

The University of Western Ontario

2011-12 Capital Budget

A. The Evolution of Capital Expenditures

The Capital Budget for 2011-12 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 2007-08 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. Capital expenditures for 2011-12 total \$138.9 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 \$11.0 million in 2011-12 (\$10.25 M in 2010-11). 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 March 31, 2011, our buildings and infrastructure have a current replacement value (CRV) of approximately \$1,832 million, as follows:

	<u>CRV \$M</u>	<u>Square Metres</u>	<u>Major Buildings</u>
Major Non-Residential Buildings	1,291	471,906	62
Utilities and Infrastructure	<u>178</u>		
Subtotal, Eligible for MMI	1,469	471,906	62
Housing	284	233,159	14
Other Ancillary Buildings	<u>79</u>	<u>42,300</u>	<u>6</u>
Total	1,832	747,365	82

At March 31, 2011, the University had 471,906 gross square metres in 62 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 \$178 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 472,000 square metres in major buildings, over 65% 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 \$7.1 million in 2011-12, 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 such as the \$4.1 million for the Brescia land purchase in 2007-08. It has been an established principle in Western's Campus Master Plan that the University pursue, as appropriate, the purchase of lands contiguous to the University property as the lands come available. Western will continue to seek to protect the Regional Facilities zoning around us 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 2009-10, line B shows \$(5,688), the difference between funding of \$70,304 (all figures in \$000) and expenditures of \$75,992. The capital reserve in line C increases or decreases by this same amount of \$(5,688), from \$14,413 in 2008-09 to \$8,725 in 2009-10. 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 2009-10, MMI expenditures were \$42.2 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.34 billion. The ratio of the two is 3.1%, 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 establishes 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 2011-12, the base transfer will be increased by \$750,000 to \$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 2009-10, the transfer was \$10.25 million and MMI expenditures were \$42.2 million, so the ration in line H is 24.3%. 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, Physical Plant considers them a reasonable average for the four categories over a number of years.

The value of line J in 2009-10 is \$26.7 million, or (in line K) 2.0% 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. Western continues to urge the Province to increase the annual allocation for facilities renewal, which has often been set at \$2.4 million or less during the last decade. The prior year Provincial Budget signaled a reduction in facilities review funding for Colleges and Universities from \$40 million to \$26 million. Western's share of this funding declined to \$1.5 million.

Table 17 reviews capital projects over \$1 million divided into four groups: projects completed up to March 2011 (4 projects with a total cost of \$44.7 million); projects underway (11 projects, \$182.1 million). In each case, the projects are assigned to one of the nine categories. For all projects in the first two categories, the year and month of the start and end of construction are shown. The third group details projects planned or under consideration and the fourth group lists projects for possible consideration in the future.

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 2011-12

Table 18 displays sources of funding for budgeted capital expenditures with estimates of comparative data for 2010-11, divided into eight 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; 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 2010-11 (estimates as of February 28, 2011) and 2011-12 (current proposals).

The details for expenditures in Categories 3 through 7, and can be found at:

http://www.ipb.uwo.ca/documents/2011-12_Capital_Budget_Detail_Tables.pdf

TABLE 16
CAPITAL BUDGET SUMMARY, 2007-08 TO 2011-12
(\$000)

Category	Purpose	Actual 2007-08	Actual 2008-09	Actual 2009-10	Projected 2010-11	Budget 2011-12
	New Construction					
1	New Construction (Table 19, line 13)	54,156	54,292	23,775	42,728	79,909
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 19, line 24)	18,192	25,526	23,835	30,787	21,202
3	Utilities and Infrastructure Projects	4,648	4,363	4,777	5,250	9,296
4	Modernization of Instructional and Research Facilities	5,150	5,909	4,285	5,053	6,326
5	General Maintenance and Modernization Projects	3,285	4,553	9,320	8,596	8,745
	Sub-Total MMI	31,275	40,351	42,217	49,686	45,569
	Other					
6	Housing Renovations	10,592	6,772	4,736	6,451	7,104
7	Ancillary Projects	2,179	2,395	179	636	875
8	Carrying Costs and Debt Repayments	774	1,396	3,327	3,318	3,271
9	Other Capital Expenditures	5,229	4,422	1,758	314	2,186
	Sub-Total Other	18,774	14,985	10,000	10,719	13,436
10	Total Expenditures	104,205	109,628	75,992	103,133	138,914

