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Executive Summary

Introduction

To meet increasing parking demand, GO Transit has added an average of 2,500 new parking spaces annually at its rail stations over the past ten years. In total, GO Transit operates 65,000 parking spaces at its rail stations, making it one of the largest parking operators in North America. Despite these significant expansions, there continues to be parking pressures at many stations. Metrolinx has developed the GO Transit Rail Parking and Station Access Plan (the Plan) to:

- **Enhance the customer experience:** parking-related issues are the second most common customer complaint (after ‘crowding on trains’);
- **Support ridership growth:** strategic parking investment and expansion is needed to support future service improvements, including two-way, all day service;
- **Manage demand for new parking:** reduction in automobile mode share for station access, particularly single occupant vehicles, is needed to lower the demand for new parking;
- **Support transit-oriented development:** stations across the system have been identified as Mobility Hubs, or areas with higher development potential;
- **Promote cost effectiveness:** value for money must be ensured to maintain cost to revenue efficiency, with consideration for the current environment of fiscal constraint; and
- **Further align policy:** GO Transit parking policies will align with direction from The Big Move, GO2020, and the Mobility Hub Guidelines.

The Plan considers parking at GO Transit rail stations only. However, it is anticipated that the majority of guiding principles and policies would remain applicable to other GO Transit parking facilities. The Plan does not consider the application of fare and parking pricing to change travel behaviour.

The development of the Plan has been informed by extensive policy and technical analysis to assess station access patterns and to develop the business case for the Plan’s recommendations. Engagement with municipalities, local transit agencies and other provincial stakeholders formed a key stage in the development of the Plan.

Metrolinx and GO Transit policies are supportive of increasing GO Transit rail ridership, and all relevant regional, local and provincial policy are supportive of improving station access by ‘other’ modes such as walking, cycling, local transit, carpooling, Kiss & Ride, taxis, and low carbon vehicles. While existing Metrolinx policy guides certain aspects of the approximately $100 million (2012/13 estimate) capital investment in parking each year, further analysis and direction is required, particularly for parking expansion.

GO Transit rail ridership is forecast to grow by 43% in AM peak demand from the 2011 to 2021, including midday and ‘counter flow’ demand; and by a further 12% between 2021 and 2031. On-board rail capacity is unlikely to be a limitation to ridership growth once two-way, all day services are operational along all corridors; however, station access, including parking capacity at stations, is a potential constraint to achieving the forecasted level of ridership.

Across the network, approximately 60% of GO Transit customers drive to their home station, the majority of which arrive in single occupant vehicles, with significant variation in alternative access modes between stations with significant variation in access modes between stations. Historically, there has been a close link between the provision of parking
and the growth in GO Transit rail ridership (see Figure 1 below). In 1999, there were five parking spots for every ten daily riders. In 2012, capacity has been increased to approximately seven spots for every ten riders. At current parking supply rates and assuming current mode share, GO Transit would need approximately 35,000 to 40,000 new parking spaces across the network to support the anticipated ridership growth to 2031.

**FIGURE 1**

**GO TRANSIT RAIL PARKING SUPPLY AND RIDERSHIP GROWTH**

Over 50% of station parking lots are at or near capacity, and as a result, the amount of time it takes riders to find a parking spot, as well as levels of illegal parking, are going up. Increasing parking demand will impact the local road network and lengthen egress times from stations. These challenges put GO Transit’s strong customer value proposition, as outlined in *Our Passenger Charter*, at risk.

Parking expansion is becoming increasingly challenging due to limited land availability, leading to the development of more expensive parking structures at some stations, which carry higher operating and rehabilitation costs. Depending on land values and the density of the surrounding ridership catchment, the provision of transit services and active transportation modes, can provide a more cost effective means of providing station access.

The local and regional policy context, Metrolinx’s programs, views of municipal and provincial government stakeholders, and best practices of comparable jurisdictions demonstrates the need for investment in, and promotion of, other modes of station access. GO Transit rail station access patterns have demonstrated that the main factors for use of other modes are proximity to stations, high parking utilization, and the quality of local transit and walking infrastructure. A recent survey of over 3,000 GO Transit rail customers identified that approximately a third of all riders who drive and park at their home station would welcome finding other ways of accessing GO Transit.

**GO Transit Rail Parking and Station Access Policy Statement**

The GO Transit Rail Parking Policy Statement directs decision making and investment in parking facilities to demonstrate value for money, integration with local and regional land use objectives, and alignment with customers’ needs, including
the development and improvement of other modes of station access. Delivery of the GO Transit Rail Parking and Station Access Plan will support the economic, environmental and social goals of Metrolinx/GO Transit’s principal policy documents, including all-day, two-way rail services, the opening of new stations, extensions of the rail corridors, and the development of Mobility Hubs.

Vision

GO Transit rail parking and station access will be planned and delivered in an integrated, sustainable and financially efficient manner to grow ridership, enhance all customers’ experience and safety, and reduce the dependency on single-occupant vehicles.

Parking will be planned, delivered, and managed in collaboration with key local and provincial partners to support transportation and land use objectives for increasing the economic competitiveness of the GTHA, improving the quality of life of local communities, and contributing to the region’s environmental sustainability.

Guiding Principles

1. **A Multi-Dimensional Approach.** A system, corridor, and station level approach is required for the planning and delivery of parking and station access investments.
2. **Strategic Parking Expansion.** Parking expansion will continue to support ridership growth through strategic investment.
3. **Supporting Other Modes.** Investments will create a balance between the movement of pedestrians, cyclists, local transit and other vehicles to ensure safe and efficient movement to and through the station for all GO Transit customers, developing a modal hierarchy that prioritizes more sustainable travel behaviour.
4. **Financial Efficiency.** Investments will be subject to triple bottom-line multiple-account evaluation, including consideration of value for money using life-cycle costing analysis that includes capital, operations, and maintenance costs, as well as amortization.
5. **Working in Partnership.** On-going engagement and partnerships are required for the successful planning and delivery of the policy and associated plans.
6. **Incremental Change.** Projects resulting from the policy will be delivered incrementally in order to achieve the vision across the short term (one to five years), medium term (six to ten years) and long term (11 to 20 years).

Decision Making Framework

The planning of GO Transit rail parking and station access requires the careful integration of many factors regarding parking expansion, including:

- the form of parking expansion,
- integration of parking and station access with land use and development objectives,
- the ability for other modes of station access to meet the needs of customers and reduce the demand for single occupant vehicle parking.
- analysis of technical and financial feasibility and associated risks.

The Decision Making Framework (summarized in Figure 2) applies the GO Transit Rail Parking and Station Access Policy Statement to identify other modes of station access, necessary strategic parking forecast as well as the most appropriate parking form (i.e. surface parking, structured parking, shared parking, and parking expansion as part of joint development). The Decision Making Framework should be applied by Metrolinx as part of any station-level planning.
FIGURE 2  DECISION MAKING FRAMEWORK & SUPPORTING QUESTIONS

1a. What is the current level of rail ridership, and what is the forecast future demand?

1b. What proportion of current station access demand is met by other modes? What is the availability and potential of other modes to meet a greater proportion of station access needs of GO Transit rail riders?

1c. What potential is there for nearby stations to accommodate parking demand?

2a. What is the development potential and land use of / around the station. Is the station designated as a Mobility Hub?

2b. How much land is available?

3a. What is the cost of acquiring or leasing the land and is the option cost effective compared to alternatives?

3b. What are the local traffic and transportation impacts, and can the local road network accommodate the resulting growth in traffic levels?

3c. What are the environmental impacts?

3d. How strongly does the station plan align with local, regional and provincial policy?

4a. What support do key stakeholders provide in terms of planning and delivery?
System-wide & Corridor Strategies

The Plan also includes System-wide and Corridor Strategies, including station-level, short-term actions, pilot projects, and recommendations for implementing the Plan.

Proposed parking expansion at a system-level is presented in Figure 3 (system-wide) and Figure 4 (station-level). Beyond the 6,700 parking spaces that are planned for delivery from 2012 to 2014, the Plan forecasts between 17,500 to 24,000 new spaces from 2014 to 2032. Approximately 7,500 to 10,000 of these spaces are forecast for potential new stations, and between 10,000 to 14,000 are forecast for existing stations. This total strategic parking forecast is approximately 10,000 fewer spaces, flattening the curve of parking expansion (see Figure 3).

An active approach to managing the demand for parking is proposed through the Plan, which includes more efficient use of existing parking capacity across the network. The Plan also recommends a significant increase in investment on other modes of station access. This includes investment in new station infrastructure to improve access for customers arriving by other modes, new local transit shuttle routes and services, and a program of pilots and projects to further promote other modes of station access, in conjunction with the on-going initiatives of the Smart Commute program between Metrolinx and the region’s Transportation Management Associations.

The above recommendations support two-way, all day service and increased midday and ‘contraflow’ ridership beyond existing forecasts of rail ridership. In order to achieve the lower end of the range of strategic parking forecast, it will be necessary to deliver the recommended improvements in other modes. The Plan has a target automobile mode share of 50% for 2031. In order to move beyond this target, it is likely that additional parking demand management measures will be required.

Short-Term Corridor Plan – 1 to 5 years

Proposed parking expansion is highest in the short-term to address immediate and increasing parking pressures. At the same time, improvements to station infrastructure for other modes of station access is required. It is recommended that funding be planned for improving transit connections to GO Transit rail services, as well as delivering improvements to station infrastructure, including walking and cycling facilities, and transit, kiss and ride and auto access/egress areas. A high number of riders live within short distances of stations along each corridor, suggesting that, with targeted action, the travel times of other modes can become more favourable relative to drive times. Awareness and marketing campaigns to promote GO Transit rail services and other modes of station access are also recommended.

Medium & Long Term Plan- 5 to 20 years

The medium-term plan for parking expansion includes considerably lower levels of parking expansion. Opportunities for integrating parking expansion into structured parking as part of joint development will become more feasible if planned in-advance. These opportunities have been identified, primarily at Mobility Hubs. It is recommended that opportunities for improving station access by other modes should continue from the short-term plan, through to the long term, parallel to implementation of the proposed pilots.
FIGURE 4    GO TRANSIT RAIL PARKING AND STATION ACCESS PLAN PROPOSED LEVELS OF PARKING EXPANSION BY STATION

GO Transit Rail Parking & Station Access Plan
Strategic Parking Forecasts From 2014
Pilot Programs and Projects

Testing new approaches, or investing in additional research, to achieve mode shift can help to understand the impacts before rolling out initiatives system-wide. The following pilots and projects have been proposed:

- **GO Transit Shuttle Pilot:** Planning and delivery of pilot shuttle services to support station access and egress to improve accessibility, connectivity, and increases in rail ridership.
- **GO Transit Website Station Pages:** Updated external GO Transit station websites will provide customers with information about all transportation modes available for access and egress.
- **Station Travel Plans:** Development of station-specific plans to direct the delivery of active transportation access improvements and promote active transportation, transit and carpooling.
- **Further Station Catchment Analysis - Travel Times and Customer Profiling:** Enhancing the analysis to inform decision-making for investments in other modes of station access.
- **Green Parking Zone:** A priority zone providing preferential space and charging infrastructure for riders using more sustainable driving practices, including carpooling, car-sharing, and the use of low carbon vehicles.

Implementing the Plan

Recommendations in the Plan are guided by a high-level action plan, which require the:

- development of a management structure and internal framework within Metrolinx to co-ordinate the multiple workstreams required to deliver the Plan;
- development of partnerships for ongoing planning and delivery of the Plan with other provincial stakeholders and external stakeholders, including municipalities and local transit agencies;
- development of a business case and budget plan for investment in, and delivery of, a) local transit integration, b) station access infrastructure and services, and c) transportation demand management programs and projects.

Although forecasts have been planned for the short, medium and long term planning horizons, the exact phasing of delivery is dependent on:

- the timing of enhancements to the level of rail service, forecast ridership growth, and parking occupancy
- funding, the availability of land, and other development opportunities
- the policies and initiatives of key partners and stakeholders.

The capital and operating costs of delivering the Plan will be calculated and integrated with broader capital and revenue budget planning exercises. However, it is likely that decreased parking expansion will result in lower capital costs and increases to annual operating costs, most notably from improvements to transit connections.
Glossary of Terms

General Terms

AM Peak
The part of the morning when the demand for travel is at its highest, typically due to commuting and school trips. Usually considered as the three hour period from 6:00am to 9:00am, but the term can also refer to a peak hour or ‘rush hour’.

Carpool to GO
An initiative led by Metrolinx to encourage GO Transit users to carpool to GO Transit stations, incentivized by dedicated parking close to platforms, and promotional campaigns.

Contraflow
Travelling against the main flow of traffic or travel.

Development Potential
A high level indicator that considers interest from the development community, the municipality, and real estate trends in a station area.

Discrete Choice Logit Model
A computer modelling tool which analyses the statistical probability of choices between two or more alternatives (e.g. choosing to take the train or drive all the way to your destination; or choosing to access a station by car, taxi, Kiss & Ride, carpooling, vanpooling, local transit, cycling, or walking).

Egress
The act of departing from a station or parking lot.

Intelligent Transportation Systems
The use of information technology to help manage the demand for travel and traffic flows (e.g. variable speed limits, dynamically responsive traffic signals, real time information for transit riders). Typically systems are integrated with a control center.

Isochrone Map
A visual representation of equal travel times to a specified destination. The map uses line segments to connect points with the same travel time to form a polygon around the specified destination point. For example, travel times to a station would be represented by a shape surrounding the station.

Life Cycle Costing Analysis
An approach to costing which estimates and accounts for costs over the entire useful life of an asset (e.g. a parking structure). Life cycle costing analysis can include the costs for planning and design, acquisition and construction, operations and maintenance, renewal and rehabilitation, depreciation, the cost of financing (e.g. discounting and amortization), and the cost of disposal.

Midday
In the context of transportation and transit planning and engineering, it refers to the time period between the AM Peak and PM Peak.

Modal Hierarchy
A prioritized order of different modes of transportation to help achieve specific goals or objectives, developed through guided planning processes and investment decision making (e.g. prioritizing investment in carpooling parking spaces of standard car parking spaces).

Multiple Account Evaluation
A systematic and robust method of comparing and assessing policies or projects. Data is presented against different measures or criteria relating to policy or project objectives and standard ‘accounts’ (e.g. transportation, environment, economy, financial, social).

Planning Horizon
The timescales over which the Plan is to be delivered (see Timescales).

PM Peak
The part of the afternoon / evening when the demand for travel is at its highest, typically due to commuting and school trips. Usually considered as
the three hour period from 4:00pm to 7:00pm, but the term can also refer to a peak hour or ‘rush hour’.

**Regression Analysis**

Analysis of the factors which are correlated to specific outputs. For example, that factors such as level of service determine the level of local transit used to access a station.

**Ridership Catchment**

The geographical area around a station from which riders originate (or the area traveled to from a station.)

**Station Master Plan**

A plan containing projects and initiatives guiding station development and station access. The plan should integrate with wider development and local transportation plans; demonstrate analysis of needs and opportunities, an evaluation of options; and be conducted in partnership with key stakeholders.

**Traffic Impact Assessment**

An assessment of the likely impacts of a development on travel patterns, typically focusses on road traffic impacts against the capacity of the road network and intersections.

**Transit Oriented Development**

Development centred around locations with a high frequency of transit provision, with the intention of reducing dependency on single-occupant vehicles, and making communities more walkable, bike-friendly, vibrant, and sustainable. Higher density and mixed-use, facilitated by the high capacity of transit to accommodate the increased demand for movement, is typical to this type of development.

**Transit Priority**

Measures to provide priority to transit in order to improve travel times and travel time reliability. For example, bus-only lanes, or automatic vehicle detection at intersections to give transit priority with a green signal.

