## 2012-13 Capital Budget

#### A. The Evolution of Capital Expenditures

The Capital Budget for 2012-13 should be seen in the context of both recent trends in capital spending and the University's proposed Long-Range Space Plan as outlined in section C of the Operating Budget portion of this document. Table 16 sets out expenditures in the Capital Budget since 2008-09 in nine categories.

Category 1 shows all new construction, while categories 2 to 7 show renovations to existing space. Category 1 expenditures are usually funded from general University funds, the major exceptions being projects funded all or in part from external research grants, private funds, government, student contributions, and Housing construction – the latter being funded from the Housing budget. Categories 2 to 5 are funded primarily from general University funds and government, while category 6 is funded from Housing operations, and category 7 is funded by the particular Ancillary undertaking the work. Categories 8 and 9 involve carrying costs and loan repayments, and other expenditures such as purchases of land and buildings and transfers from the capital budget for other purposes. Planned capital expenditures for 2012-13 total \$146.0 million.

Categories 2 to 5 involve **Maintenance, Modernization, and Infrastructure (MMI)** and are eligible to receive funds from the annual MMI transfer from the operating budget to the capital budget, which is budgeted to increase to \$11.75 million in 2012-13 (\$11.0 M in 2011-12). These are expenditures directed at modification of existing space and renewal and expansion of the utilities and infrastructure of the University.

In planning future expenditures on Maintenance, Modernization, and Infrastructure, it is useful to review the value of our current fixed assets on campus. At February 29, 2012, our buildings and infrastructure have a current replacement value (CRV) of approximately \$1,967 million, as follows:

		Square	Major
	CRV \$M	Metres	<b>Buildings</b>
Major Non-Residential Buildings	1,413	498,522	64
Utilities and Infrastructure	183		
Subtotal, Eligible for MMI	1,596	498,522	64
Housing	292	233,159	14
Other Ancillary Buildings	79	45,015	6
Total	1,967	776,696	84

At February 29, 2012, the University had 498,522 gross square metres in 64 major non-residential buildings, ranging in size from the Cronyn Observatory (338 square metres) to the

Social Science Centre (33,757 square metres). Those buildings, and some \$183 million in utilities and infrastructure, are the physical assets generally eligible for MMI expenditures. On that same date, the University had 233,159 square metres of Housing space in ten major undergraduate residences, four major apartment buildings, and numerous smaller buildings for graduate students in Platt's Lane Estates. Other than Housing, there are six major buildings which are operated largely or entirely as ancillaries: Western Sports and Recreation Centre, Thompson Recreation and Athletic Centre, TD Waterhouse Stadium, Boundary Layer Wind Tunnel, Child Care Centre, and Spencer Hall.

With this background in mind, we briefly set out the nine categories of capital expenditures.

**1. New Construction**. This category includes projects which create new buildings, including housing, additions to existing buildings, and other new facilities such as parking lots and athletic fields. It does not include projects which improve the space within existing buildings or projects which upgrade other existing facilities.

**2. Major Building Renovations**. This category involves major maintenance and renovation expenditures on non-residential building projects of over \$1 million – and the projects generally span more than one year. Of the 498,522 square metres in major buildings, over 56% was built before 1980, so renovations to major buildings will be a continuing part of University capital planning.

**3.** Utility Infrastructure Projects. This category involves projects with values greater than \$10,000 directed at the upgrading and new installation of utilities and other infrastructure, including boilers and chillers, as well as electrical, water, and sewer distribution systems. Given that most of our Utilities and Infrastructure plant and equipment is over thirty years old, these projects will continue to be a critical part of our capital budget. It is noted that proposed projects in this category include many that are devoted to the renewal of portions of our steam, water and chilled water systems. Major projects in future years will include continued work on electrical distribution systems and utility conservation.

**4. Modernization of Instructional and Research Facilities**. This category includes the renewal and modernization of classrooms, laboratories, libraries, and other space used for instruction and research, as well as upgrades to information technology. These expenditures are critical to maintaining Western's reputation as a leader in the quality of teaching and research. These projects are sometimes funded by the units themselves with operating or research funds.

**5.** General Maintenance and Modernization Projects. This category consists of a wide variety of maintenance and modernization projects which are not included in categories 2 to 4. Most of the projects are under \$100,000, involving such work as roof replacement, interior and exterior painting, road, bridge, and sidewalk repair, and general maintenance of structures and systems. A provision of \$400,000 for unforeseen projects forms part of the allotment in this category.

