

**Report to the Business Board  
Deferred Maintenance  
December 2007**



**January 21, 2008**

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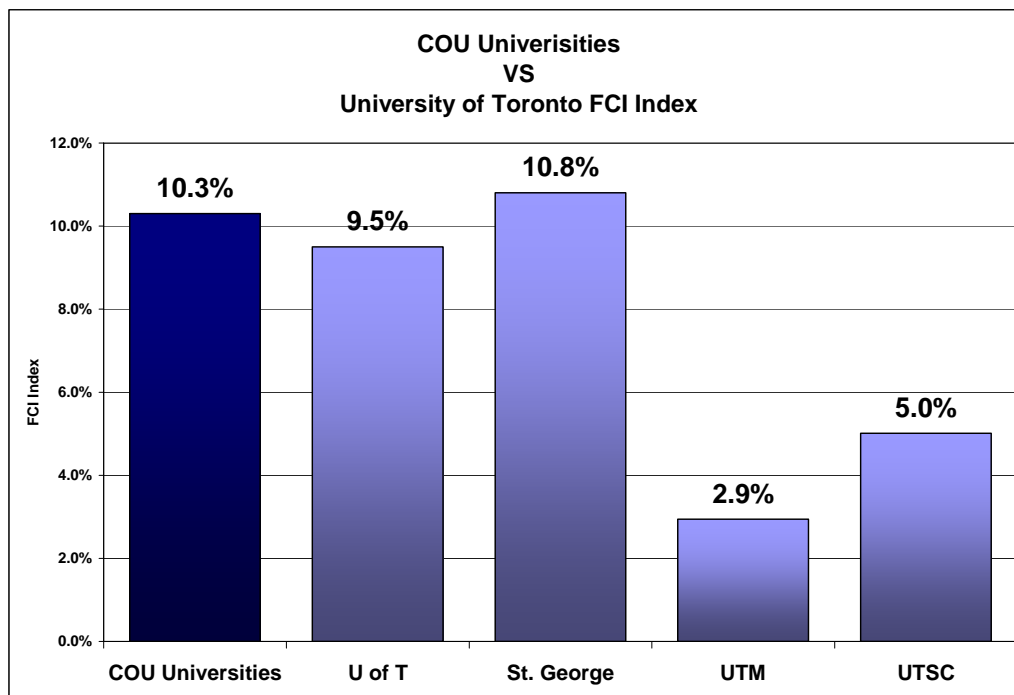
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## Introduction - Facilities Condition Assessment Program

All Ontario Universities are engaged in the Facilities Assessment program using a common software and assessment methodology, the Vanderweill Facilities Assessment (VFA) program. The program provides a consistent way to determine, quantify, and prioritize deferred maintenance liabilities. At this point all academic and administrative buildings across the province have been assessed. Each building has been assigned a numeric score called a facility condition index or FCI. The index is determined by dividing the amount of deferred maintenance by the current replacement cost of the building. The next phase of this program is the assessment of the utilities infrastructure at each campus which the University of Toronto has already completed as part of our Central Utilities Renewal Strategy. OAPPA, the Ontario Association of Physical Plant Administrators, provides an annual report on deferred maintenance across the sector to the Ministry of Training, Colleges and Universities.

