The University of Western Ontario

2008-09 Capital Budget

A. The Evolution of Capital Expenditures

The Capital Budget for 2008-09 should be seen in the context of both recent trends in capital spending and the University's proposed long-range space plan outlined in section C of the Operating Budget portion of this document. Table 22 sets out expenditures in the Capital Budget since 2004-05 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 funds, private funds, student contributions, and the Housing budget. Categories 2 to 5 are funded primarily from general University funds, while category 6 is funded from Housing operations, and category 7 is funded by the particular Ancillary unit undertaking the work. Categories 8 and 9 involve carrying costs and loan repayments, and other expenditures such as purchases of land and buildings. Capital expenditures for 2008-09 total \$122.6 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. The MMI transfer is budgeted at \$10.25 million in 2008-09. These are expenditures directed at modification of existing space and renewal and expansion of the utilities and infrastructure of the University. The four MMI categories can be differentiated by size and by responsibility for oversight, as between the Vice-Presidents Academic and Resources & Operations. Category 2 involves a limited number of large projects over \$1,000,000, while categories 3, 4, and 5 involve a greater number of projects, including many costing less than \$100,000. Projects in categories 3 and 5, which deal with non-academic physical infrastructure, are generally recommended by the Associate Vice-President (Physical Plant and Capital Planning Services) through the Vice-President (Resources & Operations).

Projects in category 4 involve instructional and research facilities, and are generally recommended by the Associate Vice-President (Institutional Planning and Budgeting) through the Vice-President (Academic). Projects in category 2 generally involve collaboration between the two Vice-Presidents, to determine the order in which the potential major building renovations on campus should be done. Certain projects, both new construction and renovation, have a very large component of external research funding (the Biotron, for example) and require leadership by the Vice-President (Research). For most major projects in categories 1 and 2 there is a private fundraising component, so that the involvement of the Vice-President (External) is critical. Generally speaking, the effective planning and implementation of the Capital Budget requires the close collaboration of all four Vice-Presidents and many senior academic and staff leaders who work with them.

In planning future expenditures on Maintenance, Modernization, and Infrastructure, it is useful to review the value of our current fixed assets on campus. At January 31, 2008, our buildings and infrastructure had a current replacement value (CRV) of approximately \$1,536 million, as follows:

		Square	Major
	CRV \$M	Metres	Buildings
Major Nonresidential Buildings	1,138	443,729	57
Utilities and Infrastructure	75		
Subtotal, Eligible for MMI	1,213	443,729	57
Housing	270	233,159	14
Other Ancillary Buildings	53	29,673	5
Total	1,536	706,561	76

At January 31, 2008, the University had 443,729 gross square metres in 57 major nonresidential buildings, ranging in size from the Cronyn Observatory (338 square metres) to the Social Science Centre (33,757 square metres). Those buildings, and some \$75 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 10 major undergraduate residences, 4 major apartment buildings, and numerous smaller buildings for graduate students in Platt's Lane Estates. Other than Housing, there are 5 major buildings which are operated largely or entirely as Ancillaries: 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 nonresidential building projects of over \$1 million (projects generally span more than one year). Of the 443,729 square metres in major buildings, over 80% was built before 1978, so renovations to major buildings will be a continuing part of University capital planning.
- **3. Utility Infrastructure Projects**. This category involves projects with costs greater than \$10,000 for upgrading and new installation of utilities and other infrastructure, including boilers, chillers, 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 in this category are a number of projects devoted to the renewal of our steam, water, and chilled water systems. In addition, replacement of two boilers is planned at \$1 million in 2008-09 and \$1 million in 2009-10. Major projects in future years will continue work on electrical distribution systems and cooling tower and additional boiler replacements.

- **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 infrastructure. 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. An annual provision of \$350,000 for unforeseen projects is included 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. The expenditures, projected to be \$6 million in 2008-09, are funded from Housing revenues and debt. Housing has always set aside adequate maintenance funds and does not have significant deferred maintenance in contrast with 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 charges on capital projects.
- **9. Other Capital Expenditures**. This category includes asset acquisitions such as the \$7.7 million purchase of Westminster College in 2005-06, and \$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 University property as the lands become available. Western will continue to protect the Regional Facilities zoning around the Campus and to buy land nearby when it comes up for sale. The University may also acquire strategic physical assets, as in the purchase of the Siebens-Drake Research Institute building in 2002.

The last 12 lines of Table 22 are labeled A to M. Line A shows total sources of funding for the capital budget, including debt; B, sources of funding 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 24 and 31. Annual changes in the capital reserve (line C) are driven by the differences between funding and expenditure (line B). Thus for 2006-07, line B shows \$14,422, the difference between funding of \$108,960 (all figures in \$000) and expenditures of \$94,538. The capital reserve in line C increases by this same amount of \$14,422, from \$37,522 in 2005-06 to \$51,944 in 2006-07. When line B is negative, as in 2005-06, 2007-08 and 2008-09, the capital reserve declines.

Line E shows the replacement value of nonresidential 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 2006-07, MMI expenditures were \$36.9 million, while the estimated replacement value of nonresidential buildings, utilities, and infrastructure was \$1.1 billion. The ratio of the two is 3.3%, as shown in line F.

Line G of Table 22 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.

Line H of Table 22 shows the ratio of the annual MMI transfer to total MMI expenditures; for example, in 2006-07, the transfer was \$8.75 million and MMI expenditures were \$36.9 million, so the ratio in line H is 23.7%. Other sources of funding for MMI expenditures include the annual capital facilities renewal grant from the Province (currently about \$2.4 million); special Provincial grants, such as the \$16.0 million announced in April, 2003 for the renovation of the Medical Sciences Building; 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 original condition. In fact, whenever Western undertakes a major maintenance project, there is also modernization of the facility, and whenever we execute 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 and Capital Planning Services considers them a reasonable average for the four categories over a number of years.

The value of line J in 2006-07 is \$22.9 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 \$2.5 million or less during the last decade. Western will also urge the federal government to include universities in future infrastructure programs and to create a fund specifically aimed at helping Canadian universities deal with deferred maintenance.

