

THOMPSON RIVERS UNIVERSITY MASTER PLAN 2013









CREDITS

Stantec:

Len Rodrigues - Architect/Planner, AAA, AIBC, FRAIC, AIA, RPP, MCIP

Ray Wolfe - Architect, AIBC

Carla Guerrera - Urban Planner, M.Pl., MCIP, RPP, LEED® AP

Anthea Ho - Intern Architect, M.Arch, IA AIBC, LEED® AP

Emily Dunlop - Landscape Architect, MBCSLA, B.L.Arch.

Bill Lambert - Transportation Solutions, M.Plg., M.PA., MCIP

Market / Economic Consultant:

Richard Wozny - Principal, Site Economics

TRU Steering Committee:

Committee Members:

Cliff Neufeld - Senior Project Advisor to the President (Committee Chair)

Matt Milovick – Vice-President, Administration and Finance

Larry Prins – Associate Vice-President, Academic

Denis Powers – Associate Vice-Presient, Human Resources and Planning

Wil Garrett-Petts, Associate Vice-President, Research and Graduate Studies

Nan McBlane – Faculty member

Wendy Gardner – Faculty member

Dylan Robinson – student

Eric Beach, City of Kamloops - Planning Department

Les Tabata – Director, Facilities

Harold Richins – Dean, Faculty of Adventure, Culinary Arts and Tourism

Fiona Chan, Chair, Board of Governors

Frank Quinn - Director, Thompson Rivers University Community Trust

Luc Pellerin – Director, Thompson Rivers University Community Trust

Nathan Matthew – Executive Director, Aboriginal Education

Ex-Officio Members:

Alan Shaver, President

Uli Scheck, Vice-President Academic and Provost

Jim Gudjonson – Director, Environment and Sustainability (Interim)

Lucille Gnanasihamany, Associate Vice-President, Marketing and

Communications

Secretariat:

Laurel Wale, EA to the VP Admin and Finance

CONTENTS

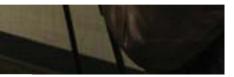


CONTEXT AND SITE ANALYSIS





2 VISIONING THE FUTURE CAMPUS





3 TRU CAMPUS MASTER PLAN





4 IMPLEMENTATION





CONTENTS



CONTEXT AND SITE ANALYSIS



To lay the foundation for the campus master plan, this section establishes the key context pieces that the plan must recognize, acknowledge and respond to which include relevant studies, city policy, university goals and history, enrollment and space projections, as well as the physical constraints and conditions.

With a comprehensive overview of past studies completed for Thompson Rivers University (TRU) and the surrounding area, the 2013 version of the TRU Campus Master Plan aims to continue guiding the academic and market development of density for the campus over time while reflecting new objectives from the university. This update to the 2003 campus plan will continue to support TRU's campus objectives and sustainability goals. The approach for the 2013 plan stems from a request to assess the overall market development opportunities available to the campus and how the revenue generated can fund academic development this is required to support the expanding needs of TRU. This master plan identifies both market and academic development opportunities on campus, and how the context of the site and surrounding area frames the emergence of a new campus master plan.



2 VISIONING THE FUTURE CAMPUS

Through a rigorous and inclusive engagement strategy, the TRU campus vision was established, providing the roadmap for TRU to grow both in terms of academic community and market development for the next 30-60 years. This section describes in detail the extent of the visioning workshops, Town Halls, use of social media and the various stakeholders from whom feedback has been incorporated into this plan.

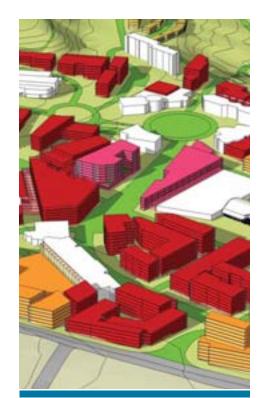
With these principles and direction firmly set, the implementation of the plan can and should be revisited and refined from time to time as the academic or community needs change and evolve without losing sight of their core priorities and direction.



This version of the TRU Master Plan has adopted a different approach to campus planning. Very often, Master Plans tend to be compositional and see the campus as a composition of buildings and parks (open spaces) that loosely refer to the movement and pace of activities that occur. This plan differs markedly from that approach. The campus here is seen as a framework that supports numerous activities that can only be generalized at the start of any period of growth. The actual layout of buildings, of their specific programs and their particular resolution by the designers that will undertake their development cannot be prescribed by a Master Plan.

Instead we adopt a framework approach and utilize the network of clear connections built on the land that will be continuously available for the movement and use of people: much like the city rights of way, parks, easements and utility infrastructure form a framework for urban development. A university campus has broad control over this entire framework and how the facilities themselves will behave with respect to it, that is often superior to many city planning agencies.

This plan will be built upon the identification and refinement of the basic framework. That framework will form the "Public Realm" off which all facilities will be placed. The "rules of engagement" for how those facilities interact with the structure of the public realm will be shown and will need further development at a detailed level in the form of a specific high quality design. This framework and its specific design should be seen as part of campus infrastructure and be maintained as such.



The implementation and phasing of this Master Development Plan is based on balancing the Thompson Rivers University Community Trust (TRUCT) development parcels with a corresponding section of the academic area of the university being developed in sequence. The intent is that success with private development opportunities realized by TRUCT allows the funding of a portion of campus academic development.

The balance of income and development costs is at best an educated guess at this point in time. We have endeavored to balance the amount of development understanding the different costs of building types. For example, the amount of mixed use private development built would need a certain density and Proforma success in terms of its return to equal the costs of an academic building of a particular type. To the extent that is possible for the scope of this plan, we have matched private development to an area academic development understanding that further study needs to be done by both the University and by TRUCT as projects are contemplated and developed.











1 CONTEXT AND ANALYSIS

1.1 Purpose and Drivers	9
1.2 Strategic Review	9
1.2.1 Recent Relevant Studies	9
1.2.2 Relationship to the 2003 Master Plan	10
1.2.3 City Policies	10
1.2.4 University Goals	10
1.2.5 TRU's Research Agenda	11
1.2.6 Campus History	12
1.3 Functional Analysis	14
1.3.1 Enrollment Projections	14
1.3.2 Space Utilization	14
1.4 Physical Analysis	15
1.4.1 Existing Physical Condition of Campus	15
1.4.2 Surrounding Community	16
1.4.3 Existing Buildings	17
1.4.4 Existing Circulation	18
1.4.5 Existing Parking	18
1.4.6 Infrastructure	18
1.5 Market Analysis	18
1.6 Key Challenges	19

2 VISIONING THE FUTURE CAMPUS

2.1 Engagement Process		21	3.1 Key Features
	2.1.1 The Stakeholders	21	3.2 Precincts
	2.1.2 The Community Meetings	22	3.3 Campus Uses and Description
	2.1.3 The Process of Engagement	22	3.3.1 Open Spaces and Pathways
	2.1.4 Aboriginal Vision	24	3.3.2 Academic
2.2 Vis	ion, Themes & Principles	26	3.3.3 Mixed Use Academic
	2.2.1 Key Priorities for New TRU Campus	26	3.3.4 Mixed Use Market
	2.2.2 International Precedents + Best Practices	26	3.3.5 Market Housing
	2.2.3 University Village	28	3.3.6 Outdoor Research Space
	2.2.4 Campus Life	28	3.4 Plan Framework
	2.2.5 Campus Open Space	29	3.4.1 Nodes
	2.2.6 Teaching, Scholarship, Research	29	3.4.2 Landmarks
	2.2.7 Transportation	30	3.4.3 Edges
2.3 Fro	m Vision to Plan	30	3.4.4 Paths
			3.4.5 Way Finding
			3.4.6 Campus Heart

3 TRU CAMPUS MASTER PLAN

3.1 Key Features	33
3.2 Precincts	33
3.3 Campus Uses and Description	34
3.3.1 Open Spaces and Pathways	35
3.3.2 Academic	36
3.3.3 Mixed Use Academic	37
3.3.4 Mixed Use Market	38
3.3.5 Market Housing	39
3.3.6 Outdoor Research Space	40
3.4 Plan Framework	41
3.4.1 Nodes	41
3.4.2 Landmarks	41
3.4.3 Edges	41
3.4.4 Paths	41
3.4.5 Way Finding	41
2 1 6 Campus Hoart	<i>4</i> 1





57

58 60



3 (CONTINUED)

3.5 Campus Plan Concepts	42
3.5.1 Open Space and Landscape Guidelines	42
3.5.2 McGill Corridor	48
3.5.3 Building Guidelines	50
3.5.4 Environmental Stewardship	54
3.5.5 Transportation and Parking	54
3.5.6 Academic and Research	55

4 IMPLEMENTATION

4.1 Development Opportunities + Key Sites
4.2 Development Phasing Plan
4.3 Recommendations

INDEX OF DIAGRAMS + FIGURES

Space Utilization Chart	14
Surrounding Communities	16
Existing Circulation and Parking Diagram	18
Development Opportunities	19
Engagement and Visioning Phase	23
Precinct Diagram	33
Campus Plan Uses Diagrams	34 - 41
Landscape Guideline Diagrams	44 - 45
Campus Heart Plan and Sections	46 - 47
McGill Corridor Plan and Section	49
Future Parking Diagram	54
Phasing Diagrams	58 - 59







PREFACE

"Decisions on the campus layout and its academic and social spaces will affect how our future campus is experienced by all who use it, including students, faculty, staff, visitors and neighbours"

- Larry Prins, interim vice-president of administration and finance

With a hilltop setting, spectacular views across the city and incredible mountainous terrain, TRU is well-positioned to become a destination campus both nationally and internationally. For over forty years, TRU's campus has been constantly growing and strategically evolving. TRU has become more that the sum of its buildings, green spaces and pathways; it has become a community, a place to learn, live, work and play.

In 2003, Thompson Rivers University (TRU) engaged Stantec to provide a Campus Master Plan which built on the previous 1992 Campus Development Plan (CDP). The 2003 plan set a special and design context which governed the rapid expansion, continued growth of the campus, the landscape design plan, and the identified lands for endowment purposes. The 2003 plan was conceived of in three phases, each driven by student enrollment thresholds. More recently, TRU determined it needed a renewed vision and strategy for the best use of its land, both within the academic core and beyond.

In 2013, a decade later, Stantec has again been engaged to update the 2003 Campus Master Plan to bring a cohesive vision to the campus expansion over the last decade, as well as the expansion needed to meet the enrollment projections moving forward. In addition, the goal of the revision of the 2003 master plan is to set the stage for future development tied to the new academic plan, research plan, enrollment growth, campus life and vitality, densification of the academic core and development opportunities for revenue and strategic reinvestment.

"It's part of keeping ourselves modern, keeping ourselves contemporary, meeting the changing needs of students, faculty and staff."

- Alan Shaver, TRU President







1 CONTEXT AND ANALYSIS

1.1 Purpose and Drivers

Building on the 2003 Campus Plan, which recommended greater density and sustainability, TRU is taking steps towards a "university village" model for new development. During consultations to update the Campus Plan it was proposed that property development should be pursued at Thompson Rivers University (TRU) to enhance campus life for the University's students, add vibrancy to the campus for all who visit it, and to generate revenue that can be reinvested in the university. A university village concept similar to "UniverCity" at SFU and the "University Village" at the UBC Endowment Lands, provides opportunities to incorporate features that might include: market-based residential housing (strata), student residences, retail shops, restaurants, professional offices, and student assembly space.

The primary drivers as identified by the TRU Steering Committee for a new campus master plan are :

- Creating a destination campus and a prominent identity
 which is a top priority for TRU in promoting its academic programs
 to students, researchers and professors at the regional, national and
 international level
- Densify the academic core to create a walkable and intimate focal point
- Support TRU's academic research growth and provide offices and laboratory space within a coherent "Research Precinct" that links and is part of the campus fabric
- Create a University Village Hub that encourages and invites public businesses and TRUs neighbours to play a vital role on campus. A mixed use vibrant heart that gets people to live on campus
- The new master plan will be based upon a growing and projected population of 13,000 students and 3,000 faculty and staff

1.2 Strategic Review

Through our process of campus and community engagement, there are many valued and treasured aspects of the current TRU campus that are appreciated and should be built on with the new campus master plan. These include:

- Incredible panoramic vistas that the campus has of the surrounding mountains and landscape
- Green and open spaces with landscaped areas that allow for campus events and informal meeting spaces such as "the Hills"
- Indigenous grasses and other plant species that can be found on the campus and are currently used for research and teaching
- Diversity and variety of architecture including the new Law Building
- Existing landmarks such as the Clock Tower that are well-known and recognized within the campus community
- Natural setting of the campus within the surrounding stunning landscape
- Renowned research capabilities and publications

1.2.1 Recent Relevant Studies

Previous studies conducted by various groups were consulted in the early stages of the planning process. These reports range from the city's community plans and previous TRU Master Plans to the university's Sustainability Action Plan. Key trends, issues and opportunities were acknowledged and have either informed the project context or have been incorporated into the Master Plan.

The list of reference studies include:

- 1991 Campus Master Plan
- 2002 McGill Corridor Plan
- 2003 Revised Campus Master Plan
- 2008 Campus Re-zoning
- 2012 Ecosign Feasibility Report
- 2007-2012 Strategic Plan
- 2010-2012 Sustainability Action Plan
- 2011 Academic Plan
- 2011 Strategic Energy Management Plan
- 2011 Carbon Neutral Action Report
- 2012 Transportation Demand Management
- Strategic Research Plan (2013)

1.2.2 Relationship to the 2003 Master Plan

The 2003 TRU Master Plan guided the development of the campus over a decade of dramatic change. This plan builds on the achievements of the previous strategies. The large goals of the 2003 plan were:

- Expand and enrich the University Concept
- Integrate learning, teaching, scholarship and research
- Be an effective institution through web based applications and distance learning
- Be a place to both learn and work.

From its inception the role of research was seen as crucial to the mission of the University with the areas of research identified as:

- Ecosystems
- Health
- Community and Human Development
- Visual and Verbal Literacy
- BC Studies
- Advanced Technologies and Applications

All of these objectives continue to be relevant and much has been achieved. The focus of the current planning effort builds on the foundation and sets the framework over a longer planning horizon and a change in the physical make-up of the campus in terms of increased density and land use intensity.

The principal drivers of this new plan are:

 An increase in the enrolment to 13,000 Full Time Equivalent students.

The definition of a "FTE" is a student on campus taking a full credit load for the semester. There are many who are not taking the full complement and in the trades, the metric is quite misleading as they will rotate to and from their training in 8 week increments and partial course loading. The result in practical terms is that for any given metric expressed as an "FTE", there are more people on campus than the number suggests and the actual count of "learners on campus" at any given moment can be considerably higher than the FTE used to describe enrolment.

 The Integration of the University with the McGill Street Corridor Study.

TRU has an enviable relationship with the City in which it resides. This is not true of many universities. The fact that each party sees their mutually beneficial relationship as key to their own growth, maturity and success speaks to a very special relationship that exists and continues to grow with the City of Kamloops. That relationship expresses itself in many ways, but

one physical connection is the development of McGill and its role as an integrating fusion of city and university – of "town and gown". Collaboration on the nature, function and quality of this area is key to both parties and this plan addresses that seam.

• The creation of TRUCT and its development of TRU land holdings

The 2013 plan integrates market driven development on lands under TRU's control to benefit both the campus and the city as a whole. Integrated development speaks to the original nature of the institution's reason for being and builds a campus that will be much less a commuter campus and much more a destination institution.

Pursuing a framework approach to support higher development intensity

To become a destination University, to develop a robust research infrastructure and track record - to be a University of choice means a significant increase in the physical facilities over time. The 2003 plan addressed this at a smaller scale, but the significance of four times the volume of building to support 13,000 FTE requires a solid infrastructure and network of access to result in a great campus experience. The framework and the open spaces associated with this must be viewed as infrastructure and designed explicitly by TRU to harmonize intensive development over many years. This plan established the components and linkages of that framework to allow high quality expansion to occur.

1.2.3 City Policies

The Kamplan 2004, the Official Community Plan for the City of Kamloops recognizes TRU as a major economic driver (as the 6th largest employer in Kamloops) and briefly addresses the campus in the 2004 report.

"The main street designation along McGill Road seeks to strengthen the City's role as a university city and to enhance the expansion of the university by encouraging compatible mixed use development off campus."

