

**Report to the Business Board  
Deferred Maintenance  
December 2009**



**January 15, 2010**

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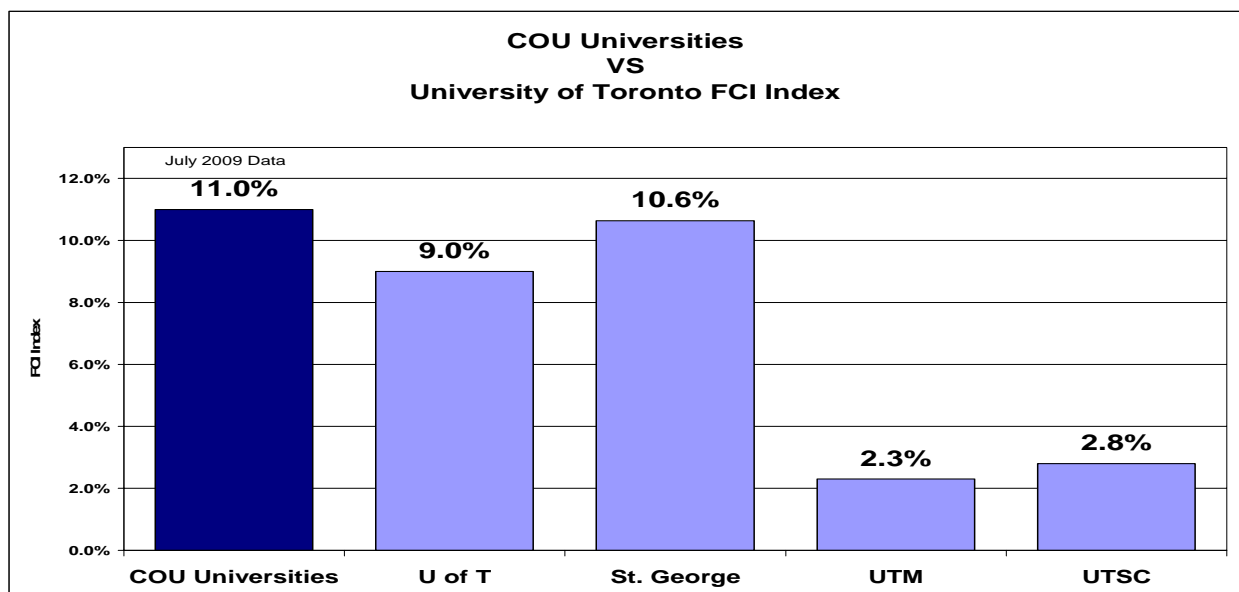
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## Introduction - Facilities Condition Assessment Program

All Ontario Universities are actively engaged in the Facilities Condition 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. Through the use of this software, each academic and administrative building at all universities across the Province has been assigned a numeric score reflecting the building's condition, called a facility condition index or FCI. This index is determined by dividing the cost of deferred maintenance by the current replacement cost of the building – the lower the FCI the better the condition of the building or portfolio. Through the Council of Ontario Universities, we continue to provide an annual report on deferred maintenance across the sector to the Ministry of Training, Colleges and Universities. We are now at the point in the program where we are starting to re-audit buildings which were originally audited in 2000 /2001.

