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## 2015-16 Capital Budget

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### A. The Evolution of Capital Expenditures

The Capital Budget for 2015-16 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 2011-12 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 2015-16 total \$91.5 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 \$14.0 million in 2015-16 (\$13.25 M in 2014-15). 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 14, 2015, our buildings and infrastructure have a current replacement value (CRV) of approximately \$2,283 million, as follows:

	CRV \$M	Square Metres	Major Buildings
Major Non-Residential Buildings	1,593	521,777	68
Utilities and Infrastructure	190		
Subtotal, Eligible for MMI	1,783	521,777	68
Housing	402	257,546	15
Other Ancillary Buildings	98	49,300	8
Total	2,283	828,623	91

At February 14, 2015, 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 \$190 million in utilities and

infrastructure, are the physical assets generally eligible for MMI expenditures. On that same date, the University had 258,000 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 many buildings which are operated largely or entirely as ancillaries: Western Student Recreation Centre, Thompson Recreation and Athletic Centre, TD Stadium, Boundary Layer Wind Tunnel, Child Care Centre, the Ivey Spencer Leadership Centre, and facilities at the Research Parks.

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 – and the projects generally span more than one year. Of the 522,000 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 \$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 \$17.3 million in 2015-16, 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 2013-14, line B shows a deficit of \$2,838, the difference between funding of \$83,780 (all figures in \$000) and expenditures of \$86,618. The capital reserve in line C decreases by this same amount of \$2,838, reflecting a decrease 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 2013-14, MMI expenditures were \$17.3 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.75 billion. The ratio of the two is 1.0%, 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 2015-16, the base transfer will be increased by \$750,000 to \$14.0 million (2014-15, \$13.25 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 2013-14, the transfer was \$12.5 million and MMI expenditures were \$17.3 million, so the ratio in line H is 72.1%. Other sources of funding for MMI expenditures include the annual capital facilities renewal grant from the Province (projected for 2014-15 and 2015-16 at \$1.5 million

and \$2.4 million respectively); special Provincial grants; additional one-time allocations from the University's operating budget; additional one-time allocations from the Province; 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 2013-14 is \$9.8 million, or (in line K) 0.6% 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 2015-16**

Table 17 displays sources of funding for budgeted capital expenditures with estimates of comparative data for 2014-15, divided into six major categories: federal, provincial and municipal government grants; funds transferred from Western's operating budget; interest earned; general fundraising; borrowing; and other sources, including internal recoveries. As compared to a decade ago, the University is more dependent on capital revenues from private fundraising, transfers from the operating budget, and debt.

Table 18 shows expenditures in Categories 1 and 2, for 2014-15 (estimates as of January 31, 2015) and 2015-16 (current proposals).

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**Table 15**  
**CAPITAL BUDGET SUMMARY, 2011-12 TO 2015-16**  
**(\$000)**

Category	Purpose	Actual 2011-12	Actual 2012-13	Actual 2013-14	Projected 2014-15	Budget 2015-16
	<b>New Construction</b>					
1	New Construction (Table 18, line 13)	56,062	108,508	55,619	26,246	34,640
	<b>Maintenance, Modernization, and Infrastructure (MMI)</b>					
2	Major Building Renovations (Table 18, line 20)	15,284	5,565	3,506	4,494	10,360
3	Utilities and Infrastructure Projects	4,819	4,760	3,737	11,975	8,302
4	Modernization of Instructional and Research Facilities	4,089	5,805	5,266	7,357	5,194
5	General Maintenance and Modernization Projects	7,288	4,826	4,819	6,397	8,144
	Sub-Total MMI	31,480	20,956	17,328	30,223	32,000
	<b>Other</b>					
6	Housing Renovations	6,039	5,860	7,073	17,087	17,318
7	Ancillary Projects	459	1,099	1,503	739	654
8	Carrying Costs and Debt Repayments	3,704	3,541	5,077	5,792	5,529
9	Other Capital Expenditures	64	48	18	1,089	1,400
	Sub-Total Other	10,266	10,548	13,671	24,707	24,901
10	<b>Total Expenditures</b>	<b>97,808</b>	<b>140,012</b>	<b>86,618</b>	<b>81,176</b>	<b>91,541</b>

