nation's participation

2.2 Important Challenges

Eleven important challenges are also identified:

- Recruitment and retention of students
- Need for proper science/research facilities
- Enrolment Growth
- Unfunded Students
- Attraction and Retention of Faculty members
- Indirect costs of research
- Staying at the forefront of applicable technology
- Need for office and general campus space
- Costs of facilities maintenance
- Fundraising initiatives
- Demands of Northern Campuses

2.3 Goals

To help effectively address opportunities and challenges, The University of Lethbridge has set a series of goals, with associated actions and expected results. The institutional goals are:

- Accessibility
- Academic excellence
- Research excellence
- Strengthen community and public relations
- Improve student services
- Facilities and equipment renewal
- Operate responsively and responsibly

2.4 Performance Measures

The U of L uses eight performance measures to assess its progress related to the goals:

- Enrolment.
- Graduate satisfaction.
- Graduate participation and employment rates.
- Administration expenditures.
- Citation index.
- Research intensity.
- Research impact.
- Research council grants.

Annual reports track yearly progress on these performance measures.

3.0 Key Capital Priorities

The vision of the University of Lethbridge is to build the most vital and engaging learning environment in Canada.

The University of Lethbridge is dedicated to cost containment, fiscal responsibility, and continuous quality improvement.

3.1 Priority Capital Projects

The University of Lethbridge annually reviews its list of capital priorities to select projects to be included in the capital budget each year depending on the funding available.

When prioritizing capital projects, the University of Lethbridge follows the BLIMS category system by placing capital projects into new, preservation, expansion or IMP (Infrastructure Maintenance Program) categories. The University of Lethbridge has prepared a Ten Year Capital Forecast of capital project funding needs. For more information see Appendix A.

Figure 1: Five Year Capital Forecast

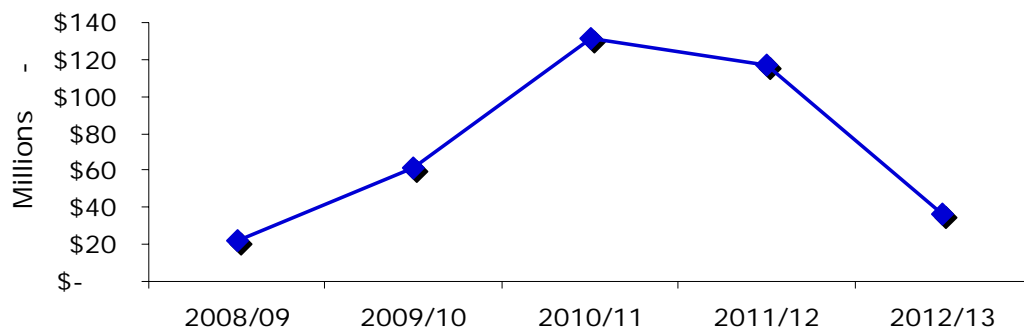
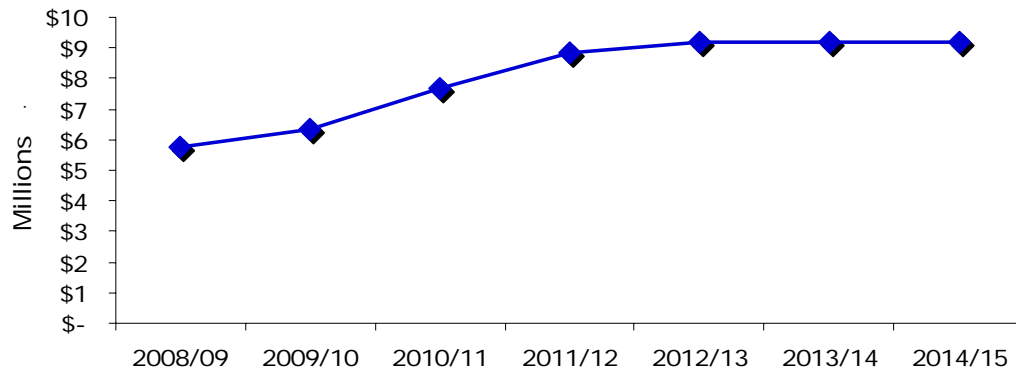


Figure 1 indicates that over the next four years the University proposes to significantly expand our facilities in order to meet our growing space needs. This growth/expansion consists primarily of the Alberta Water & Environmental Science Building, the Markin Hall (for Health Sciences and Management) and a new \$180 million Science Complex with construction starting in 2010.

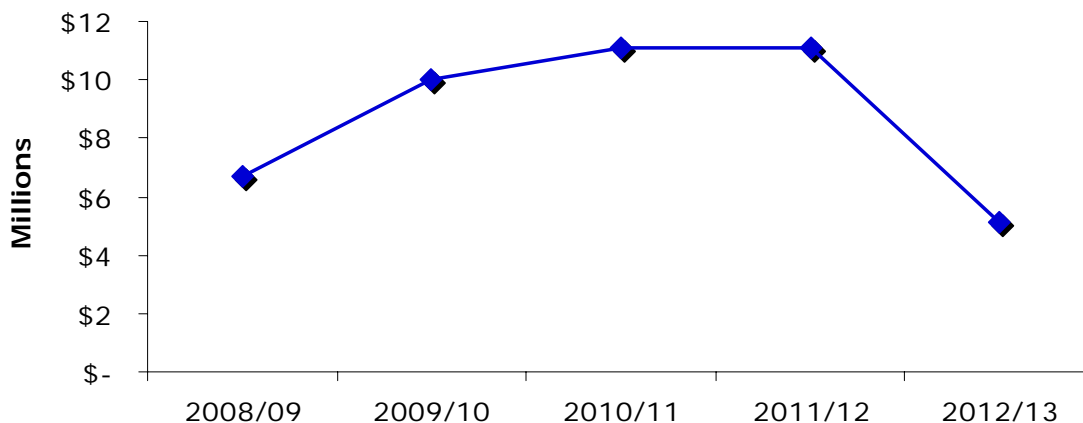
Figure 2: Deferred Maintenance Forecast



As shown in Figure 2, as the University continues to grow and expand while maintaining the quality of the existing buildings, it is expected that the deferred maintenance will continue to increase if the annual infrastructure grant funds are not increased. During 2007-08 the University received one-time deferred maintenance grants from Alberta Infrastructure and Transportation and Advanced Education and Technology in the amount of \$25.915 million which will significantly contribute to reducing the deferred maintenance projects at the University.

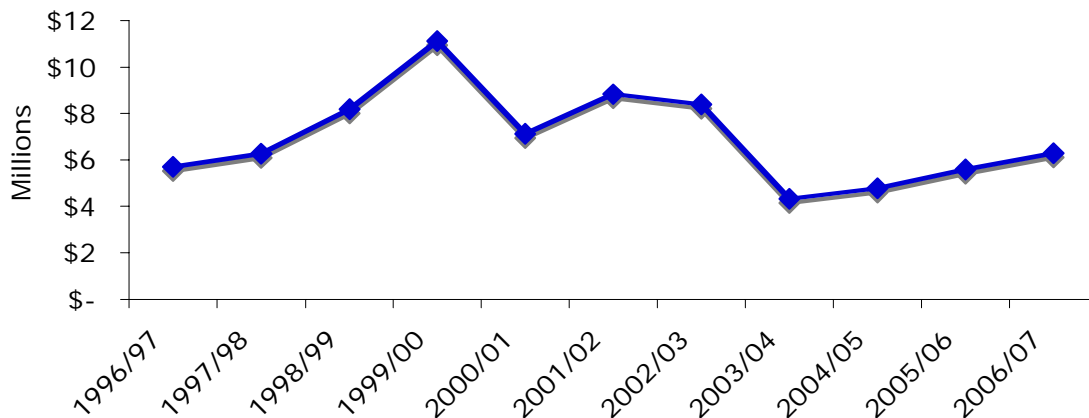
Figure 3 is the Capital Maintenance Project Budget, excluding major building projects. A major life safety upgrade to University Hall took place in 2006/07. Over the next few years the capital maintenance projects budget is projected to be just over \$5 million a year. For a detailed look at the 2007/08 Capital Maintenance Projects Budget see Appendix B, C and E.

Figure 3: Five Year Capital Projects Budget (excludes major building projects)



Shown in Figure 4 is the 10 year Capital Reserve Balances. Over the years the capital reserve balances have increased and decreased in relation to the funding of the various new building construction projects. In 1998/1999 and 1999/2000, \$3 million was reserved for the Library building. University reserves are set up from time to time through one-time dollars to be used for specific purposes. For a detailed look at the capital reserve balances see Appendix D.

Figure 4: Ten Year Capital Reserve Balances



In renewal and upgrading, deferred maintenance projects to improve the health and safety of buildings and the upgrading of services required by new buildings will be the top challenges and priorities.

3.2 Deferred Maintenance

The Deferred Maintenance Study, produced by the Canadian Association of University Business Officers (CAUBO) in 2000, warned that postsecondary institutions in Canada have a serious problem with the poor conditions of their facilities.

From December 2000 to July 2002 the ministries of Infrastructure and Learning completed a Post-Secondary Facility Evaluation Project with 22 Alberta public post-secondary institutions in which the University of Lethbridge participated. An evaluation team, consisting of architectural, mechanical, electrical and cost consultants, reviewed existing documents, and visited each facility to review all subsystems with a designated institutional representative familiar with the facility's problems areas. All infrastructure over 80m² was evaluated for area, age, cost of recommended actions, and replacement costs, including buildings supported by Infrastructure Renewal (IRE) grants, parkades, residences, site, and farm sites.

The identified costs of recommended actions were limited to those priority deferred maintenance items that would require remedial action within the next 5 years in order to maintain facilities and sites as close to their original condition as possible. Costs associated with functional upgrading of facilities were not included.

