3RD REPORT OF THE

RAPID TRANSIT IMPLEMENTATION WORKING GROUP

Meeting held on January 12, 2017, commencing at 4:32 PM, in Council Chambers, Second Floor, London City Hall.

PRESENT: Councillor P. Squire (Chair), Mayor M. Brown; Councillors, B. Armstrong, J. Helmer, J. Morgan, T. Park and H. L. Usher; S. Rooth, D. Sheppard and E. Southern and J. Martin (Secretary).

ABSENT: Councillors A. Hopkins and P. Hubert.

ALSO PRESENT: Councillor M. van Holst; A. Dunbar, J. M. Fleming, J. Ford, K. Graham, D. MacRae, K. Paleczny, K. Scherr, S. Spring and E. Soldo.

I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that Councillor J. Morgan disclosed a pecuniary interest in clause 2 of this Report, having to do with Western University consultation, by indicating that he is employed by Western University.

II. SCHEDULED ITEMS

2. Western University Consultation

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from E. Soldo, Director of Roads and Transportation, with respect to the Western University consultation.

3. Transit Oriented Development

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from B. Hollingsworth, IBI Group, with respect to transit oriented development.

4. Old East Village Corridor Options

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from E. Peissel, WSP Group, with respect to the Old East Village corridor options.

5. Business Case Review Update

That it BE NOTED that the Rapid Transit Implementation Working Group received a verbal update from E. Soldo, Director of Roads and Transportation, with respect to the Rapid Transit Business Case review.

III. CONSENT ITEMS

6. 2nd Report of the Rapid Transit Implementation Working Group

That it BE NOTED that the 2nd Report of the Rapid Transit Implementation Working Group, from its meeting held on December 15, 2016, was received.

IV. ITEMS FOR DISCUSSION

None.

V. DEFERRED MATTERS/ADDITIONAL BUSINESS

None.

VI. ADJOURNMENT

The meeting adjourned at 6:28 PM.

NEXT MEETING DATE: February 9, 2017

Preferred Alternative

The Lambton Drive alternative is Western's preferred route as it:

- Provides the highest level of connectivity to existing and future trip generators
- Minimizes impacts to sensitive activities (academia, research, leisure)
- Supports the objectives of a largely vehicle-free core campus while retaining critical access to and through the campus
- Provides a strong opportunity for the creation of a signature transit mall through campus from the iconic gateway on Western Road
- Could lead to much needed improvements along the southern portion of Western Road

Western

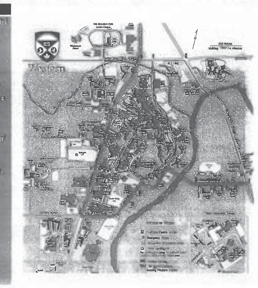
Summary Evaluation

University Objectives Metrics	Middlesex	Lambton	Windermere	Perth	Philip Aziz
Efficient connection to Downtown	Good	Good	Moderate	[illegible]	[illegible]
Legibility of route	Excellent	Excellent	Poor	Poor	[illegible]
Impact on research and other labs	Poor	Moderate	Good	Moderate	Good
Potential for mode shift (reduced parking demand)	Good	Good	Poor	[illegible]	Moderate
Potential to reduce impervious surface	Moderate	Good	Poor	Poor	[illegible]
Impact on pedestrian safety	Poor	Moderate	Good	Good	Moderate
Access to campus destinations	Excellent	Good	[illegible]	Moderate	Moderate
Reduced trip generation for new development	Poor	Good	[illegible]	[illegible]	Moderate
Intra-campus connectivity potential	[illegible]	Good	[illegible]	[illegible]	[illegible]
Potential visual impact	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Impact on Western Road	Moderate	Poor	Excellent	Excellent	[illegible]

Western

5. Philip Aziz Alternative

Potential Benefits	Potential Impacts
Excellent connectivity to student housing [illegible]	[illegible]

