

EXECUTIVE SUMMARY

HURONTARIO/MAIN STREET MASTER PLAN REPORT



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This report documents a Master Plan for the Hurontario / Main Street corridor within the City of Brampton and the City of Mississauga, integrating planning for rapid transit, intensified land use and enhanced urban design. This project has been fundamentally about city-building along this important corridor – creating a “main street” for the 21st century, where people can live, work and play in a highly sustainable and active way.

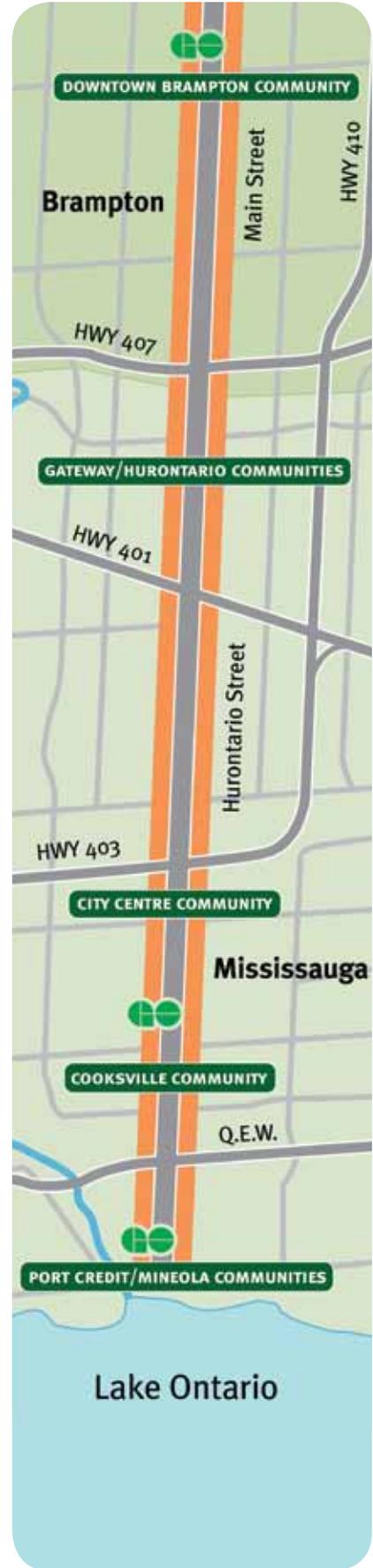
The Hurontario/Main Street Corridor will link the Urban Growth Centres, as designated by the Province’s Places to Grow initiative, while traversing five Mobility Hubs – which are identified locations for future inter-regional transit connections and enhanced transit-oriented development, as defined by the Big Move (The Metrolinx Regional Transportation Plan). The corridor has a distinctive urban character that varies from stable residential communities to areas with great potential for intensification and/or redevelopment. The cities can capitalize on opportunities throughout the Corridor, through a comprehensive and bold planning framework.

The Corridor is a logical focus for both Cities to invest in infrastructure and design. The two Cities envision the plan for Hurontario/Main Street as a critical city-building initiative that will help them remain socially, environmentally and economically sustainable and competitive.

When you design your city around cars...you get more cars.

When you design your city around people...you get more people.