## Academic and Administrative Buildings - University of Toronto

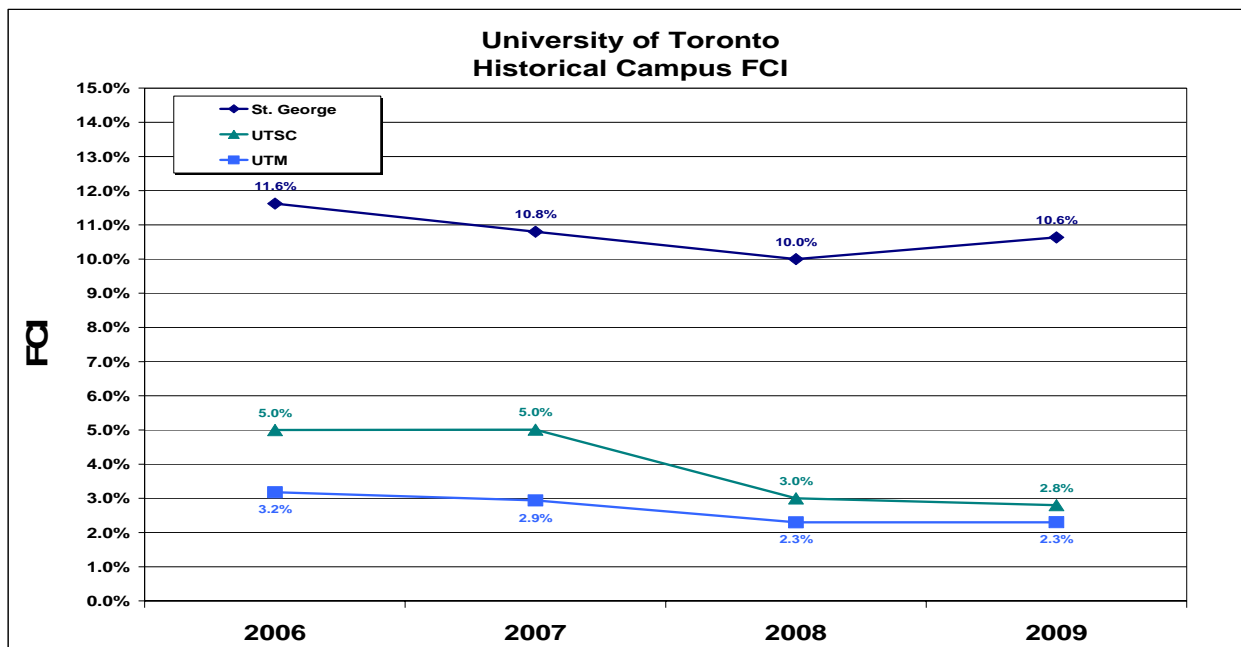
The current combined estimated replacement value of all academic and administrative buildings at the University of Toronto is \$3B. The total deferred maintenance liability is currently estimated at \$270M, up by \$13M from the previous year. The increase is attributable to the St. George campus and is a result of the re-auditing program. Our first round of facility condition audits were not completed to the level of detail of later building audits. As a result, the re-audited buildings show significantly more deferred maintenance on the second audit compared to our original audits. Another reason for the increase was the absence of major retrofits in 2009. Previous year major building retrofits, such as the Economics and Canadiana buildings, and the Energy Reduction Project where 17 chillers were replaced, assisted in reducing the overall deferred maintenance liability. Our combined facility condition index (FCI) is now 9%, up by half a percent from the previous year. Our institutional FCI is still below 10% (the threshold for buildings in “poor” condition) and 2% below the average for all Ontario universities although the St. George campus buildings are still, on average, above the threshold of 10% indicative of buildings in “poor” condition.



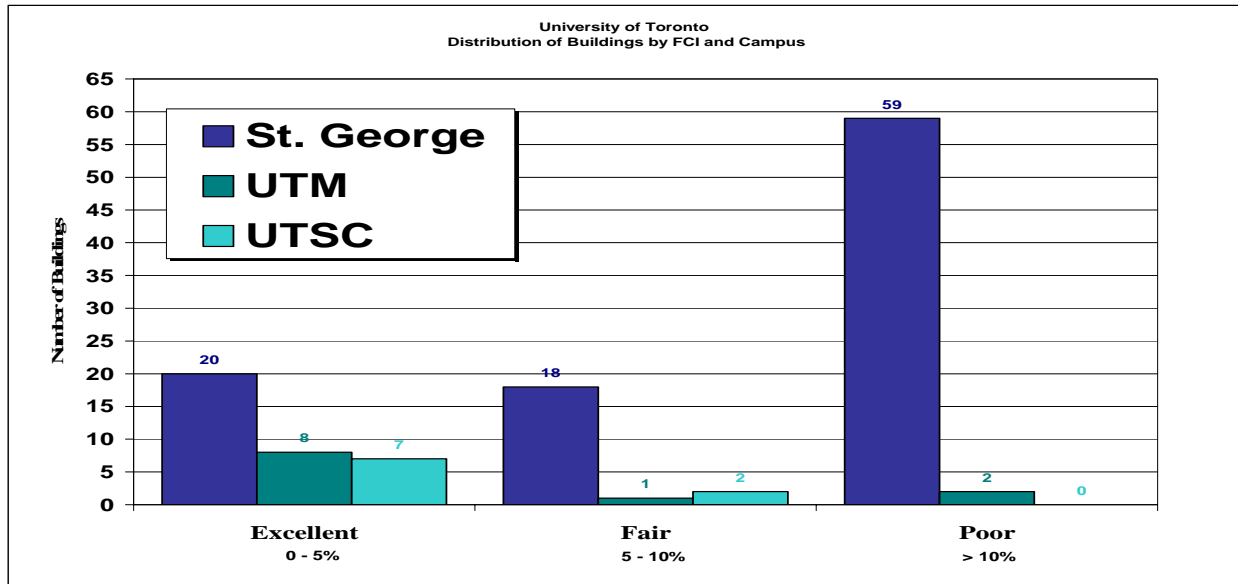
It is important to note that the total deferred maintenance figures in this report are conservative for a number of reasons:

1. 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.
2. The current VFA analysis does not include all construction related costs and cannot be used in isolation for budgeting purposes. For example, soft costs such as consulting fees and permit costs, which can add 15% to 30% to the overall cost of a project, are not included in the database figures. Secondary effects needed to complete some of the repairs, such as asbestos removal, are also not included in the database figures.
3. The VFA database relates only to academic and administrative buildings. Deferred maintenance items related to other buildings or the district energy system is not included.

