
*The University of Western Ontario***2010-11 Capital Budget**

A. Capital Expenditures

The Capital Budget for 2010-11 should be seen in the context of both recent trends in capital spending and the University's Long-Range Space Plan and the transition to Long-Range Space Plan 2 outlined in section C of the Operating Budget portion of this document. Table 22 sets out expenditures in the Capital Budget since 2006-07 in nine categories. Category 1 shows all new construction, while categories 2 to 7 show renovations to existing space. Category 1 expenditures are usually funded from general University funds, the major exceptions being projects funded all or in part from external research grants, private funds, government, student contributions, and Housing construction – the latter being funded from the Housing budget. Categories 2 to 5 are funded primarily from general University funds and government, while category 6 is funded from Housing operations, and category 7 is funded by the particular Ancillary undertaking the work. Categories 8 and 9 involve carrying costs and loan repayments, and other expenditures such as purchases of land and buildings and transfers from the capital budget for other purposes. Planned capital expenditures for 2010-11 total \$111.5 million.

Categories 2 to 5 involve **Maintenance, Modernization, and Infrastructure (MMI)** and are eligible to receive funds from the annual MMI transfer from the operating budget to the capital budget, which is budgeted to remain at \$10.25 million in 2010-11. 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) 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 Claudette MacKay-Lassonde Pavilion, for example) and require leadership by the Vice-President (Research). For most major projects in category 1 and some in category 2, there is a private fundraising component, so that the involvement of the Vice-President (External) is also 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 March 31, 2010, our buildings and infrastructure have a current replacement value (CRV) of approximately \$1,701 million, as follows:

	<u>CRV \$M</u>	<u>Square Metres</u>	<u>Major Buildings</u>
Major Non-Residential Buildings	1,285	477,919	63
Utilities and Infrastructure	<u>56</u>	<u> </u>	<u> </u>
Subtotal, Eligible for MMI	1,341	477,919	63
Housing	281	233,159	14
Other Ancillary Buildings	<u>79</u>	<u>42,300</u>	<u>6</u>
Total	1,701	753,378	83

At March 31, 2010, the University had 477,919 gross square metres in 63 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 \$56 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 (projects generally span more than one year). Of the 478,000 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 under this category include many devoted to the renewal of portions of our steam, water, and chilled water systems. In addition, replacement of a cooling tower at a cost of \$1.9 million, is planned to be

completed in fiscal 2010-11. 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 \$860,000 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 \$5.9 million in 2010-11, 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. There are no projects identified for 2010-11.

8. Carrying Costs and Debt Repayments. This category consists of principal repayments and interest on 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 purchase land in the proximity of our campus when available. The University will also look to acquire strategic physical assets, as in the purchase of the Siebens-Drake Institute building in 2002.

The last twelve 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 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 24 and 31. Annual changes in the Capital Reserve (line C) are driven by the differences between funding and expenditure (line B). Thus for 2008-09, line B shows \$(19,746), the difference between funding of \$89,882 (all figures in \$000) and expenditures of \$109,628. The capital reserve in line C increases or decreases by this same

amount of \$(19,746), from \$34,159 in 2007-08 to \$14,413 in 2008-09. When line B is negative, as in 2007-08 and 2008-09, 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 2008-09, MMI expenditures were \$40.4 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.3 billion. The ratio of the two is 3.1%, 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 incremental transfer of \$750,000 be continued until the annual transfer reaches \$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, because of the unforeseen budget challenges, the Board approved the maintenance of the annual transfer at \$10.25 million.

Line H of Table 22 shows the ratio of the annual MMI transfer to total MMI expenditures; for example, in 2008-09, the transfer was \$10.25 million and MMI expenditures were \$40.4 million, so the ratio in line H is 25.4%. Other sources of funding for MMI expenditures include the annual capital facilities renewal grant from the Province (about \$1.6 million in 2010-11); 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 2008-09 is \$24.9 million, or (in line K) 1.9% 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. While there has been an increase in one-time funding to support facilities renewal over the past few years, Western continues

to urge the Province to increase the annual system-wide allocation for facilities renewal, which has been set at \$40 million or less during the last decade. The recent Provincial Budget has signaled a reduction in facilities renewal funding for Colleges and Universities from \$40 million to \$26 million. Western's share of this funding will decline to \$1.6 million.

Table 23 reviews capital projects over \$1 million divided into three groups: projects completed in fiscal 2009 (11 projects with a total cost of \$110.4 million); projects currently underway (8 projects, \$202.0 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 estimated end of construction are shown. The third group details future projects planned or under consideration where sufficient information is not available to determine a total project cost or to estimate a date when Board approval might be sought.