— Fred Kent, *Project for Public Space*



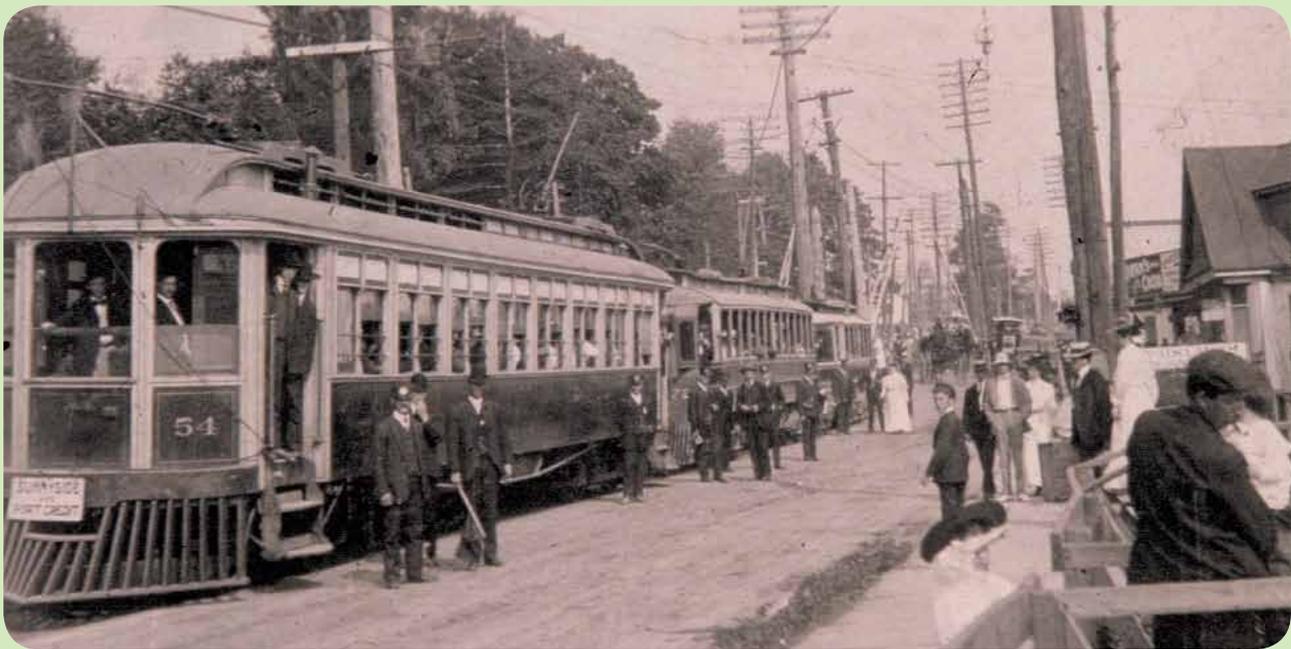
Hurontario/Main Street

This vision is supported by Metrolinx and the Province, positioning the Corridor for high-density, pedestrian and transit friendly development in targeted areas with higher order rapid transit as the first priority for infrastructure investment.

The Cities of Mississauga and Brampton are now significant urban centres within the Greater Golden Horseshoe Area (GGHA) with a combined population of

close to 1.5 million people and an employment base of nearly 587,000.

The two municipalities are expected to grow in population by nearly 400,000 people and add nearly 250,000 jobs by 2031. Of that, nearly 100,000 people and 50,000 jobs will be located in the area immediately surrounding the corridor. The proposed densities are aimed at making the Corridor an urban, vibrant and pedestrian friendly street.



Historically it is worth noting that the Port Credit area was served by streetcars until 1930, and this project represents an opportunity to re-introduce light rail-based transit in the Corridor.



The Vision for the Corridor – a 21st Century Main Street

The vision for the Corridor has been developed through a multi-disciplinary analysis of transportation, land use and urban design that included consultation with staff, stakeholders and the public. The vision is fundamentally one of city-building and sustainability, centered on rapid transit as a key mode of travel on a beautiful street.

Three key statements articulate the vision:

- Easy, reliable, frequent, comfortable and convenient rapid transit service is provided throughout the corridor, with effective connections to other links in the inter-regional transit network;
- Hurontario/Main Street is a beautiful street, with attractive places along the corridor featuring expanded mobility, vibrant economic activity, and livable, connected, mixed-use neighbourhoods, integrated with the transportation infrastructure; and
- The Regional Urban System and the planned urban structure of each City are recognized and reinforced, and accordingly, mixed-use, compact, Transit Oriented Development is present along the corridor, customized to suit the varying and distinct nature of each existing community and sensitive to the presence of adjacent stable neighbourhoods.



Guiding Principles

Building on the vision, a set of Guiding Principles was developed to focus the development of a sustainable transportation solution along the Corridor:

1. Maintain the focus on the “big picture”
2. Make it sustainable and integrated
3. Support transit through built form and densities
4. Put pedestrians first
5. Plan for development that is compact and complete
6. Facilitate multimodalism
7. Create connectivity
8. Focus on place-making
9. Ensure that the plan is both visionary and attainable
10. Protect stable neighbourhoods

Transportation Plan

The Alternatives

A high-level screening was undertaken to assess the broad range of rapid transit technologies that would be suitable in the corridor. The technologies that were assessed ranged from at-grade LRT and BRT to grade separated (above or below grade) technologies such as subways, monorail and automated guided transit.

Transit options located at-grade within the existing corridor right-of way are appropriate in terms of being supportive of the corridor vision; this allows a direct connection between the transit service and pedestrian environment, maximizing the potential for transit ridership and connectivity. At-grade options are also appropriate for the projected demands. Grade separated technologies such as subway are not warranted given the projected demand.

The following four alternatives were tested to evaluate and establish the preferred technology for Hurontario/ Main Street.

Make no little plans; they have no magic to stir men's blood...

