# University of Toronto

OFFICE OF THE VICE-PROVOST, SPACE AND FACILITIES PLANNING

TO: Planning and Budget Committee

SPONSOR: Ron Venter, Vice-Provost, Space and Facilities Planning
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DATE: April 29th, 2003 for May 13th, 2003

AGENDA ITEM: **#6**

**ITEM IDENTIFICATION:**

Project Committee Report for the Wellness Centre at the University of Toronto at Mississauga [UTM].

**JURISDICTIONAL INFORMATION:**

Under the Policy on Capital Planning and Capital Projects, the Planning & Budget Committee reviews the Project Planning Report prepared for a capital project and recommends to the Academic Board approval in principle of the project.

**PREVIOUS ACTION TAKEN:**

The South Building was the first major building on the University of Toronto [UTM] Campus constructed in the mid-1960s. The athletic and recreation facilities were but a modest part of the campus built to serve a student population of approximately 2,500 students.

Since those early beginnings, UTM has grown and the size of the current facilities severely limits what can be offered to students today. Current utilization levels of existing athletic facilities are very low, with an estimated 20-25 per cent participation rate, reflecting the inadequate quantity and quality of the currently available facilities. The campus will continue to grow and serve the needs of some 10,500 students within the next 10 years, driven initially by the *double cohort* and the long-term impacts of growth in both the Peel and Halton regions and an increasing percentage of the population pursuing a university education.

## BACKGROUND:

In September 2001, a planning committee of student leaders, staff, faculty and alumni at UTM undertook an extensive planning and consultation process regarding the components of physical education, athletic, recreation and wellness facilities appropriate for the UTM's expansion population.
The result was a planned facility estimated to cost $35M. Discussions among student groups continued and culminated in the approval of a successful levy in March, 2002 that potentially could support a $14 million mortgage over twenty-five years assuming 30 percent growth in student enrolment. With the commitment of a capped $7M matching contribution from the University of Toronto cost was considerably higher than

the funds available. Considerable efforts were undertaken to explore private and public partnerships with no firm commitment to date.

The Project Committee reconvened to review the space program and to prioritize the essential components to enable planning to proceed within the budgetary envelope.

The proposed space plan has recognized the limitations available funding; the plan has re-used existing facilities and added the necessary new components with yet other components planned for the future. The site of the project has also been adjusted to accommodate the connection to the existing facilities. The proposed Wellness will be located at the southeast corner of the South Building; the new site is large enough to permit the construction of the new program without disruption to the roadway or requiring the relocation of any parking. The original site identified for the Wellness Centre will be retained for future development on the campus

The new construction will accommodate the Aquatic Centre, comprising a 25m 8-lane pool, Double Gymnasium, with retractable eating for 800 – 1000 and a three lane running track and the Fitness Centre. Renovated areas of the existing athletic facilities will primarily provide an improved gymnasium for visually separated programs, team rooms, the Sports Medicine/Therapy Clinic, and expanded administrative space for the Athletics Department.

Under the Policy on Capital Planning and Capital Projects, the Project Committee will continue through the implementation phase. The Working Executive of the Project Committee will comprise the lead User, a Planner and Implementer all of whom have been intimately associated with the project definition since its inception; the Working Project Executive for the UTM Wellness Centre is:

**User:** K. Duncliffe, Director, Centre for Physical Education, Athletics & Recreation
M. Overton, Dean of Student Affairs and Assistant Principal
**Planner:** E. Sisam, Director, Campus & Facilities Planning
**Implementer:** J. Binks, Capital Projects, Facilities and Services

This Working Executive will expand to include the Project Manager, once appointed. The role of the Working Executive is to ensure the successful completion of the project and to ensure that the user needs and concepts introduced into the Project Planning Report are addressed throughout the process of consultant selection, design and implementation which are carried out under the direction of the Chief Capital Projects Officer.

**FINANCIAL AND/OR PLANNING IMPLICATIONS:**

The funding centre-piece for this project will be derived from a student levy advanced and conceptually approved by the students at the University of Toronto at Mississauga in March 2002. The student levy, requires an increase in fees of $150 per full-time student and $45 per part-time student increasing with inflation at a rate of 3 per cent annually, and would support a $14 million mortgage over twenty-five years. With increased student enrolment the levy will support a $16,000,000 mortgage. This funding is matched, at 50cents for each student levy dollar raised, by the University of Toronto to a capped maximum contribution of $7,000,000 [based on the original $14,000,000 student levy contribution]. Other contributions to the project are a $1,000,000 contribution from the UTM a further 500,000 from planned fund-raising at the University of Toronto at Mississauga. There are presently no negotiated partnerships with the community to secure external capital funds, but such partnerships will continue to be explored.

The Student Levy of $25.00 was passed by the University of Toronto at Mississauga's Quality Service to Students committee on March 15, 2002 and subsequently at University Affairs Board [UAB] on April 30, 2002.

The increased Physical Education, Recreation and Athletics fee, paid by all UTM students, commenced in the fall of 2002. The initial amount approved in 2002 is $25 per full time student [$7.50 per part-time student]. Students will be charged this amount according to the policy on compulsory non-academic ancillary fees, with these fees increasing annually by 3% for inflation. For the Wellness Centre project to proceed to design, construction and completion requires that the University of Toronto at Mississauga's Quality Service to Students [QSS] committee approve the full fee payment in the amount of $150 per full-time student [$45.00 per part-time student]. This process will be finalized in 2003/4, presumably by the spring of 2004, so that the full fee payment will be initiated or guaranteed for the 2004/5 academic year.

In advance of this approval by the QSS, and the subsequent endorsement by the University Affairs Board, the Wellness Centre project will proceed, with post governance approval, subject to the following conditions. Until such time as the full levy is approved and the payment thereof initiated or guaranteed at the $150 value per full-time student and $45 per part-time student, the maximum expenditures on the project will be capped at $500,000. This condition will however permit the selection and appointment of the consultant to be undertaken during the summer and provide the time window for the QSS to approve that the full allocation derived from the student levy be directed to this project. The amount of the levy remains unchanged from that identified and approved in principal in April 2002 when the levy was initiated.

The feasibility of the financial model was carefully developed and assessed by the Controller, Ms. Sheila Brown, to interpret the risk associated with the project. The attached memorandum outlines the financial analysis and the risk assessment for the project. UTM will assume responsibility for all cost overruns recognizing that such would have to be at the expense of other plans and or activities. In the unlikely event that such becomes necessary, UTM is prepared to make the necessary adjustments to future operating plans.