**6.** Housing Renovations. This category includes all maintenance and modernization expenditures on University residences and apartment buildings. Construction of a new residence

or apartment building would be included in category 1. Maintenance and modernization expenditures, projected to be \$7.9 million in 2012-13, are funded from Housing revenues and debt. Housing has always set aside adequate maintenance funds and does not have the significant deferred maintenance on its buildings which may be observed in many other University buildings.

**7. Ancillary Projects**. This category includes capital expenditures on Ancillaries other than Housing, including Hospitality Services, the Book Store, Parking Services, student fee-funded units, self-funded support units, and self-funded research units. These units pay a charge to the University for the space they occupy.

**8.** Carrying Costs and Debt Repayments. This category consists of principal repayments and interest on debt for capital projects.

**9. Other Capital Expenditures**. This category includes asset acquisitions and other miscellaneous expenditures. It has been an established principle in Western's Campus Master Plan that the University pursue, as appropriate, the purchase of lands contiguous to University property as lands become available. Western will continue to seek to protect the Regional Facilities zoning around the main campus and to buy land near our campus when it comes up for sale. The University will also look to acquire strategic physical assets.

The last twelve lines of Table 16 are labeled A to M. Line A shows total sources of funding for the capital budget, including debt; B, sources of funds less expenditures; C, the capital reserve at year-end (which changes each year by the amount in line B); and D, capital debt outstanding at year-end. Details on these items are shown in Tables 18 and 20. Annual changes in the Capital Reserve (line C) are driven by the differences between funding and expenditure (line B). Thus for 2010-11, line B shows \$22,098, the difference between funding of \$118,368 (all figures in \$000) and expenditures of \$96,270. The capital reserve in line C increases by this same amount of \$22,098, from \$8,725 in 2009-10 to \$30,823 in 2010-11. When line B is negative, as in 2008-09 and 2009-10, the capital reserve declines.

Line E shows the replacement value of non-residential buildings and utilities and infrastructure – the assets eligible for MMI spending -- while line F shows the ratio of the annual MMI expenditure to the replacement value. For example, in 2010-11, MMI expenditures were \$49.3 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.47 billion. The ratio of the two is 3.4%, as shown in line F.

Line G of Table 16 shows the annual transfer from the operating budget to the capital budget for Maintenance, Modernization, and Infrastructure (the MMI transfer). As part of the 1995 Strategic Plan, the Board of Governors approved an incremental annual base transfer of \$750,000 from operating to capital in support of maintenance spending for ten years, from 1996-97 to 2005-06. Since there was an existing transfer of \$500,000 in 1995-96, the annual transfer was \$8.0 million in 2005-06. In 2004, Western's Board of Governors approved the recommendation that the base transfer of \$750,000 be continued for another ten years after 2005-06 until 2015-16, when the annual transfer will be \$15.5 million. This commitment established Western as a leader among Canadian universities in maintaining its facilities and dealing with

deferred maintenance. For 2009-10 and 2010-11, given the financial constraints faced by the University at that time, the Board approved the annual transfer be held at \$10.25 million. For 2012-13, the base transfer will be increased by \$750,000 to \$11.75 million (2011-12, \$11.0 million) and will reach the intended maximum annual transfer of \$15.5 million in 2017-18.

Line H of Table 16 shows the ratio of the annual MMI transfer to total MMI expenditures; for example, in 2010-11, the transfer was \$10.25 million and MMI expenditures were \$49.3 million, so the ratio in line H is 20.8%. Other sources of funding for MMI expenditures include the annual capital facilities renewal grant from the Province (currently about \$1.5 million); special Provincial grants; additional one-time allocations from the University's operating budget; additional one-time allocations from the Province; research funds from such sources as the Canada Foundation for Innovation and the Ontario Ministry of Research and Innovation; fundraising; and borrowing.

Line J contains an estimate of maintenance spending, defined narrowly as spending required to bring aging facilities up to their condition when originally built. In fact, whenever Western undertakes a major maintenance project, there is also modernization of the facility, and whenever we carry out a major modernization project, there is generally some maintenance expenditure; it is thus difficult to separate the two. Line J is calculated on the assumption that 2/3 of the expenditures in categories 2, 3, and 5 involve maintenance (the remaining 1/3 involve modernization), while 1/3 of the expenditures in category 4 is for maintenance (the remaining 2/3 involve modernization). While these ratios would vary by project and by year, Facilities Management considers them a reasonable average for the four categories over a number of years.