Line		Actual 2011-12	Actual 2012-13	Actual 2013-14	Projected 2014-15	Budget 2015-16
	<b>Sources of Funding, Reserves, and Debt</b>					
A	Total Sources of Funding, Including Debt (Table 17)	91,242	146,646	83,780	107,188	78,071
B	Sources of Funding less Expenditures	-6,566	6,634	-2,838	26,012	-13,470
C	Capital Reserve, Year End (Table 19)	24,257	30,891	28,053	54,065	40,595
D	Capital Debt Outstanding, Year End (Table 19)	215,406	314,148	306,703	298,883	291,258
E	Replacement Value of Nonresidential Buildings, Utilities & Infrastructure, \$M	1,596	1,608	1,750	1,783	1,807
F	MMI Expenditures/Replacement Value	2.0%	1.3%	1.0%	1.7%	1.8%
G	Annual MMI transfer from Operating to Capital Budget	11,000	11,750	12,500	13,250	14,000
H	MMI transfer/MMI Expenditures	34.9%	56.1%	72.1%	43.8%	43.8%
J	Estimate of Maintenance Expenditure	19,624	12,036	9,797	17,696	19,602
K	Maintenance Expenditure/Replacement Value	1.2%	0.7%	0.6%	1.0%	1.1%
L	Number of Major Buildings	84	86	91	91	91
M	Total Gross Square Meters (000's)	777	784	829	829	836

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	<b><i>Projects Underway or Soon-to-Start</i></b>			
2	New Music Building - addition to Talbot College	1	Mar 12	Apr 15
3	New Academic Building (to House FIMS and Nursing)	1	Jan 14	Dec 16
4	Secondary IT Data Centre at the AMP	1	May 14	Jul 15
5	Delaware Hall Residence Renovations	7	May 14	Jul 15
6	Medical Research Facilities (Microbiology & Immunology)	2	Dec 14	Dec 16
7	Modernization of University College	2	Jan 15	Sep 18
8	Interdisciplinary Research Building - Phase 1	1	Nov 15	Jan 18
9	University-wide Infrastructure Projects	3	May 14	Apr 15
10	Parking-related Projects	1&3	May 14	tbd
11	Campus Sustainability Initiatives (multiple stages)	3&5	Ongoing	
12	<b><i>Projects Under Consideration</i></b>			
13	Modernization of Thames Hall	2	tbd	tbd
14	Expansion and Renewal of Engineering Facilities	1&2	tbd	tbd
15	Expansion of Student Collaboration and Study Spaces	1&2	tbd	tbd
16	New Research Initiatives/Partnerships at the Research Parks	1	tbd	tbd
17	Renewal/Replacement/Expansion of Medical/Dental School Facilities	1&2	tbd	tbd
18	<b><i>Projects for Future Consideration</i></b>			
19	Renewal and/or Realignment of Library Facilities	2	tbd	tbd
20	Renewal of Talbot College, Elborn College, Chemistry Addition, Althouse Bldg.	2	tbd	tbd
21	Parking Structures	1	tbd	tbd
22	Residence Projects	1&7	tbd	tbd
23	Athletic Facilities - Indoor and Outdoor	1	tbd	tbd
24	Asset Acquisitions	9	tbd	tbd