The projected cost of utilities and operating costs to service this additional 6,700 gross square metres is estimated at $466,300 in the first year of operation. The increased operating cost is the responsibility of UTM and will be derived from its operating budget including Enrolment Growth Funds within the limits of the existing multi-year expenditure plans. As necessary, reallocations will be undertaken within the existing plan so that this additional (infrastructure) commitment will not change *bottom-line* projections**.** A further commitment from UTM, estimated at $1.5M to improve the electrical infrastructure on campus, will be required to expand the existing power grid. The existing grid will not support the electrical load of additional buildings starting with the Wellness Centre and the planned Student Learning Centre. The possibility of including the electrical upgrades within respective project costs of Student Learning Centre was considered and rejected by UTM. An independent project to address the electrical infrastructure on the UTM campus will be initiated well in advance of the need for this electrical power to be available.

The student body at UTM is to be congratulated on their initiation of this project and for their considerable financial support and commitment to the project. Final approval from QSS and the UAB with respect to the full levy contribution could be anticipated in the spring of 2004. The Wellness Centre is planned to open in September 2006.

**RECOMMENDATION:**
The Planning & Budget Committee recommends to the Academic Board

1. THAT the Project Planning Report to establish the Wellness Centre at the University of Toronto at Mississauga be approved in principle.

2. THAT the project scope for the Wellness Centre at UTM comprising a total of 4,810 nasm, of which 490 nasm are renovations to existing space, for a net increase of 6,700 gsm be approved.

3. THAT the funding arrangements for the Wellness Centre at UTM be approved at an estimated total project cost of $23,500,000 to $24,500,000 with funding as follows:

    (i) A capped contribution of $7,000,000 from the University of Toronto for the 50 cent match on each dollar raised through the student levy support,
    (ii) A one-time-only contribution of $1,000,000 from the University of Toronto at Mississauga,
    (iii) A $500,000 contribution to be secured from fund raising at the University of Toronto at Mississauga [UTM], and
    (iv) A mortgage to be amortized over a period of approximately 25 years in the range of $15,000,000 to $16,000,000, with payments forthcoming from the planned student levy income. Student levy income would continue until such time as the mortgage is fully paid.

# University of Toronto at Mississauga
# Wellness Centre Project Committee Report

## April 23, 2003

**Table of Contents**



Appendices:

## University of Toronto at Mississauga – Wellness Centre Project Committee Report

### I. Membership

Ken Duncliffe, Director of the Centre for Physical Education, Athletics and Recreation, (Chair)
Mark Overton, Dean of Student Affairs and Assistant Principal
Judy Chin, President, UTM Athletic Council (UTMAC), 4th Year Biology and Anthropology Student
Adil Mirza, President, Erindale College Student Union (ECSU)
Shaila Kibria, Secretary, Erindale Part-time Student Association (EPUS)
Gemma Cassidy, Residence Don, UTM
Mohammed Hashim, Director, Student Administration Council UTM (SAC), 3rd Year Political Science Student
Jose Etcheverry, UTM Graduate Student, Ph.D. Candidate
Elizabeth Hoffman, Associate Dean, Faculty of Physical Education
Jack Krist, Programme Coordinator, Physical Education, Athletics and Recreation, UTM
Maureen MacLean, Administrative Coordinator, Physical Education, Athletics and Recreation (UTM)
Professor Gary Sprules, Department of Biology
Tina Mann, Association of Graduate Students at Erindale (AGSAE)
Pardeep Nagra, Diversity Officer
Warren Edgar, Alumni and Community Member
Sol Kessler, Director of UTM Facility Resources
Professor Bruce Kidd, Dean, Faculty of Health and Physical Education
Diana Borowski, Director of UTM Development and Alumni Affairs
Christine Capewell, Director of UTM Business Services
Elizabeth Sisam, Director, Campus and Facilities Planning
Julian Binks, Capital Projects, University of Toronto

Other participants over the term of the Committee include:

Ian Hazlewood, President, UTM Athletic Council (UTMAC)
Erick McKinlay, President of Erindale College Student Union (ECSU)
Jan Maw, UTM Residence Manager
Melanie Bowes, Residence Assistant
Nicole Phillips, Chair, UTM Student Administrative Council
Karen Lam, Vice-President, Erindale Part-time Undergraduate Students (EPUS)
Paul Jelec, Alumni and Community member
Professor John Browne, Director of Residence Development

### II. Terms of Reference

1. Determine the space program that will accommodate current needs and the future growth and change in physical education, athletic, recreation and wellness related programs and services.
2. The space program should address the needs of students, faculty and staff and community users as well as identifying the space needs and implications of potential partnerships with off-campus groups.

3. Ensure that the space program, layout and amenities, address the issues of gender equity, accessibility and cultural diversity, and establish a welcoming and inclusive environment for athletics and recreation.
4. Demonstrate that the space program will take into account the Council of Ontario Universities building blocks space formula and the University of Toronto space standards.
5. Identify all security and occupational health and safety requirements and their related costs.
6. Identify the equipment and furnishings necessary for the facility and its services.
7. Identify the site(s) for the Wellness Centre in accordance with the Master Plan of UTM.
8. Identify all secondary effects, and their associated costs, including existing space that will be released as a result of this project and any proposed modifications required for its reuse.
9. Identify all resource implications, including necessary additional staff required for the facility and the projected annual operating costs.
10. Provide an estimate of the total project cost.
11. Identify all funding sources for the project including all potential partnership arrangements.
12. Prepare the Project Planning Report for submission to the Planning and Budget Committee in March, 2002.

## III. Background Information

The South Building was a part of the Erindale Campus constructed in the mid-1960s according to a plan conceived by Raymond Moriyama, with the athletic and recreation components being a modest part of the campus built to serve a student population of approximately 2,500 students.

Current utilization levels are very low, with an estimated 20-25 per cent participation rate. It is believed that this reflects on the quantity and quality of the currently available facilities.

Two variables will directly impact the program needs of UTM; enrolment projections and participation rates. UTM retained Johnston Sport Architecture to investigate development options for the new athletic facilities.

UTM has grown to 6,400 students (as of the time of the study) and the size of the current facilities severely limits what can be offered to students today. The campus will grow and serve the needs of 10,500 students within the next 10 years, driven by the short-term effect of the “double cohort” and the long-term impacts of growth in Peel and Halton regions and an increasing percentage of the population pursuing a university education.

