
2014-15 Capital Budget

A. The Evolution of Capital Expenditures

The Capital Budget for 2014-15 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 Table 14 of the Operating Budget portion of this document. Table 15 sets out expenditures in the Capital Budget since 2010-11 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 2014-15 total \$104 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 \$13.25 million in 2014-15 (\$12.5 M in 2013-14). 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 28, 2014, our buildings and infrastructure have a current replacement value (CRV) of approximately \$2,241 million, as follows:

	CRV \$M	Square Metres	Major Buildings
Major Non-Residential Buildings	1,565	521,777	68
Utilities and Infrastructure	185		
Subtotal, Eligible for MMI	1,750	521,777	68
Housing	395	257,546	15
Other Ancillary Buildings	96	49,300	8
Total	2,241	828,623	91

At February 28, 2014, the University had 522,000 gross square metres in 68 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 \$185 million in utilities and infrastructure, are the physical assets generally eligible for MMI expenditures. On that same date, the University had 395,000 square metres of Housing space in eleven major undergraduate

residences, four major apartment buildings, and numerous smaller buildings for graduate students in Platt's Lane Estates. Other than Housing, there are eight major buildings which are operated largely or entirely as ancillaries: Western Student Recreation Centre, Thompson Recreation and Athletic Centre, TD Waterhouse Stadium, Boundary Layer Wind Tunnel, Child Care Centre, Spencer Hall, Accelerator Centre and the Fraunhofer Project Centre.

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 500,000 square metres in major buildings, over 55% 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 \$500,000 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 \$22.9 million in 2014-15, 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.

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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 15 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 17 and 19. Annual changes in the Capital Reserve (line C) are driven by the differences between funding and expenditure (line B). Thus for 2012-13, line B shows \$6,634, the difference between funding of \$146,646 (all figures in \$000) and expenditures of \$140,012. The capital reserve in line C increases by this same amount of \$6,634, reflecting an increase in the capital reserve.

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 2012-13, MMI expenditures were \$20.9 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.6 billion. The ratio of the two is 1.3%, as shown in line F.

Line G of Table 15 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. Since that time the base transfer has resumed. In 2014-15, the base transfer will be increased by \$750,000 to \$13.25 million (2013-14, \$12.5 million) and will reach the intended maximum annual transfer of \$15.5 million in 2017-18.

Line H of Table 15 shows the ratio of the annual MMI transfer to total MMI expenditures; for example, in 2012-13, the transfer was \$11.75 million and MMI expenditures were \$20.9 million, so the ratio in line H is 56.1%. 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 involves 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 2012-13 is \$12.0 million, or (in line K) 0.7% 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.

Table 16 reviews major capital projects – and the projects are assigned to one of the nine categories. For most of the projects, the year and month of the start and end of the project are shown.

The projects listed in Table 16 are the result of an update to the Long-Range Space Plan outlined in Table 14 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. With new building construction on campus continuing, Western is utilizing scarce developable land in the core campus. We anticipate bringing forward parking related projects in the near future as some parking lots may be required to house new buildings. University-wide Infrastructure Projects are also included on Table 16. These projects cover upgrades to Western's central power plant, chiller facilities and major electrical upgrades, and are typically comprised of multiple projects completed over a number of years.

B. Sources of Funding and Capital Expenditures in 2014-15

Table 17 displays sources of funding for budgeted capital expenditures with estimates of comparative data for 2013-14, 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; undistributed investment returns; 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 18 shows expenditures in Categories 1 and 2, for 2013-14 (estimates as of February 28, 2014) and 2014-15 (current proposals).

Table 15
CAPITAL BUDGET SUMMARY, 2010-11 TO 2014-15
(\$000)

Category	Purpose	Actual 2010-11	Actual 2011-12	Actual 2012-13	Projected 2013-14	Budget 2014-15
	New Construction					
1	New Construction (Table 18, line 16)	38,141	56,062	108,508	60,128	30,399
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 18, line 24)	31,281	15,284	5,565	3,897	5,157
3	Utilities and Infrastructure Projects	5,347	4,819	4,760	5,775	12,352
4	Modernization of Instructional and Research Facilities	5,102	4,089	5,805	6,389	6,607
5	General Maintenance and Modernization Projects	7,583	7,288	4,826	4,508	8,059
	Sub-Total MMI	49,313	31,480	20,956	20,569	32,175
	Other					
6	Housing Renovations	5,393	6,039	5,860	8,361	22,853
7	Ancillary Projects	535	459	1,099	1,252	220
8	Carrying Costs and Debt Repayments	2,626	3,704	3,541	21,609	17,858
9	Other Capital Expenditures	262	64	48	1,077	57
	Sub-Total Other	8,816	10,266	10,548	32,299	40,988
10	Total Expenditures	96,270	97,808	140,012	112,996	103,562

