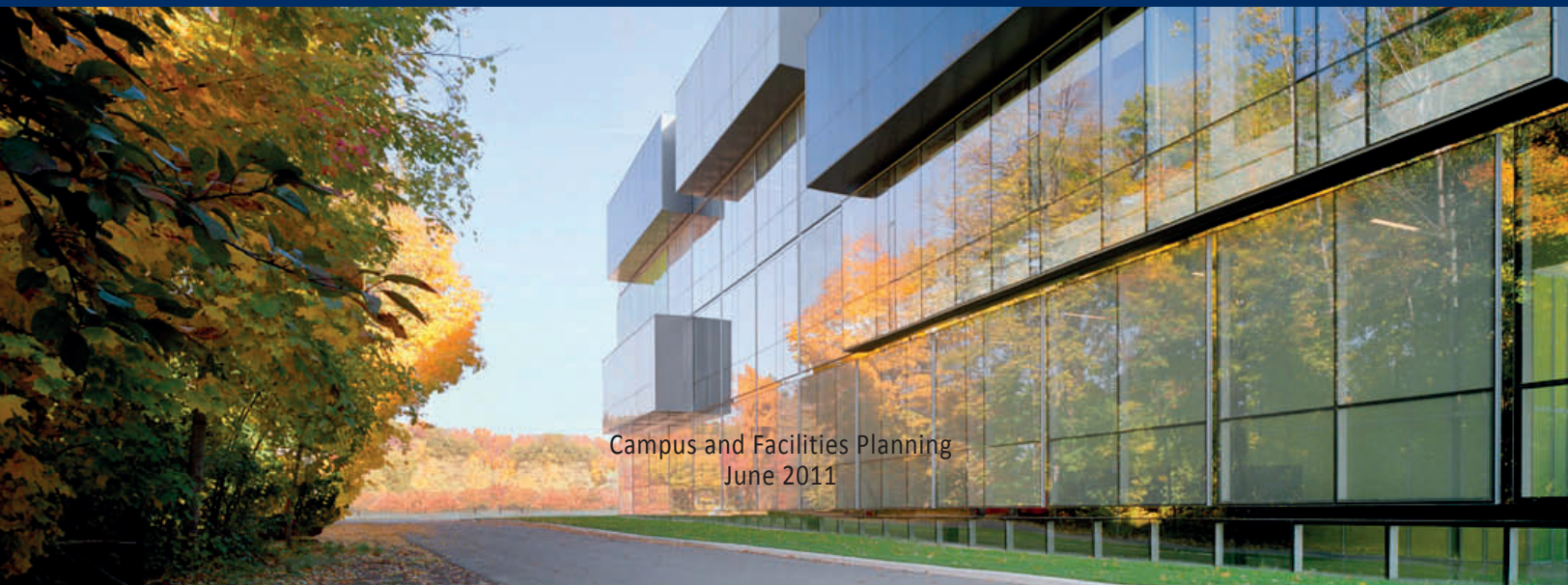
Campus Master Plan
UNIVERSITY OF TORONTO MISSISSAUGA



Campus and Facilities Planning
June 2011

UNIVERSITY OF
TORONTO

University of Toronto
Campus & Facilities Planning
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Foreword

The University of Toronto Mississauga (UTM) is situated along the Credit River in a predominantly residential district, five kilometres southwest of Mississauga's City Centre and thirty-three kilometres west of the downtown St George campus. Since its founding in the late 1960's, the campus and city have matured together, a fact that has contributed, in part, to a positive 'town-gown' partnership. The UTM campus enjoys the benefit of developable land combined with favourable zoning for much of its site, allowing ample growth potential to support the University's mission.

The 2000 Master Plan for the UTM campus has directed the most recent and transforming capital expansion. In the past decade, the UTM building inventory has increased by approximately 77%, for a current total of approximately 190,000 gross square metres of facilities on the Mississauga campus.

Looking to the future, UTM is committed to protecting and building upon the unique characteristics that make it a special place within the broader University of Toronto community. UTM views itself as a distinctive community with a plan for the future centered on academic quality and growth. Enriching the student experience, building upon academic programs and research opportunities, and extending and enhancing the infrastructure and resource base are all key tenets expressed in University of Toronto's *Towards 2030* vision document.

From a planning perspective, the strengths of the campus include: a scale of campus that allows for frequent interaction between and among faculty, students and staff; opportunity for future growth; and a distinct sense of place created by the natural environment and geography of the campus, both increasingly complemented by good architecture and urban design.

The 2011 *University of Toronto Mississauga Campus Master Plan* provides an assessment of the campus as a whole, and identifies the potential of individual development sites within defined sectors. The plan proposes expansion primarily on existing building sites and surface parking lots. With the proposed 5.7 hectare development footprint included in this Master Plan, UTM could accommodate approximately 200,000 gross square metres of new space, a capacity which, if constructed, would double the campus' current space inventory. This projection excludes development of regulated lands.

While an upper limit on enrolment has not been identified, student population growth from its current level of 9,800 FTE (11,300 headcount) to 17,700 FTE (21,100 headcount) in 2030, with a complement of 10% graduate enrolment up from 5%, is seen as a desirable and achievable level of expansion.

The 2011 Master Plan is organized under four headings: Framework; Opportunities & Challenges; Sites & Sectors; and Conclusions & Next Steps. Framework provides contextual information, establishes need, and includes seven Campus Planning Principles to help guide future development. Prior to focusing on specific development opportunities, the section on Opportunities & Challenges provides detailed observations and analysis under campus-wide topic areas: Circulation; Open Space; Environment; Infrastructure; Sustainability; Accessibility; Heritage; Housing; Personal Safety and Security; and Parking. Proposed development envelopes identified in this Plan under Sites & Sectors follow stated planning principles and guidelines, specifically the Principles outlined under Framework. Campus planning principles and proposed envelopes combined provide a road map for future development. Massing, positioning and dispersion across campus of development have been carefully considered in relation to context and in support the University's academic objectives.

Framework

> The University of Toronto is committed to being an internationally significant research university, with undergraduate, graduate and professional programs of excellent quality.
>
> Mission, Statement of Institutional Purpose, University of Toronto, Governing Council

The *University of Toronto Mississauga Campus Master Plan* expands on key attributes of the campus: a scale that allows for frequent interaction between faculty, students and staff; room for balanced growth; high-quality architecture; and a distinct sense of place resulting from its unique natural setting.

To achieve the University's stated mission and build on its strengths, long term planning must consider several key factors:

1. University needs, determined by evaluating space requirements for academic programs (capital plan);
2. opportunities for facility renewal, addressing deferred maintenance, repurposing and infrastructure (facilities assessment);
3. existing and potential site capacity on university-owned property necessary to address the central concerns of the University, its instruction and research objectives, while preserving and building on a sense of community (master plan); and
4. funding parameters (available funding and borrowing).

Capital Plans

In order to effectively deliver quality education to students, today and tomorrow, the University must maintain state-of-the-art facilities for teaching and research. To do so, the University relies on prudent management of capital assets.

Capital plans arise out of the multi-year academic process. Priorities relate to academic needs and respond to external factors such as programs that support infrastructure and funding opportunities through provincial aid programs. The most recent Capital Plan, approved in January 2006, targeted renovations and renewal to optimize the use of existing University facilities. Division heads were asked to review their academic plans and priorities; submit new projects; and confirm those that remained in early planning stages necessary to meet their academic needs. This has enabled scheduling of priority projects for deferred maintenance to harmonize with those of the Capital Plan. The University continues to review capital priorities which relate to academic planning and in response to provincial needs.

Master Plans

The term 'campus plan' or 'master plan' is broadly used and as such subject to broad definition. These plans have in many different ways indicated the location of existing and future facilities, building type, size, circulation patterns, landscape, historical designation and in some cases also include general design standards. They inform strategy regarding the placement of specific facilities from time-to-time as well as the acquisition and disposition of property over the long term. As such, they must reflect the central concerns of the University, its instructional and research objectives, and sense of community.

Introduction

Campus master plans have failed as often as they have succeeded. Failure often results from poor integration with municipal planning; unrealistic assumptions about resources available for development; insufficient attention to issues around implementation and feasibility; and inflexibility with respect to changing environments.

Successful master plans:

- are realistic and responsibly related to available resources;
- are based on clear principles and objectives, reflecting the institution and community of which they are a part;
- do not specify detailed building programs or designs, but do specify goals for the character of buildings and open spaces;
- are well-coordinated with municipal priorities and directions, with support of the local community;
- are accessible to decision-makers at all levels who may impact the implementation of the plan.

The most recent campus master plan to have been formally approved for the University of Toronto Mississauga was in 2000. The principles put forward in these plans have effectively guided the University in planning its facilities and grounds. As a result, throughout the last 10 years of significant expansion, the University has demonstrated leadership though construction of well planned and designed buildings that enhance the campus environment.

This Master Plan goes beyond identifying individual building sites by providing updated planning principles and a current assessment of the campus and opportunities related to the following:

1. Circulation
2. Open Space
3. Environment
4. Infrastructure
5. Sustainability
6. Heritage
7. Accessibility
8. Housing
9. Personal Safety and Security
10. Parking

Detailed discussion under these topics can be found under Opportunities & Challenges, providing background and impetus for the Master Plan and giving context to proposed development.

At the core of the campus master planning process is an important question – how much space does the University of Toronto Mississauga need, now and in the foreseeable future? The Council of Ontario Universities (COU) space guidelines (also known as the *Building Blocks* space standards) are the benchmarks routinely used within the Ontario university system to determine space requirements at a campus level. These guidelines are particularly well-suited for campus master planning exercises as they take a holistic approach to a wide range of campus needs, from classrooms to offices, from library space to food services and they have been used to inform the planning process at the University of Toronto.

Existing Facilities at UTM

There are two new recently constructed buildings on the UTM campus – the UTM Instructional Centre and the Terrence Donnelly Health Sciences Centre. When these buildings are fully occupied by Fall 2011 there will be approximately 190,000 gross square metres of facilities on the Mississauga campus. These buildings, along with several others built recently, represent a 77% increase in space on the UTM campus – classrooms, laboratories, offices and residential – in the last decade.