**Transportation Demand Management**

Projects or initiatives to change travel behaviour and accommodate travel demand within the existing capacity of the transportation network. For example, measures to encourage people to avoid traveling, or reduce the frequency with which a routine trip is made; to shift the time of travel or routes traveled to relieve congestion or to improve safety; or to change the mode of transportation used to conduct a journey (typically a shift away from single occupant vehicles to other modes). Transportation Demand Management measures can also be used in goods movement.

**Transportation Management Association**

An organization for the delivery of transportation demand management measures (see Transportation Demand Management). Within the Greater Toronto & Hamilton Area, Transportation Management Associations generally operate under the organization and brand of Smart Commute, with promotional activities focussed on mode shift away from single occupant cars to other modes for commuting trips.

**Travel Plan**

A plan for managing the travel demand generated by an organization or transit hub, with the aim of reducing the negative impacts of the associated travel. This typically involves transportation demand management measures (see Transportation Demand Management) and improving facilities and services for walking, cycling, public transport, carpooling, and other more sustainable modes.
Triple Bottom Line

The three ‘pillars’ of sustainability – economy, environment, and society. In setting objectives and assessing options against objectives, it is important to consider all three pillars.

Terms in Corridor Tables (see Section 5)

**GO Rail Parking Supply**
The current number of parking spaces available at each GO rail station.

**Parking Utilization**
GO Transit has a record of the number of parking spaces occupied at each station, typically expressed as a proportion of the total number of spaces (see GO Rail Parking Supply). Counts are conducted during the second Wednesday of every month.

**Forecast Rail Demand Growth**
Forecasts are based on projected service expansion and population growth. The rail service scenario used for the model forecasts was the Electrification Reference Case and it was used for both 2021 and 2031. This includes projections for two-way / all day services on all GO Transit lines after 2021. The population forecasts were taken from the Direct Demand Model prepared for Metrolinx by Peter Dalton.

**Auto Driver Mode Share**
Mode shares were taken from Metrolinx’s bi-annual Rail Passenger Survey at a station-by-station, corridor and system level. It should be noted that due to a bus strike in York Region during the latest 2010/11 survey, mode shares from the 2007/08 survey were used for York Region only.

**Opportunity for Local Transit**
An assessment based on existing local transit service levels, and opportunities highlighted by Metrolinx staff as part of their high-level local transit analysis work. At stations where extensive local transit connections already exist, there may be ‘low’ opportunity for further improvements. Similarly, stations with less extensive local transit may have a ‘high’ opportunity for improvement.

**Opportunity for Active Transportation**
An assessment based on existing active travel (i.e. walking and cycling) mode share and facilities, and the opportunities identified in Station Profiles for improvements to station infrastructure to encourage further active travel. At stations where extensive active travel facilities and infrastructure exists and mode share is already high, there may be ‘low’ opportunity for improvement. Similarly, stations with less extensive active travel facilities may have a ‘high’ opportunity for improvements.

**Committed Parking Expansion**
The number of new parking spaces that has already been budgeted and planned for delivery 2012/13 to 2013/2014, and in some cases is already under construction.

**Strategic Parking Forecasts**
The number of new parking spaces that are forecast based on the analysis conducted as part of the Plan, through application of the Decision Making Framework. The analysis considers all modes of station access.

**Land Availability / Values**
A high-level assessment of the availability of land immediately around GO Transit rail stations. Some land uses such as residential or sensitive environmental lands were considered as being undevelopable. Other land uses such as open space, low-rise industrial lands or brownfield sites were considered for their potential to redevelop. Land values were assessed based on local market real estate values.
Potential Parking Type

Strategic parking forecasts (see Strategic Parking Forecasts) were determined as surface parking, structure parking, or shared parking (i.e. shared with other land uses such as a shopping mall). In some cases, where there have been discussions with developers / land owners, or where the future land use can potentially support it, joint development opportunities have been indicated.

Timescales

<table>
<thead>
<tr>
<th>Type</th>
<th>Period</th>
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<tbody>
<tr>
<td>Short Term</td>
<td>2012/13 to 2016/17</td>
</tr>
<tr>
<td>Medium Term</td>
<td>2017/18 to 2020/21</td>
</tr>
<tr>
<td>Long Term</td>
<td>2021/22 to 2031/32</td>
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1 Introduction - GO Transit Rail Parking & Station Access Plan

Overview

To meet increasing parking demand, GO Transit has added an average of 2,500 new parking spaces annually at its rail stations over the past ten years, by purchasing and leasing available land near stations for building surface or structured parking. With approximately 65,000 parking spaces, GO Transit is currently one of the largest parking operators in North America. Despite significant parking expansion, there continue to be parking pressures at many stations. Metrolinx has developed the GO Transit Rail Parking and Station Access Plan ('the Plan'), which includes a parking and station access policy, and recommendations for implementation and phasing to:

- **Enhance the customer experience:** parking-related issues are the second most common customer complaint (after ‘crowding on trains’);
- **Support ridership growth:** strategic parking investment and expansion is needed to support future service improvements, including two-way, all day service;
- **Manage demand for new parking:** reduction in automobile mode share for station access, particularly single occupant vehicles, is needed to lower the demand for new parking;
- **Support transit-oriented development:** stations across the system have been identified as Mobility Hubs, or areas with higher development potential;
- **Promote cost effectiveness:** value for money must be ensured to maintain cost to revenue efficiency, with consideration for the current environment of fiscal constraint; and
- **Further align policy:** GO Transit parking policies will align with direction from The Big Move, GO2020, and the Mobility Hub Guidelines.

The Plan considers parking at GO Transit rail stations only. However, it is anticipated that the majority of guiding principles and policies would remain applicable to other GO Transit parking facilities. The Plan does not consider the application of fare and parking pricing to change travel behaviour.

Method

Work began on the Plan in September 2011, with support from the consulting teams of Steer Davies Gleave, DIALOG and Delcan. The primary components of the Plan include a Parking & Station Access Policy Statement, a Decision Making Framework, and a set of phased proposals for implementing the policy at a corridor and station level, as shown in Figure 1.1.
Stakeholder engagement with a broad range of stakeholders, including GO Transit rail customers, municipalities, local transit agencies, key Metrolinx and GO Transit staff, and provincial stakeholders, has taken place throughout the development of the Plan. To complement the consultation process, an extensive set of evidence-based analyses have been developed through an assessment of the current and future Parking Needs and Opportunities (see Section 2). These analyses include:

- **A review of existing policies, initiatives and best practices**: Relevant policies at a provincial, regional, and local level have been reviewed, along with details of parking station access initiatives. The review has been supported by analysis of comparable jurisdictions to identify lessons learned and ‘best practices’ in the planning, delivery and operation of parking and station access improvements.

- **Station site visits and review**: As well as understanding the needs and opportunities at a system-wide and corridor level, each station has been reviewed to identify local needs and opportunities regarding each mode of station access, parking operations, and land use and development. This information has been summarised and recorded as Station Profiles for each GO Transit rail station. Station specific actions have been identified for improving station access by all modes, enhancing parking operations, and identifying potential for joint development and shared parking opportunities. Additional analysis demonstrated the potential for improving transit connections to GO Transit rail services, with station specific suggestions for new routes, additional services, and/or improved synchronization of schedules.

- **Customer surveys and data analysis**: A survey of over 3,000 customers using the Let GO Know panel was conducted to understand station access and egress travel patterns and perceptions. Analysis of results was complemented with further analysis of rail demand forecasts and station access and parking patterns, including analysis of the proportion of riders who access the station by car and other modes of station access.

- **Modelling and multiple-account evaluation**: A comprehensive list of policy options was identified and divided into four different approaches in response to the current and future needs and opportunities of GO Transit rail riders, Metrolinx, and key stakeholders. A multiple-account evaluation framework has been used, containing accounts relating to: the economic, social and environmental objectives of the Plan; parking supply and occupancy metrics; and, a life-cycle costing approach that quantifies capital and operating expenditure. The evaluation has also been supported by the development and use of a customized passenger choice model.
Report Structure

The Parking & Station Access Policy Statement (see Section 3) contains a vision and ‘guiding principles’ for the Plan, which have been identified through analysis of existing policies and initiatives, and refined through extensive stakeholder engagement and a needs and opportunities analysis.

A Decision Making Framework (see Section 4) has been developed as a practical tool for the implementation of the Parking and Station Access Policy Statement. The Framework will guide the planning of parking expansion in relation to land use and development proposals, as well as the development of existing and potential facilities for other modes of station, with consideration for local traffic conditions, and value for money invested.

Through application of the Decision Making Framework in conjunction with extensive analyses, Strategic Parking Forecasts and System-wide and Corridor Strategies (see Section 5) have been developed. The Corridor Strategies contain forecasts for the level of parking expansion required, as well as station-level opportunities to improve station infrastructure and transit connections to increase customers accessing stations by other modes.

Pilot projects and programs (see Section 6) have been identified to test new and innovative ideas for achieving mode shift. Piloting these ideas minimizes the potential challenges of implementation across the entire network by identifying possible issues and impacts in advance.

The Plan is supported by a high-level action plan for Implementing the Plan (see Section 7).
2 Parking Needs and Opportunities

Overview
Establishing the key needs and opportunities of the GO Transit rail network has included analysis of:
- the policy context for parking and station access
- station-specific access and egress issues and opportunities
- current and future rail ridership, station access patterns, and parking demand
- the costs of providing parking and other modes of station access
- the parking and station access operations of comparable jurisdictions
- stakeholder views on parking, station access, and land use.

Key Findings

Policy Context
Reviewing relevant policy and initiatives provides a valuable understanding of the goals and objectives of public organizations at a provincial, regional, and municipal level. Metrolinx policy is supportive of increasing GO Transit rail ridership and improving station access, while all levels of policy are supportive of improving station access by promoting more sustainable, alternative modes. These policies also support transit oriented development at designated Mobility Hubs, particularly through the use of structured parking in joint development. Metrolinx and GO Transit's key policy statements regarding parking and station access are detailed in Table 2.1.

Station Site Review
A review of station access issues and opportunities was informed by site visits and engagement with municipalities and transit agencies. Key findings across the network include:
- constraints in land availability for surface parking expansion
- lengthy PM peak local traffic congestion and lot egress times
- issues with Kiss & Ride design at some stations (i.e. efficient operations)
- bus loop capacity constraints at some stations
- opportunities for dedicated shuttles to GO Transit rail stations
- gaps in walking and cycling infrastructure, such as those that connect the station to the surrounding area and through station parking lots
- opportunities to improve signage (e.g. wayfinding, variable messaging signs)
- several potential opportunities for joint development and shared parking
### TABLE 2.1 KEY METROLINX AND GO TRANSIT POLICY STATEMENTS

**Growth Plan for the Greater Golden Horseshoe (Ministry of Infrastructure Ontario, 2006)**

Policies include:
- offering a balance of transportation choices that reduce reliance upon any single mode, and promotes transit, cycling and walking;
- being sustainable, by encouraging the most financially and environmentally appropriate mode for trip-making; and
- offering multi-modal access to jobs, housing, schools, cultural and recreational opportunities, and goods and services.

Furthermore, the Growth Plan outlines several criteria that inform decisions on transit planning and investment. Criteria relevant to the GO Transit Rail Parking and Station Access Plan include:
- placing priority on increasing the capacity of existing transit systems to support intensification areas;
- facilitating improved linkages from nearby neighbourhoods to urban growth centres, major transit station areas, and other intensification areas; and
- increasing the modal share of transit.

**The Big Move (Metrolinx, 2008)**

Policy 7.15 Municipalities, in conjunction with transit agencies, landowners, major stakeholders, and public agencies and institutions, shall prepare detailed master plans for each mobility hub. Where appropriate, master plans should also be prepared for major transit station areas and unique destinations… At minimum, master plans will establish: a surface parking reduction strategy in conjunction with transit agencies, that is based on site-specific redevelopment opportunities and existing planned availability of other modes of access to the mobility hub, and that includes a scheduled transition from free surface parking to a limited supply of fairly priced, structured parking, and policies to set aside reserved parking spaces for carpool and car sharing vehicles.

**GO 2020 (GO Transit, 2007)**

Station Access – Active transportation modes (walking and cycling) and public transit will have priority access to stations and terminals, with dedicated access provided where appropriate. GO Transit will make most efficient use of the parking provided through carpooling, car sharing, and other measures. GO Transit will identify opportunities to separate parking charges from transit fares at selected locations to encourage walking, cycling, and taking transit to the station.

**Metrolinx Five Year Strategy 2012 – 2017 (Metrolinx, 2012)**

Objective 11 Improve multi-modal station and system access in collaboration with municipalities.

Deliverable 11a Work with municipal partners to increase the walking / transit / cycling modal share at GO Transit stations from 22% to 28% (or 22 million passengers) by 2017 through creating a station by station plan; improving walking, cycling and transit access; and implementing a parking management strategy.

Deliverable 11b Advance construction at 12 different mobility hubs by 2017.

**Mobility Hub Guidelines (Metrolinx, 2011)**

Guideline 4.1 Assess commuter parking needs on a corridor or system basis and locate and design parking to maximize development and ridership potential at transit stations.

Guideline 4.2 Limit commuter parking expansion by prioritizing feeder transit services to mobility hub stations.

Guideline 4.6 Minimize surface parking and integrate parking within surrounding development and parking structures.

Guideline 4.7 Design parking facilities to a high level of architectural and landscape quality to reduce negative impacts on the environment and landscape.

**Station Access Strategy (GO Transit, 2009)**

Station Access Principle 1 – Lead with our stations - prioritize access by pedestrians, cyclists and local transit users at all GO Transit stations.

Station Access Principle 2 – Improve integration, convenience and continuity of walking and cycling routes in areas surrounding stations.

Station Access Principle 5 – Manage motor vehicle parking areas to optimize use of space and minimize delays in access / egress… and ensure a quality station access experience for all users.

Target: 65 parking spaces per 100 weekday passengers in 2008 to approximately 50 in 2020.
**Rail Ridership, Station Access Patterns and Parking Demand**

GO Transit rail ridership is forecast to increase broadly in line with population and employment growth within the Greater Toronto and Hamilton Area (GTHA) over the next twenty years, and improvements to GO Transit rail services are planned along all rail corridors. Ridership in the AM peak is forecast to grow by 43% from 2011 to 2021, including midday and ‘counter flow’ demand, and by a further 12% between 2021 and 2031. On-board rail capacity is unlikely to be a limitation to ridership growth once two-way, all day services are operational along all corridors. However, station access, including parking at stations, holds both an opportunity and a potential constraint to achieving the desired level of ridership.

Across the network, approximately 60% of GO Transit rail riders drive to the station, the majority of whom arrive in single occupant vehicles, with significant variation in access mode choice between stations. To accommodate this demand, GO Transit operates 65,000 parking spots across its rail stations. Historically, there has been a close link between the provision of parking and station access and the growth in GO Transit rail ridership (see Figure 2.1 below). Over the last thirteen years, GO Transit has doubled the number of parking spaces in response to demand, growing at a faster rate than the growth in ridership. In 1999, there were five parking spots for every ten daily customers. In 2012, capacity increased to approximately seven spots for every ten customers. At current parking supply rates and assuming current automobile mode share, GO Transit would need approximately 35,000 to 40,000 new parking spaces to support the anticipated ridership growth to 2031.

**FIGURE 2.1 GO TRANSIT RAIL PARKING AND AM PEAK RIDERSHIP GROWTH**

Over 50% of station parking lots are at or near capacity, and the time required to find a parking spot, as well as levels of illegal parking, are increasing. Increasing parking demand has the potential to impact the local road network, and many customers now experience longer egress times from stations. These challenges put GO Transit’s strong customer value proposition, as outlined in *Our Passenger Charter*, at risk.
The geographical distribution of stations' ridership catchments, parking utilization, local transit context, and walking infrastructure are the main determinants of the proportion of customers accessing stations by other modes.