The Facilities Condition Index (FCI) for the 22 surveyed post secondary institutions is now estimated at 29%. Facilities Condition Index (FCI) is defined as the ratio of deferred maintenance cost divided by current replacement value. A growth in the FCI means that buildings are deteriorating faster than the funding to maintain them. Ideally, funding for facilities maintenance should be 1.7% of the building replacement costs, which for the University of Lethbridge is about \$5 million per year. For the last two years, actual funding for facilities maintenance through the regular Infrastructure Maintenance Program (IMP) has been approximately \$1.4 million per year, which is 0.5% of building replacement costs. As mentioned previously, the Provincial Government recognized the need to fund deferred maintenance projects at the University and contributed \$25.915 million in one-time funds to address immediate deferred maintenance health and safety projects.

Table 4: Deferred Maintenance of all buildings
(Data taken between December 2000 and July 2002)

Institution	Total Deferred Maintenance	Replacement Cost	Facility Condition Index
University of Alberta	\$ 433,523,058	\$ 1,382,493,985	27.2%
University of Calgary	\$ 173,775,378	\$ 907,577,230	17.5%
University of Lethbridge	\$ 64,851,890	\$ 253,374,037	22.6%

Shown above are the findings for the three Alberta residential universities. A more detailed chart of results for all supported infrastructure is included in Appendix E.

Of the 22 public post-secondary institutions evaluated (up to July 2002), \$975 million was recommended for expenditure between 2003 and 2008 to address the deferred maintenance on all the buildings. With a total building replacement cost of \$4.7 billion, which excludes the central power plants of 9 institutions, the overall system Facility Condition Index (FCI) was 18.5%. Including the replacement cost of the central power plants, it was expected that the total replacement cost of all supported buildings was \$5.4 billion.

The U of L is working closely with Alberta Infrastructure and Transportation to ensure the facilities condition database is kept up to date and to support the planned renewal and upgrading of facilities in a cost effective manner.

Although the U of L has been fiscally responsible in ensuring that funds are available in the future to maintain our physical facilities, it has put pressure on our operating budget, as funds that could have been used for teaching are diverted to facilities maintenance. Operating budget needs and projections will not allow the reallocation of operating budget dollars to be set aside for capital projects in the foreseeable future as all operating funds will be required to maintain the quality of our academic programs.

3.2.1 Deferred Maintenance – Notables

As a result of the evaluation, a few points are worth mentioning:

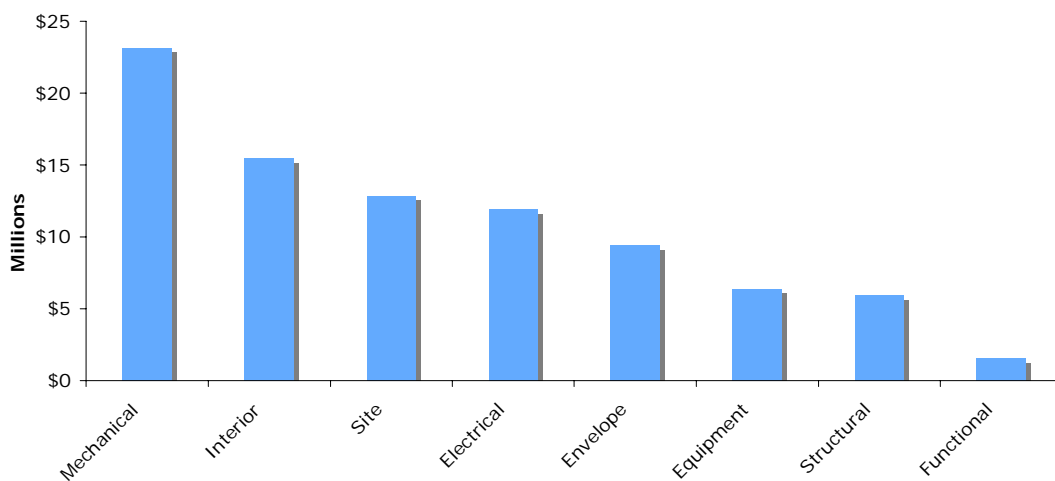
- A breakdown of buildings with gross floor area over 500m² considered in good, fair, and poor condition is shown below.

Table 5: FCI on Alberta University buildings
(With gross floor area over 500m²)

Good (0-15% FCI)	36%
Fair (16-40% FCI)	44%
Poor (Over 40% FCI)	20%

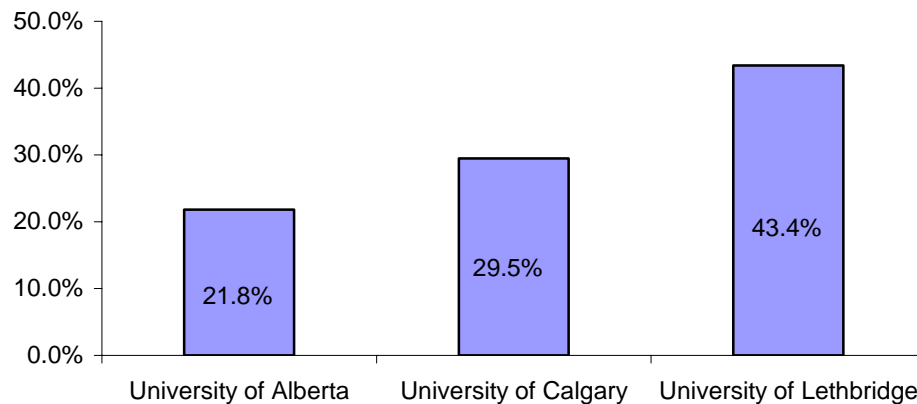
Figure 5 shows the University of Lethbridge's deferred maintenance breakdown. For more detailed deferred maintenance information see Appendix G.

Figure 5: U of L Deferred Maintenance (2007 Data)



The post-secondary facility evaluation project also took a look at all other ancillary facilities and the ancillary facility index of particular note for the University of Lethbridge is that regarding residences. Below is a summary of the deferred maintenance for the three Alberta residential universities. For a more detailed list see Appendix H.

Figure 6: Deferred Maintenance on Residences



As a result of the more than \$1 billion in condition deficiencies, institutions are now being asked to identify in their annual business plans modernization projects in priority buildings which will improve both condition and functionality of the facilities. It was noted in the study that many of the older facilities were designed for purposes other than their current usage. Since these modernization projects are usually of a magnitude that cannot be dealt with through “regular” infrastructure renewal grants, the most problematic facilities, showing both condition and functional upgrade costs, will be prioritized as cost pressures for government support.

3.3 Lights-On Funding

Lights-on funding can be defined as operating costs required to run a facility. This includes utility costs and all expenses related to caretaking, security, and operations. Over the next few years the University of Lethbridge will be spending more on new capital projects than it ever has before. As a result, the need for lights-on funding will become a requirement to maintain those facilities. Using seven of the University’s major capital projects it is estimated that it would cost an additional \$2.5 million for lights-on funding. See Appendix I for a further cost breakdown on major University capital priorities.

The University has accepted as a donation an existing building in downtown Lethbridge (Penny Building). The building will provide an opportunity to relocate some activities that currently reside on campus but which may be moved to a downtown location, thus allowing the freeing up of much needed space on campus for academic purposes. The facility will also allow the University to connect more with the Lethbridge community and may provide for such programming as a downtown speakers series and fine arts programming. Other programs which may be moved to this facility could include fine arts studios, fine arts conservatory programs and the Health Sciences addictions counseling program.

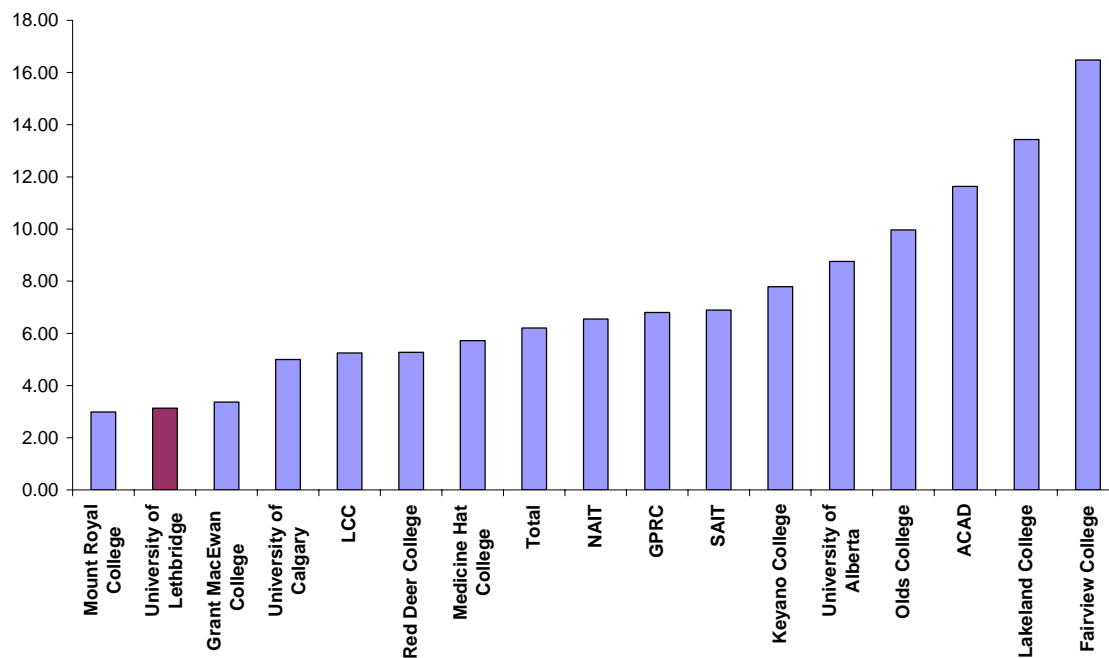
The donated building would not be a substitute for any of the capital project priorities identified in this report, but may allow for reallocation of space to academic programs by freeing up space currently used for the activities that may be moved into the newly acquired downtown facility.

3.4 Space

For the past several years the University of Lethbridge has taken steps to develop its strategic plan for the institution, including the planning for physical growth. The need for this plan is to prepare for the requirements of the institution based on the current and anticipated growth in enrolment.