The need for expansion of the athletic and recreation facilities has been well documented and researched. Several attempts to expand the current facilities have been made in the past but never realized. The following list of planning studies and conceptual plans for expansion reference the need for additional facilities at this campus:

- Raising Our Sights: An Expansion Agenda Plan 2000-2004 (Principal R.H. McNutt)
- University of Toronto at Mississauga Master Plan (Sterling Finlayson Architects, June 2000)

- Proposed Athletic/Recreation Centre Preliminary Space Programme and Project Budget Plan (Carruthers Shaw and Partners Ltd., Architects, December 1998)
- Review of the Department of Athletics and Recreation (Internal Committee Report with contribution from Dr. Mary Keyes – McMaster University and Dr. David Copp – University of Guelph, 1998)
- Expanded Athletic Facilities, Erindale College University of Toronto Department of Athletics and Recreation (WGA Wong Gregersen Architects Inc. February 1995).
- Erindale Student Centre/Gymnasium Project (Johnston Sport Architecture, October 1994)
- Master Plan University of Toronto Erindale College Campus (1990)

In September 2001, a planning committee of student leaders, staff, faculty and alumni undertook an extensive planning and consultation process regarding the components of physical education, athletic, recreation and wellness facilities appropriate for the UTM's expansion population.

A number of physical program elements were presented in menu form, to assist in reviewing programming options, activity patterns and users potentially served. Working together with student groups the plan that was assembled was ambitious requiring funding partners and private benefaction to fully realize all phases, costs totaling in excess of $35 million. This initial program comprised the following components:

I Main Complex
- Aquatic centre
- Gymnasia (triple)
- Visually separate multi-purpose gymnasium
- Fitness centre/elevated track
- Sports medicine/therapy clinic
- Racquet centre
- Administration/academic space
- Childcare centre
- Outdoor activity centre

II Outdoor Artificial Ice Rink and Pavillion Outbuilding

III Temporary Fieldhouse

Discussions among student groups continued and culminated in the approval of a successful levy in March, 2002 that will begin when the building is completed, and doors are open. The student levy, increasing fees by $150 per full-time student and $45 per part-time student increasing with inflation at a rate of 3 per cent annually would support a $14 million mortgage over twenty-five years assuming 30 percent growth in student enrolment. With a 50 per cent match from the Provost, about sixty per cent of the funding for the large project was in place. Considerable efforts were undertaken to explore private and public partnerships with no firm commitment to date. Consequently, the Project Committee reconvened to review the space program and to prioritize the essential components to enable planning to proceed within the budgetary envelope.

Consistent in discussions was the desire to meet the needs of all members of the UTM community.

This report is the result of the work of that committee in identifying facility improvements that will address the current and future student needs in the expanding UTM campus. In this regard, elements of the overall conceptual plan (fourth gymnasium, ice pad

and field house) remain projects for future consideration and completion of the athletics program.

## IV. Statement of Plan

The Project Committee envisions the UTM recreation, athletics, physical education and wellness facilities, the Wellness Centre, as a source of education and healthy activity for UTM's undergraduate and graduate students, faculty, staff, and community members.

The project committee initially imagined what facilities might be appropriate for the expanded population 10-15 years in the future, and compared these ideas with UTM's most relevant comparitors, other Ontario and Canadian universities. The Committee, through the support of UTM's Department of Physical Education, Recreation and Athletics, undertook a feasibility study facilitated by a sport architectural planning consultant to guide a structured review and analysis of the possibilities.

The study compiled the current utilization rates of UTM athletics and fitness facilities, estimated to be approximately 25 per cent participation rate or 150,000 annual visits, which is very low compared to similar Ontario institutions due to perceived inferior or inadequate facilities. (Many UTM students report that their high schools have significantly better athletic and recreational facilities than those on the campus.)

The study reviewed Ontario and Canadian data on population changes (including the double cohort, the baby boom echo, and anticipated workplace/education participation rates), the growing demographics of the Peel and Halton regions, and the plans of the University to accommodate much of its future growth at UTM (and UTSC). The Committee also noted the rising levels of obesity among youth, documented through studies in Canada and North America.

Based on the above data, annual, daily and hourly user visits were projected to determine the number of participants that should be served and how their use might be accommodated in a variety of athletic and fitness program elements available.

The study also noted key trends in university recreation and athletics in Canada, including female enrolments and participation continuing to outpace males, the quality of student life being acknowledged as a more important factor in attracting the best and brightest students, increasing individual fitness activities outpacing group and organized sport activities, and the social elements that encourage and reinforce user participation.

The study enabled discussions to proceed on what opportunities exist in enhancing the wellness of community members beyond expanded physical facilities. For example, an opportunity exists to coordinate and cooperate with the City of Mississauga in its World Health Organization involvement in the "Healthy Cities" project. Related opportunities include the involvement of Mississauga residents in university environment, encouraging greater participation rates in post-secondary education and a more highly educated population (for example, research indicates that ages 13-14 are when students fix in their minds whether they are university-bound or not, so exposing them and their families to the university environment in meaningful and engaging ways throughout their childhood should lead to a more highly educated community; on the other end of the spectrum, having mature community members physically present would likely lead to increased opportunities and participation rates in continuing education that we offered on campus and in the community). Another example includes possible partnerships with local health providers in the areas of health promotion, education and rehabilitation, specifically cardiac rehabilitation.

The space program that follows enables the existing facilities to be re-used through integration into a new complex, with a new expanded direction addressing the needs of a

diverse population on the UTM campus, for example visually separated program areas, and extending the opportunities for community participation.

## V. Space Program

Recognizing the limitations of available funding, the Project Committee developed a plan that re-uses existing facilities and adds necessary new components by new construction that have been identified as priority areas by campus constituents.

To enable the new plan to succeed from an operational standpoint, that is, without duplicating operating expenses, both areas must be adjacent and physically contiguous. A new location, southeast of the South Building was identified. In reviewing the existing facilities, configuration of the South Building and available land on the new site, it became apparent that the new Wellness Centre in this form would provide the desired facilities within the budget envelope.

The new Wellness Centre will comprise a total of 4,810 nasm. Approximately 490 nasm will be renovations to existing space and compliment other space not requiring renovation.

The following major components are described:

1. The Aquatic Centre
   This facility will comprise a 25m 8-lane pool with a moveable floor system to allow for a broad range of programmed activities. The moveable floor should extend over approximately one half of the pool. A small hot pool for relaxation after activities should be located nearby on the pool deck.
   The pool deck should allow for a small amount of spectator loose seating at competitive events and special programs. The design must be able to address visual separation at various times.
   The existing men's change room will be raised and must have direct access to the pool deck. A new women's change room must be constructed also with direct access to the pool. Separate family change rooms adjacent to and accessible from the main hallway will also have a common shower.