A recent survey of ridership demand and station access patterns at Clarkson GO Transit Rail Station during the construction of a parking structure demonstrated that for every three parking spaces lost during the construction phase, one person shifted to another mode of station access, one person transferred to a different GO Transit Station, and one person stopped taking GO Transit. This case study shows the possible impacts on ridership when parking is at capacity and no improvements are made to other modes of station access.

**Costs of Station Access**

Expanding parking is increasingly challenging due to land and traffic constraints, which are leading to the development of more expensive parking structures at some stations, with higher operating and rehabilitation costs. Depending on land values and the density of the ridership catchment, improvements to transit services from nearby residential neighbourhoods or trip generators (e.g. employment sites or educational establishments) to and from stations can provide a more cost effective means of providing station access.

**Jurisdictional Review and Customer Feedback**

Best practice from comparable jurisdictions demonstrates a rising priority for investment in and promotion of other modes of station access. Mode shift was supported by a recent survey of over 3,000 GO Transit rail customers using the *Let GO Know* panel. The survey identified that 85% of respondents would still 'ride the GO' if they were not able to park at their first choice of station, and approximately a third of all respondents who drive and park at their station would welcome finding other ways of accessing GO Transit.

**Summary**

Significant growth in rail ridership demand will increase the demand for parking and as a result, access and egress times and local congestion will continue to worsen. GO Transit has a strong customer value proposition to ensure a safe and easy experience for its passengers. Station parking is GO Transit's second most common complaint, and doing nothing, or continuing parking expansion at historical rates may negatively impact the customer experience and become a constraint on rail ridership. This is coupled with growing costs of parking due to land availability constraints, increasing construction costs for new parking structures, and operations and maintenance costs.

As identified in the *Let GO Know* customer panel survey, and through opportunities identified at each station, there is great potential to improve other modes of station access. Furthermore, the promotion of other modes of station access at GO Transit rail stations aligns with key regional and provincial policy and guidelines, including The Growth Plan for the Greater Golden Horseshoe, The Big Move, and the Mobility Hub Guidelines.
GO Transit Rail Parking & Station Access Policy Statement

The Role of the GO Transit Rail Parking & Station Access Policy Statement

While existing policy guides certain aspects of the approximate $100 million (2012/13 estimate) in capital investments on parking each year, a strengthened analysis and further direction is required, particularly for parking expansion.

This Policy Statement directs parking and station access decision making and investment to demonstrate value for money, integration with land use objectives, alignment with customers’ parking needs, and consideration of the availability and potential for other modes. Delivery of the GO Transit Rail Parking and Station Access Policy will support the economic, environmental and social goals and objectives of Metrolinx/GO Transit’s principal policy documents. It will also provide support for the development of two-way all day rail services, the opening of new stations and rail corridor extensions, and the implementation of Mobility Hubs.

GO Transit Rail Parking & Station Access Policy Vision & Guiding Principles

Vision

GO Transit rail parking and station access will be planned and delivered in an integrated, sustainable, and financially efficient manner to grow ridership, enhance all customers’ experience and safety, and reduce the dependency on single-occupant vehicles.

Parking will be planned, delivered, and managed in collaboration with key local and provincial partners to support transportation and land use objectives for increasing the economic competitiveness of the GTHA, improving the quality of life of local communities, and contributing to the region’s environmental sustainability.

Guiding Principles

1. A Multi-Dimensional Approach: a system, corridor, and station level approach is required for the planning and delivery of parking and station access investment.
2. Strategic Parking Expansion: targeted parking expansion will continue to support ridership growth.
3. Supporting Other Modes: investment will create a balance between the movement of pedestrians, cyclists, local transit and other vehicles to ensure safe and efficient movement to and through the station for all GO Transit customers, developing a modal hierarchy that prioritizes more sustainable travel behaviour.
4. Financial Efficiency: investment will be subject to triple bottom-line multiple-account evaluation, including consideration of value for money using life cycle costing analysis that includes capital and operating costs, as well as amortization.
5. Working in Partnership: on-going engagement and partnerships are required with for the successful planning and delivery of the policy and associated plans.
6. Sustainable Growth: projects resulting from the policy will be delivered incrementally in order to achieve the vision, and support sustainable ridership growth, for the short term (1 to 5 years), medium term (6 to 10 years) and long term (11 to 20 years).
The GO Transit Rail Parking and Station Access Policy Statement

1. Parking Supply

- System-wide parking expansion will continue to support ridership growth, with the aim of moderating the growth in parking supply in comparison to historical trends.
  - At a system level, the use of parking and other modes to meet customer needs will be evaluated in line with a modal hierarchy and the GO Transit Station Access Plan, to reduce the level of growth in parking supply in comparison to historical trends.

- Parking needs at existing and new stations will be determined and prioritized at a corridor and station level, based on the following criteria:
  - **Availability of Other Modes.** Lower priority for parking expansion will be given where other transportation choices exist or are planned.
  - **Potential for Other Modes.** Lower priority for parking expansion will be given at stations where a geographically compact customer base provides greater potential for the provision and promotion of other modes, and where pilot opportunities and improvements have been identified, including Intelligent Transportation Systems.
  - **Occupancy & Current and Future Demand.** The demand for parking and other modes of station access will be estimated based on: current occupancy and capacity, anticipated growth in peak and midday ridership demand in line with local population and employment growth, and improvements in level of service and rail capacity.
  - **Mobility Hubs and the Development Potential of Stations**
    - opportunities for shared parking or meeting customer parking needs at nearby stations will be considered before parking is expanded
    - parking expansion should not preclude future development opportunities and should consider long term plans at and around stations
    - parking expansion and replacement as part of joint development will be appropriate to local conditions and plans.
  - **Feasibility.** Consideration will be given to the following feasibility criteria:
    - technical feasibility: impacts on expansion potential, local transportation networks, access and egress times to maintain a positive customer value proposition, and the environment
    - financial feasibility: demonstration of value for money
    - ‘policy fit’: compliance and fit with the national, provincial, and local planning policy context and collaboration with key stakeholders, further detailed in Policy Section 5.
2. Parking Design

- Parking design will adhere to the GO Transit Rail Design Requirement Manual and Metrolinx’s Mobility Hub Guidelines where applicable, be innovative and of high architectural and landscape design quality, consider the use of sustainable materials, minimize energy consumption, and take advantage of opportunities for renewable energy production. This includes consideration of runoff reduction from snow removal, improved storm water management, and the introduction of electric vehicle charging where appropriate.

- Parking design will be directed and supported by a rolling program of Station Master Plans in order to integrate parking with other station facilities, account for the long-term vision of the station and surrounding community, and demonstrate value for money. The level of detail in Station Master Plans will be commensurate with the needs and opportunities being addressed, as well as the proposed level and anticipated impact of investments.

- Parking will be designed to use land as efficiently as possible, with consideration for: more beneficial land uses; opportunities to provide safe and direct access for pedestrians, cyclists, local transit and other modes to, from and within the station parking lot; and improvements to traffic flow and egress times, in line with a modal hierarchy.

- Parking design will prioritize and promote parking and stalls for other modes (cycling, scooters and motorcycles, local transit, carpooling, Kiss & Ride, taxis and ultra-low carbon vehicles) in closest proximity to the station building and platform access points, in line with a modal hierarchy.

- Parking design will minimize walking distances from parking areas to the station building and platform access points.

- Parking will be designed to help minimize enforcement issues.

- Parking design will adhere to provincial and local policy and statutory regulations.

- Structured parking will be considered where:
  - there is sufficient parking demand;
  - there is low land availability in close proximity to the station building and platform access points for surface parking;
  - there is high development potential, with opportunities for delivery as part of joint development;
  - it does not inhibit development potential;
  - it is suitable, given the surrounding built and natural environment;
  - other modes of station access alternatives have already been considered and exhausted;
  - value for money can be demonstrated.

- When planning for the construction of parking structures, the Decision Making Framework should be applied to determine what level of temporary parking and other station access solutions are required, with the intent of maximizing the potential for modal shift and minimizing parking replacement.
3. Parking Operations
   - Parking operations will continue to prioritize safety, comfort, and the mobility needs of all users.
   - Efforts will be coordinated within Metrolinx, including its internal departments, to ensure the Policy Statement is integrated into all relevant operations, so that improvements to parking will be maintained in all seasons and across all stations.
   - Parking maintenance will be delivered in a cost effective manner to minimize the costs of parking rehabilitation over the lifecycle of the asset, and with parking rehabilitation planned as part of station planning work.
   - The reserved parking program will be expanded to better manage demand, and ensure parking is available for those that have limited access to alternatives.
   - The Carpool to GO program will be expanded across the network to encourage greater use of multi-occupancy vehicles for station access.
   - Financial measures to change travel behaviour, such as paid parking, will be assessed for the potential to further manage demand for parking while supporting ridership growth.

4. Development and Land Use
   - At stations in Mobility Hubs, or with high development potential, the design, delivery and management of station parking will adhere to the Mobility Hub Guidelines.
   - Before parking is expanded, other options will be considered, including more beneficial land uses, the opportunity to increase the use of other modes, shared parking and joint development opportunities, as well as opportunities for providing parking at nearby stations to meet customer needs.
   - Parking expansion will be planned and located so that it does not preclude future development opportunities. This recognizes that surface parking can be viewed as an interim use that can be redeveloped as the transportation system and local community evolve, while parking structures are more permanent facilities.
   - Parking and station access, as well as development opportunities for the station will be considered together to balance all of Metrolinx’s operational and strategic transportation planning objectives.

5. Working in Partnership
   - Parking will be planned and provided in partnership with provincial and municipal stakeholders, including local transit agencies and Transportation Management Associations, and in consultation with customers and local communities.
   - The Policy Statement will complement, and be complemented by, wider municipal land use and development, transportation, and parking policies and plans, with particular consideration given to the areas surrounding GO Transit rail stations and the provision and funding of infrastructure and services for other modes of station access.
   - The Policy Statement and wider GO Transit Rail Parking and Station Access Plan will be reviewed and amended every five years, or sooner if required, in conjunction with local, municipal and provincial partners.
4 Decision Making Framework

Role of the Decision Making Framework

The planning of GO Transit rail parking and station access requires the careful integration of many factors including:

- the level of parking expansion
- the form of parking expansion
- the integration of parking and station accesses with local land use and development objectives
- the ability for other modes of station access to meet the needs of customers.

Analysis of technical and financial feasibility and risks is also required. The Decision Making Framework defines a process that applies the Parking and Station Access Policy Statement for application by Metrolinx to parking expansion, by identifying the most appropriate parking form (i.e. surface parking, structured parking, shared parking, and parking expansion as part of joint development), and any existing and potential opportunities for other modes of access at a station level, with consideration for use of available parking capacity at nearby facilities.

The Decision Making Framework should also be applied as part of the program of station master planning work. A rolling program of Station Master Plans has the potential to provide ongoing guidance for investment in parking and station access at a station level. The prioritization of Station Master Plan development should consider the timing and scale of improvements to the level of rail service, the nature and scale of parking and station access needs and opportunities, the schedule for parking rehabilitation, and Mobility Hub designation and development potential of each individual station.

Decision Making Framework

Figure 4.1 presents a flowchart to summarize the Decision Making Framework and the key questions to consider at each stage of its application. Table 4.1 provides more detail on how the Decision Making Framework has been derived from the Parking and Station Access Policy Statement, and the major considerations to address when planning parking expansion, parking rehabilitation, and improvements to other modes of station access, including the station master planning process. The criteria are not mutually exclusive and should be considered collectively and as a series of processes. Figure 4.2 (after Table 4.1) provides an example of the application of the framework using Brampton GO Transit Rail Station.
1a. What is the current level of rail ridership, and what is the forecast for future demand?

1b. What proportion of station access demand is currently met by other modes? What is the availability and potential of other modes to meet a greater proportion of the station access needs of GO Transit rail riders?

1c. What potential is there for nearby stations to accommodate parking demand?

2a. What is the development potential and land use of / around the station? Is it designated a Mobility Hub?

2b. How much land is available?

3a. What is the cost of acquiring or leasing the land, and is the option cost effective compared to other alternatives?

3b. What are the local traffic and transportation impacts, and can the local road network accommodate the resulting growth in traffic levels?

3c. What are the environmental impacts?

3d. How strong is the alignment with local, regional and provincial policy?

4a. What support do key stakeholders provide in terms of planning and delivery?
TABLE 4.1  DECISION MAKING FRAMEWORK CRITERIA

<table>
<thead>
<tr>
<th>Decision Making Processes</th>
<th>Data used to inform approach</th>
<th>Approach</th>
<th>Summary of assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. What is the current level of rail ridership, and what is the forecast future demand?</td>
<td>Future rail ridership forecast, and resulting rail demand growth</td>
<td>Calculate the existing number of riders and the future number of riders, including the percentage growth.</td>
<td>As a result of the analyses from 1a to 1d, a parking demand level should be determined. Consider complimentary actions to improve other modes of station access or alternative locations for parking expansion in meeting the existing and future level of rail demand calculated in 1a. The remainder of future rail demand not accommodated by other modes or alternative stations, above 90% parking occupancy, is the recommended level of parking expansion.</td>
</tr>
<tr>
<td>1b. Availability and potential for other modes – What is the availability and potential of other modes to meet the station access needs of GO Transit rail riders?</td>
<td>Mode share</td>
<td>Identify existing mode shares by all modes of station access.</td>
<td></td>
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<tr>
<td></td>
<td>Existing walking provision (existing and potential)</td>
<td>Assessment of the ability of the walking network to/from and within the station parking lot to meet customer needs, particularly for riders within one kilometre of GO Transit rail stations; identifying any resulting actions. How might this change with future development?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cycling provision (existing and potential)</td>
<td>Assessment of the ability of the cycling network and parking facilities to/from and within the station parking lot to meet customer needs, particularly for riders within five kilometres of GO Transit rail stations; identifying any resulting actions. How might this change with future development?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local transit provision (existing and potential)</td>
<td>Assessment of the ability of the bus network and interchange infrastructure to/from and within the station parking lot to meet customer needs, particularly for riders within a 20 minute travel time of GO Transit rail stations; identifying any resulting actions. How might this change with future development?</td>
<td></td>
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<tr>
<td></td>
<td>Provision of carpooling, Kiss &amp; Ride and taxi (existing and potential)</td>
<td>Assessment of the ability for multiple occupant vehicle modes, and parking/ranking infrastructure within the station parking lot to meet customer needs; identifying any resulting actions. How might this change with future development?</td>
<td></td>
</tr>
<tr>
<td>1c. Availability and potential for meeting customer needs at alternative locations – What potential is there for nearby stations to accommodate parking demand?</td>
<td>Parking availability at nearby stations</td>
<td>Consideration should be given to the use of available parking capacity at nearby stations to meet the needs of customers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parking expansion at nearby stations</td>
<td>Consideration should be given to the suitability of expanding parking at nearby stations to meet customer needs.</td>
<td></td>
</tr>
</tbody>
</table>
## 1d. Potential for shared parking and joint development

**What potential is there for shared parking and joint development?**

**Shared parking and development potential (including Mobility Hub designation)**

Consideration should be given to shared parking with complimentary land uses, or as part of joint development on or around station assets to meet customer needs.

Consideration should be given to the likely timing of joint development and whether interim actions are required.

## 2a. Development potential / land use

**What is the development potential of / around the station or is it designated a Mobility Hub?**

**Mobility Hub designation and development potential**

If a station has been designated as a Mobility Hub or the station has been identified as having high development potential greater levels of funding should be considered for investment in other modes.