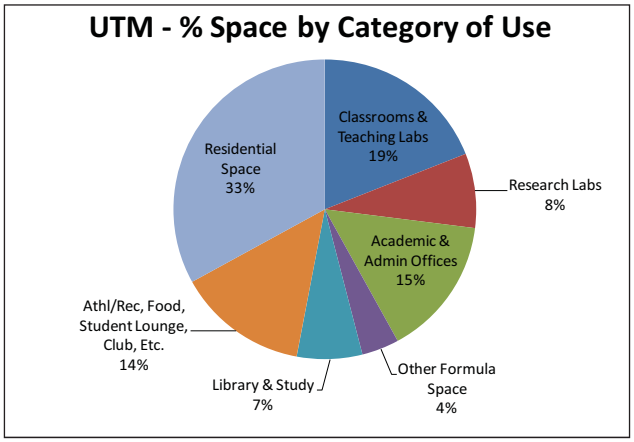


Table 1

Assignable space, that is space which can be assigned to an occupant or to a specific use, represents about 52% (99,000 nasm) of the total space; the remaining areas are corridors, mechanical spaces, public washrooms, a parking garage, structural areas, etc. Table 1 displays the assignable space grouped using the COU space classification scheme.

Required Facilities at UTM

COU space formulae and guidelines apply to 64% of the assignable space. About 63,000 nasm fall within categories of use where input measures, serving as proxies for space demand, and space utilization factors, comprising assumptions regarding target use and size of facilities, have been developed to generate a space requirement for like types of spaces. The remaining areas, non-formula space, are primarily in student residences or areas that are currently inactive.

Although an array of input measures is used in calculating space requirements (including numbers of FTE academic and non-academic staff, laboratory contact hours, and equivalent volumes counts) the key input measure that affects space requirements is the number of Full Time Equivalent (FTE) students. The number of students on the UTM campus has increased by about 96% in the last 10 years, from around 5,000 FTE in 2000 to about 9,800 FTE students in the fall of 2010. The current projection for 2015/16 is 12,500 FTE students.

In addition to the overall number of FTE students, the particular mix on a campus of undergraduate and graduate students, of arts and science programs and professional faculties, and the intensity of research activity, each have a strong impact on space needs and COU space calculations. To accommodate the students at UTM historically over the last decade, an allocation of between 8.6 nasm and 9.4 nasm per FTE student has been generated by the COU space standards. The larger number represents a time when the ratio of faculty, who generate offices and research space, to students was higher. Overall, these ratios could

Note: The University of Toronto defines Net Assignable Square Metres (nasm) as the sum of all areas on all floors of the building assigned to, or available for assignment to, an occupant, including every type of space functionality used by an occupant; and Gross Area Square Metres (gsm) as the sum of all floor areas including the outside faces of exterior walls, which have floor surfaces.

increase somewhat in the future as a result of growth in the percentage of graduate students on campus or the delivery of new programs which are more space intensive.

In comparison, the Ontario system has generally been in a range of 11.9 to 12.5 nasm required per FTE student and the St. George campus is in a range of 14.1 to 15.4 nasm generated per FTE student. Thus the UTM campus, primarily an undergraduate arts and science campus, generates fewer square metres per student than the Ontario system as a whole, while on the other hand the St. George Campus, with its mix of professional faculties, large numbers of graduate students and intensive research focus, generates a greater amount of space than the system average.

It should be noted, however, that in spite of considerable new construction resulting in a 77% increase in space and the lower nasm requirement per FTE student, UTM's physical resources have not kept pace with the increase in its student population, in terms of the COU standard. Prior to recent enrolment growth the UTM campus had met the COU standard, but by 2007/08, the last year for which an Inventory of Physical Facilities submission was made to the COU, formula space per FTE student had fallen to 6.1 nasm per FTE student (71% of the standard). This is projected to rise slightly to 6.6 nasm per student (75% of COU) when the new buildings open; the additional capacity created by these new facilities will be somewhat diminished by a projected 14% increase in FTE students since 2007/08.

Table 2 shows the impact over time of various growth scenarios. The modeling in the table uses projected enrolment numbers for 2011/12 and 2015/16 and both ends of the historical range of the COU space standard - 8.6 nasm and 9.4 nasm per FTE student. Finally, the requirement for space has been calculated at both 100% of the COU guidelines and at 85%, a target that, based on its experience, the University of Toronto perceives as feasible.

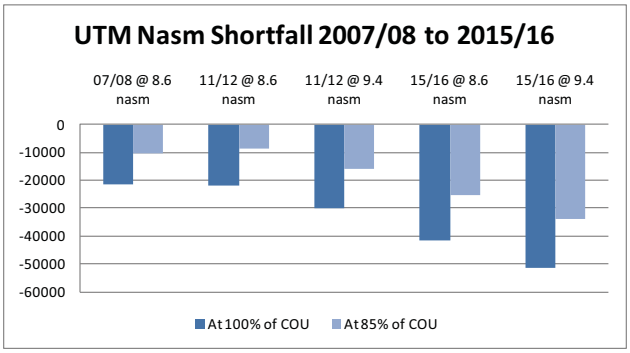


Table 2

The 2007/08 (with approx. 8,700 FTE) shortfall range of 10,000 nasm to 21,000 nasm will be between 9,000 and 30,000 nasm by 2011/12 (approx. 10,200 FTE) when the new buildings are open. This assumes a range between 8.6 nasm and 9.4 nasm calculated both at 85% and 100% of COU. By 2015/16 (approx. 12,500 FTE) the shortfall range would be 25,000 to 51,000 nasm. For reference, each nasm requires approximately two square metres of gross building area.

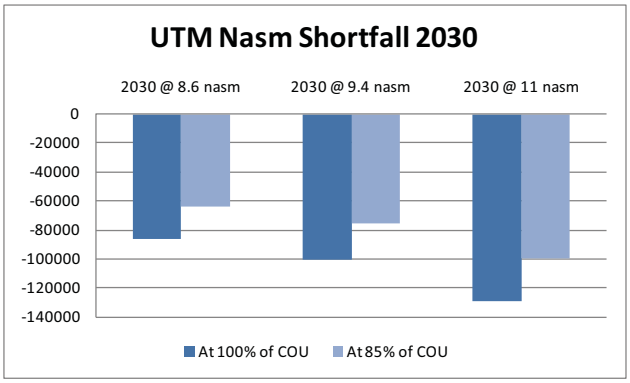


Table 3

Looking further into the future, projections have been made for 2030. In the fall of 2008, a long term strategic planning document, *Towards 2030*, was submitted to the University's governance cycle and addressed the future of the University of Toronto in the coming two decades. The document explored a range of enrolment strategies for the UTM campus that included increases in the number of undergraduate students and more moderate increases in the number of graduate students and PhD students. These scenarios were developed for exploratory purposes; the actual outcome will depend on the level of resources available to the University. The impact on the available physical resources of UTM could be significant. For this scenario a third space factor has been modeled of 11 nasm per student.

This would assume a significant increase in the ratio of graduate students to undergraduate students, a further im-

provement in the faculty to student ratio, and an increase in enrolments in space intensive disciplines with a wide range of programs including professional programs.

In 2030, with a projected FTE of about 17,700 with 10% graduate students the shortfall could range from 63,000 to 129,000 nasm depending on the ratio of nasm required per student and whether a 85% target or 100% target for COU space standards is set. Again, each nasm requires approximately two square metres of gross building area.

While the Council of Ontario Universities space guidelines are well suited for campus master planning exercises, they have some drawbacks. For example, the COU identifies space requirements in terms of quantity but does not measure the physical condition of existing space or the impact of age and deferred maintenance on a space's ability to function properly, nor the functionality of a space for the activity housed within it.

On the UTM campus, 44,000 nasm, or 44% of building facilities are at least 30 years old. The South Building, now called the Davis Building, accounts for the majority of this space. This benchmark incorporates several important factors: aging infrastructure; a level of deferred maintenance; and energy requirements that are changing with increased use of technology. In particular, the North Building, originally intended as a temporary accommodation, has been in use since 1967 with a quality of teaching and research space generally far below the University's standards. Clearly, the adequacy of the University's physical resources, buildings and facilities depends not only on the amount of space available but on the condition and design of the space and the equipment within it.

The proposed Master Plan targets a combination of new construction, renovations and renewal to optimize the use of the University's existing facilities. In addition to new state-of-the-art facilities that can best be provided by new construction, some existing buildings require renovation or repurposing to meet new and emerging programmatic needs and to comply with statutory requirements such as code compliance, environmental health, safety and accessibility.

The Healthy Mississauga 2010 Plan identifies five local health priority objectives and related actions.

All people in Mississauga will:
i. value and strive for optimal health.
ii. feel safe in their communities.
iii. have equal access to information and services.
iv. live in and contribute to a clean and sustainable environment.
v. feel part of a larger community and will know that they will be cared for in times of need.

City of Mississauga – Partnership

UTM was founded as Erindale College, even before Mississauga was established as a city in 1974, and in its early days, the City held its council meetings on campus. Essentially growing up together, UTM and the City have had a strong history of collaboration and mutual respect. Community-campus relations have also been nurtured by the Associates of U of T Mississauga, a group established in 1968 and comprised of local community members. The group remains active to this day, involved in on- and off-campus events, and includes some of the original members. A steady influx of new members, made up primarily of recently retired university faculty and staff, allows the group to continue functioning.

The relationship between the University, municipal government, and local business continues to strengthen through common ambitions and the establishment of the City of Mississauga Economic Development Advisory Council (EDAC). Additional municipal and regional partnerships include: the Healthy City Stewardship Centre (HCSC) established as a collaboration between the University and the City, which works with key organizations in the community; and the Research Innovation and Commercialization (RIC) Centre, which offers local entrepreneurs a resource to turn concepts into viable products. RIC is a partnership between the Mississauga Board of Trade, University of Toronto Mississauga, and Ontario Ministry of Research and Innovation.