- Kamplan 2004

"The City will encourage and facilitate growth of the university to 16,000 students in accordance with the UCC Campus Master Plan (2003) and will continue to pursue opportunities for joint development and operation of community facilities."

- Kamplan 2004

The TRU campus master plan works in conjunction with the preferred outcomes of the McGill Corridor Plan. The preferred McGill Corridor Plan is the outcome of a design charette and public consultation process and it has been given support by the City of Kamloops.

The plan has considered the McGill Corridor Plan as part of the context and policy analysis. The McGill Corridor is the front doorstep of the University and this plan proposes some revised design principles and a plan to start the discussion with the City of how the McGill Corridor could be updated to reflect the key principles of the surrounding future TRU campus.

"area of intensive activity where people live, work and play." – McGill Corridor / Southgate Project Concept Plan

"As UCC has continued to grow and broaden its impact on the community partnerships between the City and UCC have also expanded. Both the City and UCC have continued to work together to enhance their relationship and to ensure that there are mutual benefits associated with growth and change."

- McGill Corridor / Southgate Project Concept Plan

1.2.4 University Goals

The values behind the key drivers of the master plan is best described in the words of the university within the Academic Plan. These values have helped inform the 2013 campus master plan.

"Learner-Centredness, Accessibility, Quality of Education and Service, Responsiveness, Comprehensiveness, Sense of Community, Accountability, Environmental Responsibility, and Quality Work Place "

The TRU Mission Statement reads:

"TRU is a comprehensive, learner-centred, environmentally responsible institution that serves its regional, national, and international learners and their communities through high quality and flexible education, training, research and scholarship."

There are many ways that this mission and key values have informed the evolution of the physical space, planning, and process of developing the new TRU campus master plan. This campus master plan is not meant to be a static document. As the university values and needs evolve, the plan may need to be amended to reflect those changing values, and needs of the campus.

1.2.5 TRU's Research Agenda

Thompson Rivers University has actively pursued research from its inception as a College in 1989. Of particular note in the maturation and expansion of that mission has been the inclusion of undergraduate students as integral to the research mission and to the teaching and critical thinking that is now Thompson Rivers University. To quote its Research Strategic Plan:

"The major objectives of Thompson Rivers University's Strategic Research Plan are to:

- Be inclusive of individual research passions, recognizing the importance of intellectual freedom for researchers to pursue their interests and passions without undue constraints and interference, and valuing the research results from individual endeavours, while providing an instrument for encouraging collaboration institutionally and externally.
- Support and build upon existing and emerging research strengths

where TRU is, or is well-positioned to develop national and international leadership, and make a real difference to the world, both in terms of providing excellent opportunities for attracting and training the best students, and through the application of research in ways that improve the quality of life for

- Reinforce and facilitate TRU's role and leadership in the linking of research to community social, cultural, scientific, educational, technological and economic development.
- Facilitate the development of partnerships with communities, scholars, industries, institutions, government ministries and agencies for pursuing mutual objectives.
- Provide a guide for establishing and supporting research centres, collaborative facilities, and graduate programmes of the highest caliber.
- Encourage strategic developments in TRU's research park, and other capital developments in support of research.
- Ensure effective dissemination, knowledge translation and application of research results."

The research mission and its pursuit is structured and purposeful. The stated intent of integrating research across disciplines and training all who attend this University in the basic skills of the expansion of knowledge is a unique and powerful differentiator of Thompson River University's brand. From the early days of the 2003 plan, its research has broadened and become deeper in the areas it had then identified to now include:

- Ecosystems and Environmental Resources
- Sustainable Communities
- Agri-Foods
- Bio-products, quality control, bioremediation and product testing
- Healthy Communities, Wellness, and Human Development
- Visual, Verbal and Cultural Literacy and Communication and Communication Technologies
- Culture and Creative Arts
- Advanced Technologies and Applications
- Sustainable Development

The current plan addresses the research infrastructure as part of the overall expansion and has recognized the philosophical importance of an integrated pursuit of new knowledge and the need for collaboration and integration.



Campus History







1970 - Science Building



1972 - Aerial



1982 - Old Main



2013 - Old Main

From a small community college that was founded in the 1970s and located at a temporary Indian Residential School, Thompson Rivers University has been no stranger to development on both the academic and physical standpoint. TRUs path towards becoming a full provincial university emphasizes the institution's ability to capture opportunities and respond quickly to new challenges.

An abbreviated TRU campus history taken from the TRU 2007-2012 Strategic Plan below describes that journey best:

Thompson Rivers University (TRU) was founded in 1970 as Cariboo College, one of the network of two-year community colleges created in the 1960s and '70s to bring post-secondary education and training to all corners of British Columbia. The college began operations in Kamloops in the fall of 1970 in temporary quarters at the Kamloops Indian Residential School, and in the summer of 1971 moved to the current campus location on the south slope of the city overlooking the Thompson Rivers. From the main campus in Kamloops, and a satellite campus in Williams Lake, the institution has served regional communities from Merritt in the south and Lillooet in the west, Williams Lake and Clearwater to the north, and east to Chase for over 40 years. Twenty years after the creation of community colleges, widespread public support for greater access to university studies led to a second major expansion of postsecondary education in BC. One major strategy of the 'Access For All' initiative resulted in the

college being given university college designation in 1989. This allowed the college to expand its range of program offerings to include complete undergraduate university degrees, through partnership agreements with all three provincial universities.

The new University College of the Cariboo (UCC) thrived under the expanded mandate, developing new program options and taking a leadership role in developing the concept of 'ladders' between traditional one- and two-year college programs and university degrees. This helped to break down traditional barriers between 'college' and 'university' training and create new flexibility for students in planning their career paths.

With the proclamation of the amended College and Institute Act in 1994, UCC was given full authority to grant degrees in its own right, and within five years almost all degrees were independent. UCC established itself as a provincial leader in developing new degree programs such as the Bachelor of Natural Resource Science (BNRS), which was designed for the changing world of environmental awareness and was the first new degree in BC developed outside of the three provincial universities.

In March 2004, the Government of British Columbia announced that UCC would be a full provincial university, mandated to be fully comprehensive and highly flexible.

Today, the impacts of this new role are being felt in many different

ways, and the potential benefits of a truly comprehensive, primarily undergraduate, teaching-focused university are being recognized across the country and beyond. The launch of the first TRU Master Degree, a Master of Business Administration, in the Fall of 2006, followed by the Master of Education and Master of Environmental Science programs marked the next step in the continued evolution of the University.



1.3 Functional Analysis

1.3.1 Enrollment Projections

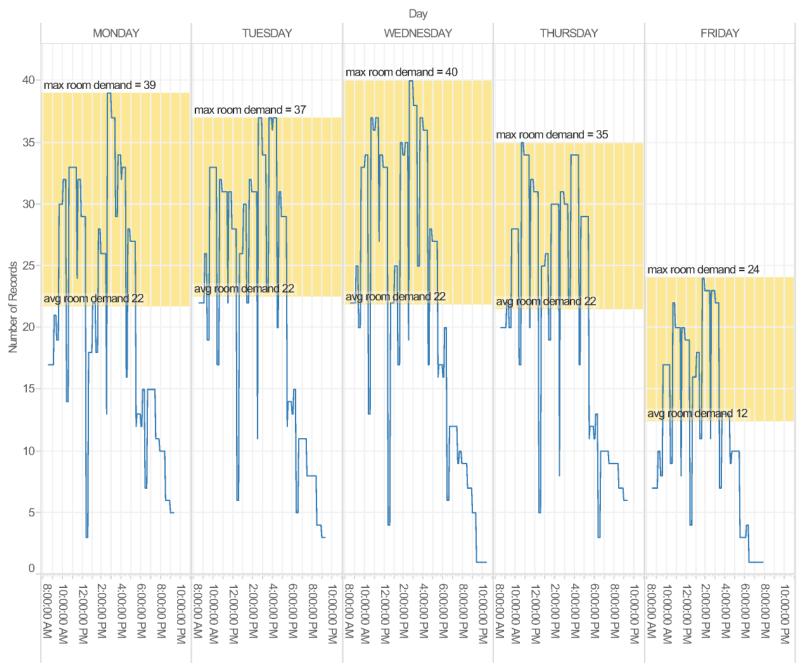
There has been much discussion regarding the Full Time Equivalent (FTE) count at TRU. Although the FTE metric (Full Time Equivalent) is used by the Ministry of Education and within the institutions themselves because these numbers are tied to funding in various ways, they can present a distorted view of the actually use of the campus on a daily basis. It has been suggested that a more refined term might be "Learners on Campus" to describe the actual traffic and occupancy of rooms at the University.

This is not a trivial discussion. TRU has a unique blend of University attendees. They include trades training where an FTE might well represent a more intensive use of space by many people due to the turn-over of trades groups within the six to eight week training windows. TRU also has an expanding research agenda that will see an increasing occupancy of the University by graduate students who spread their time among graduate courses, research participation and their own lab work.

For the purposes of reporting and consistency with the metric FTE for the Ministry and its comparison across institutions within British Columbia, we have set the planning of the 2013 Master Plan Update at 13,000 FTE with a Faculty and staff complement of 3,000 FTE. That said, prudent planning dictates that we look beyond those numbers and have an expansion strategy that can address additional growth to ensure a coherent and sustainable campus environment should the success of TRU, the City of Kamloops and the region prove to place additional growth pressures on the University.

1.3.2 Space Utilization

The planning team examined the University's data on room use and scheduling. This data was then placed into an Microsoft Access Database where specific queries could be generated to assess the use of space within the institution. The results of that analysis shows that the existing facilities within TRU are well managed and are operating near optimal occupancy allowing some flexibility without inordinate amounts of space used for float. The drop in utilization on Fridays is usually attributable to the shift from scheduled to non-scheduled spaces – most notably labs. This is normal for most institutions. Lab and research times are best assessed by the intensity of research activity and a University policy allocating research space to the research program and not to specific staff researchers.



The trend of sum of Number of Records for Time broken down by Day. The data is filtered on FIS Room Capacity, which ranges from 5 to 24.

Room Use with Size Filter

1.4 Physical Analysis

The topography and geographical location of TRU provides both constraints and opportunities for future growth. All the parts required for a successful campus are present and frame the new campus master plan.

1.4.1 Existing Physical Conditions of Campus

TRU is located in Kamloops on a campus area of 89 ha, half of which is developed with buildings, parking lots and green space and the other half which is underdeveloped.

Navigating the Campus: There is a lack of hierarchy and clarity present in the organization of paths and buildings. This is mostly due to the fact that the campus developed over a period of 40 years on a building by building basis. In addition, there are large parking lots that are dispersed within the core of the campus.

Connections to the Surrounding Communities: There are many undeveloped opportunities for connecting with the City of Kamloops and surrounding neighbourhoods. Some of these result in very unsafe pedestrian crossings across busy arterials so that students can get between campus and off campus housing.

Climate + Vegetation: The climate is characterized by strong seasonal variations, with significant snowfall (average 75 cm) in the winter and warm temperatures in the summer. It is a semi-arid climate, with close proximity to the Thompson River floodplain. The undeveloped areas within TRU provide important ecological habitat and research space for students.

Topography: The campus has a significant change in topography, approximately 150 m from its highest to lowest points. This topography creates 4 natural campus precincts within the campus: the flat campus heart (at the densest area of campus), the slopes (currently undeveloped), the mid-level (stadium area), and the upper-level (with trade and technology buildings). The topography poses a significant barrier to pedestrian circulation and campus way finding in terms of visibility and ease of access.

Existing Landfill: Another constraint to development is the presence of a former landfill site at the Southeast corner of campus.

Open Space + Landscape: There is a mix of fully grown trees, manicured landscapes, and local vegetation present on campus. There is considerable open space on campus and this is a highly valued attribute.

Views: Because of its elevated position overlooking the Thompson River, the South end of the campus provides striking vistas of the mountains beyond. The new campus master plan attempts to capitalize on these view with the new development while at the same time preserving views for existing buildings.



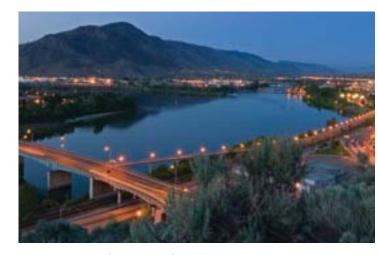
Navigating the Campus



Climate & Vegetation



Open Space



Connections to the Surrounding Communities



Topography



Views



1.4.2 Surrounding Community

City of Kamloops

The TRU campus represents a large area within Kamloops. The population of Kamloops is 85,000 people, while the number of FTE at TRU is 10,000, with 2,000 staff members, and 10,000 distance education learners. It represents an important area of employment within the city. The current built area of the campus is about the same size as the City Centre of Kamloops. The campus is located 5 km from downtown Kamloops with a significant grade change along Summit Drive, the connecting road. Additionally, the campus is 2 km away from the Trans-Canada Highway (to the South). While the campus is located centrally within the City, the campus feels isolated and not well connected with its surroundings from a design and built form perspective. No community roads pass through the campus though there are five access/egress points to the city road network. The campus is connected to the city via the bus service as well as bike paths. Potential pedestrian connections to the surrounding residential areas are under-utilized due to the scale of Summit Drive and the restricting topography. TRU has a significant aboriginal population and works towards creating strong ties with the community.

The major neighbourhoods surrounding TRU are: Northshore (North), McGill Corridor/ Southgate (East), Lower Sahali (East), Upper Sahali (South), Aberdeen (South), and Mount Dufferin (West).

The surrounding neighbourhoods and land uses that bound the campus are as described to the right.

The vision for the future of McGill Corridor is discussed in detail in section 3.5.3.

Northshore

To the North of the campus is zoned for industrial activity (sand/gravel extraction) and open space. There is a new residential development and rezoning planned to the North which may allow for connections to new developments on campus in terms of circulation and infrastructure. Additionally, there is an important connection to the Northwest to the Kamloops trail system and Kenna Cartwright Park.

Sahali

To the East is Summit Drive and an urban area with single family residential, some denser housing, and commercial space. To the Southeast is the Summit Shopping Centre.

McGill Corridor / Southgate

To the west is some light industrial and large parkland/open space. This area is mainly restricted by the site's hilly topography. An important draw to the campus is Hillside Stadium which is leased by the City of Kamloops (known as Canada's Tournament Capital), it is a highly valued facility which draws members of the community to campus.

Aberdeen

McGill Road bounds the site from the south. McGill Road has been analyzed in a study done in 2001 called the McGill Corridor/Southgate Project Concept Plan which looks at creating a consolidated vision for the campus and the Southgate industrial park immediately south. The Southgate Industrial park is a mix of light industrial and commercial spaces. McGill Road has been undergoing significant development recently, has some large (big box) retail such as Walmart, Superstore, Shoppers Drug Mart, and Save-on Foods. Beyond this area to the south is more urban area with residential developments.

1.4.3 Existing Buildings

The campus has been built over the course of the last 40 years in a series of stand-alone buildings. Some wartime housing that was on the site, a former army base, has been incorporated to provide space for a variety of functions. The main buildings on campus include the House of Learning (2011), the Clock Tower, Old Main, Arts and Education (1992), International Building, Campus Activity Centre, BC Centre for Open Learning (BCCOL) (2007), Culinary Arts, Trade and Technology (1994), Animal Health (2002) and the Library. The age of the buildings on campus ranges from over 40 years old to new. The buildings surrounding old main were built in the 1970s. The oldest buildings on campus are the centrally located houses which date from 1945. Some recent upgrades include the renovation of Old Main (2012), the new House of Learning (2011), and the Student Union building upgrades (2010). The buildings range in height from 1 to 11 stories, with an average height of 2-4 stories for the major buildings.



Student Housing and Conference Centre



The Clock Tower



Main Library (built 1975)



Wartime Housing appropriated for academic use



House of Learning (built 2011)



Addition to Old Main (built 2012)



1.4.4 Existing Circulation

TRU's campus is centrally located within Kamloops. It is near market housing, close to Kamloops' dominant shopping area and City Centre, and within two kilometers of the Trans-Canada Highway. The majority of TRU staff and students live off campus and therefore must travel using private vehicle or public transit to the campus.

TRU participates in BC's U-Pass system, which provides discounted transit passes to students. Currently, 56% of campus users live within one transit route of campus. The cost of a monthly transit pass is about 70% more expensive than a parking pass at TRU. There are five transit routes which serve the campus. In general, service that is less frequent than 15 minutes during the day is a deterrent to most users.

