Building Western: An Update on Capital Projects
The Campus – Then and Now...
The Campus in 1932
There is nothing final about the growth of the University. There will doubtless be other occasions like the present when we will open other new buildings.
Chairman Arthur Little, 1924
... and the Campus in 1985
Western’s Historical Growth

Development in the 1920s

14,000 m² NEW
14,000 m² TOTAL
Western’s Historical Growth

Development in the 1930s

5,600 m² NEW
19,600 m² TOTAL
Western’s Historical Growth

Development in the 1940s

7,500 m² NEW
27,100 m² TOTAL
Western’s Historical Growth

Development in the 1950s

45,500 m² NEW
72,600 m² TOTAL
Western’s Historical Growth

Development in the 1960s

250,000 m² NEW
322,600 m² TOTAL
Western’s Historical Growth

Development in the 1970s

126,000 m² NEW
448,600 m² TOTAL
Western’s Historical Growth

Development in the 1980s

40,000 m² NEW
488,600 m² TOTAL
Western’s Historical Growth

Development in the 1990s

96,000 m² NEW
584,600 m² TOTAL
Western’s Historical Growth

Development in the 2000s

144,000 m² NEW
728,600 m² TOTAL
Western’s Historical Growth

Development from 2010 to 2014

82,200 m² NEW
~810,800 m² TOTAL
Campus Growth

AVERAGE GROWTH
40 YRS. (70s - 00s): 102,000 sq.m.
50 YRS. (60s - 00s): 131,000 sq.m.
60 YRS. (50s - 00s): 117,000 sq.m.

LAND AREA: 480 Hectares (Ha)
BUILDINGS: 93
2015-2016 FULL-TIME CONSTITUENT ENROLLMENT:
Undergraduate + Graduate = 23,500 + 5,364 = 28,864
FULL-TIME FACULTY: 1,414
FULL-TIME STAFF: 2,449

2015/16 Constituent University Data
Building Western: The Capital Planning Framework
Capital Planning Framework
The Campus Master Plan: Focus and Initiatives

- Accommodate Western’s growth over the next 25-30 years
- Intensification of the Core Campus
- Improvement to the Pedestrian Environment of Western Road
- Promote Parking Management Alternatives
- Improve Campus Connectivity
- Creation of High Quality Public Spaces
- Identification of Campus Gateways
Primary Development Opportunities

A - Springett / FRAM Site
B - Weldon Library Site
C - Elgin Entrance
D - Social Science Site
E - Perth Drive Sites
F - Westminster Hall Site
G - South Valley Site
H - Western Road Development Site 1
I - Western Road Development Site 2
J - Advanced Manufacturing Park
K - Discovery Park

Figure 10: Primary Development Sites
The total amount of space required by the University is driven by enrolment as well as research and other specialist demands. Since the pressures on the University, both internal and external, for these kinds of activities are likely to increase, an addition of between 100,000 and 120,000 sq. m. per decade, is considered the best planning indicator of future growth.

Potential New Academic Space on Main Campus:

288,000 - 359,000 m²
Primary & Secondary Development Opportunities

Primary Development Sites
A - Springett / FRAM Site
B - Weldon Library Site
C - Elgin Entrance / Social Science Site
D - Social Science Building
E - Perth Drive Sites
F - Westminster Hall Site
G - South Valley Site
H - Western Road Development Site
I - Western Road Development Site 2
J - Advanced Manufacturing Park
K - Discovery Park

Secondary Development Sites
L - Althouse
M - Elborn
N - TRAC/Engineering Site
O - FRAM lands Site
P - Ivey Spencer Leadership Centre Site
Q - Bank of Montreal (BMO) Site
R - Bayfield Hall Site

Figure 31: Primary and Secondary Development Sites
Building Western:
Recently Completed Projects
Windermere Manor Restaurant 91

Construction start date: January 2016
Anticipated completion date: April 2016
Area: 1,950 sq. ft.

The existing café was demolished and replaced with a new year-round facility that includes accessible washrooms and minor renovations to the existing entrance and servery.
Chemistry Building Synthetic Lab Renovations

Construction start date: May 2015
Completion date: January 2016
Area: 3,900 sq. ft.