The projects listed in Table 23 are the result of the Long-Range Space Plan and transition to Long-Range Space Plan 2 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.

B. Sources of Funding and Capital Expenditures in 2010-11

Table 24 displays sources of funding for budgeted capital expenditures with comparative projections for 2009-10, divided into seven major categories: federal, provincial and municipal government grants; funds from the Canada Foundation for Innovation (CFI) and the Ontario Ministry of Research and Innovation (OMRI) awarded on a competitive basis; funds transferred from Western's operating budget; investment income on reserves held in the Capital Budget; general fundraising; borrowing; and other sources, including internal recoveries. As compared to a decade ago, the University is more dependent on capital revenues from competitive research sources (e.g. CFI/OMRI), private fundraising, transfers from the operating budget and debt.

Table 25 shows expenditures in Categories 1 and 2, for 2009-10 (estimates as of February 28, 2010) and 2010-11 (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 2010-11.

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 2009-10.

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.

	<u>86-87</u>	<u>95-96</u>	<u>98-99</u>	<u>01-02</u>	<u>04-05</u>	<u>07-08</u>
1. Western	95.2%	85.8%	81.3%	74.2%	71.1%	75.4%
2. All Ontario Universities	88.4%	86.5%	86.0%	79.6%	73.0%	72.2%
3. Western’s “Relative Space Efficiency”	-6.8%	+0.7%	+4.7%	+5.4%	+1.9%	-3.2%

We may illustrate the three lines of the table with reference to the data for 2007-08. Line 1 shows that Western had actual space equal to 75.4% of the space which would be required to meet the space standards; the corresponding figure for all Ontario universities was 72.2%. The difference of line 2 minus line 1 is -3.2%. Western’s use of space is comparable to other Ontario Universities. Figure O shows the growth of Actual and Formula space since 1986-87 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 University’s Long-Range Space Planning – captured in the Report of the Provost’s Ad-Hoc Committee on Classroom and Common Space, which was presented to Senate and the Board in the spring of 2008 – 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.

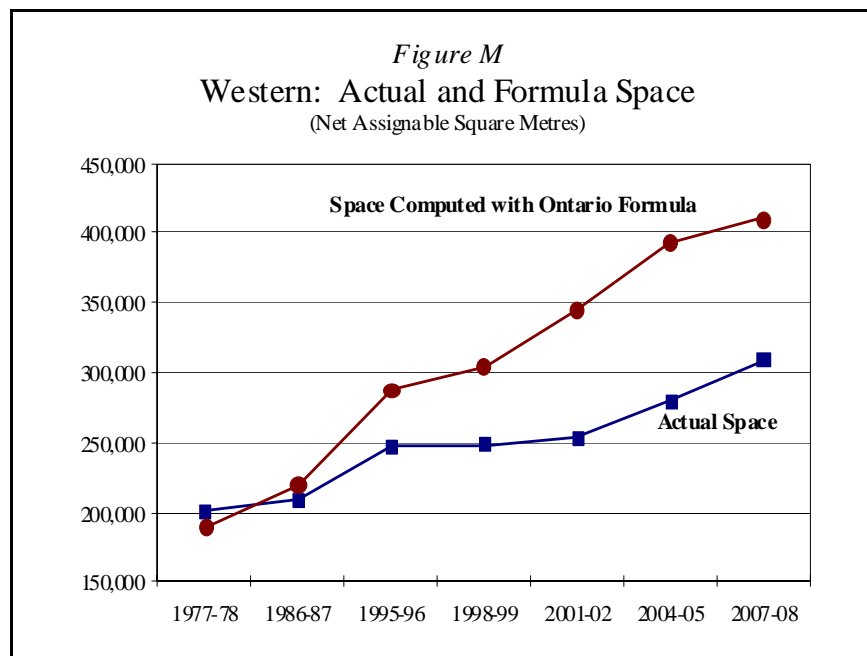


Table 22
CAPITAL BUDGET SUMMARY, 2006-07 TO 2010-11
(\$ 000)