There are eight transit stops on the campus and these are located near the periphery of the core campus area. It is important to note that all major campus functions are located within 400 metres of a transit stop, which represents a 5 minute walking distance.

Approximately one quarter of students live within walking distance and more than one third live within biking distance of campus. The main deterrents for walking and cycling are the topography, the lack of facilities on campus, and the weather conditions. There is a lack of hierarchy and clarity in terms of way finding. The area around campus has gaps in sidewalk coverage, especially on Summit Drive and McGill Road.

1.4.5 Existing Parking

Parking is currently plentiful and inexpensive on the TRU campus. The daily rate for parking is \$5 a day and \$250 per semester, which is inexpensive compared to other similar universities and within Kamloops (parking at City Centre is \$5-\$8 a day). Parking stalls currently occupy 17% of the total developed area, with a total of 2,481 parking stalls. All are surface parking lots, with the largest holding approximately 600 cars. This represents a very significant portion of the developable campus, and many of the parking lots, although convenient for users, are located within the core of the campus and occupying area that will be needed for future campus expansion. Staff members have 520 dedicated parking spots. There are 110 parking spots reserved for the McGilll On-Campus Housing.

1.4.6 Infrastructure

The existing distribution is a single point BC Hydro primary service that will be reaching capacity. The equipment is both 25kV and 12.5kV, and

any significant additions to the site will need to address the service loading and configuration. As a minimum, all of the 12.5kV equipment should be removed and upgraded to 25kV. The existing communications to the site comes in to the Old Main building and is a single point of failure. A redundant location should be considered. There is one data center in the Open Learning building that serves the campus. A second redundant location should also be added.

The present plan has looked at the central electrical systems in some detail. In view of the fact that all the buildings are "stand alone" from a mechanical point of view, no exhaustive review of a scheme for campus wide mechanical service has been undertaken. It is our recommendation that a Utilities Master Plan be undertaken to assess the feasibility of a district cogeneration plant or similar to provide a more efficient heating, cooling and energy system campus wide.

Civil engineering has also received only an overview in terms of the impact the campus growth will have on the system on campus and its connection to the City of Kamloops drainage and sanitary systems. A Utilities Master Plan should identify these elements and capacities based on the level of development this plan contemplates and add the necessary infrastructure components required at each phase as part of the phasing and implementation plan presented here.



Existing Parking and Vehicular Routes

1.5 Market Analysis

A key driver for the new master plan is to identify development opportunities to generate revenue for TRU reinvestment. The team undertook a market analysis of the local market, context and trends. We researched and identified opportunities for residential, office, and retail/commercial development on the TRU campus, assessing the feasibility and phasing for each development parcel.

Current market forces and local trends were analyzed by researching current residential selling prices, conducting interviews with commercial brokers regarding site development values and researching future neighbourhood plans for the area around the university. With strong population growth and a healthy residential market, surrounding properties by TRU are already beginning to build a mix of new residential types from row homes to multistory mid-rise residential buildings proposed for McGill Corridor. The market will support higher density living, a lifestyle concept that not only will be viable in Kamloops, but is in line with our master plan framework to create denser complete communities. Market demographic will capture home buyers from empty nesters looking for a complete neighbourhood to retire as well as the growing family investing in a vibrant community where parents and children can work, live and play within the mixed-use university precincts. The fine balance of academic parcels and market parcels will create a mixed-use campus where students and community will support each other in resource and commerce exchange.

A further investigation into the location of key market parcels and project phasing strategies can be found in section "5 Implementation".

Some of the key findings of the market analysis that have helped set the foundation of the market viability behind the master plan include:

- Retail is most viable on McGill corridor anchored by the Superstore and surrounding large scale retail. Retail on McGill will need easily accessible parking
- Smaller retail hub would be successful within a mixed-use, pedestrian
 -focused campus heart that is well serviced by transit
- Retail in mixed-use campus heart needs pedestrians, transit-users and visibility to be successful.
- A hotel could be viable at a highly visible corner of the campus along McGill
- McGill should have on street parking to make retail viable
- Market residential mixed with academic use is not viable so keep market opportunities separate from academic opportunities

 Northern residential blocks should be a mix of housing typology but with many options for townhouses with outdoor spaces. Townhouses are a desirable product in the area and can be phased by developers

1.6 Key Challenges

Throughout the planning process, the team sought to fully understand the challenges that needed to be resolved in addressing the broad range of opportunities for the newly emerging new TRU campus plan. In understanding these challenges, insight was gained that helped to turn those challenges into opportunities to inform the plan making it a plan that helped to resolve challenges while manifesting the vision of the new TRU campus. The most significant of these challenges included:

Key Challenges

- Addressing the difficult topography of the campus which divides it and makes connections across the campus very difficult on foot or bike.
- Integration of academic disciplines or separation of disciplines.
- Balancing the desire for maximizing market residential, retail and commercial development opportunities, while achieving the space requirements on campus for the academic expansion needs.
- Creating market development opportunities at the desired density for revenue generation to base on current market realities, and unknown future market conditions.
- Balancing the need to densify the current campus without compromising the valued sense of open space across the campus.
- Determining a way to deal with the extensive surface parking lots recognizing the significant cost of underground parking and revenues to cover those costs.



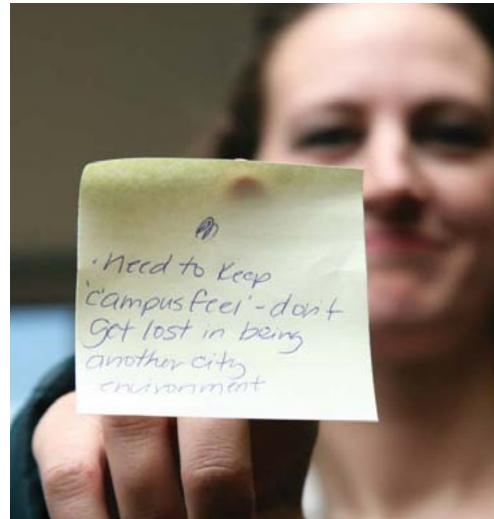
Development Opportunities



TRU MASTER PLAN









2 VISIONING THE FUTURE CAMPUS

- YEED ALL TRAFFIC ON RING ROAD.

When to see much

operATE.

NANDOMIC BUILDINGS.

USARIE THE PRIVATE

MARKET TO BUILD AND

2.1 Engagement Process

The planning process was designed to ensure strong input from the communities both on and off campus. Hundreds of people with a stake in the process were engaged either through the Steering committee, the Town Hall sessions or on social media. The materials related to the new TRU master plan at every stage in the process were all available for review and comment on the TRU website. This inclusive consultation strategy allowed a broad range of opportunities for input to a broad range of stakeholders both on and off campus, and helped to ensure a strong base of support for the future vision of the campus and the evolution to the new campus master plan. The sections below outline the key stakeholders and how they were engaged in developing the vision for the plan.

Consultation Program 2.1.1 The Stakeholders

There are a variety of stakeholders to be consulted as the Campus Master Plan 2003 is updated.

TRU Advisory Committee

 The project and process will be overseen by a Campus Advisory Committee which will provide advice to the Vice President, Administration and Finance on the update of the 2003 Campus Master Plan. The committee will provide input to Stantec during the development of the draft plan.

Thompson Rivers University Community Trust

 The Thompson Rivers University Community Trust (TRUCT) is another key multi-stakeholder advisory committee which provide input on the market drivers, opportunities and specific locations for market housing, retail, commercial and office space for the campus in the new plan.

TRU Community

 The TRU Community is a key stakeholder group that is comprised of students, faculty and staff who are critical to the process in terms of gaining their input and feedback.

Kamloops Community

 The Kamloops Community and surrounding neighbours are key stakeholders who are deeply interested and ingrained in any decisions that impact the university or its' campus. This is especially true given that approximately 9% of the total City of Kamloops population is either a student, faculty or staff at Thompson Rivers University.

Aboriginal Community

 With 10% of the TRU population being Aboriginal, an aboriginal visioning session comprised of Elders, students, and staff to gain insight and a sense of TRU's pre-history was a part of the process along with an Aboriginal Town Hall where input from the Aboriginal community at large was captured. "The manifestation of ideas rolling out of the process is never ending."

- Alan Shaver, TRU President

"Incubator spaces, natural areas for research."

- Comment from the Town Hall #1

"Where students can reconnect with their own identity and reaffirm who they really are."

- Estella Patrick Moller, Elder



22

2.1.2 The Community Meetings

A number of different types of meetings and forums were held to engage the stakeholders for face-to-face interaction with the team and the materials. The below table outlines the type of meeting and the stakeholders who have been engaged. The goal of each meeting was to share the process and gain valuable insight into the process.

2.1.3 The Process of Engagement

The methodology to engage the stakeholders was customized to the type of meeting and the stakeholders being engaged. Diverse types of forums were used to ensure that everyone has an opportunity to provide input and for their voice to be heard throughout this process. This helps ensure the best outcome for the new TRU master plan.

Advisory Committee

There were multiple stakeholders representing the university community to provide feedback along the process.

Social Media

The project used social media as a tool for multiple purposes including to communicate information about the project to all of the stakeholders, to gain input on key questions about the project, and finally to promote or encourage participation at the Town Hall meetings throughout the project. The Twitter account for the project has been a significant success with students and local politicians.

Visioning Sessions

Key themes are outlined on cards relating to the project including academic, transportation, infrastructure, open space, campus life, university village, enrollment etc. The goal of the exercise is to clarify facts and goals in Visioning Session 1 by having people rate/or vote with dots on the priority items within each category.

Visioning Session 2 followed the same format but moved onto exploring specific concepts relating to the master plan.

An Aboriginal Visioning Session was also held where an aboriginal perspective into the TRU campus was gained, more details of this session's outcomes are in section 2.1.4.

Town Hall 1, 2 and 3

For Town Hall 1, there were sixty (60) people in attendance who were comprised of community members, learners, faculty, and staff. There was a well rounded split of representatives for each of the stakeholder groups.

Town Halls 2 and 3 were also successfully attended by the community. An Aboriginal Town Hall was also held with members of the community.



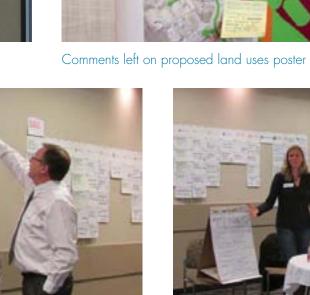
Engagement & Visioning Phase	Stakeholder(s)
Project Initiation Presentation & Meeting	Campus Advisory Committee
Visioning Session 1: Confirm Facts & Goals	Campus Advisory Committee
for Project	
Presentation to Confirm / Revise Vision	Campus Advisory Committee
Summary & Meeting with Richard Wozny	
regarding market Development Opportunities	
Presentation & Meeting with Richard Wozny	TRU Community Trust
regarding Market Development Opportunities	
Town Hall 1 - Focus on Process, Themes,	All Stakeholders
Vision and Development Opportunities	
Visioning Session 2: Build on Vision, Explore	Campus Advisory Committee
Gaps, and Master Plan Concepts	
Town Hall 2 - Explore Master Plan Concepts,	All Stakeholders
Precedents	
Aboriginal Visioning Session	Aboriginal Committee
Aboriginal Town Hall	All Aboriginal Stakeholders
Town Hall 3: Focus on New Draft TRU Master	All Stakeholders
Plan	
Draft Master Plan Presentation	Campus Advisory Committee
TRU Board Presentation	TRU Board



Community Stakeholders converse during Town Hall 2



TRU community participates in Town Hall



Working out key themes at the Visioning Session



Comment left from a community member at Town Hall $\,2\,$





Stakeholders present their ideas at a Visioning Session



2.1.4 Aboriginal Vision

On September 26, 2013 a Visioning Workshop was held with key Aboriginal representatives of Thompson Rivers University to discuss the TRU master plan and gain a critical Aboriginal perspective on the future vision for the campus. Following that, an Aboriginal Town Hall was held to engage the broader Aboriginal community.

There were nine key individuals participating in the session including the University President and VP Finance.

The objectives of the session were as follows:

- To understand traditional knowledge and wisdom related to the campus and land
- Share the process thus far for TRU Master Plan and draft Master Plan and gain feedback
- Generation of ideas for the draft Master Plan that represent an Aboriginal perspective and priorities
- To ensure a role in decision-making for the future TRU campus
- Share next steps and how the ideas get woven into the plan

The session focused on a review of the draft plan and further visioning to define the campus at the next integral level beyond the framework. Two exercises were used to explore these ideas.

Exercise 1 Outcomes: Share Your Knowledge with Us

The first was a "Share Your Knowledge With Us" exercise where the group was divided into 2 and each looked at the existing map of the campus and identified significant areas of the campus that were important to note in the masterplanning process. This exercise quickly turned into Visioning for both groups and the following key ideas were generated.

Nature:

The existing green and wildlife paths in the hills should be celebrated. The "natural" grasslands serve well as outdoor classrooms and teaching spaces for the sciences, biology and astronomy. The steep hills of TRU can become "underground classrooms" similar to aboriginal Earth Homes. Nature is an excellent example of how aboriginal culture can be layered into the TRU Master plan.

Accessibility:

A walkway or bridge across Summit Drive to Campus would ease accessibility. These pedestrian connections would potentially connect a car free campus. The idea of a free parking area outside campus was also suggested.

Balance:

Maintaining a balance between the rich natural grasslands of TRU against manmade "lawns" will be a critical component.

On-campus Employment and Events:

Creating more campus employment opportunities would be a key component along with more community based events.

Food Production:

Could TRU explore agriculture beyond the commercial grocery store? Are there opportunities for agriculture on campus in the form of vegetable gardens?

Sacred Space:

The group discussed how understanding the psychology of Aboriginal culture can begin to inform the masterplan's approach. How do we relate to space and how does this impact the aboriginal way.

Sense of Belonging:

It was mutually agreed that everywhere an aboriginal person goes, there should be a sense of belonging. There were suggestions for an Aboriginal Education Centre and Aboriginal Student Housing. Other programmed spaces the group suggested were: cultural exhibition space, day care, pit house, conference facilities, park+ride HOV parking.

Recreation:

Sports and recreation areas were high on the group's list of importance for campus. Recreation may also include garden spaces (such as the current garden outside the clocktower).

Academic:

The idea of having year round programs was intriguing to the group. Year round schooling would create a sense of community year round.

Light:

The use of indirect lighting and natural lighting strategies was also discussed as having high importance.

"Wandering path in gardens where you can sit, not be noticed by anyone and find peace of mind." Joanne Brown

- Joanne Brown, Co-ordinator of Services for Aboriginal Students

Exercise 2 Outcomes: What is Your Vision for the Campus

The next exercise continued on with Visioning through the use of flashcards with images that represented many different themes and ideas that the groups were asked to review, discuss and prioritize the top flashcards that resonated with them.

The idea of belonging was central to the group discussion. The idea of an Aboriginal Education Centre and Aboriginal Accomodations was introduced as spaces that can create a sense of cultural community. Close proximity between the accomodations and the education centre will be of utmost importance in maintaining a sense of belonging and creating an inclusive supportive community. With 10% of the population being Aboriginal, the group felt that these proposed spaces will achieve their 3 major objectives of: Learning, Support and Knowledge.

While TRU's growth is exciting, some concerns were also raised in terms of affordability and student population growth. The group felt that the 'campus feel' must be maintained and it would be a shame to urbanize to a point where community is lost. The cost of attendance and affordability of accomodations due to new housing costs may be an issue. The amount parcels being proposed for real estate development was also raised as a concern as land lost for future academic use.

Parking is also seen as a current issue and the group will like to suggest moving this from the core to the edge.

Water was a key theme with ideas about reusing water on campus as a central feature through things like waterfalls and water features. The idea of a water feature that would be an outdoor skating rink and used as a community amenity in the winter months was a strongly favored idea for the campus.

Light was another important theme. The idea of ensuring and design for the use of natural light within buildings and classrooms, high ceilings and art on the walls, to make places feel light and airy.

Light and sunlight was again a key theme with the importance of "Morning Sun Space" to honour the tradition of sunrise and sunset ceremonies.

Gardens were a key priority. Particularly gardens as they relate to places of food production on the campus. The idea of a place for a farmer's market on the campus was a strong one, a place that would serve the university community but also as a destination for the broader community as well, in line with the idea of a destination campus.