A phased upgrade of instructional & research labs. Several labs date back to the original early 60’s building. The 3rd phase renewed 2 wet labs and 1 instrumentation room. The outcome provides an enhanced learning and research environment for 15 to 20 graduate students.
Dental Sciences SIM Lab Renovation

Construction start date: March 2016

Anticipated completion date: July 2016

Area: 5,600 sq. ft.

Simulation laboratory on the lower ground floor of Dental Sciences Building; merging the two labs into one using hybrid units and increasing the number of workstations. This will accommodate use of the facility by clinical year students and the Internationally Trained Dentists.
Saugeen Maitland Dining Hall Renovations

Construction start date: May 2016
Completion date: August 2016
Area: 13,500 sq. ft.

The kitchen and dining area has a similar look and feel as that of Ontario Hall.
Saugeen Maitland Dining Hall Renovations

Construction expected to begin: May 2016
Anticipated completion date: April 2016
Area: 13,500 sq. ft.

The kitchen and dining area will have a similar look and feel as that of Ontario Hall.
Taylor Library Main Floor Renovations

Construction start date: May 2016
Anticipated completion date: August 2016
Area: 11,290 sq. ft.

The main floor has been renovated in 2 phases over 2 summers with collaboration rooms and relocated service desk in phase I and a renovation of the remainder of the floor in phase II.
Social Science Reading Room

Construction start date:
May 2016

Anticipated completion date:
October 2016

Area:
1,839 sq. ft.

Conversion of a portion of the former Map & Data Library for use as a Reading Room for Social Science students.
Music Building Phase I
FIMS and Nursing Building
Capital Projects: Current Numbers

- 270 active projects with a total combined budget of more than $300M
- 13 active major projects
- 150 Maintenance, Modernization and Infrastructure projects
- 80 Ancillary projects
- 27 Departmental/Faculty funded projects
DSB CL2+/ CL3 Lab Renovations

Construction start date: September 2016
Anticipated completion date: Fall 2017
Area: 5,100 sq. ft.

The new facility will house containment level 2+ and 3 laboratories for the Department of Microbiology and Immunology.
Music Building Phase II

Construction start date: January 2017

Anticipated completion date: January 2018

Area: 3,500 sq. ft. (35,000 sq. ft. demo)

The remaining portion of the existing Music Building will be demolished to make way for the completion of the west end of the New Music Building.
Western Interdisciplinary Research Building (WIRB)

Construction start date:
March 2016

Anticipated completion date:
Fall 2017

Area:
120,000 sq. ft.

The facility will serve as the new home for the Research Cluster for Cognitive Neuroscience and the Rotman Institute of Philosophy, as well as provide five mixed-use general classroom spaces.

SIF funding will allow this project to target LEED Gold and complete the fit-out of the 7th floor.
Western Interdisciplinary Research Building (WIRB)
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Western Interdisciplinary Research Building (WIRB)

SCHEME A

SCHEME B
Western Interdisciplinary Research Building (WIRB)
Western Interdisciplinary Research Building (WIRB)

SCHEME A
Western Interdisciplinary Research Building (WIRB)
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Western Interdisciplinary Research Building (WIRB)
University College Renovations

Construction start date: July 2016

Anticipated completion date: Summer 2018

Area: 117,000 sq. ft.

Work includes abatement, replacement of the existing mechanical, electrical, and fire safety systems, window & roof replacement and upgrades to existing classrooms and offices.
New Engineering Building – Three C+

Construction start date:
November 2016

Anticipated completion date:
April 2018

Area:
100,000 sq. ft.

The new four-storey Three C Plus, the building’s working name — the C represents the words connect, collaborate and create — will provide much-needed space for the school's rapidly expanding student population.

SIF funding will allow this project to target LEED Platinum.
The Western NEB will......