2. Double Gymnasium
   The new portion of the Centre will include a double gymnasium having retractable seating of between 800 - 1,000 and is to be subdivided by a vertical mesh curtain. Overhead, along three sides a three lane running track also extends over the fitness area.
   This area should be planned to allow for an addition comprising another gymnasium in the future.

3. Fitness Centre
   The Fitness Centre comprises distinct program areas including: strength training, free weights, cardio and stretching areas. This area will contain all existing and new fitness equipment (cardio, free weights, strength etc.).

4. Renovations
   After detailed review and consideration the Committee concluded that a portion of the program for the Wellness Centre could be successfully accommodated in existing space.

The existing gymnasium will require replacement of acoustic panelling, additional windows between it and the hallway of the existing squash courts and window treatments to allow for visually separated programs in the gymnasiums.
Except for the new access to the pool deck, it is not expected that the men's change room will have to be renovated.
No renovations will occur to the dance studio, and the existing strength training areas.
Rooms 0121 and 0121A will be converted to accommodate additional administrative space and expanded laundry facilities.
The Sports Medicine/Therapy Clinic will be located in rooms 0110, 0110A, and 0110B which will require moderate renovations.
The team rooms are to be located in the existing women's locker area (room 0118, 0198A, 0118B and 0117) which will require significant renovation.

## Wellness Centre Space Program

| | N A S M | | | |
|---|---|---|---|---|
| | **Existing in current space** | **Renovate current space** | **New space** | **Total** |
| **Summary Program** | | | | |
| Aquatic Centre | 0 | 0 | 886 | 886 |
| Gymnasia | 655 | 0 | 1,450 | 2,105 |
| Fitness Centre/Elevated Track | 193 | 0 | 1,998 | 2,191 |
| Participant Support | 550 | 258 | 476 | 1,284 |
| Sport Medicine/Therapy | 0 | 135 | 0 | 135 |
| Racquet Centre | 168 | 0 | 0 | 168 |
| Administration/Academic | 86 | 98 | 0 | 184 |
| **Total NASM** | **1,652** | **491** | **4,810** | **6,953** |
| | | | | |
| **1.0 Aquatic Centre** | | | | |
| 25-metre 8-lane Pool Tank | 0 | 0 | 477 | 477 |
| Pool Deck | 0 | 0 | 354 | 354 |
| Hot Pool | 0 | 0 | 14 | 14 |
| First Aid Room/Lifeguard | 0 | 0 | 13 | 13 |
| Pool Storage | 0 | 0 | 19 | 19 |
| Pool Office | 0 | 0 | 9 | 9 |
| **Sub-Total NASM** | **0** | **0** | **886** | **886** |
| | | | | |
| **2.0 Gymnasia** | | | | |
| Double Gymnasium | 0 | 0 | 1,380 | 1,380 |
| Double Gym Storage | 0 | 0 | 70 | 70 |
| Retractable Seating | 0 | 0 | Inc | 0 |
| Multi-purpose Hall | 655 | 0 | 0 | 655 |
| Multi-purpose Storage | Inc | 0 | 0 | 0 |
| **Sub-Total NASM** | **655** | **0** | **1,450** | **2,105** |
| | | | | |
| **3.0 Fitness Centre/Elevated Indoor Track** | | | | |
| Supervisor's Station | 0 | 0 | 9 | 9 |
| Staff Office | 0 | 0 | 11 | 11 |
| Consultation Room | 0 | 0 | 9 | 9 |

| | | | | |
|---|---|---|---|---|
| Stretching/Warm-up Area | 0 | 0 | 50 | 50 |
| Cardio Areas | 0 | 0 | 492 | 492 |
| Strength Training Machines Area | 0 | 0 | 415 | 415 |
| Free Weights Area | 0 | 0 | 328 | 328 |
| Disabled Weight Machines | 0 | 0 | 84 | 84 |
| Trend Programming Area | 174 | 0 | 0 | 174 |
| Storage | 19 | 0 | 0 | 19 |
| Indoor 3-lane Track | 0 | 0 | 600 | 600 |
| **Sub-Total NASM** | **193** | **0** | **1,998** | **2,191** |
| | | | | |
| **4.0 Participant Support** | | | | |
| Control/Reception | 0 | 0 | 23 | 23 |
| Internal Cash Room | 0 | 0 | 7 | 7 |
| Equipment/Towel/Laundry | 18 | 10 | 0 | 28 |
| General Storage | 186 | 0 | 0 | 186 |
| Staff Locker Rooms (2) | 0 | 0 | 0 | 0 |
| Men's Locker Room | 346 | 0 | 0 | 346 |
| Women's Locker Room w/Steam Room | 0 | 0 | 346 | 346 |
| Disabled/Family Change Room | 0 | 0 | 100 | 100 |
| Team Rooms (4) | 0 | 224 | 0 | 224 |
| Intramural/Coaches Offices (2) | 0 | 24 | 0 | 24 |
| **Sub-Total NASM** | **550** | **258** | **476** | **1,284** |
| | | | | |
| **5.0 Sport Medicine/Therapy** | | | | |
| Reception/Waiting | 0 | 14 | 0 | 14 |
| Records/Storage | 0 | 14 | 0 | 14 |
| Offices (2) | 0 | 24 | 0 | 24 |
| Consultation Rooms (2) | 0 | 18 | 0 | 18 |
| Treatment Rooms (2 beds) | 0 | 27 | 0 | 27 |
| Hydrotherapy Room | 0 | 14 | 0 | 14 |
| Performance Testing Labs | 0 | 24 | 0 | 24 |
| **Sub-Total NASM** | **0** | **135** | **0** | **135** |
| | | | | |
| **6.0 Racquet Centre** | | | | |
| International Squash Courts (3) | 168 | 0 | 0 | 168 |
| **Sub-Total NASM** | **168** | **0** | **0** | **168** |
| | | | | |
| **7.0 Administration/Academic** | | | | |
| General Office (2 stations; waiting area) | 69 | 30 | 0 | 99 |
| Offices (10) | 17 | 54 | 0 | 71 |
| Copy/Records/Storage | 0 | 0 | 0 | 0 |
| Kitchenette | 0 | 14 | 0 | 14 |
| Student Study Area | 0 | 0 | 0 | 0 |
| **Sub-Total NASM** | **86** | **98** | **0** | **184** |
| | | | | |
| **TOTAL NASM** | **1,652** | **491** | **4,810** | **6,953** |

Revised April1 6, 2003

The space program identified in this report is stated in net assignable square metres (nasm), and will be located in existing space to be used “as-is”, in existing space that will be renovated, and in newly constructed space. The portions of the space program located in new construction, 4,810 nasm, are anticipated to be no more than approximately 6,955 gross square metres (gsm).

