

<b>TO:</b>	<b>CHAIR AND MEMBERS STRATEGIC PRIORITIES AND POLICY COMMITTEE MEETING ON MAY 3, 2017</b>
<b>FROM:</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR, ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>
<b>SUBJECT:</b>	<b>RAPID TRANSIT ALTERNATIVE CORRIDOR REVIEW</b>

<b>RECOMMENDATION</b>
-----------------------

That, on the recommendation of the Managing Director, Environmental and Engineering Services and City Engineer, this report **BE RECEIVED** for information.

<b>PREVIOUS REPORTS PERTINENT TO THIS MATTER</b>
--

- Civic Works Committee - June 19, 2012 - London 2030 Transportation Master Plan
- Civic Works Committee - October 7, 2013 – Bus Rapid Transit Strategy
- Civic Works Committee – July 21, 2014 – Rapid Transit Corridors Environmental Assessment Study Appointment of Consulting Engineer
- Civic Works Committee – June 2, 2015 – Rapid Transit Funding Opportunities
- Civic Works Committee – August 24, 2015 – Shift Rapid Transit Initiative Appointment of Survey Consultants
- Strategic Priorities and Policy Committee – January 28, 2016 – Downtown Infrastructure Planning and Coordination
- Strategic Priorities and Policy Committee – November 9, 2015 - Shift Rapid Transit Update
- Strategic Priorities and Policy Committee – May 5, 2016 - Shift Rapid Transit Business Case
- Strategic Priorities and Policy Committee – September 12, 2016 - Rapid Transit Implementation Working Group

<b>COUNCIL’S 2015-2019 STRATEGIC PLAN</b>
---

Municipal Council has recognized the importance of rapid transit and improved mobility in its 2015-2019 - Strategic Plan for the City of London ([2015 – 2019 Strategic Plan](#)) as follows:

**Strengthening Our Community**

- Healthy, safe, and accessible city

**Building a Sustainable City**

- Robust infrastructure
- Convenient and connected mobility choices
- Strong and healthy environment
- Beautiful places and spaces
- Responsible growth

**Growing our Economy**

- Local, regional, and global innovation
- Strategic, collaborative partnerships

**Leading in Public Service**

- Collaborative, engaged leadership
- Excellent service delivery

## BACKGROUND

At its meeting of April 4<sup>th</sup> 2017, Council approved the following actions be taken with respect to the 5th Report of the Rapid Transit Implementation Working Group, from its meeting held on March 9, 2017;

a) *the Civic Administration BE DIRECTED to take the following actions with respect to the Rapid Transit Implementation Project:*

*i) review alternate route options in the Downtown as follows, including a high level cost analysis:*

*A) one east-west corridor option through Downtown (Queens Avenue and King Street couplet recommended);*

*B) one north corridor option (Wharncliffe Road to Western Road [Option 1b] recommended);*

*ii) review alternatives (grade separation [underpass] at the rail crossing, bus lanes at grade) to the Richmond Row tunnel, should the route remain as recommended;*

*iii) generally categorize residential and business impacts along the routes based upon changes to access, property acquisition (partial or full demolition), construction impacts and parking access; and*

*iv) hold a public participation meeting before the Strategic Priorities and Policy Committee on May 3, 2017, related to the above-noted alternate routing options;*

b) *the following proposed timelines BE ENDORSED:*

*April 25 and 26, 2017 – staff-led property owner meetings for each alternative route*

*May 3, 2017 – Special Strategic Priorities and Policy Committee public participation meeting (alternate routes and impact assessment provided by staff and public input opportunity for Londoners)*

*May 15, 2017 – Recommendation before the Strategic Priorities and Policy Committee for either of original or alternate routes*

*May 16, 2017 – Consideration of the recommendation from the May 15, 2017 Strategic Priorities and Policy Committee*

*If original routes are approved on May 16, 2017:*

*June 12, 2017 – Strategic Priorities and Policy Committee consideration of the updated Rapid Transit Master Plan and Business Case, with changes recommended by the Province;*

*June 13, 2017 – Council consideration of the recommendation from the June 12, 2017 Strategic Priorities and Policy Committee;*

*If alternative routes are approved on May 16, 2017:*

*June 2017 – Additional Public Information Centre*

*July 24, 2017 – Strategic Priorities and Policy Committee consideration of revised Rapid Transit Master Plan and Business Case*