Lines L and M of Table 22 show the number of major buildings and the total gross square metres on campus. From 2005-06 to 2007-08, the number of major buildings declined from 78 to 76, while gross square metres increased from 673,000 to 706,000 because the Western Road Houses, the Central Food Commissary, Dunn's Barn, and the Bio-Engineering Building were demolished, and London Hall, Graphic Services Building, the Insurance Research Lab for Better Homes Facility, and the Robarts Research Institute Building were added.

Table 23 details capital projects over \$1 million divided into three groups: projects completed in 2007 (4 projects with a total cost of \$20.4 million); projects currently underway (18 projects, \$281.9 million), and planned future projects (12 projects, \$47.1 million). In each case, the projects are assigned to one of the nine categories. For all the projects, the year and month of the start and end of construction are shown. For planned future projects, the start date is the date at which Board approval might be sought.

The projects listed in Table 23 are the result of the long-range space plan outlined in section C of the Operating Budget portion of this document. These projects include new construction that will create the additional space necessary to accommodate 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. Table 23 does not include the construction of a new \$17 million building at the Research Park, as the project will flow through the books of the Research Park (a separate legal entity) and not the University accounts.

B. Sources of Funding and Capital Expenditures in 2008-09

Table 24 presents sources of funding for budgeted capital expenditures with estimates of comparative data for 2007-08, divided into 7 major categories: provincial and municipal government grants; funds from the Canada Foundation for Innovation (CFI) and the Ontario Ministry of Research and Innovation (OMRI) awarded on a competitive basis; funds transferred from Western's Operating Budget; investment income on reserves held in the Capital Budget; general fundraising; borrowing; and other sources, including internal recoveries. As compared to a decade ago, the University is more dependent on capital revenues from competitive research sources (e.g. CFI/OMRI), private fundraising, transfers from the operating budget and debt.

Table 25 shows expenditures in Categories 1 and 2, for 2007-08 (estimates as of February 29, 2008) and 2008-09 (current proposals). Table 26 shows expenditures in Category 3. Within each category the items are listed according to the size of the proposed expenditure in 2008-09.

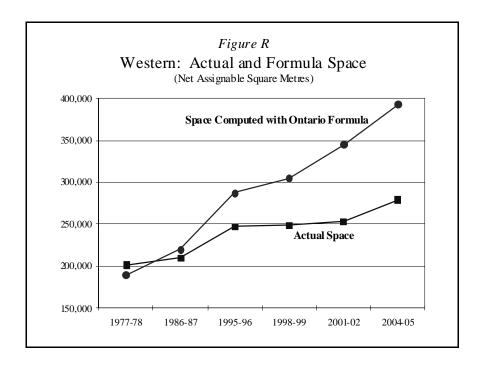
Table 27 shows expenditures in categories 4 and 5, while Table 28 shows expenditures in categories 6 and 7. For categories 4 to 6, certain smaller projects are grouped together; the full list of projects is available from the Division of Physical Plant and Capital Planning Services. Tables 29 and 30 show data on Categories 4 to 7 with estimates for 2007-08.

C. Space at Western

Western is committed to the efficient use of space. Every three years since 1977-78, the Provincial Ministry responsible for universities and the Council of Ontario Universities have compiled data on the ratio of actual space in Ontario universities, as compared to the "formula space" which would be generated by a particular set of space standards for classrooms, research, libraries, offices, services, and students.

		Ratio of A	Actual Spa	ce to Forn	nula Space	2
	77-78	86-87	95-96	98-99	01-02	04-05
1. Western	106.2%	95.2%	85.8%	81.3%	74.2%	71.1%
2. All Ontario Universities	95.7%	88.4%	86.5%	86.0%	79.6%	73.0%
3. Western's "relative space efficiency"	-10.5%	-6.8%	+0.7%	+4.7%	+5.4%	+1.9%

We may illustrate the three lines of the table with reference to the data for 2004-05. Line 1 shows that Western had actual space equal to 71.1% of the space which would be required to meet the space standards; the corresponding figure for all Ontario universities was 73.0%. The difference of line 2 minus line 1 is 1.9% — i.e. Western's use of space relative to the standards was 1.9% more efficient than the average of Ontario universities. Lines 1 and 2 show that all Ontario universities, including Western, have become more efficient in the use of space since 1977-78. Figure R shows the growth of Actual and Formula space since 1977-78 and the growing gap between the two. Space constraints have made it difficult to build and maintain space designed for interaction and collaboration among students, faculty and staff. One of the priorities of the 2006-2013 Long-Range Space Plan set out in the 2006-07 Budget is to build and protect such space, and thereby facilitate interdisciplinary and pan-University initiatives, as well as building a stronger sense of University community.



*Table 22*CAPITAL BUDGET SUMMARY, 2004-05 TO 2008-09
(\$000)

Category	Purpose	Actual 2004-05	Actual 2005-06	Actual 2006-07	Projected 2007-08	Budget 2008-09
, and the second	New Construction					
1	New Construction (Table 25, line 14)	38,963	33,850	46,560	52,299	61,660
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 25, line 28)	10,836	11,654	21,153	19,899	36,334
3	Utilities and Infrastructure Projects (Table 26)	3,310	3,313	5,197	5,506	5,320
4	Modernization of Instructional and Research Facilities (Tables 27 and 29)	5,023	6,124	4,945	5,422	4,307
5	General Maintenance and Modernization Projects (Tables 27 and 29)	4,686	4,347	5,574	3,864	5,496
	Sub-Total MMI	23,855	25,438	36,869	34,691	51,457
	Other					
6	Housing Renovations (Tables 28 and 30)	1,996	2,092	3,071	13,383	6,010
7	Ancillary Projects (Tables 28 and 30)	2,214	890	988	2,287	525
8	Carrying Costs and Debt Repayments	8,824	21,134	7,002	1,071	1,374
9	Other Capital Expenditures	45	7,717	48	4,568	1,600
	Sub-Total Other	13,079	31,833	11,109	21,309	9,509
	Total Expenditures	75,897	91,121	94,538	108,299	122,626