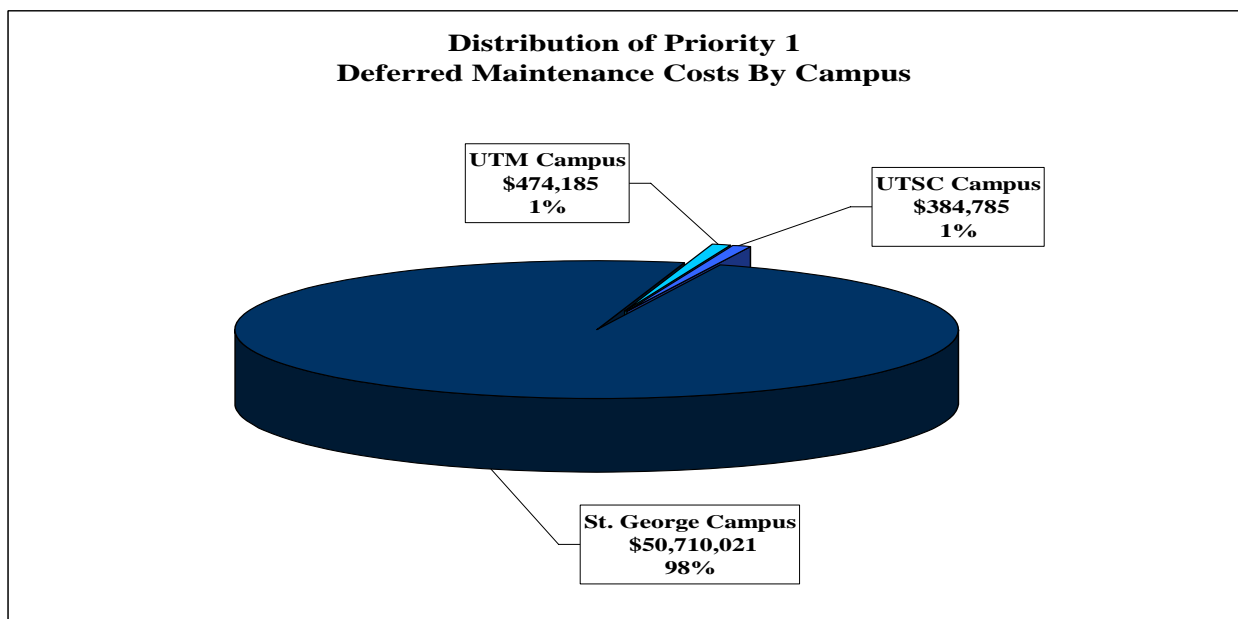
Over the past few years the FCI on all campuses has trended downward with the exception of the St. George Campus in 2009 which experienced a slight increase. The UTM and UTSC portfolio of academic and administrative buildings remain in the “excellent” category and St. George hovers just within the “poor” category.



The graph below illustrates the number of buildings in the broad categories of “poor”, “average”, and “excellent” condition for each campus. However, it should be noted that although a building is classified in excellent condition in the context of deferred maintenance, it may have serious liabilities from a comfort or safety perspective. As noted above, adaptive renewal items which bring a building into modern condition, such as adding air conditioning or accessibility components, are not identified in the deferred maintenance database.