## Academic and Administrative Buildings - University of Toronto

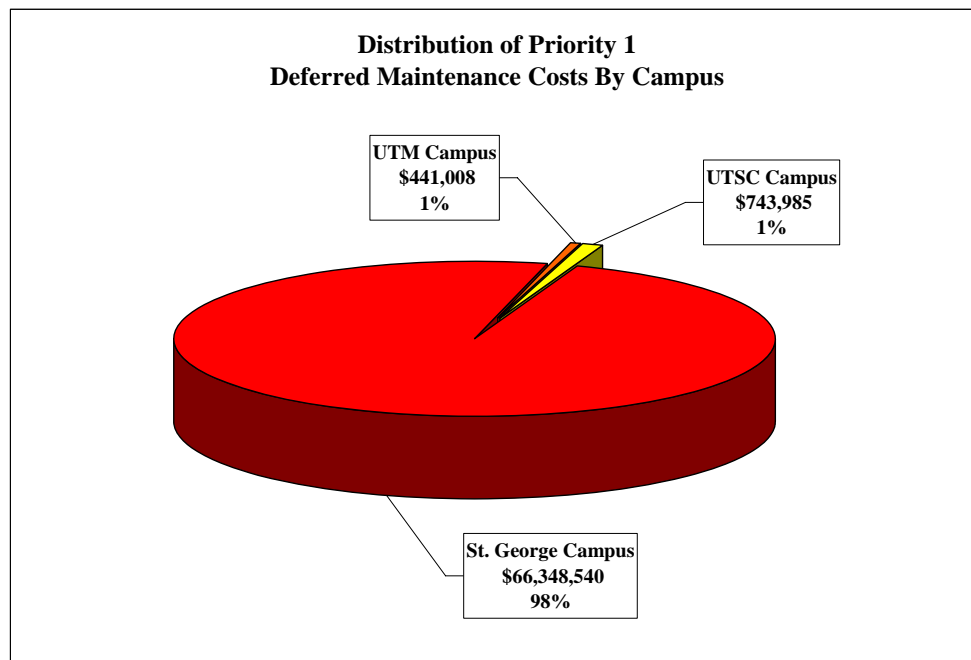
The current combined estimated replacement value of all academic and administrative buildings at the University of Toronto is \$2.9B. The total deferred maintenance liability is currently estimated at \$276M, down by \$12.5M from the previous year. This positive result is a combination of several factors: significant funding utilized to address this issue, the removal of a few buildings that were included in last year's report, which do not fit the current VFA Program criteria; and the indirect benefit of several renovations projects completed by the Capital Projects department. Our combined facility condition index (FCI) is now 9.5%, which is down from 10.3% from the previous year. Our overall FCI is now below 10%, the threshold for buildings in "poor" condition and below the average for all Ontario universities for the first time since the Assessment Program was launched.



It is important to note that the total deferred maintenance figures noted in this report are conservative for a number of reasons:

1. The VFA database relates only to academic and administrative buildings. Deferred maintenance items related to other buildings or the central utilities infrastructure are not included.
2. The VFA audits include a review of the existing building systems and not the systems that should be in the building. Capital renewal items, which address requirements to meet current fire codes, accessibility standards, or the cost to modernize the buildings to present day heating, ventilation or air conditioning standards are not included. These upgrades are defined by the COU as “adaptive renewal” and are excluded from the database.
3. Some of the environmental liabilities such as mould and asbestos abatement are not included in the VFA database. The University is obliged to undertake a significant amount of rehabilitation work on an annual basis in this area, which is not part of our operating or deferred maintenance budget. The environmental liability is roughly estimated in the tens of millions of dollars.
4. The current VFA analysis does not include construction soft costs. These costs, which include consulting fees and permit costs, can add 15% to 30% to the overall cost of a project.

The VFA database classifies all deferred maintenance items into priorities ranging from 1 to 5. Priority 1 items should be corrected within the next year. Priority 2 items should be addressed in the next 1 to 3 years. The graph below identifies all UofT priority 1 items and indicates that the vast majority of critical repair items have been identified at the St. George campus.