The value of line J in 2010-11 is \$31.1 million, or (in line K) 2.1% of the replacement value in that year. A standard target in industry for this ratio is 2.0%: if large buildings last an average of 50 years, then on average maintenance spending should be 2.0% of replacement value. When the actual ratio is consistently lower than 2.0%, as has been the case at Western and most Canadian universities over the last three decades, the level of deferred maintenance will grow. Two years ago, the Provincial Budget reduced the facilities renewal funding envelope for Colleges and Universities from \$40 million to \$26 million. Western's share of this funding is \$1.5 million.

Table 17 reviews major capital projects divided into four groups: projects completed up to March 2012 (3 projects with a total cost of \$26.0 million); projects underway (8 projects totaling \$271.4 million and 2 projects where estimates are not available); projects planned or under consideration; and projects for future consideration. In each case, the projects are assigned to one of the nine categories. For most of the projects in the first two categories, the year and month of the start and end of construction are shown.

The projects listed in Table 17 are the result of an update to the Long-Range Space Plan outlined in Table 15 of the Operating Budget portion of this document. These projects include new construction that will create the additional space necessary to accommodate undergraduate and graduate enrolment expansion and the associated additional faculty and staff, and major building renovations and utilities and infrastructure projects – reflecting the need to maintain and modernize Western's aging physical plant.

#### **B.** Sources of Funding and Capital Expenditures in 2012-13

Table 18 displays sources of funding for budgeted capital expenditures with estimates of comparative data for 2011-12, divided into seven major categories: federal, provincial and municipal government grants; funds from the Canada Foundation for Innovation (CFI) and the Ontario Ministry of Research and Innovation (OMRI) awarded on a competitive basis; funds transferred from Western's operating budget; investment income on reserves held in the Capital Budget; general fundraising; borrowing; and other sources, including internal recoveries. As compared to a decade ago, the University is more dependent on capital revenues from competitive research sources (e.g. CFI/OMRI), private fundraising, transfers from the operating budget, and debt.

Table 19 shows expenditures in Categories 1 and 2, for 2011-12 (estimates as of February 29, 2012) and 2012-13 (current proposals).

The details for expenditures in Categories 3 through 7, and can be found at: <u>http://www.ipb.uwo.ca/documents/2012-13\_Capital\_Budget\_Detail\_Tables.pdf</u>

TABLE 16
CAPITAL BUDGET SUMMARY, 2008-09 TO 2012-13
(\$000)

Category	Dumose	Actual 2008-09	Actual 2009-10	Actual 2010-11	Projected 2011-12	Budget 2012-13
Category	New Construction	2008-09	2009-10	2010-11	2011-12	2012-13
1	New Construction (Table 19, line 11)	54,292	23,775	38,141	56,867	93,465
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 19, line 24)	25,526	23,835	31,281	16,524	18,359
3	Utilities and Infrastructure Projects	4,363	4,777	5,347	4,807	8,420
4	Modernization of Instructional and Research Facilities	5,909	4,285	5,102	4,986	4,713
5	General Maintenance and Modernization Projects	4,553	9,320	7,583	7,444	7,139
	Sub-Total MMI	40,351	42,217	49,313	33,761	38,631
	Other					
6	Housing Renovations	6,772	4,736	5,393	9,144	7,940
7	Ancillary Projects	2,395	179	535	368	750
8	Carrying Costs and Debt Repayments	1,396	3,327	2,626	3,467	3,969
9	Other Capital Expenditures	4,422	1,758	262	2,160	1,250
	Sub-Total Other	14,985	10,000	8,816	15,139	13,909
10	Total Expenditures	109,628	75,992	96,270	105,767	146,005

Line		Actual 2008-09	Actual 2009-10	Actual 2010-11	Projected 2011-12	Budget 2012-13
	Sources of Funding, Reserves, and Debt					
А	Total Sources of Funding, Including Debt (Table 18)	89,882	70,304	118,368	107,575	131,028
В	Sources of Funding less Expenditures	(19,746)	(5,688)	22,098	1,808	(14,977)
С	Capital Reserve, Year End (Table 20)	14,413	8,725	30,823	32,631	17,654
D	Capital Debt Outstanding, Year End (Table 20)	222,220	208,923	217,014	223,087	314,244
Е	Replacement Value of Nonresidential Buildings, Utilities & Infrastructure, \$M	1,291	1,341	1,469	1,596	1,613
F	MMI Expenditures/Replacement Value	3.1%	3.1%	3.4%	2.1%	2.4%
G	Annual MMI transfer from Operating to Capital Budget	10,250	10,250	10,250	11,000	11,750
Н	MMI transfer/MMI Expenditures	25.4%	24.3%	20.8%	32.6%	30.4%
J	Estimate of Maintenance Expenditure	24,931	26,716	31,175	20,845	24,183
К	Maintenance Expenditure/Replacement Value	1.9%	2.0%	2.1%	1.3%	1.5%
L	Number of Major Buildings	80	83	82	84	86
М	Total Gross Square Meters (000's)	741	753	747	777	784

Category 8 does not include carrying costs and loan repayments for Residences and Apartments, Research Park and Richard Ivey School of Business.