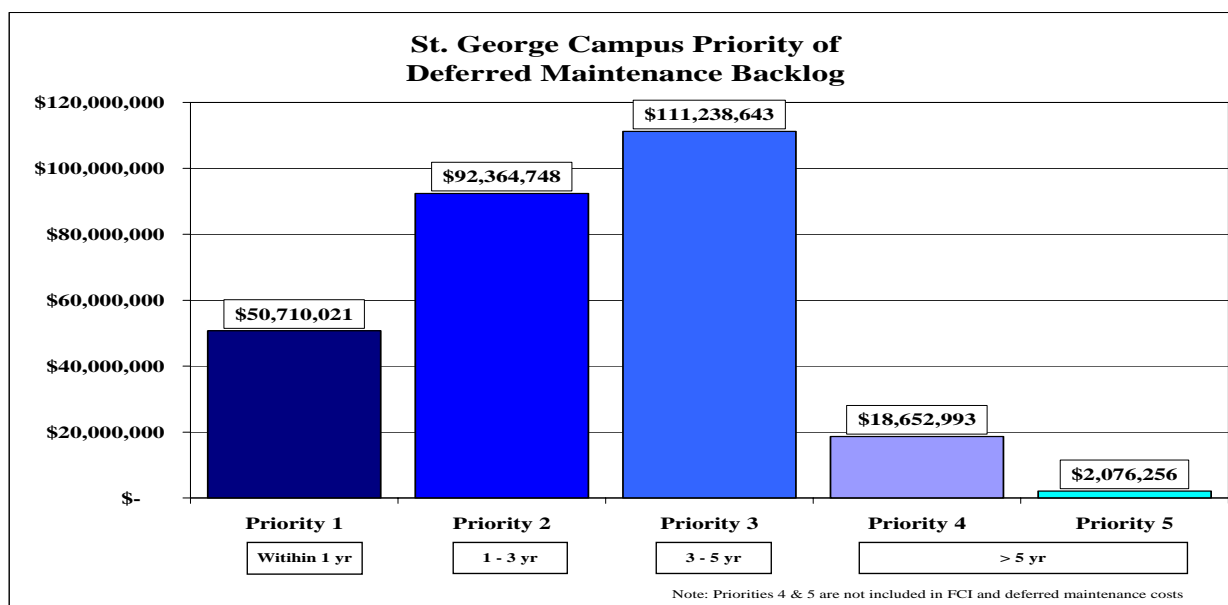
The Facilities Assessment Program not only identifies deficiencies but also classifies all deferred maintenance items into priorities ranging from 1 to 5. Priority 1 items should be corrected within the next year. Priority 2 items should be addressed in the next 1 to 3 years. The graph below identifies 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 102 academic and administrative buildings at the St. George campus with a total gross area of 895,891 square meters and a total replacement value estimated at \$2.42B. The combined FCI is up from 10% in 2008 to 10.6% in 2009. The total estimated deferred maintenance backlog is now \$254M, up from the \$241M noted in the previous report. As noted previously, the change in overall deferred maintenance liability is attributable to the re-audit of several buildings which identified significantly more deficiencies than the original audits and the absence of major building retrofits in 2009. While some additional money was allocated to this issue through government stimulus allocations, this funding was offset by the re-audits and the OISE parking garage rehabilitation, which cost \$2.5M, which was not identified in the building audit.

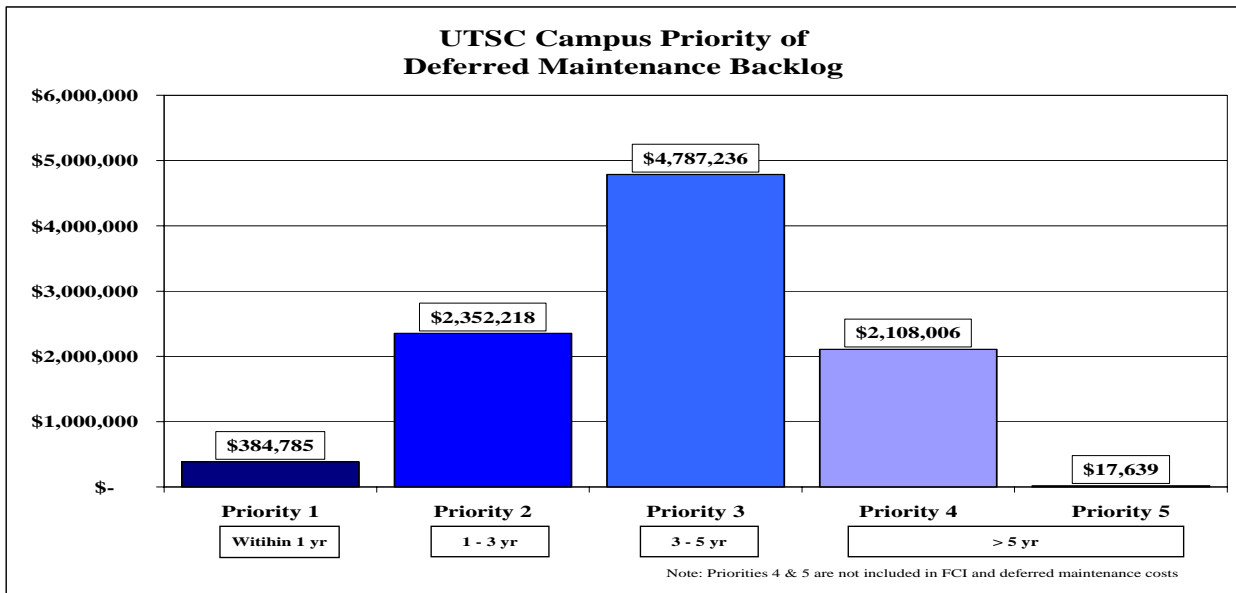
The campus deficiencies by priority type are illustrated in the graph below. In contrast to the other UofT campuses, the vast majority of deferred maintenance items at St. George are still within the higher priority ratings of 1-3.



## University of Toronto at Scarborough (UTSC)

There are 9 administrative and academic buildings at the UTSC campus with a total gross area of 86,824 square meters. The total replacement value of these buildings is estimated at \$268M. The total deferred maintenance liability stands at \$7.5M, down from the previous figure of \$8.7M. This change is the result of work completed to address deferred maintenance at the campus. The campus FCI is now down to 2.8%. A facility condition index of 5.0% or less is indicative of buildings in excellent condition.

