# Pedestrians, Cars, Buses and Trains?

Considerations for Rapid Transit Service at Western University



# Shift: The City of London's Rapid Transit Proposal

- Shift: The City of London's Rapid Transit Proposal was released in the fall of 2015
- It focuses on rapid transit, along with vehicular and active transportation, as part of a system that will help London grow and prosper.
- The City has identified four key corridors for rapid transit.
- The route that serves the Western campus is a northern branch from downtown to Masonville Place.
- The City's conceptual plan indicates a potential Light Rail Transit (LRT) line through the Western campus. The City has indicated that there are two viable routes through campus (see map page 8).
- The Rapid Transit Environmental Assessment (EA) is being undertaken to create a Rapid Transit Master Plan that adheres to the legislative requirements of the Environmental Assessment Act.
- The RT EA is progressing towards the stage of determining a preferred RT system and choosing a technology (Light Rail or Bus).



# Shift: The City of London's Rapid Transit Proposal

The City has identified several problems and opportunities for consideration:

- Growing Congestion
- Transit Travel Time / Service Frequencies
- Growth Management
- Land Use and Density
- Existing Transit Ridership and Growth
- Commuter Travel Habits



# Shift: The City of London's Rapid Transit Proposal

The City of London's Rapid Transit Planning addresses:

- Economic Development and City Building
- Transportation Capacity and Mobility
- Community Building and Revitalization
- Ease of Implementation and Operational Viability

More information about the City's Shift initiative is available at: www.shiftlondon.ca

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## Western: Current Considerations

- Western is highly supportive of the need for rapid transit in London.
- Western is experiencing more pedestrian traffic as it continues to grow
- Traffic congestion and pedestrian safety is a key concern of Western's campus community. Following two fatalities on campus roads in 2015, the University has seen more than one petition focused on the need to improve pedestrian safety and/or to reduce the number of vehicles on campus
- New buildings will decrease the number of parking lots on campus in the years ahead, which will likely push more students, faculty and staff to use transit.



### **Highly Divergent Views**

"This will be transformational for London – get on board"

"Rapid transit to campus NOT through campus"

"Respect our beautiful campus – no to trains"

The University Students' Council has stated that rapid transit is a "priority" for students and that they want rapid transit "integrated into our campus"

A Kinesiology class assignment in 2015 recommended Western move towards a car-free and train-free campus.





### Traffic/Rapid Transit Task Team

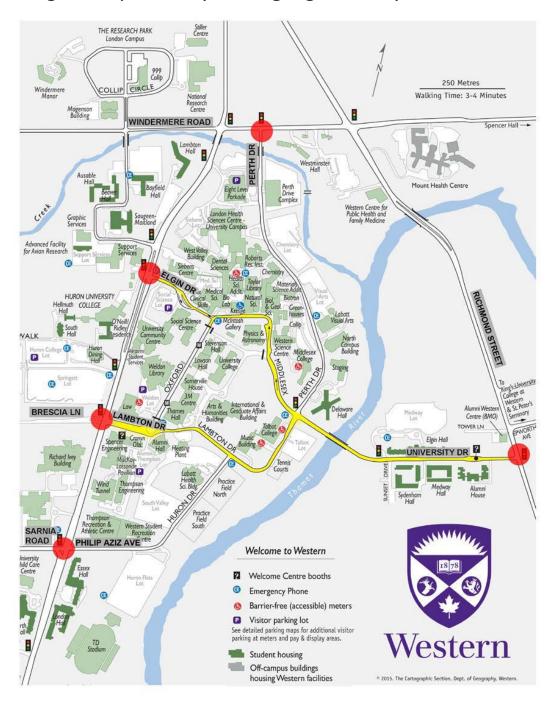
In Fall 2015, Western's Traffic/Rapid Transit Task Team was established to:

- Examine options for Rapid Transit and develop appropriate recommendations
- Guide broad consultations and communication within the Western community
- Develop recommendations for reducing traffic and creating the campus of the future



# Potential Route Through Western's Campus

The City has identified two potential routes for light rail through campus. They are highlighted in yellow.



# Widening of University Drive Bridge

To accommodate rapid transit, dedicated lanes are required. The two preferred routes would require the expansion of the current bridge (first view) to the equivalent of five lanes if vehicular traffic is still to be accommodated. The second view is an aerial mock-up.