*July 25, 2017 – Council consideration of the recommendation from the July 24, 2017 meeting of the Strategic Priorities and Policy Committee*

At its meeting held on April 18<sup>th</sup> 2017, Council resolved:

*That the Civic Administration BE DIRECTED to include, as part of its report back on the Rapid Transit Implementation Project, requested by the Municipal Council at its meeting on April 4, 2017, the following additional information:*

- a) options to mitigate potential impacts to businesses during the construction of a rapid transit system, including, but not limited to a temporary Community Improvement Project;*
- b) identification of potential means by which access to businesses can be maintained during construction and after completion of a rapid transit system; and,*
- c) potential opportunities to provide for rapid transit routes through mixed traffic on King Street between Ridout Street North and Richmond Street.”*

## **Context**

Rapid transit is the primary recommendation of the Smart Moves Transportation Master Plan (TMP), is identified in the current Official Plan, and represents a cornerstone of The London Plan and Council’s 2015 - 2019 Strategic Plan.

The implementation of a rapid transit system is a central component of London’s land use and transportation policy, which will help shape the city’s future pattern of growth, encourage intensification and regeneration, and stimulate economic growth for decades to come. Rapid transit, combined with a strong conventional transit system, supportive land use planning policies and appropriate service coverage and frequency will facilitate more transit trips, reduce traffic volumes and make transit a quicker, more convenient and comfortable option for residents.

In September 2014, Council initiated an Environmental Assessment (EA) process to identify and examine options for rapid transit in London. The EA process examined potential corridors and technology. In May 2016, Council approved the Full Bus Rapid Transit (BRT) Network as the preferred alternative for the completion of the Rapid Transit Environmental Assessment Master Plan.

The Business Case that was approved identified the Full BRT Network option as the recommended alternative because it offered the greatest value for Londoners as it meets the city’s ridership needs, provides benefits in terms of economic growth, community development and revitalization, delivers considerable air quality and GHG

emission reductions and modernizes the transit system by making it more attractive, reliable and convenient for residents to move around the city and is the best value solution from an affordability and financial return on investment perspective.

The Rapid Transit Environmental Assessment (EA) is being undertaken to create a Rapid Transit Master Plan (RTMP) that adheres to the legislative requirements of the *Environmental Assessment Act*. The Master Plan will provide a strategy for building a Rapid Transit system that will help meet the City’s economic development, mobility, environmental and community building objectives while still being operationally feasible and economically viable.

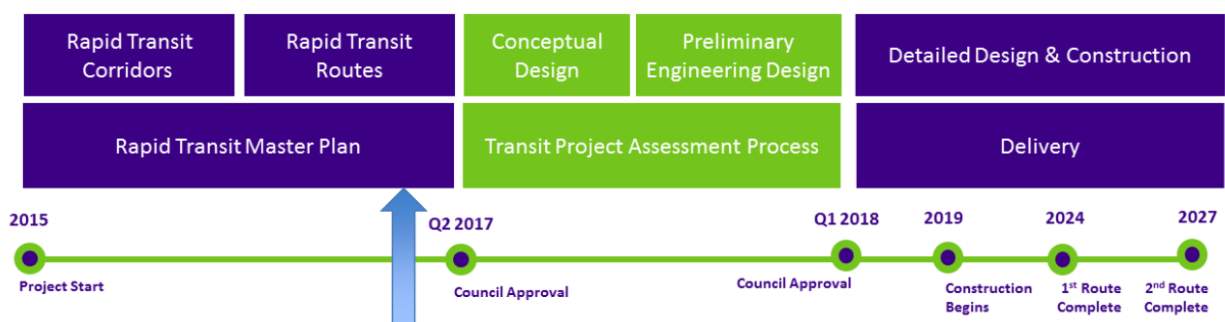
It is important to recognize that London will undoubtedly change over the coming decades. Some of these changes can be projected with the best available information, such as demographic shifts and forecasted population growth, while others cannot be anticipated as readily. BRT provides flexibility to how London grows and can be adapted to reflect the evolving of the community.