Category	Purpose	Actual 2006-07	Actual 2007-08	Actual 2008-09	Projected 2009-10	Budget 2010-11
	New Construction					
1	New Construction (Table 25, line 13)	46,560	54,156	54,292	24,998	54,538
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 25, line 27)	21,153	18,192	25,526	28,437	20,289
3	Utilities and Infrastructure Projects (Table 26)	5,197	4,648	4,363	4,457	6,340
4	Modernization of Instructional and Research Facilities (Tables 27 and 29)	4,945	5,150	5,909	4,115	4,743
5	General Maintenance and Modernization Projects (Tables 27 and 29)	5,574	3,285	4,553	9,240	10,735
	Sub-Total MMI	36,869	31,275	40,351	46,249	42,107
	Other					
6	Housing Renovations (Tables 28 and 30)	3,071	10,592	6,772	5,616	5,943
7	Ancillary Projects (Tables 28 and 30)	988	2,179	2,395	274	0
8	Carrying Costs and Debt Repayments	7,002	774	1,396	4,314	3,600
9	Other Capital Expenditures	48	5,229	4,422	2,021	5,275
	Sub-Total Other	11,109	18,774	14,985	12,225	14,818
10	Total Expenditures	94,538	104,205	109,628	83,472	111,463

Line		Actual 2006-07	Actual 2007-08	Actual 2008-09	Projected 2009-10	Budget 2010-11
	Sources of Funding, Reserves, and Debt					
A	Total Sources of Funding, Including Debt (Table 24)	108,960	86,420	89,882	87,407	103,685
B	Sources of Funding less Expenditures	14,422	(17,785)	(19,746)	3,935	(7,778)
C	Capital Reserve, Year End (Table 31)	51,944	34,159	14,413	18,348	10,570
D	Capital Debt Outstanding, Year End (Table 31)	119,006	225,920	222,220	218,956	217,001
E	Replacement Value of Non-residential Buildings, Utilities & Infrastructure, \$M	1,130	1,213	1,291	1,341	1,397
F	MMI Expenditures/Replacement Value	3.3%	2.6%	3.1%	3.4%	3.0%
G	Annual MMI transfer from Operating to Capital Budget	8,750	9,500	10,250	10,250	10,250
H	MMI transfer/MMI Expenditures	23.7%	30.4%	25.4%	22.2%	24.3%
J	Estimate of Maintenance Expenditure	22,931	19,133	24,931	29,461	26,490
K	Maintenance Expenditure/Replacement Value	2.0%	1.6%	1.9%	2.2%	1.9%
L	Number of Major Buildings	77	76	80	83	84
M	Total Gross Square Meters (000s)	693	706	741	753	767

Category 8 does not include carrying costs and loan repayment for Residences and Apartments, UCC, Research Park, and the 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 2009				
2	Westminster Hall Related Renovations	2	Jun 06	Sep 09	
3	Western Student Recreation Centre	1	Oct 06	Feb 09	
4	The Claudette MacKay-Lassonde Pavilion (Green Building)	1	Apr 07	Sep 09	
5	Student Services Building	1	Apr 07	Nov 09	
6	Advanced Facility for Avian Research	1	Mar 08	Apr 09	
7	Paul Davenport Theatre Renovations	2	May 08	Jun 09	
8	Dental Sciences Bldg Realign Lower Ground Floors for Teaching Facility	4	Jun 08	Mar 09	
9	Institute for Chemicals & Fuels from Alternative Resources Bldg (ICFAR)	1	Jun 08	Jun 09	
10	Renovations to Robarts Building 7th Floor	2	Dec 08	May 09	
11	Improvements to Saugeen-Maitland Hall	6	May 09	Sep 09	
12	University Community Centre Renovations	2	Dec 09	Jan 10	
13	Total				110.4
14	Projects Underway				
15	Biological and Geological Sciences Building Renovations	2	Nov 05	Apr 10	
16	IT Network and Infrastructure Upgrades (VOIP)	2	May 08	Sep 12	
17	Stevenson Hall and Lawson Hall Renovations	2	Jan 09	Aug 11	
18	Follow on Renovations to Existing Facilities	2	May 09	Dec 10	
19	New Ivey Building	1	Aug 09	Jan 13	
20	Brain and Mind Renovations in Natural Sciences Building	2	Jan 10	Aug 10	
21	Chiller CPS 301 and Cooling Tower in Power Plant	3	Mar 10	Jun 10	
22	Physics and Astronomy Building Renovations	2	Mar 10	Jun 12	
23	Total				202.0
24	Future Projects - Planned and Under Consideration				
25	Replacement of Condensate Lines, Saugeen-Maitland Hall	6	May 10	Jun 10	
26	Addition to the Museum of Ontario Archaeology	1	Jun 10	Jan 11	
27	The Wind Engineering, Energy and Environment Facility (WindEEE)	1	Dec 10	Dec 11	
28	Support Facilities at the Advanced Manufacturing Park	1	TBD	TBD	
29	B&GS Courtyard Conversion into Common/Gathering Space	1	TBD	TBD	
30	Renewal of Current Ivey Facilities	2	TBD	TBD	
31	Modernization of Talbot College	2	TBD	TBD	
32	Residence Expansion	1	TBD	TBD	
33	Renewal of University College	2	TBD	TBD	
34	Utilities and Infrastructure Projects	3	Ongoing		
35	Campus Sustainability Initiatives	5	Ongoing		
36	Renewal of Schulich School of Medicine and Dentistry Facilities	1&2	TBD	TBD	
37	Renewal of TH, SEB, MB, HSA and Elborn	2	TBD	TBD	
38	Co-Generation	1&3	TBD	TBD	
39	Expansion of Medical School Facilities	1	TBD	TBD	
40	Industrial Collaboration Initiative	1	TBD	TBD	
41	Interdisciplinary Advanced Studies Building	1	TBD	TBD	
42	Library Facilities - Realignment and Expansion	1&2	TBD	TBD	
43	Family Medicine Building	1	TBD	TBD	
44	Asset Acquisitions	9	TBD	TBD	

