

# 407 TRANSITWAY

## FROM EAST OF HIGHWAY 400 TO KENNEDY ROAD

GWP #252-96-00

### Planning & Preliminary Design

Public Information Centre #2

June 24<sup>th</sup> and 29<sup>th</sup>, 2010

# Purpose of Public Information Centre #2

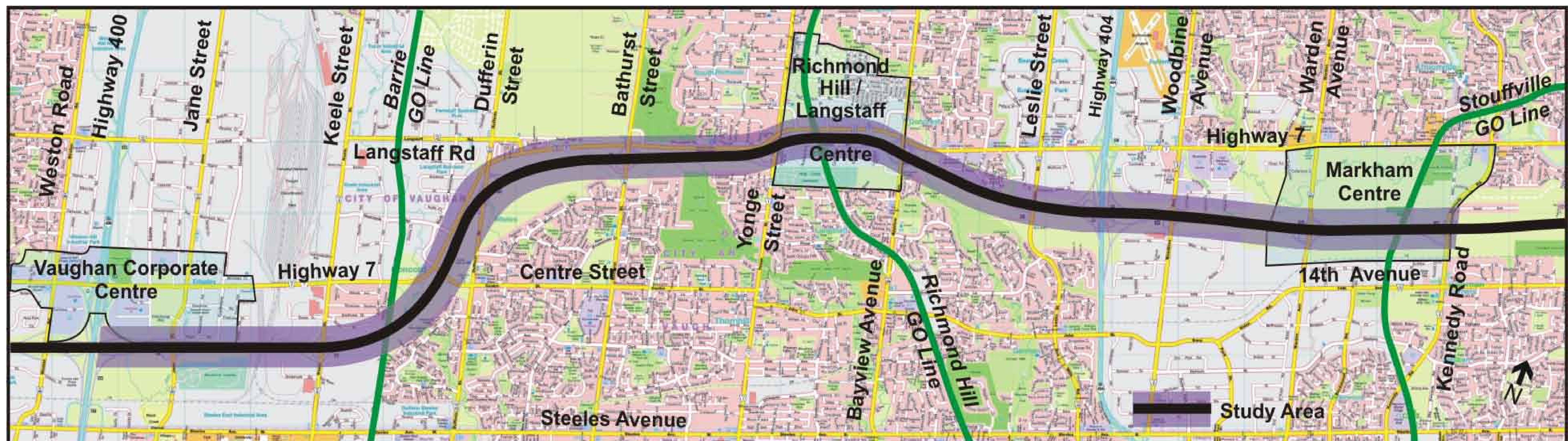


- Ø The first Public Information Centre (PIC #1) was held in May 2009 to introduce the study and to present the results of the Planning Phase, including the technically preferred station sites and route.
- Ø Since PIC #1, comments from the public were considered and consultation with regulatory agencies was carried out to develop the preliminary design of the 407 Transitway.
- Ø The purpose of this PIC (PIC #2) is to present and receive input on:
  - the preliminary design of the technically preferred stations and alignment;
  - the predicted environmental impacts and proposed mitigation measures; and,
  - the Transit Project Assessment Process for this project including major milestones, next steps and study schedule.
- Ø Members of the Study Team are available to discuss the project with you. Please feel free to ask questions and fill out a comment sheet.
- Ø You may also visit us at [www.lgl.ca/407Transitway](http://www.lgl.ca/407Transitway).

# Study Purpose & Scope

- ∅ Preliminary Design of a high-speed cross-regional transit facility located in a separate right-of-way along the 407 ETR corridor from east of Highway 400 in the City of Vaughan, through the Town of Richmond Hill, to Kennedy Road in the Town of Markham;
- ∅ Infrastructure Design for initial Bus Rapid Transit (BRT) service, convertible to Light Rail Transit (LRT) including transit runningways, stations with local car and bus access/egress and an Operations and Maintenance Facility;
- ∅ Development of a phased implementation strategy for this first section of the overall 407 Transitway;
- ∅ Environmental approval for the project under the Ontario Provincial Transit Projects Assessment Process.

This central section was selected as the priority section of the 150 km long overall corridor from Burlington to Highway 35/115, as it is long enough to be a viable, stand alone section, provides connections with other radial transit services, links regional urban centres, and attracts higher potential ridership and therefore a higher chance for early success.



Extending 23 kilometres through York Region, the study area shown above, lies within the Parkway Belt West Plan limits, a multi-purpose corridor providing rights-of-way for freeways, regional transit, electric power transmission lines, utilities and public open space.

# Background & Policy Context

## Background:

Since the early 1970s, the Ministry of Transportation (MTO) has made commitments to protect a transportation corridor to accommodate a fully grade separated Transitway facility in a separate right-of-way in the Parkway Belt West Plan area. This facility has been further defined by later studies in terms of location within the Parkway Belt West (from Hamilton to Highway 48 in Markham), its extent, type of technology and service.