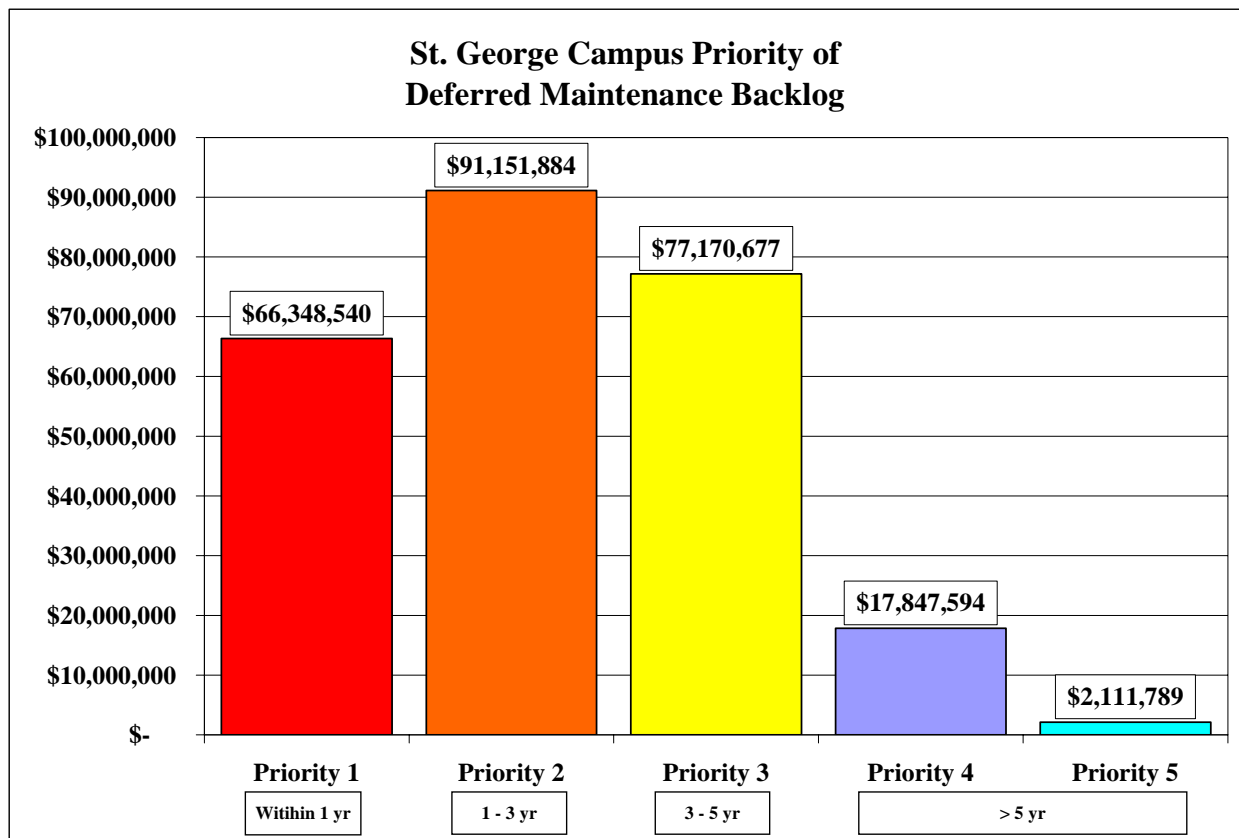
## St. George Campus

There are approximately 100 academic and administrative buildings at the St. George campus, with a total gross area of 897,142 square meters and a total replacement value estimated at \$2.35B. The combined FCI is down from 12.0 in 2006 to 10.8 in 2007. The total estimated deferred maintenance backlog is now \$255M, down from the \$267M noted in the previous report. As noted previously, the change in overall deferred maintenance liability is attributable to direct deferred maintenance funding, removal of the Central Utilities Plant building which is considered infrastructure and is no longer part of the VFA database (the central plant deferred maintenance has been included in the central utilities renewal strategy completed by Sebesta Blomberg in 2006), and major renovations completed by Capital Projects. Examples of these projects are major renovations to the Economics and Canadiana buildings.

The distribution of facility condition indices for building on the St. George campus is as follows:

- 62% have FCI's greater than 10 and are therefore considered in poor condition
- 21% have an FCI between 5 and 10 and are considered in fair condition
- 17% have FCI's lower than 5 and are therefore considered in excellent condition

