The University of Western Ontario

2009-10 Capital Budget

A. The Evolution of Capital Expenditures

The Capital Budget for 2009-10 should be seen in the context of both recent trends in capital spending and the University's proposed 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 2005-06 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. Category 6 is funded from Housing operations, and category 7 is funded by the particular Ancillary undertaking the work. Categories 8 and 9 involve carrying costs and loan repayments, and other expenditures such as purchases of land and buildings and transfers from the capital budget for other purposes. Capital expenditures for 2009-10 total \$75.1 million.

As indicated earlier in this document, we are expecting substantial infrastructure funding from the Federal and Provincial governments. As the details are not yet known, projects have not been incorporated in the 2009-10 Capital Budget.

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 at \$10.25 million in 2009-10. 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 categories 1 and 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, 2009, our buildings and infrastructure have a current replacement value (CRV) of approximately \$1,650 million, as follows:

		Square	Major
	<u>CRV \$M</u>	Metres	Buildings
Major Non-Residential Buildings	1,236	466,326	60
Utilities and Infrastructure	55		
Subtotal, Eligible for MMI	1,291	466,326	60
Housing	280	233,159	14
Other Ancillary Buildings	<u> </u>	42,300	6
Total	1,650	741,785	80

At March 31, 2009, the University had 466,326 gross square metres in 60 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 \$55 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 466,000 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 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 a number of projects devoted to the renewal of portions of our steam, water and chilled water systems. In addition, replacement of South and North cooling towers at a cost of \$3.1 million, is planned for fiscal year 2009-10. Major projects in future years will include continued work on electrical distribution systems and cooling tower and 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. 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 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 is included in category 1. Maintenance and modernization expenditures, projected to be \$4.8 million in 2009-10, are funded from Housing revenues and debt. Housing has always set aside adequate maintenance funds and does not have the significant deferred maintenance on its buildings which may be observed in many other University buildings.

7. Ancillary Projects. This category includes capital expenditures on Ancillaries other than Housing, including Hospitality Services, the Book Store, Parking Services, student fee-funded units, self-funded support units, and self-funded research units. These units pay a charge to the University for the space they occupy.

8. Carrying Costs and Debt Repayments. This category consists of principal repayments and interest on capital projects.

9. Other Capital Expenditures. This category includes asset acquisitions such as the \$7.7 million for 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 the University property as the lands come available. Western will continue to seek to protect the Regional Facilities zoning around us and to buy land near our campus when it comes up for sale. The University may also acquire strategic physical assets, as in the purchase of the Siebens-Drake Research 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 2007-08, line B shows \$(17,785), the difference between funding of \$86,420 (all figures in \$000) and expenditures of \$104,205. The capital reserve in line C increases or decreases by this same amount of \$(17,785), from \$51,944 in 2006-07 to \$34,159 in 2007-08. When line B is negative, as in 2005-06 and 2007-08, 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 2007-08, MMI expenditures were \$31.3 million, while the estimated replacement value of non-residential buildings, utilities, and infrastructure was \$1.2 billion. The ratio of the two is 2.6%, 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. For 2009-10 and 2010-11, we are recommending that the annual transfer be maintained at \$10.25 million.

Line H of Table 22 shows the ratio of the annual MMI transfer to total MMI expenditures; for example, in 2007-08, the transfer was \$9.5 million and MMI expenditures were \$31.3 million, so the ratio in line H is 30.4%. 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 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 2007-08 is \$19.1 million, or (in line K) 1.6% of the replacement value in that year. A standard target in industry for this ratio is 2.0%: if large buildings last an average of 50

years, then on average maintenance spending should be 2.0% of replacement value. When the actual ratio is consistently lower than 2.0%, as has been the case at Western and most Canadian universities over the last three decades, the level of deferred maintenance will grow. 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 allocation for facilities renewal, which has often been set at \$2.4 million or less during the last decade. The recent Federal and Provincial budgets have committed significant one-time funding to the infrastructure program for universities which will support the rapid modernization of aging facilities on campus. As the details are not yet known, projects associated with the Federal and Provincial Infrastructure Programs have not been incorporated in the 2009-10 Capital Budget.