Line		Actual 2007-08	Actual 2008-09	Actual 2009-10	Projected 2010-11	Budget 2011-12
	Sources of Funding, Reserves, and Debt					
A	Total Sources of Funding, Including Debt (Table 18)	86,420	89,882	70,304	115,193	127,395
B	Sources of Funding less Expenditures	(17,785)	(19,746)	(5,688)	12,060	(11,519)
C	Capital Reserve, Year End (Table 20)	34,159	14,413	8,725	20,785	9,266
D	Capital Debt Outstanding, Year End (Table 20)	225,920	222,220	208,923	216,971	238,040
E	Replacement Value of Nonresidential Buildings, Utilities & Infrastructure, \$M	1,213	1,291	1,341	1,469	1,531
F	MMI Expenditures/Replacement Value	2.6%	3.1%	3.1%	3.4%	3.0%
G	Annual MMI transfer from Operating to Capital Budget	9,500	10,250	10,250	10,250	11,000
H	MMI transfer/MMI Expenditures	30.4%	25.4%	24.3%	20.6%	24.1%
J	Estimate of Maintenance Expenditure	19,133	24,931	26,716	31,440	28,271
K	Maintenance Expenditure/Replacement Value	1.6%	1.9%	2.0%	2.1%	1.8%
L	Number of Major Buildings	76	80	83	82	84
M	Total Gross Square Meters (000's)	706	741	753	747	760

Category 8 does not include carrying costs and loan repayments for Residences and Apartments, UCC, 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 17
CAPITAL PROJECTS OVER \$1 MILLION

		Category	Start	End	Cost
					(\$M)
1	Projects Completed up to March 2011				
2	Biological and Geological Sciences Building Renovations	2	Nov 05	Apr 10	37.9
3	Brain and Mind Renovations in Natural Sciences Building	2	Jan 10	Jan 11	3.0
4	Chiller CPS 301 and Cooling Tower in Power Plant	3	Mar 10	Jun 10	1.9
5	Replacement of Vertical Horizontal Condensate Lines, Saugeen-Maitland Hall	6	May 10	Jun 10	1.9
6	Total				44.7
7	Projects Underway				
8	IT Network and Infrastructure Upgrades (VOIP)	2	May 08	Sep 12	
9	Stevenson Hall and Lawson Hall Renovations	2	Jan 09	Aug 11	
10	UCC Renovations - Follow on Renovations to Existing Facilities	2	May 09	Dec 10	
11	New Ivey Building	1	Aug 09	Sep 12	
12	Physics and Astronomy Building Renovations	2	Mar 10	Jun 12	
13	Electrical Infrastructure	3	May 10	Apr 11	
14	Addition to the Museum of Ontario Archaeology	1	Jun 10	May 11	
15	UCC Renovations (USC)	2	Sep 10	Apr 11	
16	The Wind Engineering, Energy and Environment Facility (WindEEE)	1	Dec 10	Nov 12	
17	University Wide Energy Efficiency Initiatives	3	Jan 11	Nov 11	
18	Site Servicing at the Advanced Manufacturing Park (AMP)	3	Apr 11	Aug 11	
19	Total				
20	Projects Planned or Under Consideration				
21	Advanced Manufacturing Centre (Support Facilities in AMP)	1	Jun 11	Aug 12	
22	Delaware Hall Residence Renovations (Phase I)	2	Apr 12	Aug 12	
23	Delaware Hall Residence Renovations (Phase II)	2	Apr 13	Aug 13	
24	International Composites Research Centre (ICRC) - City Partnership	1	Aug 11	Feb 13	
25	Family Medicine Building	1	Oct 11	May 13	
26	Modernization of Talbot College	2	Feb 12	Aug 14	
27	Undergraduate Residence Expansion	1	May 11	Aug 13	
28	B&GS Courtyard Conversion to Common/Gathering Space	1	tbd	tbd	
29	Graduate Student Housing Expansion	1	tbd	tbd	
30	Renewal of Current Ivey Facilities	2	tbd	tbd	
31	Renewal of University College	2	tbd	tbd	
32	Campus Sustainability Initiatives and Utilities and Infrastructure Projects	3&5	Ongoing		
33	Projects for Future Consideration				
34	Renewal of Schulich School of Medicine and Dentistry Facilities	2	tbd	tbd	
35	Renewal of TH, SEB, MB, HSA and Elborn	2	tbd	tbd	
36	Expansion of Medical School Facilities	1	tbd	tbd	
37	Research Initiatives/Partnerships at the Advanced Manufacturing Park	1	tbd	tbd	
38	New Facilities for Planetary Science Research Initiatives	1	tbd	tbd	
39	Library Facilities - Realignment and Expansion	1&2	tbd	tbd	
40	Interdisciplinary Advanced Studies Building	1	tbd	tbd	
41	New Facilities to House Chemistry and Brain and Mind	1	tbd	tbd	
42	Consolidation of the Psychology Department	1	tbd	tbd	
43	North Academic Campus	1&9	tbd	tbd	
44	Co-Generation	1&3	tbd	tbd	
45	Performing Arts Facility	1	tbd	tbd	
46	Athletic Facilities - Indoor and Outdoor	1	tbd	tbd	
47	Asset Acquisitions	9	tbd	tbd	