## Policy Context

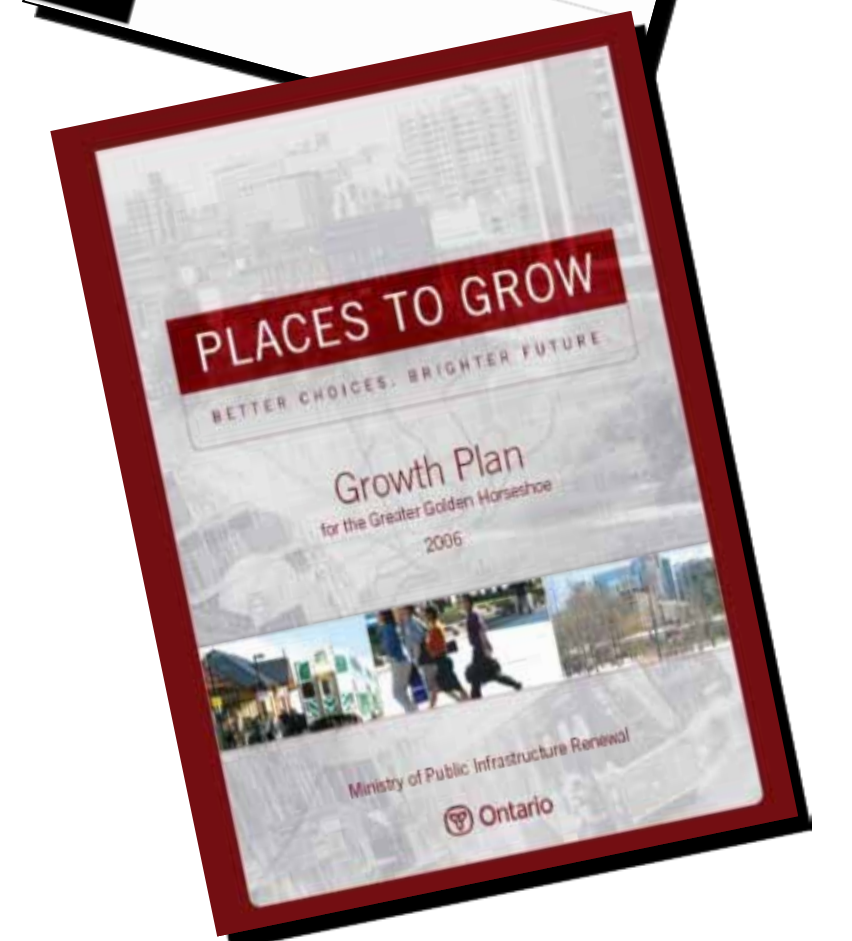
### Provincial Policy Statement

Ontario's Provincial Policy Statement (2005) promotes the efficient use of existing and planned infrastructure and connectivity within and among transportation systems and modes which cross jurisdictional boundaries.



### "Places to Grow" – Growth Plan for the Greater Golden Horseshoe

Ontario's Growth Plan for the Greater Golden Horseshoe (The Growth Plan) (2006) under the Places to Grow Act, 2005 presents a vision for managing growth in the region to the year 2031. The policy directions for intensification and compact urban form identify public transit as a first priority for transportation infrastructure planning.



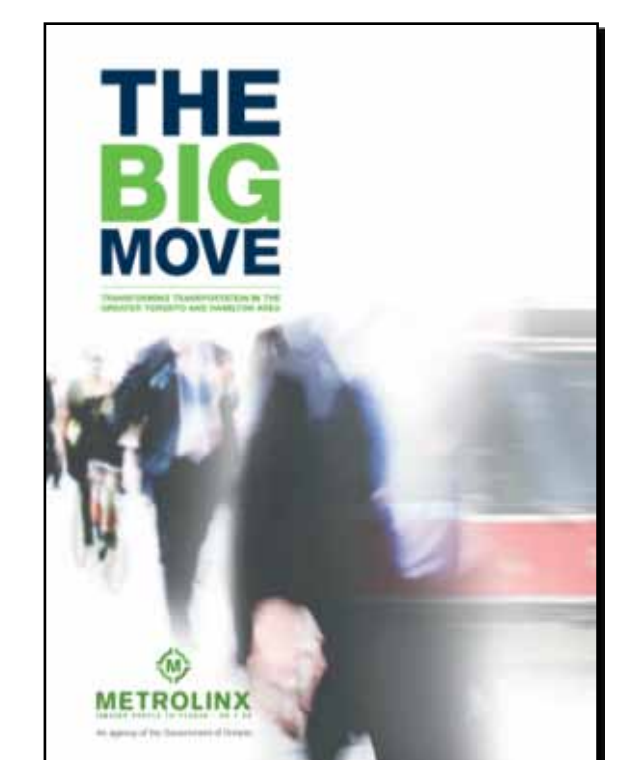
### MoveOntario 2020

In 2007, the Province of Ontario announced "MoveOntario 2020", a provincial plan to fund 52 transit projects in the Greater Toronto Area (GTA) and Hamilton over a 12-year period starting in 2008. The province identified Highway 407 as one of its priority corridors for new rapid transit initiatives in the GTA.