Table 23 reviews capital projects over \$1 million divided into three groups: projects completed in fiscal 2008 (11 projects with a total cost of \$83.0 million); projects currently underway (15 projects, \$176.1 million), and future projects: planned or under consideration (24 projects, \$997.3 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 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 2009-10

Table 24 displays sources of funding for budgeted capital expenditures with estimates of comparative data for 2008-09, divided into seven 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 2008-09 (estimates as of February 28, 2009) and 2009-10 (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 2009-10.

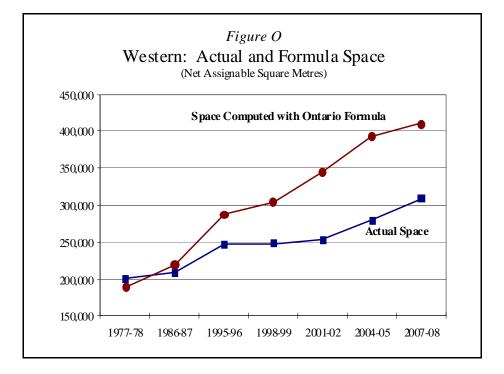
Table 27 shows expenditures in categories 4 and 5, while Table 28 shows expenditures in categories 6 and 7. For categories 4 to 6, certain smaller projects are grouped together; the full list of projects is available from the Division of Physical Plant and Capital Planning Services. Tables 29 and 30 show data on Categories 4 to 7 with estimates for 2008-09.

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.

	86-87	<u>95-96</u>	<u>98-99</u>	01-02	04-05	07-08
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 Plans 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.



CAPITAL BUDGET SUMMARY, 2005-06 TO 2009-10 (\$ 000)

Category	Purpose	Actual 2005-06	Actual 2006-07	Actual 2007-08	Projected 2008-09	Budget 2009-10
	New Construction					
1	New Construction (Table 25, line 12)	33,850	46,560	54,156	61,257	7,820
	Maintenance, Modernization, and Infrastructure (MMI)					
2	Major Building Renovations (Table 25, line 28)	11,654	21,153	18,192	29,046	31,536
3	Utilities and Infrastructure Projects (Table 26)	3,313	5,197	4,648	4,865	7,187
4	Modernization of Instructional and Research Facilities (Tables 27 and 29)	6,124	4,945	5,150	6,124	4,283
5	General Maintenance and Modernization Projects (Tables 27 and 29)	4,347	5,574	3,285	5,626	11,780
	Sub-Total MMI	25,438	36,869	31,275	45,661	54,786
	Other					
6	Housing Renovations (Tables 28 and 30)	2,092	3,071	10,592	8,367	4,776
7	Ancillary Projects (Tables 28 and 30)	890	988	2,179	2,373	130
8	Carrying Costs and Debt Repayments	21,134	7,002	774	874	3,574
9	Other Capital Expenditures	7,717	48	5,229	5,066	4,011
	Sub-Total Other	31,833	11,109	18,774	16,680	12,491
10	Total Expenditures	91,121	94,538	104,205	123,598	75,097

Line		Actual 2005-06	Actual 2006-07	Actual 2007-08	Projected 2008-09	Budget 2009-10
	Sources of Funding, Reserves, and Debt					
А	Total Sources of Funding, Including Debt (Table 24)	90,576	108,960	86,420	112,266	62,883
В	Sources of Funding less Expenditures	(545)	14,422	(17,785)	(11,332)	(12,214)
С	Capital Reserve, Year End (Table 31)	37,522	51,944	34,159	22,827	10,613
D	Capital Debt Outstanding, Year End (Table 31)	120,901	119,006	225,920	222,114	218,673
Е	Replacement Value of Non-residential Buildings, Utilities & Infrastructure, \$M	1,107	1,130	1,213	1,291	1,351
F	MMI Expenditures/Replacement Value	2.3%	3.3%	2.6%	3.5%	4.1%
G	Annual MMI transfer from Operating to Capital Budget	8,000	8,750	9,500	10,250	10,250
Н	MMI transfer/MMI Expenditures	31.4%	23.7%	30.4%	22.4%	18.7%
J	Estimate of Maintenance Expenditure	14,917	22,931	19,133	28,399	35,096
К	Maintenance Expenditure/Replacement Value	1.3%	2.0%	1.6%	2.2%	2.6%
L	Number of Major Buildings	78	77	76	80	83
М	Total Gross Square Meters (000s)	673	693	706	741	753

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 or Category 4.