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

		<b>Projected 2014-15</b>	<b>Budget 2015-16</b>
1	<b>Government Grants</b>		
2	MTCU Targeted Capital Grant - New Academic Building (to house FIMS and Nursing)	2,000	13,400
3	MTCU Graduate Expansion Capital Grant	3,885	3,846
4	MTCU Annual Capital Grant (Facilities Renewal Program)	1,522	2,424
5	<b>Sub-Total</b>	<b>7,407</b>	<b>19,670</b>
6	<b>Operating Budget</b>		
7	Operating Budget MMI Transfer - Base	13,250	14,000
8	Operating Budget MMI Transfer - Base (Ancillaries)	600	600
9	Operating Budget - FFICR	3,000	3,000
10	Operating Budget - One-Time Allocation	2,006	1,500
11	Operating Budget - CRC Transfer	848	856
12	Operating Budget - Interdisciplinary Research Building (Phase I)	30,000	0
13	IT Infrastructure Funding - Secondary IT Data Centre at the AMP	740	2,236
14	Science Operating Budget - Chemistry Synthetic Lab Renewal	110	1,640
15	Medicine Operating Budget - Medical Research Facilities (Microbiology & Immunology)	7,494	806
16	Music Operating Budget - New Music Building (addition to Talbot College)	250	250
17	Law Operating Budget - Law Library Renovations	927	0
18	Miscellaneous Faculty/Department Budgets	562	314
19	<b>Sub-Total</b>	<b>59,787</b>	<b>25,202</b>
20	<b>Interest Earned</b>	<b>138</b>	<b>62</b>
21	<b>Fundraising</b>		
22	Ivey Building	2,450	2,400
23	Western Fund	350	350
24	The Claudette MacKay-Lassonde Pavilion (Green Building)	314	290
25	<b>Sub-Total</b>	<b>3,114</b>	<b>3,040</b>

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

		<b>Projected 2014-15</b>	<b>Budget 2015-16</b>
26	<b><i>Borrowing</i></b>		
27	Long-Range Space Plan	7,040	7,763
28	Ontario Hall - Undergraduate Residence	1,650	0
29	<b><i>Sub-Total</i></b>	<b>8,690</b>	<b>7,763</b>
30	<b><i>Other</i></b>		
31	Housing Contribution - Delaware Hall Residence Renovations	10,900	7,333
32	Housing Contribution - Platt's Lane Site Development	946	0
33	Parking Contribution - Parking Related Projects	1,360	2,425
34	Student Contributions - Western Student Recreation Centre	1,176	1,213
35	Student Contributions - Artificial Turf Sports Fields	156	159
36	Energy Conservation Incentives (Rebates)	90	50
37	TRAC Contribution - TRAC Structural Cables Replacement and Roof Repairs	2,545	25
38	Ivey School of Business - Toronto Facilities Expansion/Renovations	297	0
39	Projects Funded by Housing	6,187	9,985
40	Projects Funded by Units	3,656	490
41	Projects Funded by Ancillaries	739	654
42	<b><i>Sub-Total</i></b>	<b>28,052</b>	<b>22,334</b>
43	<b>Total Sources of Funding</b>	<b>107,188</b>	<b>78,071</b>



**Table 18**  
**CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS**  
**2014-15 and 2015-16**  
**(\$000)**

		<b>Projected 2014-15</b>	<b>Budget 2015-16</b>
1	<b><i>Category 1: New Construction</i></b>		
2	New Academic Building (to house FIMS and Nursing)	5,218	23,710
3	New Music Building - addition to Talbot College	13,459	3,069
4	Interdisciplinary Research Building - Phase I	200	3,000
5	Parking-related Projects	3,076	2,425
6	Secondary IT Data Centre at the AMP	741	2,236
7	New Ivey Building	1,176	200
8	Ontario Hall - Undergraduate Residence	1,650	0
9	The Collider Centre for Technology Commercialization	203	0
10	Western Centre for Public Health and Family Medicine	199	0
11	The Wind Engineering, Energy, and Environment Facility (WindEEE) - at the AMP	164	0
12	Artificial Turf Sports Fields	160	0
13	<b><i>Total, Category 1</i></b>	<b><i>26,246</i></b>	<b><i>34,640</i></b>
14	<b><i>Category 2: Major Building Renovations</i></b>		
15	Medical Research Facilities (Microbiology & Immunology)	565	7,735
16	Modernization of University College	679	2,300
17	Upgrades to IGAB and A&HB	407	300
18	TRAC Structural Cables Replacement and Roof Repairs	2,546	25
19	Ivey Toronto Facilities Expansion/Renovations	297	0
20	<b><i>Total, Category 2</i></b>	<b><i>4,494</i></b>	<b><i>10,360</i></b>