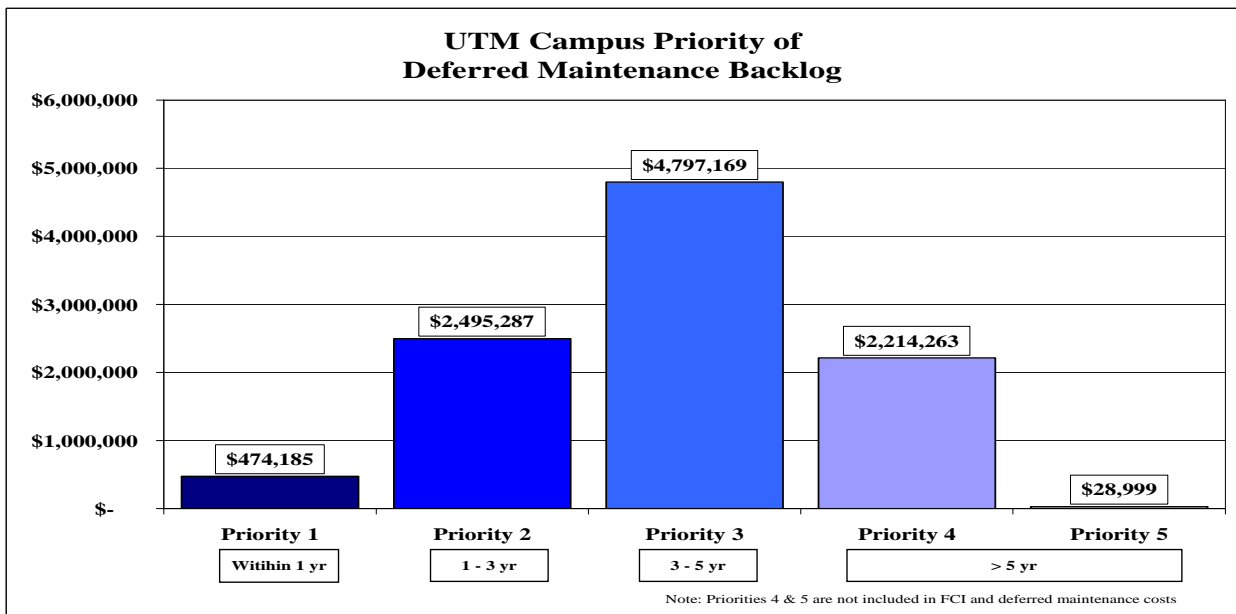
As can be seen in the chart below, the majority of the deferred maintenance items at the Scarborough campus are priority 2 to 4.



## University of Toronto at Mississauga (UTM)

The survey data for UTM includes 11 buildings with a gross area of 96,821 square meters, unchanged from the previous report. Total replacement value of the buildings was estimated at \$337M, with a deferred maintenance backlog of \$ 7.8M. The campus FCI is 2.3%, indicating buildings in excellent condition.

Similar to the Scarborough campus, the majority of deferred maintenance items at the Mississauga campus are priority 2 to 4.



## **Managing Deferred Maintenance – Funding**

Beyond the standard Provincial FRP funding of \$5M, the University of Toronto received stimulus funding from the Province and Federal governments in fiscal 2009. A portion of this funding was directed specifically to address deferred maintenance items within academic and administrative buildings at St. George. Deferred maintenance repairs for St. George campus was also supported through central funding of \$10M, an increase of \$750K from the previous year.

Beyond direct funding, deferred maintenance has been addressed indirectly through the demolition of the CIUT building on St. George St. effectively eliminating the deferred maintenance issues associated with that building. Going forward, to maintain our current institutional FCI of 9%, we will require just over \$14M per year in funding.

## **Deferred Maintenance – Setting Priorities**

The way in which we set priorities for deferred maintenance remains as it has been 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**

The significant funding we are receiving from internal and external sources has effectively supported the management of this issue. This liability, however, will be with us for a very long time into the future. With stable and 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 2009

