4TH REPORT OF THE
RAPID TRANSIT IMPLEMENTATION WORKING GROUP

Meeting held on February 9, 2017, commencing at 4:35 PM, in Council Chambers, Second Floor, London City Hall.

PRESENT: Councillor P. Squire (Chair), Mayor M. Brown; Councillors B. Armstrong, J. Helmer, A. Hopkins, P. Hubert and H. L. Usher; S. Rooth and D. Sheppard and J. Martin (Secretary).

ABSENT: Councillor T. Park and E. Southern.


I. CALL TO ORDER

1. Disclosures of Pecuniary Interest

That it BE NOTED that no pecuniary interests were disclosed.

II. SCHEDULED ITEMS

2. Business Case Update

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from B. Hollingsworth, IBI Group and K. Graham, Director, Community and Economic Innovation, with respect to an update to the Rapid Transit Business Case.

3. Rapid Transit Master Plan Overview

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 an overview of the Rapid Transit Master Plan.

4. Corridor Concepts

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from E. Peissel, WSP Group, with respect to the Corridor Concepts.

5. Public Consultation Event

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 next public consultation event to be held February 23, 2017.

6. Schedule Outlook

That it BE NOTED that the Rapid Transit Implementation Working Group received the attached presentation from B. Hollingsworth, IBI Group and E. Soldo, Director of Roads and Transportation, with respect to the schedule outlook for the Environmental Assessment and Transit Project Assessment Process.

III. CONSENT ITEMS

7. 3rd Report of the Rapid Transit Implementation Working Group

That it BE NOTED that the 3rd Report of the Rapid Transit Implementation Working Group, from its meeting held on January 12, 2017, was received.
IV. ITEMS FOR DISCUSSION
None.

V. DEFERRED MATTERS/ADDITIONAL BUSINESS
None.

VI. ADJOURNMENT

The meeting adjourned at 6:14 PM.

NEXT MEETING DATE: March 9, 2017
Business Case Updates

Key changes include:
- Increased contingencies (up to 50% from 40%)
- Increased discount rate
- Updated method for calculating future benefits
- Updated spare-vehicle ratio
- Included lifecycle costs
- Increased cost for buses to reflect potential for electric buses
- Reduced assumed value of time (input to value of transit savings)
- Updated multiplier for safety and auto operating benefits

With the above changes, the Benefit Cost Ratio (BCR) for the Full BRT alternative is 1.13
- Net benefits minus costs is $87 M

Capital Cost Estimates (Full BRT)

<table>
<thead>
<tr>
<th>Cost Component</th>
<th>May 2016 (Cost in $millions)</th>
<th>January 2017 (Cost in $millions)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segments (including structures)</td>
<td>$262</td>
<td>$262</td>
<td>No Change</td>
</tr>
<tr>
<td>Engineering (15%)</td>
<td>$39</td>
<td>$39</td>
<td>No Change</td>
</tr>
<tr>
<td>Project Management (10%)</td>
<td>$26</td>
<td>$26</td>
<td>No Change</td>
</tr>
<tr>
<td>Maintenance Facility</td>
<td>$10</td>
<td>$10</td>
<td>No Change</td>
</tr>
<tr>
<td>Contingency</td>
<td>$135</td>
<td>$169</td>
<td>Increased from 40% to 50%</td>
</tr>
<tr>
<td>Vehicles</td>
<td>$24</td>
<td>$27</td>
<td>Cost per bus increased from $800,000 to $1 million; vehicle spares reduced</td>
</tr>
<tr>
<td>Quick Start</td>
<td>$0</td>
<td>$23</td>
<td>Identified as Separate Item</td>
</tr>
<tr>
<td>Total (Real dollars)</td>
<td>$496</td>
<td>$556</td>
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Note: $556 million translates to $660 million in nominal dollars. Nominal dollars is the sum of amounts spent unadjusted for inflation. Provincial reporting requires costs to be expressed in nominal dollars.
Business Case Review

- The draft business case was reviewed by MTO over the summer/fall
  - Three rounds of comments provided
- Technical questions have largely been addressed and MTO is generally comfortable with the business case.
- MTO will be proceeding with their next internal steps towards the approval of the business case. Approval of the business case is not final until there is a funding commitment made.
- Prior to execution of project charter, Province will require:
  - Understanding of delivery model
  - Confirmation of contributions by City of London and federal government
  - Assurance of Transit Project Assessment Process (TPAP) approval