Table 23CAPITAL PROJECTS OVER \$1 MILLION

		Category	Start	End	Cost
					(\$M)
1	Projects Completed in 2008				
2	Chiller CPS303 and Cooling Tower in Power Plant	3	Mar 06	Jun 08	
3	Dental Clinic Renovations in Dental Science Building (Phase II and III)	2	May 06	Jul 08	
4	Bayfield Hall Renovations	6	May 06	Aug 08	
5	Support Services Building	1	Jun 06	Sep 08	
6	Althouse Faculty of Education Building Renovations	2	Aug 06	Apr 08	
7	Material Sciences Addition	1	Nov 06	Aug 08	
8	Electrical Infrastructure	3	May 07	May 08	
9	Western Road Expansion	9	May 07	Jul 08	
10	Install Primary/Secondary Pumping Station	3	May 07	Oct 08	
11	Robarts MRI Project - Cuddy Wing Renovations	2	Jan 08	Aug 08	
12	Recirculation Lines Replacement in Saugeen-Maitland Hall	6	May 08	Aug 08	
13	Total				83.0
14	Projects Underway				
15	Biological and Geological Sciences Building Renovations	2	Nov 05	Apr 10	
16	Westminster Hall Related Renovations	2	Jun 06	Apr 09	
17	Western Student Recreation Centre	1	Oct 06	Feb 09	
18	Student Services Building	1	Apr 07	Aug 09	
19	The Claudette MacKay-Lassonde Pavilion (Green Building)	1	Apr 07	Sep 09	
20	Advanced Facility for Avian Research	1	Mar 08	Apr 09	
21	Electrical Infrastructure	3	May 08	May 09	
22	Talbot Theatre Renovations	2	May 08	Jun 09	
23	IT Network and Infrastructure Upgrades (VOIP)	2	May 08	Sep 12	
24	Teaching Lab Upgrades in the Chemistry Addition	4	Jun 08	Jan 09	
25	Dental Sciences Bldg Rearrange Lower Floors for Teaching Facility	4	Jun 08	Mar 09	
26	Institute for Chemicals and Fuels from Alternative Resources Facility	4	Jun 08	May 09	
20	Renovations to Robarts Building 7th Floor	2	Dec 08	May 09 May 09	
27	Stevenson Hall and Lawson Hall Renovations	2	Mar 09	Mar 11	
28 29		2	Dec 09	Jan 10	
30	University Community Centre Renovations Total	2	Dec 09	Jan 10	176.1
21					
31	Future Projects - Planned and Under Consideration				
32	Replace Fan Coils & Kitchen Upgrades in Saugeen-Maitland Hall	6	May 09	Sep 09	
33	Physics and Astronomy Building Renovations	2	May 09	Mar 11	
34	Brain and Mind Renovations in Natural Sciences Building	2	May 09	Nov 09	
35	Chiller CPN 303 and Cooling Tower in North Chiller Plant	3	May 09	Apr 10	
36	Chiller CPS 301 and Cooling Tower in Power Plant	3	May 09	Apr 10	
37	Roof Replacement	5	May 09	Apr 10	
38	Follow on Renovations to Existing Facilities	2	May 09	Dec 10	
39	Services Building Renovations for FIMS	2	May 09	Mar 11	
40	Utilities and Infrastructure Projects	3	May 09	Apr 12	
41	Campus Sustainability Initiatives	5	Aug 09	Mar 11	
42	Installation of a Co-Generation System	3	Oct 09	Mar 11	
43	Nursing Space Renovations	2	TBD	TBD	
44	New Ivey School Building	1	TBD	TBD	
45	Existing Ivey Building Renovations	2	TBD	TBD	
46	Expansion and Renewal of Medical and Dental Facilities	1&2	TBD	TBD	
47	Convert B&GS Courtyard into Gathering Space	1	TBD	TBD	
48	Proposed Major Research Initiatives	1	TBD	TBD	
49	Renewal of UC, MG, SEB, TH, MB, EC and Nursing Facilities	2	TBD	TBD	
50	New Facilities for Chemistry and Brain and Mind	1	TBD	TBD	
51	Consolidation of Psychology at Westminster Campus	1	TBD	TBD	
52	Athletic Facility	1	TBD	TBD	
53	Performing Arts Facility	1	TBD	TBD	
54	Asset Acquisitions	9	TBD	TBD	
55	Accessibility Act (AODA)	,	TBD	TBD	