— Daniel Burnham, *American Architect and Urban Planner*

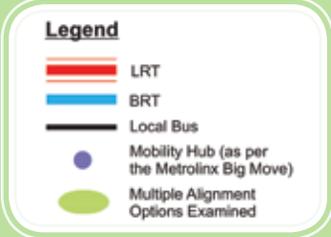
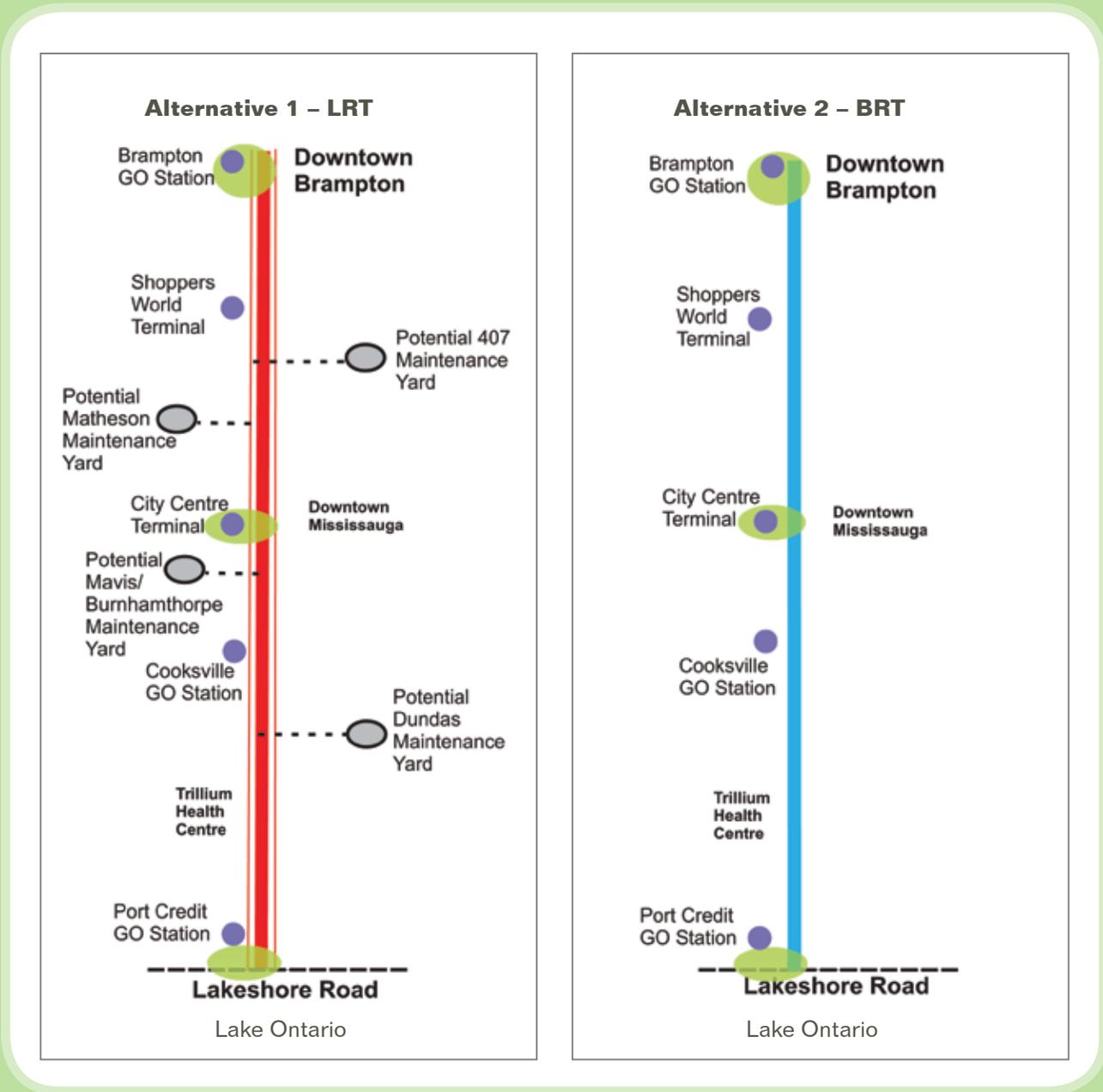