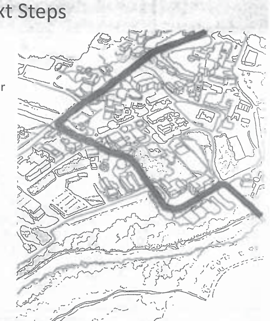


Western

Western

Next Steps

- Additional technical assessment
- Precedent Studies
- Further development of conditions for approval
- Consultation with the campus community through December and January
- Recommendations will be considered by Western's Board of Governors on January 26, 2017



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Preliminary University Conditions

Western has indicated four conditions be met for the BRT to be routed through campus:

- Transit vehicles must share travel lanes through campus to minimize any necessary widening of streets or bridge or affect historic gates.
- Transit streets, stops and other facilities must demonstrate excellence in design and respect the pedestrian-centric priorities of the campus.
- The selection of transit vehicle should eliminate, to the extent possible, noise, vibration or electromagnetic impacts.
- The addition of BRT on campus must support the objective to reduce overall vehicle traffic on campus.

Western

1. Middlesex Drive Alt

Potential Benefits	Potential Impacts

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Evaluation Metrics

Plan Principle/Objective	Qualitative Evaluation Measure(s)
Attract top talent: strengthen the ability of the University to compete in attracting leading faculty and top scholarship students from across Canada and the globe.	• Efficiency of connection to the Downtown and other key regional destinations. • Legibility of route and access to destinations.
Lead in Learning: Support leading research and teaching	• Potential impacts on sensitive research and other activities
Promote sustainability: Reduce environmental impacts with regard to transportation-related emissions and stormwater from surface runoff.	• Ability to support a mode shift among the university community to reduce vehicle kilometers traveled (VKT) • Potential to enable reduction in impervious surface area dedicated to vehicle demand such as travel way widths and surface parking
Promote a pedestrian-oriented campus: Support and enable the reduction or elimination of private vehicle traffic in the core of the campus	• Potential to negatively impact pedestrian safety • Potential to provide a non-auto alternative to access campus destinations
Enable sustainable growth: Support planned campus growth by providing access, especially by non-auto means	• Potential to reduce vehicle trip generation rates at planned campus expansion sites • Potential to reduce parking demand
Campus connectivity: Strengthen the connection and accessibility between campus precincts.	• Viability to use the proposed alignment to meet intra-campus connection demands
Quality of place: Facility design compliments visual character of the campus and campus landscape	• Potential to negatively impact or degrade elements that contribute to campus identity and pride • Potential to lead to improvement of Western Road

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Technical Assessment Criteria

There are several technical assessment criteria that will be considered, including:

- The number of proposed rapid transit stations servicing the campus and the attractiveness of particular station sites.
- The length of the route from Richmond Street at Huron Street to Western Road at Windermere Road.
- The approximate transit travel time along the assessed route assuming a top operating speed of 35 km/hour on internal campus roads.
- A sum of all the existing peak transit boardings within 400 m of the stations along the route.
- The walk time between the geographic centre of campus (McIntosh Gallery) as identified by the City of London and the closest rapid transit station on the route.