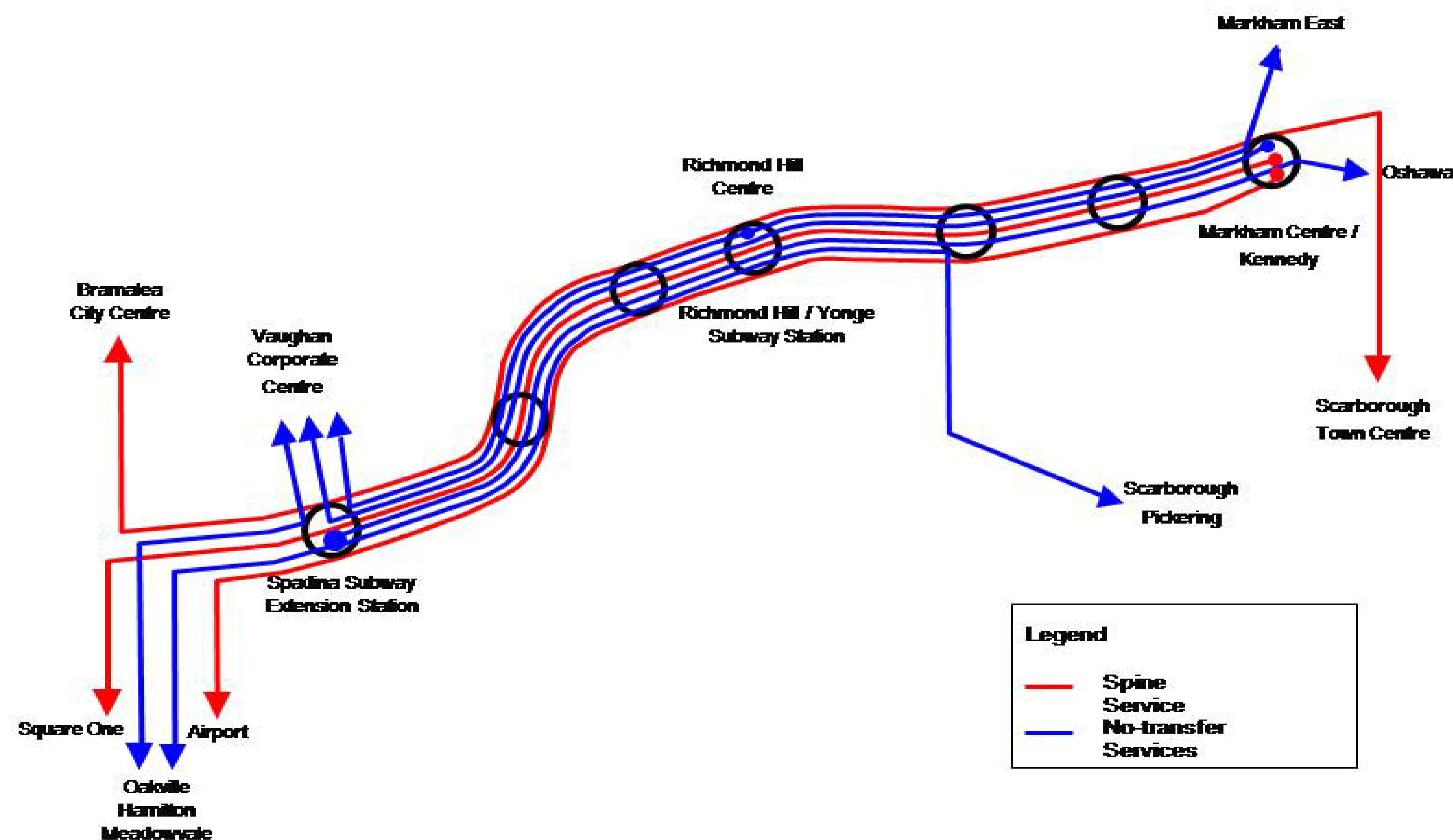
### The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (GTHA)

On November 28, 2008, the Metrolinx Board of Directors adopted this Regional Transportation Plan (RTP). The Big Move identified the 407 Transitway from Pearson Airport to Kennedy Road in Phase Three of its investment plan to be completed between 2023 and 2033.