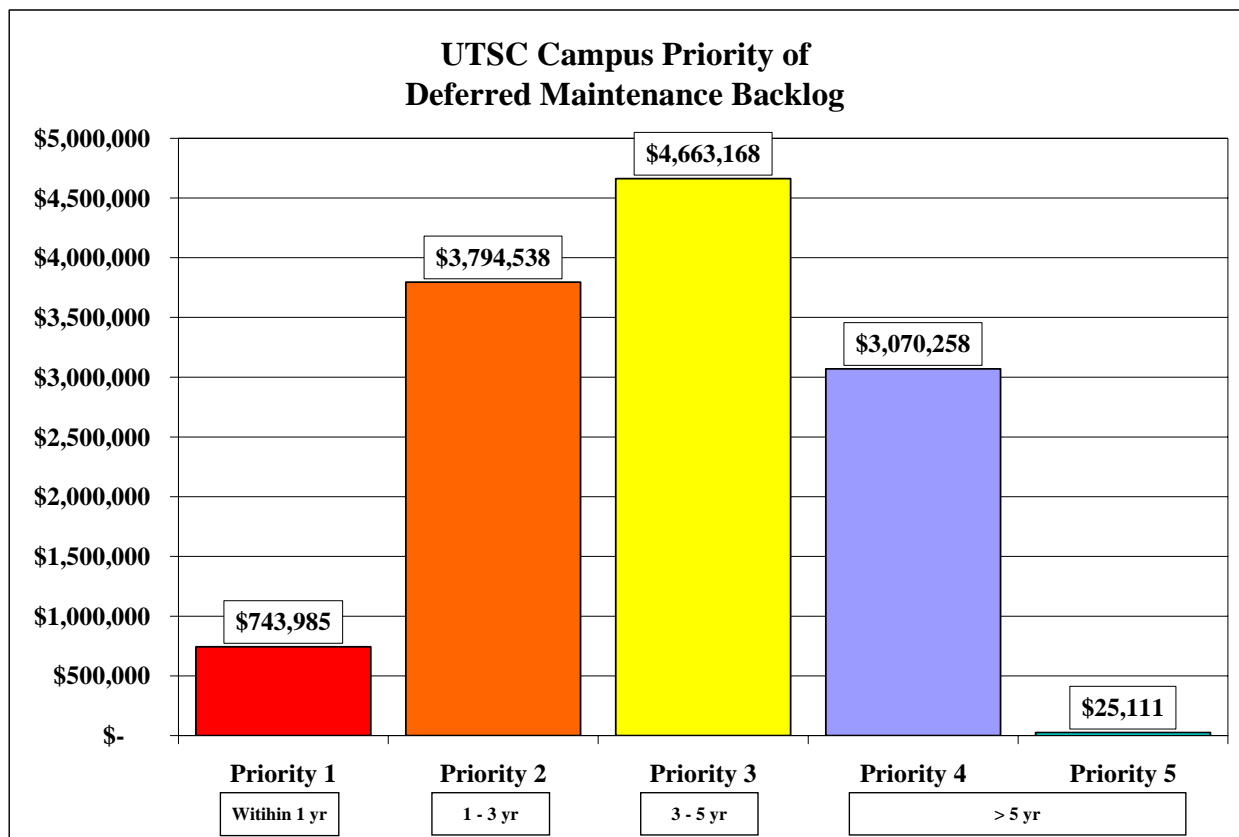
The campus deficiencies by priority type are illustrated in the graph below. In contrast to the other UofT campuses, the vast majority of deferred maintenance items at St. George are still within the higher priority ratings of 1-3.



## University of Toronto at Scarborough (UTSC)

The number of buildings at the UTSC campus has been reduced in the database to 11 buildings from last year's report of 13. The two buildings that have been removed are the Daycare Centre Building as it is an Ancillary building and the Central Utilities Plant building which is considered infrastructure and accounted for in our Utilities Infrastructure Strategy. The total gross area of the academic and administrative buildings is now 85,412 square metres. The total replacement value of these buildings is estimated at \$245M. The total deferred maintenance liability stands at \$12.3M, down from the previous figure of \$12.5M. The total FCI remains 5.0%. A facility condition index of 5.0 or less is indicative of buildings in excellent condition.

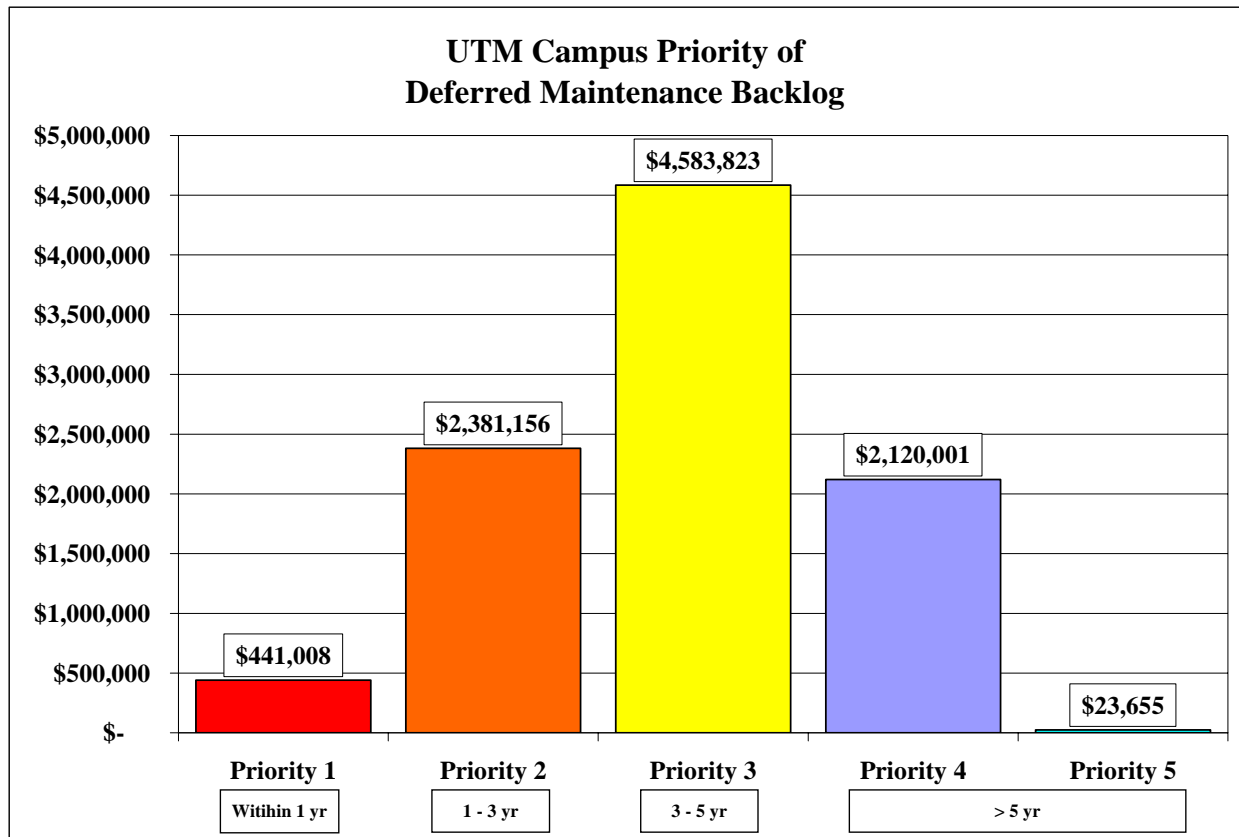
The majority of the deferred maintenance items at the Scarborough campus are priority 2 (within 1-3 years) priority 3 (within 3-5 years) and priority 4 (greater than 5 years to complete).