**DISCUSSION**

The Shift Rapid Transit project is following the provincially regulated Environmental Assessment process. This process is based on a phased approach with the level of detail and analysis increasing for each phase. Phase 1 and Phase 2 of the process include the identification of the problem or opportunity and assessment of alternative solutions. This included the identification and evaluation of alternative corridors.

The results of these phases and the analysis of impacts will be documented in a final RTMP which will be presented for Council consideration following approval of preferred corridors and completion of the public consultation for this phase. Following the approval of the RTMP, the project will move to a Transit Project Assessment Process (TPAP) which will include analysis of specific design alternatives for each of the preferred corridors as shown on Figure 1.

**Figure 1 – Rapid Transit Implementation Process**



**Rapid Transit Corridors**

The purpose of the RTMP is to develop a network that serves major destinations including the Downtown, transportation hubs, retail centres, post-secondary institutions, research centres, office areas, hospitals, entertainment destinations and large employers. The rapid transit network must integrate with the larger transportation network that includes automobiles, local buses, inter-city travel, potential future high speed rail, cyclists, pedestrians and goods movement.

The implementation of a Rapid Transit system, together with a strong base transit system with appropriate service coverage and levels of service, will improve travel time performance, increase the passenger capacity of the transit network and improve the quality of service for transit passengers. This will be achieved by providing:

- Frequent and reliable service along the Rapid Transit corridors, allowing riders to use the service without needing to consult a schedule;
- Dedicated lanes for Rapid Transit, separated from other traffic where feasible;
- Optimized stop locations at major activity generators along the Rapid Transit corridors;
- Timing traffic signals to improve efficiency for transit vehicles;
- Enhanced stations: that is, transit stops with larger, more prominent waiting areas, larger shelters, seating, and potentially an enclosed heated waiting area integrated with urban uses (within transit-oriented building forms);
- Utilization of vehicles with enhanced passenger amenities and comfort features; and,
- Real-time information for passengers.

The London Plan has been prepared to closely integrate with London's rapid transit system. It plans for four transit villages at the terminus of each rapid transit corridor (north, west, south and east) that allow for substantial residential densities, a significant amount of office space, and a broad range of land uses. The Plan calls for these transit villages to be developed over time using transit-oriented development (TOD) principles, supporting the integration of these urban areas with the rapid transit corridors that connect them to the Downtown.

The London Plan identifies rapid transit boulevards and applies the Rapid Transit Corridor Place Type (land use designation) to lands fronting onto these boulevards allowing for a mix of land uses and for a substantial intensity of development. The permitted development height and density rises at the rapid transit stations.

At the hub of all four rapid transit corridors is the Downtown. The London Plan allows for the widest range of uses in the Downtown Area as well as the greatest building height, residential density, and office floor space. Parking requirements are substantially relaxed in the Downtown, recognizing the high level of transit services offered in the core.

"Our Move Forward: London's Downtown Plan" sets the stage for rapid transit connections to the train station, the Dundas Flex Street, the Forks, Budweiser Gardens, Covent Garden Market, Victoria Park, Richmond Row and other key destinations in the core. Further supporting the plan for intensification at strategic locations, Council's financial incentives encourage Downtown development, helping to create a strong and vital Downtown destination that will fuel rapid transit ridership.

### ***Rapid Transit Route Integration***

The Rapid Transit network will operate in conjunction with the local transit routes. The London Transit Commission has completed a route structure review to assess the overall system structure and to provide a high level implementation plan on how to:

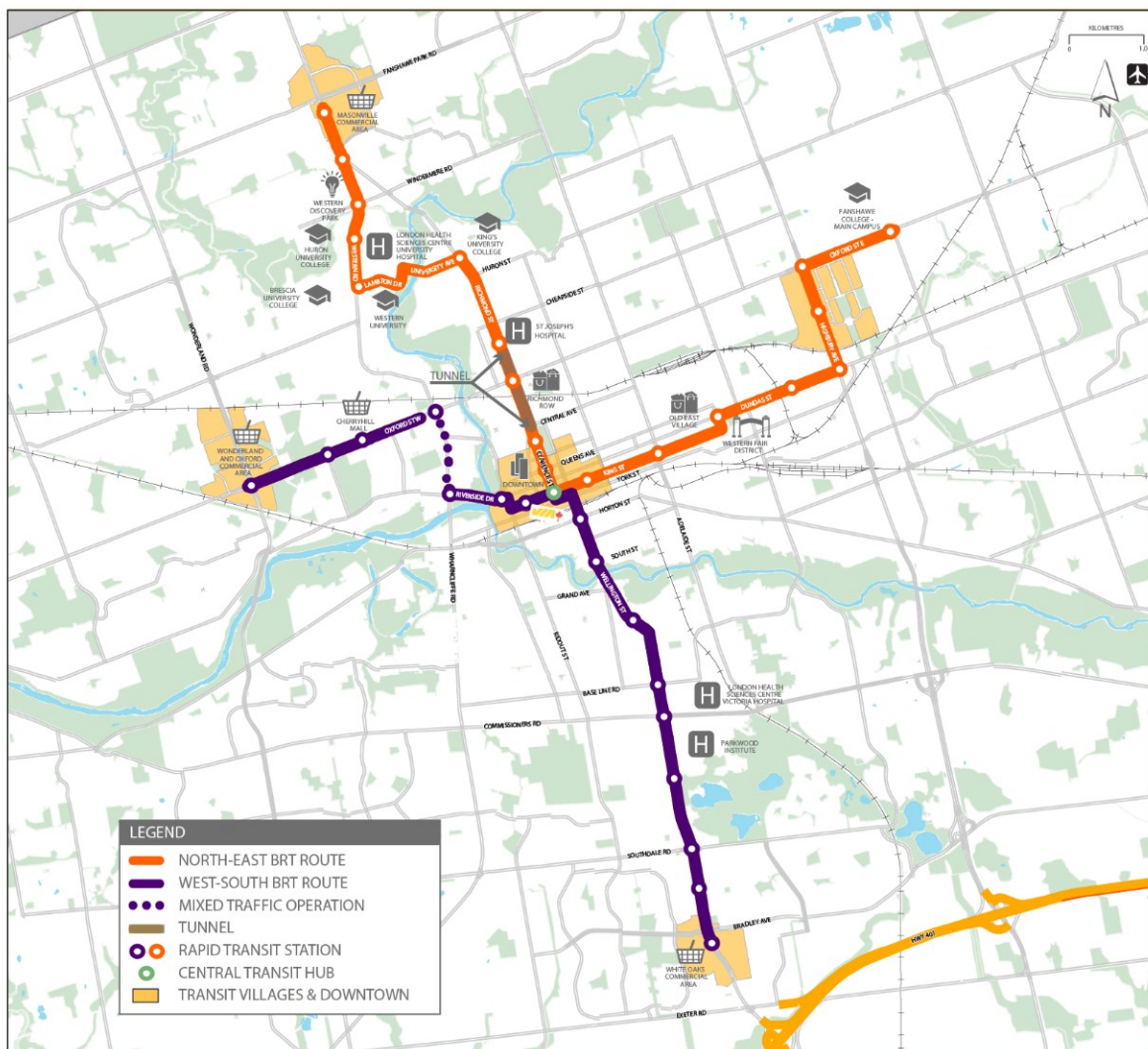
- Modify the planned local bus network to connect to the rapid transit corridors to support transit ridership growth;
- Enhance service levels on routes connecting to rapid transit corridors;

- Eliminate/modify routes that duplicate rapid transit corridors; and,
- Modify routes to better connect to rapid transit and other destinations.

The assessment includes a recommended route structure, including travel frequencies during peak and nonpeak operating hours as well as a high level implementation plan associated with establishing the desired transit network.

### **Rapid Transit Corridor Evaluation**

As part of the RTMP, a total of 13 different corridor segments were evaluated. This long list was then screened and short-listed to eight corridor segments for further evaluation, and ultimately resulted in a preferred rapid transit network. Included in this evaluation was a number of sub-analyses were conducted on focused corridor alternatives including alignments through Western University, the Richmond Street Rail Crossing, south tunnel portal options, downtown routings and Old East Village routings. The resultant preferred network was presented for public input at Public Information Centre #4 held on February 23<sup>rd</sup> 2017. The preferred network is shown on Figure 2.