# Transitway Ridership Forecasting Method

- ∅ The Greater Golden Horseshoe Travel Demand Model developed in 2008 for MTO was used.
- ∅ The Transitway infrastructure design will allow buses to achieve a speed of **100 km/hr** between stations and an average speed of **65 km/hour including station stop time**
- ∅ Transitway Service Characteristics Assumed For Ridership Forecasting:
  - **Bus-based technology will be operated initially to provide routing flexibility;**
  - **Two primary types of service will be offered:**
    1. A base spine service – Services that operate exclusively on the Transitway, including some express services
    2. One-seat ride (No-transfer) services – Direct services between major nodes or residential areas and other major employment nodes or intermodal stations. Routes comprised of portions both on and off of the Transitway and include both express and all-stop service along the Transitway (i.e., interlining)



# Transitway Riders and Buses, Forecast for 2031

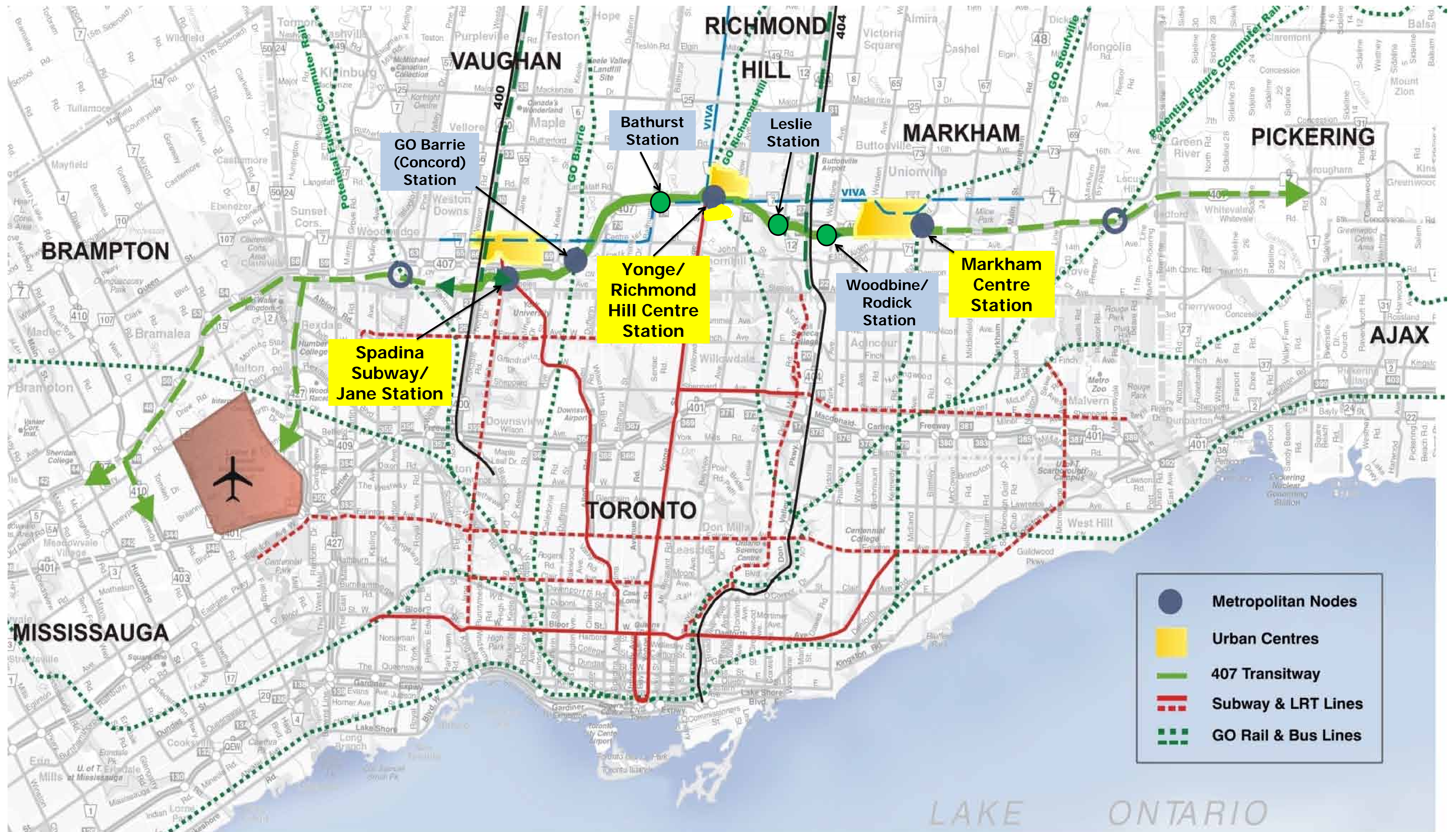


2031 AM Peak hour passenger volumes by segment

Daily Transitway Trips	70,000 to 80,000
Morning Rush Hour Transitway Boardings	15,700
<b>Busiest Section of the Transitway: Yonge Street to Kennedy Road</b>	<ul style="list-style-type: none"> <li>Ø Markham Centre (Kennedy Road) to Yonge St (westbound)</li> <li>Ø 4,500 to 5,400 approaching riders during a.m. peak hour</li> <li>Ø Up to 140 buses per hour westbound</li> </ul>