CAPITAL BUDGET: SOURCES OF FUNDING (\$000)

		Projected 2008-09	Budget 2009-10
1	Government Grants		
2	MTCU Annual Capital Grant (Facilities Renewal Program)	2,424	2,424
3	MTCU Graduate Expansion Capital Grant	1,700	2,200
4	City of London - SuperBuild Projects	826	826
5	MTCU Special Capital Grant (University Capital Renewal Funding)	18,090	0
6	Provincial Grant - Institute for Chemicals & Fuels from Alternative Sources	3,600	0
7	Urban Works Reserve Fund	0	230
8	Sub-Total	26,640	5,680
9	CFI/OMRI Federal/Provincial Funding		
10	The Claudette MacKay-Lassonde Pavilion (Green Building)	3,600	3,600
11	Advanced Facility for Avian Research	4,693	121
12	Robarts MRI Project - Cuddy Wing Renovations	2,246	0
13	Biological and Geological Sciences Building Renovations	240	0
14	Biotron - New Facility	205	0
15	West Valley Building	100	0
16	Sub-Total	11,084	3,721
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	1,000	976
21	Operating Budget - Incremental Space for Engineering in TEB	445	445
22	Operating Budget - FFICR Transfer	3,000	0
23	Operating Budget - One-Time Allocations	1,730	0
24	Operating Budget - Robarts Transition Fund Renovations	631	0
25	Operating Self Insurance Reserve - Talbot College Fire Damage	207	0
26	Medicine Operating Budget - Robarts 7th Floor Renovation Project	2,900	0
27	Medicine Operating Budget - Medical Science Building Renovations	500	0
28	Medicine Operating Budget - Rearrange Lower Ground Floors for Teaching Facility	370	0
29	Ivey School Budget - Ivey Projects and Interest	104	74
30	Science Operating Budget - RISF - Material Sciences Addition	167	0
31	Science Operating Budget - Advanced Facility for Avian Research	75	0
32	Science Operating Budget - Institute for Chemicals & Fuels from Alternative Sources	45	0
33	Social Science Operating Budget - Advanced Facility for Avian Research	75	0
		0	30
34	Miscellaneous Faculty Budgets	0	50

CAPITAL BUDGET: SOURCES OF FUNDING (\$000)

		Projected 2008-09	Budget 2009-10
36	Interest Earned	688	139
37	Fundraising		
38	Nursing Space Renovations	0	1,800
39	The Claudette MacKay-Lassonde Pavilion (Green Building)	300	700
40	Talbot Theatre Renovations	500	500
41	Biological and Geological Sciences Building Renovations	0	500
42	Medical Science Building Renovations	500	400
43	SuperBuild Projects	300	300
44	ING Leadership Centre (TSX) Leasehold Improvements	108	20
45	Law Building Expansion and Renovations	147	0
46	Sub-Total	1,855	4,220
47	Borrowing		
48	Long-Range Space Plan 1	19,673	28,450
49	Western Student Recreation Centre	13,135	309
50	Bayfield Hall Renovations	3,370	130
51	Sub-Total	36,178	28,889
52	Other		
53	Student Contributions - Western Student Recreation Centre	1,200	1,300
54	Energy Conservation Incentives	200	200
55	Telephone Switch - Funded by Telecommunications Budget	800	0
56	Campus Recreation Contribution - Western Student Recreation Centre	750	0
57	Projects Funded by Housing	5,593	4,646
58	Projects Funded by Units	3,556	1,583
59	Projects Funded by Ancillaries	1,623	130
60	Sub-Total	13,722	7,859
61	Total Sources of Funding	112,266	62,883