1997-98 data shows that the University of Lethbridge had the 2nd lowest amount of teaching space per student among public postsecondary institutions in the province, and the least assignable space per student among Alberta universities.

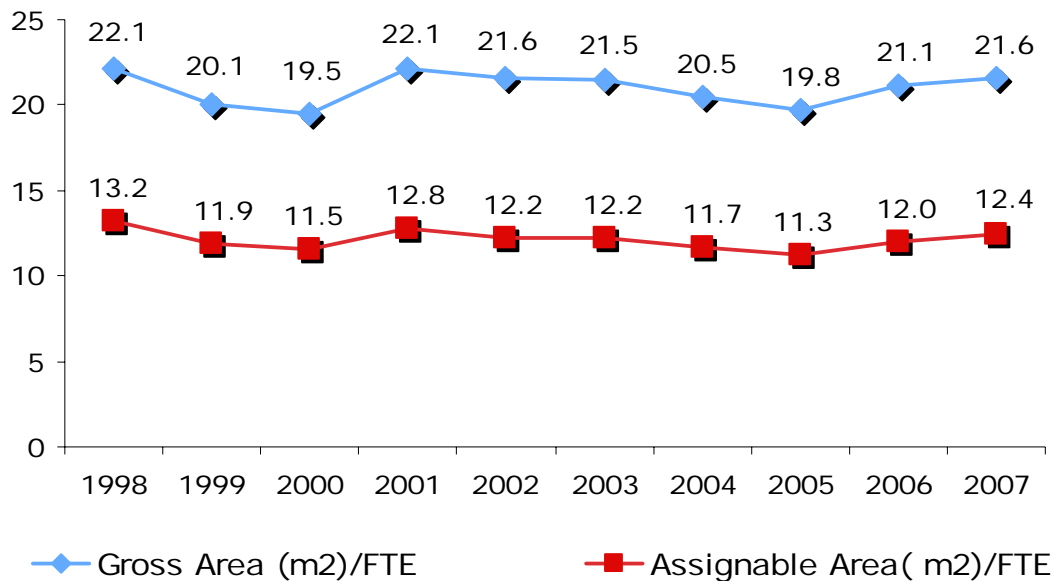
Table 6: Classroom and Laboratory Space per FLE in Alberta Postsecondary Institutions, 1997-98



Although the University of Lethbridge continues to grow in terms of its students, faculty, and staff, the institution has run out of offices and research laboratories to accommodate this growth. The addition of Markin Hall will provide much needed additional space to accommodate our current enrolment and faculty, as well as allow reallocation of space in University Hall once the Faculty of Management moves into Markin Hall.

Since 1998, the institution's enrolment has grown from 5432 to 8069 Fall full-time students, an increase of 49%. During this same period, the assignable space on campus has increased by only 40%, resulting in the assignable space per Fall FTE decreasing by 6%.

Figure 7: Space per FLE



The majority of the space additions during this period were for the 1st Choice Savings Centre for Sport and Wellness, library space and classrooms. In fall 2007 there were 8,069 students attending the University.

Currently, there is a critical need for offices for faculty. There are many faculty members sharing offices or working at home. There is also currently only very limited office/student space for graduate students on campus. Over the next two years this space will be at a premium but with the addition of Markin Hall in 2010, vacated space in University Hall and Anderson Hall should provide adequate allocations for offices.

While the Turcotte Hall expansion and the new Markin Hall (for Health Sciences and Management) will help to address the need for offices for faculty, they will not accommodate the research labs and research teaching space required by faculty, particularly in the sciences. We are also currently near capacity in terms of instructional labs.

3.5 Technology

There is an increasing dependency on technology by all University stakeholders. This requires appropriate facilities such as primary and secondary data centres with backup power and air-conditioning to ensure 24-7-365 access to technology services. Cyberinfrastructure, or technical infrastructure required by researchers, is also growing. The University currently houses a 5.05 Teraflop High Performance Computing (HPC) Cluster for research purposes. We expect to be required to house several similar HPC systems and other Cyberinfrastructure over the next few years requiring additional data centre's or the expansion of existing centres.

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

Wireless networks are also becoming increasingly important to the University. We need to increase the number of locations wireless is available, add capacity to existing locations to handle the large number of users, and increase the data transfer speed as new standards are available (i.e. move from 802.11b (11 Mbps) to 802.11g (55 Mbps) to 802.11n (100 Mbps)).

3.6 Life-Cycle Costs

When planning the expansion of its facilities, the University ensures that life-cycle costs of its facilities are kept to a minimum. The institution believes that energy efficiency and ease of maintenance are integral to building planning.

3.7 Library Resources

The new University Library has resulted in increased collection areas, classrooms, and study space. Unfortunately, it does not address the issue of limited library resources, and the University struggles with the need to commit more dollars to improving the library collection in a number of disciplines, and in trying to keep pace with the impact of inflation. Since the addition of the new Library, the usage of the facility by students for study space and group work has increased significantly. This has partially been a result of the increase in enrolment but also attributed to the attention paid to making this a desirable place for students to study and gather.

3.8 Infrastructure Upgrades

When new buildings are required on campus, it will be necessary to upgrade the site services infrastructure that supports these buildings. The U of L will have to build new capacity into the current power plant, or auxiliary services will have to accompany new construction projects. The *Campus Master Plan* calls for the development of a second energy centre to service new building developments in the west and northwest area of the campus.

3.9 Long Term Projects

EXPANSION/REPLACEMENT/NEW PROJECTS

The University of Lethbridge has identified the following long-term projects as priorities in order to continue its commitment in meeting the challenge of increased postsecondary demand on the provincial system. The institution is operating at capacity, but the identified capital projects will help accommodate the current and future planned expansions

Each project is critical to the future development of the U of L, and sources of funds have been identified from various organizations and government. For example, a particular project might be more suitable for government funding, whereas others are more appropriate for funding by users or private donors.

Alberta Water and Environmental Science Building – Phase 1 in progress

The U of L was selected as the administrative centre for the tri-University water research partnership with the University of Alberta and the University of Calgary. The University requires a new facility to fulfill its commitments in relation to this water research partnership. Phase 1 of the facility has already begun, with projected completion in August 2008. This facility is situated in Exploration Place, near the Canadian Centre for Behavioral Neuroscience.

		Phase 1	Phase 2	Phase 3	TOTAL
ESTIMATED PROJECT COST		<u>\$26,750,000</u>	<u>\$7,150,000</u>	<u>\$8,960,000</u>	<u>\$42,860,000</u>
Confirmed Funding Sources	Provincial Government	22,500,000	-	-	22,500,000
Funding Request	Federal Government	4,250,000	<u>7,150,000</u>	<u>8,960,000</u>	<u>16,110,000</u>
TOTAL PROPOSED FUNDING		<u>\$26,750,000</u>	<u>\$7,150,000</u>	<u>\$8,960,000</u>	<u>\$42,860,000</u>

Markin Hall (for Health Sciences and Management) – project in progress

The Markin Hall project is currently in the completion of the design development phase, with construction scheduled to begin in April 2008. Advanced Education & Technology has confirmed funding of this project of \$50 million, with the balance of the funding to be obtained through fundraising efforts and matching grants.

The need for this project is a result of the School of Health Sciences and the Faculty of Management growing at an exceptional rate, resulting in the need for new accommodations. The Faculty of Management has almost tripled in size over the last 10 years. The School of Health Sciences is expected to grow considerably over the next few years due to the addition of new programs and the demand for health related education. The new facility is 9638 square meters.

		TOTAL
ESTIMATED PROJECT COST		<u>\$65,000,000</u>
Funding Sources	Provincial Government	50,000,000
	(confirmed)	
	Fundraising	10,000,000
	Matching Grants	<u>5,000,000</u>
TOTAL PROPOSED FUNDING		<u>\$65,000,000</u>

Sports Fields and Stadium – project in progress

In April 2005, the City of Lethbridge examined the need and demand for sports fields within the city. The review determined that the most feasible solution would be for the City and the University to share a sports field complex that would meet the needs of both parties. Through this partnership the City of Lethbridge has contributed \$3 million towards the project, with the remaining \$4.5 million funded from the University and through external fundraising efforts. This multipurpose complex will meet the needs for track and field, football, intramurals and other University and city athletic programs.

		TOTAL
ESTIMATED PROJECT COST		<u>\$8,250,000</u>
Proposed Funding Sources	University Funds	4,500,000
	City of Lethbridge (confirmed)	3,000,000
	Fundraising	<u>750,000</u>
TOTAL PROPOSED FUNDING		<u>\$8,250,000</u>

Science Complex

The University has a strong commitment to research. Much discussion on research facilities has centered on whether to renovate or build. It has been found to be very costly to convert an existing facility into something other than the purpose for what it was created for. For example, renovating space in University Hall, converting office and classroom space to accommodate research space needs, is much more costly than new construction for research space. There is also the concern of whether it is appropriate to have significant research activities in the same building that accommodates offices, classrooms and student residences. To continue to excel in research, the U of L requires new facilities that will provide more dedicated space for research activities. Some research facilities that are in the planning stages include a remote sensing institute and an agricultural biotechnology laboratory. These facilities would increase the capacity for training by providing space for principal investigators, new graduate and undergraduate students, and technical support personnel.

		TOTAL
ESTIMATED PROJECT COST		<u>\$180,000,000</u>
Proposed Funding Sources	Provincial Government	180,000,000
TOTAL PROPOSED FUNDING		<u>\$180,000,000</u>

Central Plant Facility

The University's existing central plant facility has the capacity to handle the new Alberta Science and Environmental Science Building, Markin Hall and the Sports Stadium. Any additional new future facilities will require the addition of another central plant facility to accommodate their utility needs.

ESTIMATED PROJECT COST		TOTAL <u>\$24,000,000</u>
PROPOSED FUNDING SOURCE	Provincial Government	<u>\$24,000,000</u>

Student Residences

The U of L only has available student residence beds for approximately 8% of its current Lethbridge campus student population. It is a well known fact that students who live in on-campus residences perform better academically, integrate better into campus life programs and generally have a more positive post-secondary learning experience. The University had set a goal many years ago that it would provide up to 20% of its on-campus student population with residence accommodations. It is anticipated that the University will build more student residences over the next 10 years.