<b>Busiest Station: Future RHC (Yonge) Station</b>	<ul style="list-style-type: none"> <li>Ø 7,600 transfers during a.m. peak hour</li> <li>Ø 110 buses arriving per hour (2 min interval EB; 45 sec intervals WB)</li> </ul>
<b>Other Major Connection Node: Highway 400 to Yonge Street</b>	<ul style="list-style-type: none"> <li>Ø Jane Street Station (Future Spadina Subway connection): 4,100 transfers in a.m.</li> <li>Ø Jane Street EB– up to 2,500 riders (Buses at 90 sec intervals)</li> </ul>
<b>Proportion of riders accessing Transitway by mode</b>	<ul style="list-style-type: none"> <li>Ø Other Transit – 74%</li> <li>Ø Park-and-Ride – 19%</li> <li>Ø Walk-in – 7%</li> </ul>

# Role of the Project in the GTA

An east-west, cross-regional, intermediate capacity rapid transit service linking Urban Growth Centres and connecting with the existing and future GTA radial transit network



# 407 Transitway Infrastructure Characteristics

Ø 23 km Transitway between Highway 400 and Kennedy requires a ROW width varying between 15 m (minimum in retained sections) and 45 m (cut or fill sections with slopes).

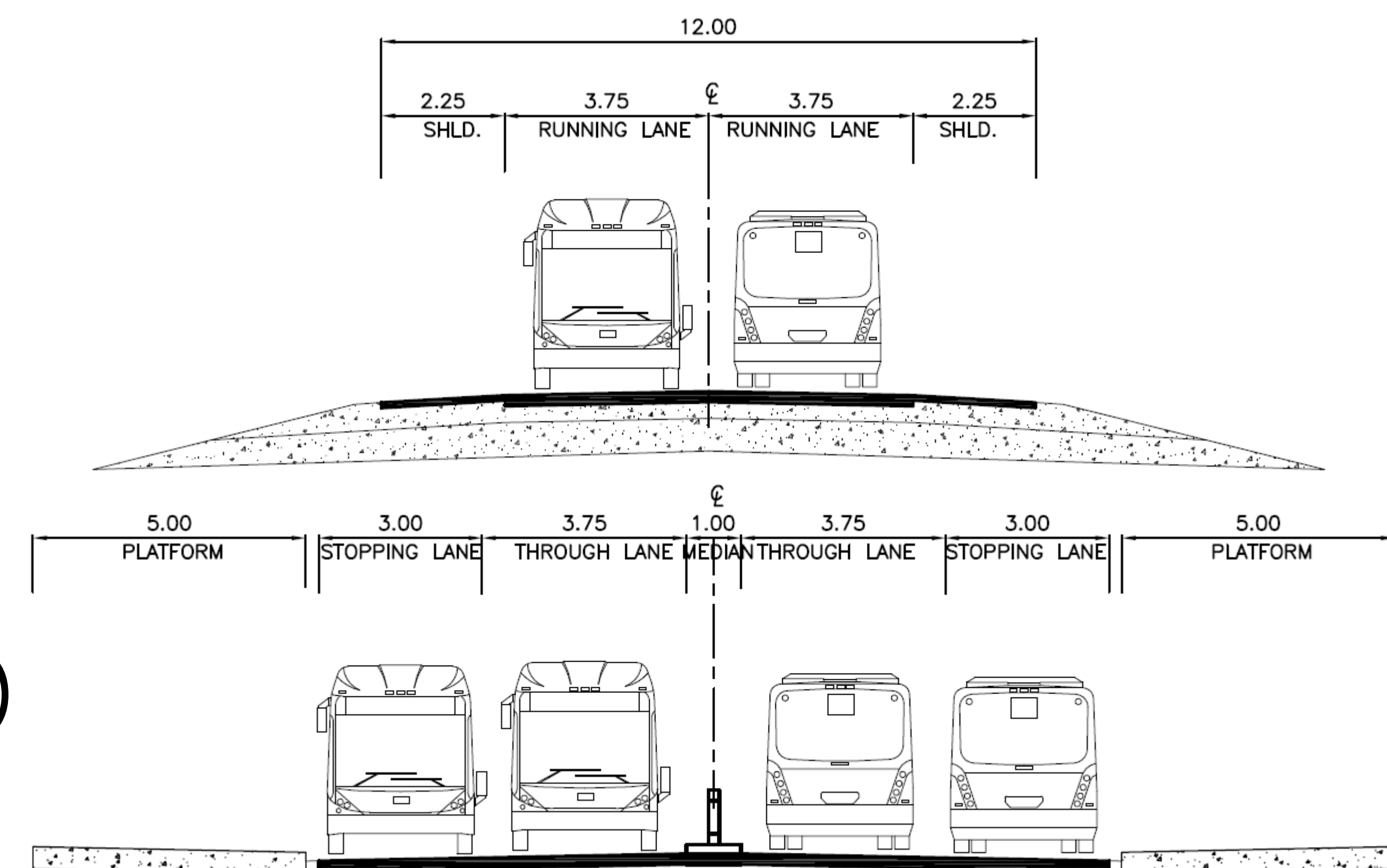


Ø Protected ROW provides for either BRT or LRT operation.