Included in the nasm is only space directly assigned to activities. The gross area allows for corridors, interior and exterior walls, janitor’s closets, washrooms - other than those required by the specific program and mechanical and electrical rooms and entry lobby. The University’s design standards specify the requirements for utilities rooms.

Sufficient crush space must be provided to adequately accommodate the simultaneous inflow and outflow of students to the areas where large crowds could exit at one time. Space should be provided in these areas, however the overall net to gross for the building should not exceed the gross envelope identified in the building program. The distribution of washroom facilities must also address the users of the building, in public areas where washroom access is limited to those attending events as well as within the facility for users of the Wellness Centre. Sufficient fixtures must be provided in these areas. In some instances the fixture count may exceed the building code requirements.

## VI. Functional Plan

The gym, pool complex, women’s and family change rooms, main entrance atrium complete with main entry control desk, public washrooms, stairs & elevator to second floor, internal circulation, and utility areas should be all located on the ground floor. The internal circulation corridor should connect to the main South Building entry at level 0. Additionally, there should be a new circulation route from the existing men’s change room into the new pool area. This floor will either be level with, or may be gently ramped to the existing level 0.

The only new program component expected to be on the second floor will be the fitness area. Teams rooms in renovated space will also be on the second floor of the existing building. Running from the East atrium through the second floor to connect to the South Building at Level 1 will be the main public circulation route. This route will have views to the gym and fitness areas, and pool if possible. The second floor will be approximately at the same level as level 1 of the South Building.

A three-lane running track will be built as a mezzanine around three sides of the gym, crossing above the circulation route, and continuing around the fitness area. The track will be accessed both by stair and a new elevator.

The link from the new building to the South Building entry at level 1 will also have doors to grade to allow for the emergency egress route to be maintained.

## VII. Environmental Impact

Wellness discussions also developed into a commitment to the new facility being a green facility, maximizing the health of its users, educating them on issues of sustainability, and making the materials and utilities required for the building as environmentally benign as possible. The facility could be a local showplace to explore "healthy living", marrying green/alternative energy, sustainable architecture, cost-efficient best practices in environment-friendly engineering systems, research/teaching/learning on wellness, information technology resources to support those who want to learn more, and an active, building-wide laboratory on community development.

A key principle of ecological thinking is that everything is interconnected to everything else. Environmental protection, human wellness and economics are all inter-related issues. For buildings, these concepts imply that a good design can greatly enhance the quality of life and at the same time minimise environmental degradation and reduce operation and maintenance costs. The choices that the design team (architects and engineers) will make are crucial to ensure that the occupants of the new UTM Athletic and Wellness Centre will enjoy a healthy indoor environment for several decades. Furthermore, these choices can minimise harmful emissions and enhance the campus ecosystem, and also reduce and control operating and maintenance costs into the future. Good design choices will also increase the durability of the building. Alternative building components can have very different levels of embodied energy and embodied pollution; therefore, using sustainability concepts to select materials and as a key design criteria can also help decrease the total ecological footprint of the centre.

The Project Committee encourages the design team to think broadly and holistically to incorporate principles of sustainable design. These principles have already been well developed and formalised through initiatives such as LEED (Leadership in Energy and Environmental Design).[1] As LEED practitioners have demonstrated, many of these principles can be incorporated *without* additional capital costs and can result in substantial savings during the life cycle of the centre. A clear example is to use practical applications of solar energy, which can ensure that electricity use and heating & cooling costs are reduced. These applications also ensure that occupants can enjoy daylight illumination, which not only saves electricity and maintenance costs but also improves human performance (e.g. by enhancing circadian cycles[2] and reducing incidences of seasonal affective disorder). The use of renewable energy displaces fossil fuels and thus reduces carbon dioxide and other harmful emissions that pollute the environment and cause climate change.

Another example is provided by the centre's swimming pool, which should be considered as a huge thermal mass that can be managed through good design to reduce heating and cooling costs for the entire centre. There are other synergies that should be explored where by-products of one process are used as input to another. As an example, the waste heat from exhaust air or wastewater can be used to preheat ventilation air and

[1] For more information on LEED see http://www.usgbc.org/LEED/LEED_main.asp

[2] Daylight's effects on the daily cycle that influences sleep, mental alertness, pain sensitivity and temperature and hormone levels have been well documented (e.g. www.rockefeller.edu/labheads/young/young.html)

water. Additional examples include, but are not limited to, the choice of building materials, paints, and finishes, which if properly selected can ensure that indoor air quality is optimal for the high impact aerobic activities that will take place in the building.

The design team is also encouraged to consider additional sustainability strategies, which can be incorporated at relatively low capital costs, and that may offer promising operating and maintenance cost reductions (as well as substantial environmental and health benefits). Two clear examples that are very promising, due to the geographic location of the site, are solar water heating and geothermal heating. There is also potential to use the thermal mass of green roofs to moderate temperatures on the roof. Green roofs also bring back components of the ecosystem that are destroyed by the footprint of new buildings. These and other alternatives can become very economically attractive if the design team ensures that cost comparisons actively incorporate operating and maintenance costs into alternative design estimates. Any additional project costs will require approvals.

In a similar vein, other practical alternatives should be considered early at the design stage so the centre can become, as much as possible, an energy exporting structure. This could be achieved, for example, through the incorporation of grid-connected photovoltaic systems. The actual cost of these systems is highly site specific and their payback times can vary significantly depending on design decisions. There are also a number of government initiatives that the design team should consider and access to increase the economic attractiveness of incorporating solar systems (thermal and Photovoltaic). [3]

There are funding programs initiated by the government and other sources to incorporate these to reduce greenhouse gas emissions. These sources should be considered by the design team.[4]

The design team should also apply principles of sustainable design to minimize water use, usage of chemicals (e.g. chlorine/bromine), and water wastage. If these are addressed as an afterthought and not as a holistic part of the design process, this could significantly increase the ecological footprint of the centre. As an illustration, on-site treatment of wastewater can be used for irrigation, aquaculture and flushing toilets (water from the pool could be especially useful for these purposes).

These recommendations represent unique opportunities for the University of Toronto to demonstrate leadership in the development of sustainable built environments. To achieve positive results the Project Committee recommends that consultants with experience in sustainable design be retained to investigate planned performance of the building, in the early part of the design process. While the Committee recommends the incorporation of sustainable design, the evaluation of each design component and its payback period must be evaluated before a decision can be made to include the component in the project. These would be potentially additional costs to the project budget, therefore approval would be required to consider their options.

