Project Planning Report
for a Parking Garage at the University of Toronto at Mississauga

I Committee Membership

Ray deSouza	Chief Administrative Officer, UTM (Co-Chair)
Elizabeth Sisam	Assistant Vice-President, Space and Facilities Planning
Sol Kessler	Director, Campus Infrastructure and Facilities, UTM
Jim Linley	Former Acting Director, Business Services, UTM
Christine Capewell	Director, Business Services, UTM
Scott Monroe	Professor and Chair, TUM Parking and Transportation Committee
Sean O'Connell	Past President, Erindale College Student Union
Ryan Carol	President, Erindale College Student Union
Gail Milgrom	Managing Director, Campus and Facilities Planning
Julian Binks	Manager, Projects Planning, Capital Projects
Ben Louie	Development Manager, Capital Projects, UTM
Walied Khogali	Vice-President, SAC, UTM

II Terms of Reference

1. Recommend a detailed performance criteria for the layout, site plan, landscaping, design and operational requirements for a new above ground parking garage facility at the junction of the new entranceway to the campus (Alumni Gates) and the Ring Road. Recommendations to fully reference the University of Toronto at Mississauga's Master Plan 2000, the projected enrolment growth at the UTM campus, plus the location and design of improved new buildings now under construction.
2. Identify any site-specific constraints and requirements, including the storm water management facility as outlined in the Master Plan 2000.
3. Identify all secondary effects including the relocation of the existing tennis courts as well as provision of temporary parking during the construction period.
4. Identify all resource implications for the recommended design (component and total project elements).
5. Comment and recommend as necessary on the role of the public transit services on the campus in relation to increased parking facilities.
6. Recommend a detailed schedule for the design and construction of the new parking garage facility consistent with and supportive of the objectives of enrolment growth target of 11,500 students by September, 2006.
7. In the event that a suitable schedule, as outlined in item 6 above, cannot be accommodated within the timeframe required, recommend an alternate solution, possibly temporary, that will allow for increased parking on the UTM campus.

III Background

The University of Toronto at Mississauga (UTM) has experienced unprecedented and dramatic enrolment growth requiring an expansion of its facilities. To meet these challenges, UTM completed a campus master plan in 2000 to provide a planning overview, with targeted objectives and solutions to guide campus planning decisions regarding physical improvements and growth.

Primarily a commuter campus the current inventory is 2,600 parking spaces, most of which are on surface parking lots located throughout the campus with approximately 400 new parking spaces in the recently constructed garage under the Centre for Communication, Culture and Information Technology (CCIT). The target for the overall supply of parking spaces at full enrolment had been identified to be in the range of 3,300-3,500 spaces. The Project Planning Committee, struck in February, 2005, reviewed options to provide additional parking on the campus.

The Resource Planning and Priorities Committee (RPPC), a standing committee of the Erindale College Council, approved a motion to proceed with an alternate delivery of parking services. The intent was to investigate alternate funding possibilities through which parking services would be provided.

The senior administration proceeded with a request for proposal process to select a consortium that would finance, build and operate a parking garage. The consortium would also be responsible for the operation of the parking facility.

After reviewing the proposals, and specifically the financial arrangements that were put forward, the option of third party financing was rejected primarily because the University would remain responsible for the cost of the project regardless of an external funding source.

The committee then focused its deliberations on item 7 of the terms of reference, ie, to recommend an alternate solution possibly temporary that will allow for increased parking on the UTM campus. A series of project planning committee meetings were held. At some meetings members of UTM's Parking and Transportation Committee and the Grounds Monitoring Committee were invited. A joint decision was made to extensively monitor the following:

- Existing operations
- Parking activity
- Parking demand during the crucial September/October window.

In the spring of 2005, UTM engaged LEA Consulting Ltd., Consulting Engineers and Planners to review the parking situation and to recommend a course of actions that would provide parking solutions in the absence of a new above-ground parking garage.

IV Summary of Study Results

LEA Consulting tabled its final report titled, "Transportation and Parking Strategy" in December, 2005. The report is available upon request and forms a part of this project planning committee report. A summary of the findings, recommendations and implementation timelines are detailed in the following executive summary:

- A three-phase study was completed to identify parking issues, constraints and opportunities at the UTM campus over the next five years. The objective of the study (begun in 2005) was to provide recommendations on parking supply to accommodate the UTM population over the next five years.

- Phase One examined conditions of parking and transportation for the campus. Existing travel demands and factors affecting parking demand at UTM were obtained and reviewed.

- Phase Two focused on identifying current parking problems and potential short-term solutions.

- Phase Three looked at forecasted parking demands for several scenarios and assessed the adequacy of the long-term parking supply.

The existing conditions showed that there had been a significant demand for unreserved parking spaces at UTM. In the 2004-05 school year, permits for unreserved spaces were oversold at a ratio of nearly 2:1. However, only 60% of the permits allocated for reserved spaces were sold. Parking demand surveys in the 2004-05 school year demonstrated that unreserved parking lots closest to the main buildings were operating at near or over-capacity.