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4. Perth Drive Alternative

Potential Benefits	Potential Impacts

Western

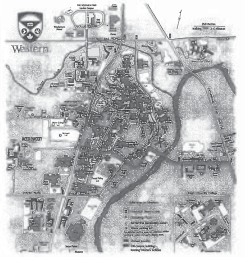
3. Richmond/ Windermere Alternative

Potential Benefits	Potential Impacts

Western

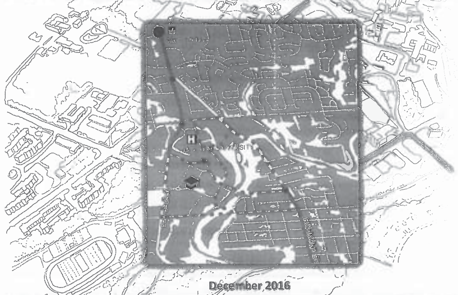
2. Lambton Drive Alternative

Potential Benefits	Potential Impacts



Western

Bus Rapid Transit Backgrounder



December 2016

Western

Vision & Objectives

Strategic Plan Goals (2013)	Campus Master Plan (2015)	Emerging Open Space Plan Principles (2016)
• Raise Expec[illegible]: [illegible] a world-class research a[illegible] culture • Lead in Lea[illegible]: Provide Can[illegible] education for to[illegible] global leade[illegible] ([illegible]ernational attraction, dive[illegible] sustai[illegible]ability ethos). • Reach Beyond Campus: Engage alu[illegible], commun[illegible], [illegible]tional and international partners. • Take Charge of Des[illegible]: Gener[illegible] and [illegible] in new resources in support of excellence.	Core Principles • Support academ[illegible] • Provide the best stude[illegible] experience • [illegible] growth and [illegible] • Enhance quality of campus environment • S[illegible]port [illegible] and [illegible] • Ensure safety, [illegible] access and mobility • [illegible] sustainability Key Initiatives • Intensify the Core Campus • Improve [illegible] of [illegible] Road • Promote p[illegible] and alt[illegible] • Improve campu[illegible] connectivity (particula[illegible]) • Create high [illegible] spaces • [illegible] campus gateways	• Human Place: People are the priority on ca[illegible]. It must be safe and inviting encou[illegible] interaction of the diverse campus community. • Access: University should be co[illegible] to the larger London community by a diversity of modes. • Equity: All people are valued. Access, enjoyment and learning on the campus should be availa[illegible] to all [illegible] culture, income or physical abil[illegible]. • Mobility: The campus is a connected place where people [illegible] easily between buildings and throug[illegible] a variety of modes. [illegible] is valued to [illegible] of body and mind. • Resil[illegible]: The campus [illegible] change. Redundancies and [illegible] ensure durability. • Ped[illegible]gogy: [illegible] campus [illegible] place of learning. Spaces and systems [illegible] the educatio[illegible] mission and promote learning.

Western

Bus Rapid Transit

The City and the university have continued to work towards finding a solution to ensure that existing bus transit and the proposed BRT provide convenient service to campus while maximizing ridership and service efficiency, and minimizing environmental and social impacts at Western.

Five route alternatives have been identified for consideration and the City plans to have final routing no later than January 2017. In order to choose the best option, it will be important to understand the potential implications to all activities on campus, including academia, research and leisure

The university is working with the City on a technical assessment of BRT route alternatives. These will be evaluated against objectives of Western's Strategic Plan, Campus Master Plan and emerging Open Space Plan.

Western

Background

The City of London is completing the second stage of ***Shift***, its public transit planning exercise. ***Shift***, focuses on rapid transit, along with vehicular and active transportation, as part of a system that will help London grow and prosper. This stage will develop a detailed design for the preferred rapid transit routes and provide a plan to build the rapid transit network including how it will be funded.

In May 2016, the City updated its plan to move away from Light Rail Transit (LRT) to a Bus Rapid Transit (BRT) model.

In June 2016, following consultations with the campus community, Western's Board of Governors unanimously expressed its support for both improved transit in the city and the introduction of rapid transit running to campus. However, the Board did not support LRT routes traversing through campus, or BRT routes traversing through campus if it is conditional to being convertible to LRT in the future.

The Board also stated that the university would complete an open-space-and-landscape-planning exercise intended, in part, to make the campus a more pedestrian-focused space with limits on vehicular traffic. This exercise, which is underway, will include an assessment of where transit routes should go, as well as the possible construction of transit hubs

Western

shift
MOVING LONDON FORWARD

Our Rapid Transit Initiative

Rapid Transit Implementation Working Group
Transit Oriented Development and Transit Villages
January 12, 2017

London CANADA

Purpose of Presentation

- Highlight opportunities for Transit-Oriented Development in London
- Present high-level concepts for designated Transit Villages
- Present station concepts and precedents

What is Transit Oriented Development?

"Transit-oriented or transit-supportive development means development which is designed to be well connected and integrated with transit systems, helps to make transit use more efficient, comfortable and attractive, provides quality pedestrian amenities to support the walk to and from transit services and generates ongoing demand for transit ridership."