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

		Actual 2011-12	Actual 2012-13	Actual 2013-14	Projected 2014-15	Budget 2015-16
1	<b>A. Capital Reserves</b>					
2	General Capital Fund	12,633	13,359	17,118	12,132	9,883
3	Designated Capital Fund	9,998	15,898	9,293	40,283	29,050
4	Gibbons Property	1,626	1,634	1,642	1,650	1,662
5	<b>Total Capital Reserves</b>	<b>24,257</b>	<b>30,891</b>	<b>28,053</b>	<b>54,065</b>	<b>40,595</b>

		Actual 2011-12	Actual 2012-13	Actual 2013-14	Projected 2014-15	Budget 2015-16
6	<b>B. Capital Debt</b>					
7	New Construction, Major Renovations & Other	91,500	126,377	123,519	100,408	111,821
8	Housing	90,342	139,671	152,066	144,575	132,337
9	Research Park	31,752	31,100	30,318	29,400	28,700
10	Richard Ivey School of Business Foundation	1,800	1,300	800	300	0
11	Unused and Invested Debenture Proceeds	12	15,700	0	24,200	18,400
12	<b>Total Capital Debt</b>	<b>215,406</b>	<b>314,148</b>	<b>306,703</b>	<b>298,883</b>	<b>291,258</b>

*Line 2 includes the required \$6 million general capital reserve fund.*

*Line 3 includes fund balances for large capital projects*

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## Long-Term Financial Trends

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The Operating and Capital Budgets set out in this document describe, in Tables 2 and 15, proposed spending of some \$784 million for the single year of 2015-16. 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 2015. 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 and funds designated for future infrastructure projects
- Designated Capital Fund, which has been assigned to specific capital 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.
- **Research Park** – debt incurred by the Research Park.
- **Richard Ivey School of Business Foundation** – debt held by Richard Ivey School of Business Foundation.

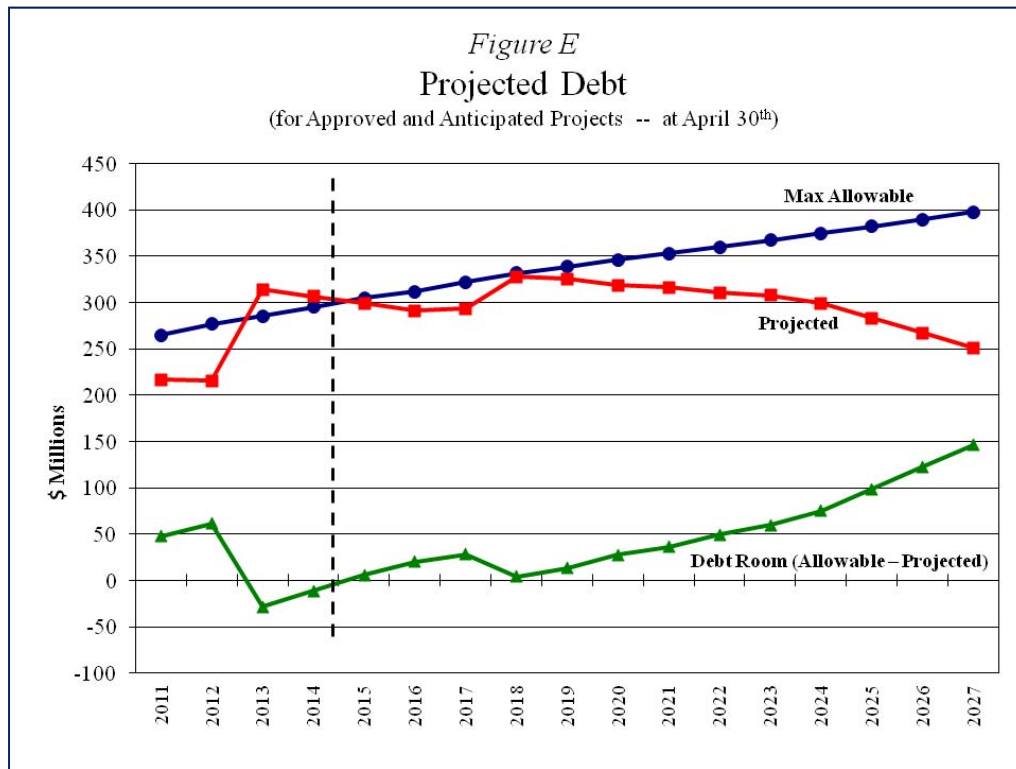
- **Unused and Invested Debenture Proceeds** – unused proceeds from Western’s first debenture issue that have been committed, and invested until the specific capital project requires the funding.