Consideration should be given to minimizing parking expansion through the ability of other modes and stations to meet customer needs (see 1b to 1c), and the potential for structured parking to meet customer parking demands as part of joint development (see 1d).

If parking expansion is required, before joint development is feasible, surface parking might be more suitable.

Parking expansion should not inhibit the potential for future development, should be considerate of surrounding land uses (e.g. avoid tall parking structures in low rise residential areas), and should be planned as part of any Mobility Hub or Station Master Plan giving due consideration to existing long term plans for the station area.

As a result of the analysis in 2a and 2b, the most suitable parking type (or no parking expansion) should be determined for feasibility analysis.

## 2b. Land availability / value

**How much land is available?**

**Land availability and value**

Once opportunities for shared parking and joint development have been considered, the availability of land to accommodate the remainder of the revised parking expansion level through surface parking should be considered. If land is not available, structured parking (or no parking expansion) at the station should be considered.

As a result of the feasibility analysis (see 3a to 3d), a revised parking expansion level and parking form should be determined, along with any complimentary actions to improve other modes of station access or locations.

## 3a. Financial feasibility

**What is the cost of the acquiring or leasing the land, and is the option cost effective compared to other alternatives?**

**Value for Money**

Analysis should be conducted to demonstrate that the level of investment in parking expansion has demonstrated consideration of other modes and locations, and that life cycle costs are exceeded by revenues and benefits as part of triple bottom-line analysis.
<table>
<thead>
<tr>
<th>3b. Traffic and Transportation impacts – <em>What are the local traffic and transportation impacts, and can the local road network accommodate the resulting growth in traffic levels?</em></th>
<th>Traffic Impact Assessment</th>
<th>Consideration should be given to the ability of the local road network to accommodate increased vehicle traffic volumes accessing and egressing station parking lots, and the need for a Traffic Impact Assessment. Consideration should also be given to the impacts and needs of all station access modes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3c. Environmental impacts – <em>What are the environmental impacts?</em></td>
<td>Environmental Assessment</td>
<td>Consideration should be given to environmental factors and impacts, and the potential need for an Environmental Assessment, and review of previously approved Environmental Assessments that include the station area. This includes consideration of reducing runoff from snow removal, improved stormwater management, and potential for installing electric vehicle charging where appropriate.</td>
</tr>
<tr>
<td>3d. Policy - <em>How strong is the alignment with local, regional and provincial policy?</em></td>
<td>Policy</td>
<td>Assessment of proposed parking expansion and proposed improvements to other modes of station access should align with federal, provincial, regional and municipal policy. For example, investment should be prioritized where municipal and Metrolinx policy best align with regards to any mode of station access.</td>
</tr>
<tr>
<td>4a. Partnership – <em>What support do key stakeholders provide in terms of planning and delivery?</em></td>
<td>Stakeholder support</td>
<td>1a to 3e should be conducted in partnership with key stakeholders including regions, municipalities, local transit agencies, and provincial stakeholders. As a result of engagement with key stakeholders (4a), a revised recommendation for parking expansion levels and parking form should be determined along with any complimentary actions for improvements to other modes of station access.</td>
</tr>
</tbody>
</table>
### FIGURE 4.2 EXAMPLE APPLICATION OF THE DECISION MAKING FRAMEWORK TO BRAMPTON GO STATION

<table>
<thead>
<tr>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
<th>Stage 4</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="561x27.png" alt="Image" /></td>
<td><img src="341x346.png" alt="Image" /></td>
<td><img src="79x413.png" alt="Image" /></td>
<td><img src="207x345.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>1a. Ridership</strong>&lt;br&gt;2010: 1,623&lt;br&gt;2031: 3,900 (forecast)&lt;br&gt;Forecast Growth: 142%</td>
<td><strong>2a. High development potential and Mobility Hub designation – opportunity for joint development</strong>&lt;br&gt;Surrounding land use suitable for structured parking through joint development.&lt;br&gt;Transfer 200 spaces.</td>
<td><strong>3a. / 3c. Financial and environmental feasibility to be assessed, but positive business case for 550 spaces in joint development unlikely.</strong>&lt;br&gt;3b. Policy fit supports GO Transit rail and station access by other modes.</td>
<td><strong>4. Stakeholders from City of Brampton and Region of Peel identified opportunities to improve station access by other modes and shared research findings regarding local road peak capacity.</strong></td>
</tr>
<tr>
<td><img src="79x345.png" alt="Image" /></td>
<td><img src="488x344.png" alt="Image" /></td>
<td><img src="630x344.png" alt="Image" /></td>
<td><img src="666x558.png" alt="Image" /></td>
</tr>
<tr>
<td><strong>1b. High Availability and Potential for Other Modes:</strong> good walk and transit networks / growing proportion of Riders within 1km and 5km / Mobility Hub designation / LRT and other rapid transit proposals.&lt;br&gt;Existing Other Mode Share: 46%&lt;br&gt;Potential future Other Mode Share: 61%</td>
<td><strong>2b. No land available for surface expansion.</strong>&lt;br&gt;<strong>OUTCOME:</strong>&lt;br&gt;3,900 riders at 39% auto driver mode share = demand for 1,650 parking spaces at 90% parking occupancy.&lt;br&gt;900 spaces currently and 200 spaces transferred to Bramalea = 550 additional spaces.</td>
<td><strong>3b. Local road network can only accommodate the increase in peak traffic demand generated by an additional 500 spaces.</strong>&lt;br&gt;<strong>OUTCOME:</strong>&lt;br&gt;Further transfer 250 spaces to Bramalea (450 spaces in total). 300 additional spaces at Brampton in a structure as part of joint development.</td>
<td><strong>OUTCOME:</strong>&lt;br&gt;Further Station Master Planning required to refine parking expansion and opportunities to improve station infrastructure and transit connections.</td>
</tr>
<tr>
<td><strong>1c. Overlapping station catchments with Bramalea Station. No spare parking capacity forecast, but suitable for higher levels of parking expansion than Brampton.</strong>&lt;br&gt;Transfer 200 spaces.</td>
<td><strong>2c. Overlapping station catchments with Bramalea Station.</strong>&lt;br&gt;No spare parking capacity forecast, but suitable for higher levels of parking expansion than Brampton.</td>
<td><strong>3b. Local road network can only accommodate the increase in peak traffic demand generated by an additional 500 spaces.</strong>&lt;br&gt;<strong>OUTCOME:</strong>&lt;br&gt;Further transfer 250 spaces to Bramalea (450 spaces in total). 300 additional spaces at Brampton in a structure as part of joint development.</td>
<td><strong>OUTCOME:</strong>&lt;br&gt;Further Station Master Planning required to refine parking expansion and opportunities to improve station infrastructure and transit connections.</td>
</tr>
<tr>
<td><strong>OUTCOME:</strong>&lt;br&gt;Propose structured parking through joint development.</td>
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<td><strong>OUTCOME:</strong>&lt;br&gt;Propose structured parking through joint development.</td>
<td><strong>OUTCOME:</strong>&lt;br&gt;Propose structured parking through joint development.</td>
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</tbody>
</table>
5 System-wide & Corridor Strategies

System-wide Overview

The system-wide plan is the outcome of applying the Decision Making Framework, and the Vision and Guiding Principles contained within the Parking and Station Access Policy Statement. The system-wide plan includes strategic parking forecasts at a system level, as well as a package of opportunities to enhance station access by other modes through local transit integration, improved station infrastructure, and through the delivery of new transportation demand management projects and pilot programs (see Section 6).

Strategic Parking Forecasts

The strategic forecasts for parking expansion at a system-level are presented in Figure 5.1 across the three different planning timescales. Beyond the 6,700 parking spaces that are already committed or planned for delivery between 2012 and 2014, between 17,500 and 24,000 new spaces from 2014 and 2032 are forecast as part of the Plan. Between 7,500 and 10,000 of these spaces are forecast for potential new stations, and between 10,000 and 14,000 of these spaces are to be allocated to existing stations. This total forecast is considerably less than continuing expansion at ‘current practice’ rates by approximately 10,000 fewer spaces, flattening the curve of parking expansion. In Figure 5.2, the recommended strategic parking forecasts are displayed at a station level from 2014 across the different planning timescales. The following descriptions apply to the level of recommended parking expansion: ‘Low’ – 0 to 200 spaces; ‘Medium’ – 200 to 600 spaces; and ‘High’ – more than 800 spaces.

The form of parking has been determined through application of the Decision Making Framework, considering development potential, Mobility Hub designation, land availability, surround land uses, and the long term plans of Metrolinx and its stakeholders. Consideration has also been given to the potential for shared parking and parking expansion as part of joint development. Parking expansion at existing stations is increasingly likely to require structured parking, or more innovative arrangements through shared parking and joint development. The majority of surface parking expansion is recommended at new stations only. Where parking expansion has been recommended as part of joint development, it will be important to consider the timing of potential joint development in relation to the need for parking expansion. In addition to strategic parking expansion, the Plan includes more efficient use of the spare parking supply capacity that exists across the network.

The Plan has a target automobile mode share of 50% for 2031. In order to move beyond this target, it is likely that additional parking demand management measures will be required.
FIGURE 5.1  GO TRANSIT RAIL PARKING AND STATION ACCESS PLAN PROPOSED SYSTEM-WIDE LEVELS OF PARKING EXPANSION
FIGURE 5.2 GO TRANSIT RAIL PARKING AND STATION ACCESS PLAN PROPOSED LEVELS OF PARKING EXPANSION BY STATION
Other Modes

Improvements to other modes of station access are recommended to support anticipated growth in rail ridership and to achieve the lower range of strategic parking forecasts. It is also recommended that delivery of improvements to other modes of station access precedes investment in parking expansion at a station-by-station level, to embed changes in station access patterns, and to inform any station-level parking expansion. At locations with high development potential, particularly Mobility Hubs, investment in other modes should be made a priority.

Investment in New Station Infrastructure

Investment in new station infrastructure should be balanced across all station access modes, by applying the modal hierarchy before expanded parking provision, in line with the Vision and Guiding Principles. With regards to infrastructure, the following should be considered:

- improving pedestrian access (including lighting, coverings and maintenance),
- bicycle parking and cycling links to municipal routes
- bus loop capacity and design enhancements
- transit priority measures
- potential redesign of Kiss & Ride
- improved wayfinding and signage for customers arriving by different station access modes.

Improvements should also consider the use of integrated Intelligent Transportation Systems to increase the efficiency of the existing road network, particularly along key routes to stations and at important intersections. In line with the modal hierarchy, the use of Intelligent Transportation Systems will need to be balanced providing pedestrians and cyclists with longer crossing periods, increased transit priority, and reducing vehicle access and egress times.

Beyond certain peak period access / egress times at GO Transit rail stations, priority should be given to other modes of station access as parking expansion becomes increasingly unfeasible due to impacts to travel times, the local road network, and the GO Transit customer value proposition. If egressing vehicles are unable to clear the parking lot before the next train arrives, then investment in other modes of station access and other nearby stations must be considered and evaluated as part of any station project planning, before further parking expansion is delivered.

Opportunities to Improve Local Transit Integration

Opportunities to improve local transit integration includes potential new routes and services to GO Transit rail stations and timetable integration with GO Transit rail services. Metrolinx’s analysis identified concentrations of riders within a 15 to 20 minute travel time catchment and could potentially be served by new routes or additional services. These opportunities build on the services provided by local transit agencies and are presented as a starting point for discussion with operators rather than fixed recommendations. Local transit agencies currently aim to provide convenient services to their residents, workers, and visitors, and should continue to ensure that all services are optimized, in addition to serving GO Transit rail stations.

Additional Promotion of Other Modes

A program of pilots and additional Transportation Demand Management measures is recommended to promote all other modes of station access, as well as to encourage changes in travel behaviour, for example, through carpooling. These measures build on the work of existing Smart Commute Transportation Management Associations and Metrolinx led initiatives such as Carpool to GO. Section 6 outlines a number of additional transportation demand management pilot programs and projects.
Modelling and Multiple Account Evaluation

The balanced approach proposed within the Plan is at a system-wide level, and recognizes that while parking expansion is preferable at some stations, improvements to other modes may be more viable and cost-efficient at other stations. In line with the Vision and Guiding Principles, the Plan compares the time and cost to the customer when using different modes of station access at each station.

Modelling and multiple-account evaluation of strategic parking forecasts and investment in other modes estimate that delivery of the Plan will support an increased level of ridership beyond existing future year forecasts, including support for midday and ‘contraflow’ ridership. The evaluation also has a positive benefits case using a life cycle costing approach and demonstrates a positive contribution to wider economic, social and environmental goals through the delivery of the Plan.

Short Term Plan – 1 to 5 years

In addition to committed or planned expansion, parking expansion will be the highest in the short-term to address immediate, and in many cases, increasing parking pressures. At the same time, improvements to station infrastructure for other modes of station access is required. It is recommended that budget be planned for improving transit connections to GO Transit rail service, as well as delivering improvements to station infrastructure, including walking and cycling facilities, improved bus, kiss and ride and vehicle access/egress. High proportions of riders live within short distances of many stations along each corridor, suggesting that with targeted action, the travel times of other modes can become more favourable relative to automobile drive times. Awareness and marketing campaigns to promote GO Transit rail services, including other modes of station access, are recommended, working with local communities that are close to GO Transit rail stations with high numbers of residents commuting to downtown Toronto.

Medium & Long Term Plan - 5 to 20 years

The medium term plan for parking expansion includes continued, but considerably lower levels of investment in parking expansion. Opportunities for integrating parking expansion into structures as part of joint development will become increasingly feasible if planned for in advance. These opportunities have been identified, particularly at Mobility Hubs, where a larger proportion of potential riders are expected to live within walking and cycling distance of the station. It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, in conjunction with the proposed pilots, to raise awareness of other mode options.

Corridor Strategies

The Corridor Strategies that follow are an outcome of applying the Decision Making Framework at a station-level. The Corridor Strategies include strategic parking forecasts at a system, corridor, and station level, including the form of parking, and interactions with development and surrounding land-uses for opportunities to introduce joint development and shared parking. Station-level actions to improve other modes further support the Corridor Strategies by detailing the interventions that will help reduce dependency on single occupant vehicles and reduce automobile drive mode share for station access. These include details of the opportunities outlined above.
Each Corridor Plan commences with a table(s) of key information for each corridor. This includes relevant information for applying the first two stages of the Decision Making Framework to determine the scale and form of parking expansion. Inputs into the Decision Making Framework are highlighted in light green, and proposals are highlighted in dark green. The corridor plan is then presented across short, medium and long-term planning timeframes including a table of strategic parking forecasts, station access infrastructure enhancements, and opportunities to improve transit connections to GO Transit rail stations.

The ‘Opportunity for Improvement’ category is the potential for existing or new infrastructure and services to increase the proportion of riders who access GO Transit rail stations by other modes:

- **Low Opportunity:** Already very high station access mode share by other modes or little potential to increase the mode share further. For example, no new transit connections have been identified or no significant walking or cycling infrastructure identified to achieve mode shift.

- **Medium Opportunity:** Potential to increase transit access mode share through new transit routes, additional services along existing routes, or improved synchronization of bus and rail schedules, improvements to station infrastructure, improvements to transit connections, as well as Mobility Hub implementation may also have been identified. The current proportion of walking and cycling mode share at stations with ‘medium opportunity’ for improvement, is likely to be slightly below the percentage of customers living within one kilometre of the station, for example, 20% of customers live within one kilometre of the station but only 15% walk or cycle.