U of T Mississauga has 14 distinct academic departments, as well as an Institute of Communication and Culture, offering 149 programs and 90 areas of study.

• Undergraduate degree options: Honours Bachelor of Arts; Honours Bachelor of Science; Bachelor of Business Administration; Bachelor of Commerce and Bachelor of Education (through the Concurrent Teacher Education Program).

• Graduate degree options: Master of Arts; Master of Science; Master of Biomedical Communications; Master of Biotechnology; Master in Management and Professional Accounting; Doctor of Philosophy; Diploma in Investigative and Forensic Accounting; and Master of Management of Innovation.

• U of T Mississauga and Sheridan Institute of Technology and Advanced Learning offer unique joint programs in theatre and drama studies; art and art history; and communication, culture and information technology.

Institutional Partnerships

UTM currently offers joint degrees with Sheridan College: the Theatre and Drama Studies Specialist Program; the Art & Art History Program; the specialist program in Visual Culture and Communication; and the interdisciplinary program in Culture, Communication and Information Technology. In addition, UTM is in conversation with Sheridan regarding future opportunities for Sheridan students to transfer credits to UTM. Although the new Sheridan City Centre campus, scheduled to open Fall 2011, will not offer joint programs with UTM, future opportunities are being considered as part of this ongoing partnership.

The new Mississauga Academy of Medicine's (MAM) facility is scheduled to open in September 2011 with 54 students in the first year; and a 4-year total enrolment of 216 by 2014. It will be the fourth Academy of the University of Toronto Faculty of Medicine undergraduate medical education (MD) program.

The new Academy allows for development of a focused community-based clinical experience. MAM students will undertake their MD training at the Terrence Donnelly Health Sciences Complex and at the two large Mississauga hospitals, Credit Valley Hospital (CVH) and Trillium Health Centre (THC).

City of Mississauga – Official Plan

Mississauga's new Official Plan was adopted by City Council on September 29, 2010. Fundamentally different from the Mississauga Plan which it replaces, it creates a framework for redevelopment and intensification to position the City to meet future challenges related to growth over the next twenty years. Originally established as a city in 1974, Mississauga evolved from a collection of towns, and grew rapidly under a typically suburban and car-dominated planning framework, by means of greenfield development of the agricultural land within its municipal borders.

The new Official Plan, developed under the Planning Act, was informed by:

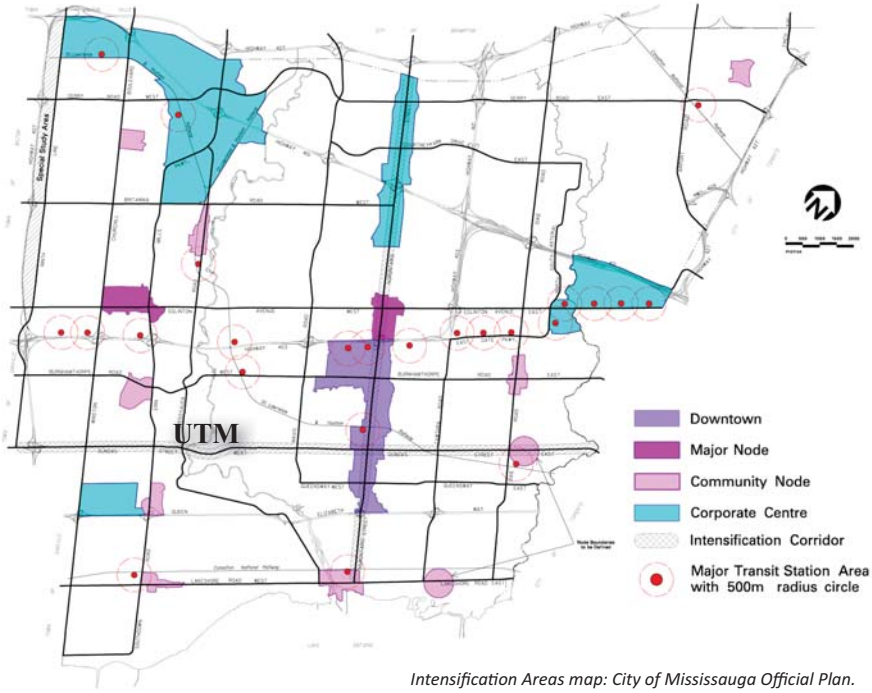
- an extensive consultation process;
- the Growth Plan for the Greater Golden Horseshoe Area; and
- other municipal studies such as the Cycling Master Plan.

Public engagement between 2007 and 2010, which included participation from the UTM community, helped to shape the City's vision. The Strategic Plan *Our Future Mississauga* identifies the value of post-secondary education and a desire to broaden opportunities for local youth, with the ultimate goal of retaining local talent in the City. Its pillar 'Prosper' defines Mississauga as a city which "values a strong global business future, fostering a prosperous and sustainable economy that attracts and grows talent", and seeks to continue and expand on partnerships with colleges, universities, and other organizations to "foster innovation".

ourfuturemississauga.ca

*The City's vision for its **Strategic Plan** is supported by five pillars for change:*

***Move**-Developing a Transit-Oriented City*
***Belong**-Ensuring Youth, Older Adults and New Immigrants Thrive*
***Connect**-Completing our Neighbourhoods*
***Prosper**-Cultivating Creative and Innovative Businesses*
***Green**-Living Green*



Intensification Areas map: City of Mississauga Official Plan.

Distinctly different in character from the St. George campus, the Mississauga campus is situated within the Credit River Valley, and located within a low density middle-to-high income residential area that typifies the underlying approach of the former Mississauga Plan, which identifies segregated Residential and Employment Districts, as well as City Centre, Mississauga's downtown core.

City Centre, includes Square One Shopping Centre and transit terminal; and Civic Centre, home to City Hall, the Civic Square, and the Art Gallery of Mississauga. In addition, the Sheridan College Institute of Technology and Advanced Learning facility is scheduled to open in fall 2011. Institutional partners, such as hospitals, are shown on the adjacent map as are other significant urban institutions. Opportunities & Challenges: Circulation provides detail on the connections by car, transit, and bicycle between these institutions and key nodes.

The new Official Plan calls for 'Complete Communities' and 'Desirable Urban Form' as a means of addressing negative outcomes of the previous plan. These include promoting a diversity of housing types, a healthy lifestyle, and proximity between core activities: live, work, play, shop etc. City Centre, which is expected to grow from 40,000 to 100,000 residents and increase by 40,000 jobs, is an example of targeted growth promoted by the Plan. The immediate campus context is not, however, expected to change significantly as a result of the Plan.

The new Official Plan's Special Site policies for zoned retail/commercial areas adjacent campus offer little or no opportunity to serve the UTM community. Excerpt from Official Plan:

16. 9 Erindale Site 1, mixed use designation appearance must be residential in character, with a three-storey height restriction.
16.10 Erin Mills Site 2, mixed use designation a funeral establishment will be the only permitted use.

16.10 Erin Mills Site 3, mixed use designation overnight accommodation; restaurants; banquet halls; conference centres; spa; recreation facilities associated with overnight accommodation; residential apartment building with a maximum height of 22 storeys as measured from The Collegeway.

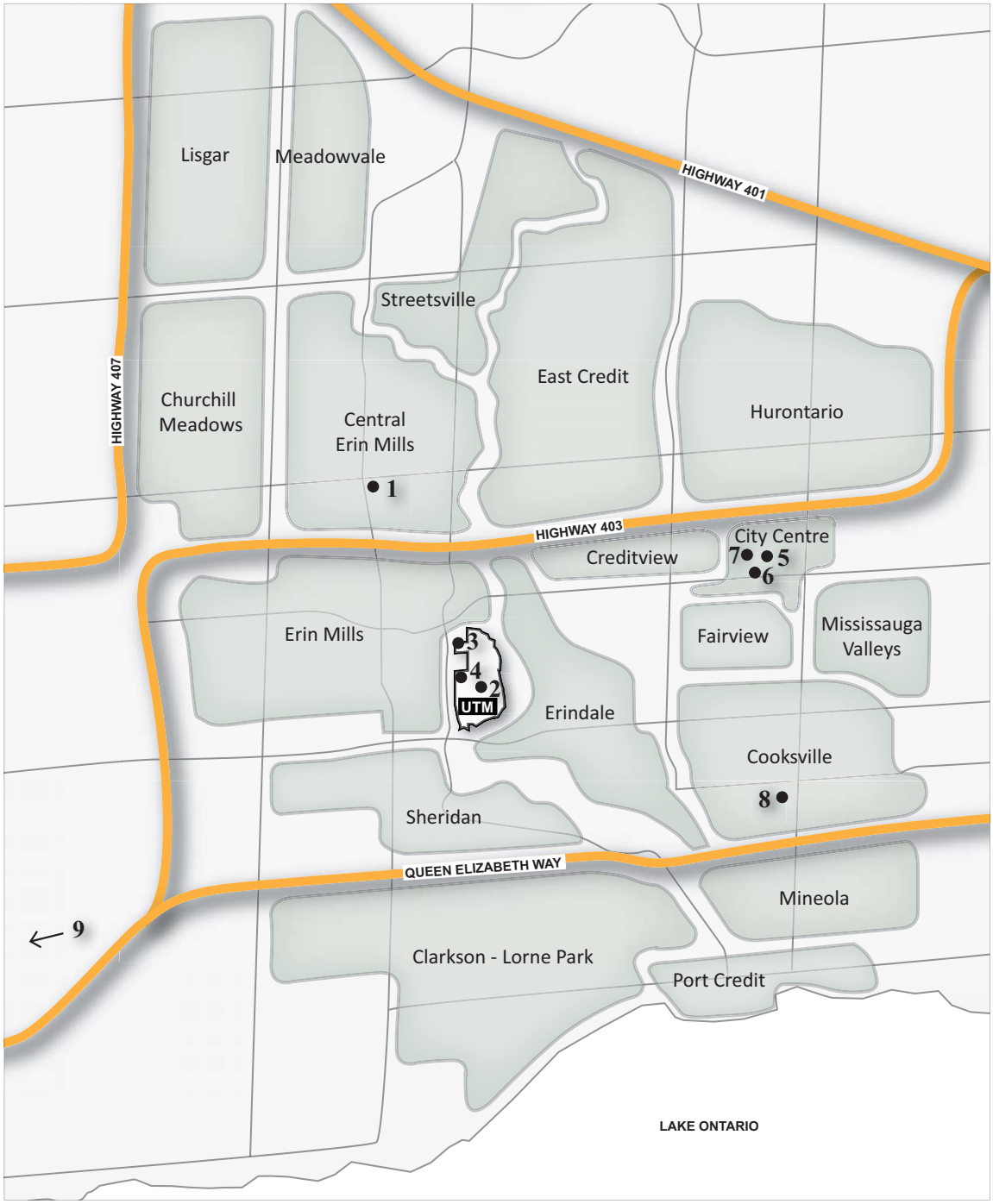
Local Amenity

An academic community requires convenience and amenity to support its core intellectual function in order to be viable. Amenity may include areas to socialize, relax or study; trails and walking paths; retail facilities, services, food outlets, etc. While the campus enjoys an idyllic natural environment, it is remote from off-campus commercial amenities. The closest restaurant, for example, is located on Dundas Street, approximately 15 minutes away on foot; groceries and other service outlets are a bus ride away. Evidenced by the zoning map, the UTM campus is an institutional island, in an otherwise residential neighbourhood.