Line		Actual 2010-11	Actual 2011-12	Actual 2012-13	Projected 2013-14	Budget 2014-15
	Sources of Funding, Reserves, and Debt					
A	Total Sources of Funding, Including Debt (Table 17)	118,368	91,242	146,646	107,682	94,823
B	Sources of Funding less Expenditures	22,098	(6,566)	6,634	(5,314)	(8,739)
C	Capital Reserve, Year End (Table 19)	30,823	24,257	30,891	25,577	16,838
D	Capital Debt Outstanding, Year End (Table 19)	217,014	215,406	314,148	306,784	298,924
E	Replacement Value of Nonresidential Buildings, Utilities & Infrastructure, \$M	1,469	1,596	1,608	1,750	1,787
F	MMI Expenditures/Replacement Value	3.4%	2.0%	1.3%	1.2%	1.8%
G	Annual MMI transfer from Operating to Capital Budget	10,250	11,000	11,750	12,500	13,250
H	MMI transfer/MMI Expenditures	20.8%	34.9%	56.1%	60.8%	41.2%
J	Estimate of Maintenance Expenditure	31,175	19,624	12,036	11,583	19,248
K	Maintenance Expenditure/Replacement Value	2.1%	1.2%	0.7%	0.7%	1.1%
L	Number of Major Buildings	82	84	86	91	91
M	Total Gross Square Meters (000's)	747	777	784	829	829

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 16
MAJOR CAPITAL PROJECTS

		Category	Start	End
1	<i>Projects Completed up to March 2014</i>			
2	New Ivey Building	1	Aug 09	Aug 13
3	The Wind Engineering, Energy, and Environment Facility (WindEEE) - at AMP	1	Dec 10	Nov 13
4	Ontario Hall - New Undergraduate Residence	1	May 11	Mar 14
5	Fraunhofer Project Centre - at the AMP	1	Aug 11	Mar 14
6	Western Centre for Public Health and Family Medicine	1	Oct 11	Jul 13
7	Western AMP Accelerator Centre	1	Jan 12	Mar 14
8	Ivey Toronto Facilities Expansion/Renovations (Phase I)	2	Jul 12	Sep 13
9	Dental Sciences Building General Anaesthesia Suite	2	Nov 12	Sept 13
10	Artificial Turf Sports Fields	1	Jan 13	Sept 13
11	<i>Total</i>			
12	<i>Projects Underway or Soon-to-Start</i>			
13	New Music Building - addition to Talbot College	1	Mar 12	Dec 15
14	New Academic Building (to house FIMS and Nursing)	1	Jan 14	Dec 16
15	University-wide Infrastructure Projects	3	May 14	Apr 15
16	Delaware Hall Residence Renovations	7	May 14	Jul 15
17	Secondary IT Data Centre at the AMP	1	May 14	Dec 15
18	Parking Related Projects	1&3	May 14	tbd
19	Modernization of University College	2	May 14	tbd
20	Interdisciplinary Research Building - Phase 1	1	tbd	tbd
21	Campus Sustainability Initiatives (multiple stages)	3&5	Ongoing	
22	<i>Projects Under Consideration</i>			
23	Modernization of Thames Hall	2	tbd	tbd
24	Modernization of SEB, HSA, Former Ivey Facilities, Medical & Dental School Facilities, Elborn, Talbot, Chemistry Addition	2	tbd	tbd
25	<i>Projects for Future Consideration</i>			
26	New Research Initiatives/Partnerships at the Research Parks	1	tbd	tbd
27	Library Facilities - Modernization, Realignment and Expansion	1&2	tbd	tbd
28	Expansion of Medical School Facilities - to Support Strategic Initiatives	1	tbd	tbd
29	Graduate Student Housing Expansion	1	tbd	tbd
30	Athletic Facilities - Indoor and Outdoor	1	tbd	tbd
31	North Academic Campus	1	tbd	tbd
32	Asset Acquisitions	9	tbd	tbd