- **High Opportunity:** Potential to substantially increase transit access mode share through new routes and additional peak services. Options for better synchronizing bus and rail schedules, improving station infrastructure and transit priority may also have been identified to lift a ‘medium opportunity’ classification to a ‘high opportunity’ classification. The current proportion of walking and cycling mode share at stations with ‘high opportunity’ is likely to be significantly below the percentage of customers living within one kilometre of the station, for example, 20% of customers live within one kilometre of the station but only 10% walk or cycle.
**Lakeshore West Line**

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>150 (N/A)</td>
<td>250 (N/A)</td>
<td>150 (N/A)</td>
<td>450 (N/A)</td>
<td>300 (-36%)</td>
<td>1,250 (111%)</td>
<td>2,900 (15%)</td>
<td>3,400 (30%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>7% (Very Low)</td>
<td>64% (Medium)</td>
<td>65% (High)</td>
<td>69% (High)</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Low / Low</td>
<td>Low / Low</td>
<td>High / Medium</td>
<td>Medium / Medium</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>1,619</td>
<td>2,270</td>
<td>3,012</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>55% (Very Low)</td>
<td>86% (High)</td>
<td>75% (Medium)</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking expansion (2014 to 2032)</td>
<td>To be determined</td>
<td>200 – 600</td>
<td>No expansion forecast</td>
<td>200 – 600</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>To be determined</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>High / Medium</td>
<td>High / High</td>
<td>High / Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>To be determined</td>
<td>Surface</td>
<td>-</td>
<td>Surface</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timescale</td>
<td>Long Term</td>
<td>Short Term</td>
<td>-</td>
<td>Medium Term</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Potential future services identified in an Environmental Assessment
## Lakeshore West Line (continued)

<table>
<thead>
<tr>
<th></th>
<th>Bronte</th>
<th>Oakville (MH)</th>
<th>Clarkson</th>
<th>Port Credit (MH)</th>
<th>Long Branch</th>
<th>Mimico</th>
<th>Exhibition</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1km</td>
<td>5.3km</td>
<td>7.5km</td>
<td>6.2km</td>
<td>5.1km</td>
<td>4.6km</td>
<td>7.5km</td>
<td>3.2km</td>
</tr>
<tr>
<td><strong>Forecast Ridership (2031) and growth from 2011</strong></td>
<td>3,500 (29%)</td>
<td>6,000 (59%)</td>
<td>4,900 (39%)</td>
<td>2,400 (26%)</td>
<td>100 (50%)</td>
<td>900 (46%)</td>
<td>50 (0%)</td>
</tr>
<tr>
<td><strong>Auto Driver Mode Share (2011/12)</strong></td>
<td>74% (Very High)</td>
<td>57% (Medium)</td>
<td>56% (Low)</td>
<td>49% (Low)</td>
<td>38% (Very Low)</td>
<td>39% (Very Low)</td>
<td>0% (Very Low)</td>
</tr>
<tr>
<td><strong>Opportunity to improve Local Transit / Active Transportation</strong></td>
<td>Medium / Medium</td>
<td>Medium / High</td>
<td>High / Medium</td>
<td>Medium / High</td>
<td>Low / Low</td>
<td>Medium / Low</td>
<td>Medium / Low</td>
</tr>
<tr>
<td><strong>Parking Supply (May 2012)</strong></td>
<td>2,623</td>
<td>2,814</td>
<td>2,878</td>
<td>931</td>
<td>282</td>
<td>174</td>
<td>0</td>
</tr>
<tr>
<td><strong>Parking Utilization (2011/12 average)</strong></td>
<td>81% (Medium)</td>
<td>97% (Very High)</td>
<td>102% (Very High)</td>
<td>100% (Very High)</td>
<td>100% (Very High)</td>
<td>101% (Very High)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Committed Parking Expansion (2012 to 2014)</strong></td>
<td>0</td>
<td>1,250</td>
<td>1,130</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Proposed Parking Expansion (2014 to 2032)</strong></td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>200 – 600</td>
<td>0 – 200</td>
<td>0 – 200</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td><strong>Land Availability / Values</strong></td>
<td>High / Low</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Low / High</td>
<td>Low / Medium</td>
<td>Low / High</td>
<td>Low / High</td>
</tr>
<tr>
<td><strong>Parking Type (2014 to 2032)</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Structure (joint development)</td>
<td>Structure (joint development)</td>
<td>Structure (joint development)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Timescale</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Medium Term</td>
<td>Medium Term</td>
<td>Short Term</td>
<td>-</td>
</tr>
</tbody>
</table>
Corridor Context – Lakeshore West Line

The Lakeshore West Line runs between Hamilton GO Transit Centre and Union Station and has the highest level of ridership of any corridor.

Ridership is forecast to increase from 22,300 boardings to 33,100 boardings between 2011 and 2031, an increase of 39%.

Along with the Lakeshore East Line, the Lakeshore West Line has the highest frequency of rail service, with two-way, all day service on all days, although Hamilton GO Transit Centre is only served by peak hour train services. Up to two early morning and two late night GO Transit bus services also serve the corridor, along with non-peak, all day services from Hamilton GO Transit Centre to Aldershot GO Transit Rail Station and Burlington GO Transit rail station.

An additional AM and PM peak 10-car service is planned for 2013/14, along with an increase in westbound boarding’s, and a planned increases in inter-peak frequency in the medium term.

The corridor has approximately 16,600 parking spaces at its GO Transit rail stations, and an average parking occupancy of 86% in 2011/12 (excluding summer vacation months of July and August).

Many stations have high development potential, and Port Credit, Oakville, Burlington and Hamilton GO Transit Centre are designated Mobility Hubs, as is the proposed new James Street North GO Transit Rail Station in Hamilton.

Approximately 2,410 parking spaces are planned and committed for delivery before 2014, and a further 1,500 to 2,500 are proposed as part of this Plan for implementation between 2014 and 2032.

Proposals for parking expansion and other modes are presented in Table 5.1.

Short Term Corridor Plan

2,410 additional parking spaces have already been committed for delivery before 2014:

- 1,250 spaces in a parking structure at Oakville GO Transit Rail Station;
- 1,130 spaces in a parking structure at Clarkson GO Transit Rail Station; and
- 30 surface parking spaces are planned at Port Credit GO Transit Rail Station.

Up to 200 spaces are planned in the short term for Mimico GO Transit Rail Station as part of joint development, and between 200 to 600 spaces are proposed for the new James Street North GO Transit Rail Station in Hamilton.

Opportunities to improve station access infrastructure, particularly by other modes; and opportunities to improve transit connections to GO Transit rail stations have been identified (see Table 5.1).
Medium Term Corridor Plan

The medium term plan for parking along the corridor includes investment in parking expansion at Aldershot, Port Credit, and Long Branch GO Transit Rail Stations. Port Credit and Long Branch GO Transit Rail Stations have high development potential and Port Credit GO Transit Rail Station is also designated as a Mobility Hub. Opportunities for integrating parking expansion in structures as part of joint development are proposed, as little space exists for surface expansion.

It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.

Long Term Corridor Plan

In the long term, new services on the Lakeshore West Line, from Hamilton to St Catharine’s, have been identified in Environmental Assessments. It is anticipated that parking will be required to support this new service, but the amount and form of the parking will be determined as part of new station planning and design.
### TABLE 5.1  LAKESHORE WEST LINE STRATEGIC PARKING FORECASTS AND DRAFT OPPORTUNITIES TO IMPROVE STATION ACCESS & TRANSIT CONNECTIONS TO GO TRANSIT RAIL STATIONS

<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibition</td>
<td>No Parking expansion forecast</td>
<td>Consider improvements to the north pedestrian access.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The New Liberty Street Environmental Assessment should be</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>referenced once complete for any access issues near the</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>station it might address.</td>
<td></td>
</tr>
<tr>
<td>Mimico</td>
<td>0 - 200 spaces</td>
<td>Consider accessibility improvements to the station.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td></td>
<td>Potential for structured parking and</td>
<td>Investigate tunnel extension/access from south side.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>joint development</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short term</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Long Branch</td>
<td>0 - 200 spaces</td>
<td>Implement access improvements recommended by Lake Shore</td>
<td>Study transit connectivity improvements in coordination with the TTC and</td>
</tr>
<tr>
<td></td>
<td>Potential for structured parking and</td>
<td>Blvd and Exmoor Drive – Long Branch Avenue Study.</td>
<td>Mississauga Transit.</td>
</tr>
<tr>
<td></td>
<td>joint development</td>
<td>Consider accessibility improvements, including improving</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short term</td>
<td>the pedestrian access to north platform.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Medium term</td>
<td>High demand for more bicycle facilities (lockers, shelters).</td>
<td></td>
</tr>
<tr>
<td>Port Credit (MH)</td>
<td>200 – 600 spaces</td>
<td>Study the feasibility of a pedestrian path on the west</td>
<td>Add an additional bus route from the area bound by Dundas Street East, the</td>
</tr>
<tr>
<td></td>
<td>Potential for structured parking and</td>
<td>side of the tracks to facilitate pedestrian access from</td>
<td>Queen Elizabeth Way, Hurontario Street, and Cawthra Road to the station. (A</td>
</tr>
<tr>
<td></td>
<td>joint development</td>
<td>residential area.</td>
<td>MiWay route exists that provides coverage to the local streets in this area</td>
</tr>
<tr>
<td></td>
<td>Medium term</td>
<td>Investigate access from Hurontario to south parking lot</td>
<td>although it does not serve the station, it could serve as a template for a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Ramp/Stairs).</td>
<td>new route).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve access from north-west parking lot.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Explore the feasibility of a pedestrian tunnel to the</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>north parking lot.</td>
<td></td>
</tr>
<tr>
<td>Station</td>
<td>Strategic Parking Forecast (from 2014)</td>
<td>Draft Opportunities to improve Station Access Infrastructure</td>
<td>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</td>
</tr>
<tr>
<td>------------</td>
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<td>-----------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clarkson</td>
<td>No parking expansion forecast.</td>
<td>Deliver Kiss &amp; Ride expansion following recommendations of recent study (IBI 2011). Improve pedestrian flow in north lot (consider feasibility of bridge over creek). Consider relocating bus loop to the centre tunnel entrance</td>
<td>Increase service levels in the Aspen Forest, Clearview, Park Royal, and Lorne Park neighbourhoods to improve connection with train times during the peak periods. Add a direct connection to and from the Homelands neighbourhood to synchronize with train times.</td>
</tr>
<tr>
<td>Oakville (MH)</td>
<td>No parking expansion forecast.</td>
<td>Consider extending the North platform over Trafalgar with pedestrian connection to the intersection of Cross/Trafalgar. Investigate the possibility of adding more bicycle facilities to the station. Consider actions to enhance bus operation to, from and at this station such as: - Transit priority measures at main intersections in the area; and - Other short term interventions to make transit use more attractive including extra bus bays and bus shelters. Undertake an operational strategy to identify opportunities for improving traffic operations surrounding the station, primarily though signal timing modifications and localized intersection improvements. Current Class Environmental Assessment is underway along Trafalgar Road from Cornwall to Highway 407.</td>
<td>Provide a new bus route along Pine Glen Road and Proudfoot Trail to Oakville GO Transit Rail Station. Add new AM peak and PM peak services from the area around Pilgrim’s Way, Heritage Way, and Nottinghill Gate. Improve synchronization between train and bus timetables Identify additional opportunities to improve local transit access to/from the Oakville GO Transit Rail Station through the Operational Strategy.</td>
</tr>
<tr>
<td>Station</td>
<td>Strategic Parking Forecast (from 2014)</td>
<td>Draft Opportunities to improve Station Access Infrastructure</td>
<td>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</td>
</tr>
<tr>
<td>---------</td>
<td>---------------------------------------</td>
<td>----------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Bronte</td>
<td>No parking expansion forecast.</td>
<td>Consider recommendations from Bronte Station Master Plan Study, completed early 2013. Improve pedestrian access from north east lot to station. Consider extending the east tunnel to the south side. Consider relocating the bus loop to south side of rail tracks to align with long term vision for Speers Road to become regional transit corridor. Alternatively, explore options to improve connections between station and existing west tunnel/bus loop. Assess the feasibility to provide additional bus loop bays for Oakville Transit. Three more bays has been identified as ideal. Consider a transit priority operation study for transit vehicles accessing the bus loop.</td>
<td>Add a bus route from the area bound by the 403, Upper Middle Rd, Third Line. and Dorval Dr. to Bronte GO Transit Rail Station. Add service on selected bus routes to meet the early morning (pre-7:00) departures. Consider the possibility of creating sub-routes to serve only Bronte Station. Many of the Oakville Transit lines serve both Bronte and Oakville, and are therefore quite long. In adding trips intended to meet train departures at Bronte, it may be more efficient to add shorter routes.</td>
</tr>
<tr>
<td>Appleby</td>
<td>No parking expansion forecast.</td>
<td>Assess feasibility to implement bus only access from Harvester Road following Environmental Assessment study. Improve signage for pedestrian / bike commuters. Consider construction of multi-use trails in the station area (City of Burlington undertaking a Community Trails Master Plan in 2013). Consider adding an elevator on the north side. Include accessible transportation infrastructure permitting transfer from Specialized Transit Services to Regional and Local services in station transit bus loop design / redesign, along with accessibility improvements to the station building. Identify opportunities to provide improved amenities for passengers transferring to local transit services, such as safe, secure and monitored sheltered waiting locations or bus bays within easy walking distance, next departure information, information kiosk, etc.</td>
<td>Add bus trips on routes serving concentrations of passengers to the west and northwest of Appleby station. Consider adding trips to the feeder portion of the route that serves the neighbourhood to the southeast of the station.</td>
</tr>
<tr>
<td>Station</td>
<td>Strategic Parking Forecast (from 2014)</td>
<td>Draft Opportunities to improve Station Access Infrastructure</td>
<td>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</td>
</tr>
<tr>
<td>-------------------------------</td>
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<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Burlington</td>
<td>No parking expansion forecast.</td>
<td>Improve signage / wayfinding inside and outside facility, including signage for indicating when the parking lot is full. Consider removing unused north track to make north platform a side platform with pedestrian connections to the north tunnel. Incorporate active transportation connections to the station into the design of major retail, residential and office development proposed, south west of the station. New station building and bus loop are currently under construction. Include accessible transportation infrastructure permitting transfer from Specialized Transit Services to Regional and Local services in station transit bus loop design/redesign.</td>
<td>Add one new bus route from the area bound by Dundas Street, the 407, and Brant Street.</td>
</tr>
<tr>
<td>Aldershot</td>
<td>200 - 600 spaces</td>
<td>Investigate planning and implementation of safe walking paths and bike lane connections to the station. Consider intersection improvements at Plains Road East and Waterdown Road Wayfinding should be improved around the station. Include accessible transportation infrastructure permitting transfer from Specialized Transit Services to Regional and Local services in station transit bus loop design/redesign.</td>
<td>Improve the synchronization of bus timetables and rail schedule at peak periods.</td>
</tr>
<tr>
<td>Hamilton</td>
<td>No parking expansion forecast.</td>
<td>The City has produced a cycling master plan ‘Shifting Gears’ which should be referred to in considering improved bicycle connections to the station. Wayfinding should be improved around the station. The City of Hamilton has produced Transit Oriented Development Guidelines that should be referenced to in planning around the station.</td>
<td>No opportunities identified at this time.</td>
</tr>
<tr>
<td>New Station: James Street North</td>
<td>200 - 600 spaces</td>
<td>To be determined as part of new station planning.</td>
<td>To be determined as part of new station planning.</td>
</tr>
<tr>
<td>Station</td>
<td>Strategic Parking Forecast (from 2014)</td>
<td>Draft Opportunities to improve Station Access Infrastructure</td>
<td>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Confederation*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grimsby*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>St Catharines*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MH) – Mobility Hub / * Potential future station identified in Environmental Assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Milton Line