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

		Projected 2009-10	Budget 2010-11
1	Government Grants		
2	Knowledge Infrastructure Program - New Ivey Building	11,500	38,500
3	MTCU Graduate Expansion Capital Grant	2,569	2,839
4	MTCU Annual Capital Grant (Facilities Renewal Program)	2,342	1,640
5	City of London - SuperBuild Projects	826	826
6	Provincial Grant - Institute for Chemicals & Fuels from Alternative Sources	900	60
7	Urban Works Reserve Fund	230	0
8	Sub-Total	18,367	43,865
9	CFI/OMRI Federal/Provincial Funding		
10	The Wind Engineering, Energy and Environment Facility (WindEEE)	65	9,353
11	Addition to the London Museum of Archaeology	85	2,145
12	The Claudette MacKay-Lassonde Pavilion (Green Building)	2,284	0
13	SuperBuild Projects	276	0
14	Robarts MRI Project - Cuddy Wing Renovations	73	0
15	Advanced Facility for Avian Research	59	0
16	Sub-Total	2,842	11,498
17	Operating Budget		
18	Operating Budget MMI Transfer - Base	10,250	10,250
19	Operating Budget MMI Transfer - Base (Ancillaries)	600	600
20	Operating Budget - CRC Transfer	976	1,008
21	Operating Budget - Incremental Space for Engineering in TEB	445	445
22	Operating Budget - One-Time Allocations	250	350
23	Medicine Operating Budget - Robarts 7th Floor Renovation Project	884	66
24	Science Operating Budget - Advanced Facility for Avian Research	75	0
25	Science Operating Budget - RISF - Material Sciences Addition	67	0
26	Science Operating Budget - Storage Facility at Environmental Science Field Station	45	0
27	Social Science Operating Budget - Advanced Facility for Avian Research	75	0
28	Ivey School Budget - Ivey Projects and Interest	74	0
29	Miscellaneous Faculty Budgets	30	82
30	Sub-Total	13,771	12,801
31	Interest Earned	140	87

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

		Projected 2009-10	Budget 2010-11
32	Fundraising		
33	New Ivey Building	5,145	3,145
34	Nursing Space Renovations	900	900
35	The Claudette MacKay-Lassonde Pavilion (Green Building)	565	565
36	Paul Davenport Theatre Renovations	544	500
37	SuperBuild Projects	321	370
38	Medical Science Building Renovations	400	200
39	Accessibility Funding	10	10
40	NCMRD Expansion	1,540	0
41	Clinical Skills Facility	95	0
42	Sub-Total	9,520	5,690
43	Borrowing		
44	Long-Range Space Plan	32,446	20,625
45	Western Student Recreation Centre	1,969	193
46	Sub-Total	34,415	20,818
47	Other		
48	Student Contributions - Western Student Recreation Centre	950	1,007
49	Energy Conservation Incentives	45	50
50	Bayfield Hall Recovery - Ancillary Contribution	676	0
51	Projects Funded by Housing	4,940	5,943
52	Projects Funded by Units	1,560	1,926
53	Projects Funded by Ancillaries	181	0
54	Sub-Total	8,352	8,926
55	Total Sources of Funding	87,407	103,685

Table 25

CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS
2009-10 AND 2010-11
(\$000)