## University of Toronto at Mississauga (UTM)

The survey data for UTM includes 11 buildings with a gross area of 96,821 square metres. Total replacement value of the buildings was estimated at \$325M, with a deferred maintenance backlog of \$ 9.5M. The campus FCI stands at 2.9% indicating buildings in excellent condition.

The majority of the deferred maintenance items at the Mississauga campus are priority 3 (within 3-5 years).



## Managing Deferred Maintenance – Funding

We receive two direct sources of funding specifically intended to deal with deferred maintenance: the Provincial Government's Facilities Renewal Program (FRP) and central funding from the University. Consistent with the past several years, \$42 million has been allocated to all Ontario universities to assist with massive a deferred maintenance backlog. The University of Toronto share of this funding is just under \$5M. St. George receives \$3.9M in FRP funds. Only half of the FRP funds provided to St. George are used for deferred maintenance. The other half is utilized to address environmental liabilities such as PCB transformer replacements and environmental hazards such as asbestos and mold abatement. Funding from the University for deferred maintenance has grown steadily over the past few years. In this fiscal year funding to St. George moved up to \$8.6M from \$8.0M provided the previous year.

Beyond the direct funding, deferred maintenance has been addressed indirectly through major renovation projects at St. George. Specifically the renovations to the Economics and Canadiana buildings corrected major building deficiencies as part of the capital renewal project.

The significant internal funding, external FRP funding, and the benefit of major capital renewal projects has ensured the University's overall deferred maintenance liability is now being held in check. Moving forward, in order to keep the FCI under 10%, the threshold for buildings in fair condition, we will require consistent funding of approximately \$13.7M per year.

### **Deferred Maintenance – Setting Priorities**

Setting the priorities for deferred maintenance remains as it has in previous years. We set our priorities based on four basic criteria:

1. Legislation, regulations, or enforcement agency orders requiring the work to be undertaken
2. Risk of failure based on VFA assessment priorities
3. Work that can be coordinated with major renovations to buildings
4. Projects that support academic priorities

### **Conclusion**

We are presently managing the issue of deferred maintenance but this liability will be with us for a very long time into the future. With stable, significant funding we will be able to maintain the current condition of the buildings and minimize, although not eliminate, the chance of an unforeseen problem having major consequences to the University's mission and operating budget.