ESTIMATED PROJECT COST		TOTAL <u>\$10,600,000</u>
PROPOSED FUNDING SOURCE	Financing, supported by housing rents	<u>\$10,600,000</u>

Art Gallery

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

ESTIMATED PROJECT COST		TOTAL <u>\$60,000,000</u>
Proposed Funding Sources	Provincial Government	50,000,000
	Research Agencies	<u>10,000,000</u>
TOTAL PROPOSED FUNDING		<u>\$60,000,000</u>

Office/Classroom Complex

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

ESTIMATED PROJECT COST		TOTAL <u>\$60,000,000</u>
PROPOSED FUNDING SOURCE	Provincial Government	<u>\$60,000,000</u>

RENEWAL/PRESERVATION PROJECTSData Centre

The main Data Centre is being upgraded. The server air conditioning units are very old and require replacement. We will have three 10-ton cooling units where two will act as the main cooling systems for the room at any one time, with the third acting as a backup. This will provide a total of 20 tons of cooling. We have also raised the floor an additional six inches to improve airflow and maximize the cooling available to the repositioned servers in the Centre.

Unified Communications

The University of Lethbridge has owned and operated its own telephone voice switch since 1994. This system requires replacement and we have begun the migration from traditional telephone service to Unified Communications using our IP Network. This includes at a basic level IP Telephony. However, many other layers of communication services will be added such as video, virtual meetings rooms, and soft phones on desktop and laptop computers, allowing for improved communications in an increasingly mobile campus community.

Wireless

The wireless network is currently being upgraded and expanded. The University is adding wireless to key area's around campus that require it and expanding capacity in current wireless areas that are saturated due to large numbers of users. This project also includes enhancing security and access to the network through Network Access Control devices.

3.10 Facilities Performance Indicators

For nearly 30 years the Association of Higher Education Facilities Officers (APPA) has provided the most comprehensive data available on facilities management costs and staffing information in North America. This includes cost information relating to the many functions classified primarily as maintenance and operations. The University of Lethbridge participated in the 2006 APPA's Facilities Core Data Survey. The results of this survey were published in the 2005-06 Facilities Performance Indicators report. A few of the notables will be described below.

The operating costs per gross square foot are among one of the notables from this report. As shown in Figures 8 and 9, the University of Lethbridge is compared to other similarly classified institutions (for more details see Appendix I). The University of Lethbridge spends less in the areas of Administration, Maintenance and Landscaping grounds than other comparable institutions.

Figure 8: Comparison of Expenditures on Grounds (\$/Acre)

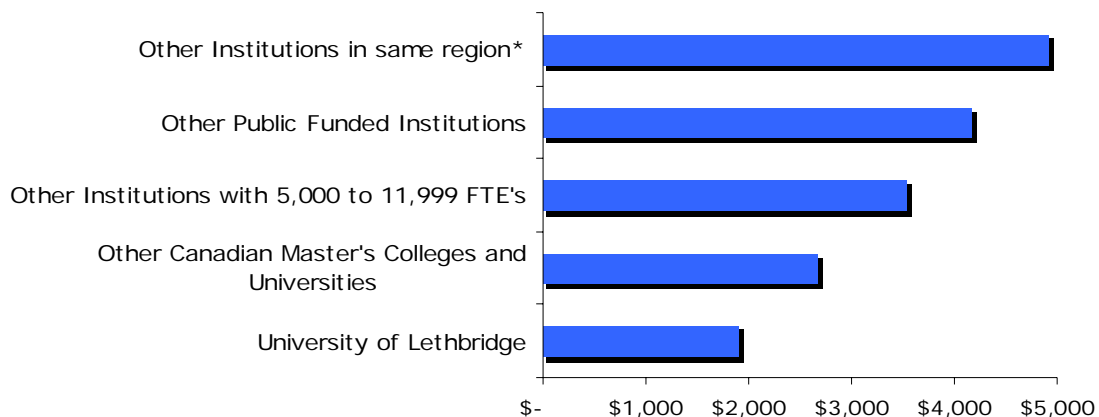


Figure 9: Operating Costs per Gross Square Foot

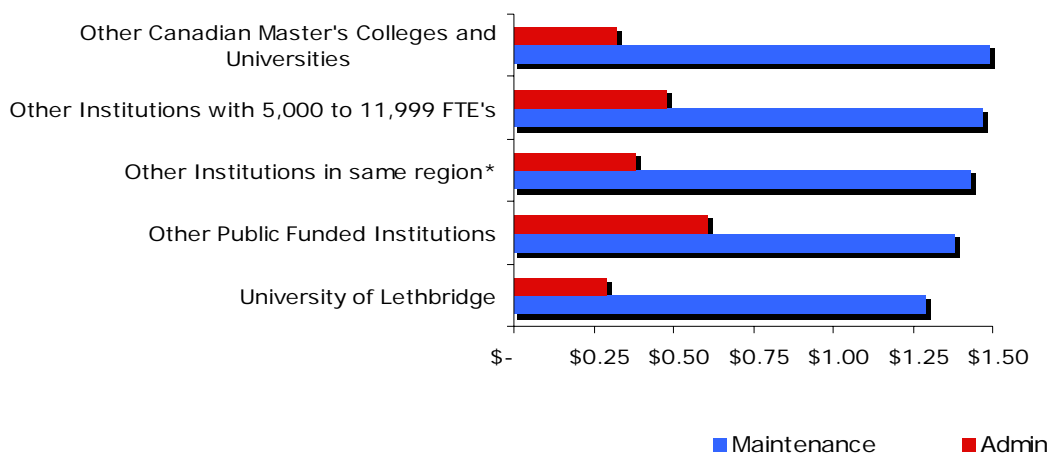


Figure 10 indicates that the ratio of Maintenance Costs to Students is far less at the U of L than it is at other similar institutions (See Appendix I for more details).

Figure 10: Maintenance Costs per Student

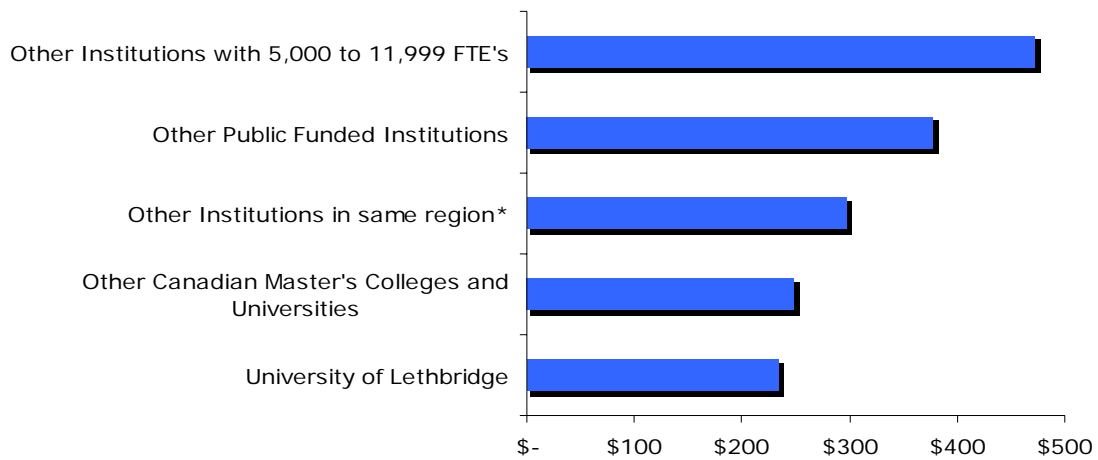
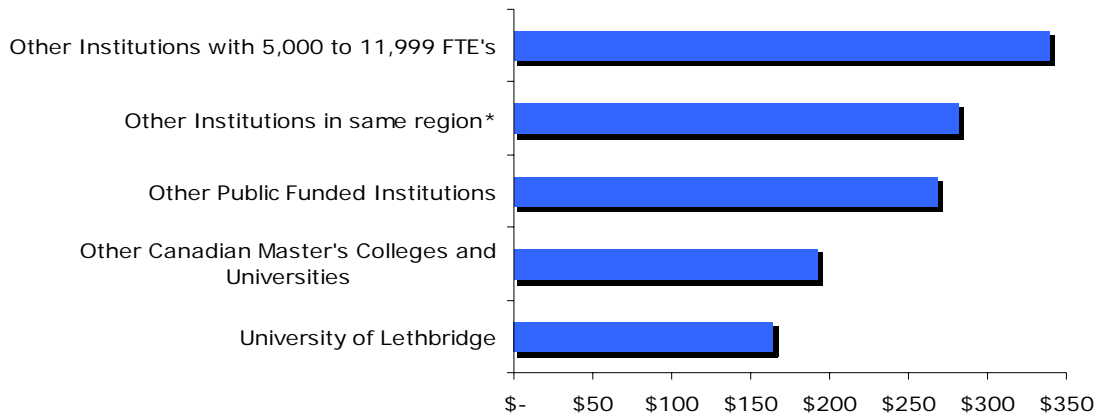


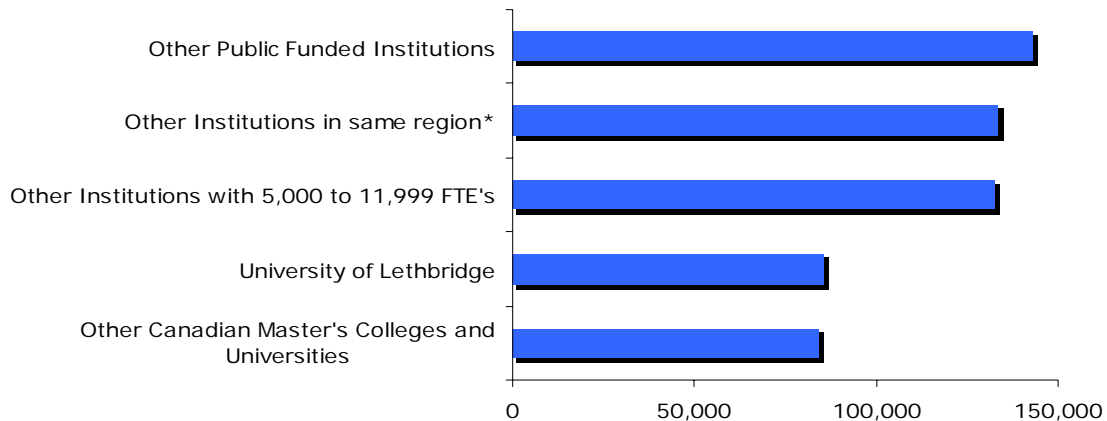
Figure 11 indicates that the ratio of Custodial Costs per Student at the U of L is well below that of other similar institutions.