Recently constructed, a retirement condominium on the Collegeway is the first and only high-rise building in the area. (16.10 reference above)

The City's new Official Plan calls for vibrant mixed use 'walkable' communities, and identifies Dundas Street West as a Higher Order Transit Corridor. However, the Plan offers minimal opportunity for commercial/retail intensification near the campus. On campus, current I-5 zoning allows for accessory uses. UTM must continue to rely on campus-based meeting space, retail and food vendors, and improved transit and bicycle connections to outlying urban nodes. Solutions to the non-retail functions may be a simple matter of programming and re-envisioning existing space, such as the Meeting Place in the Davis Building.

Institutional and Neighbourhood Context



1. Credit Valley Hospital
2. Hazel McCallion Academic Learning Centre
3. Blackwood Gallery
4. Erindale Theatre
5. Living Arts Centre
6. Central Library
7. Sheridan College City Centre Campus
8. Trillium Health Centre
9. Sheridan College Trafalgar Campus

1000m

Campus Entrances on Mississauga Road

The campus is accessed at three points along Mississauga Road, an important vehicular and transit corridor (decribed by the City as a 'major corridor/scenic route') which runs the length of the campus' south boundary. UTM's most distinguishing feature is its beautiful and unique setting. There are several areas of protected natural areas along the river including an old field meadow ecosystem.

Sensitive to the scale of the adjacent neighbourhood, the academic buildings are set well into campus, buffered by student residence buildings, and well-treed frontage. In 2006, a south entry was added to improve campus access from the Collegeway at Mississauga Road.

The 2000 Master Plan anticipated the new south entrance as an opportunity to create a new gateway as a bold new institutional gesture. Some physical feature, other than Alumni House, is required in this location in order to identify and distinguish the campus from its surroundings. That said, appropriate identification of the campus must be balanced with preservation of visual harmony along Mississauga Road.

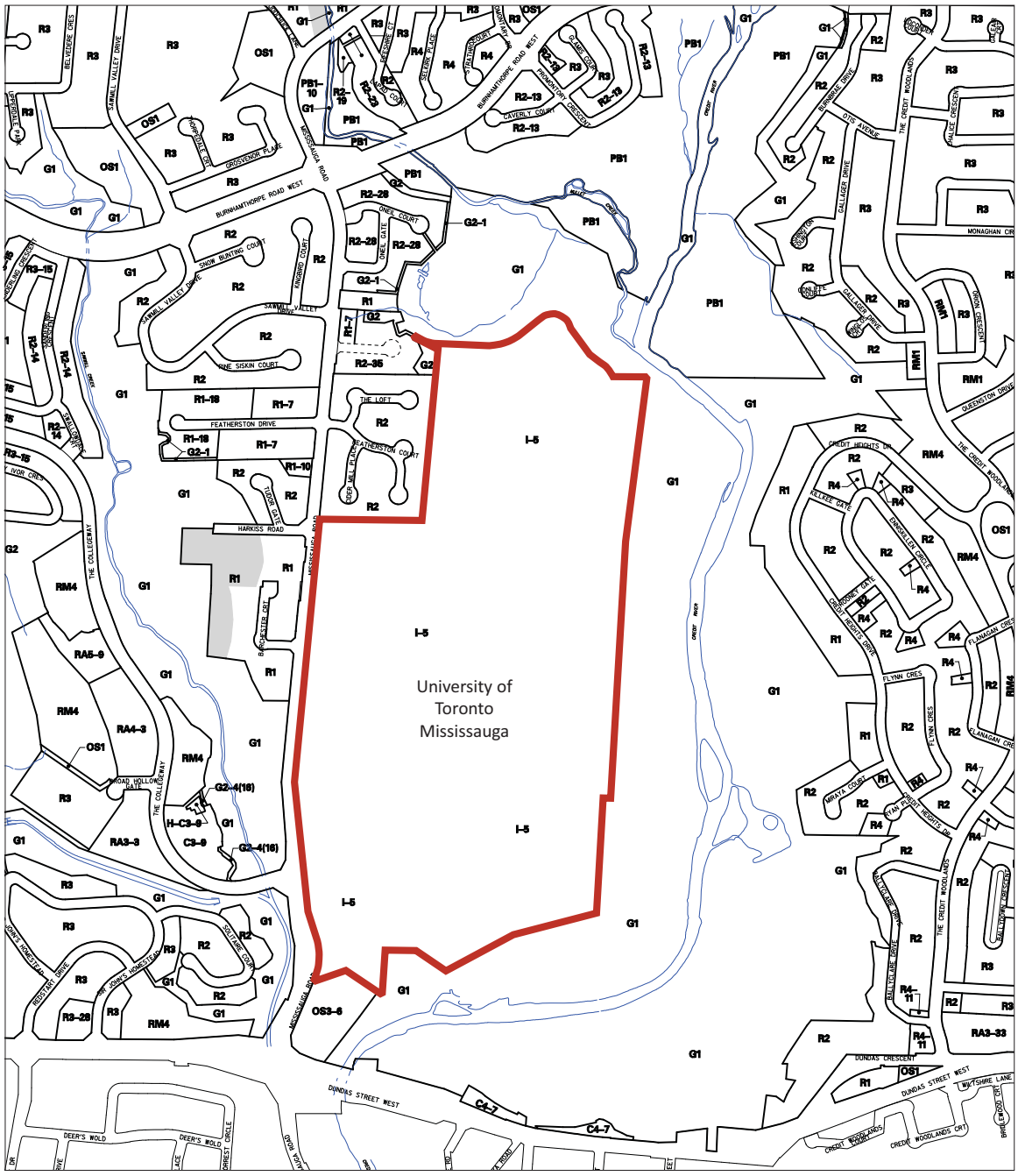
Zoning Regulations

The majority of the campus has Institutional (I-5) zoning, a classification that permits most uses related to the operation of a university.

Development on campus is only limited by set-back, lot coverage, landscaped open space and parking requirements. The minimum setback from Mississauga Road is 15 m; and construction is not permitted within the greenbelt area G-1, which runs along the Credit River. Trails and accessories related to passive recreational uses are an exception. Several applicable environmental protections and regulations at the provincial, regional, municipal and conservation authority levels pertain to this existing woodland and watershed area. Protections and their associated regulating bodies are discussed in greater detail under Opportunities & Challenges: Environment.

The Culham Trail in the Credit River valley

Zoning Map

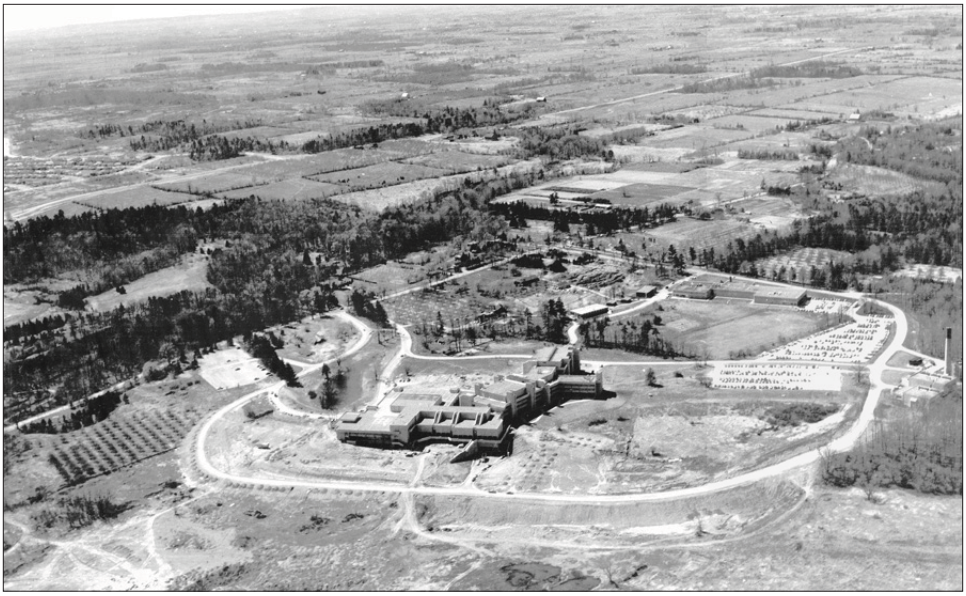


City of Mississauga Zoning Map '24' June 20, 2007.