Table 17
CAPITAL BUDGET: SOURCES OF FUNDING
(\$000)

		Projected 2013-14	Budget 2014-15
1	Government Grants		
2	MTCU Capital Support Program - New Academic Building (to house FIMS and Nursing)	0	5,125
3	MTCU Graduate Expansion Capital Grant	3,735	3,951
4	MTCU Annual Capital Grant (Facilities Renewal Program)	1,523	1,523
5	Federal Economic Development Agency for Southern Ontario (Fed Dev)	6,634	0
6	Sub-Total	11,892	10,599
7	CFI/OMRI Federal/Provincial Funding		
8	Addition to the Museum of Ontario Archaeology	40	0
9	Sub-Total	40	0
10	Operating Budget		
11	Operating Budget MMI Transfer - Base	12,500	13,250
12	Operating Budget MMI Transfer - Base (Ancillaries)	600	600
13	Operating Budget - FFICR	3,000	3,000
14	Operating Budget - One-Time Allocation	4,885	2,000
15	Operating Budget - CRC Transfer	952	984
16	Academic Priorities Fund - Interdisciplinary Research Building (Phase I)	0	2,000
17	IT Infrastructure Funding - Secondary IT Data Centre at the AMP	600	3,500
18	Science Operating Budget - Chemistry Synthetic Lab Renewal	0	1,750
19	Law Operating Budget - Law Library Renovations	950	1,250
20	Music Operating Budget - New Music Building (Addition to Talbot College)	2,250	300
21	Dentistry Operating Budget - Dental Sciences Building General Anaesthesia Suite	605	0
22	Library Operating Budget - Map and Data Centre in Weldon Library	225	0
23	Miscellaneous Faculty/Department Budgets	858	330
24	Sub-Total	27,425	28,964
25	Interest Earned	38	36
26	Undistributed Investment Return	15,000	10,000

Table 17
CAPITAL BUDGET: SOURCES OF FUNDING
(\$000)

		Projected 2013-14	Budget 2014-15
27	Fundraising		
28	New Ivey Building	4,050	2,450
29	Western Fund	350	350
30	The Claudette MacKay-Lassonde Pavilion (Green Building)	533	314
31	Artificial Turf Sports Fields	500	0
32	All Other	137	0
33	Sub-Total	5,570	3,114
34	Borrowing		
35	Long-Range Space Plan	7,203	6,868
36	Ontario Hall - New Undergraduate Residence	21,332	1,934
37	Platt's Lane Site Development and Design	815	0
38	Sub-Total	29,350	8,802
39	Other		
40	Housing Contribution - Delaware Hall Residence Renovations	550	15,800
41	Housing Contribution - Ontario Hall (New Undergraduate Residence)	2,161	2,881
42	TRAC Contribution - TRAC Structural Cables Replacement and Roof Repairs	15	2,157
43	Richard Ivey School of Business Foundation - New Ivey Building	1,700	2,000
44	Richard Ivey School of Business Foundation - Toronto Facilities Expansion/Renovations	1,323	0
45	Student Contributions - Western Student Recreation Centre	1,129	1,176
46	Parking Contribution - Parking Related Projects	0	1,000
47	Targeted Student Fee - Artificial Turf Sports Fields	152	155
48	Energy Conservation Incentives	110	35
49	Projects Funded by Housing	7,811	7,053
50	Projects Funded by Units	2,164	831
51	Projects Funded by Ancillaries	1,252	220
52	Sub-Total	18,367	33,308
53	Total Sources of Funding	107,682	94,823

Table 18
CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS
2013-14 and 2014-15
(\$000)