Ø Infrastructure includes runningway and stations (accommodating both BRT & LRT standards), park and ride and transit interface facilities.

Ø Runningway cross-section:

- Between Stations – 12 m  
(2 x 3.75m lanes + 2 x 2.25m shoulders)
- Through Stations – 14 m  
(2 x 3.75m lanes + 2 x 3m stopping lanes)






Ø 16 Overpasses & 14 Underpasses








# Environmental Impacts and Mitigation

Impacts	Mitigation
<p><b>Soils</b> Disturbance of soil and utilization and disposal of excess materials</p>	<ul style="list-style-type: none"> <li>Utilization and disposal of excess materials will be managed in accordance with regulatory requirements.</li> <li>Subsurface environmental investigations will be conducted on properties with high likelihood to have contamination or waste and are to be affected by construction activities.</li> </ul>
<p><b>Flora and Fauna</b> Minor impacts to natural vegetation at watercourse crossings.</p>  <p>Most impacts are to occur within previously disturbed transportation rights-of-way.</p> <p>Minor displacement and disturbance of wildlife habitat.</p>	<ul style="list-style-type: none"> <li>Impacts on natural vegetation will be mitigated by restoration of any vegetation removed.</li> <li>Requirements under the <i>Species at Risk Act</i>, Ontario's <i>Endangered Species Act</i>, <i>Migratory Birds Convention Act</i>, and <i>Fish and Wildlife Conservation Act</i> will be met to mitigate any adverse effects on wildlife species.</li> <li>Measures will be incorporated, where necessary, to compensate for any harmful alteration of fish habitat and to address requirements under the <i>Fisheries Act</i>.</li> </ul> 
<p><b>Surface Water</b> The 407 Transitway will cross a total of 16 watercourses using existing, new or modified culverts/bridges.</p> 	<ul style="list-style-type: none"> <li>Erosion and sedimentation control measures to prevent the potential migration of sediments off site.</li> <li>Stormwater run-off from the 407 Transitway will be collected and treated in accordance with provincial guidelines. Stormwater quality and quantity controls will be implemented at station sites.</li> </ul>
<p><b>Groundwater</b> Potential impact to groundwater during construction</p>	<ul style="list-style-type: none"> <li>Impacts to the groundwater regime are temporary. Further hydrogeology studies will be conducted prior to construction at locations where dewatering is required and to support Ministry of Environment's Permit to Take Water applications.</li> </ul>
<p><b>Archaeology</b> A Stage 1 Archaeological Assessment identified areas of archaeological potential.</p>	<ul style="list-style-type: none"> <li>A Stage 2 Archaeological Assessment will be conducted prior to construction. Any impacts on archaeological resources will be mitigated through avoidance or salvage.</li> </ul>

# Environmental Impacts and Mitigation

Impacts	Mitigation
<p><b>Cultural Heritage</b> Two Built Heritage buildings will be displaced at GO Barrie (Concord) Station. Disturbance to one Built Heritage building during construction at Markham Centre (Kennedy) Station.</p>	<ul style="list-style-type: none"> <li>• Cultural Heritage Resource Documentation will be completed as a mitigation measure for the built heritage resources to be displaced by the 407 Transitway.</li> <li>• A Cultural Heritage Resource Study will be conducted to determine protection measures to mitigate disturbance impacts during construction.</li> </ul> 
<p><b>Property</b> Most of the 407 Transitway is located on publicly-owned lands within a provincially designated infrastructure corridor.</p> 	<ul style="list-style-type: none"> <li>• Small amounts of private property will need to be acquired through negotiation or expropriation if required.</li> <li>• Landscape planting plans will be prepared and implemented to mitigate any visual impacts and impacts to the existing vegetation communities within the study area.</li> <li>• Discussions with private landowners and local municipalities have occurred to integrate the 407 Transitway into development plans.</li> </ul>
<p><b>Infrastructure</b> The 407 Transitway will not conflict with the operation and maintenance of adjacent roadways and other infrastructure.</p>	<ul style="list-style-type: none"> <li>• The 407 Transitway will be grade-separated from highways, roads and other transit facilities to avoid conflict with existing transportation infrastructure.</li> <li>• Construction activities will be staged to avoid/minimize traffic delays.</li> </ul> 
<p><b>Air and Noise</b> Negligible changes of gaseous pollutant concentrations and greenhouse gas emissions are expected from the 407 Transitway.  The projected increases in sound levels due to the operation of the 407 Transitway do not exceed Ministry of the Environment guidelines of 5 decibels when comparing to 2031 ambient sound levels.</p>	<ul style="list-style-type: none"> <li>• Best management practices will be implemented to prevent the potential release of dust and other airborne pollutants during construction.</li> <li>• Trees or solid barriers at least 2 m high will be implemented to reduce dust impacts at nearby sensitive receptors.</li> <li>• Construction activities will adhere to local noise by-law regulations. If required, noise by-law exemptions will be obtained from the municipality where the construction activities may occur within the prohibited times.</li> </ul>