#### Forecast Ridership (2031) and growth from 2011

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton</th>
<th>Lisgar</th>
<th>Meadowvale</th>
<th>Streetsville</th>
<th>Erindale</th>
<th>Cooksville (MH)</th>
<th>Dixie</th>
<th>Kipling (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ridership</td>
<td>3,100</td>
<td>1,100</td>
<td>1,500</td>
<td>3,600</td>
<td>2,400</td>
<td>4,900</td>
<td>1,000</td>
<td>400</td>
</tr>
<tr>
<td>Growth</td>
<td>101%</td>
<td>51%</td>
<td>34%</td>
<td>42%</td>
<td>30%</td>
<td>86%</td>
<td>17%</td>
<td>36%</td>
</tr>
</tbody>
</table>

#### Automobile Driver Mode Share (2011/12)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton (High)</th>
<th>Lisgar (High)</th>
<th>Meadowvale (Medium)</th>
<th>Streetsville (Low)</th>
<th>Erindale (Low)</th>
<th>Cooksville (MH) (Very High)</th>
<th>Dixie (Very Low)</th>
<th>Kipling (MH) (Very High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share</td>
<td>69%</td>
<td>70%</td>
<td>60% (Medium)</td>
<td>54% (Low)</td>
<td>47% (Low)</td>
<td>56% (Low)</td>
<td>83%</td>
<td>39% (Very Low)</td>
</tr>
</tbody>
</table>

#### Opportunity to improve Local Transit / Active Transportation

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton / High</th>
<th>Lisgar / High</th>
<th>Meadowvale / Medium</th>
<th>Streetsville / Low</th>
<th>Erindale / Low</th>
<th>Cooksville (MH) / Medium</th>
<th>Dixie / Low</th>
<th>Kipling / High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>Medium</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>Low / Low</td>
<td>Low / Low</td>
<td>Low / Medium</td>
<td>Low / High</td>
<td>Low / Medium</td>
</tr>
</tbody>
</table>

#### Parking Supply (May 2012)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton</th>
<th>Lisgar</th>
<th>Meadowvale</th>
<th>Streetsville</th>
<th>Erindale</th>
<th>Cooksville (MH)</th>
<th>Dixie</th>
<th>Kipling (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply</td>
<td>1,482</td>
<td>788</td>
<td>1,747</td>
<td>1,335</td>
<td>833</td>
<td>1,458</td>
<td>935</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Parking Utilization (2011/12 average)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton (Medium)</th>
<th>Lisgar (Very Low)</th>
<th>Meadowvale (Low)</th>
<th>Streetsville (Very High)</th>
<th>Erindale (Very High)</th>
<th>Cooksville (MH) (Medium)</th>
<th>Dixie (Very High)</th>
<th>Kipling (MH) (Medium)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilization</td>
<td>75% (Medium)</td>
<td>55% (Very Low)</td>
<td>71% (Low)</td>
<td>102% (Very High)</td>
<td>99% (Very High)</td>
<td>105% (Very High)</td>
<td>81% (Medium)</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Committed Parking Expansion (2012 to 2014)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton</th>
<th>Lisgar</th>
<th>Meadowvale</th>
<th>Streetsville</th>
<th>Erindale</th>
<th>Cooksville (MH)</th>
<th>Dixie</th>
<th>Kipling (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expansion</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>50</td>
<td>1,100</td>
<td>240</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Proposed Parking Expansion (2014 to 2032)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton</th>
<th>Lisgar</th>
<th>Meadowvale</th>
<th>Streetsville</th>
<th>Erindale</th>
<th>Cooksville (MH)</th>
<th>Dixie</th>
<th>Kipling (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast</td>
<td>600 – 800</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>200 - 600</td>
<td>No expansion forecast</td>
<td>600 - 800</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
</tr>
</tbody>
</table>

#### Land Availability / Values

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton (High)</th>
<th>Lisgar (Low)</th>
<th>Meadowvale (High / Low)</th>
<th>Streetsville (Low / Medium)</th>
<th>Erindale (Medium / Medium)</th>
<th>Cooksville (MH) (High / Medium)</th>
<th>Dixie (Medium / High)</th>
<th>Kipling (MH) (Medium / High)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability</td>
<td>Medium</td>
<td>Low</td>
<td>High / Low</td>
<td>Low / Medium</td>
<td>Medium / Medium</td>
<td>High / Medium</td>
<td>Medium / High</td>
<td>Medium / High</td>
</tr>
</tbody>
</table>

#### Parking Type (2014 to 2032)

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton (Structure)</th>
<th>Lisgar (Structure)</th>
<th>Meadowvale (Structure)</th>
<th>Streetsville (Structure)</th>
<th>Erindale (Structure)</th>
<th>Cooksville (MH) (Structure (some joint development))</th>
<th>Dixie (Structure)</th>
<th>Kipling (MH) (Structure)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Structure</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Structure (some joint development)</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Timescale

<table>
<thead>
<tr>
<th>Station</th>
<th>Milton (Medium Term)</th>
<th>Lisgar (Short Term)</th>
<th>Meadowvale (Short Term)</th>
<th>Streetsville (Short Term)</th>
<th>Erindale (Medium Term)</th>
<th>Cooksville (MH) (Medium Term)</th>
<th>Dixie (Medium Term)</th>
<th>Kipling (MH) (Medium Term)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timescale</td>
<td>Medium Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>Medium Term</td>
<td>Medium Term</td>
<td>Medium Term</td>
<td>Medium Term</td>
</tr>
</tbody>
</table>
**Corridor Context – Milton Line**

- The Milton Line runs between Milton GO Transit Rail Station and Union Station, and has the third highest level of ridership of the seven rail corridors.
- Ridership is forecast to increase from 12,900 boardings to 19,700 boardings between 2011 and 2031, an increase of 53%. The corridor operates peak only rail service – inbound towards Union Station in the AM peak and outbound towards Milton GO Transit Rail Station in the PM peak. Outside of these times, GO Transit bus services operate along the corridor.
- Two-way, all day service is planned for the corridor in the medium to long term with hourly inter-peak services.
- The corridor has approximately 8,600 parking spaces at its GO Transit rail stations, and an average parking occupancy of 85% in 2011/12 (excluding July and August).
- Many stations have medium to high development potential, and the Kipling and Cooksville GO Stations are designated as Mobility Hubs.
- Approximately 1,390 parking spaces are committed for 2014, and a further 2,000 to 2,500 are proposed as part of this Plan between 2014 and 2032.
- Proposals for parking expansion and other modes are presented in Table 5.2.

**Short Term Corridor Plan**

- Approximately 1,390 additional spaces are committed for 2014:
  - 1,100 spaces in a parking structure at Erindale GO Transit Rail Station;
  - 240 surface parking spaces at Cooksville GO Transit Rail Station; and
  - 50 surface parking spaces at Streetsville GO Transit Rail Station.
- In addition to the surface spaces at Streetsville GO Transit Rail Station, it is also recommended that a parking structure for 200 to 600 spaces be constructed there in the short term.
- Opportunities to improve station access infrastructure, particularly by other modes, and opportunities to improve transit connections to GO Transit rail stations have been identified (see Table 5.2).

**Medium & Long Term Corridor Plan**

- The medium term plan for parking along the corridor includes investment in parking expansion at the Cooksville GO Transit Rail Station and Milton GO Transit Rail Station. Both stations have high development potential and Cooksville GO Station is designated as a Mobility Hub. Opportunities for integrating parking expansion in structures as part of joint development are proposed at Cooksville GO Transit Rail Station, as available land is limited for surface expansion.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of options for other station access modes.
### TABLE 5.2 MILTON LINE STRATEGIC PARKING FORECASTS AND DRAFT OPPORTUNITIES TO IMPROVE STATION ACCESS & TRANSIT CONNECTIONS TO GO TRANSIT RAIL STATIONS

<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kipling</td>
<td>No parking expansion forecast</td>
<td>No opportunities identified at this time.</td>
<td>No opportunities identified at this time.</td>
</tr>
</tbody>
</table>
| Dixie            | No parking expansion forecast          | Investigate the opportunity for an additional access point northeast of the station.  
Consider extending the platform west and providing a staircase/ramp from the west side of Dixie to the platform. | Explore the potential for bus trips to meet rail services.                   |
| Cooksville (MH)  | 600 - 800 spaces                      | Consider the feasibility of a pedestrian bridge over Hurontario Street as a medium to long term action since local buses load and unload passengers at Hurontario stops, and future Light Rail Transit will only increase transit transfer demand.  
Explore the opportunity to improve north access by adding a new ramp. | Provide a direct connection to and from the area bounded by Matheson Boulevard to the north, Hurontario Street to the west, Highway 403 to the east, and Eglington Avenue to the south that meets train times.  
Provide a direct transit connection between Confederation Parkway to increase travel options between the station and the area south of Burnhamthorpe Road and west of Hurontario Street. |
| Erindale         | No parking expansion forecast          | Enhancements to bus loop, pedestrian movements and internal traffic flows are currently being implemented alongside a new parking structure. | Increase service levels in the area bounded by Britannia Road to the north, the Credit River to the west, Mavis Road to the east, and Burnhamthorpe Road to the south to improve connection with rail departures.  
MiWay services on Rathburn Road and Creditview Road currently do not serve the station directly due to traffic congestion on site that impacts travel time and service reliability. The nearest southbound bus stop on Creditview Road is approximately 400 to 500 metres away at Melia Drive. |
<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
</table>
| Streetsville | 200 - 600 spaces  
Potential for structured parking  
Short term | Discuss the feasibility of adding a turning lane at the intersection of Thomas Road and the access road to the station, as recommended by the 2011 Traffic Impact Study.  
Study the feasibility of widening the access road to the station from Thomas Road and regulating traffic.  
Study the opportunity to improve pedestrian and cyclist access to the north tunnel entrance.  
Consider improving transit access to and from the station through the completion of the new bus loop and the reconfiguration of internal traffic circulation. | Increase service levels in the area bounded by Britannia Road to the north, the Credit River to the west, Mavis Road to the east, and Burnhamthorpe Road to the south to improve connection with select rail services during peak periods. |
| Meadowvale | No parking expansion forecast | Consider reconfiguration of bus loop/layby to increase capacity. Alternatively examine the possibility of a bus-only access to/from the loop.  
Assess feasibility for improved facilities (Kiss &Ride, bike shelter) and access to the north side. | Increase service levels in the area bounded by Britannia Road to the north, Ninth Line to the west, Winston Churchill Boulevard to the east, and Erin Centre Boulevard to the south to improve connections with rail services during peak periods.  
Increase service levels in the area north of Britannia Road and east of Mississauga Road to improve connections with select rail services during peak periods. |
<p>| Lisgar | No parking expansion forecast | Consider improvements at the intersection as it is the only access point to the station. Note that plans for extending Argentia Road should improve the level of service of the intersection. | Add trips to the route that serves the area southeast of the station bound by Ninth Line Road, Winston Churchill Blvd., the rail corridor, and Britannia Road West to enhance flexibility for GO Transit customers using transit to access the station. |</p>
<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Milton</td>
<td>600 – 800 spaces&lt;br&gt;Potential for structured parking&lt;br&gt;Medium term</td>
<td>Asses options to improve pedestrian connectivity between Main Street and the station platform.&lt;br&gt;Explore options of expanding the number of bus bays for local transit.&lt;br&gt;The Town is currently exploring station area design and access options as part of a Mobility Hub Plan for Milton’s Transportation Master Plan.</td>
<td>Increase bus service along existing routes to provide additional flexibility for GO Transit customers utilizing local transit.</td>
</tr>
</tbody>
</table>

(MH) – Mobility Hub
### Kitchener Line

MH – Mobility Hub

<table>
<thead>
<tr>
<th></th>
<th>Kitchener</th>
<th>Potential Future Station</th>
<th>Guelph</th>
<th>Acton</th>
<th>Georgetown</th>
<th>Mount Pleasant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>190 (94%)</td>
<td>50 (N/A)</td>
<td>800 (177%)</td>
<td>200 (N/A)</td>
<td>900 (29%)</td>
<td>2,800 (200%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>Unknown</td>
<td>-</td>
<td>Unknown</td>
<td>Unknown</td>
<td>61% (Medium)</td>
<td>62% (Medium)</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>Unknown</td>
<td>-</td>
<td>Unknown</td>
<td>Unknown</td>
<td>Low / High</td>
<td>Medium / Medium</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>110</td>
<td>614</td>
<td>1,112</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Unknown</td>
<td>72% (Low)</td>
<td>64% (Very Low)</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>No expansion forecast</td>
<td>To be determined</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>200 – 600</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>Low / Medium</td>
<td>Medium / Medium</td>
<td>Low / Medium</td>
<td>Medium / Low</td>
<td>Medium / Medium</td>
<td>High / Medium</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>-</td>
<td>To be determined</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Structure</td>
</tr>
<tr>
<td>Timescale</td>
<td>-</td>
<td>Medium Term</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Medium Term</td>
</tr>
</tbody>
</table>
**Kitchener Line**

*(continued)*

<table>
<thead>
<tr>
<th></th>
<th>Brampton (MH)</th>
<th>Bramalea (MH)</th>
<th>Malton</th>
<th>Etobicoke North</th>
<th>Weston</th>
<th>Bloor (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>3,900 (142%)</td>
<td>2,900 (23%)</td>
<td>1,300 (46%)</td>
<td>850 (27%)</td>
<td>600 (63%)</td>
<td>50 (c.0%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>54% (Low)</td>
<td>62% (Medium)</td>
<td>63% (Medium)</td>
<td>73% (Very High)</td>
<td>41% (Very Low)</td>
<td>N/K</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Low / Low</td>
<td>Low / Low</td>
<td>Medium / High</td>
<td>Medium / Low</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>891</td>
<td>2,381</td>
<td>731</td>
<td>532</td>
<td>110</td>
<td>0</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>101% (Very High)</td>
<td>81% (Medium)</td>
<td>95% (Very High)</td>
<td>97% (Very High)</td>
<td>101% (Very High)</td>
<td>-</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>280</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>200 - 600</td>
<td>800+</td>
<td>200 – 600</td>
<td>0 - 200</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>Low / High</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Medium / Low</td>
<td>Medium / Medium</td>
<td>Low / High</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>Structure (joint development)</td>
<td>Structure</td>
<td>Surface</td>
<td>Surface</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Timescale</td>
<td>Medium Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Corridor Context – Kitchener Line

- The Kitchener Line runs between Kitchener GO Transit Rail Station and Union Station, and has the fourth highest level of ridership of the seven rail corridors.
- Ridership is forecast to increase from 8,600 to 15,700 riders between 2011 and 2031, an increase of 89%.
- The corridor operates peak only rail service; inbound towards Union Station in the AM peak, and outbound towards Kitchener GO Transit Rail Station in the PM peak. Stations closer to Union Station are served with a higher peak frequency. Outside of peak periods, GO Transit bus services operate along the corridor.
- Five additional AM and PM peak services are proposed for 2015/16, four of which will use twelve-car train sets and one of which will be a ten-car train set. Two-way, all day service is planned for the medium to long term at inner stations.
- The corridor has approximately 6,400 spaces at its GO Transit rail stations, and an average parking occupancy of 83% in 2011/12 (excluding July and August).
- Several of the stations have high development potential. Brampton, Bramalea, and Bloor GO Transit Rail stations are designated as Mobility Hubs. Weston and Bloor GO Transit Rail Stations are intermediate stations for the Union Pearson Express.
- Approximately 280 spaces are committed for 2014, and an additional 3,000 to 3,500 parking spaces are proposed as part of this Plan between 2014 and 2032.
- Proposals for parking expansion and other modes are presented in Table 5.3.