Line 23 for 2008-09 includes allocations to Support Services Building Furnishings (\$730) and Teaching Lab Upgrades in Chemistry Addition (\$1,000).

CAPITAL EXPENDITURES FOR NEW CONSTRUCTION AND MAJOR BUILDING RENOVATIONS 2008-09 AND 2009-10

(\$000)

		Projected 2008-09	Budget 2009-10
1	Category 1: New Construction		
2	Student Services Building	14,163	4,793
3	The Claudette MacKay-Lassonde Pavilion (Green Building)	15,039	2,172
4	Western Student Recreation Centre	10,464	409
5	Support Services Building	7,244	325
6	Advanced Facility for Avian Research	5,043	121
7	Material Sciences Addition	5,324	0
8	Institute for Chemicals and Fuels from Alternative Resources Facility	3,645	0
9	Biotron - New Facility	205	0
10	West Valley Building	100	0
11	Ivey Spencer Leadership Centre Expansion and Renovations	30	0
12	Total, Category 1	61,257	7,820
13	Category 2: Major Building Renovations		
14	Stevenson Hall and Lawson Hall Renovations	1,107	7,625
15	University Community Centre Renovations	2,800	6,900
16	Services Building Renovations for FIMS	0	4,400
17	Biological and Geological Sciences Building Renovations	10,534	3,715
18	IT Network and Infrastructure Upgrades (VOIP)	1,100	3,160
19	Physics and Astronomy Building Renovations	1,431	2,695
20	Brain and Mind Renovations in Natural Sciences Centre	0	1,800
21	Talbot Theatre Renovations	4,507	741
22	Follow-on Renovations to Existing Facilities	350	500
23	Renovations to Robarts Building 7th Floor	2,900	0
24	Robarts MRI Project - Cuddy Wing Renovations	2,246	0
25	Westminster Hall Related Renovations	1,260	0
26	Althouse Faculty of Education Building Renovations	559	0
27	Westminster Hall Renovations	252	0
28	Total, Category 2	29,046	31,536

CAPITAL EXPENDITURES FOR UTILITIES AND INFRASTRUCTURE PROJECTS 2008-09 AND 2009-10 (\$000)

		Projected 2008-09	Budget 2009-10
1	Category 3: Utilities and Infrastructure Projects		
2	PP - Chiller CPS 301 and Cooling Tower Replacement	0	1,600
3	CG - Chiller CPN 303 and Cooling Tower Replacement in North Chiller Plant	0	1,450
4	CG - Electrical Infrastructure Continuing Program	1,953	1,105
5	PP - New Emergency Generator	46	654
6	CG - Steamline Insulation and Heat Recovery Initiatives	200	600
7	CG - Storm and Sanitary Sewer Upgrades	0	550
8	PP - Replacement and Upgrade of High Pressure Steam Line Components	0	250
9	CG - Energy Conservation Investment (Lighting)	325	200
10	PP - Upgrade Natural Gas Valve System	0	200
11	PP - Replacement of Boiler Controls	410	150
12	CG - Chilled Water Capacity Upgrade	100	150
13	CG - Chilled Water Valve Replacement - Buildings	90	90
14	PP - Feedwater Pump Replacement	40	80
15	CG - Building Steam Distribution Systems Upgrades	40	50
16	CG - Upgrade Compressed Air Lines - Mains	25	30
17	PP - Condensate Transfer Pump Replacement	2	28
18	PP - Install Primary/Secondary Pumping Station	550	0
19	PP - Chiller CPS 303 and Cooling Tower Replacement	325	0
20	PP - Cooling Water System for Compressor	178	0
21	CG - New Water Main from Elgin Hall to Richmond Street	170	0
22	PP - Replacement of Boilers 2 and 3	100	0
23	CG - Replacement and Upgrade of High Pressure Steam Lines	100	0
24	CG - Replacement of Steam Safety Valves	70	0
25	CG - Flash Tank Replacements	58	0
26	NCP - Upgrade Delta Control System	43	0
27	PP - Replace HP Condensate Line at Thames Hall	40	0
28	Total, Category 3	4,865	7,187