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

		Projected 2010-11	Budget 2011-12
1	Government Grants		
2	MTCU Graduate Expansion Capital Grant	2,818	3,479
3	MTCU Annual Capital Grant (Facilities Renewal Program)	1,517	1,517
4	Knowledge Infrastructure Program - New Ivey Building	38,467	1,365
5	City of London - ICRC	0	600
6	City of London - SuperBuild Projects	826	413
7	Sub-Total	43,628	7,374
8	CFI/OMRI Federal/Provincial Funding		
9	The Wind Engineering, Energy and Environment Facility (WindEEE)	1,100	7,798
10	Addition to the Museum of Ontario Archaeology	1,935	392
11	Sub-Total	3,035	8,190
12	Operating Budget		
13	Operating Budget MMI Transfer - Base	10,250	11,000
14	Operating Budget MMI Transfer - Base (Ancillaries)	600	600
15	Operating Budget - FFICR	0	3,000
16	Operating Budget - CRC Transfer	976	952
17	Operating Budget - University Wide Energy Efficiency Initiatives	1,500	0
18	Operating Budget - Incremental Space for Engineering in TEB	445	0
19	Operating Budget - One-Time Allocations	350	0
20	Medicine Operating Budget - Family Medicine Building	470	6,660
21	Miscellaneous Faculty Budgets	893	480
22	Sub-Total	15,484	22,692
23	Undistributed Investment Returns	0	12,800
24	Fundraising		
25	New Ivey Building	0	14,219
26	The Claudette MacKay-Lassonde Pavilion (Green Building)	556	573
27	SuperBuild Projects	370	371
28	Western Fund	700	350
29	Nursing Capital Projects	900	300
30	Paul Davenport Theatre Renovations	300	200
31	All Other	320	22
32	Sub-Total	3,146	16,035

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

		Projected 2010-11	Budget 2011-12
33	<i>Borrowing</i>		
34	Long-Range Space Plan	34,496	26,027
35	Undergraduate Residence Expansion	0	20,500
36	Western Student Recreation Centre	1,551	64
37	<i>Sub-Total</i>	36,047	46,591
38	<i>Other</i>		
39	University Students Council (USC) - UCC Renovations	3,450	1,350
40	Student Contributions - Western Student Recreation Centre	1,007	1,007
41	Energy Conservation Incentives	209	100
42	Projects Funded by Housing	6,451	7,104
43	Projects Funded by Units	2,013	3,176
44	Projects Funded by Ancillaries	636	875
45	<i>Sub-Total</i>	13,766	13,612
46	<i>Interest Earned</i>	87	101
47	Total Sources of Funding	115,193	127,395

TABLE 19
CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS
2010-11 and 2011-12
(\$000)

		Projected 2010-11	Budget 2011-12
1	<i>Category 1: New Construction</i>		
2	New Ivey Building	36,919	38,481
3	Undergraduate Residence Expansion	0	20,500
4	The Wind Engineering, Energy and Environment Facility (WindEEE)	1,100	7,798
5	Family Medicine Building	470	6,660
6	B&GS Courtyard Conversion to Common/Gathering Space	0	2,000
7	Advanced Manufacturing Centre (Support Facilities in AMP)	184	2,466
8	International Composite Research Centre (ICRC)	20	1,600
9	Addition to the Museum of Ontario Archaeology	1,935	392
10	The Claudette MacKay-Lassonde Pavilion (Green Building)	321	12
11	Western Student Recreation Centre (WSRC)	1,379	0
12	Student Services Building	400	0
13	<i>Total, Category 1</i>	<i>42,728</i>	<i>79,909</i>
14	<i>Category 2: Major Building Renovations</i>		
15	Physics and Astronomy Building Renovations	13,572	8,281
16	Modernization of Talbot College	0	4,868
17	Stevenson Hall and Lawson Hall Renovations	7,076	3,564
18	Support Services Follow-on Renovations	2,031	1,780
19	University Community Centre Renovations (USC)	3,450	1,350
20	IT Network and Infrastructure Upgrades (VOIP)	1,480	1,330
21	Brain and Mind Renovations in Natural Sciences Building	2,247	29
22	Biological and Geological Sciences Building Renovations	565	0
23	University Community Centre Renovations	366	0
24	<i>Total, Category 2</i>	<i>30,787</i>	<i>21,202</i>