**Figure 2 – Rapid Transit Network (February 2017)**

During and following the February 23, 2017 PIC #4, a number of comments and concerns were raised on the downtown routing options and north corridor routings along with their associated impacts. As a result, further information was brought to the Rapid Transit Implementation Working Group (RTIWG) on March 9<sup>th</sup>, 2017. This included two Technical Briefings on the Downtown and alignments from Downtown to Western University ([http://www.shifflondon.ca/working\\_group](http://www.shifflondon.ca/working_group)).

In response to the April 4<sup>th</sup> 2017 Council motion, a technical assessment was undertaken and summarized in a technical memo (Attachment #1, also available at <http://www.shifflondon.ca/reports>).

The Rapid Transit Master Plan applied a comprehensive evaluation framework based on five categories:

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

Affordability and Fiscal Responsibility was an overarching consideration and key aspect of the Rapid Transit Business Case.

These guiding principles were used to develop more specific evaluation criteria to evaluate network alternatives. For the basis of evaluating the alternatives identified in the Council motion, a number of the criteria would not vary significantly for the alternatives being considered, hence the analysis focused on a short list of criteria and includes key issues such as business impacts and property impacts.

It should be noted that the analysis is completed at a high level and the property compensation cost estimates are based on a preliminary analysis of the corridors, extraordinary assumptions and will require further detailed and independent consultation and analysis once the preferred corridor is selected.

In addition to the technical memo, the document refers to a number of conceptual drawings that are attached to the memo and are available for download on the Shift website at <http://www.shifflondon.ca/reports>.

### ***Public Engagement***

Throughout March and April 2017, meetings were organized to present and receive input on the north corridor and downtown alternatives. The following meetings have been held to date or are scheduled to be held at the time of submission of this report:

- Wharncliffe/Western Road Residents and Businesses, April 26, 2017, Centennial Hall
- King Street/King Queens Couplet Property Owners, April 25, 2017, Centennial Hall
- Covent Garden Market Merchants, April 19, 2017, Covent Garden Market
- Saint Andrew Memorial Church, April 19, 2017, 55 Foxbar Road
- Pillar Non Profit Network, April 13, 2017, 201 King Street
- First Baptist – Church on the Park, April 12, 2017, 568 Richmond Street
- Richmond Street Merchants/Businesses, March 30, 2017, Centennial Hall
- St. Peter's Cathedral Basilica Parish Committee, March 29, 2017, St. Peter's Cathedral Basilica
- King Street Businesses/Merchants, March 23, 2017, City Hall
- London Police Service, March 22, 2017, 601 Dundas Street
- Downtown London, March 16, 2017, Downtown London Office
- Covent Garden Market, March 14, 2017, Covent Garden Market
- Budweiser Gardens, March 13, 2017, Budweiser Gardens

<b>CONCLUSION</b>
-------------------

This report provides Committee and Council with an overview of the analysis related to the alternatives that were requested as part of the April 4<sup>th</sup> Council resolution as well as as the additional high level analysis requested at the April 19<sup>th</sup> Council meeting.

The Public Participation Meeting scheduled for May 3<sup>rd</sup> will allow for the public to provide their input on the various alternatives. Subsequent to the meeting, a report will be prepared and presented at the SPPC meeting on May 15<sup>th</sup> with a recommendation on a preferred Rapid Transit network for Council's consideration.

Subsequent to Council's approval of the preferred Rapid Transit network, a 5<sup>th</sup> Public Information Centre has been scheduled for June 14<sup>th</sup> to obtain public input on the preferred Rapid Transit network. Should new routes be approved, the final Rapid Transit Master Plan and Business Case would be presented to SPPC on July 24<sup>th</sup> and Council on July 25<sup>th</sup>.

### **Acknowledgements**

This report was prepared with input and support from the Rapid Transit Steering Committee.

<b>SUBMITTED BY:</b>	<b>RECOMMENDED BY:</b>
<b>EDWARD SOLDI, P.ENG. DIRECTOR, ROADS AND TRANSPORTATION</b>	<b>KELLY SCHERR, P.ENG., MBA, FEC MANAGING DIRECTOR ENVIRONMENTAL &amp; ENGINEERING SERVICES AND CITY ENGINEER</b>

Attach: Appendix "A" – Technical Memo

cc. London Transit Commission  
Rapid Transit Implementation Working Group  
Transportation Advisory Committee



## **Appendix A**

Rapid Transit Technical Memo