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

		Budget 2009-10
1	Category 4: Modernization of Instructional and Research Facilities	
2	DSB - Lab Renovations in Rooms 2017 to 2021F	700
3	CG - GU Classroom Upgrades	350
4	MSB - Renovations to Rooms 150 and 150G	300
5	CG - IT Network Backbone Upgrades and Improvements	250
6	MSB - Create Research Space in Physiology and Pharmacology	216
7	DSB - Space Conversion to Rooms 00045 - 00048	180
8	WSC - Stable Isotope Lab Renovations	138
9	MB - Modernization of VonKuster Hall	120
10	CG - Study Space Upgrades in Various Libraries	101
11	SEB - Security Upgrade	100
12	WL - Create Offices for Archivists	100
13	SSC - Create Graduate Student Computer Lab and Multi Media Lab	95
14	VAC - Space for the PhD Program in Visual Arts and Culture	90
15	FEB - Improvements to Pre-Service Office Suite	86
16	WSC - Renovations to Create Faculty Offices for Statistical and Actuarial Sciences	86
17	UC - Create Graduate Student Space in French	85
18	MSA - Upgrade Furniture in Faculty and Staff Offices	79
19	DSB - Renovations to Lab in Rooms 2003 and 2004	72
20	EC - Improvements to Graduate Classrooms in Room EC1547	70
21	37 Other Projects	1,065
22	Total, Category 4	4,283
23	Category 5: General Maintenance and Modernization Projects	
24	CG - Roof Replacement	1,112
25	CG - Tunnel Galvanized Water Main Replacement	562
26	SLB - ITS and Server Room Upgrades	460
27	EC - Replacement of Fan System 102	452
28	CG - Window Replacement	430
29	WL - Skylight Replacement	400
30	TRAC - Road and Sidewalk Upgrades	400
31	RRI - Building Improvements	365
32	CG - Unforeseen Projects	350
33	SLB - Window Replacement	350
34	CG - Upgrade of Existing Radio System	350
35	CG - Real Time Metering	300
36	CG - Utility Sub-Metering	300
37	GLR - Building Upgrades	300
38	CG - Exhaust Disbursement Study on Campus	250
39	CG - Roof Safety	250
40	CG - Installation of Card Access Systems to Buildings	200
40	CG - Repairs and Replacement of Autoclaves	200
	CG - Building Fire Alarm System Upgrades	200
42	- Co Building File Alarm System Opgrades	200
42 43	75 Other Projects	4,549

Table 28 EXPENDITURES IN 2009-10 FOR HOUSING AND ANCILLARIES (\$000)