Intergovernmental Financial Partnerships

- The City of London has committed $125 million toward our estimated $560 million Rapid Transit Initiative
- To move forward, London is seeking approximately $435 million from federal and provincial partners
- The City will provide all of the on-going operating and maintenance costs for Rapid Transit, and invest millions in projects that will support implementation of Rapid Transit (parallel grade separations)
- Shift will only proceed through strong intergovernmental partnerships between all orders of government

Intergovernmental Financial Partnership - Sequencing

- Shift has received a mention in the Province of Ontario’s Budget 2016 and Budget 2015
  - “Cost-sharing the capital costs of municipal transit projects such as London rapid transit…”
    - Ontario Budget 2016, pg. 71
- The City of London has submitted approximately $15 million worth of Shift-related projects under Canada’s Investing in Canada Plan (pending approval) under the Public Transit Infrastructure Fund
- The Government of Canada is expected to announce Phase 2 of the Investing in Canada Plan in the upcoming Budget 2017 ($~81 billion)
- Within this Plan, roughly $24.5 billion is expected to be dedicated to public transit priorities

Purpose of Master Plan

- Shift is a multi-phase Environmental Assessment (EA) – a public process that provides all citizens and stakeholders with the opportunity to provide input in planning and designing our Rapid Transit network.
- The Rapid Transit Master Plan is an important milestone in the Environmental Assessment process and covers the first two phases:
  - Phase 1: Problem identification
  - Phase 2: Alternative planning solutions
- The Rapid Transit Master Plan defines the rapid transit network, including route, technology and a preliminary list of stations.

Rapid Transit Master Plan Overview

- Planning Context
- Consultation Process and Input
- Existing and Future Conditions
- Identification and Assessment of Alternatives
- Rapid Transit Vision
- Description of Preferred Alternative
- Costs
- Planning and Urban Design Framework
- Implementation Plan

Rapid Transit Master Plan contents
Vision for Rapid Transit

The vision for the Rapid Transit Master Plan is intertwined with The London Plan’s Mobility goals. The plans recognize that there is an interconnected link between land use and mobility. The plans rely on each other to succeed.

Rapid Transit will form the backbone of an integrated multi-modal system.

Rapid Transit will enable corridors designed to provide a variety of safe, convenient, attractive, viable and accessible mobility options for all Londoners.

Rapid Transit will be leveraged to strategically promote and stimulate intensification while ensuring development is conducive to the efficient operation and attractiveness of public transit.

Evaluation Summary

<table>
<thead>
<tr>
<th>Criteria/Measures</th>
<th>Business As Usual</th>
<th>Base BRT</th>
<th>Full BRT</th>
<th>Hybrid</th>
<th>Full LRT</th>
</tr>
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<tbody>
<tr>
<td>City Building and Revitalization</td>
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<td>Public Space and Heritage</td>
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<tr>
<td>Transportation and Mobility</td>
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<tr>
<td>Implementation</td>
<td>NA</td>
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<tr>
<td>Natural Environment</td>
<td></td>
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<td>Costs and Benefits</td>
<td>NA</td>
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<tr>
<td>Economic Effects</td>
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<tr>
<td>Overall Rank</td>
<td></td>
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Full BRT is the preferred network alternative as it is best suited to ridership demand, provides a high quality of service and reliability, supports growth objectives, provides the highest value for the investment and is adaptable to future conditions.

The Preferred Network

The Preferred Network

Master Plan – What’s Next?

- Hold Final PIC for Master Plan to receive public input
- Request formal Council approval of Master Plan
- Place notice of completion for this phase of study

What happens after the Master Plan is finalized?

- Master Plan provides the starting point for design alternatives
- Next stage (Transit Project Assessment Process) will evaluate design alternatives and seek to minimize negative impacts.
- Public and stakeholder consultation will be on-going

What is a TPAP?

- Pre-Planning
  - Identify issues and develop technical solutions to mitigate negative impacts
  - Consultation on specific issues

- TPAP
  - 120-day Regulated Timeline
  - Consultation (public, regulatory agencies, aboriginal communities, other interested persons)
  - Prepare Environmental Project Report (EPR)

- Review & Approval
  - 30-day public review of EPR
  - Objection(s) may be submitted to Minister of Environment and Climate Change
  - If objection(s) received, 35-day response from Minister
Corridor Concepts

Ideal Configuration for Bus Rapid Transit

Ideal configuration is not possible in all corridors – trade-offs must be made.