# Appendix A - University of Toronto: Facility Condition Index - December 2007

## St. George Campus

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
142 - Spadina Ave-713	Administration	311	587,504	298,385	50.8%	2003-2004
046 - Varsity Newspaper	Administration	724	1,367,694	689,374	50.4%	2005-2006
097 - Centre for Medieval Studies	Academic	799	1,382,781	883,955	49.1%	2005-2006
071 - College Street-92	Administration	592	1,118,335	465,523	41.6%	2003-2004
050 - Falconer Hall	Administration	2,453	4,633,913	1,707,748	36.9%	2003-2004
061A - Borden Building North	Administration	3,425	5,927,442	2,139,496	36.1%	2003-2004
138 - Huron Street-370	Academic	443	766,674	269,347	35.1%	2003-2004
097A - Queens Park Cres. E. - 39 (Rear)	Administration	165	311,698	108,421	34.8%	2005-2006
054 - Spadina Crescent-1	Administration	8,647	16,334,875	6,020,790	34.5%	2002-2003
039 - St. George Street-49	Academic	787	1,362,014	469,220	34.5%	2002-2003
003 - Sigmund Samuel Library Building	Library	17,818	28,285,006	8,719,704	30.8%	2001
136 - Spadina Avenue-705	Administration	325	613,951	185,456	30.2%	2003-2004
068 - Clara Benson Building	Athletic Facility	9,988	14,904,493	4,388,931	29.4%	2001
061 - Borden Building South	Administration	2,443	4,227,954	1,232,759	29.2%	2003-2004
117 - W.B. MacMurray Field House	Athletic Facility	368	1,004,802	286,335	28.5%	2005-2006
053 - Institute of Child Study	Academic	2,489	4,307,563	1,217,697	28.3%	2003-2004
110 - St. George Street-121	Administration	1,244	2,350,016	825,971	28.3%	2003-2004
125 - Spadina Avenue-703	Administration	705	1,331,801	375,334	28.2%	2005-2006
154 - Board of Education	Academic / Admin	14,340	27,089,407	6,919,640	25.5%	2003-2004
033 - Sidney Smith Hall	Academic / Admin	28,039	52,967,914	13,514,231	25.5%	2001
091 - Studio Theatre	Academic	442	1,403,368	357,457	25.5%	2003-2004
020 - Rosebrugh Building	Academic	5,628	9,740,042	2,774,031	24.7%	2002-2003
146 - Sussex Avenue-40	Administration	375	708,405	174,217	24.6%	2003-2004
032 - Wetmore Hall - New College	Residence	12,919	15,486,780	4,132,635	24.5%	2005-2006
027 - Physical Geography Building	Academic	1,952	3,378,209	818,844	24.2%	2003-2004
084 - CIUT Radio	Other	686	1,873,082	447,838	23.9%	2002-2003
088 - St. George Street-123	Administration	790	1,492,373	355,669	23.8%	2003-2004
115 - St. George Street-97	Administration	1,039	1,962,754	459,057	23.4%	2003-2004
049 - Aerospace	Acad & Research	8,104	30,490,003	6,897,711	22.6%	2005-2006
082 - Gage Building	Academic	1,353	3,694,285	809,220	21.9%	2003-2004
010A - Convocation Hall	Academic	4,348	13,805,074	3,007,229	21.8%	2002-2003
120 - Louis B. Stewart Observatory (SAC)	Academic	537	929,354	197,820	21.3%	2005-2006
030A - Varsity Arena	Athletic Facility	6,560	9,789,094	2,074,343	21.2%	2003-2004
016 - Banting Institute	Acad & Research	9,466	35,614,310	7,455,809	20.4%	2002-2003
090 - College Street-88	Academic	1,734	3,000,930	601,589	20.0%	2003-2004
043 - School of Graduate Studies	Academic	1,139	1,971,199	391,788	19.9%	2003-2004
021 - Engineering Annex	Acad & Research	1,941	7,302,702	1,649,623	19.6%	2002-2003
007 - Mining Building	Acad & Research	11,064	19,147,801	3,658,647	19.1%	2002-2003
028 - Architecture Building	Academic	6,452	11,166,089	2,129,865	19.1%	2005-2006
093 - Electrometallurgy Lab	Acad & Research	176	662,172	124,705	18.8%	2005-2006
023 - University College Union	Other	2,090	3,948,177	716,623	18.2%	2002-2003
067 - Huron Street-215	Administration	11,572	21,860,434	3,714,119	17.0%	2003-2004
019 - Kings College Circle-21	Administration	2,331	4,403,445	742,993	16.9%	2002-2003
024 - Haultain Building	Administration	3,258	5,638,425	1,192,198	16.4%	2003-2004