Line B is equal to Line A Total Sources of Funding less Total Expenses.

The change in line C from one year to the next is equal to Line B.

Line J consists of 2/3 of Category 2, 3 and 5 and 1/3 of Category 4.

# TABLE 17MAJOR CAPITAL PROJECTS

		Category	Start	End	Cost
					(\$M)
1	Projects Completed up to March 2012				
2	Stevenson Hall and Lawson Hall Renovations	2	Jan 09	Aug 11	18.8
3	Addition to the Museum of Ontario Archaeology	1	Jun 10	May 11	2.4
4	University Community Centre Renovations (USC)	2	Sep 10	Apr 11	4.8
5	Total				26.0
6	Projects Underway				
7	IT Network and Infrastructure Upgrades (VOIP)	2	May 08	Jun 12	
8	New Ivey Building	1	Aug 09	Aug 13	
9	Physics and Astronomy Building Renovations	2	Mar 10	Jul 12	
10	The Wind Engineering, Energy and Environment Facility (WindEEE)	1	Dec 10	Nov 13	
11	Undergraduate Residence Expansion	1	May 11	Aug 13	
12	Dental Sciences Building 2nd Floor Renovations	2	Jul 11	Jul 12	
13	The Fraunhofer Project Center (ICRC)	1	Aug 11	Jul 12	
14	Medical Education Building	1	Oct 11	May 13	
15	B&GS Courtyard Conversion to Common/Gathering Space	1	Jan 12	May 13	
16	Advanced Manufacturing Centre (Support Facilities in AMP)	1	Jan 12	tbd	
17	Total				
18	Projects Planned or Under Consideration				
19	Convert Thames Hall Pool to Classroom Space	2	tbd	tbd	
20	Delaware Hall Residence Renovations	2	tbd	tbd	
21	Modernization/Expansion of Talbot College	1&2	Mar 12	Aug 16	
22	Graduate Student Housing Expansion	1	tbd	tbd	
23	Renewal of Current Ivey Facilities and Follow On Renovations	2	tbd	tbd	
24	Renewal of University College	2	tbd	tbd	
25	Campus Sustainability Initiatives and Utilities and Infrastructure Projects	3&5	Ongoing		
26	Projects for Future Consideration				
20	Interdisciplinary Advanced Studies Building	1	tbd	tbd	
28	Renewal of Schulich School of Medicine and Dentistry Facilities	2	tbd	tbd	
29	Renewal of TH, SEB, MB, HSA and Elborn	2	tbd	tbd	
30	Expansion of Medical School Facilities	1	tbd	tbd	
31	Western's Downtown Campus - City Partnership	1&2	tbd	tbd	
32	Research Initiatives/Partnerships at the Advanced Manufacturing Park	1	tbd	tbd	
33	Library Facilities - Realignment and Expansion	1&2	tbd	tbd	
34	New Facilities to House Chemistry and Brain and Mind	1	tbd	tbd	
35	Consolidation of the Psychology Department	1	tbd	tbd	
36	North Academic Campus	1&9	tbd	tbd	
37	Performing Arts Facility	1	tbd	tbd	
	· · · · · · · · · · · · · · · · · · ·				
38	Athletic Facilities - Indoor and Outdoor	1	tbd	tbd	

Table 18
CAPITAL BUDGET: SOURCES OF FUNDING
(\$000)