Encourage constant transformation $\rightarrow$ through a highly adaptable environment

Bring people together $\rightarrow$ through transparency, openness and spatial connectivity

Inspire creativity and innovation $\rightarrow$ through intellectual and social collisions, didactic architecture and by creating a stage for the voice of engineering

Push the envelope on Sustainability $\rightarrow$ by optimizing energy use, showcasing alternative technologies and utilizing passive strategies
New Engineering Building – Three C+
New Engineering Building – Three C+
New Engineering Building – Three C+
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New Engineering Building – Three C+
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New Engineering Building – Three C+
New Engineering Building – Three C+
New Engineering Building – Three C+

ThreeC+ EXPRESSION
CURRENT DESIGN

Western
New Engineering Building – Three C+
New Engineering Building – Three C+
New Engineering Building – Three C+
New Engineering Building – Three C+
Building Western: Current Planning Initiatives

[Image of building and construction]
Open Space & Landscape Plan

Background

• Phase II of the Campus Master Plan
• Coming out of the work of the Rapid Transit Working Group and the Traffic Study completed in December, 2015
• Informed by concern about pedestrian safety
Open Space & Landscape Plan

PROJECT TIMELINE

- **Western University Strategic Plan 2014**
- **Launch of Shift 2015**
- **LRT/Traffic Study Oct 2015 – June 2016**
- **City Business Case Now Full BRT System 2016**
- **2015 Campus Master Plan**
- **2015 Western University Parking Study**
- **June 2016 Board Support for LRT to Campus but Not Through Campus**
- **August 2016 Open Space and Landscape Plan**

Western
Open Space & Landscape Plan

PROJECT TIMELINE

- **PRINCIPLES WORKSHOP**
  - November 2016

- **OPEN HOUSES**
  - January 2017

- **RESPONSE TO CITY**
  - February 2017

2016 OPEN SPACE AND LANDSCAPE PLAN

DECember 2016 TECHNICAL ASSESSMENT OF FULL BRT ROUTE ALTERNATIVES

JANUARY 26, 2017 BOARD OF GOVERNORS

MARCH 30, 2017 WORKSHOP

WE ARE HERE
Open Space & Landscape Plan

Project Objectives

• Ensure safety, security and a healthy workplace
• Safe and efficient transportation networks
• Preserve existing natural features and maintain and enhance landscaped open spaces
• Invest in the quality of the campus
Open Space & Landscape Plan

Scope - Phase 1:

- Identify and establish short-term goals for traffic management and pedestrian safety
- Establish a long-term vision for the main campus
Open Space & Landscape Plan

Scope - Phase 2:

• Public realm enhancements
• Campus Design Guidelines for open ‘public domain’ spaces and landscaping
• Primary entrance routes and gateway enhancements
Open Space & Landscape Plan

**EMERGING PRINCIPLES**

**HUMAN PLACE**
- Prioritizes pedestrian and encourages accessibility throughout the campus
- Encourages safety and comfort
- Creates a sense of place and history
- High quality, flexible spaces

**ACCESS TO UNIVERSITY**
- Provide strong bus connectivity to the campus
- Integrate the campus with its surrounding context
- Foster collaboration with community and industry partners

**EQUITY**
- Equal access regardless of gender, age, background, or ability
- Recognize that people travel differently for different reasons
- City of London Facilities Accessibility Design Standards (FADS) & University of Western Accessibility Guidelines

**RESILIENCE**
- Supports health and wellness of the university community
- Provides efficient and cost effective Operations and Maintenance
- Creates a sustainable environment (economically, socially, physically)
- Ability to recover from events related to climate change

**MOBILITY**
- Maximizes connectivity and accessibility
- Create a safe pedestrian environment across campus
- Reduce cut through traffic
- Improve multimodal connections and expanded choices

**PEDAGOGY**
- Create campus spaces that support the academic mission
- Educate students through environmental design
- Consider outdoor spaces as part of the continuum of learning
- Provide positive environments that foster creativity and organic learning
Open Space & Landscape Plan: Inventory + Analysis

Open Space Network

**Issues**

- **Inadequate Lighting:** Light基礎 at some areas across the campus including pedestrian gateways and corridors are not well lit, creating low visibility conditions.

- **Underutilized Spaces:** The University Community Center is a major event venue, but the main area outside of the building is underutilized due to scale and lack of pedestrian activity.

- **Topography & Accessibility:** Ongoing topography and localized grade change in some open areas creates challenges for accessible travel.

- **Walkway Design Standards:** The current network of pedestrian walkways does not meet the scale of use in some areas based upon observed pedestrian flows.

- **Campus Orientation:** Campus signage and wayfinding elements are provided but are not consistent in style or function through the campus to all streets.

**Opportunities**

- **Universal Access:** Ensure that accessible travel routes are provided where localized elevation change occurs through the implementation of standards and guidelines for curb ramp treatments, sidewalks, stairs, and ramps across campus.