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	
	2013	2014	2015	2016
Total Debt (in millions)	\$314	\$307	\$299	\$291
FTE Enrolment	31,018	31,448	31,814	31,888
Allowable debt per FTE	\$9,209	\$9,393	\$9,581	\$9,772
Actual debt per FTE	\$10,125	\$9,752	\$9,394	\$9,137
Debt room per FTE	(\$916)	(\$359)	\$187	\$635

In 2015, the maximum allowed debt per FTE under Western’s Capital Debt Policy is \$9,581 and the forecast is \$9,394. 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 2012: 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 (%)
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%
2014	306.7	1,159.3	31,448	\$36,864	26.5%
2015 p	298.9	1,105.0	31,867	\$34,675	27.0%

**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, 2014, the University's accrued benefit liability relating to the employee future benefit plans was \$386 million (2013 - \$362 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 2014 Audited Combined Statement of Operations is an annual expense in the amount \$23.2 million (2013 - \$22.6 million) for non-pension employee future benefits.

A recent review of major research universities identified only five institutions with significant post-employment benefit obligations greater than \$200 million, ranging from \$287 million to \$514 million and an unweighted average of \$364 million. Western ranked 2nd in total liability for Employee Future Benefits. The ratio of obligations to total revenues ranged from 19.0% to 41.4% with an unweighted average of 31.9%.

**Employee Future Benefits (EFB)**  
**Obligation and Expense as a % of Total Expenditures: 2010 to 2014**

	Obligation (\$M)	Expense (\$M)	Total University Expenses (\$M)	EFB Obligation as % of Total	EFB Expense as % of Total
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%
2014	\$385.80	\$23.20	\$1,067	36.2%	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 14, 2015) deferred maintenance at Western is \$209 million for non-residential buildings and \$34 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 14, 2015 is as follows:

	Non-Residential Buildings	Combined Residences
Current Replacement Value (CRV)	\$1,783 million	\$ 402 million
Deferred Maintenance (DM)	\$209 million	\$34 million
DM/CRV	11.7%	8.5%

The average age of buildings for universities in the Province of Ontario was 41.6 years as of May 2014. Western's average age is 38 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 11.7% (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 \$1.8 billion, spending on major maintenance for campus buildings at 2% should be in the range of \$36 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 2015-16, the base transfer will be increased by \$750,000 to \$14.0 million (2014-15, \$13.25 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 2011-12	Actual 2012-13	Actual 2013-14	Projected 2014-15	Budget 2015-16
MMI	\$ 11.00 m	\$ 11.75 m	\$ 12.50 m	\$ 13.25 m	\$ 14.0 m
CRV	\$ 1,596 m	\$ 1,608 m	\$ 1,750 m	\$ 1,783 m	\$ 1,807 m
Ratio	0.69%	0.73%	0.71%	0.74%	0.77%

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 2013-14, and the estimated ratios through 2015-16 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 2014-15.