		Projected 2011-12	Budget 2012-13
1	Government Grants		
2	MTCU Graduate Expansion Capital Grant	3,575	3,889
3	City of London - The Fraunhofer Project Center (ICRC)	0	2,200
4	MTCU Annual Capital Grant (Facilities Renewal Program)	1,517	1,517
5	Knowledge Infrastructure Program - New Ivey Building	4,677	0
6	City of London - SuperBuild Projects	413	0
7	Sub-Total	10,182	7,606
8	CFI/OMRI Federal/Provincial Funding		
9	The Wind Engineering, Energy, and Environment Facility (WindEEE)	4,200	7,272
10	Addition to the Museum of Ontario Archaeology	643	0
11	Sub-Total	4,843	7,272
12	Operating Budget		
13	Operating Budget MMI Transfer - Base	11,000	11,750
14	Operating Budget MMI Transfer - Base (Ancillaries)	600	600
15	Operating Budget - FFICR	3,000	3,000
16	Operating Budget - CRC Transfer	904	936
17	Operating Budget - One-Time Allocation	0	257
18	Ivey Operating Budget - New Ivey Building	0	1,500
19	Dentistry Operating Budget - Dental Sciences Building 2nd Floor Renovations	1,995	778
20	Medicine Operating Budget - Medical Education Building	4,605	0
21	IT Infrastructure Fund - Advanced Manufacturing Park	0	600
22	Miscellaneous Faculty Budgets	1,298	113
23	Sub-Total	23,402	19,534
24	Interest Earned	69	38
25	Fundraising		
26	New Ivey Building	17,719	5,200
20	The Claudette MacKay-Lassonde Pavilion (Green Building)	544	561
27	SuperBuild Projects	344	371
28 29	Western Fund	350	350
30	All Other	750	89
30	Sub-Total	19,734	6,571
51		17,/34	0,371

Table 18
<b>CAPITAL BUDGET: SOURCES OF FUNDING</b>
(\$000)

		Projected 2011-12	Budget 2012-13
32	Borrowing		
33	Undergraduate Residence Expansion	18,067	43,100
34	Long-Range Space Plan	17,578	35,065
35	Sub-Total	35,645	78,165
36	Other		
37	Student Contributions - Western Student Recreation Centre	1,007	1,069
38	Richard Ivey School of Business Foundation - Toronto Facilities Expansion/Renovations	0	1,000
39	Energy Conservation Incentives	100	100
40	Deleware Hall Recovery - Housing Contribution	1,860	0
41	University Students Council (USC) - UCC Renovations	1,438	0
42	Projects Funded by Housing	7,284	7,940
43	Projects Funded by Units	1,643	983
44	Projects Funded by Ancillaries	368	750
45	Sub-Total	13,700	11,842
46	Total Sources of Funding	107,575	131,028

#### TABLE 19

## CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS

### 2011-12 and 2012-13

#### (\$000)

		Projected 2011-12	Budget 2012-13
1	Category 1: New Construction		
2	Undergraduate Residence Expansion	18,000	43,100
3	New Ivey Building	31,225	23,350
4	The Wind Engineering, Energy, and Environment Facility (WindEEE)	4,200	10,072
5	Medical Education Building	470	8,700
6	B&GS Courtyard Conversion to Common/Gathering Space	780	3,220
7	Advanced Manufacturing Centre (Support Facilities in AMP)	231	2,709
8	The Fraunhofer Project Center (ICRC)	1,086	2,314
9	Addition to the Museum of Ontario Archaeology	643	0
10	The Claudette MacKay-Lassonde Pavilion (Green Building)	232	0
11	Total, Category 1	56,867	93,465
12	Category 2: Major Building Renovations		
13	Modernization/Expansion of Talbot College	0	8,700
14	Convert Thames Hall Pool to Classroom/Gathering Space	0	3,000
15	Physics and Astronomy Building Renovations	7,692	2,538
16	Renewal of Current Ivey Facilities	0	1,850
17	Ivey Toronto Facilites Expansion/Renovations	0	1,000
18	Dental Sciences Building 2nd Floor Renovations	1,995	778
19	Support Services Follow-on Renovations	636	380
20	Brain and Mind Renovations in Natural Sciences Building	296	113
21	Stevenson Hall and Lawson Hall Renovations	3,496	0
22	University Community Centre Renovations (USC)	1,438	0
23	IT Network and Infrastructure Upgrades (VOIP)	971	0
24	Total, Category 2	16,524	18,359

## TABLE 20 CAPITAL RESERVES AND DEBT AT FISCAL YEAR END (\$000)

		Actual 2008-09	Actual 2009-10	Actual 2010-11	Projected 2011-12	Budget 2012-13
1	A. Capital Reserves					
2	General Capital Fund	24,146	15,483	15,015	12,164	6,389
3	Designated Capital Fund	(11,355)	(8,380)	14,186	18,830	9,620
4	Gibbons Property	1,622	1,622	1,622	1,637	1,645
5	Total Capital Reserves	14,413	8,725	30,823	32,631	17,654

		Actual 2008-09	Actual 2009-10	Actual 2010-11	Budget 2011-12	Budget 2012-13
6	B. Capital Debt					
7	General Capital Fund	0	0	0	0	0
8	New Construction, Major Renovations & Other	25,040	45,900	77,500	95,078	130,143
9	Housing	92,792	88,288	81,713	94,409	130,701
10	Robarts Capital Leases	1,538	926	284	0	0
11	Research Park	22,570	32,463	32,325	31,800	31,200
12	Richard Ivey School of Business Foundation	3,300	3,300	2,300	1,800	1,300
13	Unused and Invested Debenture Proceeds	76,980	38,046	22,892	0	20,900
14	Total Capital Debt	222,220	208,923	217,014	223,087	314,244

Line 2 represents the capital reserve fund mandated by the board and carry forward funds for smaller capital project.