# Commitments to Future Work



- ∅ Consult with the public, property owners and stakeholder agencies (including emergency service providers) during the design of the 407 Transitway.

- ∅ Secure necessary permits and approvals for the implementation of the 407 Transitway including a determination under the *Canadian Environmental Assessment Act*.

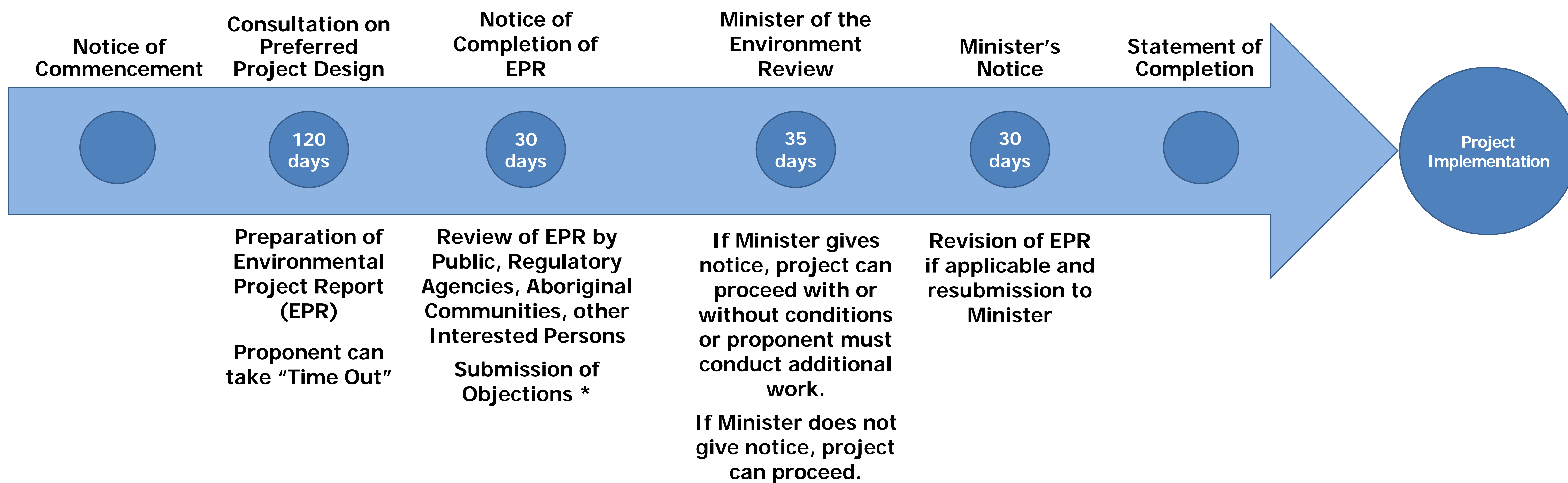


- ∅ Conduct further research and analysis to manage construction issues such as:
  - noise;
  - air emissions;
  - traffic, transit and pedestrian management strategies;
  - construction methods; utility and municipal services relocation;
  - emergency response plans; vegetation restoration, edge management and streetscape plans;
  - etc.