Figure 11: Custodial Costs per Student



After looking at this data and the previous history it is easy to see what will happen if the University of Lethbridge continues to grow. If the operating dollars are not there to fund these expanded facilities and staffing levels, the worry is that the quality of programs on campus will weaken, as well as putting further strains on existing facilities and staff.

Figure 12: Energy Consumption (BTU/GSF) for Western Canadian Universities



Shown in Figure 12, the University of Lethbridge is an environmentally sensitive institution. In the University of Lethbridge's 10-year capital plan, the quality of a building that is constructed or renovated depends upon the funding level. The building quality affects ongoing operating costs by a factor that inflates with the cost of energy. The 1st Choice Savings Centre for Sport and Wellness is one of the first buildings in the province to meet the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification standards. As a LEED building, the 1st Choice Savings Centre will literally be a showcase of modern conservation methods.

4.0 Capital Budget

Appendix A identifies the approved Capital Budget for 2008/09, and the proposed capital budgets for 2009/10, 2010/11, 2011/12 and 2012/13. The U of L has prepared a ten-year capital forecast showing the costs for all planned future major capital projects in December 2007 dollars. This document, as described earlier in this report, is grouped into the four BLIMS categories: Renewal/Preservation projects, Expansion/Replacement projects, New Facilities, and Capital Planning. The capital budgets and priority projects are reviewed and approved annually by the Board of Governors.

5.0 Conclusion

The University of Lethbridge's vision is to strive to build the most vital and engaging learning and educational environment in Canada.

As a result of an ever-changing environment, there continues to be stresses on facilities and capital budgets as a result of the demands from the growth in enrolments and the need for high quality facilities and resources. The commitment is to maintain those areas that the University presently excels in and work on those key areas where enhancement is required.

With a focus on liberal education, smaller class sizes, co-op placements, excellence in teaching, and student involvement in research, the University of Lethbridge will continue to provide top-quality education.

Appendix A – 10 Year Capital Forecast (in thousands)

	Estimated Project Cost	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	Total
Renewal/Preservation Projects												
1 Penny Building (downtown)	\$ 4,700	4,700										4,700
2 Physical Education Building upgrades	\$ 5,000	2,500	2,500									5,000
3 University Hall Renovations - vacated Faculty of Management	\$ 5,836		5,836									5,836
4 Anderson Hall Renovations - vacated Health Sciences	\$ 1,575		1,575									1,575
	\$ 17,110	\$ 7,200	\$ 9,911	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,111
Expansion/Replacement Projects												
1 Alberta Water & Environmental Science Building - Phase 2	\$ 7,150	7,150										7,150
2 Alberta Water & Environmental Science Building - Phase 3	\$ 8,960		8,960									8,960
	\$ 16,110	\$ 7,150	\$ 8,960	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,110
New Facilities & Capital Planning												
1 Science Complex	\$ 180,000		40,000	100,000	40,000							180,000
5 Central Plant Facility	\$ 24,000			9,000	15,000							24,000
2 Student Residences	\$ 10,600	8,000	2,600									10,600
3 Art Gallery	\$ 60,000			15,000	30,000	15,000						60,000
4 Office/Classroom Complex	\$ 60,000			7,000	32,000	21,000						60,000
	\$ 334,600	\$ 8,000	\$ 42,600	\$ 131,000	\$ 117,000	\$ 36,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 334,600
												-
TOTAL CAPITAL PROJECTS	\$ 367,820	\$ 22,350	\$ 61,471	\$ 131,000	\$ 117,000	\$ 36,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 367,821
PROPOSED CAPITAL PROJECTS FUNDING												
Provincial Capital Funding Request		14,350	58,871	121,000	117,000	36,000						347,221
Other Funding Sources		8,000	2,600	10,000								20,600
		22,350	61,471	131,000	117,000	36,000	-	-	-	-	-	367,821
DEFERRED MAINTENANCE												
Buildings Capital Asset Replacement Value (\$000)	\$ 552,607	574,957	636,428	767,428	884,428	920,428	920,428	920,428	920,428	920,428	920,428	
Annual Deferred Maintenance Requirement (1% of building capital asset value)		5,750	6,364	7,674	8,844	9,204	9,204	9,204	9,204	9,204	9,204	74,654
ANNUAL PROVINCIAL CAPITAL REQUIREMENT REQUEST												
New Capital Funding Request		14,350	58,871	121,000	117,000	36,000	-	-	-	-		347,221
Annual Deferred Maintenance Request		5,750	6,364	7,674	8,844	9,204	9,204	9,204	9,204	9,204	9,204	83,858
TOTAL		20,100	65,235	128,674	125,844	45,204	9,204	9,204	9,204	9,204	9,204	431,079

Appendix B – Capital Budget 2008-12

(in thousands)

	2008-09 Approved Budget	2009-10 Proposed Budget	2010-11 Proposed Budget	2011-12 Proposed Budget	2012-13 Proposed Budget
SOURCES OF FUNDS					
Major Capital Projects:					
Fund Raising/External Sources	3,500	10,000	10,000	-	-
Provincial Government	66,750	80,871	121,000	117,000	36,000
Research Agencies	250	-	-	-	-
University Contributions	11,950	2,600	-	-	-
	82,450	93,471	131,000	117,000	36,000
Infrastructure Maintenance (IMP) Grant	1,369	1,400	1,400	1,400	1,400
Indirect Research Costs Grant	300	300	300	300	300
Advanced Education and Technology	2,434	5,700	7,500	6,800	800
University contributions	680	680	680	680	680
University Capital Reserves	1,930	1,930	1,930	1,930	1,930
TOTAL FUNDING	\$ 89,163	\$ 103,481	\$ 142,810	\$ 128,110	\$ 41,110
CAPITAL EXPENDITURES					
Major Capital Projects:					
Markin Hall	31,400	32,000	-	-	-
Alberta Water & Environmental Sciences Bldg - Phase 1	21,250	-	-	-	-
Sports Stadium	7,450	-	-	-	-
* Science Complex	-	40,000	100,000	40,000	-
* Central Plant Facility	-	-	9,000	15,000	-
* Student Residences	8,000	2,600	-	-	-
* Art Gallery	-	-	15,000	30,000	15,000
* Office/Classroom Complex	-	-	7,000	32,000	21,000
* Alberta Water & Environmental Sciences Bldg - Phase 2	7,150	-	-	-	-
* Alberta Water & Environmental Sciences Bldg - Phase 3	-	8,960	-	-	-
* Penny Building (Downtown)	4,700	-	-	-	-
* Physical Education Building upgrades	2,500	2,500	-	-	-
* University Hall - vacated Management space	-	5,836	-	-	-
* Anderson Hall - vacated Health Sciences space	-	1,575	-	-	-
	82,450	93,471	131,000	117,000	36,000
Capital Maintenance & Facility Upgrade (includes deferred maintenance)	4,103	7,400	8,500	8,500	2,500
Equipment					
Arts and Science	700	700	700	700	700
Education	100	100	100	100	100
Management	70	70	70	70	70
Fine Arts	200	200	200	200	200
Health Sciences	25	25	25	25	25
Administrative Support Units	150	150	150	150	150
Sports and Recreation/Athletics	150	150	150	150	150
Motor Vehicles	35	35	35	35	35
Information Technology & Telecommunications	500	500	500	500	500
	1,930	1,930	1,930	1,930	1,930
Ancillaries					
Parking	300	300	300	300	300
Bookstore	30	30	30	30	30
Printing	50	50	50	50	50
Housing	230	230	230	230	230
Catering and Food Services	50	50	50	50	50
Conference Services	10	10	10	10	10
Ancillary Services Director	10	10	10	10	10
	680	680	680	680	680
TOTAL CAPITAL EXPENDITURES	\$ 89,163	\$ 103,481	\$ 142,110	\$ 128,110	\$ 41,110

* The Board of Governors has not formally approved these major capital projects. They have been submitted to Alberta Advanced Education as the University's Capital Priorities.