Landmarks for direction and way finding. The landmarks could be used with Aboriginal symbols including animals such as coyotes, bear, eagles, and wolves which are all important indigenous animals to the area.

> "Aboriginal Art and Culture is more than just a name, incorporate it throughout water, air and land."

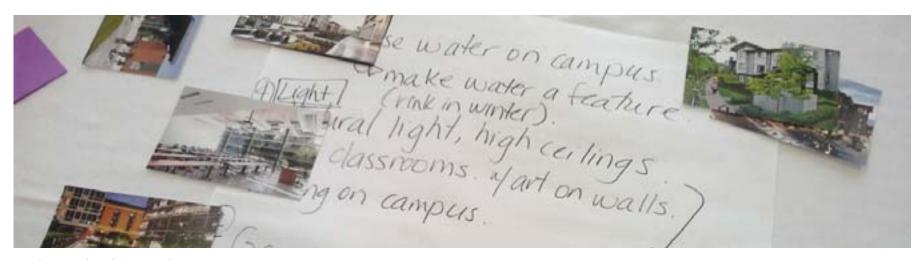
- Comment from the Aboriginal Town Hall

"Keep the campus feel, not too urban."

- Comment from Town Hall #1

"Sense of belonging for Native people."

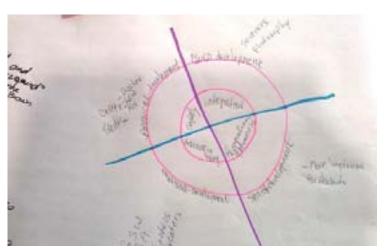
- Nathan Matthew, Aboriginal Advisor to the President, TRU



Working out key themes at the Visioning Session



Sharing knowledge of the TRU campus



Aboriginal medicine wheel overlay



Stakeholders discuss their visions



Stakeholders discuss their visions



2.2 Vision, Themes & Principles

From the community and stakeholder engagement several key priorities emerged around the future of the campus. These priorities were further explored in our consultation process to develop the vision principles.

2.2.1 Key Priorities for New TRU Campus

- Student housing, amenities and shopping opportunities
- Mixed-use
- Walkable campus
- Spaces for meeting and research
- Spaces for formal and informal connections
- Vibrant campus life
- Build on research strength of university
- Bring research and trades/technical together
- Explore revenue opportunities for development
- Vibrant Open space and Landscape
- TRU International and First Nations students
- McGill Corridor as mixed-use, vibrant and walkable knit TRU to City
- Densification of the Academic Core
- Campus Heart mixed-use, walkable with transit
- Destination University
- Parking to the perimeter, underground or structured

2.2.2 International Precedents + Best Practices

Once an understanding of the key priorities was established, an international scan of best practices and key precedent projects which demonstrated the themes and priorities that emerged during the visioning sessions was conducted. These precedent projects and images were then used to elicit feedback in the rest of the stakeholder engagement process such as the public town halls.

Precedents + Best Practices



University Village, UBC







Virginia Tech - Academic and Student Affairs Building



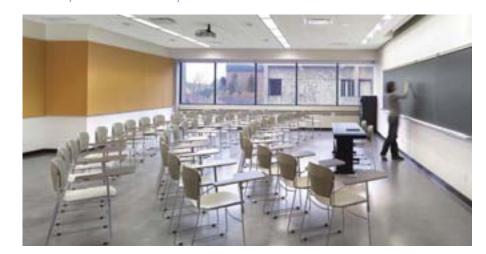
Walkable Campus



Lagunda Honda Hospital



University of the Fraser Valley



York University



University of California - Berkeley



University of Fraser Valley



Connected Campus



UniverCity, Simon Fraser University



2.2.3 Vision Principle - University Village

Vision Principles

Create a destination where people want to live, work, learn and play

Innovative integration of academic, housing, retail and office spaces

Redevelop the campus to its fullest potential with market housing, academic, retail, student housing, and office development

Development of campus for strategic reinvestment opportunities for the university

Implementation Strategies

- Create a destination university that draws community to campus ie. theatre, gardens, culinary arts.
- More indoor/outdoor recreation facilities
- Focus on recreation hub for campus as a community asset
- Diverse market and student housing options
- Integrate academic space with retail offices and student housing
- More food options on campus and green grocer
- Densify academic core
- Maximize market residential opportunities that can be phased over time
- Explore opportunities for commercial / retail spaces as part of other buildings and as student run opportunities
- Phasing plan for development parcels to ensure flexibility and reduce market risk



Mixed academic, housing and retail uses



Mixed use social heart

2.2.4 Vision Principle - Campus Life

Vision Principles

Create a vibrant mixed-use social heart in the academic core

Cultural diversity is valued and one of our greatest community strengths

Strong social and cultural network on campus

Access to high-quality housing, shopping and amenities in walking distance opportunities for the university

Diverse housing options on campus for students, families, faculty, and staff

Implementation Strategies

- Affordable housing to create a diverse community
- Example of UniverCity at SFU
- Childcare/early learning facilities
- Create more green spaces
- Create more indoor and outdoor recreation spaces.



Destination campus



High quality housing and indoor recreation spaces

2.2.5 Vision Principle - Campus Open Space

Vision Principles

Learning can take place everywhere and does so in formal and informal meeting places.

Spaces between buildings knit the campus together and create interactive, vibrant campus environment.

Year Round meeting and connection spaces outdoors for entire community

Highly pedestrian-focused, safe and enjoyable place to walk.

Campus well-integrated within Kamloops to create synergies that strengthen

Implementation Strategies

- Outdoor seating and casual meeting spaces
- Create spaces that can be used year round
- Designate areas for bicycles, pedestrians, and cars
- Preserve watershed and natural vegetation
- Create water feature on campus
- Consider alternative energy and water conservation



Public art that connects the regions' pre-history into the TRU campus



Gardens and places for reflection

2.2.6 Vision Principle - Teaching, Scholarship, Research

Vision Principles

Dense, vibrant, mixed-use academic core

Meeting, teaching and research facilities that allow university to expand to its fullest potential

Strong connections of the campus and university to the City of Kamloops

Implementation Strategies

- Mix academic with retail uses or student housing within academic
- Retail and food related services at grade within campus heart area
- Create outdoor rooms and flexible academic space
- Social hubs within building design
- Create large meeting rooms and informal spaces.
- Optimize views and natural light in building design and orientation
- Ensure dedicated spaces for students and faculty to meet, exchange,
- Explore locating additional university uses downtown
- Active uses at grade along McGill corridor and within campus heart
- Continue to work with city on implementation of McGill Corridor Plan



Year round outdoor rooms that promote learning everywhere



Flexible academic spaces



Optimize natural light indoors



2.2.7 Vision Principle - Transportation

Vision Principles

Preferred modes of travel are walking, cycling and transit, and these modes of travel are accommodated in all parts of the campus

Frequent transit connections to the rest of Kamloops

Implementation Strategies

- More transit connections to Kamloops
- Extensive pedestrian and cycling paths throughout campus
 Reduce amount of surface parking in favour of underground, structured and perimeter parking
- Establish a transit hub near the campus heart
- Improved road network
- Maintain or reduce commuter parking with anticipated campus growth
- Improve way finding and circulation patterns on campus
 Create facilities that encourage sustainable transportation such as cycling and transit



Highly pedestrian focused campus, enjoyable places to walk



Preferred modes of travel, walking and cycling on campus

2.3 From Vision to Plan

With key priorities identified and a vision articulated for the new TRU campus, the next section will provide an overview of the multiple layers of the new TRU campus master plan.



Reduce surface parking in favour of underground



Transit and pedestrian oriented plaza





3 TRU CAMPUS MASTERPLAN

3.1 Key Features

TRU has a unique and interesting topography. That fact alone helps to establish a unique framework that can form a very strong basis of overall campus development. The descending terrain from the entry points, the spectacular views of the valley and mountains beyond provide many opportunities to reinforce the understanding of the campus' structure within the context of the wider city and its place in the Thompson River Valley.

3.2 Precincts

This plan will identify four distinct terraces that can be interpreted and developed as precincts. The terrain lends itself to this broad classification of uses from those mixed commercial and recreational opportunities along the McGill corridor to housing on the lower terrace and slopes. The middle terrace works extremely well for the continued development and intensification of the academic, research and student housing facilities that form the core of the campus overall.







ACADEMIC (OFFICE TEACHING, STUDENT HOUSING, RESEARCH, MEETING SPACE)

MIXED USE ACADEMIC (RETAIL, ACADEMIC, STUDENT HOUSING)



MIXED USE MARKET (RETAIL, MARKET HOUSING)

MARKET HOUSING



OPEN SPACE + PATHWAYS

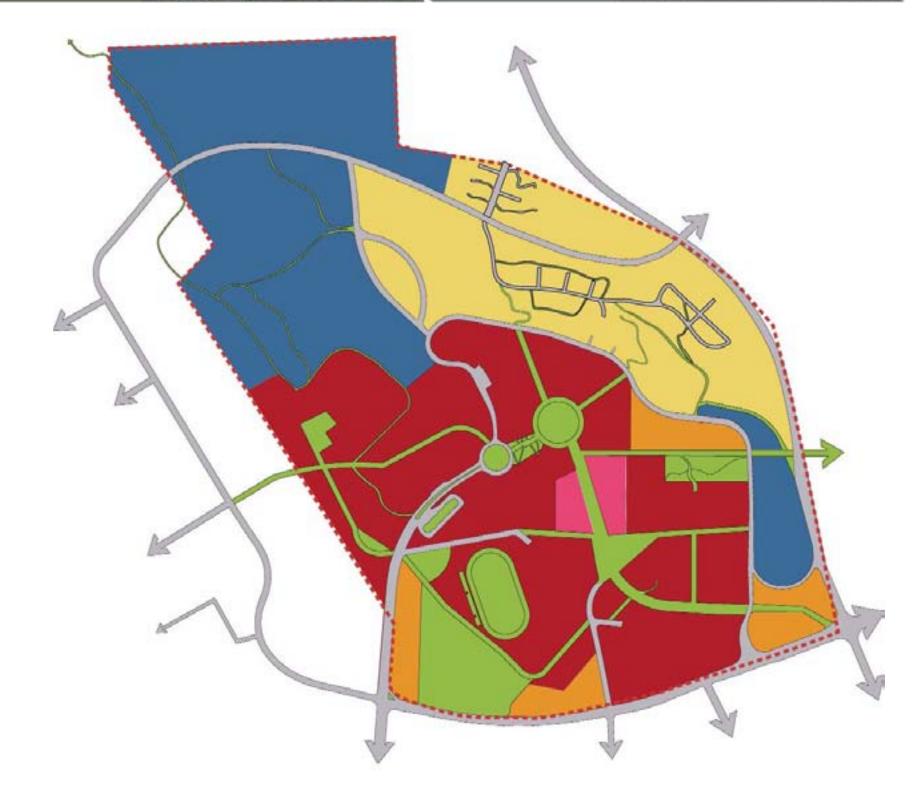
OUTDOOR RESEARCH SPACE



3.3 Campus Plan Uses and Description

This section sets out the overall campus land use organization positioned to best foster the TRU master plan objectives. The vision of a vibrant and pulsing mixed-use academic heart and its accompanying land uses is supported around the new open space network designed to connect the campus precincts and create an integrated university village. Six major land use categories have been identified: Academic, Mixed Use Academic, Mixed Use Market, Market Housing, Open Space and Pathways, and Outdoor Research and Education Space. These categories have been loosely defined to allow for flexibility to accommodate future university objectives and requirements while also establishing a framework from which future growth can be organized within the larger campus vision. Recommended programming for each land use category is based on the primary uses only and any ancillary use within each category has not been included for clarity. For example, a parcel designated as "Academic" will not specify "Retail", but an ancillary café or a convenience store is both expected and encouraged within that block.

The placement of each land use classification acknowledges existing environmentally sensitive zones and existing location of academic research buildings, as well as the future McGill Corridor plans and anticipated future developments on adjacent sites.



3.3.1 Open Spaces and Pathways

The open space network at TRU is undoubtedly the principal defining land use for the new master plan. The multi-faceted role in which open space will operate at TRU includes: connecting people and spaces, organizing land uses, and establishing the visual and experiential identity of TRU.

Open Space will also function at multiple scales including: creating spaces within buildings, permeating and breaking down building blocks, stitching together the larger campus precincts and at a much larger scale, connecting TRU to the City and surrounding neighbourhoods.

A diverse range of spatial strategies such as pedestrian pathways, vehicular limited roads, open commons, courtyards, athletic fields, and trails will be used to compose the network. Further detail on the landscape concepts will be found in section 3.5.1.

The formal structure that the open space network provides will lay down the foundation for the campus phasing plan, its associated land uses, and the social organization from which campus life and learning will advance.







3.3.2 Academic

The Academic component comprises the largest and most significant land use area on campus. Its primary uses include office, teaching, research, meeting room, student housing and athletic spaces. These spaces constitute where academic learning and teaching both formally in classrooms as well as informally in meeting spaces and research in laboratories unfold. In working with the existing campus fabric and relatively new existing buildings, the new academic parcels have been placed near some of the key existing academic and research infrastructures designated to be preserved in the new master plan.

There are 5 main Academic zones in the campus land use plan. The zone Northwest of University Drive will facilitate the expansion of an already existing research presence. The existing buildings around the circular Campus Commons forms another academic zone that can facilitate additions to the back side of the existing buildings to further grow the necessary density while keeping the current success of the Commons. The Parcel directly south of the traffic circle along University Drive, will act as a bridge to link the Northern research parcels to the central TRU campus. South of this, forms the academic parcels associated with campus recreation and athletics. TRU is nationally recognized for its sports facility and for hosting the BC Lions Training Camp. The growing demand for supporting athletic spaces can be accommodated here. The parcels sandwiched between the Health Sciences building and Old Main will facilitate the connection between the campus core and the surrounding market development both within the campus and along McGill Corridor. Building flexibility into the academic land use parcels is fundamental to the future needs and any unanticipated changes to the campus objectives and the direction and emphasis of any of the above parcels; either be they research space, athletic space, student housing or academic office space; can be altered within the broad definition of "academic" to suit TRU's requirements.





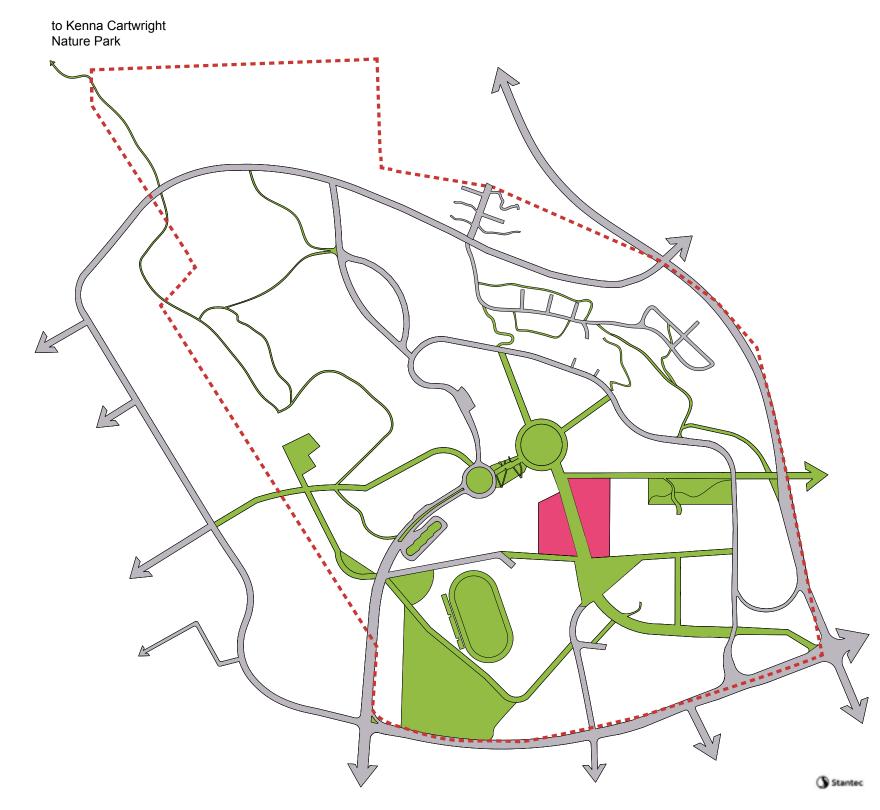
3.3.3 Mixed Use Academic

Mixed Use Academic is the unique designation earmarked for the new campus heart. Located just south of the Campus Commons, this land use designation will create a true intermingling between retail uses, academic spaces, and student housing to create a circadian rhythm to the heart of campus. Recognizing that market housing will not thrive in the middle of the academic campus, this land use will only comprise of student residences and student focused market rentals in terms of housing. Precedent examples include the Yale NUS College in Singapore (bottom image).