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

		Actual 2007-08	Actual 2008-09	Actual 2009-10	Projected 2010-11	Budget 2011-12
1	A. Capital Reserves					
2	General Capital Fund	14,176	24,146	15,483	13,202	6,622
3	Designated Capital Fund	18,385	(11,355)	(8,380)	5,961	1,007
4	Gibbons Property	1,598	1,622	1,622	1,622	1,637
5	Total Capital Reserves	34,159	14,413	8,725	20,785	9,266

		Actual 2007-08	Actual 2008-09	Actual 2009-10	Budget 2010-11	Budget 2011-12
6	B. Capital Debt					
7	General Capital Fund	800	0	0	0	0
8	New Construction, Major Renovations & Other	12,940	25,040	45,900	81,857	107,948
9	Housing	93,992	92,792	88,288	81,714	96,892
10	Robarts Capital Leases	2,118	1,538	926	200	0
11	Research Park	14,170	22,570	32,463	32,000	31,400
12	Richard Ivey School of Business Foundation	3,800	3,300	3,300	2,300	1,800
13	Unused and Invested Debenture Proceeds	98,100	76,980	38,046	18,900	0
14	Total Capital Debt	225,920	222,220	208,923	216,971	238,040

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

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

*The University of Western Ontario***Long-Term Financial Trends**

The Operating and Capital Budgets set out in this document describe, in Tables 2 and 16, proposed spending of some \$741 million for the single year of 2011-12. 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 December of 2010. 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.
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- **Robarts Capital Lease** – with the integration of Robarts into Western, a capital lease for equipment has been added to Capital Debt.
- **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.

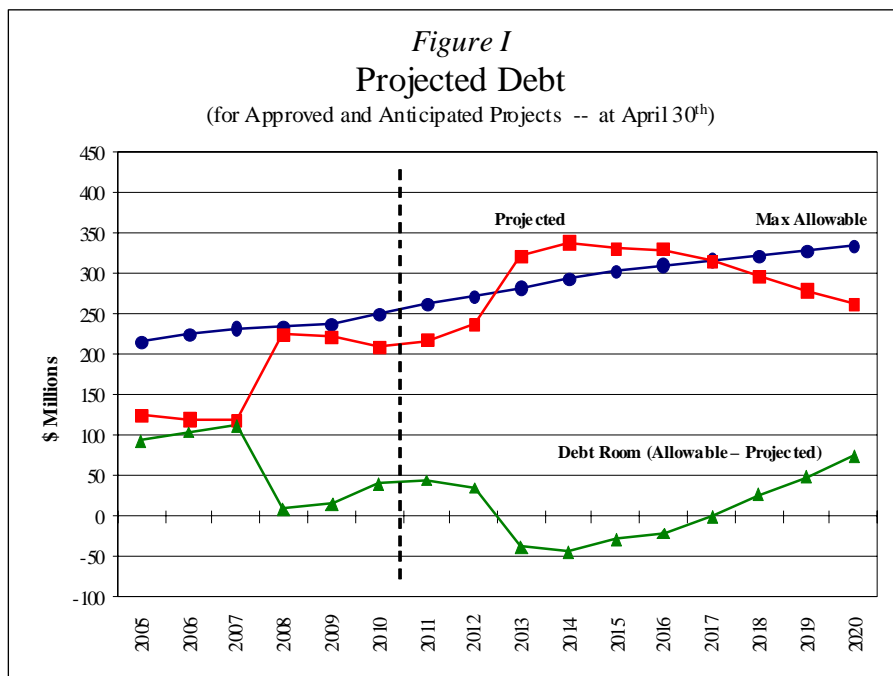
	Actual		Forecast	
	2009	2010	2011	2012
Total Debt (in millions)	\$ 222	\$ 209	\$ 217	\$ 238
FTE	28,197	28,987	29,913	30,535
Allowable debt per FTE	\$8,416	\$8,584	\$8,756	\$8,931
Actual debt per FTE	\$7,880	\$7,206	\$7,252	\$7,794
Debt room per FTE	\$ 536	\$1,378	\$1,504	\$1,137

In 2011, the maximum allowed debt per FTE under Western’s Capital Debt Policy is \$8,756, and the forecast is \$7,252. In 2006, the credit rating agencies (Moody’s, DBRS & Standard & Poors) set a reasonable limit for debt per FTE as \$10,000 CDN. Western’s current debt is thus below the Board limit and the suggested limit of expert rating agencies. 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 February 2011 containing information on universities that have issued debentures. Debt per FTE at eleven universities ranged from \$5,692 to \$9,237, with an unweighted average of \$7,505.