Short Term Corridor Plan

- Approximately 280 surface parking spaces are already planned for 2013 at Weston GO Station. Acton GO Transit Rail Station, which opened in January 2013, has an additional 110 spaces.
- The Plan recommends surface expansion at Malton and Etobicoke North GO stations, and a parking structure at Bramalea GO Transit Rail Station to meet demand from increased local transit and from Brampton GO Transit Rail Station.
- Opportunities to improve station access infrastructure, particularly by other modes and opportunities to improve transit connections to GO Transit rail stations have been identified (see Table 5.3).

Medium & Long Term Corridor Plan

- The medium term plan for parking along the corridor includes investment in parking expansion in a structure at Mount Pleasant GO Transit Rail Station and Brampton GO Transit Rail Station. Brampton GO Transit Rail Station is designated as a Mobility Hub, and considering land availability constraints, opportunities for integrating parking expansion in a structure as part of joint development is proposed.
- A potential future station is being considered in the medium term between Kitchener GO Transit Rail Station and Guelph GO Transit Rail Station. Parking is anticipated at this station, but the amount and form of the parking will be determined during the station planning and design.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.
<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bloor</td>
<td>No parking expansion forecast.</td>
<td>The Dundas West-Bloor Mobility Study was completed in June 2011. Improving pedestrian connections to Dundas West TTC Station was identified as a priority in the study.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Weston</td>
<td>No parking expansion forecast.</td>
<td>The Weston Station Master Plan was completed in September 2012. New Weston Station to be built by 2015.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Etobicoke North</td>
<td>0 - 200 spaces Surface parking Short term</td>
<td>Improve pedestrian connection from parking lots to platforms (consider weather protected walkways).</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Malton</td>
<td>200 - 600 spaces Surface parking Short term</td>
<td>Consider pedestrian connectivity improvements between Derry Road and all facilities within the station site.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Bramalea (MH)</td>
<td>800+ spaces Potential for structured parking Short term</td>
<td>Improve the safety of pedestrian connectivity to and within the station area. Current Bramalea Master Planning Study should be used to identify feasible and immediate station infrastructure actions. Improve vehicular access from South lot (north west corner) to Steeles Avenue. Build out proposals for a transit hub, including operational integration with the City of Brampton’s Züm Bus Rapid Transit services along Steeles Avenue.</td>
<td>Increase GO Transit bus service frequency along Dixie Road. Increase bus service frequency on City of Brampton local transit routes providing neighbourhood pickup service in the areas between: Steeles Avenue, Dixie Road, Queen Street, and Bramalea Road; and Steeles Avenue, Bramalea Road, Bovaird Drive, and Torbram Road.</td>
</tr>
<tr>
<td>Location</td>
<td>Parking Spaces</td>
<td>Potential for Structured Parking</td>
<td>Medium Term</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
<td>----------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Brampton (MH)</td>
<td>200 - 600 spaces</td>
<td>Potential for structured parking and joint development</td>
<td>This station is planned to become a major mobility hub when the Hurontario / Main Light Rail Transit is built. Improve pedestrian connectivity between the rail station platforms and the bus terminal.</td>
</tr>
<tr>
<td>Mount Pleasant</td>
<td>200 - 600 spaces</td>
<td>Potential for structured parking</td>
<td>Assess the feasibility of separating transit and automobile access to station. Consider pedestrian circulation improvements in and around the station. Assess need for additional bike shelters/racks. Explore options to implement north side Kiss &amp; Ride.</td>
</tr>
<tr>
<td>Georgetown</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>Explore options of adding more accessible features. Improvements to pedestrian walkways to station, in particular, the one from Queen Street should be investigated.</td>
</tr>
<tr>
<td>Acton</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>To be determined.</td>
</tr>
<tr>
<td>Guelph</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>New Kiss &amp; Ride and other station facilities currently being built.</td>
</tr>
<tr>
<td>Potential Future Station</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kitchener</td>
<td>Parking shared with VIA Rail (limited).</td>
<td></td>
<td>To be determined as part of new station planning.</td>
</tr>
</tbody>
</table>

(MH) – Mobility Hub
## Barrie Line

### MH – Mobility Hub

<table>
<thead>
<tr>
<th></th>
<th>Allandale Waterfront</th>
<th>Barrie South</th>
<th>Potential Future Station</th>
<th>Bradford</th>
<th>East Gwillimbury</th>
<th>Newmarket (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forecast Ridership (2031) and Growth from 2011</strong></td>
<td>500 (48%)</td>
<td>300 (-54%)</td>
<td>To be determined</td>
<td>500 (74%)</td>
<td>1,100 (161%)</td>
<td>1,000 (65%)</td>
</tr>
<tr>
<td><strong>Automobile Driver Mode Share (2011/12)</strong></td>
<td>Not Known</td>
<td>70% (High)</td>
<td>-</td>
<td>72% (Very High)</td>
<td>90% (Very High)</td>
<td>57% (Medium)</td>
</tr>
<tr>
<td><strong>Opportunity to improve Local Transit / Active Transportation</strong></td>
<td>Unknown</td>
<td>Low / High</td>
<td>-</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>High / High</td>
</tr>
<tr>
<td><strong>Parking Supply (May 2012)</strong></td>
<td>160</td>
<td>623</td>
<td>-</td>
<td>322</td>
<td>639</td>
<td>267</td>
</tr>
<tr>
<td><strong>Parking Utilization (2011/12 average)</strong></td>
<td>58% (Very Low)</td>
<td>72% (Low)</td>
<td>-</td>
<td>63% (Very Low)</td>
<td>68% (Low)</td>
<td>102% (Very High)</td>
</tr>
<tr>
<td><strong>Committed Parking Expansion (2012 to 2014)</strong></td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Proposed Parking Expansion (2014 to 2032)</strong></td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>To be determined</td>
<td>No expansion forecast</td>
<td>200 – 600</td>
<td>0 – 200</td>
</tr>
<tr>
<td><strong>Land Availability / Values</strong></td>
<td>Low / Low</td>
<td>High / Medium</td>
<td>To be determined</td>
<td>High / Low</td>
<td>High / Low</td>
<td>Low / Medium</td>
</tr>
<tr>
<td><strong>Parking Type (2014 to 2032)</strong></td>
<td>-</td>
<td>-</td>
<td>To be determined</td>
<td>-</td>
<td>Surface</td>
<td>Surface (shared parking)</td>
</tr>
<tr>
<td><strong>Timescale</strong></td>
<td>-</td>
<td>-</td>
<td>Long Term</td>
<td>-</td>
<td>Long Term</td>
<td>Short Term</td>
</tr>
</tbody>
</table>
### Barrie Line

*(continued)*

<table>
<thead>
<tr>
<th>Station</th>
<th>Aurora</th>
<th>King City</th>
<th>Potential Future Station</th>
<th>Maple</th>
<th>Rutherford</th>
<th>York University</th>
<th>New Station: Sheppard West</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Forecast Ridership (2031) and Growth from 2011</strong></td>
<td>2,700 (71%)</td>
<td>900 (67%)</td>
<td>Unknown</td>
<td>2,400 (100%)</td>
<td>2,300 (87%)</td>
<td>50 (N/A)</td>
<td>50 (N/A)</td>
</tr>
<tr>
<td><strong>Automobile Driver Mode Share (2011/12)</strong></td>
<td>75% (Very High)</td>
<td>80% (Very High)</td>
<td>-</td>
<td>77% (Very High)</td>
<td>80% (Very High)</td>
<td>40% (Very Low)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Opportunity to improve Local Transit / Active Transportation</strong></td>
<td>Medium / Medium</td>
<td>Low / High</td>
<td>-</td>
<td>Medium / Low</td>
<td>High / High</td>
<td>Low / Low</td>
<td>Unknown / Unknown</td>
</tr>
<tr>
<td><strong>Parking Supply (May 2012)</strong></td>
<td>2,422</td>
<td>445</td>
<td>-</td>
<td>1,265</td>
<td>935</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td><strong>Parking Utilization (2011/12 average)</strong></td>
<td>88% (High)</td>
<td>102% (Very High)</td>
<td>-</td>
<td>86% (Very High)</td>
<td>98% (Very High)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Committed Parking Expansion (2012 to 2014)</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Proposed Parking Expansion (2014 to 2032)</strong></td>
<td>No expansion forecast</td>
<td>200 – 600</td>
<td>To be determined</td>
<td>200 – 600</td>
<td>800+</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td><strong>Land Availability / Values</strong></td>
<td>Medium / Medium</td>
<td>Low / Medium</td>
<td>To be determined</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>Low / High</td>
</tr>
<tr>
<td><strong>Parking Type (2014 to 2032)</strong></td>
<td>-</td>
<td>Structure</td>
<td>To be determined</td>
<td>Surface (Shared Parking)</td>
<td>Structure</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Timescale</strong></td>
<td>-</td>
<td>Short Term</td>
<td>Medium Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>Short Term</td>
<td>-</td>
</tr>
</tbody>
</table>

*Towards Union*
**Corridor Context – Barrie Line**

- The Barrie Line runs between Allandale Waterfront GO Transit Rail Station and Union Station, and has the fifth highest level of ridership of the seven GO Transit rail corridors.
- Ridership is forecast to increase from 7,600 to 13,500 riders between 2011 and 2031, an increase of 87%.
- The corridor operates peak only rail service on weekdays, inbound towards Union Station in the AM peak and outbound towards Allandale Waterfront GO Transit Rail Station in the PM peak.
- One additional AM and PM peak service is proposed for 2015/16, and two-way all day service is proposed to inner stations in the medium to long term.
- The corridor has approximately 5,900 parking spaces at its GO Transit rail stations, and an average parking occupancy of 88% in 2011/12 (excluding July and August).
- Several stations have high development potential, primarily those located in downtown areas along the corridor. Newmarket GO Transit Rail Station is the only designated Mobility Hub along the corridor.
- No spaces have been planned or committed to for 2014, but approximately 2,000 to 2,500 additional parking spaces are proposed as part of this Plan between 2014 and 2032.
- Proposals for parking expansion and other modes are presented in Table 5.4.

**Short Term Corridor Plan**

- No additional spaces have been planned or committed to up to 2014.
- From 2014 to 2017, 2,000 to 2,500 additional spaces are recommended:
  - 0 to 200 shared surface spaces at Newmarket GO Transit Rail Station;
  - 200 to 600 spaces in a parking structure at King City GO Transit Rail Station;
  - 200 to 600 shared surface parking spaces at Maple GO Transit Rail Station; and
  - 800 plus spaces in a parking structure at Rutherford GO Transit Rail Station.
- Opportunities for improving station access infrastructure and opportunities to improve local transit connections to GO Transit rail stations other modes have been identified (see Table 5.4).

**Medium Term Corridor Plan**

- A new station is proposed at Sheppard West in the City of Toronto between Union Station and York University GO Transit rail station. No additional local parking expansion is proposed at this point.
- A potential station is being considered between King City GO Transit Rail Station and Maple GO Transit Rail Station, and while the amount of parking supply is yet to be determined, there is potential to redistribute parking demand from King City and Maple GO Transit Rail Stations which are severely constrained in terms of current parking capacity and opportunities for expansion.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.
**Long Term Corridor Plan**

The long term plan for parking along the corridor includes investment in surface parking expansion at East Gwillimbury GO Transit Rail Station by 200 to 600 spaces. A potential station is possible between Barrie South GO Transit Rail Station and Bradford GO Transit Rail Station. Parking would be required at this station, but the amount and form of the parking will be determined as part of new station planning and design.
### TABLE 5.4  BARRIE LINE STRATEGIC PARKING FORECASTS AND DRAFT OPPORTUNITIES TO IMPROVE STATION ACCESS & TRANSIT CONNECTIONS TO GO TRANSIT RAIL STATIONS

<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Station: Sheppard West</td>
<td>No parking expansion forecast.</td>
<td>To be determined as part of new station planning.</td>
<td></td>
</tr>
<tr>
<td>York University</td>
<td>No parking expansion forecast.</td>
<td>No opportunities identified at this time.</td>
<td>No opportunities identified at this time.</td>
</tr>
<tr>
<td>Rutherford</td>
<td>800+ spaces</td>
<td>Explore the opportunity to improve pedestrian connections between the station and residential developments to the east. Improvements for vehicular access to be developed in conjunction with Rutherford Road expansion and grade separations. Investigate options for direct pedestrian access from Rutherford Road to platform.</td>
<td>Add shuttle bus services from residential areas to the east and to the north of the station. Add two new local transit connections to the station, one along Keele Street and one along Bathurst Street</td>
</tr>
<tr>
<td>Maple</td>
<td>200 - 600 spaces</td>
<td>Discuss the opportunity for a pedestrian master plan of the area, including improved access to the station to promote pedestrian commuters. Recent feasibility study (Planmac Inc – March 2010) recommends implementing a bus loop, two space layby and widening Hill Street. Consider developing a new bus loop on the south side of the station with direct access to and from Major Mackenzie Drive via Hill Street.</td>
<td>Improve timetable integration between YRT services on Major Mackenzie Drive and rail services. Provide a direct connection to and from the area south of Major Mackenzie Drive and east of Dufferin Street to meet train times. Improve connection between the station and the neighbourhood south of Teston Road and west of Keele Street.</td>
</tr>
<tr>
<td>Potential Station</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>King City</td>
<td>200 – 600 spaces</td>
<td>Consider feasibility of constructing sidewalks along Burton Grove to attract pedestrian activity from this residential area.</td>
<td>Study opportunity for a shuttle bus service to the municipal parking lot north on Keele Street (Identified by the township). Increase service level to improve connection with select trains during the morning peak period.</td>
</tr>
<tr>
<td>Location</td>
<td>Parking Expansion Forecast</td>
<td>Station Area Details</td>
<td>Recommendations</td>
</tr>
<tr>
<td>---------------------</td>
<td>----------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Aurora</td>
<td>No</td>
<td>Station area was recently renovated, which included a new bus loop, new Kiss &amp; Ride, new promenade area and an upgraded station building.</td>
<td>Add a new bus route or variation of an existing route to more directly serve the station from the neighbourhood bound by Wellington Street West, St John’s Sideroad, Bathurst Street and Yonge Street. Add additional bus services to and from the neighbourhood bound by Wellington Street West, Mulock Drive, Bathurst Street and Yonge Street to better align with rail service times.</td>
</tr>
<tr>
<td>Newmarket (MH)</td>
<td>0 - 200 spaces</td>
<td>Assess the opportunity for additional access to the site in coordination with Regional plans for Viva BRT implementation on Davis Drive.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Potential for shared surface parking</td>
<td>To provide a direct connection to and from the area south of Davis Drive and east of Bathurst Street, as well as the area north of Murlock Drive and west of Leslie Street, that meets rail services at the station.</td>
<td></td>
</tr>
<tr>
<td>East Gwillimbury</td>
<td>200 - 600 spaces</td>
<td>Explore the potential for additional access from Main St North to the station.</td>
<td>Add one trip in the peak periods to the feeder bus route serving the stations from the area northwest of the station.</td>
</tr>
<tr>
<td></td>
<td>Surface parking</td>
<td>Explore options to improve pedestrian connection to the Haines Road residential area.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long term</td>
<td>Consider enhancing lighting on the trail network to encourage safe active transportation to station.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider grade separated connection from the trail to platforms.</td>
<td></td>
</tr>
<tr>
<td>Bradford</td>
<td>No</td>
<td>Construction of pedestrian/cycling facilities to the station as identified in Master Plan.</td>
<td>Explore opportunity for a bus shuttle service to the downtown core.</td>
</tr>
<tr>
<td>Potential Future Station</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barrie South Station</td>
<td>No</td>
<td>Major developments are being proposed and planned around station area. GO Transit and municipal staff should ensure that these developments connect well with existing station.</td>
<td>None identified at this station</td>
</tr>
<tr>
<td>Allandale Waterfront</td>
<td>No</td>
<td>A Station Master Plan is being conducted for this new station.</td>
<td>To be determined as part of new station planning.</td>
</tr>
</tbody>
</table>