		Actual	Actual	Actual	Projected	Budget
Line		2004-05	2005-06	2006-07	2007-08	2008-09
	Sources of Funding, Reserves, and Debt					
A	Total Sources of Funding, Including Debt (Table 24)	105,041	90,576	108,960	84,978	115,999
В	Sources of Funding less Expenditures	29,144	(545)	14,422	(23,321)	(6,627)
С	Capital Reserve, Year End (Table 31)	38,067	37,522	51,944	28,623	21,996
D	Capital Debt Outstanding, Year End (Table 31)	124,216	120,901	119,006	227,303	223,424
Е	Replacement Value of Nonresidential Buildings, Utilities & Infrastructure, \$M	1,105	1,107	1,130	1,213	1,306
F	MMI Expenditures/Replacement Value	2.2%	2.3%	3.3%	2.9%	3.9%
G	Annual MMI transfer from Operating to Capital Budget	7,250	8,000	8,750	9,500	10,250
Н	MMI transfer/MMI Expenditures	30.4%	31.4%	23.7%	27.4%	19.9%
J	Estimate of Maintenance Expenditure	14,229	14,917	22,931	21,320	32,869
K	Maintenance Expenditure/Replacement Value	1.3%	1.3%	2.0%	1.8%	2.5%
L	Number of Major Buildings	78	78	77	76	80
M	Total Gross Square Metres (000s)	673	673	693	706	741

Category 8 does not include carrying costs and loan repayments for Residences & Apartments, UCC, Research Park, and 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 23
CAPITAL PROJECTS OVER \$1 MILLION

		Category	Start	End	Cost
					(\$M)
1	Projects Completed in 2007				
2	Westminster College Renovations	2	Jun 06	Sep 07	
3	Ivey Spencer Leadership Centre Expansion and Renovations	1	Apr 07	Jul 07	
4	UCC Wave Renovations	2	Apr 07	Oct 07	
5	Asset Acquisitions - Land Purchase	9	-	-	
6	Total				20.4
7	Projects Underway				
8	Biological and Geological Sciences Building Renovations	2	Nov 05	Apr 10	
9	Chiller and Cooling Tower in Power Plant	3	Mar 06	Jun 08	
10	Dental Clinic Renovations in Dental Science Building (Phases II & III)	2	May 06	Jul 08	
11	Bayfield Hall Renovations	6	May 06	Aug 08	
12	Westminster College Related Renovations	2	Jun 06	Apr 08	
13	Support Services Building	1	Jun 06	Sep 08	
14	Physics and Astronomy Building Renovations	2	Jun 06	Jun 11	
15	Althouse Faculty of Education Building Renovations	2	Aug 06	Apr 08	
16	Student Recreational Facility	1	Oct 06	Sep 08	
17	Material Sciences Addition	1	Nov 06	Aug 08	
18	Student Services Building	1	Apr 07	Aug 09	
19	The Claudette MacKay-Lassonde Pavilion (Green Building)	1	Apr 07	Aug 09	
20	Electrical Infrastructure	3	May 07	May 08	
21	Western Road Expansion	9	May 07	Jul 08	
22	Install Primary/Secondary Pumping Station	3	May 07	Oct 08	
23	Robarts MRI Project - Cuddy Wing Renovations	2	Jan 08	Aug 08	
24	Follow on Renovations to Existing Facilities	2	Jan 08	Jun 10	
25	Advanced Facility for Avian Research	1	Mar 08	Feb 09	
26	Total				281.9
27	Planned Future Projects				
28	Saugeen Maitland Recirculation Lines Replacement	6	May 08	Aug 08	
29	Electrical Infrastructure	3	May 08	May 09	
30	Talbot Theatre Renovations	2	May 08	Jun 09	
31	Boiler Replacement	3	May 08	May 10	
32	IT Network and Infrastructure Upgrades	2	May 08	Sep 12	
33	Teaching Lab Upgrades in the Chemistry Addition	4	Jun 08	Dec 08	
34	Institute for Chemicals and Fuels from Alternative Resources Facility	1	Jun 08	Dec 08	
35	Health Sciences Building Renovations	2	Oct 08	Apr 10	
36	Utilities and Infrastructure Projects	3	May 09	Apr 11	
37	New Ivey School Building	1	-	-	
38	Existing Ivey Building Renovations	2	-	-	
39	Asset Acquisitions	9	-	-	
40	Total				47.1

Table 24
CAPITAL BUDGET: SOURCES OF FUNDING
(\$000)

		Projected 2007-08	Budget 2008-09
1	Government Grants		
2	Provincial Grant - Institute for Chemicals and Fuels from Alternative Sources	0	2,800
3	MTCU Annual Capital Grant (Facilities Renewal Program)	2,424	2,424
4	MTCU Graduate Expansion Capital Grant	0	1,400
5	City of London - SuperBuild Projects	826	826
6	Urban Works Reserve Fund	0	230
7	MTCU Special Capital Grant (Campus Renewal Program)	12,263	0
8	MTCU Capital Grant - Physics and Astronomy Building Renovations	9,000	0
9	Sub-Total	24,513	7,680
10	CFI/OMRI Federal/Provincial Funding		
11	Advanced Facility for Avian Research	728	5,013
12	The Claudette MacKay-Lassonde Pavilion (Green Building)	0	3,600
13	Robarts MRI Project - Cuddy Wing Renovations	250	2,750
14	Biological and Geological Sciences Building Renovations	0	900
15	Physics and Astronomy Building Renovations	0	500
16	West Valley Building	209	100
17	The Insurance Research Lab for Better Homes	495	64
18	Sub-Total	1,682	12,927
19	Onavatina Predact		
20	Operating Budget Operating Pudget MMI Transfer, Page	0.500	10.250
21	Operating Budget MMI Transfer - Base Operating Budget MMI Transfer - Base (Ancillaries)	9,500	10,250
22			
23	Operating Budget - One-Time Allocations	5,875	14,200
24	Operating Budget - FFICR Transfer	3,000	3,000
	Operating Budget - CRC Transfer	952	1,000
25	Operating Budget - Incremental Space for Engineering in TEB	1 205	1.055
26	Ivey School Budget - Ivey Projects and Loan Repayments	1,305	1,055
27	Medicine Operating Budget - Medical Science Building Renovations	500	500
28 29	Science Operating Budget - Material Sciences Addition	0	267 75
	Science Operating Budget - Advanced Facility for Avian Research	-	
30	Social Science Operating Budget - Advanced Facility for Avian Research Medicine Operating Budget - Rearrange Lower Ground Floors for Teaching Facility	270	75
31		370	0
32	Health Sciences Operating Budget - The Michael Kirkley Mustang Training Centre		
33	Science Operating Budget - Biotron - New Facility VB Because Pictron New Facility	174	0
34	VP Research - Biotron - New Facility	90	0
35	Operating Self Insurance Reserve - Talbot College Fire Damage	150	0
36	Miscellaneous Faculty Budgets	48	30
37	Sub-Total	23,393	31,497
38	Interest Earned	745	121