LRT: Phoenix, USA

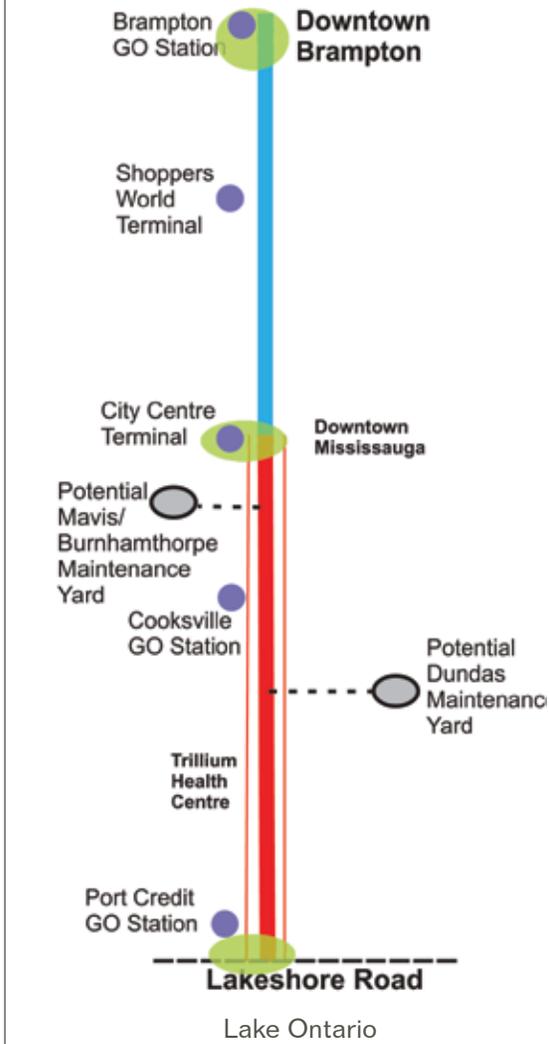


BRT: Cleveland, USA

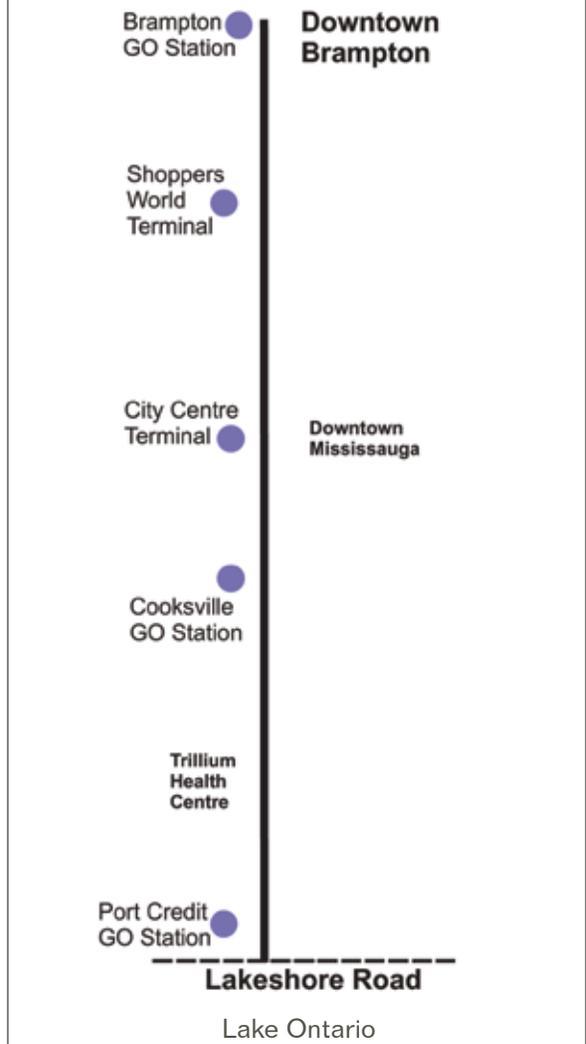
**Figure ES.1:
Corridor Rapid Transit Alternatives**



Alternative 3 – BRT/LRT Split



Alternative 4 – Do Nothing



Legend

-  LRT
-  BRT
-  Local Bus
-  Mobility Hub (as per the Metrolinx Big Move)
-  Multiple Alignment Options Examined



Each of these technology options were analyzed to gauge their effectiveness for transit ridership and community building along the Hurontario/Main Street Corridor. This analysis included an evaluation based on the following criteria:

- **Transit Capacity and Operations** – Ridership demands for each technology option were projected through the use of an EMME/2 transportation model for the entire GTHA. Based on these projections, the technologies were evaluated on their potential for generating ridership, and their capacity to accommodate this ridership in terms of vehicle capacity and operating frequency;
- **Social Effects** – The potential for each technology to contribute to city building, increase connectivity between destinations on the corridor, enhance the pedestrian realm and fit into the character of existing neighbourhoods along the corridor;
- **Environmental Effects** – Each technology’s impact on the surrounding environment, including air quality, impact on nearby water bodies, and energy use; and
- **Economic Effects** – The capital and operating costs of each technology, as well as the potential for stimulating development and increasing property value along the corridor.