		Projected 2009-10	Budget 2010-11
1	<i>Category 1: New Construction</i>		
2	New Ivey Building	11,543	39,617
3	The Wind Engineering, Energy and Environment Facility (WindEEE)	65	9,353
4	Support Facilities at the Advanced Manufacturing Park	0	2,500
5	Addition to the London Museum of Archaeology	85	2,145
6	The Claudette MacKay-Lassonde Pavilion (Green Building)	3,109	463
7	Student Services Building	5,366	400
8	Institute for Chemicals & Fuels from Alternative Resources Facility (ICFAR)	945	60
9	Western Student Recreation Centre (WSRC)	1,882	0
10	Support Services Building	1,453	0
11	Advanced Facility for Avian Research (AFAR)	409	0
12	Material Sciences Addition	141	0
13	<i>Total, Category 1</i>	<i>24,998</i>	<i>54,538</i>
14	<i>Category 2: Major Building Renovations</i>		
15	Physics and Astronomy Building Renovations	2,696	8,187
16	Stevenson Hall and Lawson Hall Renovations	7,775	7,095
17	IT Network and Infrastructure Upgrades (VOIP)	1,858	1,550
18	Support Services Building Follow-on Renovations	235	1,500
19	Brain and Mind Renovations in Natural Sciences Building	930	1,445
20	Biological and Geological Sciences Building Renovations	5,548	246
21	University Community Centre Renovations	6,871	200
22	Renovations to Robarts Building 7th Floor	884	66
23	Paul Davenport Theatre Renovations	1,402	0
24	Westminster Hall Related Renovations	163	0
25	Robarts MRI Project - Cuddy Wing Renovations	73	0
26	Althouse Faculty of Education Building Renovations	2	0
27	<i>Total, Category 2</i>	<i>28,437</i>	<i>20,289</i>

Table 26
CAPITAL EXPENDITURES FOR UTILITIES AND INFRASTRUCTURE PROJECTS
2009-10 AND 2010-11
(\$000)

		Projected 2009-10	Budget 2010-11
1	<i>Category 3: Utilities and Infrastructure Projects</i>		
2	CG - Electrical Infrastructure Continuing Program	888	1,455
3	PP - Chiller CPS 301 and Cooling Tower Replacement	800	1,100
4	PP - Replacement of Equipment in Boiler Plant	0	750
5	CG - Energy Conservation Investment (Lighting)	200	450
6	CG - Utility Conservation Investment (Exit and Street Lighting)	0	400
7	PP - Campus Wide Energy Study including Power Plant	0	350
8	PP - Replacement of Joy Compressor	0	300
9	PP - Replacement and Upgrade of High Pressure Steam Line Components	250	250
10	PP - Engineering and Design for Chillers and Cooling Towers	0	200
11	CG - Upgrade of Controls	0	170
12	CG - Storm and Sanitary Sewer Upgrades	250	150
13	PP - Motor Conversion and Design for Standby Gen Conversion to 600V	0	150
14	CG - Chilled Water Capacity Upgrade	150	100
15	PP - Engineering and Design for Replacement of Boilers 4 and 5	0	100
16	CG - Renewable Energy Initiatives	0	100
17	PP - Feedwater Pump Replacement	30	80
18	CG - Chilled Water Valve Replacement - Buildings	60	75
19	PP - Design for Upgrading Fuel Systems & Replacement of Condensate Receivers	0	50
20	PP - Power Plant Energy Profile and Metering	0	50
21	CG - Building Steam Distribution Systems Upgrades	50	30
22	CG - Upgrade Compressed Air Lines - Mains	47	30
23	PP - New Emergency Generator	651	0
24	CG - Steamline Insulation and Heat Recovery Initiatives	464	0
25	PP - Replacement of Boiler Controls	248	0
26	PP - Upgrade Natural Gas Valve System	220	0
27	CG - Chiller CPN 303 and Cooling Tower Replacement in North Chiller Plant	125	0
28	PP - Removal of Chillers 301 and 302 -- and Flash Tank Replacements	24	0
29	Total, Category 3	4,457	6,340

Table 27
EXPENDITURES IN 2010-11 FOR INSTRUCTIONAL/RESEARCH FACILITIES
AND GENERAL MAINTENANCE
(\$000)

