GO Rail Network Electrification

Transit Project Assessment Process

Public Meetings Round #3
June - July 2017
PURPOSE OF TONIGHT’S MEETING

To provide updates on:

• Overall project since last consultation round in November 2016
• Public meeting feedback
• Vegetation Compensation Protocol
• Visual mitigation and Design Excellence
• Noise Mitigation Plan
• Cultural Heritage Studies and recommendations
• Archaeology Studies and recommendations
• Allandale Tap facility location
• Next steps
GO RAIL NETWORK ELECTRIFICATION TPAP STUDY AREA
TRANSIT PROJECT ASSESSMENT PROCESS

PRE-TPAP PLANNING AND CONSULTATION

COMPLETE STUDIES, CONCEPTUAL DESIGN/IMPACT ASSESSMENT AND CONSULTATIONS WITH STAKEHOLDERS

NOTICE OF COMMENCEMENT

TRANSIT PROJECT ASSESSMENT PROCESS (TPAP)

CONSULT STAKEHOLDERS AND UPDATE ENVIRONMENTAL PROJECT REPORT (EPR)

NOTICE OF COMPLETION

STAKEHOLDER REVIEW OF EPR

MINISTER REVIEW (MOECC) OF EPR

STATEMENT OF COMPLETION

TIMELINE VARIES

UP TO 120 DAYS

30 DAYS

UP TO 35 DAYS

WE ARE HERE
ELECTRIFICATION PROJECT UPDATE

• Had over 115 meetings with Municipalities, Agencies and Conservation Authorities

• 28 public meetings (February/March 2016 and November 2016)

• Completed 13 draft impact assessment reports, can be viewed at: www.gotransit.com/electrification

• Prepared the draft Environmental Project Report and circulated to 80+ Federal, Provincial, Municipal, Conservation Authority, and Indigenous review agencies for comment

• Notice of Commencement was issued June 14th 2017
RECAP OF NOVEMBER 2016 PUBLIC MEETINGS

- Held 13 Public Meetings between November 7 and November 29, 2016 at multiple municipalities across the GTHA

- **Electrification-Related Feedback:**
  - Go above and beyond minimum noise and vibration mitigation requirements
  - Proactively communicate with communities on all aspects of the projects
  - Create conditions for replacement trees to thrive
  - Include diverse and native species in replacement trees
  - Ensure noise, vibration, and tree removal compensation is locally applied
  - Be open to alternative types of technology for trains on the rail corridor (undertaking a feasibility report on hydral)

- **Feedback Received Not Related to Electrification:**
  - Separate at-grade crossings
  - Consider the impacts that providing additional local service will have on the regional service
  - Integrate GO Service with local transit service
  - Ensure the service remains affordable to all who use it
  - Review and revise outdated policy and strengthen the procurement process

- Summary reports for each public meeting are available at www.gotransit.com/electrification
ELECTRIFICATION - VEGETATION REMOVALS

• Vegetation removal is required within a maximum 7m zone of the outermost electrified track
• Minimize the risk of tree limbs falling on the track or overhead wires
• Secure the safety of maintenance workers when working in an electrified environment
• Maintain the safety of our customers and neighbours
VEGETATION APPROACH - PRIVATE PROPERTY

• Metrolinx will seek design solutions to minimize tree removal on private property

• In the case where a safety risk cannot be avoided, then Metrolinx will consult with land owner and seek municipal tree removal permit

• Trees will be compensated as per Municipal requirements
VEGETATION APPROACH – METROLINX PROPERTY

• Technically, Metrolinx can remove trees within Metrolinx property without permits or compensation

• Metrolinx is developing a methodology to compensate for trees removed on Metrolinx’s property

• Metrolinx will partner with Conservation Authorities and municipalities to develop the final compensation strategy.
VISUAL EFFECTS & MITIGATION

**OCS – Rail Corridors:**

- The installation of OCS infrastructure will affect the viewshed along the rail corridor, particularly in areas of vegetation/tree clearing

**Mitigation Measures**
- Areas of ‘high’ visual impact will be identified and specific design measures will be incorporated to mitigate visual impacts
- These strategies will address the range of visual conditions, area allocations, and mitigation needs that will be found along the corridor

**OCS – GO Stations:**

- The installation of OCS infrastructure will affect the views at GO Stations, particularly in areas of vegetation/tree clearing

**Mitigation Measures**
- A Design Excellence process will be followed to integrate the OCS design into GO Stations to reduce the extent of visual impacts
VISUAL EFFECTS & MITIGATION

Bridge Barriers:
• All overhead and pedestrian bridges will require bridge barriers for safety, which may affect views across the bridge