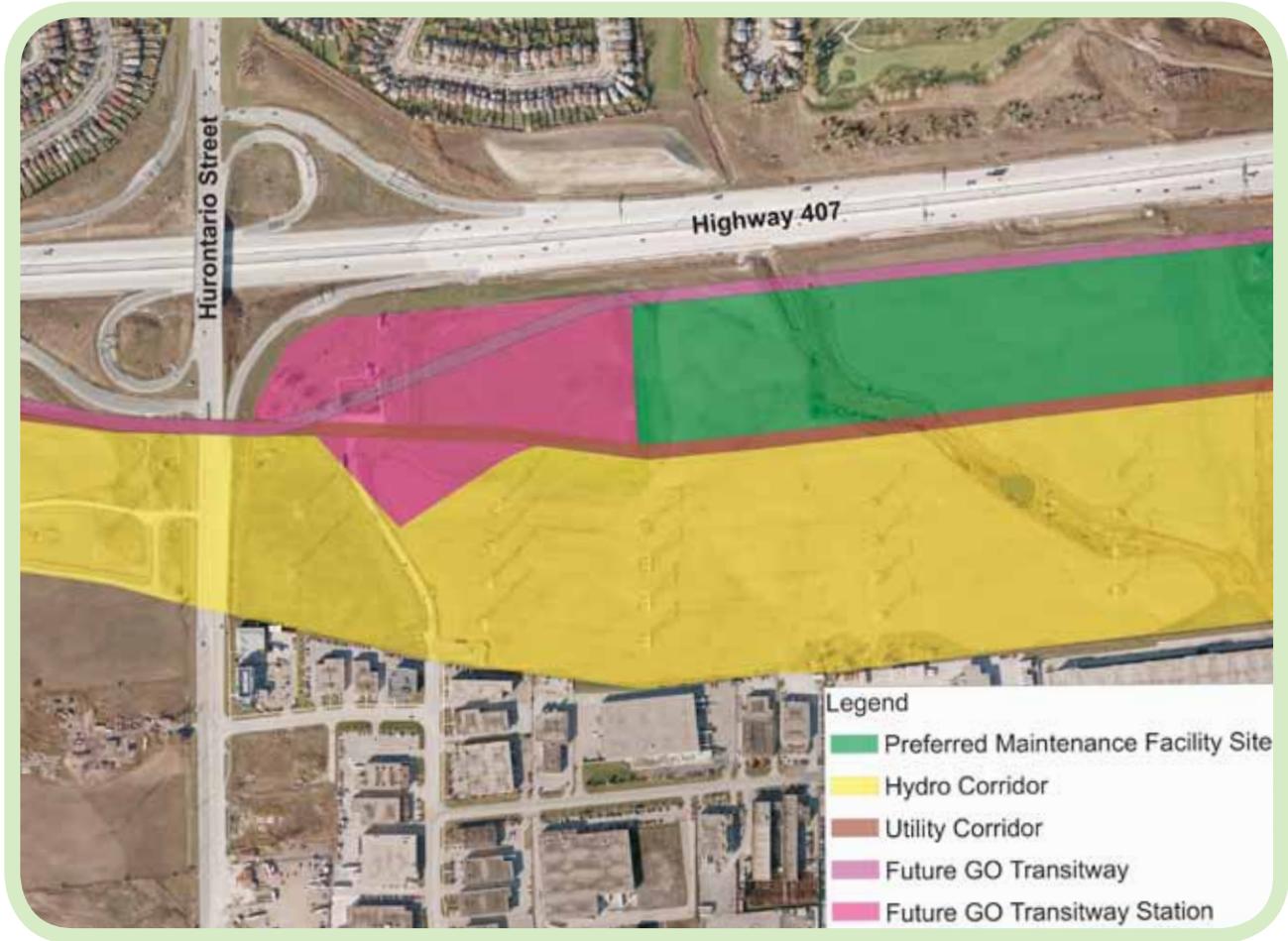
The Plan

The recommended transportation solution, developed in close consultation with residents and stakeholders, supports the vision of an 'easy, reliable, frequent, comfortable and convenient rapid transit service throughout the corridor'. The major elements of the preferred solution include:

- Light Rail Transit along Hurontario Street between Downtown Brampton and the Port Credit waterfront that moves more people, faster and more efficiently;
- Local transit services operating on Hurontario Street rerouted as feeders to serve the proposed LRT;
- Use of innovative technologies, such as transit signal priority, that improve the speed and reliability of transit operations along Hurontario Street;
- Conversion of the existing six-lane cross-section segments to four lanes for auto use and two reserved transit lanes. Segments of Hurontario Street that are currently four lanes will have the LRT operate in shared lanes, in the Main Street South Heritage Area in Brampton and in Mineola in Mississauga; and
- A maintenance/storage facility to be located in the southeast quadrant of the junction of Hurontario Street and Highway 407, on lands owned by the Ontario Realty Corp.