The London Plan

Breaking Down T-O-D

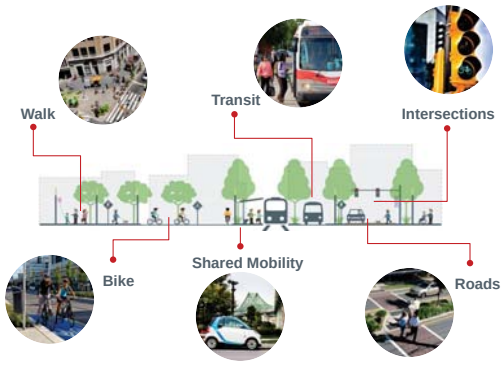
T = **Higher Order Transit & Transit frequency**

O = Orienting infrastructure for making **pedestrian connections between transit & development**

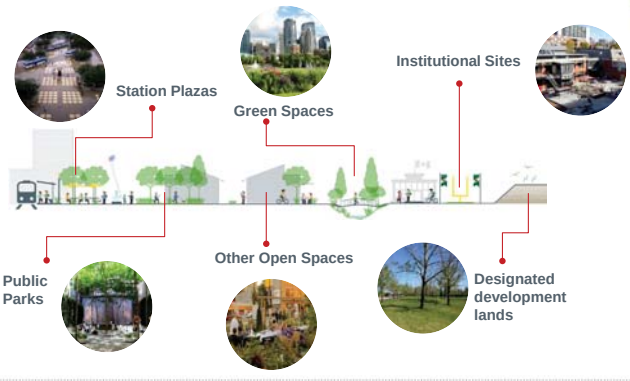
D = Development featuring a **mix of uses & densities**

T O D =

The "T" in TOD

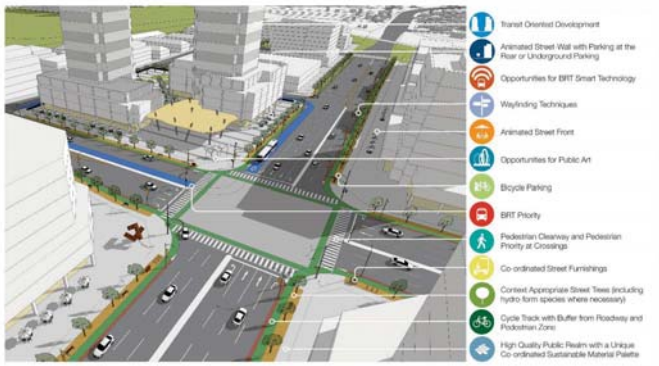


The "O" in TOD



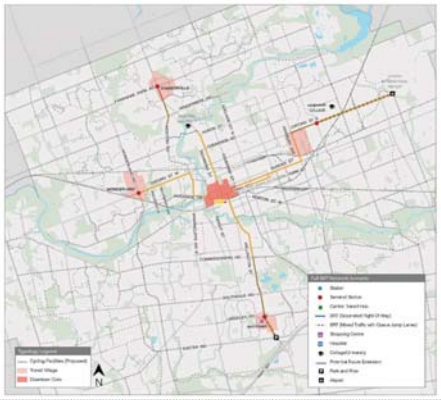
The “D” in TOD

Typical Transit Village: The End Goal

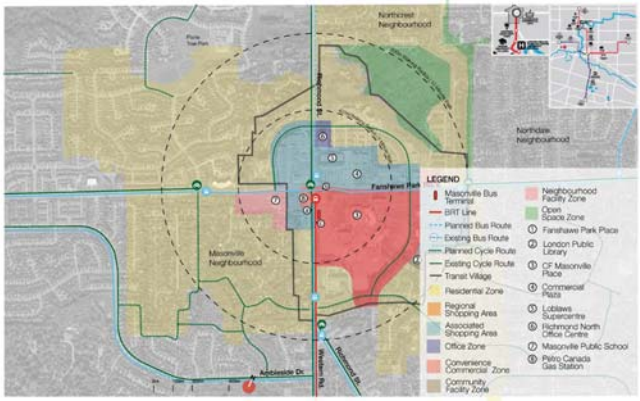


London’s Transit Villages

The London Plan identifies four transit villages plus the downtown. These are key areas for TOD