		Projected 2013-14	Budget 2014-15
1	<i>Category 1: New Construction</i>		
2	New Music Building - addition to Talbot College	9,085	11,154
3	New Academic Building (to house FIMS and Nursing)	152	5,105
4	Parking Related Projects	151	4,315
5	Secondary IT Data Centre at the AMP	0	3,500
6	Ontario Hall - New Undergraduate Residence	24,932	2,015
7	Interdisciplinary Research Building (Phase I)	0	2,000
8	Western Centre for Public Health and Family Medicine	6,980	960
9	New Ivey Building	5,917	750
10	Western AMP Accelerator Centre	7,000	600
11	Artificial Turf Sports Fields	4,179	0
12	Platt's Lane Site Development and Design	815	0
13	Fraunhofer Project Centre - at the AMP	553	0
14	The Wind Engineering, Energy, and Environment Facility (WindEEE) - at the AMP	324	0
15	Addition to the Museum of Ontario Archaeology	40	0
16	<i>Total, Category 1</i>	<i>60,128</i>	<i>30,399</i>
17	<i>Category 2: Major Building Renovations</i>		
18	TRAC Structural Cables Replacement and Roof Repairs	15	2,157
19	Modernization of University College	0	2,000
20	Minor Upgrades to Former Ivey Facilities	630	1,000
21	Ivey Toronto Facilities Expansion/Renovations	1,323	0
22	Dental Sciences Building General Anaesthesia Suite	1,230	0
23	Physics and Astronomy Building Renovations	699	0
24	<i>Total, Category 2</i>	<i>3,897</i>	<i>5,157</i>

Table 19
CAPITAL RESERVES AND DEBT AT FISCAL YEAR END
(\$000)

		Actual 2010-11	Actual 2011-12	Actual 2012-13	Projected 2013-14	Budget 2014-15
1	A. Capital Reserves					
2	General Capital Fund	15,015	12,633	13,359	15,392	8,586
3	Designated Capital Fund	14,186	9,998	15,898	8,543	6,604
4	Gibbons Property	1,622	1,626	1,634	1,642	1,648
5	Total Capital Reserves	30,823	24,257	30,891	25,577	16,838

		Actual 2010-11	Actual 2011-12	Actual 2012-13	Projected 2013-14	Budget 2014-15
6	B. Capital Debt					
7	New Construction, Major Renovations & Other	77,500	91,500	126,377	115,550	112,447
8	Housing	81,713	90,342	139,671	153,934	148,977
9	Robarts Capital Leases	284	0	0	0	0
10	Research Park	32,325	31,752	31,100	30,300	29,400
11	Richard Ivey School of Business Foundation	2,300	1,800	1,300	800	300
12	Unused and Invested Debenture Proceeds	22,892	12	15,700	6,200	7,800
13	Total Capital Debt	217,014	215,406	314,148	306,784	298,924

Line 2 includes the Board mandated \$6 million general capital reserve fund.

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 15, proposed spending of some \$793 million for the single year of 2014-15. 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 2014. 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 19 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:

- **New Construction, Major Renovations, Infrastructure, 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. It also includes debt on purchases of property and parking related projects.
- **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 2010-11).
- **Research Park** – debt incurred by the Research Park.
- **Richard Ivey School of Business Foundation** – debt held by Richard Ivey School of Business Foundation.

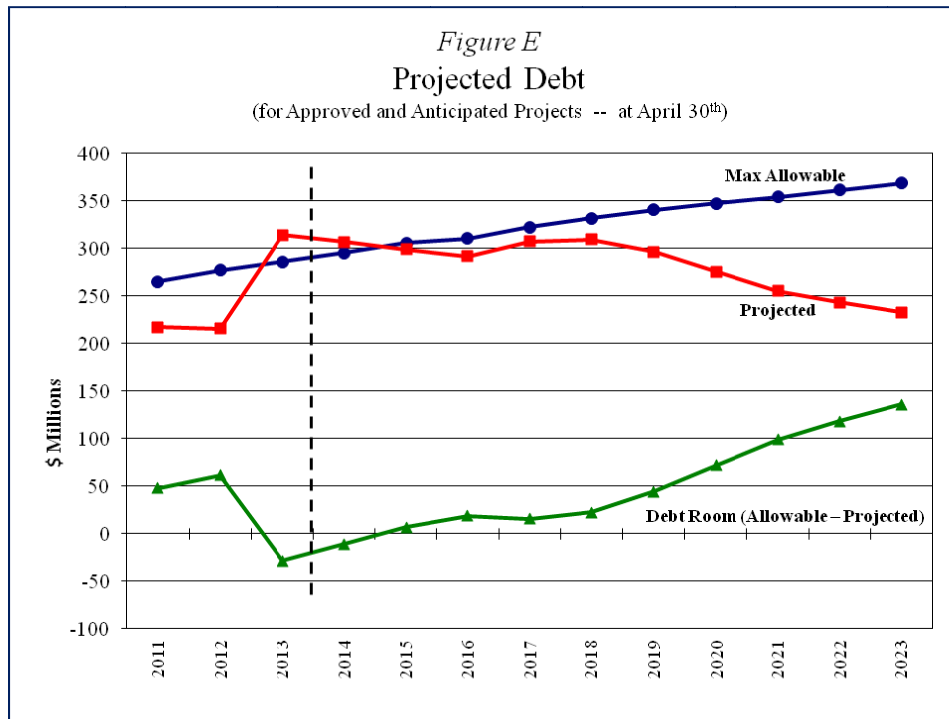
- **Unused and Invested Debenture Proceeds** – unused proceeds from Western’s first debenture issue that have been committed, and invested until the specific capital project requires the funding.

