Welcome

Stage 2 ION: Light Rail Transit (LRT) from Kitchener to Cambridge
Transit Project Assessment (TPA) Process
Public Consultation Centre (PCC) No.1
November 18, 2015
November 19, 2015

Join the Conversation!
Purpose of Today

• Introduce the planning and approvals process that Stage 2 ION will follow
• Present the endorsed route and new study area of Stage 2 ION
• Present the potential criteria used to evaluate route alternatives
• Receive public input on the various LRT routes and stop locations
What is ION?

• Approved by Council in 2011, ION will bring LRT to Waterloo Region in two stages:
  – Stage 1 ION includes LRT from Waterloo to Kitchener and Bus Rapid Transit (BRT) from Kitchener to Cambridge
  – Stage 1 ION LRT is currently under construction, while BRT was completed in 2015 and is now operational
  – Stage 2 ION will see BRT replaced by LRT, creating a continuous LRT system

• ION is the foundation for the direction of the Regional Official Plan:

- Enhance Natural Environment
- Provide Greater Transportation Choice
- Protect Farmland
- Ensure Overall Coordination & Communication
- Foster Strong Economy
- Build Vibrant Urban Places
Why Light Rail Transit?

• LRT will:
  – Help contain urban sprawl
  – Protect environmentally-sensitive areas
  – Preserve farmland and the rural lifestyle
  – Move people; create transportation choice

• Without LRT, the Region will require:
  – 500 new lane kilometres of roadways at a cost of $1.4 billion
    • ION reduces the need for new roads by 40% or $500 million
1970’s Rapid Transit Initial Idea

2003 Regional Growth Management Strategy Adopted

2004 Planning/EA Studies Initiated

2011 Regional Council Endorsed Route for Stage 1 LRT & BRT and Stage 2 LRT

2012 Stage 1 LRT and BRT Ministry of Environment Approval

2014 Stage 1 LRT & BRT construction begins

2015 Stage 2 LRT Planning/EA Study Begins

2015 Stage 1 BRT Operational
Transit Project Assessment (TPA) Process consists of various steps and requirements. It is a focused impact assessment process that includes consultation, an assessment of potential positive and negative impacts, and assessment of measures to mitigate negative impacts, and documentation.
Why Re-examine the 2011 Route?

• Canadian Pacific (CP) Rail Challenges
  – Now identified that 2011 route requires lengthy track relocation and grade separation
  – Route options will be considered to minimize impact on rail operations and avoid grade separations

• Updated Data Collection
  – Updated data and condition analysis is being completed to examine past findings taking into account any new challenges and opportunities

• Maximize Ridership, Minimize Operating Costs
  – Confirmed 2011 route maximizes the opportunity for transit-supportive development and creates the most cost-effective solution (both in terms of construction and the operating costs)

• GO Rail Service
  – Increased interest and support for a future GO Rail service into Southern Cambridge
  – Possible locations for a high quality, convenient GO-LRT hub connection will need to be identified and evaluated

• Planning Opportunities
  – Confirm and validate the feasibility of the preferred route, taking into account recent development, redevelopment and intensification initiatives

• Natural Environment Considerations
  – Costly construction and invasive construction may be required for the 2011 route which crosses and runs along the Speed River
  – Route options should be explored to minimize impacts and provide mitigation
2011 Council Endorsed Plan
Stage 2 Study Area

* Endorsed by Regional Council in June 2011

Legend
- Endorsed * LRT Stop
- Potential LRT Stop
- Potential GO Station
- Endorsed * Stage 2 Route
- Alternative Route
- Potential GO Rail Line
- Study Area Boundary
- Rail Corridor
- Municipal Border

Stage 2 ION:
LRT from Kitchener to Cambridge
Alternative Routes
Kitchener/North Cambridge

Legend
- Endorsed* LRT Stop
- Potential LRT Stop
- Potential GO Station
- Study Area Boundary
- Rail Corridor
- Municipal Border

Stage 2 ION:
LRT from Kitchener to Cambridge
Alternative Routes
Kitchener/North Cambridge

* Endorsed by Regional Council in June 2011
Central Cambridge

* Endorsed by Regional Council in June 2011
South Cambridge – Option 1

* Endorsed by Regional Council in June 2011

Option 1:
GO Station in the vicinity of Samuelson Street

Legend
- Endorsed* LRT Stop
- Potential LRT Stop
- Potential GO Station

Stage 2 ION:
LRT from Kitchener to Cambridge
Alternative Routes
South Cambridge
CPR Corridor GO Station Option

* Endorsed by Regional Council in June 2011
South Cambridge – Option 2

Endorsed by Regional Council in June 2011

Option 2:
GO Station in the vicinity of Downtown Galt

Legend
- Endorsed* LRT Stop
- Potential LRT Stop
- Potential GO Station
- Endorsed* Stage 2 Route
- Alternative Route
- Potential GO Rail Line
- Study Area Boundary
- Rail Corridor
- Municipal Border