I	Institutional (Hospital and University/College)	**RA**	Apartment, Long Term Case and Retirement Dwelling
G	Greenbelt	**O**	Office
R	Detached Dwelling	**C**	Commercial
RM	Semi-Detached and Townhouse Dwelling	**OS**	Open Space

The University of Toronto acquired private estate lands in 1965 to accommodate what was to be known as Erindale College and commissioned architect John Andrews in 1966 to develop a campus master plan. Andrews, called on after completing a favorable plan for the Scarborough campus, proposed a single, massive 'megastructure' at the south end of the campus that would leave the remainder of the site's cleared rural and wooded areas relatively undisturbed. The form responded to the site topography (the ridge of a former quarry) and would grow incrementally over time, from 500 students to 5,000 students. At the time, the predicted ultimate student population was 12,000 students.

In 1967-68, for reasons unknown, A.D. Margison and Raymond Moriyama took over the planning process. Similar to the Andrews vision, the Margison/Moriyama plan built on the idea of a 93,000 square metre building complex surrounded by open space, and a loop road. This led to the design of the South Building and its ring road (Outer Circle Road) vehicle circulation. This plan, for better or worse, has served as the basis for the present-day campus.



Aerial view of campus circa. 1972

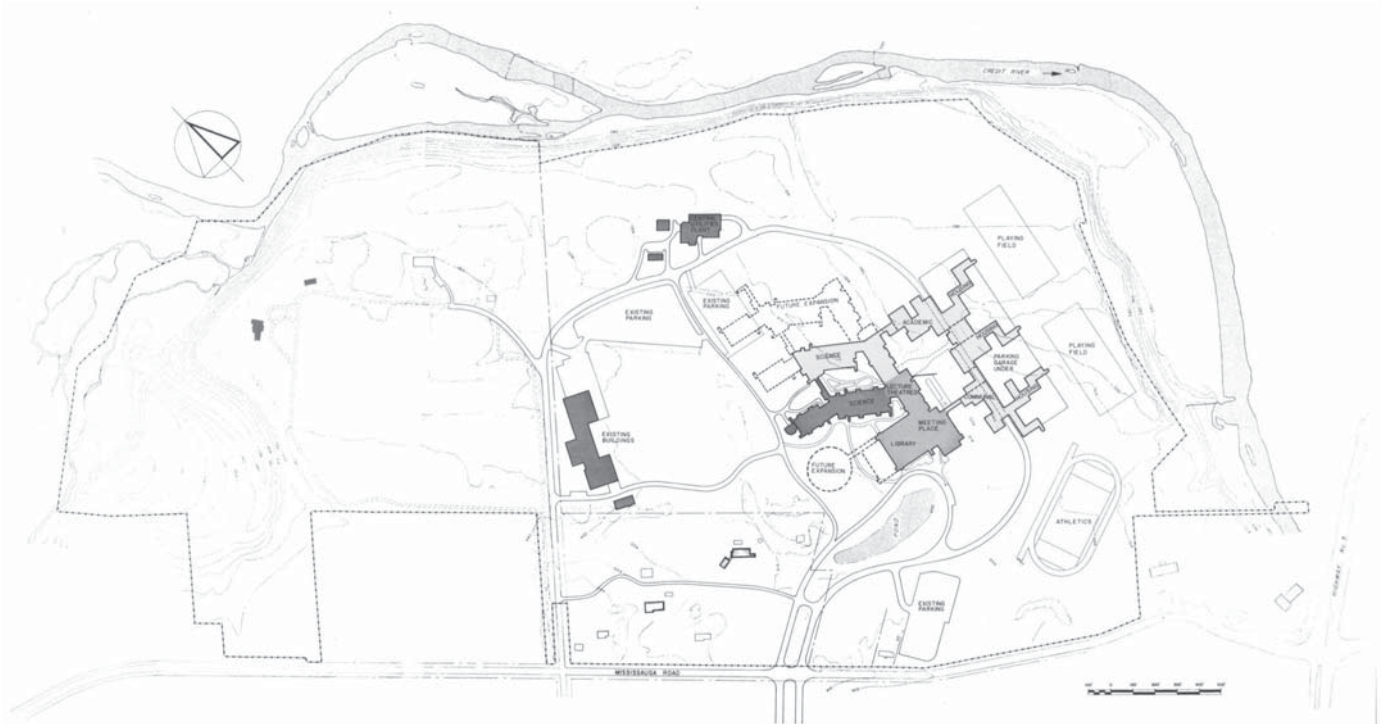
The South Building, prominant in this image, was rededicated in October 2010 as The William G. Davis Building. Davis, former premier of Ontario, was instrumental in establishment of the UTM campus.

Since the initial construction projects of the early 1970s, the campus developed slowly and on an ad hoc basis. It was not until the double-cohort year following the elimination of Ontario's Grade 13 and the subsequent increase in enrolment pressures that the University commissioned a new comprehensive campus master plan in 2000.

The 2000 Master Plan sought to address several key issues: community, environment, consolidation, pedestrian routes, and accessibility. The planning strategy involved dividing the campus into parcels by use, including: academic, mixed-use, residential, landscape and parking. The parcel plan also designated open spaces and ecological areas to be retained over the long term.

The 2000 Plan did not lead to any related municipal designations. However, the Plan is referenced when municipal approvals for new facilities and renovations are sought.

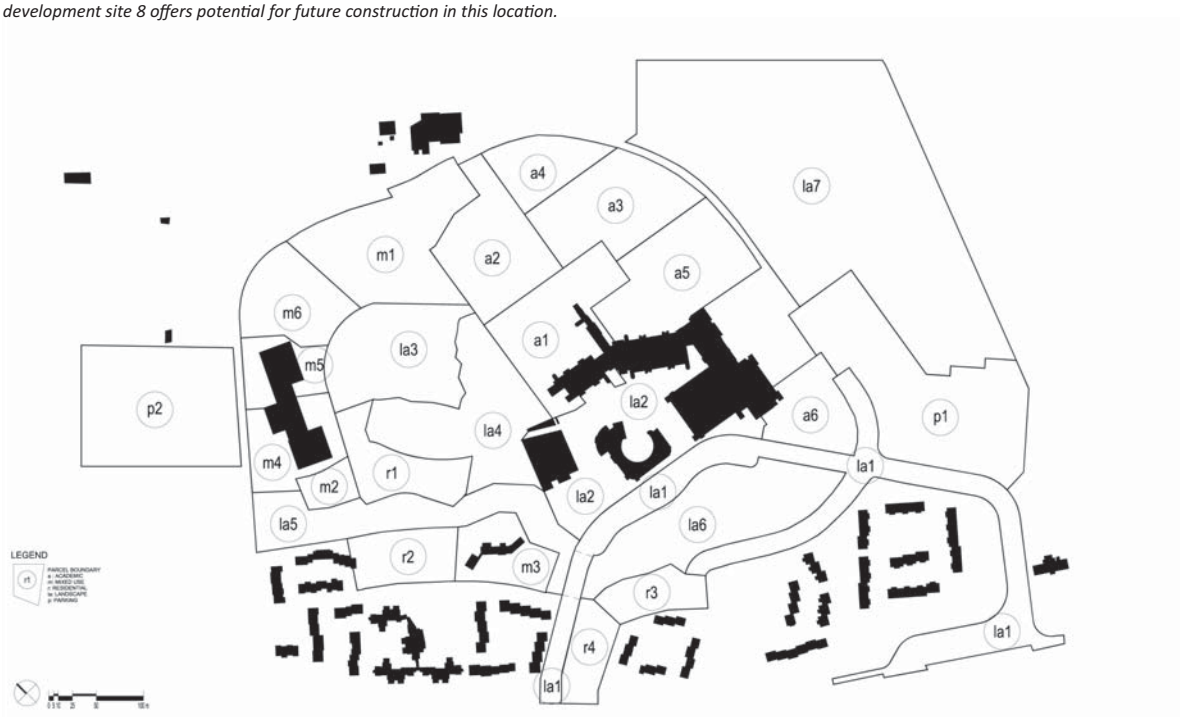
Historical Growth of the Campus



Building Complex Phasing Plan from A.D. Margison's plan: Report on Phasing and Planning for the Erindale College 1972.

67,300 gsm

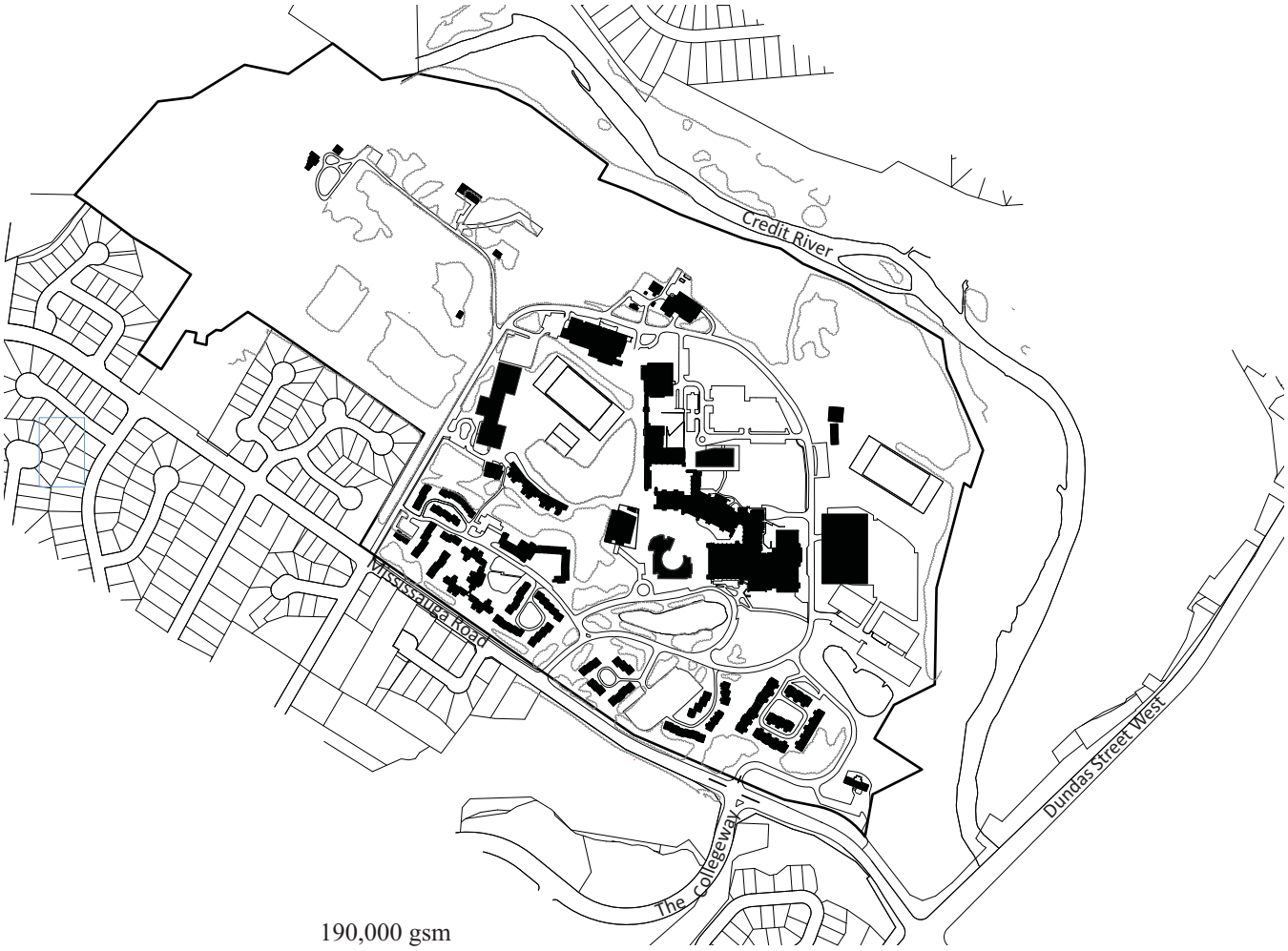
The proposed mixed use development, over the ring road and on the current site of parking lot 8, was not constructed, though development site 8 offers potential for future construction in this location.