034 - Massey College	Academic	7,456	20,358,161	3,863,277	16.3%	2005-2006
056 - Graduate Students Union	Administration	920	1,737,954	246,217	14.2%	2003-2004
102 - Soldiers Tower	Other	300	819,132	113,205	13.8%	2005-2006
010 - Simcoe Hall	Administration	5,893	11,132,348	1,515,816	13.6%	2002-2003
006 - John P. Robarts Library Building	Library	80,882	128,395,322	18,188,636	13.5%	2001
068A - Warren Stevens Building	Athletic Facility	19,568	29,200,152	4,731,535	13.5%	2001
077 - Sussex Court	Academic	3,293	5,698,998	765,769	13.4%	2005-2006
052 - Best Institute	Acad & Research	6,884	25,899,949	3,212,339	12.4%	2002-2003
153 - Spadina Road-56	Administration	899	1,698,283	201,679	11.9%	2003-2004
070 - Galbraith Building	Academic	19,577	33,880,739	4,004,718	11.8%	2001
014 - Bloor Street West-371	Administration	16,568	31,298,277	3,681,061	11.8%	2003-2004
036 - Nursing Building	Academic	3,131	11,779,887	1,375,102	11.7%	2002-2003
001 - University College	Academic / Admin	16,922	46,204,506	5,413,068	11.2%	2001
004 - McMurrich Building	Administration	5,400	10,201,032	1,573,503	10.9%	2002-2003
051 - Edward Johnson Building	Academic	14,881	25,753,654	2,639,096	10.2%	2001
072 - Ramsay Wright Zoological Laborator	Acad & Research	22,997	86,522,533	9,163,361	10.2%	2001
089 - Admissions Office	Administration	1,802	3,404,122	340,111	10.0%	2003-2004
026 - Cumberland House	Administration	1,581	2,736,142	269,306	9.8%	2003-2004
005 - Medical Sciences Building	Acad & Research	72,372	272,288,070	29,439,897	9.8%	2001
022 - Mechanical Engineering Building	Acad & Research	9,723	36,581,232	3,876,075	9.6%	2001
078 - McLennan Physical Laboratories	Acad & Research	31,826	119,740,233	11,657,258	9.3%	2001
073 - Lash Miller Chemical Laboratories	Acad & Research	21,681	81,571,294	7,606,269	8.7%	2001
006B - Thomas Fisher Rare Book Library	Library	6,383	10,132,630	858,823	8.5%	2002-2003
032A - Wilson Hall - New College	Academic	18,360	22,009,234	2,153,104	8.3%	2005-2006
156 - Old Administration Building (BOE	Academic / Admin	3,093	5,596,736	464,529	8.3%	2003-2004
065 - Dentistry Building	Acad & Research	23,898	89,912,401	7,540,631	8.2%	2001
011 - Tanz Neuroscience Building	Acad & Research	5,421	20,395,645	1,896,787	7.7%	2003-2004
006A - Claude T. Bissell Building	Academic	9,298	16,091,491	1,210,937	7.5%	2002-2003
040 - Flavelle House	Academic	11,512	19,923,128	1,471,760	7.4%	2003-2004
079 - F. Norman Hughes Pharmacy	Acad & Research	6,196	23,311,459	1,672,769	7.2%	2002-2003
123 - Ont. Inst. for Studies in Educatio	Academic	38,156	72,079,736	5,284,681	6.8%	2002-2003
008 - Wallberg Building	Acad & Research	17,160	64,561,754	4,736,147	6.5%	2001
111 - Bloor Street West-246	Academic	6,698	11,591,827	747,410	6.4%	2005-2006
037 - David Dunlap Observatory	Acad & Research	2,132	8,021,309	512,781	6.4%	2005-2006
025 - FitzGerald Building	Acad & Research	9,392	35,335,897	2,184,713	6.2%	2001
057 - Bancroft Building	Administration	3,728	6,451,826	334,304	5.2%	2003-2004
062 - Earth Sciences Centre	Acad & Research	30,345	114,168,207	5,110,037	4.5%	2001
145 - Koffler Institute for Pharmacy Mgm	Academic	2,118	3,665,496	157,331	4.3%	2005-2006
008A - D.L. Pratt Building	Acad & Research	8,130	30,587,824	1,293,444	4.2%	2001
143 - Koffler Student Services Centre	Academic	11,511	31,430,095	2,189,582	4.2%	2003-2004
009 - Sanford Fleming Building	Acad & Research	21,833	82,143,169	3,687,425	3.6%	2001
083 - McCaul Street-254/256	Academic	4,391	7,599,240	218,931	2.9%	2003-2004
105 - Fields Inst for Research in Math	Academic	3,239	5,605,543	119,213	2.1%	2005-2006
132 - Innis College	Academic	3,361	5,816,681	117,348	2.0%	2003-2004
038 - Woodsworth College	Academic	5,332	14,558,706	287,857	2.0%	2005-2006
134 - Joseph L. Rotman Management	Academic	9,987	17,283,902	279,178	1.6%	2005-2006
103 - School of Continuing Studies	Academic	1,706	2,952,472	9,129	0.3%	2005-2006
080 - Bahen Information Technology Centr	Acad & Research	29,000	109,107,860	253,551	0.2%	2005-2006
047 - Canadiana Gallery	Library	2,864	4,546,428	169,432	0.0%	2003-2004
104 - Economics Department	Academic	2,403	4,158,728	189,004	0.0%	2003-2004