Figure ES.2:
Proposed LRT Maintenance and Storage Facility Site



**Figure ES.3:
Preferred Corridor Concept**

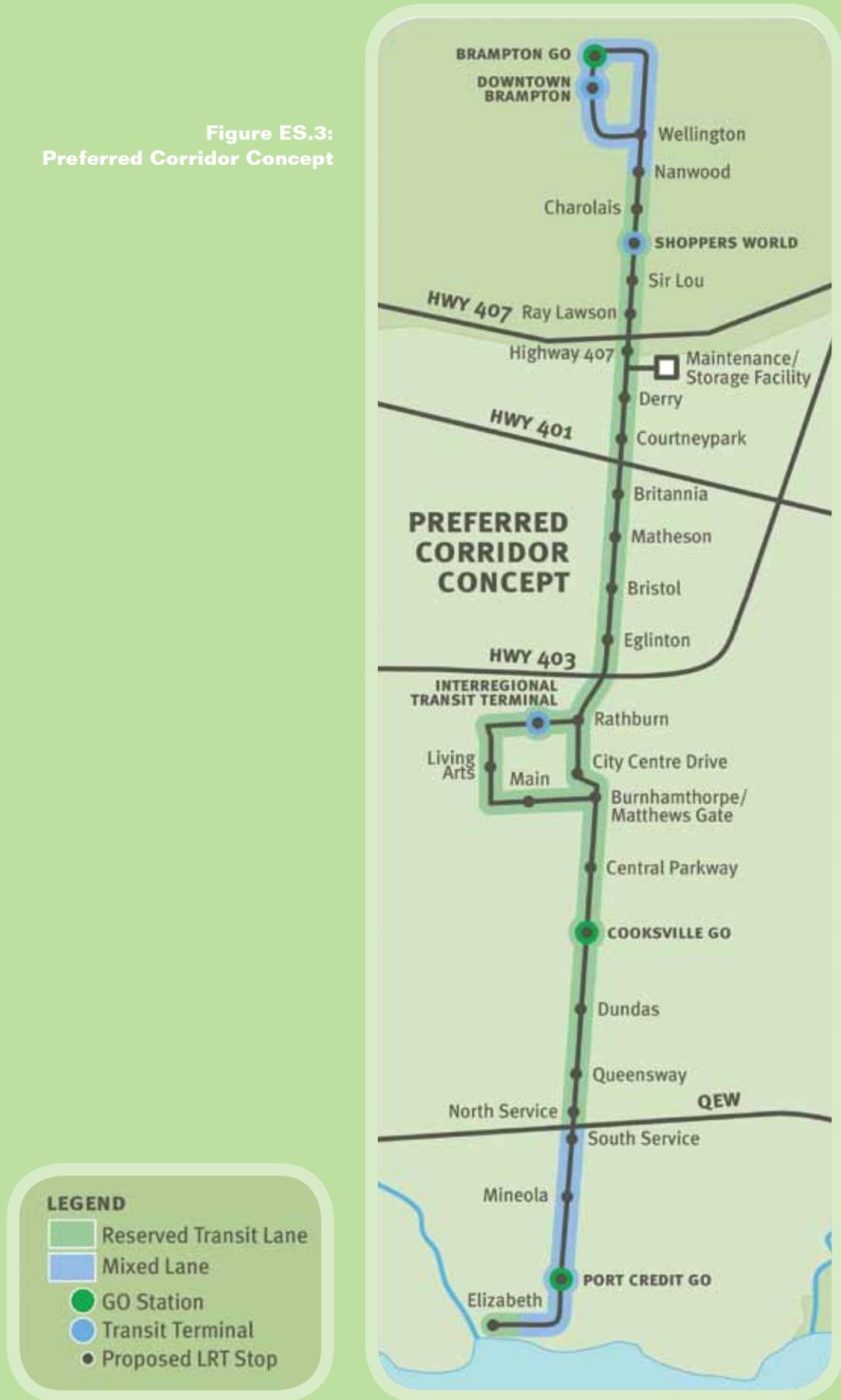




Figure ES.4:
Proof of Concept for Downtown Brampton



Figure ES.5:
Proof of Concept for Downtown
Brampton

Downtown Brampton

The LRT line will operate in mixed traffic (sharing the lane with other vehicles) in Downtown Brampton due to the limited right-of-way available on the streets and the goal of minimizing disruption to the built environment.

Analysis of the road network, transit access opportunities and development in Downtown Brampton identified three potential routing options for the LRT. The recommended option involves the LRT operating as a one way loop that includes Wellington and George Streets, then passing through a new tunnel under the CN rail corridor, and returning to Main Street north of the rail corridor. This alignment connects the LRT to the Georgetown GO rail service, the Brampton Züm BRT services and other Brampton bus services.

Downtown Mississauga

A two corridor system was chosen to provide more flexibility for the operator and for riders. The two corridors allow the implementation of service plans with alternate vehicles either passing directly through or circulating around downtown. Of all the assessed LRT routing options to serve downtown Mississauga, the preferred option is based on factors including integration with the Transit Terminal, traffic operations and integration with development, as shown in the figure below.

The plan includes functional designs for each road. Options for crossing Highway 403 have been identified; these are to be studied further in the next project phases in conjunction with the Ontario Ministry of Transportation, to define a preferred option.

It is recommended that the LRT line operate in reserved lanes throughout downtown Mississauga, in keeping with the fundamental goal of “putting transit first”, an essential objective in attracting “choice” riders (i.e. riders who choose transit over their private car).