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, and again in 2013 when the University entered into a \$100 million long-term facility to finance the new 1,000 bed residence and other capital projects.

	Actual		Forecast	
	2012	2013	2014	2015
Total Debt (in millions)	\$215	\$314	\$307	\$299
FTE Enrolment	30,679	31,018	31,448	31,867
Allowable debt per FTE	\$9,028	\$9,209	\$9,393	\$9,581
Actual debt per FTE	\$7,022	\$10,125	\$9,752	\$9,379
Debt room per FTE	\$2,006	(\$916)	(\$359)	\$202

In 2014, the maximum allowed debt per FTE under Western’s Capital Debt Policy is \$9,393 and the forecast is \$9,752. To accommodate the additional debt that was 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 E shows total debt as well as three measures of debt per FTE since 2011: 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 E 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 previously). In 2015, total debt once again reduces to within Board Policy.



	Debt (\$M)	Combined Revenue (\$M)	FTE Enrolment	Revenue per FTE	Debt / Revenue (%)
2010	208.9	961.1	28,987	\$33,155	21.7%
2011	217.0	995.0	29,913	\$33,263	21.8%
2012	215.4	1,017.4	30,679	\$33,163	21.2%
2013	314.1	1,081.3	31,018	\$34,860	32.2%
2014p	306.7	1,055.3	31,448	\$33,557	29.1%

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, 2013, the University's accrued benefit liability relating to the employee future benefit plans was \$362 million (2012 - \$340 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 2013 Audited Combined Statement of Operations is an annual expense in the amount \$22.6 million (2012 - \$19.6 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 \$200 million, ranging from \$255 million to \$735 million and an unweighted average of \$400.6 million. Western ranked 3rd in total liability for Employee Future Benefits. The ratio of obligations to total revenues ranged from 28.7% to 51.5% with an unweighted average of 34.5%.

Employee Future Benefits (EFB)
Obligation and Expense as a % of Total Expenditures: 2009 to 2013

	Obligation (\$M)	Expense (\$M)	Total University Expenses (\$M)	EFB Obligation as % of Total	EFB Expense as % of Total
2009	\$229.90	\$21.70	\$905	25.4%	2.4%
2010	\$248.10	\$18.30	\$915	27.1%	2.0%
2011	\$287.40	\$23.30	\$952	30.1%	2.4%
2012	\$339.90	\$19.60	\$975	34.9%	2.0%
2013	\$362.60	\$22.60	\$1,009	35.9%	2.2%

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 (as of February 28, 2014) deferred maintenance at Western is \$176 million for non-residential buildings and \$25 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 28, 2014 is as follows:

	Non-Residential Buildings	Combined Residences
Current Replacement Value (CRV)	\$ 1,750 million	\$ 395 million
Deferred Maintenance (DM)	\$ 176 million	\$ 25 million
DM/CRV	10.0%	6.3%

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 years. Over 55% 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 10.0% (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 \$1.75 billion, spending on major maintenance for campus buildings at 2% should be in the range of \$35 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 2014-15, the base transfer will be increased by \$750,000 to \$13.25 million (2013-14, \$12.5 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 15 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 2010-11	Actual 2011-12	Actual 2012-13	Projected 2013-14	Budget 2014-15
MMI	\$ 10.25 m	\$ 11.00 m	\$ 11.75 m	\$ 12.50 m	\$ 13.25 m
CRV	\$ 1,469 m	\$ 1,596 m	\$ 1,608 m	\$ 1,750 m	\$ 1,787 m
Ratio	0.70%	0.69%	0.73%	0.71%	0.74%

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 15 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 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. The actual ratio in 2012-13, and the estimated ratios through 2014-15 have fallen short of the 2% target.

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 0.08% of the current replacement value in 2013-14.