155 - 255/257 McCaul Street (BOE)	Academic / Admin	6,628	12,520,822	-	0.0%	2003-2004
160 - CCBR	Acad & Research	20,624	77,593,748	-	0.0%	N/A
161 - Leslie Dan Pharmacy Building	Acad & Research	15,626	58,789,497	-	0.0%	N/A
	<b>St. George Dec 2007</b>	<b>897,142</b>	<b>2,355,189,854</b>	<b>254,630,484</b>	<b>10.8%</b>	
	St. George Nov 2006		2,299,429,210	267,243,858	11.6%	
	St. George Dec 2005		2,089,395,371	264,131,162	12.6%	
	St. George Jan 2005		1,980,206,646	247,488,670	12.5%	
	St. George Jan 2003		2,013,741,422	273,165,188	13.6%	

## UTM Campus

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
322 - Geomorphology Building	Acad & Research	60	225,740	73,237	32.4%	2005-2006
330 - Springbank Centre	Administration	543	1,025,770	275,116	26.8%	2005-2006
317 - Rock Magnetism Laboratory	Acad & Research	209	786,329	51,080	6.5%	2005-2006
311 - North Building	Acad & Research	9459	35,587,974	1,738,692	4.9%	2005-2006
316 - Drama Workshop	Academic	418	1,327,167	65,511	4.9%	2005-2006
313 - South Building	Academic / Admin	52478	197,440,079	7,271,069	3.7%	2005-2006
328 - Student Centre	Administration	2991	8,166,746	37,054	0.5%	2005-2006
314 - Kaneff Ctr for Mgmt	Acad & Research	3376	12,701,660	37,885	0.3%	2005-2006
329 - CCIT	Academic	11414	42,943,349	-	0.0%	2005-2006
331 - Academic Learning Centre	Library	9173	14,561,587	-	0.0%	2005-2006
332 - Recreation, Athletics and Wellness	Athletic Facility	6700	9,998,008	-	0.0%	2005-2006
	<b>UTM December 2007</b>	<b>96,821</b>	<b>324,764,409</b>	<b>9,549,644</b>	<b>2.9%</b>	
	UTM November 2006		288,384,319	9,165,351	3.2%	
	UTM January 2005		311,268,924	11,387,392	3.7%	
	UTM January 2003		251,473,702	21,436,566	8.5%	

## UTSC Campus

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
200R - R-Wing	Athletic Facility	8,050	12,012,532	1,950,175	16.2%	2005-2006
200PAV - Pavilion	Academic	560	969,158	155,641	16.1%	2005-2006
200H - H-Wing	Academic / Admin	9,216	34,673,725	2,612,348	7.5%	2005-2006
200S - S-Wing	Academic / Admin	29,771	112,008,624	6,339,639	5.7%	2005-2006
200POR - Portables	Academic	783	1,355,091	56,188	4.1%	2005-2006
200B - Bladen Wing	Academic / Admin	9,253	34,812,932	1,142,735	3.3%	2005-2006
200SEL - Soil Erosion Laboratory	Research	323	1,215,236	28,054	2.3%	2005-2006
200ARC - Academic Resource Centre	Library	8,737	13,869,463	6,847	0.0%	2005-2006
200M - Management Building	Academic / Admin	5,069	8,772,614	2,717	0.0%	2005-2006
200ART - Arts and Administration Building	Academic / Admin	8,737	16,504,892	2,717	0.0%	2005-2006
200SC - Student Centre	Multi-Use	4,913	9,281,050	-	0.0%	2005-2006
	<b>UTSC December 2007</b>	<b>85,412</b>	<b>245,475,318</b>	<b>12,297,061</b>	<b>5.0%</b>	
	UTSC November 2006		251,029,150	12,544,006	5.0%	
	UTSC January 2005		240,449,223	11,318,594	4.7%	
	UTSC January 2003		96,800,114	13,409,795	13.9%	

\* - Indicates new buildings

