

# 1. INTRODUCTION

Provincial and municipal land use plans have identified the importance of transit infrastructure to support the development of land use patterns that promote long term economic prosperity by providing for an efficient, cost effective, reliable transportation system that is integrated with adjacent systems and those other jurisdictions and is appropriate to address expected growth.

Due to the rapid rate of development in the Highway 407 corridor between the City of Mississauga and the Town of Markham, the MTO recognized the need to review the protection of land for transit in the corridor. This would ensure the opportunity to provide a self-contained, high-speed east-west transit service along the corridor with relatively little impact and costs. Subsequently, a study conducted by MTO concluded that a ROW for a separate fully grade separated transitway should be protected in the Highway 407 corridor.

The primary objective of the 407 Transitway is to foster and support sustainable travel behaviour and a more compact urban structure in the GTA. In this regard, the 407 Transitway is an integral element of the Growth Plan with the following attributes:

- In its final form, the 407 Transitway would transform the existing predominantly Toronto centered radial system of high-order regional transit facilities into a network configuration, thereby expanding travel choices as well as reinforcing the utilization of the existing system; and,
- It reinforces the emergence and development of mixed use UGCs in the vicinity of the Highway 407 corridor, mostly comprised of office, retail and institutional elements.

A primary focus is to enable transit centre opportunities through the provision of transit areas where the possibility to transfer to other transit facilities is facilitated.

The specific objectives of this study are to design the 407 Transitway, maintenance facilities and stations to accommodate an initial bus service with provision for future conversion to LRT, including local bus access to and egress from the stations, platforms, access to/from the adjacent arterial road, parking, PPUDO, buildings, shelters and other miscellaneous amenities.

## 1.1 Study Process

A Planning, Preliminary Design and EA Study was initiated by MTO for the 407 Transitway from east of Highway 400 to Kennedy Road, a distance of 23 km. This project was initiated as a Group "A" project following MTO's *Class Environmental Assessment for Provincial Transportation Facilities (MTO 2000)*. Later, a decision was made to transition the EA process to the TPAP following the *Transit Projects and Greater Toronto Transportation Authority Undertakings Regulation, Ontario Regulation 231/08, June 2008*. As a result, this EPR documents the TPAP for the 407 Transitway.

The study area is located within the City of Vaughan, Town of Richmond Hill and Town of Markham in York Region. The study area is also located within the province's Parkway Belt West Plan, which is a multi-purpose

corridor from Burlington to Oshawa providing ROW for freeways, regional transit, electric power transmission lines, utilities and public open space.

This project involves constructing a separately dedicated running way for transit vehicles, a maintenance and storage yard, and seven stations within the project limits: Jane Station, GO Barrie (Concord) Station, Bathurst Station, Yonge Station, Leslie Station, Woodbine/Rodick Station and Kennedy Station. Subject to the outcome of the TPAP, the 407 Transitway will be implemented initially as a BRT with the opportunity to convert to LRT in the future. The project limits are presented in **Figure 1-1**.

**Figure 1-1: Study Area**



## 1.2 Transit Project Assessment Process (TPAP) (2008)

The 407 Transitway study is being carried out under the new TPAP. The new process was approved by the Government of Ontario in June 2008, based on the new regulation named *Transit Projects and Greater Toronto Transportation Authority Undertakings, Ontario Regulation 231/08 (Transit Projects Regulation)* for undertaking transit-related projects in the GTA. The Transit Project Regulation provides a framework for an accelerated, focused assessment and consultation process for completing the assessment of potential environmental impacts of a transit project, so that decision-making can be completed within six months.

A Guide for the study process was released by the Ministry of the Environment (MOE) in March 2009 to highlight the key features of the new process. A summary of this new process is provided in the following section and an outline of the TPAP is provided in **Figure 1-2**.

One of the objectives of this rapid transit project was to maximize inter-regional transit connectivity and provide connections to future gateways. The 407 Transitway was identified as a future inter-regional transit corridor and regarded as a positive attribute to the overall project.

#### 1.3.2.11 407 West Transitway Corridor Protection Study (2005)

The purpose of this study was to examine the need and feasibility of redesigning and locating the transitway adjacent to Highway 407. The transitway was evaluated with the capability of implementing a busway or LRT technology. The study area was the Parkway Belt West Corridor from Highway 403/407 interchange in the City of Mississauga to the Freeman Interchange in the City of Burlington.