Parcel Plan: the 2000 Master Plan delineated specific land use zones: academic, mixed-use, residential, lanscape, and parking; and reflect a complete campus build-out.

108,000 gsm

Current UTM Campus Plan

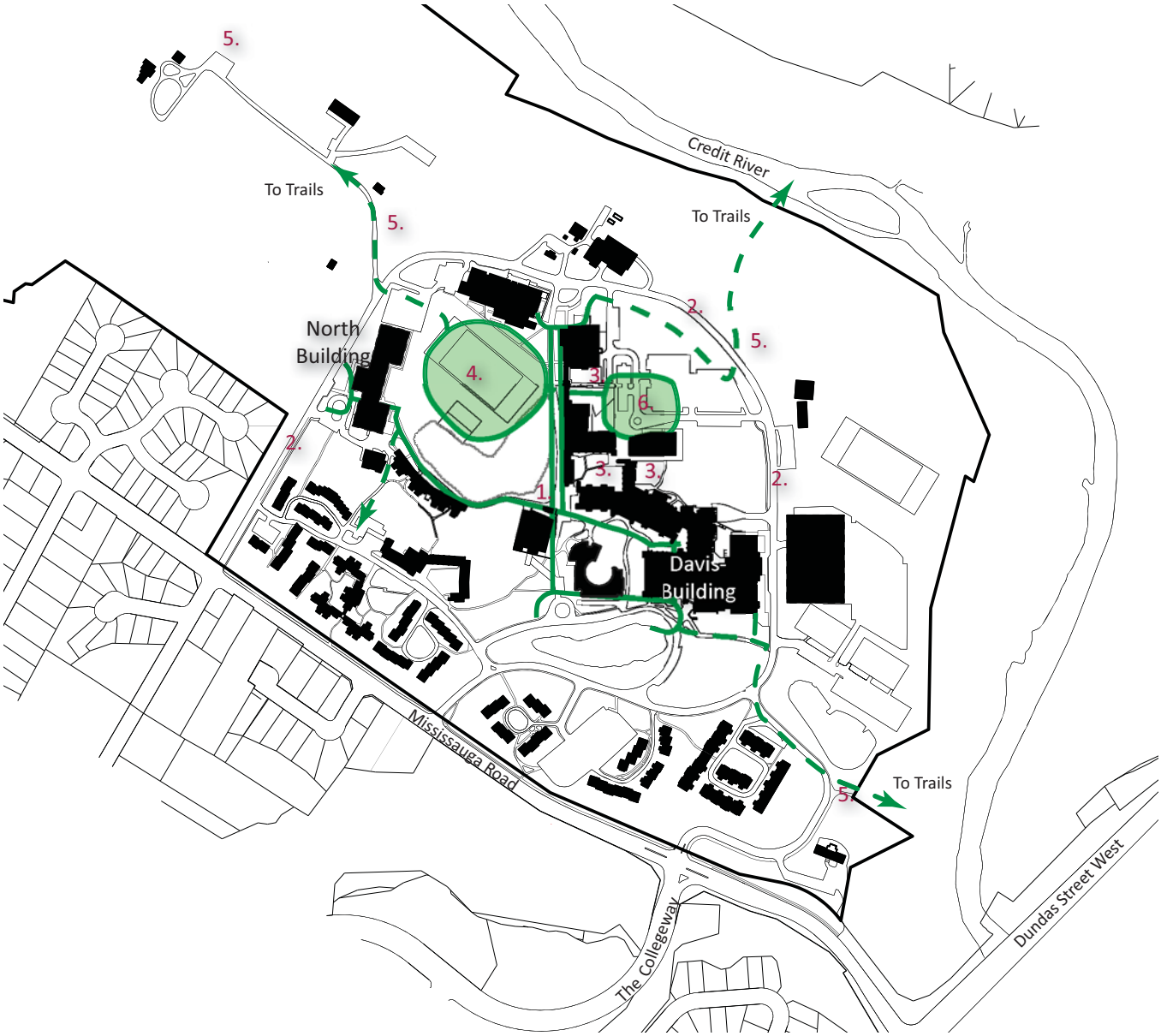


The Campus Today

Since the year 2000, undergraduate and graduate student enrolment has nearly doubled. This growth precipitated a rapid expansion of capital infrastructure, including the construction of two major academic buildings (Communication, Culture & Technology Building (CCT) and Hazel McCallion Academic Learning Centre (HMALC)); the Recreation, Athletics and Wellness Centre (RAWC); and two student residences, totaling over 62,500 gsm of new space.

Construction for the new Health Sciences Complex (6,000 gsm) began in Summer 2009, with a scheduled Summer 2011 completion; a new Instructional Centre (12,100 gsm) was completed in March 2011.

The University has demonstrated leadership in maintaining a high level of excellence in architecture throughout the last 10 years of significant expansion. An integration of innovative architectural design with the campus' distinctive natural environment will continue to build an identity of excellence. Planning for balanced development will enable the University to realize necessary physical expansion to fulfill future academic objectives identified for the short- and long-term and to address evolving academic needs.



This updated UTM Master Plan expands upon strengths of the current campus framework and the direction outlined in the 2000 Master Plan. It features:

1. two defined pedestrian links intersecting at the centre of campus;
2. a ring road, which contains and serves the majority of academic buildings on campus;
3. a series of courtyards;
4. a central, prominent green space to be redefined as the Campus Green;
5. preservation of and connection to the natural environment; and
6. the potential for an academic quad.

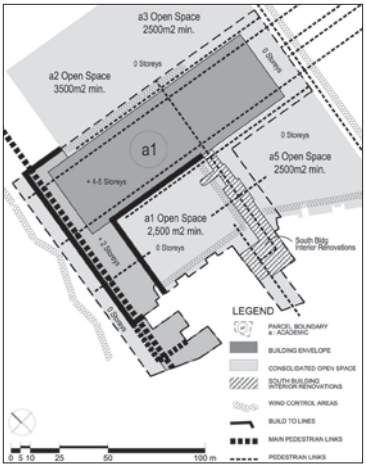
The Link view down Middle Road toward the Hazel McCallion Academic Learning Centre (HMALC)

The design and placement of the CCT building was shaped by two key objectives of the a1 parcel: the main Link, and creation of a courtyard, both intending to set up a framework for continued development.

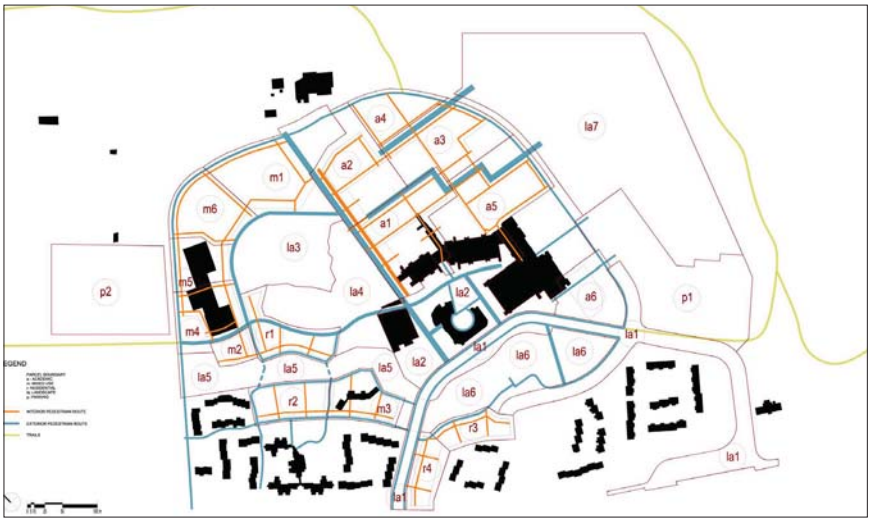
The new Health Sciences Complex, under contruction continues to respect the system of linkages and courtyards.

The Five-minute Walk was originally an informal connection between the Davis Building and the North Building, which was built as a temporary structure. The North Building, actually west of the Davis Building, remained, and the path between the two buildings developed over time as the campus grew up around it. The Link, a pedestrian and service route which runs between the Central Plant and Inner Circle Road, was identified in the 2000 Master Plan as an opportunity to restore the original plan to expand in the north-south direction. The CCT building and the HMALC were constructed in line with the Plan and, as a result, reinforce a language of primary and secondary linkages upon which to shape future development.