### St. George Campus

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
142 - Spadina Ave-713	Administration	311	607,728	312,471	51.4%	2003-2004
046 - Varsity Newspaper	Administration	724	1,417,273	721,893	50.9%	2005-2006
097 - Centre for Medieval Studies	Academic	799	1,431,233	711,731	49.7%	2005-2006
071 - College Street-92	Administration	592	1,161,492	487,433	42.0%	2003-2004
050 - Falconer Hall	Administration	2,453	4,787,667	1,788,382	37.4%	2003-2004
061A - Borden Building North	Administration	3,425	6,141,744	2,240,181	36.5%	2003-2004
138 - Huron Street-370	Academic	443	794,011	282,070	35.5%	2003-2004
039 - St. George Street-49	Academic	787	1,413,177	491,135	34.8%	2002-2003
097A - Queens Park Cres. E. - 39 (Rear)	Administration	165	322,737	104,008	32.2%	2005-2006
054 - Spadina Crescent-1	Administration	8,647	16,902,031	5,348,966	31.6%	2002-2003
003 - Sigmund Samuel Library Building	Library	17,818	29,116,928	9,038,483	31.0%	2001
136 - Spadina Avenue-705	Administration	325	634,852	194,204	30.6%	2003-2004
433 - Queen's Park Crescent East - 43	Administration	881	1,101,796	334,316	30.3%	2006-2007
061 - Borden Building South	Administration	2,443	4,368,792	1,290,990	29.6%	2003-2004
053 - Institute of Child Study	Academic	2,489	4,443,139	1,275,034	28.7%	2003-2004
125 - Spadina Avenue-703	Administration	705	1,374,031	393,934	28.7%	2005-2006
110 - St. George Street-121	Administration	1,244	2,436,349	695,365	28.5%	2003-2004
068 - Clara Benson Building	Athletic Facility	9,988	15,367,836	4,356,577	28.3%	2001
033 - Sidney Smith Hall	Academic / Admin	28,039	54,416,409	14,090,027	25.9%	2001
091 - Studio Theatre	Academic	442	1,451,263	374,283	25.8%	2003-2004
154 - Board of Education	Academic / Admin	14,340	28,148,990	7,246,044	25.7%	2003-2004
146 - Sussex Avenue-40	Administration	375	735,799	182,587	24.8%	2003-2004
027 - Physical Geography Building	Academic	1,952	3,504,269	857,553	24.5%	2003-2004
032 - Wetmore Hall - New College	Residence	12,919	16,115,807	3,927,329	24.4%	2005-2006
088 - St. George Street-123	Administration	790	1,549,869	372,447	24.0%	2003-2004
115 - St. George Street-97	Administration	1,039	2,039,141	480,609	23.6%	2003-2004
082 - Gage Building	Academic	1,353	3,837,852	873,976	22.8%	2003-2004
030A - Varsity Arena	Athletic Facility	6,560	10,111,125	2,181,450	21.6%	2003-2004
117 - W.B. MacMurray Field House	Athletic Facility	368	1,041,860	223,055	21.4%	2005-2006
120 - Louis B. Stewart Observatory (SAC)	Academic	537	969,688	207,165	21.4%	2005-2006
020 - Rosebrugh Building	Academic	5,628	10,129,443	2,141,336	21.1%	2002-2003
005 - Medical Sciences Building	Acad & Research	72,372	242,564,166	51,245,520	21.1%	2009-2010
016 - Banting Institute	Acad & Research	9,466	36,738,682	7,616,226	20.7%	2002-2003
090 - College Street-88	Academic	1,734	3,111,056	629,855	20.2%	2003-2004
010A - Convocation Hall	Academic	4,348	14,343,269	2,898,793	20.2%	2002-2003
043 - School of Graduate Studies	Academic	1,139	2,038,548	410,181	20.1%	2003-2004
028 - Architecture Building	Academic	6,452	11,582,888	2,233,159	19.3%	2005-2006