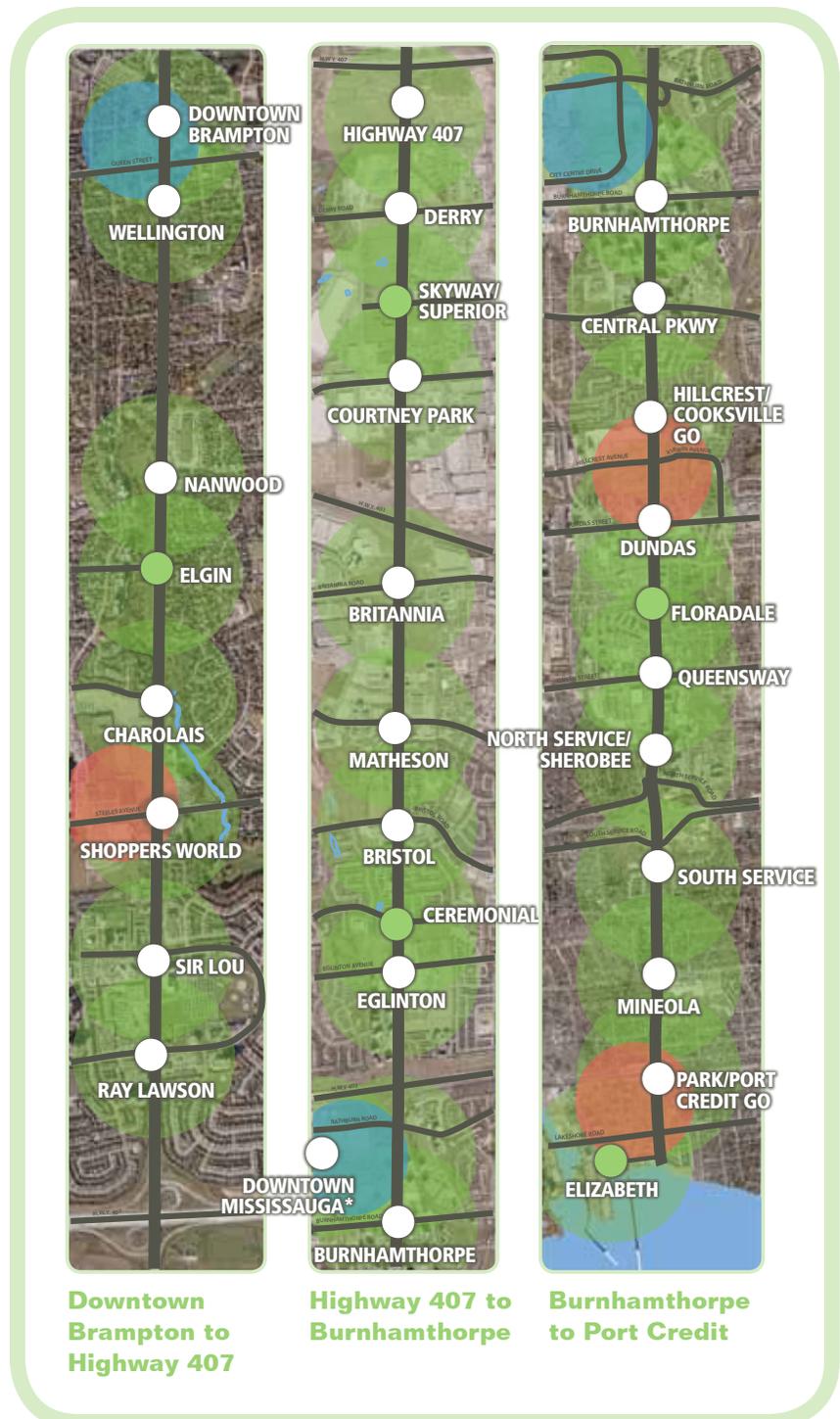
Infrastructure

32 stations are planned along the LRT route, serving major employment and residential centres. The station locations were based on a number of factors, such as:

- A maximum walking distance of 500 metres or a 10 minute walk;
- Connection to east/west transit services;
- Location of the Metrolinx Mobility hubs, both anchor and gateway hubs;
- Connection to GO Rail services at the Brampton, Cooksville and Port Credit Stations;
- Current and planned development patterns; and
- Public input.



Figure ES.6: Proposed Transit Stops



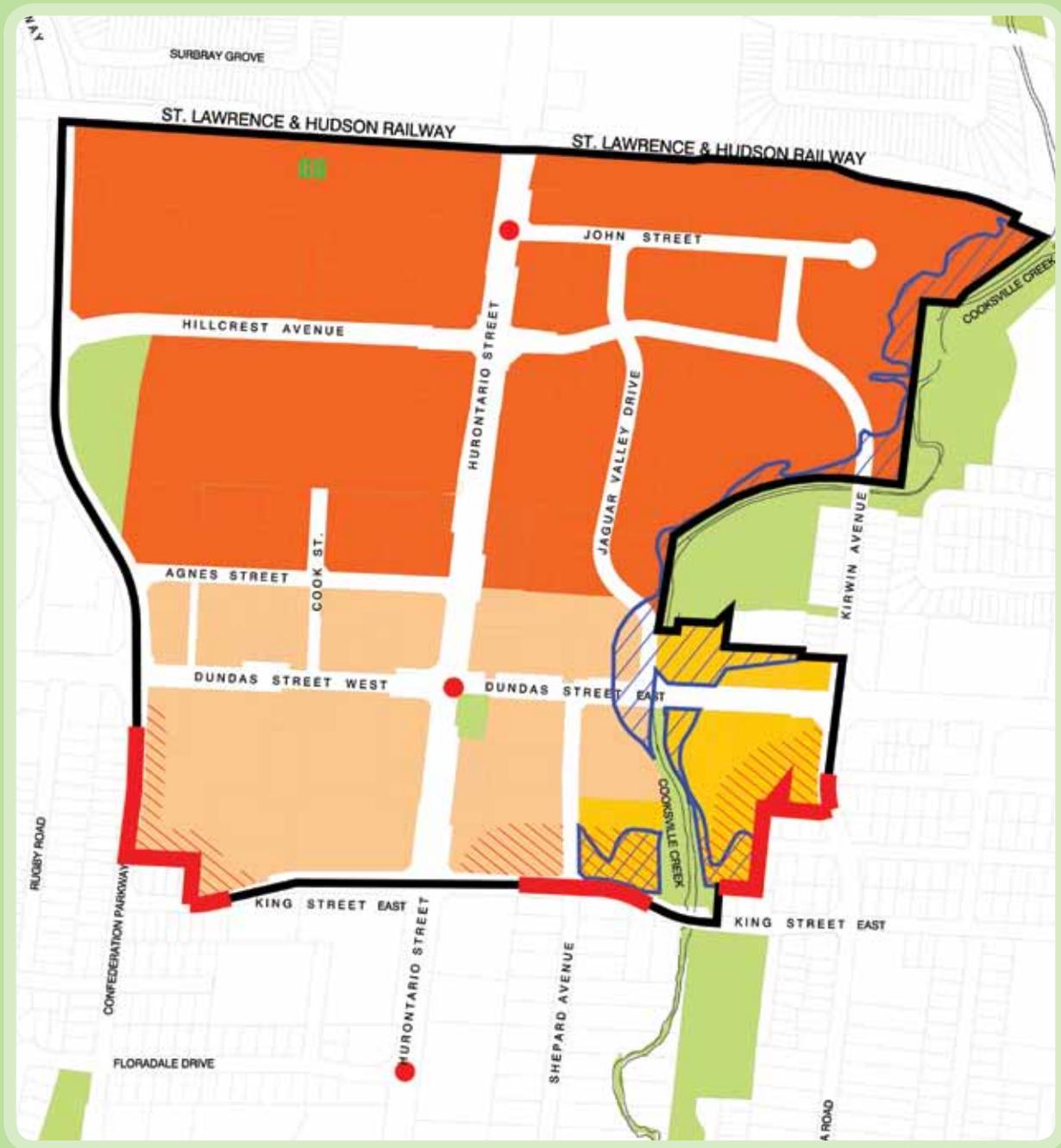


Figure ES.7:
Proposed Height and Density in Cooksville



Planning and Urban Design Strategy

In order to realize the vision of the Corridor and adhere to the guiding principles, the Master Plan includes a planning and urban design strategy based on a transit-supportive land use and design framework. The intent is to guide the public and private sectors to a level of design excellence, while at the same time incrementally building toward the long term vision.