Changes to Traffic Circulation (typical)

Focus Areas: Conceptual Design

Areas to be reviewed in detail during the ‘Transit Project Assessment’ study to evaluate design alternatives and minimize negative impacts.

Focus Area 1: Western University

Station locations will be confirmed in consultation with Western University during the TPAP process.

Western Road Concept

The alignment is consistent with Western’s on-going Open Space and Landscape Plan and approved by the Board of Governors.
Focus Area 2: Richmond Street North

Richmond Street between Grosvenor Street and University Drive

A decision needs to be made on whether this stretch of Richmond Street will have 2 lanes of traffic or 4 lanes of traffic. The decision will consider impacts of the two options, including:

- 4 lanes will require road widening and result in property impacts, reductions to driveways and parking, and the removal of some trees.
- 2 lanes will result in increased congestion for general traffic, and require a shift in travel patterns.

Richmond Street North – Initial Concept (two lanes plus rapid transit)

Huron Street

The Rapid Transit tunnel, once completed, will:
- Maintain transit service reliability
- Maintain travel time consistency
- Avoid long-term impacts to Richmond Row businesses and public realm
- Emergency services vehicles can use the tunnel, improving response time

Station locations, the tunnel and underground station design will be developed in the next study phase.

Focus Area 3: Richmond Street Tunnel

The Rapid Transit tunnel, once completed, will:
- Maintain transit service reliability
- Maintain travel time consistency
- Avoid long-term impacts to Richmond Row businesses and public realm
- Emergency services vehicles can use the tunnel, improving response time

Station locations, the tunnel and underground station design will be developed in the next study phase.

Richmond Street North – Initial Concept (two lanes plus rapid transit)

Grosvenor Street

North Tunnel Entrance Concept

South Tunnel Entrance Concept
Focus Area 4: Downtown

Angel St. Station
Queens Ave. Station
Central Transit Hub
Waterloo St. Station
Talbot St. Station

Station locations will be confirmed during the next study phase.

Focus Area 5: Forks of the Thames

Riverside Dr. Station
Museum Station (potential)
Talbot St. Station

Station locations will be confirmed during the next study phase.

Focus Area 6: Wellington Road

Challenges
This section of Wellington Road needs an improved alignment plus widening for rapid transit. The design will be developed in the next study phase to minimize impacts, such as:
- Property impacts: land acquisition, reduced driveways, parking, trees; and,
- Traffic impacts: changes to lane configurations, restricted turning movements

Wellington Road – Potential Widening Concept

Property impacts will be mitigated and confirmed during the next study phase.
Focus Area 7: Old East Village

Station locations will be confirmed during the next study phase.

Summary of Corridor Concepts

- The ideal configuration cannot be achieved across the entire Rapid Transit Network
- Design shown in the Rapid Transit Master Plan is one workable concept and is not final
- During the TPAP process, design alternatives will be developed and evaluated to minimize negative impacts
- Additional public consultation will be held around the design issues to gather feedback and identify concerns
- Design refinements will occur between the RTMP and construction

Public Consultation Event

Public Information Centre #4

Thursday, February 23, 2017

5 to 8 pm
London Public Library – Central Branch
251 Dundas Street, London
Drop-in format

Schedule Outlook

EA/TPAP Process
Near Term Target Milestones

• Rapid Transit Master Plan
  – PIC1 for Underground & PIC4 for RTMP: Feb 23
  – PIC two-week comment period: ends March 10
  – RTMP to RTI Working Group: Mar 9
  – RTMP and Business Case to Civic Works Committee: Mar 27
  – RTMP to Council & Approval to proceed as TPAP: Apr 4
  – RTMP 30 day public review period: ends May 2017
• Richmond Street Municipal Underground Utilities EA
  – Project File Report (PFR) to Civic Works Committee: Apr 24
  – PFR to Council: May 2
  – PFR 30 day public review period: ends June 2017

All dates tentative

Next Steps

• Revised Business Case and final Rapid Transit Master Plan to Council
• Work with Infrastructure Ontario to undertake Value for Money Assessment (VFM)
• Approval of Business Case by Federal government
• Continue to refine corridor-specific costs and phasing through on-going Environmental Assessment/TPAP
• Confirm delivery approach
• Upon completion of TPAP and funding approvals, construction could be scheduled. Utility relocations and property acquisition require lead time prior to construction.