		Budget 2009-10
1	Category 6: Housing Renovations	
2	Replace Fan Coils and Upgrade Kitchen and Washrooms, Saugeen-Maitland Hall	2,265
3	Replace Watermains, Bathrooms and Plumbing, Platt's Lane Estates	250
4	Replace Transformer, Sydenham Hall	136
5	Bayfield Hall Renovations	130
6	Plumbing Improvements, Sydenham Hall	100
7	Electrical and Mechanical Upgrades, Delaware Hall	100
8	Contingency Projects, General	100
9	Flooring Replacement, Glenmore Apartment Complex	90
10	Replace Exterior Apartment Doors and Stair Treads, Platt's Lane Estates	90
11	Asphalt and Concrete Repairs, Medway Hall	80
12	Replace Stairwell Ceiling Tile, Medway Hall	75
13	Housing Operations Committee Projects, General	75
14	Concrete and Asphalt Repairs, Glenmore Apartment Complex	70
15	Townhouse Furnace Replacement, Platt's Lane Estates	68
16	Replace Switchgear and Transformer, Glenmore Apartment Complex	60
17	Kitchen Assessment and Design, Essex Hall	50
18	Security Measures, General	50
19	Replace Condensing Units, Lambton Hall	50
20	Flooring Replacement, Platt's Lane Estates	50
21	Replace Chain Link Fencing, Platt's Lane Estates	50
22	Fire Alarm System Assessment, Platt's Lane Estates	35
23	Air Handling Study, Sydenham Hall	30
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	Bike Rack Fencing, General	25
28	Contingency Projects, Glenmore Apartment Complex	25
29	Replace Street Lighting, Platt's Lane Estates	25
30	Contingency Projects, Platt's Lane Estates	25
31	Replace Lights under Front Canopy Townhouses, Platt's Lane Estates	20
32	Washroom Improvements, Medway Hall	20
33	Replace Asbestos Panels in Tunnel, Sydenham Hall	20
34	Replace Flushometers, Delaware Hall	18
35	Refurbish Main Lounge, Alumni House	15
36	Install Irrigation System, Medway Hall	15
37	Replace Drapes, Lambton Hall Residence	15
38	Replace Brahubs, Platt's Lane Estates	15
39	58 Other Projects	444
40	Total, Category 6	4,776
41	Category 7: Ancillary Projects	
42	CG - Springett Parking Lot Expansion	100
43	TRAC - Dressing Room Upgrades	30
44	Total, Category 7	130

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

	Projected 2008-09
y 4: Modernization of Instructional and Research Facilities	
HB - Teaching Lab Upgrades in the Chemistry Addition	940
SB - Video Conferencing Link to Windsor Medical Training Group	740
SB - Re-Arrange Lower Ground Floors for Teaching Facility in Dentistry	724
G - GU Classroom Upgrades	350
C - Exam Room Renovations	328
G - IT Network Backbone Upgrades and Improvements	250
SB/DSB - Schulich School Space Study	212
EB - Convert Gym Mezzanine to Graduate Space	200
SB - Renovations to Lab in Rooms 402 and 403	188
EB - Faculty of Education Community Room	180
RS - Alumni Hall Upgrade for SRS	154
SB - Renovations to Lab in Rooms 2003 and 2004	153
LP - Storage Facility	136
C - Modernize EC1330 for Rehabilitation Sector Program	115
G - ARCC Loading Dock Renovations	115
EB - Create Water Treatment Facility in Room 15	112
(SB - Renovations to Rooms 150 and 150G	100
EB - Renovations to Lab in Room 2025	84
EB - Divide SEB2020 to Accommodate Lab from Elborn College	80
3 Other Projects	963
Category 4	6,124
	0,124
y 5: General Maintenance and Modernization Projects	
SC - Window Replacement	600
G - Installation of Card Access Systems to Buildings	482
L - New Office in Suite 200	470
G - Roof Replacement	288
*	266
RI - Building Improvements G - Improve Access for Physically Challenged	258
CC/SSC - Repair of Concrete Walkway	249
G - Unforeseen Projects	223
G - Repairs and Replacement of Autoclaves	200
C - Fire Damage	179
G - Asbestos and Mould Abatement	150
C - Repairs of Cracks in Concrete	125
G - Utility Sub-Metering	100
G - Road Repair and Replacement	100
G - Sidewalk Repairs	89
G - Exterior Painting	78
C - Elevator 'B' Replacement	72
G - Repairs to WES Infrastructure	68
	60
4 Other Projects	1,569
G - 4 O	Building Controls and Panel Upgrades

Table 30 EXPENDITURES IN 2008-09 FOR HOUSING AND ANCILLARIES (\$000)