[3] For example Natural Resources Canada administers the Renewable Energy Deployment Initiative (REDI) which provides subsidies to install solar systems in new buildings, for more information see http://www2.nrcan.gc.ca/es/erb/english/View.asp?x=455

[4] For more information on trading of GHG emission reductions units see http://www.dfait-maeci.gc.ca/cdm-ji/joint-en.asp and for an example of carbon commerce see http://www.co2e.com

It is also important to note that all of the recommendations related to sustainability mentioned have a strong educational potential that should be emphasized and highlighted by the consultant design team, such that students, researchers, and university staff can use the centre itself as an educational instrument for several generations.

## VIII. Special Considerations

### Accessibility

The design of the new Wellness Centre must take into account accessibility by persons with disabilities and provide an inclusive environment. Interior way-finding and sight lines, a functional and convenient layout, interior and exterior signage and clear access to other floors by stairs and elevators will be necessary. Other accessibility considerations are:

- Larger door widths to accommodate wheelchairs and scooters
- Automatic door openers on all entrances, exits accessible washrooms and accessible change rooms
- Accessible shower areas and washroom in the locker areas
- Lowered counters at all service desks
- Turning space for wheelchairs and scooters
- Accessible passenger elevator to all floors of the facility
- Accessible swimming pool, and hot pool

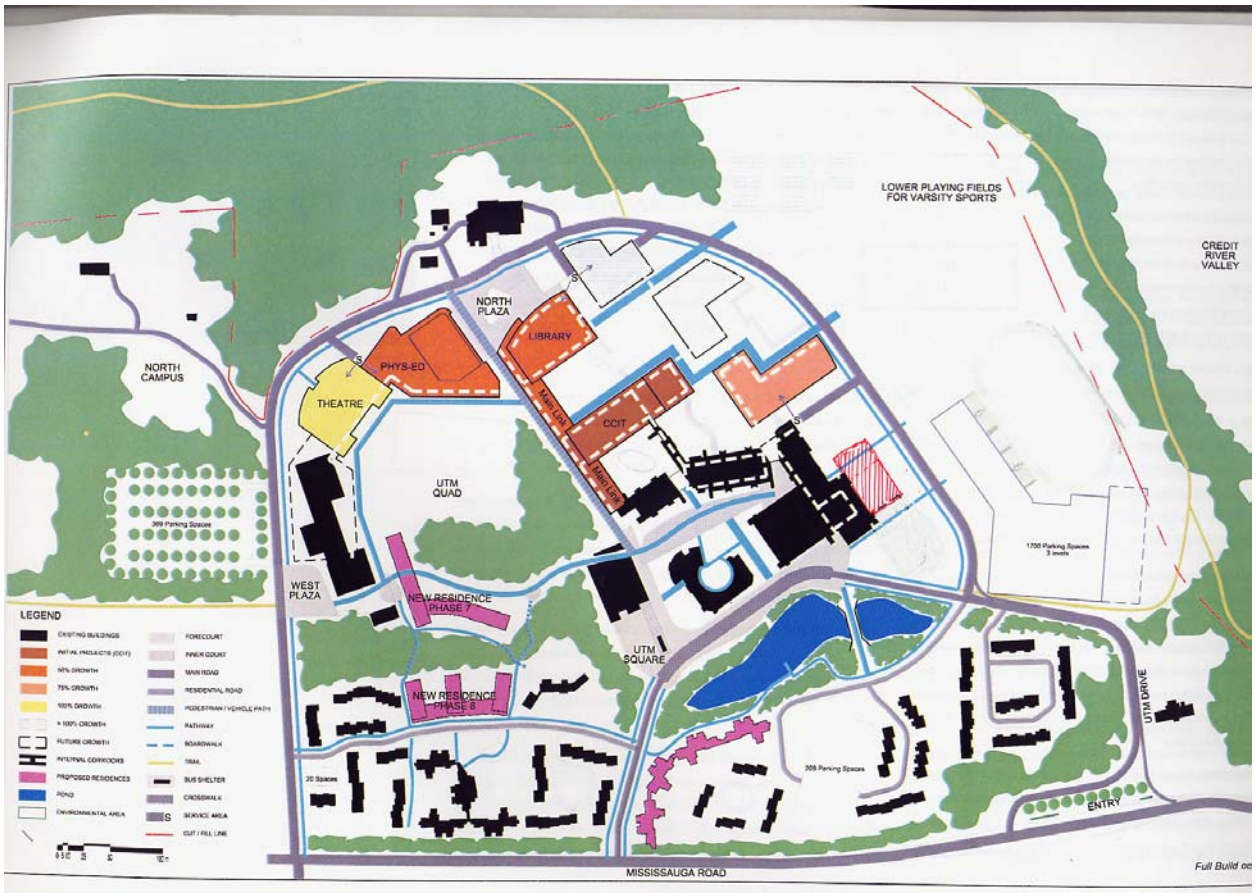
There are specific design standards for the University of Toronto which are provided to the architect. The project must be reviewed for accessibility during the implementation phase.

### Campus Planning

The Master Plan 2000 for UTM identified a framework for development providing an implementation strategy that allows for flexibility in changing environments. It provides guidelines for future development, identifying sites, proposed uses, open space that must be maintained, parking, and service connections, landscape treatments and phasing.

The Plan anticipated growth due to demographics and the double cohort. Scenarios of the Plan articulated a build-out to 50, 75 and 100 per cent growth, yet at each phase of the Plan it would be seen as being complete with “a more developed sense of community.”

The Wellness Centre was originally planned to be located northwest of the new Library on an existing parking lot. After some consideration, the Committee recommends that the new athletic facilities be located at the southeast corner of the South Building, allowing for a connection to permit continued use of the existing facilities. The proposed site is between the east face of the South Building and the ring road. The floor plate must allow for appropriate set-back from the road and from the South Building. It was determined that that the available floor plate in this area would allow for a double gym, pool, and for future expansion to the south should it occur. A plan illustrating the siting follows:




The site work will also include a layby adjacent to the main entry. The landscaping must address the master plan for the campus. The removed trees will be replaced or relocated and a small landscaped area at the entrance. Remedial work to the terrace is part of the construction budget, whereas any improvements to the terrace will be part of the true landscape component. All site work and landscaping is part of the project.

Site services are available as the site is close to existing sanitary, storm, water and gas lines. Gas and sanitary lines run through the site, and allowance must be made during construction. The high voltage electrical service will run from the central plant building through the tunnel system and South Building. A substation must be provided for the new building. With respect to heating and air conditioning, the building is planned to be stand-alone.