- **Enhanced Pedestrian Plazas & Courtyards:** Implement design initiatives to activate spaces and create underutilized pedestrian areas throughout the year.

- **Wayfinding Signage:** Determine a hierarchy of wayfinding signage oriented to both vehicular and pedestrian use across the campus to meet in-campus orientation at all major nodes and entrance locations.

- **Canopy Coverage:** Identify gaps in tree plantings and canopy coverage areas across the campus' street network and parking areas, or in pedestrian spaces and corridors.

- **Gateways:** Implement a collective system of gateway treatments for entry points of vehicular and pedestrian access points, in opportunities to extend branding and improve areas of entree and arrival to the main campus.
Open Space & Landscape Plan: Inventory + Analysis

ACCESS + CIRCULATION

ISSUES

INCOMPLETE CROSSWALKS:
Several crossings lack crosswalks across all parts of intersections. Median should provide protected pedestrian refuge but also short of pedestrian crosswalks.

CHAOTIC VEHICLE/PEDESTRIAN MOVEMENTS:
Elgin Road is an indistinct space and challenged gateway to the University. Vehicle movements should be rationalized and the character of the street strengthened. Intersection of Elgin Road and Middlesex Drive is a highly complicated space with inefficient movements for all users.

EXCESSIVE PAVEMENT:
Oxford Drive has excessive amounts of unnecessary pavement. The existing curbing separating the bicycle facility from roadway presents a tripping hazard and unnecessary barrier.

MOODAL CONFLICTS:
Aurora Circle has a number of conflicting elements including pedestrians, shared vehicles, motorists, and loading vehicles. This area also has excessive amounts of pavement and does not optimize the opportunity of creating a distinctive space.

INADEQUATE SIDEWALK WIDTH:
There is a heavy flow of pedestrian traffic along this area of campus. Sidewalk widths are often too narrow to accommodate pedestrian demand forcing pedestrians into the travel lane and subsidizing them to vehicle traffic.

CUT-THROUGH TRAFFIC AND SPEEDING CONCERNS:
The Western University transportation study identified a high volume of traffic traveling through the campus with cutoff origins and destinations within the campus itself. Vehicle speeds, particularly in areas with poor visibility, were also identified as

OPPORTUNITIES

LOW-COST PEDESTRIAN IMPROVEMENTS:
Consider bell statues and other low cost pedestrian improvements. Evaluate opportunity to provide additional crosswalks at existing intersections.

RATIONALIZE MOVEMENTS WITH LOW-COST RECONFIGURATION:
Rationalize vehicle movements through Elgin/Middlesex intersection through paint treatments and planters or other landscaping devices.

CREATE SHARED STREET (MOWING):
Consider restoring bike track curb on Oxford Drive. Consider unique paint scheme to create a dynamic environment in the street. Treat the street as a shared use street.

RELOCATE TRAFFIC TO THE PERIPHERY:
Relocate traffic and the majority of vehicle traffic to the periphery of the main campus - permanently utilizing Philo Ave, Harris, Larnerman and Field. Remove or restrict vehicle flow through the center of campus, including Aurora Circle. Consider premium transit services providing rapid east-west access from University Drive to Elgin.

SHARED USE SPACE:
Utilize temporary barriers such as planter boxes to expand pedestrian walking space. Alternatively, design parking drive and as shared use space and ensure very low speeds. Restrict loading vehicles to existing areas.

RELOCATE PARKING ACCESS - PURPOSE:
Relocate parking facilities and access to the periphery ring. Consider development of an aggressive transportation demand management program.
Other Planning Initiatives

Western Libraries Space Master Plan

+ Increase and Improve Learning and Research Space
- Decrease Collections Space
✓ Staff space that functions well and supports collaboration
✓ Community space that builds the library’s role as the heart of the campus
+ Partnerships that enhance library and are aligned with strategic vision

Housing Master Plan

- Maintain first class facilities
- Play a central role in educating citizens of the “world”
- Assess and respond to the needs of all student demographics (class years)
  - First year, upper year, international, graduate
- Have integrated living/learning
  - Shared courses
  - Faculty in residence
  - Mandatory CLE experience
- Remain relevant to student needs
- Be at full occupancy
- Incorporate good study and community space throughout the buildings
- Make residence affordable to all students
- Be outward facing and participatory