The outflowing of academic discussion on café patios and the impromptu team meeting under the Ponderosa trees on the green running through the campus mixed use heart will create both a robust TRU identity and generate memories for generations of TRU graduates. This concept is further explored in section 3.5.1.







3.3.4 Mixed Use Market

Combining mixed use retail and market housing, this land use category is primarily located on parcels along McGill corridor. In keeping with the desired outcomes of the McGill Corridor Concept Plan, this land use will break down the scale of surrounding big-box stores in exchange for a smaller scale walkable retail stretch. The southeastern parcel will act as the campus retail hub, anchoring the campus' main visual entrance. To the west, the mixed use market parcels will emphasize the McGill Corridor vision and the western parcel will establish a strong corner for the west side of TRU's campus. The northern mixed use market parcel will include the new location of the community day care, community recreational facilities and market housing. Being further away from McGill Road, traditional retail uses will not prosper in this specific location and all uses other than market housing should be connected to community amenity and recreational use. Precedent studies for the mixed use market category include: Wesbrook Village at UBC and the West 4th Retail Corridor in Vancouver. This urban edge will establish an urban mixed use frontage and plays the role of creating and blending the edge between TRU and the City.





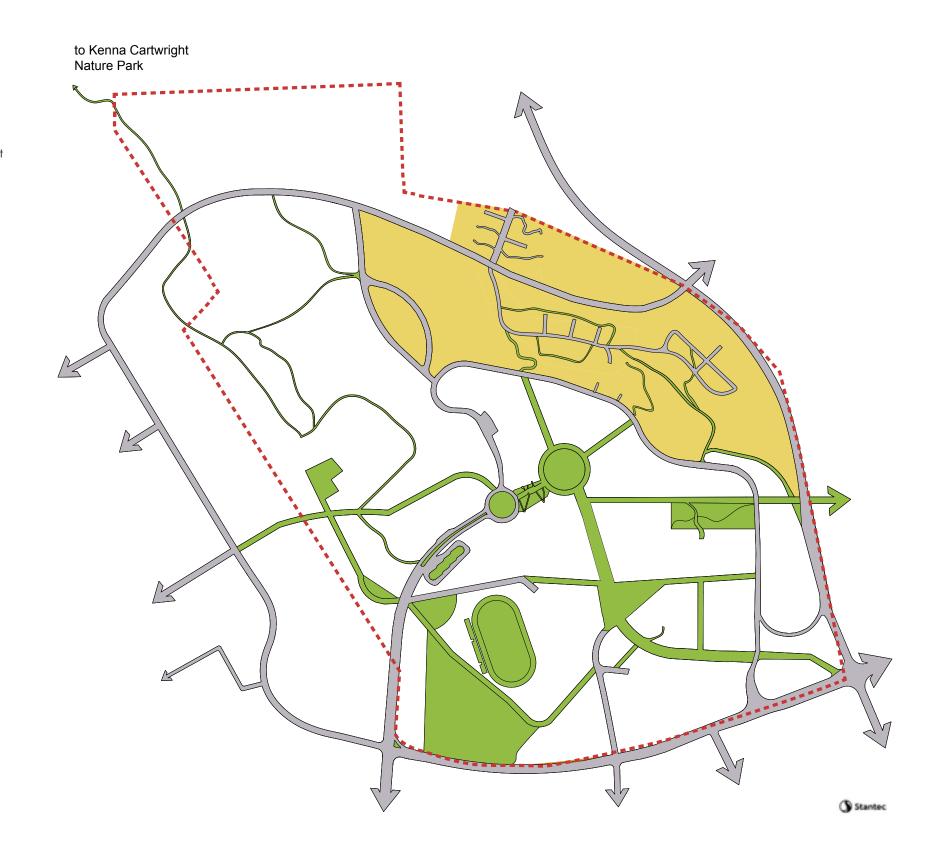


3.3.5 Market Housing

The Market Housing land use is contained to the Northern portion of TRU lands. Challenging topography and isolation from the rest of the campus provides its benefits to market housing but also limits any academic parcels to be placed in this area. The elevation change is drastic and creates a natural border along the North and South of University Drive. Market Housing will benefit from the beautiful and expansive views towards the downtown and to the mountains to the North. The most western portion of this land use (located on an existing open parking lot) will contain a higher density due to its relative flatness and closer proximity to campus; otherwise the housing typology will be primarily town homes. Precedents include UniverCity at Simon Fraser University where multifamily town homes are built onto the edge of Burnaby Mountain and take advantage of the challenging topography.







3.3.6 Outdoor Research and Teaching Space

Learning is a process that occurs indoors as much as it does outdoors. At TRU, the diversity of native grasses, plant life and wildlife is recognized by various faculties and community groups to benefit research as an outdoor lab. This land use is designated to protect and preserve the existing natural areas for learning and teaching, as well as, recreational purposes. It is similar to, but differentiates itself from, the open space network by the nature of pre-existing native plant life unique to the region. TRU's academics consist of a strong horticulture tradition and the study of plant species crosses many of the academic programs currently offered by TRU. These range from the Horticulture to the Culinary Arts program. The current outdoor teaching lab for the Natural Resource Sciences program will be protected from development in the master plan. Undevelopable areas containing challenging topography or environmentally sensitive zones have also been designated under this land use.

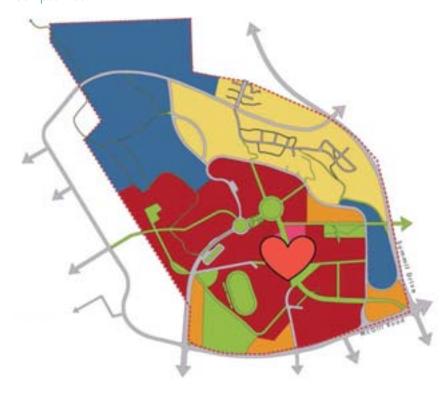






Landmarks





3.4 Plan Framework

Nodes

There are several criteria that impinge upon campus planning that directly affect the quality of the experience that students, staff and faculty will have. The understanding of place is of fundamental importance in building a truly unique and memorable campus experience. The most notable research that had been done on this issue of the spatial experience of large scale planning was done at the Department of Urban Studies and Planning at the Massachusetts Institute of Technology. The research focused upon how people experience and understand their environment. Many techniques were used to probe the understanding people had of several cities including Boston, Hoboken, New Jersey, and Los Angeles. One such technique was asking a random sample of the population to draw maps of the city. The result was not a map one would see printed, but a mapping of one's perception of the city and how that mental map was structured

The research has taught us that several key components must be present to assist in properly designing a city (and in our case a campus) so that it is understood and has character that can be translated and internalized by people easily. Together, these components help a person construct a mental map of their environment and aides in its understanding, appreciation and significance as well as in its basic navigation.

3.4.1 Nodes

A node is an area one enters into. It is an area of activity and helps to anchor ones understanding of where you are in relationship to other locations by virtue of the uniqueness of the activities within this "room".

Times Square is an easily recognized nodal point as is Piccadilly Circus in London. However, nodes can be any size and still be recognizable as a locus of activities well understood by its users.

3.4.2 Landmarks

Perhaps the easiest of these performance measures to understand, Landmarks are objects within a field of view that are memorable and serve to anchor a location. Everyone will recognize the Eiffel Tower or The Statue of Liberty as one enters New York Harbour (an iconic arrival for many immigrants coming from Europe by ship at the beginning of the last century). However, landmarks can be any scale and need only have a distinctiveness that is easily recognized and is associated directly with its location.

3.4.3 Edges

Edges – as the name implies – are boundary areas. They are locations that demark one area from another or form continuous "fences". These can be made up of a great variety of physical arrangements, but mentally, they are perceived as a demarcation from one locale to another along a linear dimension.

3.4.4 Paths

Paths are lines of movement that tend to connect various nodes and landmarks. They can be many different scales from wide avenues to footpaths. The basic characteristic of their importance however is in their understanding as a connection between places of significance and meanina.

3.4.5 Way finding

With the clarity of the framework formed by Paths, Nodes, Landmarks and Edges, the task of way finding on campus becomes a much easier problem. The basic form of the campus then has legibility and an intuitive navigational basis. Signage then has a rich context in which it can be placed to assist. This can be fixed signage or a smart phone app that has geospatial capability.

3.4.6 Campus Heart

The idea of the "Campus Heart" was a recurring theme in the public Town Hall meetings. In the language of our framework, it would translate to a very strong nodal point that has definitive character as the most central and richly serviced location on campus. We have identified that location in this plan and care needs to be taken to ensure that a mix of uses and building configurations reinforce this location. Design elements for both building and landscape will require careful attention and detail. This concept is further explored in section 3.5.1.



3.5 Campus Plan Concepts

3.5.1 Open space and Landscape Guidelines

The Thompson Rivers University campus fabric consists of a collection of building typologies, ranging in age, architectural character, and overall academic function that have developed steadily over the past 40 years. Previous master plan exercises for TRU developed in 1989 and 2004, have made some solid recommendations as specific to the character of landscape materials and elements around the campus and its open spaces, while the form of these open spaces have been driven or influenced primarily by this varied built form. In order to achieve TRU's overall vision and goals for a well-organized and connected campus, and a strong, unified campus identity, it requires the "carving out" of open spaces using the campus "framework" approach, identifying the public realm's overall guiding principles throughout the campus and utilizing design criteria to support the purpose of the public realm and help inform future built form, instead of the other way around.

The Public Realm & Landscape Design Guidelines have been established as the criteria for future networks and open space development as the Campus Master Plan is implemented over time. As the phased development occurs, the removal of old buildings and the renovation or construction of new buildings will begin to transform the public realm, and therefore a solid understanding of what the public realm wants to be is required now. In order to fully realize the potential for a vibrant, walkable and revenue generating campus, the below guiding principles and design criteria for the public realm should be expanded upon in more detail in the form of a "Public Realm Masterplan" as a separate document and adhered to in all future planning and development endeavors undertaken by the University.

GUIDING PRINCIPLES FOR PUBLIC REALM

A successful public realm is the vital layer on a campus that creates the overall identity and image of the campus and facilitates the enjoyment of academic life through stitching together a series of nodes, landmarks, edges, paths, way finding and building forms.

In order to "carve out" open spaces and networks to create the public realm, there needs to be some guiding principles as to how the planning and development of the public realm is implemented. There are five important, over-arching guiding principles that should be considered when approaching the planning and creation of the Public Realm at TRU in

order to meet the vision, principles and themes identified by the TRU Steering Committee in Sections 1.1 and 1.2 and the Visioning Process outlined in Section 2.0. The networks and open spaces of the public realm of the campus should be developed and designed to:

- ORGANIZE: The public realm should organize the campus and it's elements, strengthen connectivity, create landmarks and support the distinguishable "neighbourhoods" to the campus in order to improve way-finding
- 2. CREATE IDENTITY: The public realm should contribute to the creation of a unified character of the campus while creating unique identities for the campus "neighbourhoods" and "precincts"
- 3. CREATE VIBRANCY: The public realm should create a vibrant student life and innovative educational opportunities and support the objective of a 'mixed use' development approach to the campus through form and function
- 4. SUSTAIN: The Public Realm should be long lasting, durable, low maintenance and resilient. It should include comfortable environments to be in and be socially and environmentally sustainable
- 5. BE FLEXIBLE: Campus forms are consistently changing to meet academic demands, support organic mixed use development, and respond to available funding and changing technology. Therefore the public realm and open space should have overall flexibility inherent in its design to support a range of uses and needs

The above Guiding Principles should be used to inform the design of the Public Realm, which is utilized and experienced by campus users, staff and faculty in two major formats: networks and open spaces.

DESIGN CRITERIA OF NETWORKS:

The networks on campus are responsible for the movement of people and goods/services around campus. But in order to achieve TRU's goal for a walkable campus, the public realm and vibrancy must be enhanced through a strong pedestrian oriented network that provides ease of access, safety and enjoyment for pedestrians and cyclists over the use of vehicles.

- 1. Ease of access pedestrians use networks that are well-connected and make day to day use easy:
 - Very direct and pedestrian only access to key points and academic spaces on campus, especially those with greater prominence, to reduce the urge to drive
 - Bicycle facilities prominently located at entrances and en routes for cyclists
 - Pathway designs on slopes that work with the grade and provide benches for adequate resting and respite
- 2. Safety pedestrians use networks that appear safe, and feel safe when using them. These include walkways with:
 - density that supports the "All Eyes On the Street" theory by Jane Jacobs
 - appropriate interfaces between pedestrian and vehicular traffic
 - emergency call centres on long, campus walkways
 - comfortable environmental design (for example, use principles of Crime Prevention Through Environmental Design)
 - adequate lighting
 - presence of campus security (cameras, security personnel, school "walking buddy" programs)
- 3. Enjoyment enjoyment of walking from A to B is supported by:
 - a continuous design language among spaces,
 - sheltered from elements (shading from hot sun, sheltered from cold winds, etc)
 - aesthetically pleasing using quality landscape elements and treatments
 - a variety of experiences of places that provide different characteristics (i.e. urban vs rural) and invigorate the senses (smell, touch, sight, etc)

The physical layout of networks for the public realm have been identified in two ways based on pedestrian access and vehicular access that should have their own design characteristics to promote a walkable, and connected campus

HIERARCHY AND CHARACTER OF NETWORKS:

A recommended hierarchy of networks identifying their location and their overall landscape character is listed below and identified in the "Networks" diagram on page 44.

Pedestrian Networks

- **Existing Trail System**
- Mountain Trail
- **Campus Connections**
- University Village Corridor
- Multi-Use Trails

Vehicular Networks:

- Minor Access Roads
- Major Access Roads

GENERAL DESIGN CRITERIA OF OPEN SPACES:

The following is a list of design criteria that will generate real "place-making" of open spaces that significantly contribute to campus life:

- Landscape design must respond to the aligned cultural, historical and environmental contexts of the site, the surrounding campus and the Kamloops region:
- Cultural provide a design form and language that supports the local Kamloops heritage and the Aboriginal vision for the campus (for example, protecting, incorporating and celebrating nature)
- Historical create designs that take cues and provide historical references to Kamloops, celebrate the heritage of the campus, and protect existing heritage elements and landmarks found around

- campus (for example the clock tower as identified in Section 1.2 Strategic Review)
- Environmental provide landscape designs that relate to the environmental character of the region, that provide ecological value through design and connectivity to the natural landscape around the campus, and that appropriately respond to and deal with environmental conditions on the campus
- Landscape designs take cues from the aligned contexts above, and use the following to create a unique "story" for each place:
- Form (shape, layout, design)
- Materials (paving, vegetation, etc)
- Elements (furnishings, lighting, public art, custom landscape architectural features such as trellis or water features, etc.)
- Landscape designs that respond to site specific challenges of Thompson Rivers University:
- Sloping sites Use public art or landscape installations or buildings to artfully and creatively deal with grades, claim back otherwise vacant hillsides with public space and create "penetrations" between grade changes that create "barriers" to the campus flow both physically and visually
- Seasonal uses Use design of open spaces to provide both comfort in extreme seasonal weather (hot sunny summer days to cold, windy winter nights) and incorporate a range of uses and activities in both climates (summer hiking to winter snow shoeing)
- Underutilized Spaces use public art or landscape installations or buildings to artfully and creatively open up and brighten spaces, providing safe access and egress, and enhance the overall function and enjoyment of otherwise derelict and dark spaces
- Single-use spaces modify key and strategic open spaces to accommodate a variety of abilities and age groups to support the broad types of users of the "mixed-use" development parcels around the campus. Open spaces should include a diversity of amenities for ages 8 to 88 and be designed with materials to suit selected and supported age groups
- Landscapes should respond to the identity of the architectural form, function and character of each particular department complex or building they are associated with

Landscapes should provide for and encourage social interaction, exchanging of ideas, and outdoor learning and education opportunities

HIERARCHY AND CHARACTER OF OPEN SPACES:

A recommended hierarchy of open spaces identifying their location and their overall landscape character is listed below and identified in the "Character of Open Spaces" diagram on page 45.