Table 24
CAPITAL BUDGET: SOURCES OF FUNDING
(\$000)

		Projected 2007-08	Budget 2008-09
39	Fundraising		
40	Health Sciences Building Renovations	0	900
41	Biological and Geological Sciences Building Renovations	0	800
42	Medical Science Building Renovations	700	500
43	Physics and Astronomy Building Renovations	0	500
44	Talbot Theatre Renovations	0	500
45	The Claudette MacKay-Lassonde Pavilion (Green Building)	300	300
46	SuperBuild Projects	200	300
47	ING Leadership Centre (TSX) Leasehold Improvements	222	160
48	Law Building Expansion and Renovations	300	100
49	Student Services Building	1,000	0
50	Dental Clinic Renovations in Dental Science Building	260	0
51	The Michael Kirkley Mustang Training Centre - J.W. Little Building	43	0
52	Completed Projects	5	0
53	Sub-Total	3,030	4,060
54	Borrowing		
55	Support Services Building	0	16,534
56	Student Services Building	0	15,000
57	Student Services Building Student Recreational Facility	12,000	12,386
58	The Claudette MacKay-Lassonde Pavilion (Green Building)	0	6,226
59	Bayfield Hall Renovations	2,967	1,533
60	Sub-Total	14,967	51,679
61	Other		
62	Student Contributions - Student Recreational Facility	104	1,200
63	Telephone Switch - Recoveries	700	800
64	Energy Conservation Incentives	100	100
65	Bayfield Hall Recovery - Ancillary Contribution	7,000	0
66	USC Renovations to UCC Wave	924	0
67	TD Waterhouse Stadium - Field Turf Replacement	681	0
68	London Hall Recovery - Ancillary Contribution	275	0
69	Projects Recovered from Housing	3,835	4,477
70	Projects Recovered from Units	1,423	933
71	Projects Recovered from Ancillaries	1,606	525
72	Sub-Total	16,648	8,035
73	Total Sources of Funding	84,978	115,999

Line 22 for 2007/08 includes allocations to Major Capital Projects (\$5,000), furnishings for Westminster College renovations (\$525), and GU Classroom Upgrades (\$350).

Line 22 for 2008/09 includes allocations to Major Capital Projects (\$13,200) and Teaching Lab Upgrades in the Chemistry Addition (\$1,000).

Table 25

CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS 2007-08 AND 2008-09

(\$000)

		Projected 2007-08	Budget 2008-09
1	Category 1: New Construction		
2	Student Services Building		
3	The Claudette MacKay-Lassonde Pavilion (Green Building)		
4	Student Recreational Facility		
5	Support Services Building		
6	Advanced Facility for Avian Research		
7	Material Sciences Addition		
8	Institute for Chemicals and Fuels from Alternative Resources Facility		
9	Ivey Spencer Leadership Centre Expansion and Renovations		
10	West Valley Building		
11	The Insurance Research Lab for Better Homes		
12	Biotron - New Facility		
13	London Hall Residence		
14	Total, Category 1	52,299	61,660
15	Category 2: Major Building Renovations		
16	Follow on Renovations to Existing Facilities		
17	Biological and Geological Sciences Building Renovations		
18	Physics and Astronomy Building Renovations		
19	Talbot Theatre Renovations		
20	Robarts MRI Project - Cuddy Wing Renovations		
21	IT Network and Infrastructure Upgrades		
22	Health Sciences Building Renovations		
23	Westminster College Related Renovations		
24	Althouse Faculty of Education Building Renovations		
25	Westminster College Renovations		
26	Dental Clinic Renovations in Dental Science Building (Phase II & III)		
27	UCC Wave Renovations		
28	Total, Category 2	19,899	36,334

Table 26

CAPITAL EXPENDITURES FOR UTILITIES AND INFRASTRUCTURE PROJECTS 2007-08 AND 2008-09

(\$000)

		Projected 2007-08	Budget 2008-09
1	Category 3: Utilities and Infrastructure Projects		
2	CG - Electrical Infrastructure Continuing Program	1,000	1,650
3	PP - Replacement of Boilers 2 and 3	0	1,000
4	PP - Replacement of Boiler Controls	100	350
5	PP - Chiller and Cooling Tower Replacement	307	331
6	CG - Energy Conservation Investment	420	300
7	CG - New Water Main from Elgin Hall to Richmond Street	184	250
8	PP - Install Primary/Secondary Pumping Station	2,500	200
9	CG - Steamline Insulation and Heat Recovery Initiatives	200	200
10	PP - New Emergency Generator	0	200
11	PP - Cooling Water System for Compressor	0	150
12	CG - Replacement and Upgrade of High Pressure Steam Lines	112	100
13	CG - Chilled Water Capacity Upgrade	100	100
14	CG - Chilled Water Valve Replacement - Buildings	90	90
15	PP - Feedwater Pump Replacement	60	60
16	CG - Replacement of Steam Safety Valves	60	60
17	CG - Hartman Loop Energy Efficiency Software	0	59
18	CG - Building Steam Distribution Systems Upgrades	50	50
19	CG - Flash Tank Replacements	0	50
20	NCP - Upgrade Delta Control System	0	40
21	CG - Upgrade Compressed Air Lines - Mains	30	30
22	PP - Condensate Transfer Pump Replacement	30	30
23	PP - Replace HP Condensate Line at Thames Hall	20	20
24	UC - Water Main Upgrade from UC to SLB	100	0
25	CG - Installation of Building Steam Meters	80	0
26	CG - Electrical Distribution Study	30	0
27	PP - Rebuild Stop Valve and Return Stop Valve	21	0
28	WC363 - Security System	12	0
29	Total, Category 3	5,506	5,320

Table 27

EXPENDITURES IN 2008-09 FOR INSTRUCTIONAL/RESEARCH FACILITIES AND GENERAL MAINTENANCE (\$000)