Mitigation Measures
• Metrolinx is developing an approach for the design of the bridge barriers to visually enhance their appearance
• Will review options for enhancing aesthetics of bridge barriers in consultation with interested/affected municipalities as appropriate

Bridge barrier example from New Zealand
BRIDGE BARRIER DESIGN

• Metrolinx developed profiles for each road over rail bridge, and categorized them based on:
  o Surrounding land use and community character
  o Automobile and pedestrian traffic levels
  o Adjacent built form (current and proposed)

• A Design Excellence process will review options for design treatments/options for enhancing the aesthetics of bridge barriers:
  o Bespoke (heritage bridges)
  o Sensitive community areas and high traffic bridges
  o Bridges in mixed use areas
  o Bridges over highway and in industrial zones
  o Fully enclosed bridges (omitted)
BRIDGE BARRIER DESIGN

Example of a sensitive community area and high traffic bridge barrier design solution
Strachan Avenue Bridge (looking east)
VISUAL EFFECTS & MITIGATION

Traction Power Facilities (TPFs):

- Many TPFs have minimal to no impact on visual landscape as they are located in industrial areas
- Some TPFs will require vegetation clearing

Mitigation Measures

- Landscaping and/or screening may be considered around the TPF’s located in residential/sensitive areas. These areas include:
  - Scarborough TPS
  - Scarborough SWS
  - Don Yard PS
  - Maple PS
  - Gilford PS

Example of screening around TPF
PROPOSED BRIDGE REPLACEMENTS

• Jameson and Dunn Avenue bridges do not meet the clearance requirement for Electrification
• Metrolinx will work with the City to develop options for replacing

Dunn Avenue Bridge

Jameson Avenue Bridge
All pedestrian bridges will be replaced ‘like for like’ with a new pedestrian bridge

Drury Lane Bridge
Replacement due to vertical clearance

Dowling Avenue Bridge
Replacement due to barrier requirements
PROPOSED PEDESTRIAN BRIDGE REPLACEMENTS

Mooregate Avenue / Tara Avenue Bridge
Replace due to protective barrier requirements

Pape Avenue Bridge
Replace due to protective barrier requirements

All pedestrian bridges will be replaced ‘like for like’ with a new pedestrian bridge
Where impacts of 5 dB or greater are expected, noise mitigation measures are evaluated.
NOISE WALLS

• Approximately 5 metres tall
• Must be solid (free of gaps and cracks)
• Must be absorptive in situations where there are parallel barriers
TECHNICALLY FEASIBLE NOISE BARRIERS

Example: Barrie Rail Corridor

- Corridor mapping can be found online at: www.gotransit.com/electrification
NOISE MITIGATION - TRACTION POWER FACILITIES

• Traction Power Facilities typically have breakers, switchgear and transformers

• These facilities typically are not a significant source of noise

• For TPFs near residential areas, noise mitigation will be considered based on final design

• Potential TPFs that could need noise mitigation include Gilford, Allandale and Scarborough
POTENTIALLY IMPACTED HERITAGE PROPERTIES

- Provincially Important Heritage:
  - Union Station (Toronto)
  - Credit River Bridge (Mississauga)
  - Aurora GO Station (Aurora)

- Locally Important Heritage:
  - Islington Avenue Bridge (Toronto)
  - Markham GO Station (Markham)
  - Maple GO Station (Vaughan)
  - Newmarket GO Station (Newmarket)
  - Bradford GO Station (Bradford West Gwillimbury)
  - Sixteen Mile Creek and Cross Avenue Bridge (Oakville)
  - Bronte Creek Bridge (Oakville)
  - Highland Creek Bridge (Toronto)
  - Humber River Bridge (LSW, Toronto)
REVISED ALLANDALE TAP LOCATION

Proposed location to connect to Hydro One power supply
Technical studies available to review online

Final Environmental Project report will be made public

NEXT STEPS

TPAP Notice of Commencement
June 14, 2017

Public Meeting Round #3
June 26, 28, 29, and July 5

TPAP Notice of Completion
October 11, 2017

30 Day Public Review
October 12 - November 10, 2017

35 Day Minister Review
November 11 - December 15, 2017

Statement of Completion
December 15, 2017

Construction Completed
2025
SHARE YOUR THOUGHTS

Complete a feedback form and sign up for e-mail updates to stay up to date on the project

- Visit www.gotransit.com/electrification to review project materials
- Sign-up for email updates at: electrification@metrolinx.com
- Call us at 416-869-3200 or 1-888 GET-ON-GO (438-6646)

Recap of Public Meeting #3

- Please submit your feedback by **July 14, 2017** to be included in the published meeting summary
- All feedback will be recorded as part of the Environmental Project Report