- Academic Building Landscape
- Primary Activity Plaza/ the "Campus Heart"
- Secondary Activity Plaza/Courtyard
- Public Open Green space
- Naturalized Area
- Stormwater Park
- Technology, Research and Laboratory Landscape
- Residential Landscape



PEDESTRIAN NETWORKS

EXISTING TRAIL SYSTEM

 connection to campus vai "mountain trail system"

MOUNTAIN TRAIL CONNECTIONS

- rugged trails connecting outdoor learning areas to existing trail systems
- 2 3m wide gravel/mulch paths suitable for use all year round
- adjacent natural revegetation restoration as required to suit existing native conditions

VEHICULAR NETWORKS

TRU boundary

MINOR ACCESS ROAD

- narrower two lane traffic
- pavers surface with vehicular and pedestrian traffic shared
- traffic uses are separated with bollards, street tree planting and other street furnishings



CAMPUS CONNECTIONS

- simple corridors for direct access around campus
- pedestrians only (with maintenance access)
- unit pavers with benches, lighting and lined with large street trees
- supports connectivity to buildings and open plazas as dictated by masterplan



UNIVERSITY VILLAGE CORRIDOR

- pedestrian traffic only (with service access as required)
- decorative paving with custom furnishings, lighting, planters and trees in unique design that supports commercial uses
- outdoor dining areas and program amenity areas
- plenty of areas for social interaction/ relaxation



- wide multi-lane traffic
- asphalt for driving surface
- boulevard, sidewalks & street trees
- campus wayfinding & signage
- signalled crosswalks



MULTI-USE TRAILS

- trails for pedestrians, bicycles and wheelchairs (fully accessible)
- 3 4m wide asphalt surfaces
- strategic connections to outdoor amenities and to campus facilities

- consists of natural vegetation indicative of
- natural landscape should be protected

Thompson valley

• to be used for outdoor education and learning

CHARACTER OF OPEN SPACES



PUBLIC OPEN GREEN SPACE

- open space that is mostly green with flexible space for outdoor student gatherings, active gardening, large events and educational activities
- to include areas and amenities for social interaction and relaxation

■ RESIDENTIAL LANDSCAPE

- sustainable & low maintenance landscapes that support architectural character
- amenities suitable for residential use



TRU boundary

ACADEMIC BUILDING LANDSCAPE ■

- landscape should support academic use of building and include areas for social interation and outdoor learning
- landscape should promote pedestrian connectivity between academic building entrances and outdoor areas

■ TECHNOLOGY, RESEARCH AND LABORATORY LANDSCAPE

- landscaping suitable for campus technology/ research and laboratory space
- sustainable landscapes with local, low maintenance plantings, street trees, and stormwater management best practices highly recommended for this area



CAMPUS "HEART"

• mixed-use walkable pedestrian oriented plaza spaces suitable for dense activity

PRIMARY ACTIVITY PLAZA/

 landscape design and selected amentities should support commercial businesses

■ STORMWATER PARK

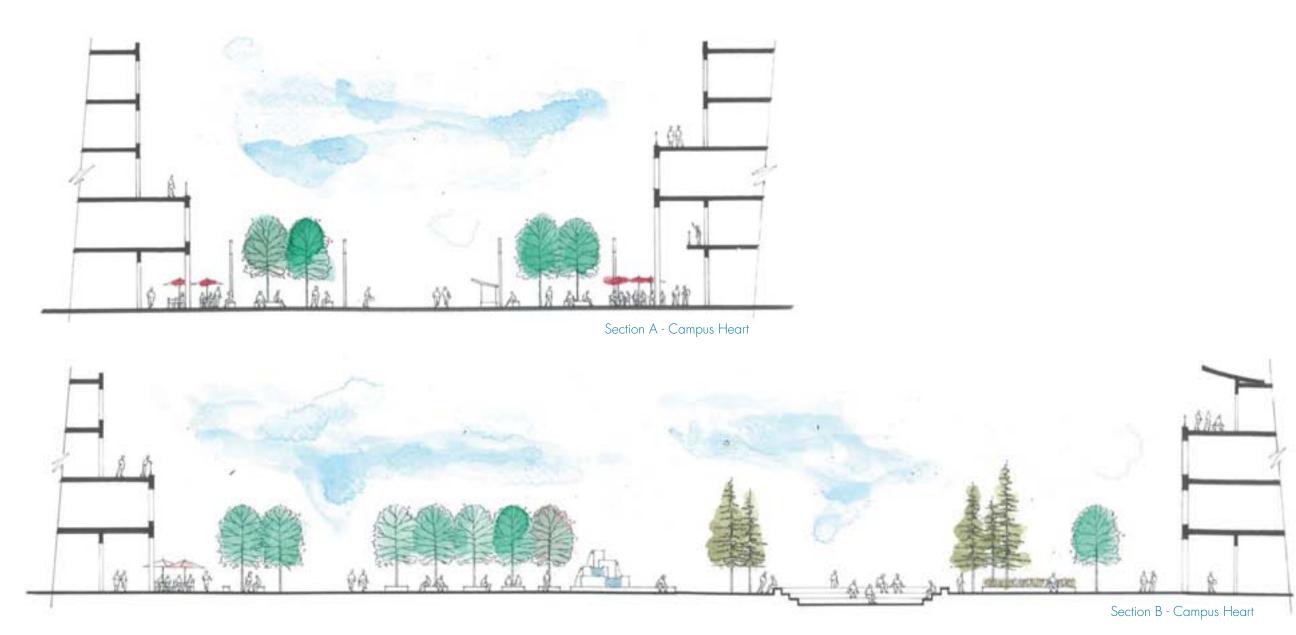
- naturalized green space with stormwater pond for retention
- integrated with multi-use trails for passive reacreational use
- acts as the "foreground" to the campus development beyond into the heart of the campus



SECONDARY ACTIVITY PLAZA/ COURTYARDS

- pedestrian traffic only (with service access as required)
- paving with furnishings and street trees
- plenty of areas for social interaction/ relaxation





University Village Campus Heart

The Campus Heart begins with a ceremonial pedestrian entrance to the TRU campus, and its active 'heart'. A tree-lined processional way proceeds from the university doorstep on McGill Street at the edge of the campus, towards the existing campus Commons.

The corridor moving into the campus heart is both pedestrian-focused and pedestrian-scaled. The mixed-use campus buildings surrounding the corridor shape positive outdoor space and the activity along building edges is reinforced with a sheltered arcade. This provides opportunity for outdoor dining, social interaction as well as offering multi-season weather-protected movement. Animation along the corridor is further supported through movable seating elements, benches, lighting elements, public art, and trees and water elements. The long-term vision to develop the campus heart will require a critical mass living on campus to support it.

The Campus Heart is conceived as a series of outdoor 'rooms', each with

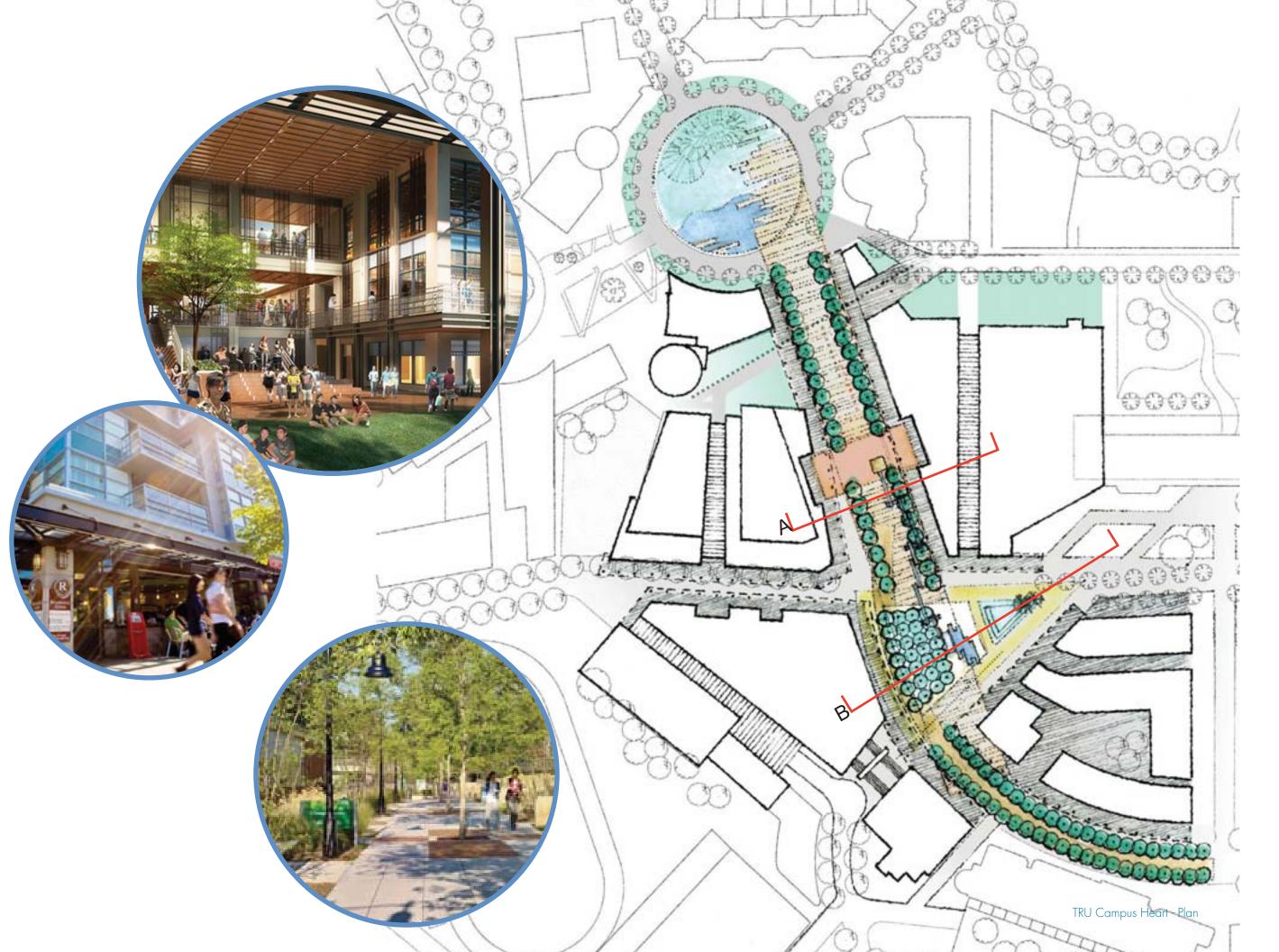
a unique spatial identity, but tied together visually with consistent palette of materials and finishes. The sequence is connected with a way finding program that may include signage, symbols, as well as art or sculptural elements embracing Aboriginal themes.

At the southern end of the 'heart' is a wedge-shaped space that has an active, urban feel. Water emerges in this plaza in a sculptural fountain element and traverses the promenade, transforming from a rectilinear channel to a more naturalized pattern as it 'flows' towards the informal pond feature in the Commons. The wedge also features a triangular outdoor educational space, as well as a formalized bosque of trees. This plaza is conceived as an all-season, active focus of student activity and meeting place.

The main promenade linking the wedge plaza with the existing Commons is an active corridor, supporting many kinds of student activity, including outdoor dining, festivals, farmer's markets, book sales and other campus events. The edges are strongly delineated with the sheltering arcade and activated with mixed-uses such as book shops, campus printer, food outlets, campus grocer and other student amenities. Bike racks, seating elements, trash receptacles, lighting and other pedestrian amenities are abundant and well-placed to support student activity.

At the north end of the promenade, a 'pivot' building acts as a gateway between the promenade and the Commons. This is a stand-alone building which houses an activity such as a café that invites lingering and peoplewatching. From the Commons side, this building helps to visually complete the encircling structures which define the space.

As the paving from the promenade meets the Commons, it begins to visually erode and break down into the naturalized landscape, becoming part of the elevated mound, and merging with the stormwater pond. This is the symbolic contrast where the urban campus meets the more natural, garden-like environment of the Commons.



3.5.2 McGill Corridor

The Front Door Step of TRU Campus & Key Connection to Surrounding Communities

The importance of the McGill Corridor to Thompson Rivers University cannot be overstated. As a key perimeter road to the university, McGill corridor serves both as a key connection of the university to the surrounding neighbourhoods as well as the front door step to the university. As such, it is important that the McGill Corridor must consider some of the key design direction taken by the revised TRU Master Plan update to create a seamless connection and interface with the surrounding communities. This is an early idea to start discussion of what McGill corridor could be. The idea would need to be vetted with the City of Kamloops and need to be conditional with the opening of the Hillside connector and consultation with private sector landowners on the other side from TRU. The City would also need to monitor the traffic flows of the Hillside Connector.

In 2001, the McGill Corridor Southgate Concept Plan was created which outlines a vision and design strategy for McGill Corridor given its important and strategic location knitting TRU campus to surrounding communities. This plan was carefully referenced through the TRU Master plan Update, however since 2001 the area, the market and landscape have changed quite significantly. As such, we believe that it is important as part of this master plan update for the TRU campus to recognize where some of the major drivers are that have led to a rethink of the surrounding land uses on McGill Corridor, and as such require a "revision" to the concept plan for McGill Corridor.

One of the key drivers to the master plan update was to identify opportunities for development and revenue generation for the university, as such McGill Corridor with market housing and commercial space across the street, was the ideal location to locate the mixed-use development on the campus property that could be used for revenue generation. This is a departure from the McGill corridor plan which only showed mixed-use development on the south side of McGill. In the revised land use plan considering the corridor alongside the TRU lands, mixed-use development is on both sides of the street, creating a much higher density, and more urban condition than was previously considered in 2001 McGill Corridor Concept Plan. Given the amount of growth and development in the area with residential, commercial and industrial, since 2001, it certainly makes sense that a higher density land-use scenario is being suggested here.

As a result of the resulting mixed-use corridor that emerged from the development of the TRU master plan, the key elements to support the retail and commercial development at grade are both on street parking, and frequent and regular transit. With the vision of TRU to become a destination campus instead of a commuter campus, frequent regular transit and on street parking are critical components.

The revised McGill Corridor plan needs to consider on-street parking on both sides of the street and regular transit stops to support healthy retail, create a destination campus, and connect students to the community.

Another key element that came of the extensive consultation and visioning for the new TRU master plan, is the focus on a pedestrian and bike-friendly campus. One of the major moves with the new campus is to get cars out of the centre of campus and to create a desirable pedestrian environment. We believe that many of these key elements of a safe and desirable pedestrian and bike-oriented environment should be adopted along McGill as well to create a cohesive feel and glue the campus to the surrounding communities. These principles would include wide sidewalks, with canopies for weather protection, well-designed landscaping and tree planting along the street, and designated bike lanes. Another aspect of a safe pedestrian environment is regulating vehicular speeds and traffic calming. We recognize that McGill is a major arterial for the area, but propose that a "University District" be developed on the stretch of McGill that borders the TRU campus and that landscaping measures that both calm traffic and pedestrianize the street around the university would be successful and necessary to help achieve the TRU master plan vision. This could include a planted median in the middle of the street, as well as parking laybys on the street. To denote the importance of the campus to the area and signal a change in character of McGill Corridor along the TRU campus, we suggest that signage to street poles be developed that speaks to the "TRU District" with the university colours and emblem. This type of University District signage has been successfully used and adopted in other places to denote the importance and connection of the university campus to the surrounding communities.