To finance the capital costs associated with the long-range space plan and graduate student expansion, Western issued its first debenture in May 2007 for \$190 million at a coupon rate of 4.798% for a 40-year period. With interest rates hovering near 48-year lows at that time, this 40-year bullet debenture provides a cost-effective source of funds to finance capital construction and renovations.

Figure I shows total debt as well as three measures of debt per FTE since 2005: 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 I shows that projected debt grows beyond the maximum allowable debt from 2013 to 2017 to support the funding of the new student residence. Given the University’s intention to grow its first-year class and continue with the first-year residence guarantee – and given the fact that the residences pay for themselves over time – the business case supports temporarily exceeding the debt limit for this project. In 2018, total debt once again falls within Board Policy. The specific projects contemplated as part of this planning will be brought forward to the Board for approval as required.

Actual debt has increased by 79% since 2006, while revenues have grown by 22.8% over this same period, representing an increase in the ratio of debt to revenue from 15.81% to 23.11% in 2011. The forecast level of debt at April 30, 2011 is \$217 million or \$7,252 per FTE.



	<u>Debt</u>	<u>Combined</u>	<u>FTE</u>	<u>Revenue</u>	<u>Debt /</u>
	<u>\$M</u>	<u>Revenue</u>		<u>per FTE</u>	<u>Rev %</u>
	\$M	\$M			
2006	120.9	764.5	27,879	\$27,430	15.81%
2007	119.0	829.1	28,164	\$29,440	14.35%
2008	225.9	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%
2011p	217.0	939.0	29,913	\$31,391	23.11%

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, 2010, the University's accrued benefit liability relating to the employee future benefit plans was \$248 million (2009 - \$230 million).

Cost containment of active and post-retirement benefits has been a focus in recent negotiations. For staff, Western has 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 2010 Audited Combined Statement of Operations is an annual expense in the amount \$18.3 million (2009 - \$21.7 million) regarding 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 \$127 million to \$330 million and an unweighted average of \$234 million. Western ranked 2nd in total liability for Employee Future Benefits. The ratio of obligations to total revenues ranged from 14.9% to 34.9% with an unweighted average of 24.5%.

**Employee Future Benefits (EFB) – Obligation and Expense
as a % of Total Expenditures
2006 through 2010**

	<u>Obligation</u> (\$M)	<u>Expense</u> (\$M)	<u>Total</u> <u>University</u> <u>Expenses</u> (\$M)	<u>EFB</u> <u>Obligation</u> <u>as % of Total</u>	<u>EFB</u> <u>Expense</u> <u>as % of Total</u>
2006	\$ 173.2	\$ 14.7	\$ 722	24.0%	2.0%
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%

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 Physical Plant Division estimates that on March 31, 2011 deferred maintenance at Western is \$163 million for non-residential buildings, and \$24 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 March 31, 2011 is as follows:

	<u>Non-residential Buildings</u>	<u>Residences</u>
Current Replacement Value (CRV)	\$1,469 million	\$284 million
Deferred Maintenance (DM)	\$ 163 million	\$ 24 million
DM/CRV	11.1%	8.4%

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 65% 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 11.1% (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 \$1.5 billion, spending on major maintenance for campus buildings at 2% should be in the range of \$30 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. The annual transfer will again grow by \$750,000 in 2011-12 to \$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.

	<u>Actual 2007-08</u>	<u>Actual 2008-09</u>	<u>Actual 2009-10</u>	<u>Projected 2010-11</u>	<u>Budget 2011-12</u>
MMI	\$ 9.50m	\$ 10.25m	\$10.25m	\$10.25m	\$11.00m
CRV	\$1,213m	\$1,291m	\$1,341m	\$1,469m	\$1,531m
Ratio	0.85%	0.79%	0.76%	0.70%	0.72%

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 Province and federal government, 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 2010-11. The Rae Report also recommended that the Province give high priority to the funding of deferred maintenance in Ontario's universities. Western and COU continue to urge the Province to increase the facilities renewal transfer to \$200 million. Western's share of a \$200 million fund would be about \$18 million – 1.2% of the \$1.47 billion of current replacement value in 2010-11.