		Budget 2010-11
1	Category 4: Modernization of Instructional and Research Facilities	
2	DSB - Lab Renovations in Rooms 2017 to 2021F	670
3	MG - McIntosh Gallery Modernization	500
4	CG - Graduate Student Furniture for Faculty of Science Departments	413
5	CG - GU Classroom Upgrades	350
6	PSFS - Relocation of LIDAR Facility to Environmental Science Field Station	345
7	CG - IT Network Backbone Upgrades and Improvements	250
8	SSC - Renovations of Research and Graduate Space in 4200 Block	195
9	DSB - Modernization of Classroom 2016	190
10	UC - Renovations to Rooms 113 and 114	188
11	DSB - Renovations to Lab in Rooms 2024 to 2025A	153
12	DSB - Renovations to Rooms 2022, 2023, 2025 and 2026	133
13	RRI - Lab Renovations in Room 4213	119
14	TEB - Lab Renovations in Room 417	109
15	SSC - Reconfigure Dean's Suite to Create Additional Offices and Improve Efficiencies	103
16	SEB - Undergraduate Hydraulics Lab Renovations in Rooms 29 and 31	96
17	B&GS - Upgrade Furniture in Faculty and Staff Offices	90
18	EC - Renovations to Child Language Lab Rooms 2270, 2273 and 2276	87
19	DSB - Space Conversion to Rooms 00045 - 00048	84
20	LB - Renovations to Classrooms 36 and 38 to Accommodate Enrolment Expansion	80
21	17 Other Projects	588
22	Total, Category 4	4,743
23	Category 5: General Maintenance and Modernization Projects	
24	CG - Unforeseen Projects	860
25	SLB - Window Replacement	800
26	CG - Roof Replacement	600
27	CG - Improve Access for Physically Challenged	365
28	WL - Skylight Replacement	350
29	CG - VFA Assessment	300
30	CG - Exhaust Dispersement Study on Campus	215
31	EC - Replacement of Fan System 105	200
32	CG - Drinking Fountain Installation	200
33	CG - Occupational Health and Safety Projects	200
34	B&GS - Window Replacement	200
35	CG - Contract and Design Standards and Project Tracking	200
36	CG - Campus Asbestos Inventory	200
37	CG - Way Finding and Signs	200
38	CG - Building Fire Alarm System Upgrades	150
39	SSC - Replacement of Concrete Stairs and Railing	150
40	CG - Installation of Card Access Systems to Buildings	150
41	CG - Upgrades to Existing Traffic Signals	150
42	CG - Sidewalk Repairs	150
43	83 Other Projects	5,095
44	Total, Category 5	10,735

Table 28
EXPENDITURES IN 2010-11 FOR HOUSING AND ANCILLARIES
(\$000)

		Budget 2010-11
1	<i>Category 6: Housing Renovations</i>	
2	Replace Fan Coils and Horizontal Condensate Lines, Saugeen-Maitland Hall	2,550
3	Replace Hot Water Main, Lambton Hall	600
4	Contingency Projects, General	470
5	Replace Transformer, Sydenham Hall	270
6	Refurbish Kitchen and Bathrooms, Alumni House	250
7	Replace Fridges, Bayfield Hall	200
8	Replace Fridges, Essex Hall	115
9	Replace Air Handling Units, Saugeen-Maitland Hall	100
10	Furnace Replacement, Platt's Lane Estates	100
11	Replace Exterior Entry Doors and Stair Treads, Platt's Lane Estates	90
12	Replace Mattresses, Medway Hall	85
13	Replace Mattresses, Sydenham Hall	85
14	Flooring Replacement, Glenmore Apartment Complex	70
15	Replace Mattresses, Alumni House	60
16	Asphalt and Concrete Repairs, Medway Hall	55
17	Air Handling Study, Sydenham Hall	50
18	Painting of Suites, Essex Hall	50
19	Restoration of Exterior Brick Due to Spalling, Saugeen-Maitland Hall	50
20	Restoration of Exterior Brick Due to Spalling, Bayfield Hall	50
21	Contingency Projects, Lambton Hall	50
22	Replace Carpets and Tile Floors Allowance, Platt's Lane Estates	50
23	Plumbing Improvements, Delaware Hall	35
24	Fire Alarm System Design, Platt's Lane Estates	35
25	Restoration of Upper Storey Walls, Saugeen-Maitland Hall	30
26	Contingency Projects, Platt's Lane Estates	25
27	Asbestos Removal and Mould Abatement, Platt's Lane Estates	25
28	Washroom Improvements, Medway Hall	20
29	Replace Asbestos Panels in Tunnel By Garbage Room, Sydenham Hall	20
30	Replace Drapes, Platt's Lane Estates	20
31	Replace Compressors, Loading Dock and Walk-In Freezer, Saugeen-Maitland Hall	18
32	Add Sprinkler in Recycling Room, Sydenham Hall	16
33	Arc Flash Study, Platt's Lane Estates	16
34	Furnace Bi-Annual Louvre Cleaning, Elgin Hall	15
35	Electrical Study, Saugeen-Maitland Hall	15
36	Installation of Bat Exit Valves, Platt's Lane Estates	15
37	Replace Bathtubs, Platt's Lane Estates	15
38	Design, Platt's Lane Estates	15
39	30 Other Projects	208
40	Total, Category 6	5,943
41	<i>Category 7: Ancillary Projects</i>	
42	No Projects in this Cycle	0
43	Total, Category 7	0