		Budget 2008-09
1	Category 4: Modernization of Instructional and Research Facilities	
2	CHB - Teaching Lab Upgrades in the Chemistry Addition	1,000
3	DSB - Re-Arrange Lower Ground Floors for Teaching Facility in Dentistry	623
4	CG - GU Classroom Upgrades	350
5	MSB/DSB - Medical and Dental Condition Space Study	260
6	CG - IT Network Backbone Upgrades and Improvements	250
7	ACE - Convert Gym Mezzanine to Graduate Space	200
8	ACE - Faculty of Education Community Room	180
9	WSC - Stable Isotope Lab Renovations	150
10	SEB - Create Water Education Laboratory in Room 19A	118
11	EC - Modernize EC1330 for Rehabilitation Sector Program	115
12	CG - Study Space Upgrades in Various Libraries	111
13	CG - ARCC Loading Dock Renovations	110
14	SRS - Alumni Hall Upgrade for SRS	102
15	MSB - Video Conferencing Link to Windsor Medical Training Group	100
16	SEB - Divide SEB2020 to Accommodate Lab from Elborn College	80
17	B&GS - Furnish Faculty and Staff Offices in Newly Renovated Space	68
18	TML - Create Librarian Office Space in Taylor Library	60
19	TH - Modernization of Thames Hall	48
20	B&GS - Graduate Student Furnishings in Chemistry and Stats. and Actuarial Science	47
21	14 Other Projects	335
22	Total, Category 4	4,307
23	Category 5: General Maintenance and Modernization Projects	
24	SSC - Window Replacement	600
25	CG - Installation of Card Access Systems to Buildings	401
26	CG - Roof Replacement	400
27	CG - Unforeseen Projects	350
28	UCC/SSC - Repair of Concrete Walkway	258
29	EC - Replacement of Fan System 102	230
30	CG - Improve Access for Physically Challenged	220
31	CG - Replacement of Galvanized Water Piping	200
32	CG - Repairs and Replacement of Autoclaves	200
33	LB - Elevator 'B' Replacement	200
34	CG - Asbestos and Mould Abatement	150
35	CG - Utility Sub-Metering	100
36	CG - Gas Inspections	100
37	CG - Road Repair and Replacement	100
38	CG - Sidewalk Repairs	100
39	CG - Renewal of Exterior Lighting	100
40	CG - Exterior Painting	75
41	CG - Window Replacement	70
42	CG - Building Controls and Panel Upgrades	60
43	51 Other Projects	1,582
44	Total, Category 5	5,496

Table 28
EXPENDITURES IN 2008-09 FOR HOUSING AND ANCILLARIES (\$000)

		Budget 2008-09
1	Category 6: Housing Renovations	
2	Bayfield Hall Renovations	1,533
3	Recirculation Lines Replacement, Saugeen-Maitland Hall	1,100
4	Replace Watermain, Platt's Lane Estates	250
5	Door Replacement, Saugeen-Maitland Hall	250
6	Replace Condensate Lines, Saugeen-Maitland Hall	200
7	Refurbish Washrooms, Saugeen-Maitland Hall	185
8	Replace Building Locking System, Saugeen-Maitland Hall	150
9	HV Switchgear Transformer Installation, Medway Hall	114
10	Replace Carpet, Saugeen-Maitland Hall	100
11	Replace Switchgear, Glenmore Apartment Complex	98
12	Replace Stoves, Platt's Lane Estates	98
13	Replace Stairway to Bayfield Hall, Lambton Hall	90
14	Single Family Residence Contingency, General	80
15	Contingency Projects, General	75
16	Replace Exterior Apartment Doors and Stair Tread, Platt's Lane Estates	65
17	Townhouse Furnace Replacement, Platt's Lane Estates	62
18	Refurbish Stairwell and Doors on Exit, Glenmore Apartment Complex	60
19	Replace Street Lighting, Platt's Lane Estates	52
20	Residence Security Measures, General	50
21	Replace Chain Link Fencing, Platt's Lane Estates	50
22	Refurbish Main Floor Bathrooms, Saugeen-Maitland Hall	50
23	Flooring Replacement Allowance, Glenmore Apartment Complex	50
24	Carpet and Tile Replacement, Platt's Lane Estates	50
25	Carpet and Tile Replacement, Essex Hall	47
26	Replace Ceiling Tile 4th Floor, Delaware Hall	45
27	Supply and Install Dishwasher, Sydenham Hall	45
28	Contingency, Glenmore Apartment Complex	40
29	Carpet and Tile Replacement, Elgin Hall	40
30	Varnish All Baseboards in Corridor and Paint Washroom, Sydenham Hall	36
31	Replace Transfer Switch, Elgin Hall	35
32	Replace Motor Control Centre, Saugeen-Maitland Hall	35
33	Washroom Plumbing Improvements, Sydenham Hall	35
34	Caulk and Paint Exterior Windows, Delaware Hall	30
35	Replace Drapery on Ground and First Floor, Delaware Hall	28
36	Replace 300 KWA Transformer, Glenmore Apartment Complex	28
37	Washroom Improvements Allowance, Medway Hall	25
38	69 Other Projects	729
39	Total, Category 6	6,010
40	Category 7: Ancillary Projects	
41	TRAC - Bleacher Replacement	250
42	SSB - Food Outlet	175
43	Student Recreational Facility - Food Outlet	100
44	Total, Category 7	525

Table 29

EXPENDITURES IN 2007-08 FOR INSTRUCTIONAL/RESEARCH FACILITIES AND GENERAL MAINTENANCE (\$000)