Stage 2 ION:
LRT from Kitchener to Cambridge
Alternative Routes
South Cambridge
Downtown GO Station Option

* Endorsed by Regional Council in June 2011
Endorsed by Regional Council in June 2011

ROUTE ALTERNATIVES INCLUDE DOUBLE TRACK, SINGLE TRACK, AND MIXED OPERATIONS

Option 3: GO Station in the vicinity of Water Street

Legend
- Endorsed * LRT Stop
- Potential LRT Stop
- Potential GO Station
- Study Area Boundary
- Rail Corridor
- Municipal Border

Stage 2 ION: LRT from Kitchener to Cambridge
- Alternative Routes
- South Cambridge
- Water St GO Station Option

* Endorsed by Regional Council in June 2011
Criteria are categorized into four groups:

- Transportation
- Social and Cultural Environment
- Natural Environment
- Economic Impact

The following four boards illustrate examples of criteria in each group.
Transportation

Cycling/Pedestrian
Ability to provide a safe cycling and pedestrian network, particularly at stop locations.

Traffic Operations
Traffic impacts such as level of service, restricted turning movements and safety risk.

GO Rail Service
Feasibility to implement a high quality transit inter-modal facility in Downtown Galt.

LRT Riders
Ability to provide reliability, comfort, and reduced travel time for transit riders.

CP Rail
Impact on CP rail operations and LRT-rail crossings.

Ridership
Opportunity to increase LRT ridership as a transportation choice.

MTO Highways
Impact on right-of-ways, hwy operations and goods movement.

Pinebush

City of Cambridge

Emergency Services
Impact on response times for emergency services (fire, police, and ambulance).

Parking
Impact on on/off-street parking should be avoided or minimized.

GO Station

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Traffic impacts such as level of service, restricted turning movements and safety risk.

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Social and Cultural Environment

Archaeology
Archaeological sites are valuable resources, loss or disturbance should be minimized.

Property
Impacts on residences, businesses, and local facilities should be minimized.

Business Support
Support existing businesses by minimizing impacts, such as goods movement and accessibility.

Built Heritage/ Cultural Landscape
Valuable community resources such as built heritage and cultural landscapes, (e.g. Grand River bridge) should be preserved.

City of Kitchener

Contamination
Avoid or minimize property acquisition with potential subsurface environmental concerns.

Economic Development
Transit investment should support the economic vitality of urban growth centres, consistent with the Region’s and City’s Official Plan.

Noise/Vibration
Projected noise/vibration levels, during construction or as result of changed traffic conditions should be considered.

Parks/Open Space
Parks and open spaces are vital to the local community. Impacts should be avoided or minimized.
Natural Environment

Natural Heritage Features
Endangered species and important ecosystems, such as provincially significant wetlands, need to be protected.

Wildlife
Wildlife habitat are valuable resources, loss or disturbance should be avoided or minimized.

Grand/Speed Rivers
Constructing in-water or in the vicinity of rivers, should be minimized. Potential issues include: soil erosion, flood level increases, aquatic habitat fisheries, navigable waters requirements, and First Nations consultation.

City of Kitchener

Vegetation
Vegetation loss or disturbance, in particular mature trees and woodlots, should be minimized.

Hydrology
Construction may impact groundwater conditions, aquifers, or watercourse flows, and should be avoided.

Fisheries
Fisheries and aquatic habitat loss or disturbance should be avoided or minimized.

Surface Water
Quality and quantity runoff changes can alter flood levels and aquatic environments, and should be minimized.
**Economic Impact**

- **Construction Cost**: Construction cost should be minimized.
- **Property**: Property acquisition for the LRT right-of-way should be minimized.
- **Maintenance Cost**: Maintenance cost represents a major investment and therefore should be considered.
- **City of Kitchener**: City of Cambridge
- **City of Cambridge**: City of Cambridge
- **Major Utilities**: Utility relocation costs within an LRT right-of-way should be considered and minimized.
- **Operations Cost**: Operation cost represents a major investment and therefore should be considered.
- **Conflict with CP rail**: Conflict with CP rail should be minimized to reduce cost of construction and operational impacts.
What’s Next?

• December 2015 to June 2016 – Incorporate comments from the first round of public consultation, undertake detailed assessment and preliminary selection of the preferred design concept
• April to June 2016 – Business case completion
• Fall 2016 – Second public round of consultation to present the preferred route, evaluation, impacts and proposed mitigation
• Late Fall 2016 – Preferred option presented to Regional Council for endorsement
• October 2016 – Commence TPA Process
• March 2017 – Completion of TPA Process (Notice of Completion, Environmental Project Report published for public review)
Contact Info/Get Involved

Your opinion matters!
Provide comments on comment sheet to help shape decisions!

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