Table 29
EXPENDITURES IN 2009-10 FOR INSTRUCTIONAL/RESEARCH FACILITIES
AND GENERAL MAINTENANCE
(\$000)

		Projected 2009-10
1	Category 4: Modernization of Instructional and Research Facilities	
2	MSB - Renovations to Rooms 150 and 150G	406
3	CG - GU Classroom Upgrades	350
4	CG - IT Network Backbone Upgrades and Improvements	250
5	MSB - Create Research Space in Physiology and Pharmacology	216
6	DSB - Lab and Space Renovations to Rooms 5001 to 5003A	150
7	WSC - Stable Isotope Lab Renovations	138
8	WL - Interior Renovations to Rooms M2, M3, 127 and 128	130
9	HSA - Interior Renovations to Rooms 45 to 45A	112
10	SBA - Space Conversion to Room 1G29	110
11	SpH - Construct Faculty Offices	109
12	MB - Modernization of VonKuster Hall	100
13	SEB - Security Upgrade	100
14	WL - Create Offices for Archivists	100
15	SSC - Create Graduate Student Computer Lab and Multi Media Lab	95
16	FEB - Convert Gym Mezzanine to Graduate Space	95
17	VAC - Space for the PhD Program in Visual Arts and Culture	89
18	FEB - Improvements to Pre-Service Office Suite	86
19	WSC - Renovations to Create Faculty Offices for Statistics and Actuarial Sciences	86
20	UC - Create Graduate Student Space in French	85
21	51 Other Projects	1,308
22	Total, Category 4	4,115
23	Category 5: General Maintenance and Modernization Projects	
24	CG - Roof Replacement	1,168
25	SLB - ITS and Server Room Upgrades	460
26	TRAC - Road and Sidewalk Upgrades	400
27	RRI - Building Improvements	382
28	CG - Replacement of Galvanized Water Piping	366
29	SLB - Window Replacement	350
30	CG - Upgrade of Existing Radio System	350
31	GLR - Building Upgrades	330
32	CG - Utility Sub-Metering	300
33	CG - Real Time Metering	300
34	CG - Repairs and Replacement of Autoclaves	200
35	LB - Elevator 'B' Replacement	178
36	SSC - Windows Replacement	178
37	SSC - Electric Heaters on a Control Panel	174
38	BIO - Relocation of Standby Generator	150
39	CG - Asbestos and Mould Abatement	150
40	CG - Upgrade of Existing Traffic Signals	150
41	CG - Installation of Card Access Systems to Buildings	144
42	CG - Sidewalk Repairs	130
43	80 Other Projects	3,380
44	Total, Category 5	9,240

Table 30
EXPENDITURES IN 2009-10 FOR HOUSING AND ANCILLARIES
(\$000)

		Projected 2009-10
1	<i>Category 6: Housing Renovations</i>	
2	Replace Fan Coils and Upgrade Kitchen and Washrooms, Saugeen-Maitland Hall	2,482
3	Bayfield Hall Renovations	676
4	Replace Watermains, Bathrooms and Plumbing, Platt's Lane Estates	250
5	Plumbing Improvements, Sydenham Hall	171
6	Replace Transformer, Sydenham Hall	136
7	Contingency Projects, Glenmore Apartment Complex	118
8	Replace Stairwell Ceiling Tile, Medway Hall	104
9	Electrical and Mechanical Upgrades, Delaware Hall	100
10	Replace Exterior Apartment Doors and Stair Treads, Platt's Lane Estates	90
11	Flooring Replacement, Glenmore Apartment Complex	90
12	Replace Switchgear and Transformer, Glenmore Apartment Complex	89
13	TSSA Directives, Sydenham Hall	87
14	Asphalt and Concrete Repairs, Glenmore Apartment Complex	70
15	Townhouse Furnace Replacement, Platt's Lane Estates	68
16	Replace Street Lighting, Platt's Lane Estates	52
17	Replace Chain Link Fencing, Platt's Lane Estates	50
18	Flooring Replacement, Platt's Lane Estates	50
19	Replace Condensing Units, Lambton Hall	50
20	Kitchen Assessment and Design, Essex Hall	50
21	Recycle Room Renovations, Saugeen-Maitland Hall	50
22	Supply and Install Mixing Valves For Water Heaters, Platt's Lane Estates	40
23	Fire Alarm System Assessment, Platt's Lane Estates	35
24	Plumbing Improvements, Delaware Hall	30
25	Replace Pianos, Delaware Hall	30
26	Design of Shower Hot and Cold Vertical Lines, Saugeen-Maitland Hall	30
27	Air Handling Study, Sydenham Hall	30
28	Replace Street Lighting, Platt's Lane Estates	25
29	Contingency Projects, Platt's Lane Estates	25
30	Replace Asbestos Panels in Tunnel, Sydenham Hall	20
31	Washroom Improvements, Medway Hall	20
32	Replace Flushometers, Delaware Hall	18
33	Replace Grease Trap, Perth Hall	16
34	59 Other Projects - Various Residences	464
35	<i>Total, Category 6</i>	<i>5,616</i>
36	<i>Category 7: Ancillary Projects</i>	
37	CG - Springett Parking Lot Expansion	116
38	Campus Recreation Furnishings and Equipment for WSRC	93
39	TDWS - Field Speaker Replacement	26
40	TRAC - Dressing Room Upgrades	21
41	3 Other Projects	18
42	<i>Total, Category 7</i>	<i>274</i>