		Projected 2007-08
1	Category 4: Modernization of Instructional and Research Facilities	
2	WC - Furnishings for Westminster College	525
3	DSB - Re-Arrange Lower Ground Floors for Teaching Facility in Dentistry	487
4	MSB - Video Conferencing Link to Windsor Medical Training Group	394
5	WC - Renovations to Westminster Houses for Psychology	352
6	CG - GU Classroom Upgrades	350
7	WL - Create Classrooms in Weldon Library	300
8	CG - IT Network Backbone Upgrades and Improvements	250
9	STAB - Create Space for Faculty and Graduate Students	245
10	SSC - Move Main Geography Office Room 2322	184
11	RISB - Business Library Upgrades	184
12	SEB - Room 2025 Lab Renovations	158
13	CG - Library Improvements	149
14	SEB - Create Water Education Laboratory in Room 19A	132
15	WC - Renovations to Westminster Houses for Call Centre	127
16	PSFS - Upgrade Water Treatment and Septic Systems at Environmental Field Station	122
17	TH - Upgrades to Gymnasium Facilities in Room 3120	100
18	EC - Renovate Audiology Clinic in Room 1500	95
19	B&GS - Graduate Student Furnishings in Chemistry and Statistics and Act. Sciences	91
20	SEB - Renovate Undergraduate Laboratory in Room 1077	87
21	39 Other Projects	1,090
22	Total, Category 4	5,422
	Total, Caregory 1	3,122
23	Category 5: General Maintenance and Modernization Projects	
24	CG - Roof Replacement	410
25	CG - Road Repair and Replacement	230
26	CG - Building Fire Alarm System Upgrades	200
27	CG - Unforeseen Projects	198
28	UC - Elevator 'B' Replacement	177
29	CG - Installation of Card Access Systems to Buildings	145
30	TLP - Extra Steel for Platforms	129
31	CG - Renewal of Exterior Lighting	115
32	CG - Improve Access for Physically Challenged	103
33	CG - Interior Painting	100
34	CG - Utility Sub-Metering	100
35	UC - Repairs of Cracks in Concrete	100
36	CG - Fixed Extinguishing System Upgrades	100
37	CG - Building Controls and Panel Upgrade	100
38	CG - Asbestos Survey	85
39	CG - Window Replacement	80
40	SH - Pool Filtration System Replacement	75
41	CG - Stone Repairs, Tuck Pointing and Caulking	67
42	CG - Asbestos and Mould Abatement	64
43	49 Other Projects	1,286
TJ.	17 Outer Frojecto	1,200

Table 30
EXPENDITURES IN 2007-08 FOR HOUSING AND ANCILLARIES (\$000)

		Projected 2007-08
1	Category 6: Housing Renovations	
2	Bayfield Hall Renovations	9,548
3	Apartment Water Mains, Bathroom and Plumbing Replacement, Platt's Lane Estates	450
4	Plumbing Improvements, Essex Hall	235
5	Replace HV Switchgear, Medway Hall	230
6	Replace Fire Alarm Panel, Sydenham Hall	150
7	Townhouse Roof Replacement, Platt's Lane Estates	137
8	Refurbish Washroom Countertops, Saugeen-Maitland Hall	130
9	Stair Replacement, Lambton Hall	117
10	Replace Heat and Smoke Detector Sensors, Saugeen-Maitland Hall	117
11	Replace Carpets, Saugeen-Maitland Hall	102
12	Repair Asphalt and Seams Medway Parking Lot, Medway Hall	87
13	Replace Convertors and Pumps, Delaware Hall	85
14	Improvements to Study Room and Floor Lounge, Saugeen-Maitland Hall	76
15	Contingency, General	75
16	Replace Apartment Building Exterior Doors and Stair Treads, Platt's Lane Estates	73
17	Repairs to Exterior Steps and Landing, Sydenham Hall	71
18	Parquet Tile Replace, Glenmore Apartment Complex	65
19	Replace Asbestos Containing Incandescent Lights, Saugeen-Maitland Hall	65
20	Servery Improvements, Sydenham Hall	63
21	Townhouse Furnace Replacement, Platt's Lane Estates	62
22	Security Measures, General	58
23	Replace Carpets, Essex Hall	53
24	Replace Motor Control Centre, Medway Hall	51
25	Shower Floor Improvements, Saugeen-Maitland Hall	50
26	Refurbish Stairwells, Glenmore Apartment Complex	48
27	Replace Elevator Sheave Jammers (TSSA Directive), Lambton Hall	45
28	Painting Improvements, Medway Hall	45
29	Replace Ceiling Tiles, Delaware Hall	42
30	Carpets and Tile Floors, Platt's Lane Estates	40
31	Replace Boiler Refractory and Gas Train Components, Saugeen-Maitland Hall	40
32	Replace Air Handling Unit 103, Essex Hall	39
33	Snack Bar Upgrades, Saugeen-Maitland Hall	34
34	67 Other Projects - Various Residences	900
35	Total, Category 6	13,383
36	Category 7: Ancillary Projects	
37	TDWS - Field Turf Replacement	681
38	UCC - Student Health Services Renovations	600
39	CRD - Westminster Lot Expansion	582
40	SH - Dishwashing Area Renovation	150
41	NCB - Food Services Renovation	125
42	CG - Parking Gate Access Equipment	104
43	UCC - Bookstore Renovations	45
44	Total, Category 7	2,287

Table 31
CAPITAL RESERVES AND DEBT AT FISCAL YEAR END (\$000)

		Actual 2004-05	Actual 2005-06	Actual 2006-07	Projected 2007-08	Budget 2008-09
1	A. Capital Reserves					
2	General Capital Fund	22,480	11,818	11,386	12,848	10,516
3	Designated Capital Fund	14,151	24,202	39,012	14,179	9,860
4	Gibbons Property	1,436	1,502	1,546	1,596	1,620
5	Total Capital Reserves	38,067	37,522	51,944	28,623	21,996

		Actual	Actual	Actual	Projected	Budget
		2004-05	2005-06	2006-07	2007-08	2008-09
6	B. Capital Debt					
7	General Capital Fund	2,500	2,000	1,500	800	0
8	New Construction	20,000	3,255	1,540	13,540	63,686
9	Major Renovations	0	2,670	0	0	0
10	Housing	78,290	92,088	97,579	97,263	94,438
11	Robarts Capital Leases	0	0	0	2,700	2,100
12	UCC	3,765	1,810	0	0	0
13	Research Park	14,311	14,278	14,087	16,000	28,800
14	Richard Ivey School of Business Foundation	5,350	4,800	4,300	3,800	3,300
15	Unused and Invested Debenture Proceeds	0	0	0	93,200	31,100
16	Total Capital Debt	124,216	120,901	119,006	227,303	223,424

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.