As a result of these findings, the UTM Transportation and Parking Project Planning Committee initiated a promotion to increase permit sales for reserved spaces in the CCIT parking garage through price discounting. Also, two levels of the CCIT garage were opened for unreserved short-term parking, resulting in an incrase of unreserved parking supply on campus. Data for the 2005-06 school year provided by UTM show that permit sales for unreserved spaces had generally decreased while permit demand for reserved spaces has increased. Just prior to the start of the 2005-06 academic year for UTM, 300 permits were sold for the CCIT garage whereas in the previous year, only 175 permits were sold. The following table summarizes permit sales in 2004-05 and at the beginning of the 2005-06 year.

	# of Permits Sold	
Parking Type	2004-05 School Year	Beginning 2005-06 School Year
Unreserved	3,110	2,445
Reserved	353	481
Car Pool	80	52
Resident	177	101
Total	**3,720**	**3,079**

When looking for alternative solutions for more efficient use of the current parking supply, the value of undergoing minor lot expansion, re-striping of parking lots, and implementing slightly different price structures for parking was examined. It was found that approximately 130 more parking spaces could be provided through re-striping and minor parking lot expansion. For the most part, these modifications were completed for the start of the 2005-06 school year. The overall supply is expected to remain constant over the next five years.

Notable changes to the supply in parking lots from 2004-05 to 2005-06 include an increase in unreserved spaces by opening up the bottom two levels of the CCIT garage for general parking and the re-striping of Lot 4 for a net gain of 25 spaces and Lot 9 for a net gain of 84 spaces; an increase in reserved spaces by including the top three levels of the CCIT garage.

The total parking count in 2005-06 is 2,730 spaces once all expansion and relining of the parking lots on campus is complete. Parking demand for the 2004-05 school year for typical months was estimated at 78 per cent utilization (2,021 parked vehicles), with Lot 2 and Lot 9 typically exceeding capacity. UTM advised that during the peak months of September/October, there was an overflow demand of up to 90 vehicles, or 5 per cent additional parking demand.

The September, 2005 surveys confirm that with the reallocation of parking spots, there is still capacity in the parking lots to accommodate demand during the known peak months of parking demand on campus. Surveys were subsequently conducted in November, 2005 to confirm the difference between parking demand during a typical month and a peak month.

Both analyses show that there would be sufficient parking on site to accommodate typical demands during typical months. However, some parking types, notably the unreserved parking exceed 90 per cent and should be monitored for the need to provide a greater supply for this parking type by 2010.

However, in the case of using the 2004-05 base year for forecasting if current trends on campus continue, there is little reserve capacity for additional demands caused by peak months, the need to accommodate contractor and other parking, and most importantly, should parking supply decrease due to redevelopment plans. Using the September, 2005 survey results as the base observed parking demand (81%), parking utilization on campus increases to 87 per cent in 2006-07 and to about 96 per cent in 2009-10. Most notably, both the unreserved and reserved parking types exceed 100 per cent in 2009-10, although the overall utilization remains under 100 per cent.

V Automobile Minimization Options

Attempting to reduce automobile demand to the campus is an important initiative that the University is currently undertaking and should continue to enhance in the future. The sensitivity of automobile/parking reduction to the campus was tested. Successful implementation of demand reduction measures would decrease regular peak parking demand to under 90 per cent for both moderate and aggressive mode split scenarios up

to the year 2010. This would necessitate a lower re-allocation of spaces between unreserved and other types of parking and potentially defer the need for, or decrease the amount of, additional parking supply that may be needed in the longer term

UTM's carpool program is comparable to those offered at other universities. Requiring two registered drivers to enroll in the program instead of the three that are required for most other universities is already an incentive for the university population. However, it does seem that some universities give greater incentive for carpools in terms of parking permit cost and preferred parking location. It is suggested that when UTM issues its carpool passes, it should inquire the user on their preferred location, so that in the future, if there are particular lots which appear to be preferred by carpools, more parking spaces at a particular lot may be re-designated as carpool-only spaces.

UTM Is seeking the implementation of a U-Pass system, but it is also necessary to ensure that the transit authorities provide coverage to areas where the current population resides. The degree of success depends on the efficiency of the transit system. Students that are far from a transit route would be unlikely to do so.

The issue of parking enforcement has been identified as a complex matter and should be considered in more detail by the University. Entry gates have been identified as a potential measure to reduce illegal parking. If this becomes a preferred enforcement option, a technical study should be undertaken to evaluate the benefits and impacts, and cost-benefit ratio of different types of gating systems, which is beyond the scope of this report.

VI Conclusion

Based on the foregoing, UTM does not appear to require new parking structures on campus prior to 2009-10, although it is inevitable with continued enrolment expansion, and physical expansion over the parking lots that a structure will be required some time after 2010. Using the September, 2005 data, which is acknowledged as the peak parking demand time on campus, both the unreserved and reserved parking types exceed 100 per cent in 2009-10, although overall utilization does not, thus suggesting that supply must be increased by reallocating parking from other types (ie, resident, carpool) or by constructing additional parking. Should development occur on the parking lots the overall loss of parking spaces to the University's parking supply may cause constraints to occur earlier than predicted by the consultant's analysis. In this case, monitoring the parking situation on campus as 2009-10 approaches is necessary as additional supply may be required earlier than forecasted.

VII Recommendations

The Project Planning Committee recommends:

a) THAT a parking garage on the UTM campus not be constructed at this time.
b) THAT parking demand on the UTM campus be monitored on an annual basis.
c) THAT alternative solutions to minimize the use of automobiles be examined.