Line 3 includes fund balances for large capital projects with construction budgets greater than \$1 million.

## **Long-Term Financial Trends**

The Operating and Capital Budgets set out in this document describe, in Tables 2 and 16, proposed spending of some \$782 million for the single year of 2012-13. That spending will take place, however, in a longer term context which must be understood in evaluating the Operating and Capital Budgets. The Administration and Board have identified three elements of that longer term context which should be reviewed in the annual Budget of the University: capital reserves and debt, employee future benefits, and deferred maintenance. These three items are described below.

The long term context for Western changed in May 2007, when the University issued its first debenture, for \$190 million. As part of this process, the University received a credit rating of AA from Standard & Poor's. This credit rating was reaffirmed in February of 2012. Part of the credit rating evaluation focused on a number of long-term obligations that the University manages on an ongoing basis, including the three which we review below.

#### A. Capital Reserves and Debt

Table 20 displays Capital Reserves and Debt for April 30 fiscal year-ends. Capital Reserves are divided into three categories:

- The General Capital Fund, not yet designated for specific purposes
- Designated Capital Fund, which has been assigned to specific projects
- Gibbons Property, the remaining funds from the sale of that property

The University's intention is that when the Gibbons funds are spent, there will be naming opportunities to honor the Gibbons name.

Capital Debt is divided into the following categories:

- General Capital Fund includes debt for projects that are not new construction or major renovations.
- New Construction, Major Renovations, and Other represents debt on projects that are largely new construction, additions to existing buildings, other new facilities, non-residential projects that involve major maintenance and renovations to existing space, and includes debt on purchases of property.
- **Housing** debt required for new construction, maintenance, and modernization projects for University residences and apartment buildings.

- **Robarts Capital Lease** with the integration of Robarts into Western, a capital lease for equipment has been added to Capital Debt (noting that the lease came to an end in 2011-12).
- **Research Park** debt incurred by the Research Park.
- **Richard Ivey School of Business Foundation** debt held by Richard Ivey School of Business Foundation.
- Unused and Invested Debenture Proceeds unused proceeds from Western's first debenture issue that have been committed, and invested until the specific capital project requires the funding.

In 2002-03, the Board of Governors approved a Capital Debt Policy, which included a limit of \$7,500 in debt per student full-time equivalent (FTE). In 2005-06, the Board policy was modified to increase the \$7,500 each year by the change in the CPI, beginning in 2002. The table below shows the allowed debt per FTE (shown with indexation beginning in 2003-04) and actual debt per FTE; the figures are for years ending on April 30th. Debt was increased significantly in 2008 due to the issuance of the \$190 million debenture.

	Actual		Forecast .	
	2010	2011	2012	2013
Total Debt (in millions)	\$ 209	\$ 217	\$ 223	\$ 314
FTE	28,987	29,913	30,679	31,193
Allowable debt per FTE	\$8,584	\$8,756	\$8,931	\$9,110
Actual debt per FTE	\$7,206	\$7,255	\$7,269	\$10,073
Debt room per FTE	\$1,378	\$1,501	\$1,662	\$ (963)

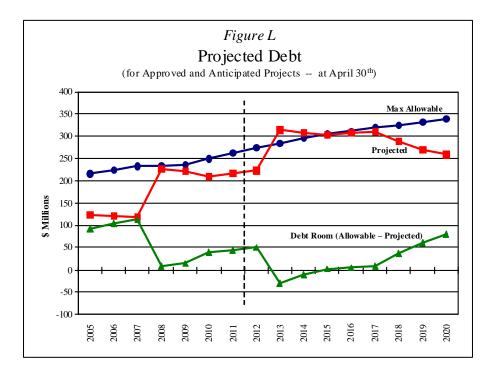
In 2012, the maximum allowed debt per FTE under Western's Capital Debt Policy is \$8,931 and the forecast is \$7,269. In 2006, the credit rating agencies (Moody's, DBRS & Standard & Poors) set a reasonable limit for debt per FTE as \$10,000 CDN. The University also compares its debt per student to some other Canadian universities on a regular basis. A recent report was issued by DBRS in December 2011 containing information on universities that have issued debentures. Debt per FTE at eleven universities ranged from \$4,997 to \$11,967 with an unweighted average of \$7,741.