Appendix C – Capital Maintenance Budget 2008/09

Source of Funds

Infrastructure Maintenance Program (IMP) Grant	\$	1,369,000
Advanced Education and Technology		1,420,000
University - annual operating budget contribution		300,000
University Reserves		
Art Gallery	45,000	
Parking	620,000	
Housing	25,000	
Vehicle	37,000	
Centre for Sport & Wellness	112,000	
Other (One-time)	175,288	1,014,288
Total Funds Required		\$ 4,103,288

Proposed Capital Expenditures

Aperture Park	\$	25,000
Regional Aquatic Centre		17,000
Art Storage		25,000
Biology Field Station		29,500
Centre for Behavioural Neuroscience		20,000
Central Plant		24,000
Centre for Sport & Wellness		310,000
Biology Greenhouse		7,000
Hepler Hall		150,000
Campus Wide		245,000
Site Systems		881,788
Students' Union Building		150,000
Turcotte Hall		112,000
Tunnel		250,000
University Centre for the Arts		310,000
University Hall		1,510,000
Vehicle Pool		37,000
Total Proposed Capital Expenditures		\$ 4,103,288

Appendix D – 10 Year Capital Reserve Balances

	1996/97	1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07
Capital											
2651 Building and Plant	882,133	790,306	249,965	923,266	904,794	726,730	105,222	192,574	271,364	361,830	536,729
2652 Information Technology Servers	161,847	101,220	102,281	178,887	259,080	264,162	189,402	67,610	92,610	121,845	178,389
2653 Major Equipment	630,979	735,127	350,268	370,308	360,180	303,693	224,480	158,501	183,501	216,401	251,433
2655 Micro Computer Equipment	68,131	-	151	946	26,514	4	4	4	-	-	-
2656 Telecommunications Equipment	90,946	92,947	93,783	208,715	131,046	593,398	817,464	190,002	158,565	269,784	318,829
2657 Self Insurance	120,785	117,392	112,989	122,496	130,994	149,459	132,554	178,037	180,907	189,060	231,988
2658 PE Equipment	43,885	35,830	25,364	60,797	70,020	84,403	-	-	-	-	-
2659 Aquatic Centre Equipment	76,713	77,912	64,847	71,818	71,013	71,436	-	-	-	-	-
2660 North Plaza Development	155,425	155,425	-	-	-	-	-	-	-	-	-
2661 Education School Labs	20,000	20,000	-	-	-	-	-	-	-	-	-
2662 Site & Utilities	221,385	589,550	184,102	512,010	471,305	178,974	183,036	37,029	47,029	59,126	71,993
2663 Parking	125,575	105,911	106,864	168,133	215,347	243,235	75,219	273,144	222,279	364,087	97,050
2664 Service Vehicles and Equipment	77,563	100,807	78,985	76,744	64,419	44,186	33,706	64,244	102,329	103,472	97,150
2665 Utility Conservation	137,000	330,000	326,642	330,059	229,775	275,640	109,848	169,551	253,692	263,511	274,518
2666 LINC	200,000	-	3,162,370	3,638,027	-	-	-	-	-	-	-
2667 Housing - Apartments	-	841,948	1,085,420	1,322,652	764,806	950,020	946,167	611,170	625,028	650,358	698,450
2668 Housing - Townhouses	-	398,650	547,783	715,232	530,704	652,896	686,225	284,595	370,431	425,570	-
2670 PE Building and Equipment	-	-	-	15,086	22,952	30,951	-	-	-	-	-
2671 Matching Equipment	-	-	-	-	527,590	537,939	488,342	121,187	121,187	126,070	131,336
2672 Audio Visual Renwal	-	-	-	-	-	-	125,155	187,585	250,983	336,812	-
2673 Support Units Equipment Renewal	-	-	-	-	-	-	-	-	160,247	175,286	229,638
2674 Sport and Recreation/Athletics	-	-	-	-	-	-	-	-	285,189	315,171	-
	3,012,366	4,493,025	6,491,815	8,715,176	4,780,540	5,107,126	4,116,823	2,535,233	3,325,340	3,978,382	3,117,503
Capital - Ancillary Services Departments											
71001 Bookstore	403,784	362,483	365,746	765,746	747,630	1,316,906	1,353,906	192,906	266,966	353,419	861,579
72005 Printing Services - Offset	413,085	422,173	419,766	488,266	488,266	588,266	619,266	228,384	186,939	204,221	261,268
72010 Printing - Copy Centre	148,765	149,360	148,157	148,157	145,514	145,514	145,514	-	-	-	-
72015 Printing - Copier	2,621	-	-	-	-	-	-	-	-	-	-
73005 Housing Services	408,273	176,412	157,326	165,266	141,446	639,472	751,472	590,132	757,741	903,205	1,622,828
73010 Housing Services - Apartments	637,629	-	-	-	-	-	-	-	-	-	-
73015 Housing Services - Family	126,742	-	-	-	-	-	-	-	-	-	-
74001 Food Services	216,969	319,716	289,949	380,514	363,773	505,272	489,510	208,930	146,128	51,011	250,679
75001 Conference Services	53,396	54,571	51,059	150,659	150,659	155,659	184,059	102,259	91,524	90,994	168,574
76101 Athletics	119,614	122,245	106,307	143,240	143,240	143,240	222,240	282,240	-	-	-
76201 Recreation Services	119,706	122,340	105,051	152,051	152,051	222,051	277,051	184,031	-	-	-
76203 Rec Services - Adult Programs	1,920	1,962	1,980	1,980	1,980	1,980	1,980	-	-	-	-
76301 Language Centre	27,405	28,008	25,658	-	-	-	-	-	-	-	-
76701 Aquatic Centre	-	-	-	-	-	-	46,436	-	-	-	-
76751 PE Facilities	-	-	-	-	-	-	176,891	-	-	-	-
	2,679,908	1,759,268	1,670,997	2,395,878	2,334,559	3,718,359	4,268,325	1,788,881	1,449,298	1,602,850	3,164,928
Total	5,692,273	6,252,294	8,162,812	11,111,054	7,115,098	8,825,486	8,385,148	4,324,115	4,774,637	5,581,232	6,282,431

Appendix E – 2008-2009 Capital Maintenance Project Budget

CURRENT YEAR PROJECT BUDGETS							
Proposed Assigned Dept.		Capital Main. Funding Available	Infrastruct. Funding JAN	UH Life Safety JAN	UH Exterior Envelope	Housing Reserve APRIL	Special Funding APRIL
Aperture Park							
6496	AP Piikani Balcony Windows/Doors Replacement					\$ 25,000	
Aperture Park Totals		\$ -	\$ -	\$ -	\$ -	\$ 25,000	\$ -
Regional Aquatic Centre							
3734	RAC Building Millwork	\$ 17,000					
Aquatic Centre Totals		\$ 17,000	\$ -	\$ -	\$ -	\$ -	\$ -
Art Storage							
6341	AV Sanitary Sewer Tie-In		\$ 25,000				
Art Storage Totals		\$ -	\$ 25,000	\$ -	\$ -	\$ -	\$ -
Biology Field Station							
6162	BFS Replace East Exterior Doors and Stairs	\$ 5,000					
3527	BFS Plumbing Distribution	\$ 7,000					
3077	BFS Furnace Replacement	\$ 17,500					
Biology Field Station Totals		\$ 29,500	\$ -	\$ -	\$ -	\$ -	\$ -
Centre for Behavioural Neuroscience							
6493	CCBN Air Compressor Replacement	\$ 20,000					
Centre for Behavioural Neuroscience Totals		\$ 20,000	\$ -	\$ -	\$ -	\$ -	\$ -
Central Plant							
2587	CP HWH Replace Distribution Balance Valves		\$ 24,000				
Central Plant Totals		\$ -	\$ 24,000	\$ -	\$ -	\$ -	\$ -
Centre for Sport & Wellness							
6370	CSW Decommission Level 3 Washrooms	\$ 15,000					
3729	CSW Classroom Spaces Upgrades	\$ 25,000					
3731	CSW Washroom Stall Upgrade	\$ 8,000					
3888	CSW Upgrade N. Wall, Roof & Soffit of PE Building		\$ 150,000				
6468	CSW Main Gym Fall Arrest System					\$ 12,000	
6489	Regrade Ground Adjacent to West Side of CSW					\$ 100,000	
Centre for Sport & Wellness Totals		\$ 48,000	\$ 150,000	\$ -	\$ -	\$ -	\$ 112,000
Biology Greenhouse							
6495	GH Biology Greenhouse Renovation	\$ 7,000					
Biology Greenhouse Totals		\$ 7,000	\$ -	\$ -	\$ -	\$ -	\$ -
Hepler Hall							
6492	HH Increase Cooling Capacity		\$ 150,000				
Hepler Hall Totals		\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -
Campus Wide							
803307	Campus Painting Program	\$ 6,500					
803198	Fire Extinguisher Maintenance	\$ 18,000					
889003	Infrastructure Renewal Contingency - Building		\$ 200,000				
889001	Capital Maintenance Contingency	\$ 20,500					
Campus Wide Totals		\$ 45,000	\$ 200,000	\$ -	\$ -	\$ -	\$ -

Total Current Year	Spent Previous Year(s)	Projected Future Year(s)	Total Project
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 17,000	\$ -	\$ -	\$ 17,000
\$ 17,000	\$ -	\$ -	\$ 17,000
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 5,000	\$ -	\$ -	\$ 5,000
\$ 7,000	\$ -	\$ -	\$ 7,000
\$ 17,500	\$ -	\$ -	\$ 17,500
\$ 29,500	\$ -	\$ -	\$ 29,500
\$ 20,000	\$ -	\$ -	\$ 20,000
\$ 20,000	\$ -	\$ -	\$ 20,000
\$ 24,000	\$ -	\$ -	\$ 24,000
\$ 24,000	\$ -	\$ -	\$ 24,000
\$ 15,000	\$ -	\$ -	\$ 15,000
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 8,000	\$ -	\$ -	\$ 8,000
\$ 150,000	\$ -	\$ -	\$ 150,000
\$ 12,000	\$ -	\$ -	\$ 12,000
\$ 100,000	\$ -	\$ -	\$ 100,000
\$ 310,000	\$ -	\$ -	\$ 310,000
\$ 7,000	\$ -	\$ -	\$ 7,000
\$ 7,000			\$ 7,000
\$ 150,000	\$ -	\$ -	\$ 150,000
\$ 150,000	\$ -	\$ -	\$ 150,000
\$ 6,500	\$ 22,168	Annual*	\$ 28,668
\$ 18,000	\$ 64,840	Annual*	\$ 82,840
\$ 200,000	\$ 592,320	Annual*	\$ 792,320
\$ 20,500	\$ 628,169	Annual*	\$ 648,669
\$ 245,000	\$ 1,307,498	\$ -	\$ 1,552,498

Site Systems (Circ./Land.Util.)