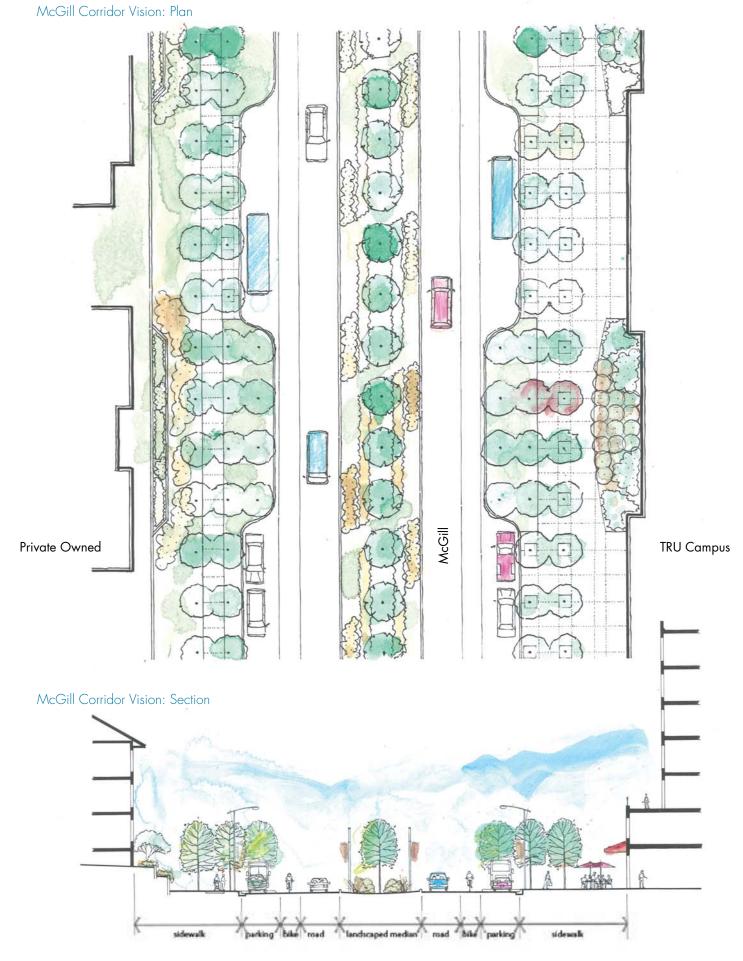
The new TRU master plan strives to create a mixed-use, vibrant campus that is a destination for the entire community. As such, both the campus heart and McGill Corridor are opportunities to create a lively mixed-use destinations

where people can shop, dine and socialize. The strategies to achieve this are weather protection canopies on the buildings, space for outdoor seating for cafes and restaurants, traffic calming measures to slow down drivers and encourage more pedestrians and cyclists around the campus.

The below plan and section are scaled drawings speak to how these concepts could be implemented along McGill to achieve many of the design objectives outlined and help to knit the new TRU master plan into the surrounding communities and help to build its success.

Design Strategies for McGill Corridor:

- Vibrant, Mixed-Use development on both sides of McGill to create a destination
- On-street parking to support retail in parking laybys
- Frequent transit service and regular transit stops, strategically located to maximize transit use. (through City, University and transit authority partnership)
- Designate "TRU District" though signage along McGill to designate a university district using TRU colours and emblem
- Enhance pedestrian environment through well-designed landscaping, canopies for weather protection, generous sidewalks, traffic calming on street.
- Space for outdoor seating for restaurants and cafes to enhance social interaction, vibrancy and destination feel to this section of McGill corridor
- Signal the uniqueness of "TRU District", and calm traffic through planted median in centre of street.
- Encourage cycling through designated bike lanes along McGill Corridor
- Create a gateway node to signal TRU District through well-designed landscaping on all 4 corners of node at McGill. This could also include TRU related public art installation at corner.





3.5.3 Building Guidelines

The previous guidelines have established an expectation for building design that has created a palette of not identical but certainly compatible materials and treatments. The buildings themselves have been well executed and have exhibited a high level of excellence in design. Moving forward, the new priority on campus has shifted towards the pursuit of iconic architecture, most prevalent with the new extention of Old Main by Diamond and Schmitt Architects. To ensure that such a level and quality of building and architecture is up held on campus, a much more detailed building guideline study, going beyond the scope of this Master Plan is highly recommended to be completed. While iconic architecture acts as a natural landmark, it must be integrated back into the community of buildings within its built context. These detailed building guidelines are critical next steps for TRU.

The Importance of the Framework

This plan changes some of the basic assumptions about the structure of the campus as it becomes denser and adds private housing and mixed use development to some land parcels that would be under the control of Thompson Rivers University Community Trust. The core idea is to increase the allowable densities and building heights in the context of a strong Master Plan Framework with a well thought through, consistent and high quality open space and landscape design. These new developments, some of which will be iconic, will nonetheless need to fit within their local context and market. The need for consistency and key points of iconism will be critical to establishing a well integrated campus fabric.

Residential and market parcel guidelines will also require to be in place that allow for development consistent with both the City of Kamloops objectives

for the McGill Corridor as well as the market conditions that are prevalent when development proceeds.

Design guideline concepts to be further explored in detail include:

- Building Character
 - Heights
 - Light
 - Transparency
 - Mediating Slopes
- 2. Existing and Future Finishes
 - Palette
- 3. Edge Conditions
- 4. Building Massing and Articulation
- Materials and Colours
- 6. Wall Cladding
- 7. Structure
- 8. Roof and Soffits
- 9. Doors and Windows
- 10. Accents





Academic Parcels



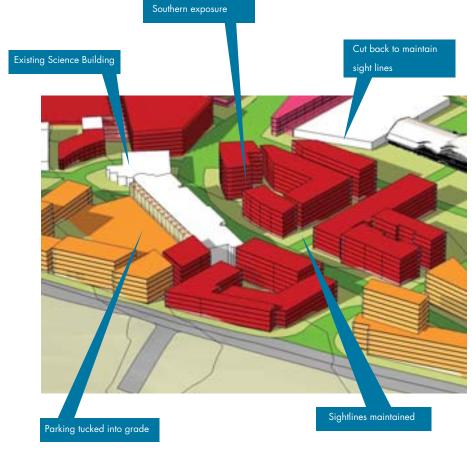


Learning Hub

- Located South of the Campus Heart
- Parking located behind the existing Science Building and built into slope
- Building arrangements open up for southern daylight exposure
- Old Main is cut back to allow for greater visibility and pedestrian access

Athletics Zone

- Hillside Stadium and Field House remain
- Parking located East of Hillside Stadium and built into the slope
- Main transit stop is centrally located within campus
- Buildings that "bridge between different topographical levels on campus" to help facilitate and create a seamless pedestrian experience and a connected campus





Bridge building between grades

Campus Heart

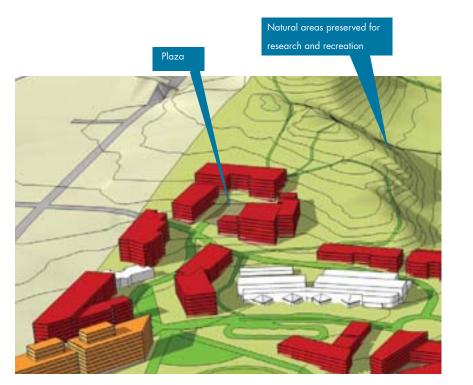
- Vibrancy through a mix of uses including academic, student housing and retail uses that support the campus culture such as cafes, bookstores, or student run units
- Pedestrian only area with service vehicle access only
- Academic mixed-use buildings (pink) to have canopies and a notched facade to create opportuntiies for lounging and support outdoor activities

Southern exposure Cut back for connectivity Campus Heart

Student Run Retail units

Technology, Research and Laboratory Hub

- Located on the lower slopes of the hills
- Natural areas to be preserved for non-built uses such as research and outdoor recreation
- Pedestrian paths connect the campus heart to the Technology, Research and Laboratory hub to maintain a seamless connected campus

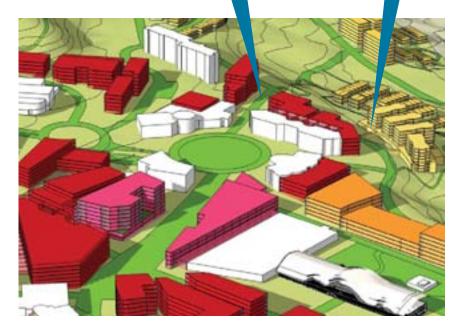


The Commons Extension

- Densifying on an existing successful Campus Commons by building extensions to the "backs" of existing buildings
- New builling extensions act to create a pedestrian friendly face to University Drive as well, create a connection between the residential parcels to the North with the academic buildings to the South of University Drive
- Residential "bridge" building to mediate slopes and acts as a platform to connect pedestrians between campus and the North

"Bridge" building to connect pedestrians from the campus to the residential parcels

Extensions create an edge for new pedestrian streets that connect to the Northern parcels





3.5.4 Environmental Stewardship

The TRU campus master plan sustainability goals are to achieve more sustainable, efficient, effective and convenient land use distribution patterns; integrated approaches to managing open space, energy and infrastructure systems; a pedestrian and transit oriented campus and a socially engaging environment that fosters a thriving academic community. Some key ways in which these results will be achieved are explained below.

TRU Outdoor Research and Education Labs

The Campus Plan integrates the physical land use and spatial needs of the University's related programs such as but not limited to: Environmental Sciences, Horticulture, Fine Arts and Culinary Arts. It does this through identifying and preserving in the plan itself specific natural areas to be protected for such uses as outdoor research and an Education Food Garden to further the academic mandate.

Sustainable Features of TRU Campus Master plan

- Outdoor Research and Education Labs
- More student housing on campus
- Destination Campus for live, work, shop and play
- Campus Open space and outdoor rooms designed with nature
- Compact and mixed-use campus
- Walkable and Transit Oriented Campus
- Vibrant campus life

More Student Housing

The capacity for more student housing on campus will improve academic engagement, reduce commuting and improve personal safety by having more people and eyes on pathways within a pedestrian friendly campus. More student residents will provide a critical population mass to support a greater variety of academic and personal services operating with longer hours on campus. Providing a greater variety of housing types recognizes the increasing diversity of students.

Campus Open Space - Connecting to the Natural Environment

A key direction in the plan is integrating public realm improvements with other campus plan infrastructure and transportation systems including cycling, walking trails and sustainable storm water management features. This integration allows for multiple use of the valuable open space network. These water elements can be used as contemplative spaces while also functioning as storm water management which will promote a natural systems approach to using rain water as a resource. This is especially important in the microclimate of the TRU Campus and Kamloops. The use of more native and edible plants in low maintenance, simple landscaping schemes will be encouraged along with working towards a pesticide-free regime in campus landscape maintenance. Campus art located in these open spaces will allow opportunities to showcase both student and aboriginal art. Art and symbols that connect back to Aboriginal pre-history may find its way onto signage and open spaces.

Compact and Mixed-Use Campus

Designing all new academic facilities as taller buildings with more compact footprints will use less land, protect open space and support a pedestrian and transit friendly campus. Focusing these new facilities in infill locations will maximize the economic and environmental benefits of shared infrastructure and reduce greenhouse gas emissions. Opportunities for sharing infrastructure and resources and reducing energy usage will be considered in the siting review for each new project and in the more detailed site planning for the mixed-use hubs.

Vibrant Campus Life

Building facilities with a mix of uses in higher densities at infill locations will create more opportunities for academic engagement and social interaction, a key priority in the vision for the new TRU campus master plan These changes in land use, combined with having more informal learning spaces inside building and in outdoor commons, will create a more lively campus life that contributes to building a strong sense of place, a thriving and unique community and a memorable academic experience.

In addition to the above key sustainability features of the TRU campus master plan there are many areas that should be explored for a more comprehensive sustainability strategy including:

- Water and Wastewater as a resource
- Energy and District Energy Systems
- Climate Change- Adaptation and Mitigation Strategies for TRU
- Operation and Maintenance
- Buildings and Indoor Air Quality
- Waste Management

"TRU can become a leader in reducing the number of people driving to the campus and increasing the adoption of other modes of transportation."

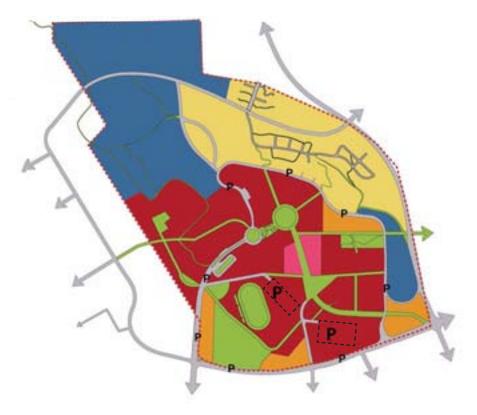
"A target of 40 per cent of people taking transit to campus, and incentives to make alternatives more attractive than driving, such as the pedestrian overpass, improvements to transit, and more residence space on campus."

- TDM Study, 2010

3.5.5 Transportation and Parking

A number of transportation studies have been completed over the last several years. The McGill Corridor Transportation Strategy indicates that there will be considerable growth in traffic volumes as Kamloops and the McGill Road Corridor continues to grow.

The City has also completed its Bicycle Master Plan in 2010 and is currently undertaking its Pedestrian and Trails Master Plans, and the City would will explore connections with the TRU campus networks.



Parking on Campus

It is recommended that transit service frequency increase from all key areas of the City and that a night bus service for students be introduced to create a safe travel option off and on campus. This service will not only be a highly sustainable option but also help alleviate parking demands on campus. Pedestrian and cycling connections between key areas and the transit stops have been implemented in the plan. Although steep topography may limit cycling to and from campus, bike facilities such as a maintenance shop, bike rentals, bike parking, lockers and bikeways within campus is encouraged for use at TRU. At a larger scale, permeability between TRU and its immediate community is a key component in the location of parcel uses and pedestrian crossings. By enhancing these pedestrian crossings to neighbourhoods south of McGill as well as the market housing parcels North of Hillside Drive by designing bridge buildings to alleviate elevational changes, the TRU campus will be able to seamlessly connect to its greater community at large.

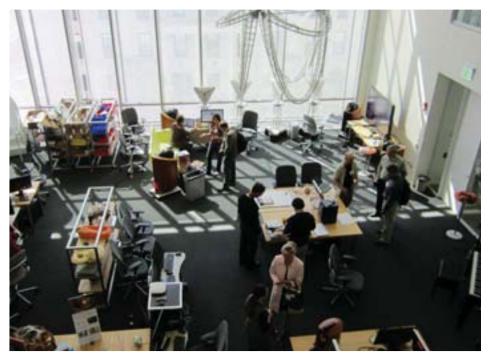
Education around sustainable modes of transportation will assist in and encourage a mode shift from the car and active student involvement in the development and implementation of this plan is encouraged.

Parking on TRU will be approached with both on street parking as well as underground structures that are built into the campus slopes. On street parking will be located on both sides of University Drive around the TRU campus, this will provide approximately 600 stalls. Further work is required to be undertaken as to how the rinf road will accomodate this parking. Two underground parkades built into the campus slopes have been identified to be located just East of the Hillside Stadium field as well as one located just South of the Science and Health Sciences Building. Each parkade will have capacity to hold approximately 900 stalls. Parking for the residential parcels to the North of University Drive will be located in parkades built into the slopes. By working with the existing topography, parking can be tucked away and allow for better campus land use. The number of on campus parking stalls (excluding the residential parcels to the North) will be maintained at 2,481. The City of Kamloops needs to conduct further studies in this area and are currently engaged in travel smart, as well as examine a pedestrian overpass over Summit Drive.

3.5.6 Academic and Research

What will make our world a sustainable one? This is a huge question and the topic of intense activity in both teaching and research. TRU has already distinguished itself in the exploration of native species of plant in the Valley climate. It is ideally suited to pursuing numerous questions related to a sustainable future across all disciplines from trades through the sciences and social sciences.