CCT and HMALC also successfully implement the plan's vision that built form should wrap a series of courtyards to provide view and sunlight to interior spaces, outdoor comfort and connection. The 2000 Master Plan recommended the creation of a 'UTM Quad'. While a hierarchy of outdoor space has begun to take shape, the campus continues to lack a true common green. The North Field is currently dominated by a regulation-size soccer field and used primarily for organized athletics. However, in terms of size and location, it holds the potential for a multi-use gathering space, especially as the north end of campus expands.



3.6.5 CCT Parcel Description, 2000 Master Plan.



UTM Campus Map-Greenspace, including 'No-build' zones identified in the 2000 plan and environmental regulated zones.

The natural environment is intrinsic to the UTM campus identity. Preservation of existing green space and definition of future green space continues to be pivotal in shaping proposed future development. To date, the University has ensured that expansion proceeds in a thoughtful and coherent fashion with respect for significant natural landscapes. Future expansion must consider scale within the surrounding suburban area and invite broader thinking about the campus as an integral part of the environment and the City.

Woodlot on campus; No-Build zone

Entrance to W.G. Davis Building

Gateways and landmarks are required at the scale of the automobile, as well as within the campus at the pedestrian scale.

View to Davis Building, approaching the ring road from the new campus entry

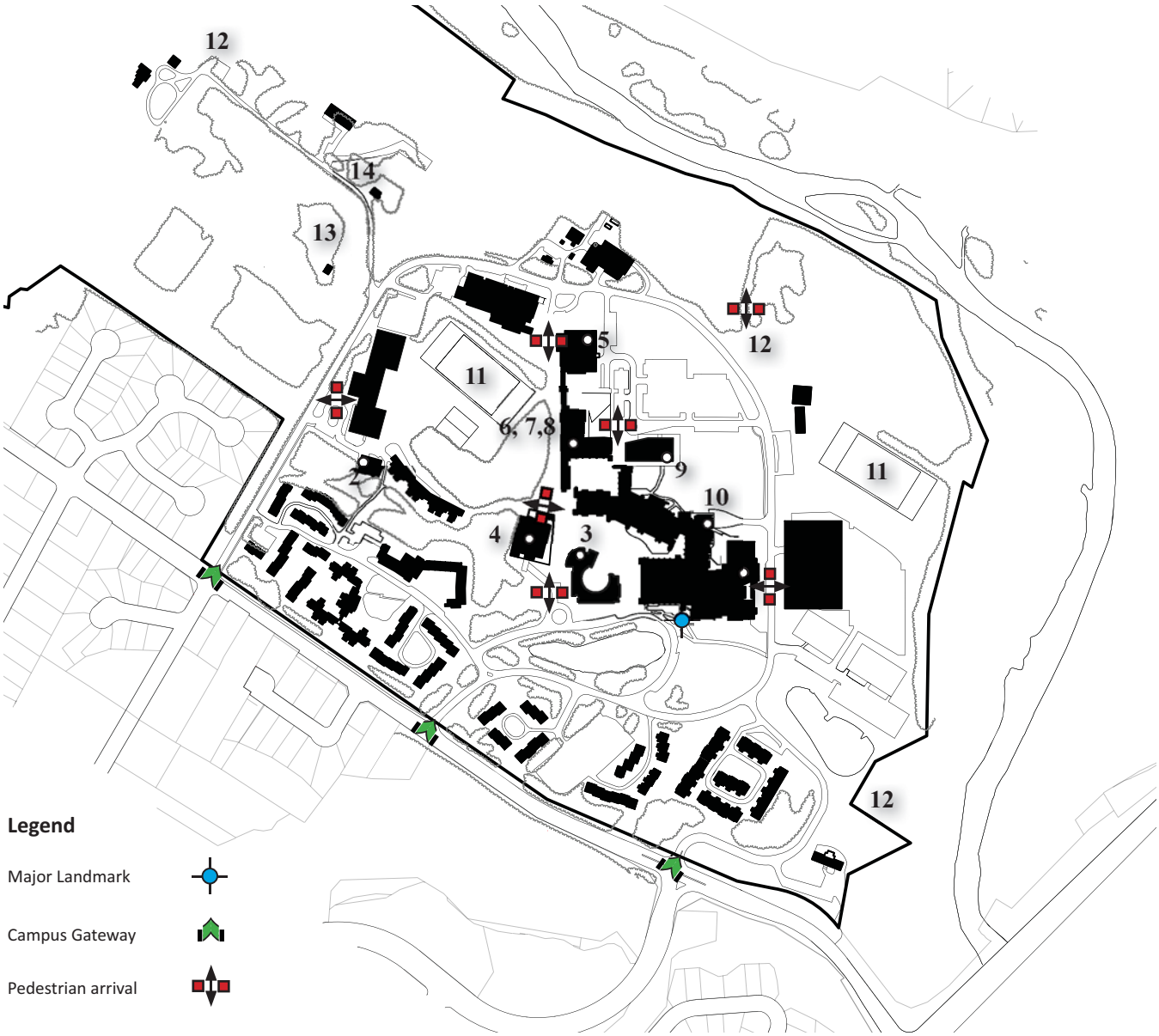
Recreation, Athletics and Wellness Centre (RAWC)

Student Center

At the centre of campus, the Student Centre acts as a gateway (to the 5-minute walk); its signature roofline is a notable campus landmark.

Hazel McCallion Learning Centre (HMALC)

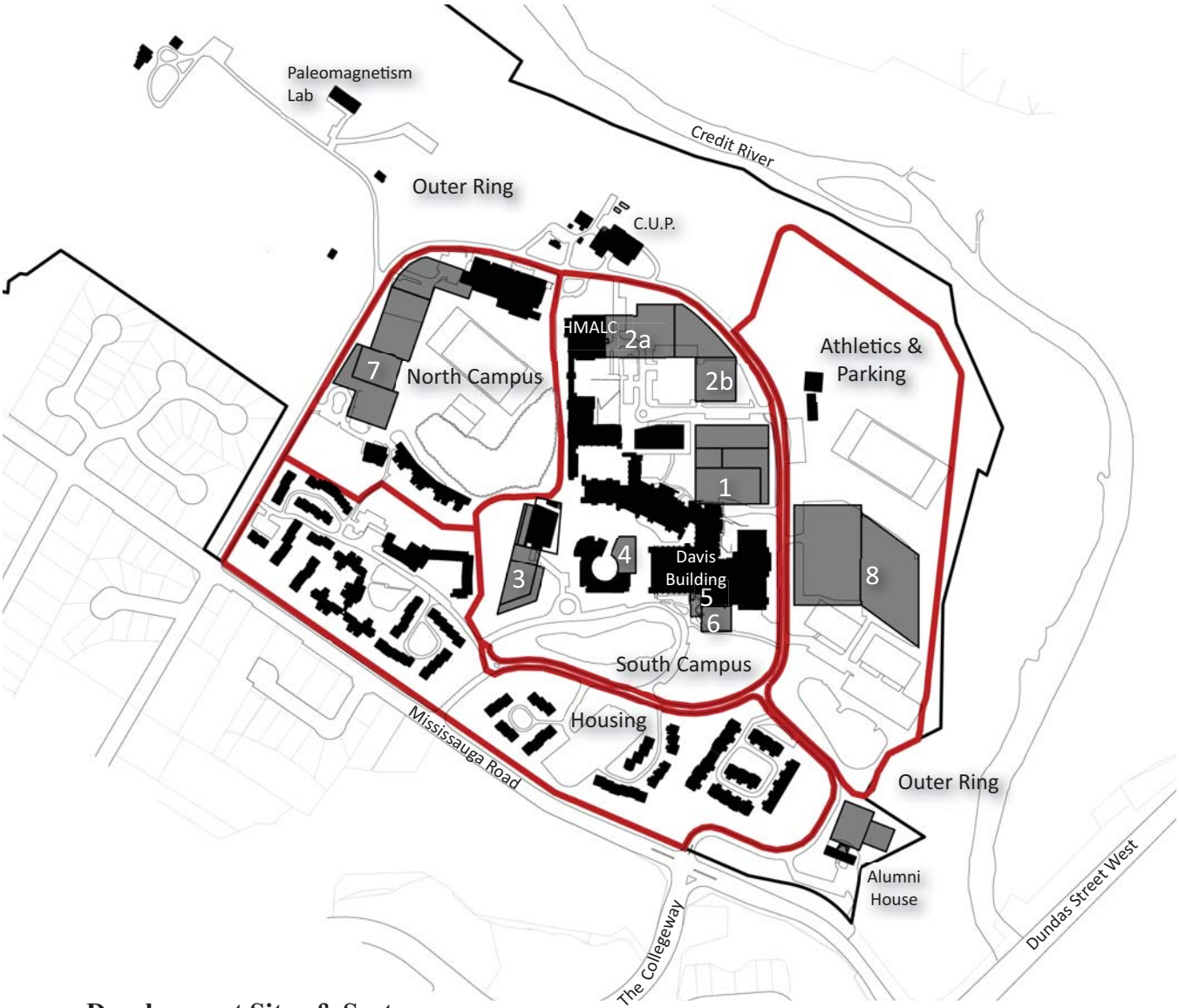
The 'Hazel' has become a campus landmark, a destination and meeting place. Open to the public, its outreach includes programs for high school students.



UTM Campus Gateways and Key Visitor Destinations

To be respectful of its low-scale residential and natural context, the campus is intentionally inconspicuous from Mississauga Road. Alumni House may be considered a landmark denoting the South entrance to the campus at the Collegeway. However, its identity is separate from the rest of campus, and its current business services function does not marry with the concept of a gateway building. The Davis Building's main entrance is currently the 'front door' to campus. However, since construction of the new Collegeway entrance road, the Recreational, Athletic & Wellness Centre (RAWC), located directly on the ring road, has become the unofficial 'front door'. The 2011 Master Plan proposes a prominent landmark, clearly visible upon entry to the campus, as part of a Davis Building entrance expansion.