 ${\it Table~32}$ DESCRIPTION OF BUILDING/PROJECT CODES USED IN TABLES 22 through 31

	Code	Description
1	3M	3M Centre
2	AC	Althouse Faculty of Education Building
3	AH	Alumni Hall
4	BEB	Bio-Engineering Building
5	BLWT	Boundary Layer Wind Tunnel
6	B&GS	Biological and Geological Sciences Building
7	C-MSC	Campus Miscellaneous
8	C-RD	Campus Roads
9	CG	Campus General
10	ChB	Chemistry Building
11	CSB	Dr. Don Rix Clinicals Skills Building
12	DSB	Dental Sciences Building
13	EC	Elborn College
14	ELGO	Elginfield Observatory
15	GCS	Galleria - Continuing Studies
16	GLR	Gibbons Lodge Residence
17	GU	General University
18	HSA	Health Sciences Addition
19	HSB	Labatt Health Sciences Building
20	KB	Kresge Building
21	LB	Law Building
22	MB	Music Building
23	MC	Middlesex College
24	MSB	Medical Sciences Building
25	NCB	North Campus Building
26	NCMRD	National Centre for Management Research and Development
27	NSC	Natural Sciences Centre
28	OH&S	Occupational Health and Safety
29	PP	Power Plant
30	P&AB	Physics and Astronomy Building
31	PSFS	Environmental Field Station
32	SBA	School of Business Administration Building
33	SDRI	Siebens-Drake Research Institute
34	SEB	Spencer Engineering Building
35	SH	Somerville House
36	SLB	Stevenson-Lawson Building
37	SpH	Spencer Hall
38	SSB	Support Services Building
39	SSC	Social Sciences Centre
40	StaB	Staging Building
41	TDWS	TD Waterhouse Stadium
42	TC	Talbot College
43	TEB	Thompson Engineering Building
44	TH	Thames Hall
45		Taylor Library
	TL	
46	TL TRAC	Thompson Recreation and Athletic Centre
46 47		
	TRAC	Thompson Recreation and Athletic Centre
47	TRAC UC	Thompson Recreation and Athletic Centre University College
47 48	TRAC UC UCC	Thompson Recreation and Athletic Centre University College University Community Centre
47 48 49	TRAC UC UCC USC	Thompson Recreation and Athletic Centre University College University Community Centre University Students Council

The University of Western Ontario

Long-Term Financial Trends

The Operating and Capital Budgets set out in this document describe, in Tables 14 and 22, proposed spending of some \$664 million for the year 2008-09. That spending will take place, however, in a longer term context which must be understood in evaluating the Operating and Capital Budgets.

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. Part of the credit rating evaluation focused on a number of long-term obligations that the University manages on an ongoing basis. 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.

A. Capital Reserves and Debt

Table 31 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 have been assigned to specific projects
- Gibbons Property, the remaining funds from the sales of that property

The University's intention is that when the Gibbons funds are spent, there will be naming opportunities to honour 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. This category currently includes the loan associated with the Telephone Switch System.
- **New Construction** represents debt on projects that are largely new construction, additions to existing buildings and any other new facilities. This category does not include debt for Housing projects.
- Major Renovations & Other includes debt on nonresidential projects that involve major
 maintenance and renovations to existing space and includes debt on purchases of property.

- **Housing** debt required for new construction, maintenance, and modernization projects for University residences and apartment buildings.
- Robarts Capital Leases With the integration of Robarts, their existing capital leases for equipment have been added to Capital Debt.
- UCC includes remaining debt for The University Community Centre Expansion.
- **Research Park** debt incurred by the Research Park, which includes debt for new construction.
- Richard Ivey School of Business Foundation debt held by the Richard Ivey School of Business Foundation. This does not include debt for the expansion and renovation project at Spencer Hall or the Ivey EMBA Leasehold Improvement Project. The debt for those projects is included in the categories New Construction and Major Renovations as the University is holding this debt.
- **Unused and Invested Debenture Proceeds** unused proceeds from Western's first debenture issue that have been committed, and invested until the specific capital projects require the funding.

In 2002-03, the Board of Governors approved a Capital Debt Policy, which included a limit of \$7,500 debt per Student 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. The large increase in total debt in 2008 is related to the issuance of the \$190 million debenture.

	<u>Actual</u>			Forecast		
	2006	2007	2008	2009	2010	2011
Total Debt (in millions)	\$ 121	\$ 119	\$ 227	\$ 223	\$ 223	\$ 244
FTE	27,879	28,164	27,985	28,229	28,374	28,462
Allowable debt per FTE	\$8,069	\$8,246	\$8,411	\$8,579	\$8,751	\$8,926
Actual debt per FTE	\$4,327	\$4,226	\$8,119	\$7,915	\$7,869	\$8,556
Debt room per FTE	\$3,742	\$4,020	\$ 292	\$ 664	\$ 882	\$ 370

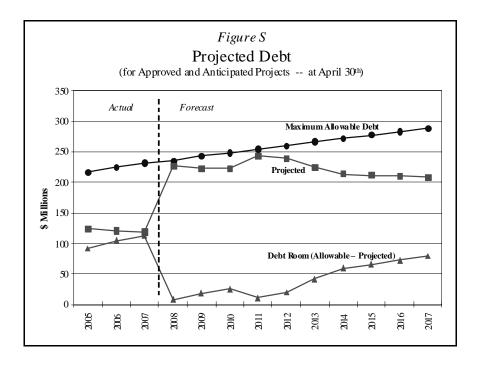
In 2008, the maximum allowed debt per FTE under Western's Capital Debt Policy is \$8,411, and the forecast is \$8,119. In 2006, the credit rating agencies (Moody's, DBRS and Standard & Poor's) set a reasonable limit for debt per FTE as \$10,000. Western's current debt is thus below the Board limit and 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 2008 containing information on universities that have issued debentures. Debt per FTE at eleven universities ranged from \$4,998 to \$9,756, with an unweighted average of \$7,823. Figure

S shows total debt as well as three measures of debt since 2005: the maximum allowable, 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 and preliminary estimates for other projects which may be presented to the Board during the period under consideration. Figure S shows a significant decline in projected debt after 2011; in all likelihood, however, there will be new approved projects in the intervening years that will result in projected debt staying relatively constant. The forecasts beyond 2008 show that the minimum debt room per FTE is about \$370 in 2011. With 28,000 FTEs, this corresponds to about \$10 million in debt which could be allocated to projects in future Board decisions. Western's total debt is projected to be \$244 million in 2011.

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, this 40-year bullet debenture provides a cost effective source of funds to finance new capital construction.