Masonville Commercial Transit Village



London’s Transit Villages

As outlined in The London Plan, Transit Villages will be:

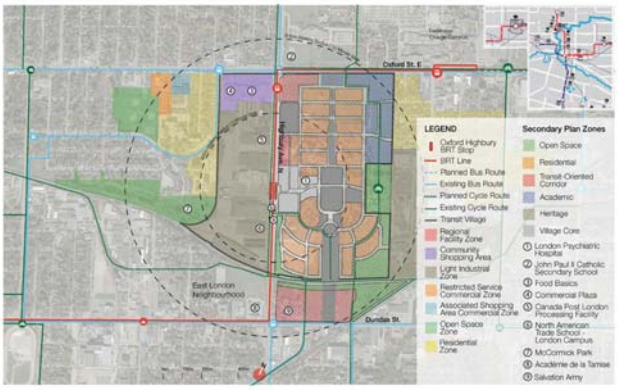
*“**exceptionally designed, high-density mixed-use urban neighbourhoods** connected by rapid transit to the Downtown and each other. They will be occupied by extensive retail and commercial services and will allow for substantial office spaces, resulting in **complete communities**. Adding to their interest and vitality, Transit Villages will offer entertainment and recreational services as well as public parkettes, plazas and sitting areas. All of this will be tied together with an exceptionally designed, **pedestrian-oriented form of development that connects to the centrally located transit station**.”*

Masonville Commercial Transit Village

Opportunities:

- Large surface parking lots represent opportunity for development
- Existing anchor destination
- Potential extension of rapidway north of Fanshawe Park Road
- Street front buildings to animate street and integrate with transit

Oxford and Highbury Transit Village

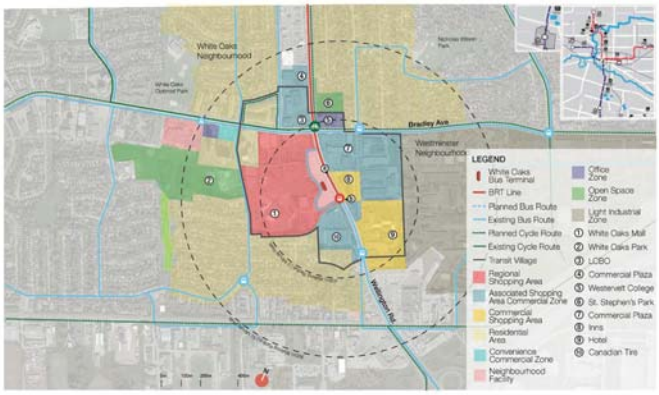


Oxford and Highbury Transit Village

Opportunities:

- Planned redevelopment of LPH site
- LPH site has limited constraints and can be designed as “signature” TOD
- Close proximity of Fanshawe College
- Good potential for active connections to neighbourhood

White Oaks Commercial Transit Village

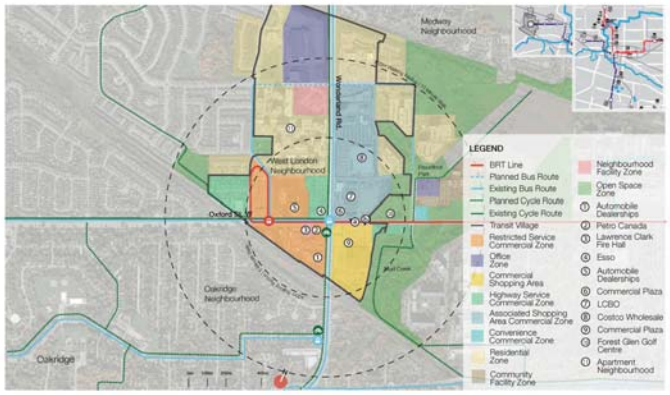


White Oaks Commercial Transit Village

Opportunities:

- Large surface parking lots represent opportunity for development
- Existing anchor destination
- Potential extension of rapidway south to Highway 401 area park and ride
- Opportunity to improve on existing transit terminal and provide more seamless connections

Wonderland and Oxford Commercial Transit Village



Wonderland and Oxford Commercial Transit Village

Opportunities:

- Emerging commercial area, which can transform by introducing greater mix of uses
- Several parcels available for redevelopment
- Strong local transit connections to west, south and north

Transit Stations

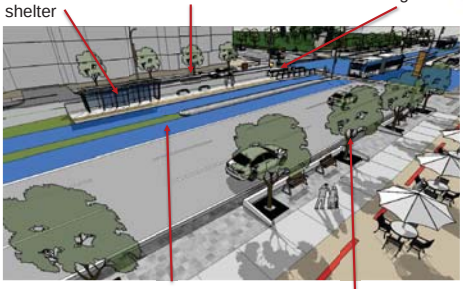
The London Plan outlines, within Transit Villages:

1. Transit stations will be designed as public places that serve as focal points for the Transit Villages
2. The architectural design of transit stations should establish these buildings as public landmarks.
3. Transit stations should be designed to include accessible, comfortable waiting areas and safe, convenient and direct routes for pedestrians and cyclists.

Typical Station Area Concept

Real Time Information

Well-lit and secure



Design Precedent: vivaNext, York Region

Design Precedent: Health Line, Cleveland

Design Precedent: Swift BRT, Seattle

Design Precedent: Züm, Brampton

Next Steps

- Assess impacts of design alternatives
  - Community building and revitalization
  - Transportation capacity and mobility
  - Economic development and city building
  - Ease of implementation and operational viability
  - Environmental, property, heritage
- Engage with property owners
- Finalize engineering designs
- Prepare TOD and urban design guidelines

LEGEND:

STATION/RAMP		BIKE LANE		CROSS WALK	
RAPIDWAY		PARKING LANE		EX RIGHT OF WAY	
TRAFFIC LANES		CURB, SIDEWALK			
		LANDSCAPE			

IBI WSP shift MOVING LONDON FORWARD London CANADA

SCALE
10 0 20m HORIZONTAL
1 0 2m VERTICAL

TITLE
CONCEPTUAL DESIGN

LONDON RT
RAPID TRANSIT CORRIDORS ENVIRONMENTAL ASSESSMENT
NORTH AND EAST ROUTE

KING STREET TWO WAY TRANSIT BETWEEN WATERLOO STREET & ONTARIO STREET

LEGEND:
STATION/RAMP BIKE LANE CROSS WALK
RAPIDWAY PARKING LANE EX RIGHT OF WAY
TRAFFIC LANES CURB, SIDEWALK
LANDSCAPE
IBI WSP shift MOVING LONDON FORWARD London CANADA
SCALE 10 0 20m HORIZONTAL 1 0 2m VERTICAL
CONCEPTUAL DESIGN
LONDON RT
RAPID TRANSIT CORRIDORS ENVIRONMENTAL ASSESSMENT
NORTH AND EAST ROUTE

LEGEND:

STATION/RAMP		BIKE LANE		CROSS WALK	
RAPIDWAY		PARKING LANE		EX RIGHT OF WAY	
		CURB, SIDEWALK			
TRAFFIC LANES		LANDSCAPE			

IBI WSP shift MOVING LONDON FORWARD London CANADA

SCALE
10 0 20m HORIZONTAL
1 0 2m VERTICAL

TITLE
CONCEPTUAL DESIGN

LONDON RT
RAPID TRANSIT CORRIDORS ENVIRONMENTAL ASSESSMENT
NORTH AND EAST ROUTE

DUNDAS STREET CENTER RUNNING TRANSIT LANE BETWEEN WATERLOO STREET & ONTARIO STREET

LEGEND:
STATION/RAMP BIKE LANE CROSS WALK
RAPIDWAY PARKING LANE EX RIGHT OF WAY
CURB, SIDEWALK
TRAFFIC LANES LANDSCAPE
IBI WSP shift MOVING LONDON FORWARD London CANADA
SCALE 10 0 20m HORIZONTAL 1 0 2m VERTICAL
TITLE CONCEPTUAL DESIGN
LONDON RT
RAPID TRANSIT CORRIDORS ENVIRONMENTAL ASSESSMENT
NORTH AND EAST ROUTE