### St. George Campus Cont.

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
093 - Electrometallurgy Lab	Acad & Research	176	686,902	132,302	19.3%	2005-2006
007 - Mining Building	Acad & Research	11,064	19,944,852	3,832,614	19.2%	2002-2003
067 - Huron Street-215	Administration	11,572	22,588,428	4,158,052	18.4%	2003-2004
023 - University College Union	Other	2,090	4,087,977	750,805	18.4%	2002-2003
089 - Admissions Office	Administration	1,802	3,529,361	596,617	16.9%	2003-2004
024 - Haultain Building	Administration	3,258	5,850,423	968,848	16.6%	2003-2004
021 - Engineering Annex	Acad & Research	1,941	7,589,621	1,171,634	15.4%	2002-2003
019 - Kings College Circle-21	Administration	2,331	4,582,303	680,539	14.9%	2002-2003
056 - Graduate Students Union	Administration	920	1,808,260	257,825	14.3%	2003-2004
102 - Soldiers Tower	Other	300	855,168	118,570	13.9%	2005-2006
077 - Sussex Court	Academic	3,293	5,913,997	806,787	13.6%	2005-2006
034 - Massey College	Academic	7,456	21,123,668	2,657,020	12.6%	2005-2006
052 - Best Institute	Acad & Research	6,884	26,978,878	3,362,551	12.5%	2002-2003
010 - Simcoe Hall	Administration	5,893	11,597,188	1,430,747	12.3%	2002-2003
070 - Galbraith Building	Academic	19,577	34,946,120	4,193,629	12.0%	2001
153 - Spadina Road-56	Administration	899	1,771,497	211,193	11.9%	2003-2004
036 - Nursing Building	Academic	3,131	12,223,424	1,440,070	11.8%	2002-2003
006 - John P. Robarts Library Building	Library	80,882	132,079,497	15,138,280	11.5%	2001
001 - University College	Academic / Admin	16,922	47,869,461	5,395,525	11.3%	2001
014 - Bloor Street West-371	Administration	16,568	32,446,274	3,519,681	10.8%	2003-2004
051 - Edward Johnson Building	Academic	14,881	26,534,013	2,763,588	10.4%	2001
004 - McMurrich Building	Administration	5,400	10,620,666	1,069,815	10.1%	2002-2003
026 - Cumberland House	Administration	1,581	2,830,844	282,446	10.0%	2003-2004
022 - Mechanical Engineering Building	Acad & Research	9,723	37,864,084	3,692,408	9.8%	2001
072 - Ramsay Wright Zoological Laboratories	Acad & Research	22,997	88,882,715	7,954,754	8.9%	2001
073 - Lash Miller Chemical Laboratories	Acad & Research	21,681	83,738,526	7,404,935	8.8%	2001
078 - McLennan Physical Laboratories	Acad & Research	31,826	122,949,567	10,783,001	8.8%	2001
006B - Thomas Fisher Rare Book Library B	Library	6,383	10,543,886	900,016	8.5%	2002-2003
068A - Warren Stevens Building	Athletic Facility	19,568	29,995,787	2,520,906	8.4%	2001
032A - Wilson Hall - New College	Academic	18,360	22,979,927	1,908,968	8.3%	2005-2006
156 - Old Administration Building (BOE	Academic / Admin	3,093	5,820,323	483,087	8.3%	2003-2004
011 - Tanz Neuroscience Building	Acad & Research	5,421	21,134,256	1,669,668	7.9%	2003-2004
006A - Claude T. Bissell Building	Academic	9,298	16,744,861	1,268,005	7.6%	2002-2003
040 - Flavelle House	Academic	11,512	20,628,698	1,540,991	7.5%	2003-2004
079 - F. Norman Hughes Pharmacy Bldg	Acad & Research	6,196	24,253,684	1,751,065	7.2%	2002-2003
065 - Dentistry Building	Acad & Research	23,898	92,794,500	6,199,439	6.7%	2001
111 - Bloor Street West-246	Academic	6,698	12,008,777	789,797	6.6%	2005-2006
025 - FitzGerald Building	Acad & Research	9,392	36,710,135	2,287,771	6.2%	2001
008 - Wallberg Building	Acad & Research	17,160	66,607,741	3,596,144	5.4%	2001
057 - Bancroft Building	Administration	3,728	6,733,924	350,535	5.2%	2003-2004

### St. George Campus Cont.

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
123 - Ont. Inst. for Studies in Education	Academic	38,156	75,135,651	3,578,542	4.8%	2002-2003
145 - Koffler Institute for Pharmacy Mgmt	Academic	2,118	3,838,430	168,162	4.4%	2005-2006
062 - Earth Sciences Centre	Acad & Research	30,345	118,144,313	5,116,635	4.3%	2001
008A - D.L. Pratt Building	Acad & Research	8,130	31,731,390	1,354,183	4.3%	2001
143 - Koffler Student Services Centre	Academic	11,511	32,603,181	1,376,175	4.2%	2003-2004
049 - Aerospace	Acad & Research	8,104	31,657,060	1,023,000	3.2%	2009-2010
083 - McCaul Street-254/256	Academic	4,391	7,889,881	229,259	2.9%	2003-2004
009 - Sanford Fleming Building	Acad & Research	21,833	85,187,781	2,008,278	2.4%	2001
105 - Fields Inst for Research in Math	Academic	3,239	5,830,232	127,613	2.2%	2005-2006
132 - Innis College	Academic	3,361	6,064,320	122,883	2.0%	2003-2004
151 - Spadina Avenue-655	Residential	1,015	1,997,439	39,939	2.0%	2003-2004
038 - Woodsworth College	Academic	5,332	15,220,781	301,929	2.0%	2005-2006
134 - Joseph L. Rotman School of Management	Academic	9,987	18,010,156	292,348	1.6%	2005-2006
103 - School of Continuing Studies	Academic	1,706	3,091,767	9,560	0.3%	2005-2006
080 - Bahen Information Technology Ctr	Acad & Research	29,000	113,356,360	265,512	0.2%	2005-2006
047 - Canadiana Gallery	Library	2,864	4,724,970	-	0.0%	2003-2004
104 - Economics Department	Academic	2,403	4,310,261	-	0.0%	2003-2004
155 - 255/257 McCaul Street (BOE)	Academic / Admin	6,628	12,988,626	-	0.0%	2003-2004
160 - CCBR	Acad & Research	20,624	81,255,673	-	0.0%	n/a
161 - Leslie Dan Pharmacy Building	Acad & Research	15,626	61,564,252	-	0.0%	n/a
<b>St. George December 2009</b>		<b>896,906</b>	<b>2,391,705,682</b>	<b>254,313,412</b>	<b>10.6%</b>	
St. George December 2008			2,419,104,180	240,842,865	10.0%	
St. George December 2007			2,355,189,854	254,272,048	10.8%	
St. George November 2006			2,299,429,210	267,243,858	11.6%	
St. George December 2005			2,089,395,371	264,131,162	12.6%	
St. George January 2005			1,980,206,646	247,488,670	12.5%	
St. George January 2003			2,013,741,422	273,165,188	13.6%	