## Consideration of Rapid Transit Options – Principles & Objectives

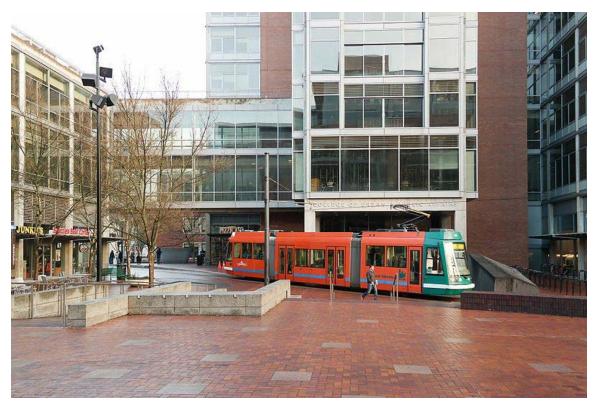
Western's consideration of rapid transit service to campus must take into account the following principles and objectives:

- Moving students to campus
- Campus safety, especially pedestrian safety
- Respective the collegiate gothic vistas and architecture
- Significantly reducing cut-through traffic
- Creating car-free zones
- Western would not anticipate any large incremental costs
- No disruptions to academic and research activities (during or after implementation)
- Rationalize the transit routes on campus
- Respect the principles and initiatives in Western's Campus Master Plan



# Where else has this been done on a university campus and what can we learn from them?

The Traffic/Rapid Transit Task Team is investigating how universities such as the University of Minnesota, Portland State University and University System of Maryland have approached Rapid Transit. This has not been done on a campus in Canada.



Portland State University



### What is the impact of electromagnetic interference, vibration and noise?

- Precision equipment can be affected by noise and vibration from LRT
- Electromagnetic fields can also affect a wide variety of laboratory equipment
- Other academic research related activities may be impacted by LRT, including musical studies and performances.
- Western researchers have been asked to submit information to help the University assess the impact of potential electromagnetic interference, vibration and noise.



# What is London Transit's preliminary bus rationalization plan for Western?

#### **Current Bus Service:**

13 routes, 49 buses/hour at peak times

#### 2019 Bus Service (before Rapid Transit):

11 routes, 56 buses/hour at peak times

#### With Rapid Transit:

10 routes, 48 buses/hour at peak times

Requires separate lay-bys and stops to allow trains to move without delay



# What can we learn about traffic on campus?

Western commissioned an independent study of traffic on campus examining:

- Intersection Turning Movements
  - Summaries of all vehicles, cyclists, pedestrians entering intersection, and their departure routes
- Automated Vehicle Tracking
  - Movements of individual inbound and outbound vehicles with time stamps
- Five boundary intersections
  - Western Road @ Sarnia Road/Philip Aziz Avenue
  - Western Road @ Lambton Road
  - Western Road @ Elgin Drive
  - Windermere Road @ Perth Drive
  - Richmond Street @ University Drive

## What can we learn about traffic on campus?

#### Western is a city within a city

- 13.500 inbound vehicles
- 12,278 outbound vehicles
- More daily traffic than the City of Port Colborne (Pop. 13,000)

#### **Buses and Trucks**

- 1,212 bus trips
- 606 buses serving 13 routes (mostly LTC)

#### **Pedestrians**

- 4 intersections with 1,600 to 8,975 pedestrian crossings each per nine hour period.
- Intersections with 9,000 pedestrian crossings in nine hours are typically associated with Downtown Toronto.

#### **Turn-over Rate**

- 51% of all vehicles entering campus are on campus less than 20 minutes
- In fact, of 5,361 vehicles entering campus, 40% departed at another intersection within 3-7 minutes.



## What can we learn about traffic on campus?

- If all linked trips and cut-through trips were eliminated, campus traffic would be reduced by almost 5,400 vehicles (40%)
- If all transit trips were shifted to peripheral roads, with curb-side stops, campus traffic would be reduced by another 600 trips (5%)
- In total, this would represent a 45% reduction in vehicles using campus roads
- Moving these trips onto public streets may add to congestion on these roads – particularly at key intersections
- Turn-outs for stopping/standing on these roads, and/or an off-road transit hub and/or kiss-n-ride facility would be needed to free road capacity and improve safety of people boarding and alighting from vehicles
- A more complete summary of this study is available in <u>Western's Traffic Study</u>.



## **Shared Opportunities**

- Western University, London Health Sciences Centre, the City of London and London Transit all have a stake in safe and efficient traffic operations on and off-campus
- Coordinated planning and execution is essential to the success of:
  - Western's Campus Master Plan goals
  - LHSC's expansion aspirations
  - The City's and LTC's introduction and integration of Rapid Transit



## **Share Your Thoughts**

We welcome your feedback as this process moves forward.

You may provide comments in writing to transit@uwo.ca.