801030	Irrigation Improvements Campus Wide	\$ 6,500					
801066	SUB Loading Dock & Tennis Court Site Reconfiguration		\$ 50,000				
6498	Water Aeration in Irrigation Reservoir		\$ 30,000				
802001	Parking Facility Annual Maintenance					\$ 250,000	
801062	University Drive Landscape Enhancement					\$ 175,288	
6484	Pave Area South of Centre for Sport & Wellness					\$ 20,000	
6504	Northwest Parking Lot Expansion					\$ 350,000	
Site Systems (Circ./Land.Util.) Totals		\$ 6,500	\$ 80,000	\$ -	\$ -	\$ -	\$ 795,288

Students' Union Building

808064	SU Window Replacement		\$ 150,000				
Students' Union Building Totals		\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ -

Turcotte Hall

807012	TH Window Replacement		\$ 55,000				
807017	TH East Wall Stucco Refurbishing	\$ 57,000					
Turcotte Hall Totals		\$ 57,000	\$ 55,000	\$ -	\$ -	\$ -	\$ -

Tunnel

3355	PE Tunnel Assessment & Rehabilitation		\$ 250,000				
Tunnel Totals		\$ -	\$ 250,000	\$ -	\$ -	\$ -	\$ -

University Centre for the Arts

804110	UCA Doors & Hardware Replacement	\$ 5,000					
6258	W425 Replace Floor and Rebuild Traps		\$ 200,000				
6487	UCA AHU #112 Replacement		\$ 45,000			\$ 45,000	
6271	UCA Television Cabling Infrastructure		\$ 15,000				
University Centre for the Arts Totals		\$ 5,000	\$ 260,000	\$ -	\$ -	\$ -	\$ 45,000

University Hall

2969	UH Emergency Power and Lighting System			\$ 100,000			
6394	UH Classroom Door Hardware Upgrade	\$ 10,000					
803026	Safety Systems Upgrade	\$ 20,000					
3936	UH Exterior Fire/Smoke Barrier			\$ 100,000			
6289	UH TV Cable Infrastructure Upgrade		\$ 25,000				
803228	UH Exterior Rehabilitation				\$ 390,000		
803226	UH Sprinkler Installation			\$ 300,000			
803301	UH University Hall Asbestos Removal			\$ 350,000			
803091	Energy Efficient Lighting Conversion	\$ 35,000					
6501	UH Chemical Safety			\$ 30,000			
803331	UH NFC Upgrade/Fire Breaches			\$ 150,000			
University Hall Totals		\$ 65,000	\$ 25,000	\$ 1,030,000	\$ 390,000	\$ -	\$ -

Vehicle Pool

6320	Vehicle Replacement - Unit #139 - Maintenance					\$ 37,000	
Vehicle Pool Totals		\$ -	\$ -	\$ -	\$ -	\$ 37,000	\$ -

Totals \$ 300,000 \$ 1,369,000 \$ 1,030,000 \$ 390,000 \$ 25,000 \$ 989,288

Total Current Year: \$ 4,103,288

Parking Res.
One Time Fund.
Parking Res.
Parking Res.

\$ 6,500	\$ 36,200	\$ 6,500	\$ 49,200
\$ 50,000	\$ -	\$ 200,000	\$ 250,000
\$ 30,000	\$ -	\$ -	\$ 30,000
\$ 250,000	\$ 412,671	Annual*	\$ 662,671
\$ 175,288	\$ 3,725	\$ -	\$ 179,013
\$ 20,000	\$ -	\$ -	\$ 20,000
\$ 350,000	\$ -	\$ -	\$ 350,000
\$ 881,788	\$ 452,596	\$ 206,500	\$ 1,540,884

\$ 150,000	\$ 15,517	\$ -	\$ 165,517
\$ 150,000	\$ 15,517	\$ -	\$ 165,517

\$ 55,000	\$ -	\$ -	\$ 55,000
\$ 57,000	\$ 2,947	\$ -	\$ 59,947
\$ 112,000	\$ 2,947	\$ -	\$ 114,947

\$ 250,000	\$ -	\$ -	\$ 250,000
\$ 250,000	\$ -	\$ -	\$ 250,000

\$ 5,000	\$ 11,837	\$ 30,000	\$ 46,837
\$ 200,000	\$ -	\$ -	\$ 200,000
\$ 90,000	\$ -	\$ -	\$ 90,000
\$ 15,000	\$ -	\$ -	\$ 15,000
\$ 310,000	\$ 11,837	\$ 30,000	\$ 351,837

\$ 100,000	\$ -	\$ -	\$ 100,000
\$ 10,000	\$ -	\$ -	\$ 10,000
\$ 20,000	\$ 61,760		\$ 81,760
\$ 100,000	\$ -	\$ -	\$ 100,000
\$ 25,000	\$ -	\$ -	\$ 25,000
\$ 390,000	\$ 118,492	\$ 3,510,000	\$ 4,018,492
\$ 300,000	\$ 780,736	\$ 150,000	\$ 1,230,736
\$ 350,000	\$ 508,391	\$ 170,000	\$ 1,028,391
\$ 35,000	\$ 172,789	\$ -	\$ 207,789
\$ 30,000	\$ -	\$ -	\$ 30,000
\$ 150,000	\$ -	\$ -	\$ 150,000
\$ 1,510,000	\$ 1,642,167	\$ 3,830,000	\$ 6,982,167

\$ 37,000	\$ -	\$ -	\$ 37,000
\$ 37,000	\$ -		\$ 37,000

\$ 4,103,288 \$ 3,432,562 \$ 4,066,500 \$ 11,602,350

Vehicle Res.

Appendix F – Post-Secondary Institutions FCI

Institution	Supported Buildings Area	% System Buildings Area	% System Buildings Condition	Deferred Maintenance Supported Buildings	Deferred Maintenance Heating Plants (Supported)	Deferred Maintenance Site	Total Deferred Maintenance Supported	Replacement Cost (Supported Buildings)	Facility Condition Index (FCI) Buildings	Average DM/m ²
Alberta College of Art and Design	35,327	1.26%	0.48%	4,141,976		(See SAIT)	4,141,976	43,734,312	9.5%	117
Bow Valley College	28,206	1.01%	0.50%	4,333,724		(No Site DM)	4,333,724	35,896,125	12.1%	154
Fairview College	36,664	1.31%	0.73%	6,337,401		2,502,691	8,840,092	57,210,015	11.1%	173
Grande Prairie Regional College	39,222	1.40%	1.14%	9,905,610		1,127,039	11,032,649	64,312,413	15.4%	253
Grant MacEwan College	108,574	3.88%	3.67%	31,727,305	735,875	3,210,628	35,673,808	184,752,000	17.2%	292
Grnat MacEwan (Alberta College)	14,284	0.51%	0.02%	175,233		250,051	425,284	22,534,438	0.8%	12
Keyano College	39,018	1.40%	1.14%	9,821,213	2,683,515	513,457	13,018,185	77,114,311	12.7%	252
Lakeland College	58,232	2.08%	0.70%	6,080,949	2,762,772	1,029,413	9,873,134	94,015,594	6.5%	104
Lethbridge Community College	71,446	2.56%	1.55%	13,374,397		1,892,100	15,266,497	121,312,015	11.0%	187
Medicine Hat College	38,497	1.38%	0.97%	8,407,916		4,767,383	13,175,299	65,944,049	12.8%	218
Mount Royal College	122,903	4.40%	1.88%	16,247,830	6,457,575	1,800,000	24,505,405	251,457,595	6.5%	132
NorQuest College	25,695	0.92%	1.07%	9,241,865		126,150	9,368,015	35,767,440	25.8%	360
Northern Lakes College	27,268	0.98%	0.80%	6,900,790		1,551,261	8,452,051	41,801,046	16.5%	253
Olds College	58,887	2.11%	1.29%	11,167,917		1,801,190	12,969,107	84,552,026	13.2%	190
Portage College	22,482	0.80%	0.79%	6,870,463		120,000	6,990,463	43,520,518	15.8%	306
Red Deer College	64,153	2.29%	2.58%	22,311,021		6,522,475	28,833,496	106,854,111	20.9%	348
Public Colleges	790,858	28.28%	19.31%	167,045,610	12,639,737	27,213,838	206,899,185	1,330,778,008	12.6%	211
NAIT	194,880	6.97%	4.24%	36,705,169	5,090,225	2,335,549	44,130,943	304,664,424	12.0%	188
SAIT (Including ACAD Site)	259,393	9.28%	4.29%	37,078,108	12,200,300	3,684,125	52,962,533	387,154,973	9.6%	143
Technical Institutes	454,273	16.25%	8.53%	73,783,277	17,290,525	6,019,674	97,093,476	691,819,397	10.7%	162
University of Alberta	808,525	28.92%	43.50%	376,376,263	57,146,795	12,382,425	445,905,483	1,382,493,985	27.2%	466
The University of Calgary	528,551	18.90%	18.36%	158,879,963	14,895,415	4,058,550	177,833,928	907,577,230	17.5%	301
The University of Lethbridge	128,468	4.59%	6.63%	57,370,576	7,481,314	5,081,670	69,933,560	253,374,037	22.6%	447
Athabasca University	14,440	0.52%	0.45%	3,903,451	-	604,912	4,508,363	24,241,448	16.1%	270
Universities	1,479,984	52.93%	68.94%	596,530,253	79,523,524	22,127,557	698,181,334	2,567,686,700	23.2%	403
Banff Centre	56,752	2.03%	3.22%	27,879,580		4,744,038	32,623,618	94,829,233	29.4%	491
Total	2,796,151	100.00%	100.00%	865,238,720	109,453,786	60,105,107	1,034,797,613	4,685,113,338	18.5%	309