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

		Actual 2006-07	Actual 2007-08	Actual 2008-09	Projected 2009-10	Budget 2010-11
1	A. Capital Reserves					
2	General Capital Fund	11,386	14,176	24,146	13,725	6,626
3	Designated Capital Fund	39,012	18,385	(11,355)	3,001	2,322
4	Gibbons Property	1,546	1,598	1,622	1,622	1,622
5	Total Capital Reserves	51,944	34,159	14,413	18,348	10,570

		Actual 2006-07	Actual 2007-08	Actual 2008-09	Projected 2009-10	Budget 2010-11
6	B. Capital Debt					
7	General Capital Fund	1,500	800	0	0	0
8	New Construction, Major Renovations, & Other	1,540	12,940	25,040	57,915	78,733
9	Housing	97,579	93,992	92,792	88,241	81,968
10	Robarts Capital Leases	0	2,118	1,538	900	200
12	Research Park	14,087	14,170	22,570	32,900	32,600
13	Richard Ivey School of Business Foundation	4,300	3,800	3,300	2,800	2,300
14	Unused and Invested Debenture Proceeds	0	98,100	76,980	36,200	21,200
15	Total Capital Debt	119,006	225,920	222,220	218,956	217,001

Line 2 represents the capital reserve fund mandated by the Board and carryforward funds for smaller capital projects.

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

Table 32
DESCRIPTION OF BUILDING/PROJECT CODES USED IN TABLES 22 through 31

	<i>Code</i>	<i>Description</i>
1	3M	3M Centre
2	AH	Alumni Hall
3	BEB	Bio-Engineering Building
4	BLWT	Boundary Layer Wind Tunnel
5	B&GS	Biological and Geological Sciences Building
6	C-MSC	Campus Miscellaneous
7	C-RD	Campus Roads
8	CG	Campus General
9	ChB	Chemistry Building
10	CSB	Dr. Don Rix Clinicals Skills Building
11	DSB	Dental Sciences Building
12	EC	Elborn College
13	ELGO	Elginfield Observatory
14	FEB	Althouse Faculty of Education Building
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	MG	McIntosh Gallery
25	MSA	Material Sciences Addition
26	MSB	Medical Sciences Building
27	NCB	North Campus Building
28	NCMRD	National Centre for Management Research and Development
29	NSC	Natural Sciences Centre
30	OH&S	Occupational Health and Safety
31	PP	Power Plant
32	PSFS	Environmental Field Station
33	P&AB	Physics and Astronomy Building
34	RRI	Robarts Research Institute
35	SBA	School of Business Administration Building
36	SDRI	Siebens-Drake Research Institute
37	SEB	Spencer Engineering Building
38	SH	Somerville House
39	SLB	Stevenson-Lawson Building
40	SpH	Spencer Hall
41	SSB	Support Services Building
42	SSC	Social Sciences Centre
43	Stab	Staging Building
44	TC	Talbot College
45	TDWS	TD Waterhouse Stadium
46	TEB	Thompson Engineering Building
47	TH	Thames Hall
48	TL	Taylor Library
49	TRAC	Thompson Recreation and Athletic Centre
50	UC	University College
51	UCC	University Community Centre
52	USC	University Students Council
53	VAC	John Labatt Visual Arts Centre
54	WC	Westminster College
55	WL	Weldon Library
56	WSC	Western Science Centre
57	WSRC	Western Student Recreation Centre