In September 2011, the University entered into a \$100 million long-term facility and \$30 million revolving capital expenditure bank facility to finance the new 1,000 bed residence and other capital projects. As of September 12, 2011, the University entered into a forward starting interest rate swap transaction to fix the long-term interest rate on the entire principal amount of the \$100 million long-term facility at an all-in rate of 2.995% for a 15-year period. With this additional debt that will be issued in fiscal 2013, the University has received board approval to

exceed the limits set out in the Capital Debt Policy, if required, by up to \$45 million for the fiscal period 2013 and 2014.

Figure L shows total debt as well as three measures of debt per FTE since 2008: the maximum allowable debt, indexed to the CPI; the actual and projected debt; and the difference between the two, which we call debt room. The projected debt is based on Board-approved projects with allowance for other projects which may be presented to the Board during the period under consideration. Figure L shows that projected debt grows beyond the maximum allowable debt from 2013 to 2014 to support the funding of the new student residence (as discussed in previous paragraph). In 2015, total debt once again reduces to within Board Policy.

Actual debt has increased by 87% since 2007, while revenues have grown by 19% over this same period, representing an increase in the ratio of debt to revenue from 14.35% to 22.58% in 2012. The forecast level of debt at April 30, 2012 is \$223 million or \$7,269 per FTE.



	Debt \$M	Combined <u>Revenue</u> \$M	FTE	Revenue <u>per FTE</u>	Debt / <u>Rev %</u>
2007	119.0	829.1	28,164	\$29,440	14.35%
2008	225.8	848.7	27,981	\$30,333	26.61%
2009	222.2	834.9	28,197	\$29,610	26.61%
2010	208.9	961.1	28,987	\$33,155	21.74%
2011	217.0	995.0	29,913	\$33,263	21.81%
2012p	223.0	987.6	30,679	\$32,191	22.58%

#### **B.** Employee Future Benefits

Subject to eligibility rules set within various collective agreements, the University provides medical, dental and life insurance benefits to eligible employees after their employment with Western has ended.

These employee future benefits are determined using actuarial valuations every three years. In the years between valuations, an extrapolation of the actuarial valuation is used to determine the projected benefit obligations. At April 30, 2011, the University's accrued benefit liability relating to the employee future benefit plans was \$272 million (2010 - \$248 million).

Cost containment of active and post-retirement benefits has been a focus in recent negotiations. For staff, Western introduced a measure that limits cost increases for active and retiree benefits to no greater than CPI (3% maximum) in each year, reduced the age limit for dependent coverage and increased service requirements to qualify for post-retirement benefits to 10 years. For faculty, the threshold for eligibility has been increased from 5 to 10 years for all new employees and cost containment changes were introduced to the plan.

Included in the University's 2011 Audited Combined Statement of Operations is an annual expense in the amount \$24.0 million (2010 - \$18.3 million) for non-pension employee future benefits.

A recent comparison amongst G13 universities identified only five universities with significant post-employment benefit obligations greater than \$100 million, ranging from \$137 million to \$379 million and an unweighted average of \$262.4 million. Western ranked  $2^{nd}$  in total liability for Employee Future Benefits. The ratio of obligations to total revenues ranged from 16.3% to 38.8% with an unweighted average of 26.0%.

#### Employee Future Benefits (EFB) – Obligation and Expense as a % of Total Expenditures 2007 through 2011

	Obligation (\$M)	Expense (\$M)	Total University <u>Expenses</u> (\$M)	EFB Obligation <u>as % of Total</u>	EFB Expense <u>as % of Total</u>
2007	\$ 188.1	\$ 14.9	\$ 762	24.7%	2.0%
2008	\$ 208.2	\$ 20.0	\$ 845	24.6%	2.4%
2009	\$ 229.9	\$ 21.7	\$ 905	25.4%	2.4%
2010	\$ 248.1	\$ 18.3	\$ 915	27.1%	2.0%
2011	\$ 272.1	\$ 24.0	\$ 952	28.6%	2.5%

#### **C. Deferred Maintenance**

Deferred Maintenance is defined as work on the maintenance of physical facilities that has been deferred on a planned or unplanned basis to a future budget cycle or postponed until funds become available. To avoid increasing the size of the deferred maintenance backlog, it is necessary to carry out replacement of facility components on an annual basis.