Appendix G – Deferred Maintenance and FCI for U of L Buildings

Summary 2007

Building	2007	2008-2010	2011-2016	2017 +	Bldg Total (2007 +)	Bldg Area (m2)	Replacement Cost Rate (\$/m2)	Replacement Costs	FCI %
Anderson Hall B5057B	\$866,122	\$177,936	\$0	\$0	\$1,044,058	4,503	\$3,567	\$16,060,774	7%
Art Vault B5057Z	\$95,404	\$0	\$0	\$0	\$95,404	675	\$3,566	\$2,407,368	4%
Biology Field Station	\$42,822	\$28,570	\$0	\$0	\$71,392	96	\$3,981	\$382,223	19%
Bio - Science Greenhouse B5057H	\$363,431	\$0	\$3,952	\$0	\$367,383	124	\$3,221	\$399,388	92%
Canadian Centre for Behavioural Neuroscience B5057AF	\$0	\$60,574	\$0	\$0	\$60,574	4,948	\$2,668	\$13,203,730	0%
Central Heating Plant B5057U	\$2,901,319	\$1,590,605	\$827,877	\$991,409	\$6,311,210	156,030	\$128	\$20,000,000	32%
Grounds Maintenance Building B5057W	\$20,026	\$0	\$0	\$0	\$20,026	297	\$3,079	\$914,505	2%
Gushul Studio	\$89,394	\$164,173	\$0	\$30,779	\$284,346	278	\$2,226	\$618,829	46%
Hepler Hall B5057A	\$296,433	\$58,302	\$0	\$0	\$354,735	769	\$4,764	\$3,663,822	10%
Kainai House B5057I	\$434,260	\$3,679,849	\$101,796	\$188,626	\$4,404,531	5,507	\$2,645	\$14,564,319	30%
Library Storage Building B5057AA	\$37,859	\$41,947	\$0	\$0	\$79,806	188	\$3,558	\$668,813	12%
Maintenance Storage Building R130 B5057AB	\$19,308	\$18,475	\$0	\$0	\$37,783	322	\$3,078	\$991,073	4%
Maintenance Storage Building R140 B5057AC	\$0	\$18,445	\$0	\$0	\$18,445	63	\$9,004	\$567,248	3%
Max Bell Regional Aquatic Center B5057E	\$253,729	\$1,046,810	\$0	\$217,112	\$1,517,651	5,884	\$3,567	\$20,987,515	7%
Observatory B5057Y	\$27,667	\$32,454	\$0	\$0	\$60,121	36	\$4,452	\$160,275	38%
Paterson Centre	\$0	\$0	\$0	\$0	\$0	860	\$1,709	\$1,469,519	0%
Physical Education Building B5057R	\$9,012,271	\$808,698	\$0	\$198,288	\$10,019,257	8,436	\$3,567	\$30,090,855	33%
Physical Education Storage	\$0	\$0	\$0	\$0	\$0	54	\$1,750	\$94,512	0%
Piikani House B5057L	\$435,087	\$2,810,497	\$726,531	\$188,848	\$4,160,963	5,417	\$2,645	\$14,326,314	29%
Remote Research Building B5057T	\$451,897	\$269,281	\$10,540	\$0	\$731,718	151	\$4,478	\$676,119	108%
Residence Village	\$0	\$0	\$0	\$0	\$0	3,843	\$1,708	\$6,563,910	0%
Service Building No. 1 B5057M	\$1,073,399	\$552,025	\$0	\$134,383	\$1,759,807	932	\$3,082	\$2,872,136	61%
Service Building No. 2 B5057N	\$1,052,141	\$134,383	\$0	\$0	\$1,186,524	607	\$3,076	\$1,867,140	64%
Service Building No. 4 B5057O	\$1,198,908	\$0	\$0	\$0	\$1,198,908	980	\$3,074	\$3,012,270	40%
Service Building No. 5 B5057P	\$308,554	\$0	\$0	\$0	\$308,554	197	\$3,080	\$606,698	51%
Service Building No. 6 B5057Q	\$261,915	\$0	\$0	\$0	\$261,915	280	\$3,077	\$861,615	30%
Siksika House B5057K	\$293,791	\$752,121	\$1,106,696	\$106,039	\$2,258,647	3,250	\$2,644	\$8,594,096	26%
Site S5057	\$4,573,243	\$8,187,814	\$12,872	\$63,098	\$12,837,027	156,030	\$926	\$144,504,598	9%
Students' Union Bldg B5057F (incl. South Plaza)	\$578,125	\$1,832,695	\$701,706	\$174,594	\$3,287,120	9,086	\$3,415	\$31,028,976	11%
Tsuutina House B5057J	\$303,983	\$1,203,963	\$657,776	\$189,328	\$2,355,050	2,594	\$2,645	\$6,859,833	34%
Tunnel Link B5057V	\$0	\$2,119,917	\$0	\$0	\$2,119,917	508	\$3,075	\$1,562,100	136%
Turcotte Hall B5057C	\$50,910	\$654,066	\$144,858	\$135,172	\$985,006	3,408	\$3,567	\$12,154,909	8%
University Center For The Arts B5057G	\$1,555,995	\$10,813,844	\$525,489	\$335,428	\$13,230,756	28,328	\$4,554	\$129,014,721	10%
University Hall B5057D	\$0	\$10,106,891	\$1,382,223	\$4,269,230	\$15,758,344	40,162	\$3,580	\$143,779,706	11%
University Library B5057AD	\$0	\$90,861	\$0	\$30,287	\$121,148	23,199	\$2,936	\$68,114,620	0%
Water Chamber North	\$0	\$0	\$0	\$0	\$0	24	\$2,783	\$66,792	0%
Water Chamber South	\$0	\$0	\$0	\$0	\$0	24	\$2,829	\$67,905	0%
Totals	\$26,597,993	\$47,255,196	\$6,202,316	\$7,252,621	\$87,308,126	156,030	\$4,511	\$703,779,226	12%

Appendix H – Institutions Deferred Maintenance for Residences

Institution	Residence Area (m ²)	Deferred Maintenance (\$)	FCI
Fairview College	15,401	6,647,946	35.7%
Grande Prairie Regional College	4,183	1,240,333	24.6%
Keyano College	11,850	2,211,923	16.5%
Lakeland College	26,149	5,456,562	15.8%
Lethbridge Community College	9,662	1,995,895	18.0%
Medicine Hat College	6,378	935,468	12.2%
Mount Royal College	13,807	3,774,875	32.7%
Northern Lakes College	11,028	3,484,620	31.9%
Olds College	20,084	8,007,408	26.0%
Portage College	10,086	3,535,463	29.0%
Red Deer College	20,335	723,950	3.0%
Sub-Total Colleges	148,963	38,014,443	
SAIT	14,199	8,503,199	45.7%
Sub-Total Technical Institutes	14,199	8,503,199	
University of Alberta	97,511	24,395,931	21.8%
University of Calgary	85,512	30,510,900	29.5%
University of Lethbridge	21,389	12,403,393	43.4%
Sub-Total Universities	204,412	67,310,224	
Banff Centre	18,020	4,073,056	19.4%
Total All Institutions	385,594	117,900,922	

Appendix I – 2005-06 Facilities Performance Indicators Report

Summary Table

Institutions	Landscaping Grounds \$/Acre	Maintenance	Admin	Maintenance Cost/ Student FTE	Custodial Cost/ Student FTE	Energy Consumption
University of Lethbridge	\$ 1,896	\$ 1.29	\$ 0.29	\$ 233.24	\$ 163.81	85,716
Other Institutions in same region*	\$ 4,917	\$ 1.43	\$ 0.38	\$ 297.71	\$ 281.73	133,674
Other Institutions with 5,000 to 11,999 FTE's	\$ 3,527	\$ 1.47	\$ 0.48	\$ 472.52	\$ 339.22	132,782
Other Public Funded Institutions	\$ 4,171	\$ 1.38	\$ 0.61	\$ 377.56	\$ 268.24	143,109
Other Canadian Master's Colleges and Universities	\$ 2,662	\$ 1.49	\$ 0.32	\$ 248.01	\$ 192.44	84,217

* The University of Lethbridge falls under the "Rocky Mountain" APPA Region which includes schools from Arizona, Colorado, Montana, New Mexico, Utah, Wyoming, Alberta and Saskatchewan.

Appendix J – Lights-on Funding

OPERATING COSTS:	Alberta Water & Environmental Sciences Building - Phase 1	Markin Hall	Student Residences	Science Complex	Central Plant Facility	Art Gallery	Office/ Classroom Complex	TOTAL
Utilities	\$ 423,800	\$ 299,260	\$ 93,653	\$ 572,130	\$ 135,000	\$ 108,675	\$ 248,400	\$ 1,880,918
Capital Projects Office	\$ 22,820	\$ 38,793	\$ 12,140	\$ 30,807	\$ -	\$ 14,088	\$ 32,200	\$ 150,848
Physical Plant Operations	\$ 32,600	\$ 55,419	\$ 17,343	\$ 44,010	\$ 40,200	\$ 20,125	\$ 46,000	\$ 255,697
Utilities Operations	\$ 104,320	\$ 144,088	\$ 45,092	\$ 140,832	\$ 72,000	\$ 52,325	\$ 119,600	\$ 678,257
Caretaking	\$ 81,500	\$ 138,546	\$ 43,358	\$ 110,025	\$ -	\$ 50,313	\$ 115,000	\$ 538,742
Building Maintenance	\$ 39,120	\$ 66,502	\$ 20,812	\$ 52,812	\$ -	\$ 24,150	\$ 55,200	\$ 258,596
Grounds Maintenance	\$ 26,080	\$ 44,335	\$ 13,875	\$ 35,208	\$ -	\$ 16,100	\$ 36,800	\$ 172,397
Security	\$ 39,120	\$ 66,502	\$ 20,812	\$ 52,812	\$ 22,800	\$ 24,150	\$ 55,200	\$ 281,396
TOTAL	\$ 769,360	\$ 853,445	\$ 267,085	\$ 1,038,636	\$ 270,000	\$ 309,925	\$ 708,400	\$ 4,216,850
Building m ²	5,263	9,638	3,016	7,000	1,800	3,500	8,000	
Projected operating costs \$/m ²	\$ 146.19	\$ 88.55	\$ 88.55	\$ 148.38	\$ 150.00	\$ 88.55	\$ 88.55	
Occupancy Date	July 2008	August 2010	Sept 2010	2011	2011	2013	2013	

Appendix K – Bibliography

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Appendix L – Acknowledgements

This document has been prepared on behalf of the University of Lethbridge by Irwin B. Easthope, Executive Analyst, in the Office of the Vice-President (Finance and Administration).

The author wishes to acknowledge the contribution of the following individuals to the creation of this document:

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