Actual debt (net of the accumulated funds necessary to retire the Lambton Hall mortgage when it comes due in 2010) has increased by 12.6% since 2003, while revenues have grown by 41.2% over this same period, representing a decline in the ratio of debt to revenue from 17.92% to 14.29% in 2007. The forecast level of debt at April 30, 2008 is \$227.2 million or \$8,119 per FTE and the ratio of debt to revenue is projected to reach 26.35%.

	<u>Debt</u> \$000	Combined Revenue \$000	<u>FTE</u>	Revenue per FTE	Debt / Rev %
2003	105,228	587,280	25,986	\$22,600	17.92%
2004	119,393	680,353	27,027	\$25,180	17.55%
2005	123,516	713,272	27,464	\$25,980	17.32%
2006	120,301	764,543	27,879	\$27,430	15.74%
2007	118,506	829,130	28,164	\$29,440	14.29%
2008	227,200	862,295	27,981	\$30,820	26.35%



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, 2007, The University's accrued benefit liability relating to employee future benefits was \$188 million (in 2006 it was \$173 million).

Cost containment of active and post-retirement benefits has been a focus in recent negotiations with employee groups. Western has introduced designs that limit cost increases for active and retiree benefits including reduced age limit for dependent coverage and increased service requirements to qualify for post-retirement benefits.

Included in the 2007 Audited Combined Statement of Operations is an annual expense in the amount \$14.9 million (2006 - \$14.7 million) which represents the in-year growth of the University's accrued benefit liability. The University's 2007 Audited Combined Statement of Operations (within the Audited Financial Statements) can be found at:

www.uwo.ca/finance/finstate/2006_07/complete.pdf

A recent comparison among Canada's research-intensive universities (known as the G13) identified only five Universities with significant post-employment benefit obligations — ranging from \$96 million to \$329 million and an unweighted average of \$193 million. The ratio of obligations to total expenditures ranged from 17.8% to 34.9% with an unweighted average of 24.4%.

Employee Future Benefits (EFB) – Obligation and Expense as a % of Total University Expenses 2003 through 2007

	EFB Obligation (\$M)	EFB Expense (\$M)	Total University Expenses (\$M)	EFB Obligation as % of Total	EFB Expense as % of Total
2003	140.1	7.1	584	24.0%	1.2%
2004	148.3	8.1	625	23.7%	1.3%
2005	158.5	10.2	669	23.7%	1.5%
2006	173.2	14.7	722	24.0%	2.0%
2007	188.1	14.9	762	24.7%	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 approach to making estimates for deferred maintenance is different than used for estimates of debt or employee future benefits. There are actual contracts in place for the latter two that allow us to make either precise calculations (in the case of debt) or reasonable estimates (in the case of employee future benefits). For deferred maintenance that is not the case, and other ways have to be found 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 Division of Physical Plant and Capital Planning Services (PPD) estimates that on April 30, 2008 deferred maintenance at Western is \$150 million for nonresidential buildings, and \$10 million for residences. Slightly more than 50% of the deferred maintenance for nonresidential buildings relates to mechanical, electrical and infrastructure requirements. Other major components of the \$150 million include maintenance driven by code requirements and maintenance for roofs and windows.

This total does not yet include any amount for Robarts. PPD will be conducting a detailed review of the Robarts building and infrastructure to add to the estimate of deferred maintenance.

A common measure for determining the overall condition of facilities is the ratio of deferred maintenance to the replacement value of the facilities. The calculation for January 31, 2008 is as follows:

	Nonresidential <u>Buildings</u>	Residences
Current Replacement Value (CRV)	\$1,138 million	\$270 million
Deferred Maintenance (DM)	\$ 150 million	\$ 10 million
DM/CRV	13.2%	3.7%

Western's residences are in excellent condition, and our nonresidential campus buildings are comparable to other older universities in the province. The average age of buildings for Ontario Universities is more than 30 years. Western's average building age is 39.4 years. A ratio of 13.2% (deferred maintenance / current replacement value) for nonresidential 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 \$1.1 billion, spending on major maintenance for campus buildings at 2% should be in the range of \$22 million annually.

As described earlier, in the explanation of line G of Table 22, since 1996-97 the University has made an incremental base budget transfer of \$750,000 from the operating budget to the capital budget in support of Maintenance, Modernization, and Infrastructure (the MMI transfer). The total MMI transfer in 2008-09 will be \$10.25 million. The Administration is sometimes asked if the MMI transfer is too large. As lines G and E in Table 22 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 <u>2004-05</u>	Actual <u>2005-06</u>	Actual <u>2006-07</u>	Projected <u>2007-08</u>	Budget 2008-09
MMI	\$ 7.25 m	\$ 8.00m	\$ 8.75m	\$ 9.50m	\$ 10.25m
CRV	\$1,105m	\$1,107m	\$1,130m	\$1,213m	\$1,306m
Ratio	0.66%	0.72%	0.77%	0.78%	0.78%

The MMI transfer from the operating to the capital budget is less than half the 2% required to keep deferred maintenance from growing. The annual provincial allocation for facilities renewal at \$2.5 million does not close the gap. Increasing our transfer by \$750,000 per year, as required by Board policy, is essential to maintaining a safe and reliable campus infrastructure, which supports modern research and teaching, and sustains faculty, staff and student morale.

During the six years from 2000-01 to 2005-06, the ratio of maintenance spending to current replacement value averaged 1.1%. We thus know that deferred maintenance was growing during this period. During the last two years, 2006-07 and 2007-08, the ratio was about 2%, so 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. The University is very grateful for these one-time funds. In particular, one-time year-end spending in recent Provincial Budgets, including that of March 2008, have been very supportive of facilities renewal. We hope, however, given the ongoing nature of the problem, that the annual base allocation for facilities renewal can be increased substantially, to provide a predictable source of funding for what are long-term capital spending requirements.

The latest annual Facilities Condition Assessment Report issued by COU in March of 2007 states that annual renewal expenditures in the order of \$264 million are required just to maintain the facilities in their current condition. Western and COU have urged the Province to increase the annual facilities renewal transfer from \$26 million to \$200 million to help accommodate the required maintenance spending. Of this \$200 million, Western would receive about \$18 million, which amounts to 1.4% of the \$1.3 billion of current replacement value in 2008-09. Western has also urged the federal government to include universities in future infrastructure programs and, working with the Provinces, to be supportive of adequate annual spending on maintenance.