### St. George Buildings Not Yet Audited (Data excluded from FCI calculation)

98c - 90 Wellesley Mary Hall	Administration	2,317	4,148,681	n/a	n/a	n/a
98b - 90 Wellesley Fontbonne	Administration	4,152	7,434,322	n/a	n/a	n/a
127 - 172 St. George	Administration	1,823	3,263,614	n/a	n/a	n/a
128 - Jackman Humanities	Administration	11,821	14,783,579	n/a	n/a	n/a
152 - 500 University	Academic / Admin	13,569	26,590,627	n/a	n/a	n/a
xxx - 245 College St.	Administration	700	1,253,378	n/a	n/a	n/a

## Schedule A: University of Toronto Facility Condition Index - December 2009

### UTM Campus

BUILDING NAME	BUILDING USE	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI	AUDIT DATE
322 - Geomorphology Building	Acad & Research	60	235,532	70,558	29.9%	2005-2006
330 - Springbank Centre	Administration	543	1,065,008	221,611	20.8%	2005-2006
317 - Rock Magnetism Laboratory	Acad & Research	209	819,165	45,361	5.6%	2005-2006
311 - North Building	Acad & Research	9,459	37,008,527	1,709,909	4.6%	2005-2006
316 - Drama Workshop	Academic	418	1,381,937	53,545	3.9%	2005-2006
313 - South Building	Academic / Admin	52,478	204,356,154	5,594,389	2.7%	2005-2006
328 - Student Centre	Administration	2,991	8,504,579	34,679	0.4%	2005-2006
314 - Kaneff Ctr for Mgmt & Social Science	Acad & Research	3,376	13,218,255	36,587	0.3%	2005-2006
329 - CCIT	Academic	11,414	44,969,562	-	0.0%	2005-2006
331 - Academic Learning Centre	Library	9,173	15,248,553	-	0.0%	2005-2006
332 - Recreation, Athletics & Wellness Centre	Athletic Facility	6,700	10,469,822	-	0.0%	2005-2006
<b>UTM December 2009</b>		<b>96,821</b>	<b>337,277,095</b>	<b>7,766,640</b>	<b>2.3%</b>	
UTM December 2008			335,931,231	7,728,201	2.3%	
UTM December 2007			324,764,409	9,549,644	2.9%	
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	12,539,727	424,340	7.0%	2005-2006
200H - H-Wing	Academic / Admin	9,217	35,888,049	1,757,321	5.4%	2005-2006
200S - S-Wing	Academic / Admin	29,771	116,130,121	4,644,347	4.5%	2005-2006
200B - Bladen Wing	Academic / Admin	9,371	36,879,664	694,474	1.9%	2005-2006
200ARC - Academic Resource Centre	Library	9,321	15,450,117	3,756	0.0%	2005-2006
200ART - Arts and Administration Building	Academic / Admin	5,617	11,103,349	-	0.0%	2005-2006
200M - Management Building	Academic / Admin	5,037	9,100,298	-	0.0%	2005-2006
200SC - Student Centre	Multi-Use	4,804	9,503,369	-	0.0%	2005-2006
SRB - Science Research Building	Acad & Research	5,636	21,984,796	-	0.0%	n/a
<b>UTSC December 2009</b>		<b>86,824</b>	<b>268,579,488</b>	<b>7,524,239</b>	<b>2.8%</b>	
UTSC December 2008			288,595,356	8,708,836	3.0%	
UTSC December 2007			245,475,318	12,297,061	5.0%	
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%	

### TOTAL U OF T SUMMARY

	GSM	REPLACEMENT VALUE	DEFERRED MAINTENANCE COST	FCI
St. George December 2009	896,220	2,391,705,682	254,313,412	10.6%
UTM December 2009	96,821	337,277,095	7,766,640	2.3%
UTSC December 2009	86,824	268,579,488	7,524,239	2.8%
<b>TOTAL U OF T SUMMARY</b>	<b>1,079,865</b>	<b>2,997,562,265</b>	<b>269,604,291</b>	<b>9.0%</b>