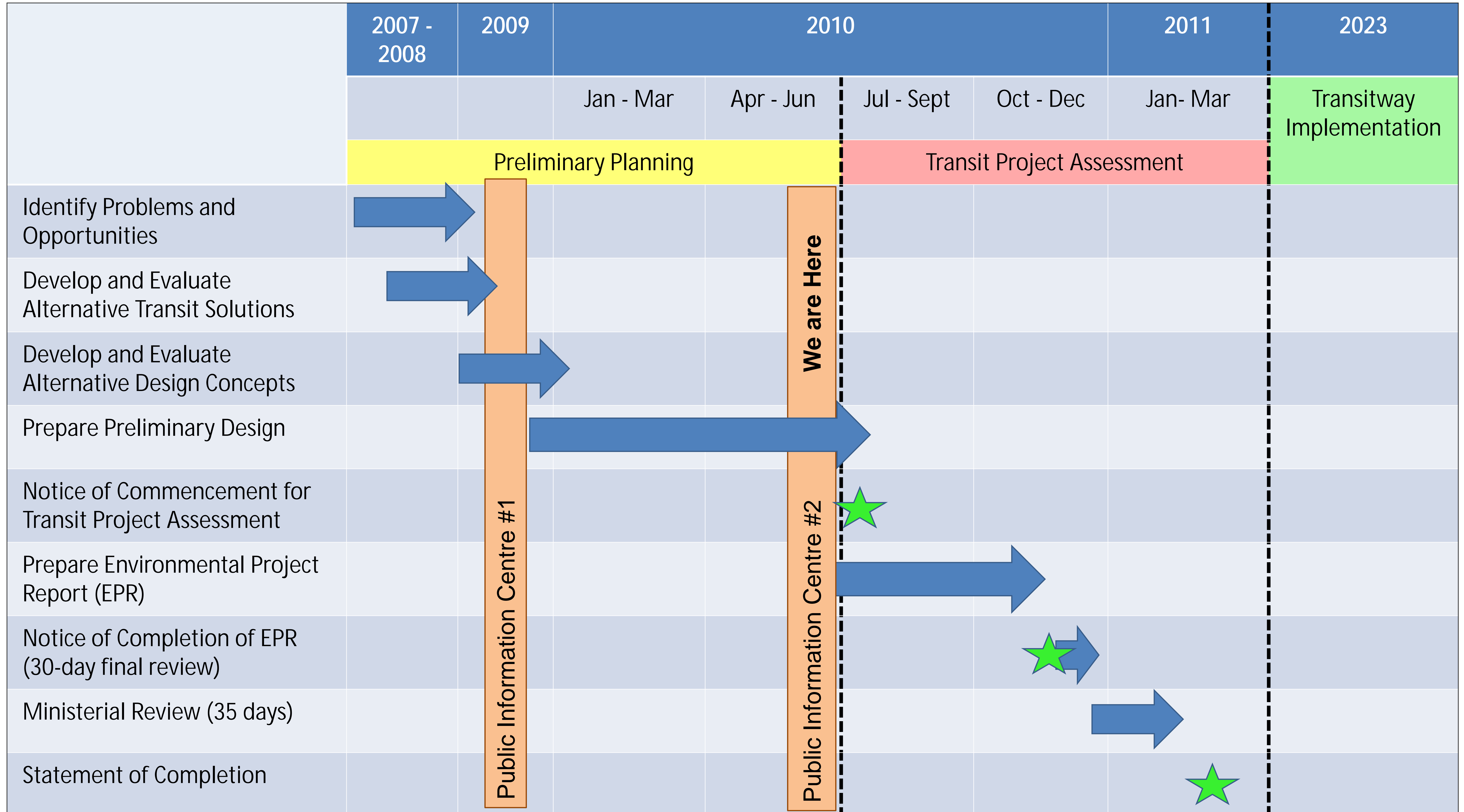
# Transit Project Assessment Process

The 407 Transitway study was initiated as a Group “A” project under MTO’s Class Environmental Assessment for Provincial Transportation Facilities (2000). The 407 Transitway was transitioned in 2009 in accordance with the *Transit Projects and Greater Toronto Transportation Authority Undertakings*, Ontario Regulation 231/08 (Transit Projects Regulation) under the *Environmental Assessment Act*. The outline of the Transit Projects Assessment Process is presented below:



\* If an objection is made, the Minister of the Environment can only act if there is a potential negative impact on a matter of provincial importance relating to the natural environment, or cultural heritage value or interest, or a constitutionally protected Aboriginal or treaty right.

# Study Schedule



# Next Steps

- Ø Input received at this PIC will be reviewed and incorporated into the study, as appropriate.
- Ø The Transit Project Assessment will be initiated shortly with the publication and distribution of the Notice of Commencement.
- Ø Once the Notice of Commencement is issued, MTO has 120 days to prepare the Environmental Project Report (EPR) and to consult with the public, regulatory agencies, aboriginal communities, landowners and other interested persons.
- Ø The Notice of Completion will be published and distributed concurrent with the release of the EPR for a 30-day final review. Objections on matters of provincial importance or aboriginal or treaty rights are submitted to the Minister at this time.
- Ø The Minister has an additional 35 days to review the project before giving notice to proceed, proceed subject to conditions or request additional studies.
- Ø MTO will submit a Statement of Completion and then proceed to detail design, implementation and construction of the 407 Transitway, subject to funding and provincial priorities.

- Ø Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*.
- Ø Comments and information regarding this study are being collected to assist the MTO in meeting the requirements of the *Environmental Assessment Act*. This material will be maintained on file for use during the project and may be included in project documentation. With the exception of personal information, all comments will become part of the public record.
- Ø You are encouraged to contact the project team if you have questions or concerns regarding this study.