The estimates of deferred maintenance are different than estimates of debt or employee future benefits in the previous sections. There are actual contracts in place for the first two that allow us to make reasonable estimates. For deferred maintenance, that is not the case; therefore, we have to find other ways to quantify this liability. In 2001, a common capital-asset management system was purchased by the Ontario University system to assess, track, and report on the condition of facilities. The system requires that each major component of a building – roof sections, classrooms, heating, ventilation, air-conditioning systems and so on – be inspected, either entirely or on a sample basis. Data on the findings of these inspections are entered into a central database. The system uses industry-standard cost and lifecycle data to forecast the timing and costs of capital renewal projects. The Facilities Management Division estimates that on February 29, 2012 deferred maintenance at Western is \$169 million for non-residential buildings, and \$24.8 million for residences. Slightly more than 50% of the deferred maintenance for non-residential buildings relates to mechanical, electrical and infrastructure requirements. Other major components include maintenance driven by code requirements and maintenance for roofs and windows.

A common measure for determining the overall condition of facilities is the ratio of deferred maintenance over replacement value of the facilities. The calculation for February 29, 2012 is as follows:

	Non-residential Buildings	Residences
Current Replacement Value (CRV)	\$1,596 million	\$ 292 million
Deferred Maintenance (DM)	\$ 169 million	\$ 24.8 million
DM/CRV	10.6%	8.5%

The average age of buildings for universities in the Province of Ontario was over 30 years as of March 2007. Western's average age is 36.4 years. Over 56% of our buildings were built before 1980. Western's residences are funded through rents which cover maintenance; the University has never had a problem with deferred maintenance on residences. A ratio of 10.6% (Deferred Maintenance/Current replacement value) for non-residential buildings indicates a significant need for maintenance funding.

If the average component of a large building lasts 50 years, then on average maintenance spending should be 2.0% of replacement value. This level of spending is a standard target in the industry. When the actual ratio is consistently less than 2.0%, as has been the case at most Canadian universities, the volume of deferred maintenance will grow. Failure to adequately address deferred maintenance results in substandard facilities and could result in the failure of critical systems. Based on the current replacement value of our facilities at \$1.6 billion, spending on major maintenance for campus buildings at 2% should be in the range of \$32 million annually.

As part of the 1995 Strategic Plan, the Board of Governors approved an incremental annual base transfer of \$750,000 from operating capital in support of maintenance spending for ten years, from 1996-97 to 2005-06. In 2004, Western's Board of Governors approved the recommendation that the base transfer of \$750,000 be continued for another ten years after 2005-06, until 2015-16, when the annual transfer will be \$15.5 million. However, for 2009-10 and 2010-11, the annual transfer was maintained at \$10.25 million. For 2012-13, the base transfer will be increased by \$750,000 to \$11.75 million (2011-12, \$11.0 million) and will reach the intended maximum annual transfer of \$15.5 million in 2017-18.

As explained at the start of the Capital Budget, the maintenance transfer is used for Maintenance, Modernization, and Infrastructure (MMI). The administration is sometimes asked by faculty and staff if the MMI transfer is too large. As lines G and E in Table 16 show, the ratio of the MMI transfer to the current replacement value (CRV) of our nonresidential buildings, utilities and infrastructure has been below 1% in recent years.

	Actual 2008-09	Actual <u>2009-10</u>	Actual 2010-11	Projected 2011-12	Budget <u>2012-13</u>
MMI	\$ 10.25m	\$ 10.25m	\$10.25m	\$11.00m	\$11.75m
CRV	\$1,291m	\$1,341m	\$1,469m	\$1,596m	\$1,613m
Ratio	0.79%	0.76%	0.70%	0.69%	0.73%

Thus the MMI transfer from the operating to the capital budget is less than half the 2% required to keep deferred maintenance from growing. Continuation of this MMI transfer is essential to maintaining a safe and reliable campus infrastructure, which supports modern research and teaching, and sustains faculty, staff, and student morale.

Line J of Table 16 presents an estimate of maintenance spending from all sources, with maintenance defined as spending required to bring aging facilities up to their condition when originally built. During the six years from 2000-01 to 2005-06, the ratio of maintenance spending to current replacement value averaged 1.1%, about one-half the 2% required to keep deferred maintenance from growing. We thus know that deferred maintenance was growing during this period. During the last five years, 2006-07 through 2010-11, the ratio was about 2%, so that the level of deferred maintenance was stabilized. The University reached the 2% ratio with one-time funds from the provincial and federal governments, and by borrowing.

To sustain the 2% rate of expenditure, we need a greater annual commitment from the Province beyond the annual facilities renewal funding of \$17 million (for Ontario's universities) – of which Western's share is about \$1.5 million. A facilities renewal grant of \$1.5 million is 0.1% of the current replacement value in 2011-12.