The new site is large enough to permit the construction of the new program without disrupting the existing roadway or requiring that parking be relocated. It takes advantage of the existing parking lots and the new planned south entrance to the UTM campus, where the facility will be easily seen and will serve as a major thoroughfare from the parking area to the building. The project budget allows for the construction of a fire route up to the area of the existing terrace if required, by the local authorities.

The original site identified for the Wellness Centre will be retained for future development on the campus.

**Design Issues**

As stated in the Master Plan, new buildings must develop the character of the campus in a consistent fashion through consideration of factors such as building materials, mass, relation to open space, siting circulation and view. Access to sunlight should be maximized particularly when the campus population is at its peak in the late spring and fall.

The building must evoke a warm welcoming atmosphere with natural light wherever possible. The entry foyer should permit views to the parking areas and provide users of the athletic facilities with a place to wait.

The design of the building should be physically integrated with the existing structure and be compatible. The building space program reflects the construction possible within the funding envelope. The initial concept design must also anticipate the addition of an additional gymnasium in the future. The plan should clearly illustrate where the addition should occur and include an allowance to enable properly sized infrastructure for the expanded version.

During the course of discussions the Project Committee toured several new athletic facilities at nearby universities and those municipally owned. The level of finishes recommended by the Committee should equal those in the newly constructed Oakville YMCA.

The Project Committee agreed to the following principles and criteria to govern the design of the building:

- Participation – to invite and encourage use
- Learning Setting – whole student life environment that reinforces lifelong learning concept
- Friendly and Accessible in the broadest sense
- Efficient and Functional – well planned
- Innovative – a leading edge facility
- Achievability – affordable and sustainable
- Flexibility – to change as needs change
- Future Needs – to adapt to a long-term future and an ever-changing campus
- Partnership Benefits – value added opportunities
- Openness, but respectful of individual needs.

## IX. Resource Implications

1. The total project cost is estimated to be $24,500,000 at point of tender, August, 2004 for new construction and April, 2006 for renovations. The project cost includes renovations in the South Building to areas requiring change, equipment and furnishings. A detailed breakdown of costs is included as Appendix 4.

   Detailed furniture and equipment schedules are included in Appendix 2.

2. In the first full year of operation, the cost of utilities and caretaking and services approximately 6,700 gsm will increase the operating budget on the UTM campus by approximately $466,300. These costs, utilities and caretaking, increase because there will be substantially more space to heat, cool and clean.

3. All utility services work with respect to the new building is part of the project and has been included excepting the electrical substation as part of the total project cost. UTM has committed to completing that work well in advance of the start of construction of the Wellness Centre. The UTM operating budget will fund this cost within the limits of the existing multi-year expenditure plan, thus not changing the total project cost estimate by adding this component.

## X. Operating Plan

Mortgage payments are scheduled to begin in 2006-07, although the expense incurred in 2006-07 reflects only a partial year of payments. The mortgage will be amortized over 25 years at an assumed interest rate of 8 per cent.

The cost of salaries and benefits also will increase once the building has opened because of the required staffing necessary to operate the new pool and additional programming foreseen for the Centre.

The increase identified in 2006-07 is not as significant as might be expected because some of the additional staff will be hired in the two years previous to opening the facility to prepare for expanded services and facilities.

Supplies expense will not increase significantly as many items are not directly related to an expanded operation.

Expenses associated with the maintenance and repair of equipment and space decrease in 2006-07 because equipment will be new to the facility and because no renovations or repairs will be required to the newly constructed and renovated Centre. Therefore the plan identifies the elimination of the capital reserve once the Centre is open.

Other program expenses (including all other costs, such as advertising, team travel, conference fees, laundry and office expenses) increase although not substantially as some are not significantly affected by the increased space and service.

A new revenue stream will be realized in 2006-07 because of the new facilities. Rental income will increase as the additional gyms and pool are rented to outside users. Program revenue will also increase as many more new programs are scheduled in an expanded summer camp. Lockers, Fitstop sales, guest passes, towel service and other revenues will increase with an increased revenue base. Membership sales to the Wellness Centre are expected to increase as the facilities will be much more appealing to the community.

## XI. Funding Sources and Cash Flow Analysis

The total cost of the Wellness Centre is $24,500,000.

In December, 2001, the Provost agreed to a 50% match to student levies raised for the new athletic facilities on the UTM campus to a maximum of $7 million against current enrolment. In 2002, Quality Services to Students committee (QSS) approved a student levy of $150 per full-time student and $45 per part-time student, increasing with inflation at a rate of 3% annually, that would support a $14 million mortgage over a period of twenty-five years assuming a 30 per cent growth in student enrolment. The student levy will begin when the

new facilities are open for use. Because enrolment is increasing on the UTM campus due to the double cohort and demographics, this levy will now support a $16 million mortgage. Fundraising efforts are continuing for additional funding contributions.

The funding for this project is identified as follows:

| | |
|---|---|
| UTM student levy | $16.0 million |
| Office of the Vice-President and Provost | 7.0 |
| UTM | 1.0 |
| UTM fundraising | 0.5 |
| Total | 24.5 million |

## XII. Schedule

The Project Committee, and the athletic committee before it, has been working to carefully define the components of the Wellness Centre. Planning consultants had also been retained by the athletics department and UTM.

Approval of this report, and the project scope, will allow UTM to begin the architect selection process. It is anticipated that the consultant can be selected within the next three month period to allow appropriate time for design, the preparation of contract drawings and construction anticipating that the facilities can open for September, 2006. The project cost estimate has been determined assuming a tender date of August, 2004, for the new construction and April, 2006, for the renovations of the existing facilities.

## XIII. Recommendations

That the Planning and Budget Committee recommend to the Academic Board:

1. THAT the Project Planning Report for the Wellness Centre at the University of Toronto at Mississauga campus be approved in principle;

2. THAT the project scope identified in the Project Planning Report, with new construction of approximately 4,800 net assignable square metres or 6,700 gross square metres, and renovations of approximately 570 net assignable square metres be approved at a total project cost of $24,500,000.