Our studies of University campuses suggests that the most effective means of encouraging interdisciplinary communication among faculty and students is not to silo a particular group within a building dedicated to that group. The model that has consistently shown spectacular long term results is the model utilized by the Massachusetts Institute of Technology. The distribution of faculties and departments at MIT are all within interconnected buildings with almost none dedicated to a particular faculty or group. The exceptions to this have been the Centre for Brain Science and the MIT Media Lab. The former has been criticized for its silos and shows the signs endemic to many institutions where groups do not actively interact. The Media Lab in contrast is by definition an interdisciplinary research group drawings its participants from across the MIT community. We would strongly encourage TRU to follow a similar model and disperse its groups treating the campus as one grouping. The master plan design has been developed with this approach in mind, and can easily accommodate the interdisciplinary physical space planning and communication between groups if TRU does choose to adopt this model in the next phase of the space planning

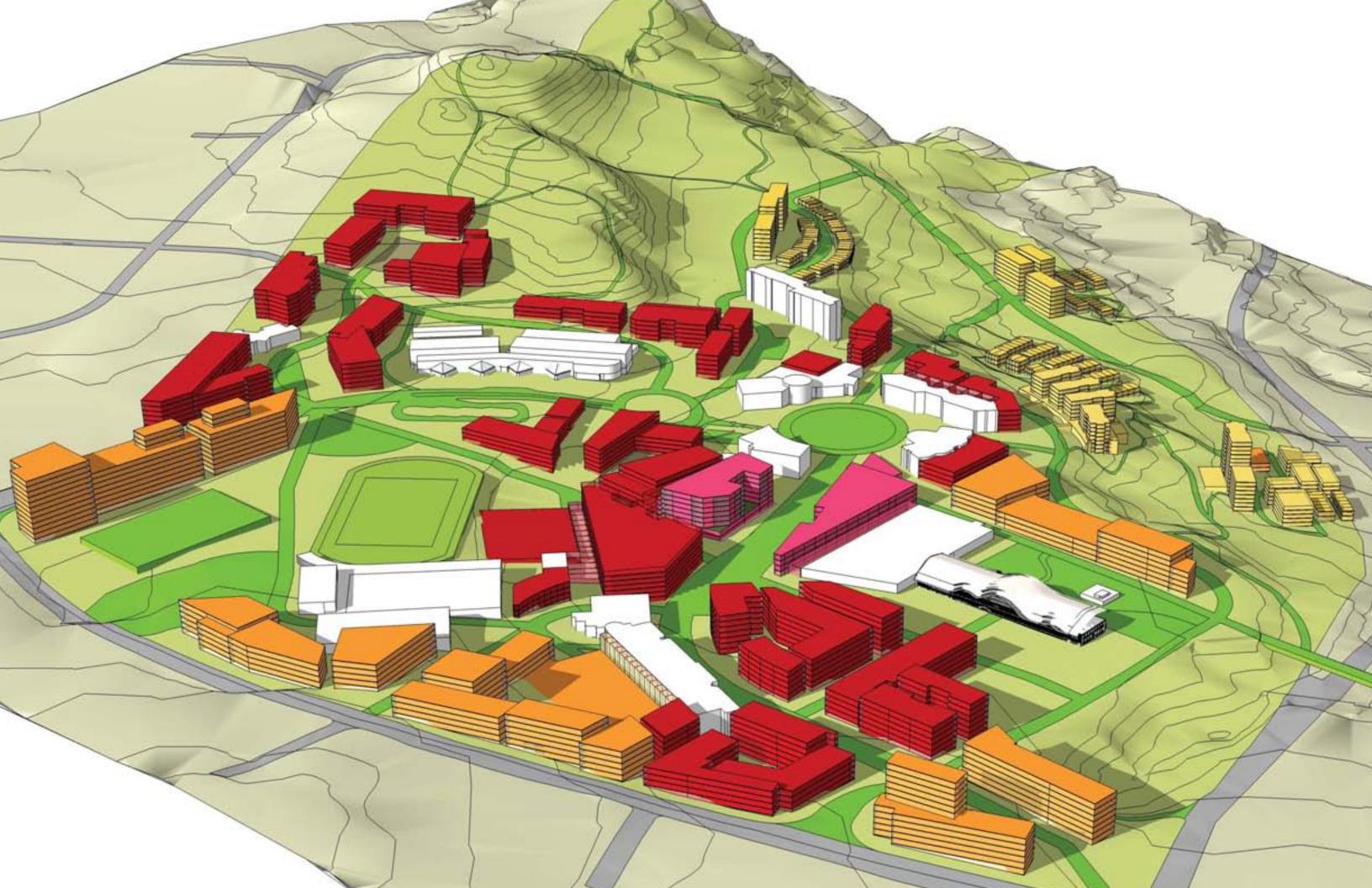


Collaborative Space at Media Lab, MIT



Teams working in informal meeting spaces





4 IMPLEMENTATION

4.1 Development Opportunities & Key Sites

As outlined by in the Market Analysis section 1.5, development parcels are located primarily along the high traffic McGill Corridor where high foot traffic and increased community visibility will support retail and office development. Notwithstanding that, ancillary retail will be incorporated into the first floor of most academic parcels within the mixed use heart as well as the casual food service within the academic zones.

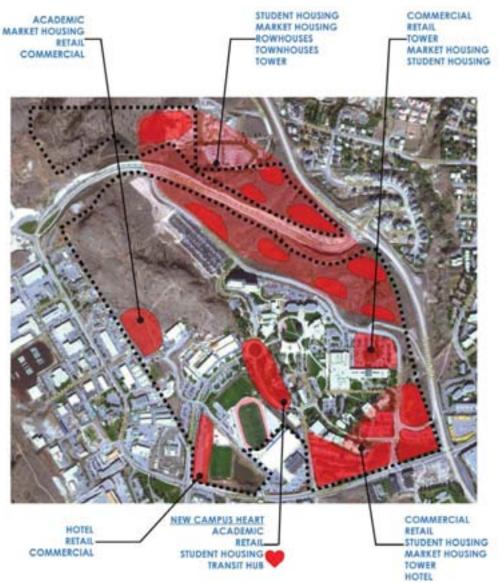
Market residential parcels are located to the North of the site, they are situated to take advantage of the panoramic vistas and are built into the topography of the lower slopes. This location is separated from the campus and allows for a different neighbourhood identity while also being only a short walk away from the university campus. The housing typologies that have been chosen work well on sloped sites: stacked row homes, terraced mid to high rises as well as parking that is tucked into the slopes behind the building.

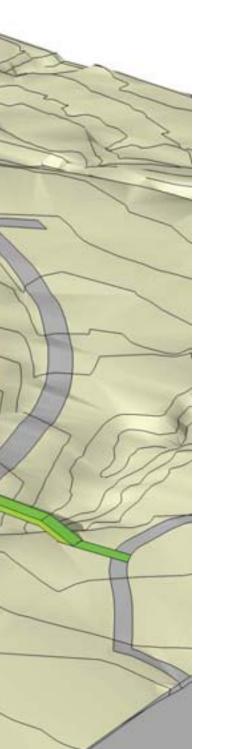
The complete build out for the Master Plan is 30-60 years depending on rate of University growth and market absorption on the development parcels.

Buildings to be demolished in phasing (grey)

Existing buildings to stay (white)







4.2 Development Phasing Plan

The development of TRU has been organized into 6 phases, each containing a market development component followed by an academic development build out. This strategy allows for building financing of the academic realm with the profits from the market leases. There is no time frame allotted to each phase. This allows flexibility for market forces to influence the development. Should the housing and commercial market explode, the plan will be implemented faster, should it slow down, a phase may be implemented at a later date. Ultimately, it is the decision of the University and the Trust to decide how the phasing will be implemented in the university's best interest and based on market conditions and local insight.

Phase 1: The anchor commercial hub located at the campus "gates", will function much like the Campus Heart, but with a community commerce focus. By Phasing the two strongest components in the first phase, the academic as well as the "front face" of TRU will be able to create an initial identity.



Phase 1 Market Build Out



Phase 1 Academic Build Out

Phase 2: This unique market site is located in the campus. Community amenity spaces such as a day care or a gym can be located at the base to serve the building as well as the student body at large. The market housing parcels to the North will start development. The academic component consists of research buildings due to the expanding program and the space pressures that it is currently facing. The popular playing field will stay as is until Phase 3.



Phase 2 Market Build Out



Phase 3: The Hotel will be built in phase 3 as part of the McGill Corridor development to increase uses and densities along this stretch. It will compliment the thriving athletics program by hosting traveling spectators, traveling sports teams and their families. Along McGill, an academic parcel has been introduced near the playing field, this development may consist of a mixture of commercial elements and function as a true mixed-use academic building.



Phase 3 Market Build Out



Phase 2 Academic Build Out

Phase 3 Academic Build Out

Phase 4: The western parcel along McGill is established. The link between the commercial hub and the campus heart is almost complete.

Phase 5: A diverse range of housing types are introduced to the northern market housing parcels creating complete and sustainable communities. The research hub to the West receives additional research and lab space.

Phase 6: The final phase completes the McGill Corridor Edge and defines the campus to the adjacent neighbourhoods. The academic additions to the exisitng buildings around the Commons creates the gateway between the campus and the housing to the north

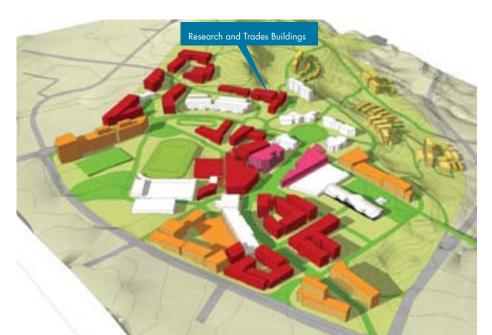


Phase 4 Market Build Out





Phase 5 Market Build Out



Phase 5 Academic Build Out



Phase 6 Market Build Out



Phase 6 Academic Build Out



Phase 4 Academic Build Out

4.4 Recommendations

The TRU master plan provides a comprehensive and integrated framework for future development decisions for the campus. The plan is rooted in a strong context analysis that examined previous studies, University goals and mission, city policies and a thorough market analysis.

The engagement process was thorough and comprehensive engaging a diverse range of university community stakeholders, surrounding neighbors, and the broader Kamloops community. The resulting vision, principles, and physical campus master plan provides a framework that can accommodate the desired growth of the TRU campus and set the stage for new buildings and open spaces in the future academic development areas, and revenue generation from market development. To ensure the successful implementation of the plan over time, several recommendations are made below for consideration on how to ensure that the key processes are in place so that the objectives of this master plan are in fact achieved through the next stages of implementation.

Open Space Plan and Design

The framework for this plan is built around the open spaces and pathways. There has been a clear vision through this master planning process of the desired nature and character of those spaces. The next step would be to ensure that those pathways and spaces are designed comprehensively as a network and that the desired character is in fact achieved to ensure a highly desirable campus that meets the vision for TRU.

Building Design Guidelines

A detailed Building Design Guidelines to provide a framework for both academic and market buildings should be established for the future building development. These guidelines should provided high level guidelines for the campus development, and also a block by block analysis of key considerations to ensure the vision of the TRU master plan is achieved

through implementation.

TRU Design Review Process

A design review process should be put in place with key design individuals from TRU and beyond to ensure high quality building and open space design for the campus that meets the objectives from this master plan.

Public Art Strategy

Public art will be an essential part of enlivening the open spaces, pathways and buildings and create a dynamic, social and engaging campus that is highly desired by TRU. Public art can tell the story of the people and themes within this master plan. A Public Art strategy would be a key element to create the TRU "destination university" and memorable first impression that is of key importance.

Sustainability Strategy and Implementation Plan

Sustainability was addressed at a high level through this exercise and clear direction emerged on some aspect of the physical plan. For a clear and comprehensive approach to sustainability, which we know is of importance to TRU, a separate sustainability strategy and plan should be developed that would work as a sister document to this master plan and address the full range of options that TRU should look at as a leading-edge and sustainable world-class campus.

Business and Implementation Plan

The development of a business and implementation plan would help with the implementation of the TRU Master plan through identifying funding sources, identifying costs, resource requirements and risks. It would set out the university needs more specifically with the build out of the academic parcels and further outline the market parcels and strategy to bring them to the market for development.

Infrastructure Master Plan

A detailed review of the existing civil, mechanical, and electrical systems on campus and a recommended approach to help facilitate the Master Plan build out.

PHOTO CREDITS

APPENDICES

Drury's Office of Marketing & Communications

Stantec

TRU Marketing & Communications

Yale-NUS College (Master Plan by Pfeiffer Partners Architects with Kieran-Timberlake, Design by Pelli Clarke Pelli Architects with Forum Architects)

Townhall Presentation Boards Feedback	
Aboriginal Visioning Workshop	

62

65



Legend

of participant votes in favour of a particular issue from Town

of participant votes in favour of a particular issue from Aboriginal Town Hall

Participant comments

VISION **UNIVERSITY VILLAGE**

Thompson Rivers University is a place where...

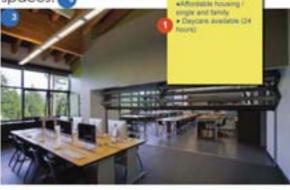
- · Our university village is a destination where people want to live,
- · Our university village creates innovative integration of academic, housing, retail and office spaces.



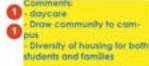














CAMPUS MASTER PLAN 2013 Stantec



VISION **UNIVERSITY VILLAGE**

Thompson Rivers University is a place where...

- . Our university village allows us to redevelop the campus to its fullest potential with market housing, academic, retail, student housing, and office development.
- Our university village allows us strategic reinvestment opportunities















CAMPUS MASTER PLAN 2013 Stantec



VISION

CAMPUS OPEN SPACE

Thompson Rivers University is a place where...

- · Learning takes place everywhere and does so in formal and informal meeting places. (2) (0)
- · Spaces between buildings knit the campus together and create a interactive, vibrant campus environment.
- · Our campus provides many places for learners, faculty and staff















CAMPUS MASTER PLAN 2013 Stantec



VISION **CAMPUS LIFE**

Thompson Rivers University is a place where...

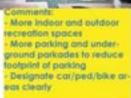
- Our cultural diversity is valued and one of our greatest community strengths @
- We enjoy a vibrant, meaningful and exciting life on campus 0
- · We enjoy access to high-quality housing, shopping and amenities in walking distance. (8)





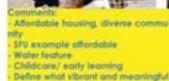




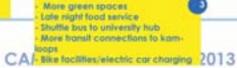








neans to students











VISION

CAMPUS OPEN SPACE

Thompson Rivers University is a place where...

- · Our campus is a highly pedestrian-focused, safe and enjoyable place to walk. 110 60
- · Our campus is well-integrated with in Kamloops to create synergies that strengthen the campus.

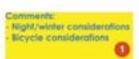
















CAMPUS MASTER PLAN 2013 Stantec



VISION

TEACHING, SCHOLARSHIP & RESEARCH Thompson Rivers University is a place where...

- Our campus has a dense, vibrant, mixed-use academic core.
- · Our students, faculty and staff have places and spaces to interact and expand to our full potential. 00 0

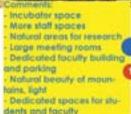
















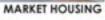
MARKET HOUSING

UNIVERSITY VILLAGE - BUILT FORM TYPOLOGIES



ROWHOUSE











RETAIL + HOUSING



STUDENT HOUSING



CAMPUS MASTER PLAN 2013 Stantec







ABORIGINAL VISIONING WORKSHOP - SEPT.26

- On Sept. 26th, an aboriginal vision workshop was held which resulted in the below key themes:
 - Connecting to the Natural Environment
 - Connection to Aboriginal Pre- History
 - Aboriginal Knowledge, Research and Housing 60
 - Campus Life and Mixed-Use













CAMPUS MASTER PLAN 2013 Stantec

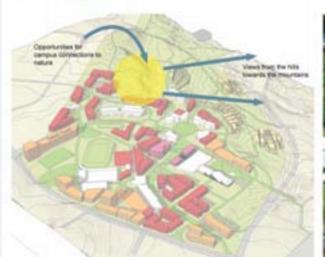


OUTCOMES OF ABORIGINAL VISIONING WORKSHOP:

KNOWLEDGE, RESEARCH AND HOUSING

Thompson Rivers University is a place where...

- · Aboriginal knowledge, research and housing are integrated with the natural setting 0
- The TRU hills are a place designated for the pursuit of knowledge and research 🚳













CAMPUS MASTER PLAN 2013 (Stantec





OUTCOMES OF ABORIGINAL VISIONING WORKSHOP:

CONNECTING TO THE NATURAL **ENVIRONMENT**

Thompson Rivers University is a place where...

- Students have access to contemplative spaces
- Natural light filters into learning and living spaces
- Farmer markets and campus food garden alternatives
- A balance between natural and the man-made environment is struck
- Water elements are used for contemplation and environmental functions

















gardens where you can sit, not be noticed by anyone and find peace of mind." Joanne Brown

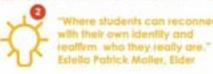
OUTCOMES OF ABORIGINAL VISIONING WORKSHOP:

CONNECTION TO ABORIGINAL PRE-HISTORY

Thompson Rivers University is a place where...

· Aboriginal symbolism is on wayfinding and in artwork in the public realm











CAMPUS MASTER PLAN 2013 Stantec



CAMPUS MASTER PLAN 2013 Stantec