The study defined property required and to be protected for the Transitway including alignment, station locations, parking, access to municipal roads, SWM ponds, and vehicle operations and maintenance facilities. The conceptual design configuration for the 407 West Transitway was intended to facilitate planning for integration of local transit services with the Highway 407 inter-regional transit system. The study determined:

- potential peak direction/peak hour transit demand in 2031;
- the need to protect the 407 West corridor for an exclusive transitway; conceptual transit operations; and,
- potential implementation strategies.

These results formed the basis for transitway design criteria for BRT and LRT technologies. Using the proposed criteria, transitway alignment alternatives were investigated leading to a recommended ROW alignment. As a result of the recommended ROW future steps included an amendment to the Parkway Belt West Plan to designate inter-regional transit in the corridor and a future commitment to consult with the Ministry of Infrastructure (MOI) to ensure that transit facilities are protected within the Greenbelt Plan 2005.

#### 1.3.2.12 Highway 407 Transitway Implementation Study (2006)

This study outlined a strategy for the staged implementation of the 407 Transitway. Criteria for the evaluation and identification of alternative segments for the transitway included:

- direct support of one or more of the Growth Plan UGCs along the corridor;
- potential transit ridership;
- connectivity with one or more GO Rail lines;
- connectivity with two or more 400-series corridors;
- opportunity for commuter parking/carpool lots;
- opportunity for connection with surface transit services; and,
- adequate length to be viable as a stand-alone entity.

Following detailed evaluation, the Highway 400 to GO Unionville (Kennedy Road) segment of the 407 Transitway was carried forward as the most suitable high priority segment. Other potential high-priority standalone stations identified along the Highway 407 corridor included Bronte Road, Trafalgar Road, Highway 10, Airport Road, Jane Street, Keele Street and Markham Road.

### 1.3.3 Related Transportation Plans/Studies/Projects

#### 1.3.3.1 York Rapid Transit Plan

The YRTP (2002) is a result of recommendations made by the York Region Transportation Master Plan (2002) identifying the need to expedite the development of a rapid transit network in the region. Four corridors were considered: Yonge Street, Highway 7, Vaughan North-South Link and Markham North-South Link.

Currently, this plan has resulted in the implementation of the first phase of the rapid transit service (YRT/Viva) with queue-jump and transit priority measures on the four corridors. Future plans involve implementation of the service in separate ROW and ultimately conversion to LRT if required. The effect of the close proximity of the parallel Highway 7 YRT/Viva services is of critical importance to the potential effectiveness of this project's 407 Transitway segment.

#### 1.3.3.2 GO 2020 Plan

GO Transit's vision is to be the preferred choice for interregional travel in the GGH. The *Metrolinx Regional Transportation Plan (2008)* and *GO 2020 (2008)* refers to a strategic plan which commits to meeting the region's interregional transportation needs, consistent with the Growth Plan and Metrolinx's RTP. Together, GO 2020 and Metrolinx 's RTP provide the basis for GO Transit's 10-year capital program, three-year operating plan, and annual business plans and budgets. The Master Plan identifies increased service on the Barrie, Richmond Hill and Stouffville lines within York Region. This enhanced service would consist of up to five peak period trains combined with all day train-bus service. An extension of this is the possibility of offering all-day rail service on the three corridors. Grade separations have been completed on the Stouffville Line (Hagerman Diamond – completed in 2008) and Barrie Line (Snider Diamond – completed in 2007). The improvements to service and infrastructure of GO Rail lines and connectivity with the 407 Transitway have the potential to increase the effectiveness and efficiency of the inter-regional transit system in the province.

#### 1.3.3.3 York Region Transit Five-Year Service Plan

The objective of the YRT/Viva Five-Year Service Plan (2001) was to significantly improve transit connections and the quality of transit service in order to attract new users to transit and increase the modal share of intra- and inter-regional travel.

The two general transit travel needs outlined were travel to and from major destinations within York Region and travel to and from the City of Toronto (including high-demand destinations like York University and Seneca College as well as connections with TTC and GO Transit). The most notable transit service deficiencies in York Region included infrequent service on grid routes (usually resulting in poor transfer connections), no off-peak service on several core routes, no continuous service on Highway 7, and a lack of integration between Yonge Street GO Transit bus services and local bus routes.

As one of the proposed strategies in dealing with current deficiencies, the plan indicated that the Highway 7/407 corridor along with the Yonge Street corridor should be designated as "super corridors". These would function as the two backbones of the regional route network and will have a high level of both local and limited-stop express