3. THAT funding sources for the project are as follows:

| | |
|---|---|
| UTM student levy | $16.0 million |
| Office of the Vice-President and Provost | 7.0 |
| UTM | 1.0 |
| UTM fundraising | 0.5 |
| Total | 24.5 million |

**M E M O R A N D U M**

**Date:** April 28, 2003

**To:** Sheila Brown, Controller and Director of Financial Services Department

**From:** Helen Choy, Manager, Accounting Services

**Copies:** Prof. Ron Venter, Vice-Provost, Space and Facility Planning
John Bisanti, Chief Capital Projects Officer

**Subject:** Risk analysis of the UTM Wellness Centre Project

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**Scope of review:**

UTM proposes the construction of a Wellness Centre, a source of education and healthy activity for UTM students, faculty, staff and community members, which is to be built adjacent to the existing athletic facility. The existing facility has modest components and was built to serve 2,500 students. UTM has grown significantly, and is expected to have continued growth over the next 10 years. The project will comprise of 4,810 nasm for the new Wellness Centre plus 570 nasm of renovations of existing space. The major components of the project are: an aquatic centre, a double gymnasium, a fitness centre and renovation of existing space. A new revenue stream is also expected from the new facilities such as rental income from gyms and pool to outsiders, new program fees, lockers rental and membership sales of the Wellness Centre. The Centre is scheduled to open on September of 2006.

The financial model submitted includes the following financial parameters and assumptions:

Financial parameters:

1. The projected cost of the Wellness Centre is estimated at $24.5 million.
2. Funding for the project has been identified as follows: Student levies of $16.0 million, matching from the Provost Offices of $7.0 million (UIIF), fundraising of $0.5 million and funding from UTM of $1.0 million.
3. The timing of these funding sources is as follows:
    a. $0.7 million in student levies, $1.0 million from UTM, $0.5 million from fundraising and $7.0 million matching from the Provost Office (UIIF) are expected to be collected by the completion of the construction.
    b. The remainder of the student levies will be collected in the years subsequent to construction and will be used towards the payment of the expected mortgage of

$15.3 million.

Assumptions:

1. The mortgage will be for 25 years at an annual interest rate of 8%. Mortgage payments are scheduled to begin in 2006-07.
2. The Provost contribution is based on a 50% match of student levies, up to a maximum of $7 million. The entire matching is expected to be made available at the completion of the construction.
3. Annual revenues and general expenses are indexed at 2%, while student levies, fees, compensation costs and space costs are indexed at 3%.
4. A special student levy of $25 per full time student ($7.50 per part-time) begins in 2002-03 and is increased by 3% per year to 2005-06. All these levies will go toward the funding of construction costs. In 2006-07, when the centre opens, the capital levy is increased to $115 per full time student for capital. The student levy is also increased by $35 per FTE for operating costs of the new facility. Both of these levies are inflated at 3% per year. The capital levy is discontinued when the mortgage is fully paid off.
5. Enrolment is expected to increase to 11,028 students (8,161 full time & 2,867 part time) by 2006-07 and remains constant thereafter. This represents an increase of 52.5% from 2002-03.
6. Once the building is opened, the operation ceases to provide for capital reserve. Instead, major maintenance expenditures are planned beginning in 2020. A total of $10 million in major maintenance is planned for the period 2020 to 2032.

**Financial Analysis:**

A motion to approve a student levy for the new Wellness Centre was passed by the U of T at Mississauga's Quality Service to Students committee on March 15, 2002 and subsequently at the University Affairs Board on April 30, 2002. This motion was for a facility consisting of 3 phases with a total estimated cost of $39.1 million. The current proposal has an estimated cost of only $24.5 million, with slightly fewer facilities. The revision has been approved by the Quality Service to Students committee.

The student levies assumptions used in the model correspond with the levies approved in the motion. According to the approval, "upon the final mortgage payment, the levies will be re-evaluated"; however, in the model, the "operating" levy is a continuous source of revenue throughout the model, even after the full payment of the mortgage. Should the operating levy be discontinued, the NPV would be lower by $253,637.

The student enrolment numbers used in the model are conservative. The figures used in the model were 1.5% to 4% lower in the first 2 years and about 5% lower in the outer years from those used by the Planning and Budget Office. This would represent an additional NPV of approximately $1.8 million.

The new revenue streams included in the model are based on information provided by the Director of the Athletic Centre at UTM. It is based on new space estimates and demand for rentals and

membership. The additional revenue reflects the expected increase in volume (membership sales, rentals, etc.) and an increase in price. Current membership fees are low and with the new facility, they are expected to rise. No comparisons were made by UTM with other athletic facilities.

**Identified Risk Factors:**

1. Enrolment is the largest risk factor. A 1% variance (110 students) results in a variance of $353 thousands in NPV.
2. Construction cost can exceed estimated costs. A 1% increase in construction cost results in a reduction of $245 thousands in NPV.
3. Funding to be found by UTM and donations. At the present time, a specific source for the $1 million has not yet been identified by UTM and only $25,000 in pledges has been raised.
4. New revenue streams could not materialize at the planned levels.
5. UTM has made a commitment to be the guarantor of the project. UTM is fully responsible for any cost overruns. In the unlikely event that such becomes necessary, UTM is prepared to make the necessary adjustments to future operating plans in order to free up the needed funds.

**Sensitivity Analysis:**

Since the capital project contains multiple risk factors, a sensitivity analysis was prepared to account for the various possibilities. Medium risk and worst-case scenarios were modelled. The results of the financial analysis are summarized in Appendix 1.

The financial plan submitted will support the current level of construction cost and it results in a positive NPV, even after providing $10 million for major maintenance in the last ten years of the model. However, this is contingent on the underlying objectives. Risk factors are:

1. Student Levy Revenue Projections: Assumption is that revenue from the student levy materializes. Student levy is a sensitive factor in the model. UTM has used conservative enrolment estimates in the model representing a low risk.
2. Construction Cost Overrun: It is assumed that construction costs do not exceed current capital cost projections. The current project cost has built in a contingency of $0.69 million, representing 2.8% of the total cost. This risk is evaluated at medium.
3. Funding from UTM of $1 million and donation of $0.5 million. The assumption is that UTM will be able to raise $0.5 million in donations and find another source of $1 million before the opening of the Wellness Centre in September 2006. UTM has yet to find a funding source for $1 million, and only $25,000 in donations pledges has been raised so far. This is considered to be a high risk.
4. Operating revenues: Assumption is that increased revenues from operations materialize. Forecast for additional revenue streams from the new facility are based on space and demand estimates from the Athletic Director at UTM. UTM has not compared these estimates with other existing facilities and therefore, they should be considered of medium risk.
5. UTM is prepared to be the guarantor of the project and be fully responsible for any cost

overruns. This lowers the risk of the project by transferring the risk to UTM.

**Conclusion:**

Based on the analysis of the first four risk factors as presented above, the project's overall rating is determined to be of medium risk. With UTM commitment to be fully responsible for any cost overruns, most of the project risk is now transferred to UTM and hence the project overall rating has been reduced to low risk.