		Projected 2008-09
1	Category 6: Housing Renovations	
2	Bayfield Hall Major Renovations	2,774
3	Recirculation Lines Replacement, Saugeen-Maitland Hall	1,360
4	Replace Watermain, Platt's Lane Estates	600
5	Refurbish Washrooms, Saugeen-Maitland Hall	337
6	Replace Locks on Door 430, Saugeen-Maitland Hall	270
7	Door Replacement, Saugeen-Maitland Hall	250
8	Replace Stoves, Platt's Lane Estates	152
9	Replace Building Locking System, Saugeen-Maitland Hall	150
10	Replace Stairway to Bayfield Hall, Lambton Hall	121
11	HV Switchgear Transformer Installation, Medway Hall	114
12	Replace Switchgear, Glenmore Apartment Complex	98
13	Flooring Replacement Allowance, Glenmore Apartment Complex	90
14	Single Family Residence Contingency, General	80
15	Medway Kitchen Conversion, Medway Hall	76
16	Contingency Projects, General	75
17	Refurbish Main Floor Bathrooms, Saugeen-Maitland Hall	75
18	Refurbish Stairwell and Doors on Exit, Glenmore Apartment Complex	68
19	Painting Stairwells, Alumni House	68
20	Replace Exterior Apartment Doors and Stair Tread, Platt's Lane Estates	65
21	Townhouse Furnace Replacement, Platt's Lane Estates	62
22	Replace Chain Link Fencing, Platt's Lane Estates	54
23	Replace Street Lighting, Platt's Lane Estates	52
24	Carpet and Tile Replacement, Essex Hall	52
25	Residence Security Measures, General	50
26	Carpet and Tile Replacement, Platt's Lane Estates	50
27	Supply and Install Dishwasher, Sydenham Hall	45
28	Contingency, Glenmore Apartment Complex	40
29	Carpet and Tile Replacement, Elgin Hall	39
30	82 Other Projects - Various Residences	1,100
31	Total, Category 6	8,367
32	Category 7: Ancillary Projects	
33	Campus Recreation Furnishings and Equipment for WSRC	750
34	CG - Springett Parking Lot Expansion	650
35	TRAC - Bleacher Replacement	260
36	SSB - Food Outlet	175
37	Western Student Recreation Centre - Food Outlet	150
38	UCC - Subway Outlet Renovations	119
39	UCC - DX Cooling Kitchen	100
40	TD Waterhouse Stadium Renovations	75
41	UCC - Install Freezer	46
42	CG - Reconstruction of Lambton Parking Lot	28
43	UCC - Student Health Services Renovations	20
44	Total, Category 7	2,373

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

		Actual 2005-06	Actual 2006-07	Actual 2007-08	Projected 2008-09	Projected 2009-10
1	A. Capital Reserves					
2	General Capital Fund	11,818	11,386	14,176	16,320	6,462
3	Designated Capital Fund	24,202	39,012	18,385	4,885	2,529
4	Gibbons Property	1,502	1,546	1,598	1,622	1,622
5	Total Capital Reserves	37,522	51,944	34,159	22,827	10,613

		Actual 2005-06	Actual 2006-07	Actual 2007-08	Projected 2008-09	Projected 2009-10
6	B. Capital Debt	2005-00	2000-07	2007-08	2008-03	2009-10
7	General Capital Fund	2,000	1,500	800	0	0
8	New Construction, Major Renovations, & Other	5,925	1,540	12,940	45,748	74,507
9	Housing	92,088	97,579	93,992	92,966	88,366
10	Robarts Capital Leases	0	0	2,118	1,500	900
11	UCC	1,810	0	0	0	0
12	Research Park	14,278	14,087	14,170	27,900	31,600
13	Richard Ivey School of Business Foundation	4,800	4,300	3,800	3,300	2,800
14	Unused and Invested Debenture Proceeds	0	0	98,100	50,700	20,500
15	Total Capital Debt	120,901	119,006	225,920	222,114	218,673

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.

1	Code	Description 2M Control
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
+9 50	UC	University College
50 51	UCC	University Conege University Community Centre
52	USC	University Students Council
52 53	VAC	John Labatt Visual Arts Centre
55 54	WC	Westminster College
54 55	WL	Weldon Library
<i>ss</i>		Weidon Library Western Science Centre
56	WSC	

 Table 32

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