It is imperative that the Cities adopt a planning and urban design strategy that facilitates and encourages the best designs in buildings, streetscapes and landscaping.

The key ideas and concepts that inform the policy framework are listed below:

- A vibrant and healthy mix of uses, all located within close proximity to each other;
- Higher density nodes centered around the major transit stations;
- Pedestrian-friendly streets and neighbourhoods;
- Active main streets with retail uses at grade and continuous street walls;
- An interconnected network of open spaces and local street network;
- On-street parking or structured parking to replace surface lots;
- Protecting stable neighbourhoods;
- Protecting and preserving natural areas;
- Providing for phased development;
- Cycling as an integral transportation option; and
- Place making to create memorable and unique places.

The strategy has been designed so that each City can implement it specifically tailored to their jurisdiction.



Urbanism works when it creates a journey as desirable as the destination.

— Paul Goldberger, *Architecture critic for the New Yorker*,
Author, Educator

Phasing

In addition to the planning and urban design strategy, a number of additional strategies addressing complementary modes, safety and travel demand management need to be implemented to further the benefits of higher order rapid transit along the Corridor, such as:

- Pedestrian Strategy
- Cycling Strategy
- Transportation Demand Management Strategies
- Neighborhood Traffic Management
- Access Management

The Hurontario LRT initiative is identified as a Quick-Win in The Big Move. These quick wins are positioned as early, foundation investments to support the Move Ontario 2020 vision and to achieve tangible customer benefits within a short time frame. They are also expected to demonstrate the ability of Metrolinx, the Province, municipalities and transit agencies in the region to work together and agree to a shared set of initial high-impact priorities. The transit ridership forecasted by the Hurontario travel demand model indicates that a LRT is warranted for the entire length of the Corridor by 2016. However, the phasing is dependent on a number of key external factors, such as:

- Construction feasibility;
- Operational considerations;
- Multi-agency cooperation;
- Funding; and
- The risk associated with the successful implementation of other major transit initiatives that traverse the Corridor.





Business Case Assessment

It is anticipated that the first phase of the LRT line will be anchored to the proposed maintenance facility, linking to the major transit terminal at Steeles Avenue in the north and both Urban Growth Centres. A detailed phasing plan will be completed as part of the next stage of this study where LRT service is projected to be operational throughout the entire length of the Corridor by 2021.

A business case assessment has been completed for the LRT and BRT-based options. This assessment followed the Metrolinx methodology, encompassing social, environmental and economic factors. A detailed analysis indicated a preliminary capital cost estimate for the LRT between \$925 Million and \$1.15 Billion.

Benefits for the LRT are likely to exceed those for BRT for three out of the four accounts used in the evaluation (transportation, environmental, economic). This conclusion is corroborated by the review conducted of numerous case studies in North America and Europe. LRT has been found to provide a degree of certainty in transit investment that is generally very attractive to the development community, and hence results in marked economic uplift.

Study Process: A Class Environmental Assessment Master Plan



This study has been conducted as a Class Environmental Assessment (EA) Master Plan, in accordance with the Municipal Class Environmental Assessment process. It addresses the first two of the five phases of the Municipal Class EA document. The five phases of the EA process are listed below:

- Phase 1: Identify the problem or opportunity statement
- Phase 2: Identify alternative solutions
- Phase 3: Examine alternative design concepts for the preferred solution
- Phase 4: Prepare Environmental Study Report
- Phase 5: Implementation

The implementation of the LRT line is conditional on the completion of the next two phases (Phase 3 and Phase 4) of the EA, or the undertaking of the Transit Project Assessment Process. It is recommended that the Municipalities of Brampton and Mississauga proceed with the six-month Transit Project Assessment Process to complete the Environmental Assessment process. The primary advantages are the streamlined approval process through the assigned Director from the Ministry of the Environment, and the overall six-month time limit, which includes a maximum 35-day review period by the Minister of the Environment.

Public Consultation

An extensive public consultation plan (PCP) was implemented during the course of this study, to meet the requirements of the Class EA process and to ensure the solution was vetted with the various communities along the corridor. The main components of the PCP included:

- Notice of Project Commencement
- Three rounds of Public Information Centres (one per City in each round)
- Community Workshops
- Stakeholder Symposium
- External Liaison Committee
- Cable TV Spots
- Ratepayer Association Updates
- Electronic Media
- Newsletters

Throughout the study, the public and stakeholders provided input to the Corridor vision, alternatives and trade offs, in order to identify opportunities and constraints for transit, traffic, land use and urban design unique to their communities and the Corridor itself. Over all the three stages, their comments were generally supportive of the plan for rapid transit and evolution of the Corridor. They provided inputs on defining existing conditions, vision concepts, and the final articulation of the functional plan for LRT throughout the Corridor. All the comments are summarized in the main report.



Workshop, October 2008



Stakeholder Symposium, November 2008



Public Information Centre, March 2010