1. Recreation, Athletics and Wellness Centre (RAWC)
2. Erindale Studio Theatre
3. Blackwood Gallery
4. Student Centre
5. Hazel McCallion Learning Centre (HMALC)
6. Multimedia Studio Theatre (MiST)
7. e I gallery
8. Human Communications Laboratory
9. Health Sciences Complex
10. Conference facilities
11. Athletic Fields
12. Public nature trail entry
13. Weather Station
14. Historic sites



Development Sites & Sectors

The 2011 Master Plan identifies sites for future development. Sites & Sectors details specific building envelopes (build-to lines, setbacks, and heights) and contextual information. In order to maximize flexibility over time, this plan does not reference specific program or building types.

South Campus

Site 1 Davis Building science expansion
Site 2 Hazel McCallion Learning Centre (HMALC) expansion, and new building
Site 3 Student Centre expansion, and new building
Site 4 Kaneff Building expansion
Site 5 Davis Building entry and tower addition
Site 6 Davis Building student plaza expansion

North Campus

Site 7

Athletics & Parking

Site 8

Outer Ring

Alumni House
Central Utilities Plant (CUP)
Paleomagnetism Lab

Housing

UTM's Planning Principles have been created to help guide proposed campus development, and should be read in conjunction with review of proposed building envelopes.

They were derived from key concepts first presented in the 2000 Master Plan, and evolved in response to feedback from the UTM community. During an intense period of community engagement from January to April 2010, a series of meetings, a web link to the Master Plan from the UTM homepage and email contact allowed students, staff and faculty to provide feedback on the Planning Principles. Key themes emerged from this consultation, including:

- a desire for centralized outdoor common space;
- improved pedestrian connections on campus and to outlying areas;
- preservation of green space;
- increased campus amenity; and
- a well-articulated sense of UTM's academic mission and campus identity through built form.

The pages that follow outline Campus Planning Principles under seven headings >

1. CAMPUS ENVIRONMENT
2. LAND USE
3. MASSING
4. BALANCED INTENSIFICATION
5. SUSTAINABILITY
6. ACCESSIBILITY
7. HERITAGE PRESERVATION

North Field (future Campus Green)

The existing North Field has the potential to serve as a unifying element on the UTM campus if enhanced as a multi-use, flexible open space accessible to the broader University community. It is the largest single open space at UTM, comparable in scale to St. George's Front Campus.

Engaging the Ecological Context

UTM's existing Nature Trails provide an entry point into the rich ecological zones along the Credit River valley. The trail network can be enhanced to provide greater accessibility and connection to the University's unique natural context.

Land Allocation

The supply of parking on campus remains a challenge and a particularly inefficient use of land if constructed as surface level-only. Solutions lie in a combination of enhanced transit options and reduced-footprint parking amenities.

CAMPUS ENVIRONMENT

The University community's environment must:

- support intellectual aspirations of its community;
- build on a fundamental framework of social and environmental amenity;
- be vibrant and encourage activity;
- relate buildings to landscapes and create a logical sequence of movement;
- provide shelter and active travel between buildings;
- be safe, secure, and accessible;
- respect and engage with the unique ecological context; and
- maintain and enhance a central unified open space, as a unifying element on campus.

This Principle defines the vision and aspiration of spaces between buildings. The principles under Campus Environment recognize the University's unique sense of place as far more than the sum of its parts.

Related section under Opportunities & Challenges: Open Space

LAND USE

Uses and functions assigned to the campus' physical environment must:

- promote the University's academic goals and serve its overall mission;
- consider non-academic uses that are compatible with, contribute to and engage the University community;
- enhance the connection between residential and academic life;
- respect and engage with the ecological context;
- seek opportunities to animate the campus, particularly by locating active use at the ground floor level and providing transparency between indoor and outdoor spaces; and
- ensure a visionary campus plan where parking, transit, servicing and traffic planning coordinate with existing and future buildings.

Unlike the 2000 Plan, this Master Plan does not identify specific building programs or land use zoning for each development site. The Land Use Principle provides overarching intent within an otherwise flexible framework.

Related sections under Opportunities & Challenges: Circulation, Open Space, Environment and Housing

MASSING

The form and scale of future expansion should define and develop appropriate relationships with surrounding buildings and landscapes. New construction must take into account impact on micro-climatic conditions creating an animated streetscape, and minimizing shadow and wind conditions.

Erindale Hall is a positive example of built form on campus, appropriate in scale and proportion. The north face of the residence building gives definition to the Five-minute Walk stretching between the Student Centre and North Building; the south side undulates to allow greater view and connection in response to the surrounding natural environment.

Erindale Hall, north elevation

In addition to successfully negotiating two very different campus conditions to the north and south, Erindale Hall provides a colonnade running parallel to the 5-Minute Walk for use during inclement weather.

BALANCED INTENSIFICATION

Future campus development must enhance, not overwhelm, existing University environs while making efficient use of limited campus land. The Plan seeks to:

- balance the desire for consolidation and the desire to connect to the outdoor environment;
- enliven and shape the spaces between and within buildings;
- strive to achieve the appearance of a complete campus at each phase of the plan; and
- ensure the adjacent community is addressed in scale and presence, while presenting a prominent and inviting image of an academic institution.

Though the Principle of Balanced Intensification applies equally to all three University campuses, the context is quite different. Despite a large land holding, UTM must be sensitive in its development footprint. UTM is unique, given its proximity to the Credit River, its woodlands, and its location within a predominantly residential district. In response, academic expansion sites are contained primarily within the ring road. In addition to sensitivity toward existing context, new buildings must also be thoughtful in creation of new context. As stated in the 2000 Master Plan "each building project is responsible for creating the open space that surrounds it".

Related sections under Opportunities & Challenges: Open Space and Environment; and Sites & Sectors

Recreation, Athletics & Wellness Centre (RAWC)

The RAWC has created a positive street presence along Outer Ring Road and serves to connect through to the Davis Building beyond. Its massing at the street level helps to identify the building as a secondary gateway to the inner campus.

Communication, Culture and Technology Building, CCT

An example of enlivening and shaping the spaces between buildings, the CCT's siting in relation to the Davis Building created an intimately-scaled outdoor courtyard. Glazing along perimeter walls allows visual connection to the exterior from interior ground floor spaces.

SUSTAINABILITY

Solar Panel Array, Davis Building

The solar panel retrofit on the Davis Building is a prominently displayed example of a sustainable energy technology in use at UTM. Displays inside the building provide real-time energy use data.

Beyond reduced environmental impact, the University of Toronto Mississauga seeks to:

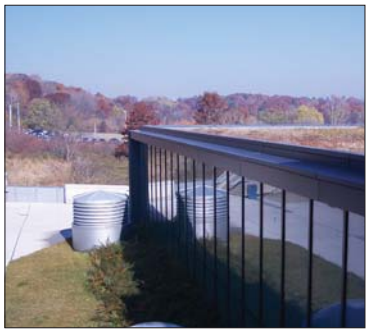
- take a leadership role in line with the University's overall mission;
- advance opportunities to link sustainability principles with research and teaching;
- promote its environmental achievements on campus and to the out side community;
- meet the University's stringent Design Standards related to environmental measures, and continue to strive beyond minimum requirements;
- incorporate technological advancements in building and landscape design, and seek partnerships where appropriate;
- encourage bicycle commuting and transit-oriented modes of travel; and
- enhance, connect and respond to the Campus' ecological context.

Environmental stewardship continues to be a high priority in discussions with the UTM community given the campus' naturalized context and the institution's emphasis on environmental sciences, sustainability, biodiversity and climate in programs such as geography, chemical and physical sciences, and management.

Bike Share program

Students, faculty and staff can sign out a bicycle free of charge to use for up to 24 hours. This recent initiative is promotes active lifestyles and provides alternative transportation to improve the local air quality and campus parking congestion.

Recent buildings reflect both UTM's banner for growth – *Grow Smart, Grow Green* – with the Hazel McCallion Academic Learning Centre completed in 2006, the first building on campus to achieve LEED® Silver certification, and current projects (registered with the Canada Green Building Council (CaGBC)) aiming to achieve LEED® Silver or higher.



Green Roof, RAWC Building

The green roof on the RAWC facility is an example of sustainable building technology that mitigates stormwater runoff, provides additional habitat for local species, and reduces both building cooling loads and the campus' urban heat island effect.

Related section under Opportunities & Challenges: Sustainability

ACCESSIBILITY

The University's buildings and landscape must accommodate a diverse population in an open and inclusive campus. The campus environment should adhere to the principles of universal design.

UTM is a relatively new campus and as such largely accessible. Nonetheless, certain improvements can be made such as to the ramp at the main entrance to the Davis Building and the front door to campus. The design of the ramp also could be better integrated into the architecture.

Standards are anticipated to become more stringent in the near future once the Accessibility of Ontarians with Disabilities Act (AODA) *Accessible Built Environment Standard* is legislated.

Related section under Opportunities & Challenges: Accessibility

Accessible Entry, Davis Building

All buildings and connections to buildings throughout the campus should strive to be universally accessible. This accessibility should be integrated into the design process of new and renovated facilities.

HERITAGE PRESERVATION

The University of Toronto seeks to protect and maintain its heritage properties and landscapes. Listed and designated properties should not be considered in isolation, but as character-defining elements within the overall campus context. Development should respect and engage with the contextual value of these heritage elements.

There are only two designated heritage properties on campus (Lislehurst, and Alumni House) both outside Outer Circle Road. The Student Centre and the 1968 wing of the South Building (now the Davis Building) are listed buildings within the ring road, where most future development will occur.

Mississauga Road is recognized as a Cultural Landscape, as it is one of the City's oldest and most picturesque thoroughfares. The Master Plan is sensitive to UTM's unique context.

Related section under Opportunities & Challenges: Heritage

Cultural Landscape, Mississauga Road

This picturesque thoroughfare serves as one of UTM's campus edges and has a distinct character that should be handled with sensitivity.