(MH) – Mobility Hub
## Richmond Hill Line

(MH) – Mobility Hub

<table>
<thead>
<tr>
<th></th>
<th>Bloomington</th>
<th>Gormley</th>
<th>Richmond Hill</th>
<th>Langstaff (MH)</th>
<th>Old Cummer</th>
<th>Oriole</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>900 (N/A)</td>
<td>1,600 (N/A)</td>
<td>2,600 (12%)</td>
<td>2,400 (64%)</td>
<td>450 (19%)</td>
<td>450 (39%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>-</td>
<td>-</td>
<td>64% (High)</td>
<td>75% (Very High)</td>
<td>68% (High)</td>
<td>79% (Very High)</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>-</td>
<td>-</td>
<td>Medium / Low</td>
<td>Low / High</td>
<td>High / High</td>
<td>High / High</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>-</td>
<td>-</td>
<td>1635</td>
<td>1135</td>
<td>439</td>
<td>292</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>-</td>
<td>-</td>
<td>98% (Very High)</td>
<td>99% (Very High)</td>
<td>91% (High)</td>
<td>98% (Very High)</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>-</td>
<td>-</td>
<td>380</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>200 - 600</td>
<td>800+</td>
<td>No expansion forecast</td>
<td>200 - 600</td>
<td>No expansion forecast</td>
<td>0 – 200</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>Unknown / Unknown</td>
<td>Unknown / Low</td>
<td>Low / Medium</td>
<td>Medium / Medium</td>
<td>High / Medium</td>
<td>Low / High</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>Surface</td>
<td>Surface</td>
<td>-</td>
<td>Structure (Joint Development)</td>
<td>-</td>
<td>Surface (Shared Parking)</td>
</tr>
<tr>
<td>Timescale</td>
<td>Long Term</td>
<td>Short Term</td>
<td>-</td>
<td>Medium Term</td>
<td>-</td>
<td>Long Term</td>
</tr>
</tbody>
</table>
**Corridor Context – Richmond Hill Line**

- The Richmond Hill Line runs between Richmond Hill GO Transit Rail Station and Union Station and has the lowest level of ridership of the seven corridors.
- Ridership is forecast to increase from 5,200 to 9,200 between 2011 and 2031, an increase of 78%.
- The corridor operates peak only rail service on weekdays, inbound towards Union Station in the AM peak and outbound towards Richmond Hill GO Transit Rail Station in the PM peak. Outside of these times GO Transit bus services operate along the corridor.
- One additional AM peak service is proposed for 2015/16, and two-way all day service to inner stations is proposed in the medium to long term.
- The corridor has approximately 3,500 parking spaces at its GO Transit rail stations, and an average parking occupancy of 98% in 2011/12 (excluding July and August).
- Many stations have low or medium joint development potential, with the exception of high joint development potential at Langstaff, which is also a designated Mobility Hub.
- Approximately 380 parking spaces are committed to 2014, and a further 1,500 to 2,000 additional parking spaces are proposed for this corridor between 2014 and 2032.
- Proposals for parking expansion and other modes are presented in Table 5.5.

**Short Term Corridor Plan**

- 380 additional parking spaces are committed for 2014 in surface parking at Richmond Hill GO Transit Rail Station
- 800 plus surface parking spaces at a proposed new station at Gormley.
- Opportunities for improving station access infrastructure and opportunities to improve local transit connections to GO Transit rail stations other modes have been identified (see Table 5.5).

**Medium Term Corridor Plan**

- The medium term plan beyond 2014 for parking along the corridor includes investment in parking expansion at Langstaff GO Transit rail station for 200 to 600 spaces. Opportunities for integrating parking expansion in structures as part of joint development are proposed at Langstaff, as little space exists for surface expansion.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.

**Long Term Corridor Plan**

- There is uncertainty over plans at Oriole given planned highway works on Highway 401, but it is possible that an additional 0 to 200 parking spaces could be accommodated as shared parking in the long term. In addition, 200 to 600 surface parking spaces are forecast at a proposed new station at Bloomington.
### TABLE 5.5  RICHMOND HILL LINE STRATEGIC PARKING FORECASTS AND DRAFT OPPORTUNITIES TO IMPROVE STATION ACCESS & TRANSIT CONNECTIONS TO GO TRANSIT RAIL STATIONS

<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
</table>
| Oriole           | 0 – 200 spaces  
Potential for shared surface parking  
Long term | Consider the feasibility of a pedestrian bridge across Esther Shiner Boulevard, connecting with the TTC Leslie Subway Station and to the large residential re-development taking place northwest of the station.  
Bike lanes have been approved along Esther Shiner Boulevard. | No opportunities identified at this time.                                                                                      |
| Old Cummer       | No parking expansion forecast.                                   | Investigate the feasibility of weather protection on pedestrian walkway.  
Consider improving pedestrian access to the neighbourhood west of the tracks.  
Consider implementing the Bikeways Trail program, through the Finch Hydro Corridor (pending Hydro One approval), which runs adjacent to station parking lot. | No opportunities identified at this time.                                                                                      |
| Langstaff (MH)   | 200 - 600 spaces  
Potential for structured parking and joint development  
Medium term | Explore options to improve conditions (including possibility of weather protection) of existing walkway from platform to pedestrian bridge at Viva Terminal. | No opportunities identified at this time.                                                                                      |
<p>| Richmond Hill    | No parking expansion forecast.                                   | Explore the feasibility of a new signalized intersection to join new parking lot on the east-side of Newkirk with the west of station. | Add a new bus route from Gamble Rd. and Bathurst Street along Shaftsbury Avenue, Regents Street, Mill Street, and Trench Street to the station. |</p>
<table>
<thead>
<tr>
<th>New Station: Gormley</th>
<th>800+ spaces</th>
<th>To be determined as part of new station planning.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surface parking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Short Term</td>
<td></td>
</tr>
<tr>
<td>New Station: Bloomington</td>
<td>200 – 600 spaces</td>
<td>To be determined as part of new station planning.</td>
</tr>
<tr>
<td></td>
<td>Surface parking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long Term</td>
<td></td>
</tr>
<tr>
<td>(MH) – Mobility Hub</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Stouffville Line

MH – Mobility Hub

<table>
<thead>
<tr>
<th></th>
<th>Lincolnville</th>
<th>Stouffville</th>
<th>Mount Joy</th>
<th>Markham</th>
<th>Centennial</th>
<th>Unionville (MH)</th>
<th>Milliken</th>
<th>Agincourt</th>
<th>Kennedy (MH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timescale</td>
<td>2.9 km</td>
<td>8.2 km</td>
<td>2.1 km</td>
<td>2.4 km</td>
<td>3.5 km</td>
<td>3.5 km</td>
<td>4.2 km</td>
<td>6.4 km</td>
<td>16.2 km</td>
</tr>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>250 (80%)</td>
<td>1,200 (80%)</td>
<td>2,300 (109%)</td>
<td>1,500 (27%)</td>
<td>900 (27%)</td>
<td>3,900 (133%)</td>
<td>800 (34%)</td>
<td>900 (90%)</td>
<td>100 (53%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>74% (Very High)</td>
<td>60% (Medium)</td>
<td>69% (High)</td>
<td>45% (Low)</td>
<td>52% (Low)</td>
<td>71% (High)</td>
<td>54% (Low)</td>
<td>70% (High)</td>
<td>15% (Very Low)</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>Low / Low</td>
<td>High / High</td>
<td>Medium / High</td>
<td>High / Medium</td>
<td>Low / Low</td>
<td>Low / Medium</td>
<td>Medium / Low</td>
<td>Medium / High</td>
<td>Low / Low</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>561</td>
<td>289</td>
<td>1,365</td>
<td>378</td>
<td>455</td>
<td>1,633</td>
<td>728</td>
<td>319</td>
<td>0</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>27%</td>
<td>87%</td>
<td>72%</td>
<td>96%</td>
<td>98%</td>
<td>94%</td>
<td>68%</td>
<td>99%</td>
<td>-</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>0</td>
<td>125</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>200 – 600</td>
<td>No expansion forecast</td>
<td>0 - 200</td>
<td>800+</td>
<td>No expansion forecast</td>
<td>0 - 200</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>High / Low</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>Low / Medium</td>
<td>High / Medium</td>
<td>Medium / Medium</td>
<td>Low / High</td>
<td>Low / High</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>-</td>
<td>-</td>
<td>Structure</td>
<td>-</td>
<td>Surface (Shared Parking)</td>
<td>Structure</td>
<td>-</td>
<td>Surface (Shared Parking)</td>
<td>-</td>
</tr>
<tr>
<td>Towards Union</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Corridor Context – Stouffville Line

- The Stouffville Line runs between Lincolnville GO Transit Rail Station and Union Station, and has the sixth highest level of ridership of any corridor.
- Ridership is forecast to increase from 7,200 to 13,000 riders between 2011 and 2031, an increase of 80%.
- The Stouffville Line has AM peak inbound and PM peak outbound weekday services only. Outside of these hours the corridor is served by GO Transit bus services.
- Two-way, all day rail services to inner stations are proposed for the corridor in the medium to long term.
- The corridor has approximately 5,700 parking spaces at its GO Transit rail stations, and an average parking occupancy of 78% in 2011/12 (excluding July and August).
- Many stations have medium to high development potential, and Kennedy and Unionville GO Transit Rail Stations are designated Mobility Hubs.
- Approximately 125 parking spaces are committed for 2014, and a further 2,500 to 3,000 additional parking spaces are proposed between 2014 and 2032.
- Proposals for parking expansion and other modes are presented in Table 5.6.

Short Term Corridor Plan

- 125 surface parking spaces are committed at Stouffville GO Transit Rail Station, due to open in 2013.
- Up to 200 surface parking spaces are recommended at Centennial GO Transit Rail Station, potentially shared with Markville Shopping Centre.
- Up to 200 surface parking spaces are recommended for Agincourt GO Transit Rail Station, also in shared parking.
- Opportunities for improving station access infrastructure, local transit connections to GO Transit rail stations, and other modes have been identified (see Table 5.6).

Medium & Long Term Corridor Plan

- The medium term plan for parking along the corridor includes investment in parking expansion at Mount Joy GO Transit Rail Station (200 to 600 spaces in a structure) and Unionville GO Transit Rail Station (800 plus spaces in a parking structure). The stations have medium or high development potential and Unionville is designated as a Mobility Hub.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.
### TABLE 5.6 STOUFFVILLE LINE STRATEGIC PARKING FORECASTS AND DRAFT OPPORTUNITIES TO IMPROVE STATION ACCESS & TRANSIT CONNECTIONS TO GO TRANSIT RAIL STATIONS

<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kennedy</td>
<td>No parking expansion forecast.</td>
<td>Improve pedestrian access from platform to neighbourhood south-east of station. Kennedy Station Mobility Hub Study to be completed in 2014.</td>
<td>Eglinton Crosstown and Scarborough LRT currently under design. Expected to be operationally by 2020.</td>
</tr>
<tr>
<td>Agincourt</td>
<td>0 – 200 spaces</td>
<td>Discuss the possibility of regulating on-street Kiss &amp; Ride along Riedmount Avenue or Marilyn Avenue since current informal Kiss &amp; Ride at Sheppard Avenue obstructs traffic on this main arterial at peak periods.</td>
<td>Coordinate implementation of Light Rail Transit along Sheppard Avenue with better integration with GO Station.</td>
</tr>
<tr>
<td>Milliken</td>
<td>No parking expansion forecast.</td>
<td>Review traffic impact analysis undertaken for the ‘Steeles Ave. overpass’. The ‘Redlea Avenue Extension’ study is expected to identify actions to alleviate traffic congestion at the access point to the station. Assess the possibility of improved pedestrian connections from the commercial development around the station.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Unionville (MH)</td>
<td>800+ spaces</td>
<td>No immediate actions recommended at this station due to uncertainties and major planning in this area.</td>
<td>Increase local transit service levels in the area bounded by Kennedy Road to the west, McCowan Road to the east, Major Mackenzie Drive to the north, and Highway 407 to the south to improve connection with rail services during the peak periods.</td>
</tr>
<tr>
<td>Location</td>
<td>Current Parking Spaces</td>
<td>Potential for Future Spaces</td>
<td>Short Term Recommendations</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------</td>
<td>-----------------------------</td>
<td>--------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Centennial</td>
<td>0 – 200 spaces</td>
<td>Surface parking with potential for shared parking</td>
<td>Consider installing a bus shelter at the on-street bus stop on Bullock Drive.</td>
</tr>
<tr>
<td>Markham</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>Investigate opportunities to integrate active transportation access to the station with the City’s pedestrian friendly plans along Main Street.</td>
</tr>
<tr>
<td>Mount Joy</td>
<td>200 – 600 spaces</td>
<td>Potential for structured parking</td>
<td>Consider the feasibility for operational and infrastructural improvements to intersections in the area, especially at the intersection of Bur Oak Ave. and Markham Road, which are already operating at capacity at peak periods.</td>
</tr>
<tr>
<td>Stouffville</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>Increase bike parking as it is currently over capacity. Assess the feasibility of moving the GO Transit bus stop off Main Street as loading operations currently block traffic flow during peak periods.</td>
</tr>
<tr>
<td>Lincolnville</td>
<td>No parking expansion forecast.</td>
<td></td>
<td>No opportunities identified at this time.</td>
</tr>
</tbody>
</table>

(MH) – Mobility Hub
### Lakeshore East Line

#### MH – Mobility Hub

<table>
<thead>
<tr>
<th></th>
<th>Bowmanville*</th>
<th>Courtice*</th>
<th>Oshawa Downtown8</th>
<th>Oshawa Thornton Rd*</th>
<th>Oshawa (MH)</th>
<th>Whitby</th>
<th>Ajax</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forecast Ridership (2031) and growth from 2011</td>
<td>2,100 (N/A)</td>
<td>3,000 (N/A)</td>
<td>2,900 (N/A)</td>
<td>1,800 (N/A)</td>
<td>1,400 (129% to 2021)</td>
<td>5,300 (34%)</td>
<td>4,500 (26%)</td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>66% (High)</td>
<td>64% (High)</td>
<td>46% (Low)</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>High / Low</td>
<td>Medium / Low</td>
<td>High / Low</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,245</td>
<td>3,860</td>
<td>1,529</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>102% (Very High)</td>
<td>80% (Medium)</td>
<td>114% (Very High)</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>1,100</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>To be determined</td>
<td></td>
<td></td>
<td></td>
<td>800+</td>
<td>200 – 600</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>To be determined</td>
<td></td>
<td></td>
<td></td>
<td>High / Low</td>
<td>Medium / Medium</td>
<td>Low / Medium</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>To be determined</td>
<td></td>
<td></td>
<td></td>
<td>Surface (shared parking)</td>
<td>Surface</td>
<td>-</td>
</tr>
<tr>
<td>Timescale</td>
<td>Long Term</td>
<td></td>
<td></td>
<td></td>
<td>Short Term</td>
<td>Medium Term</td>
<td>-</td>
</tr>
</tbody>
</table>

* Potential future service identified in an Environmental Assessment
## Lakeshore East

*(continued)*

<table>
<thead>
<tr>
<th>Forecast Ridership (2031) and growth from 2011</th>
<th>Pickering (MH)</th>
<th>Rouge Hill</th>
<th>Guildwood</th>
<th>Eglinton</th>
<th>Scarborough</th>
<th>Danforth</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,400 (30%)</td>
<td>2,600 (31%)</td>
<td>1,200 (31%)</td>
<td>1,100 (17%)</td>
<td>650 (43%)</td>
<td>250 (c.0%)</td>
<td></td>
</tr>
<tr>
<td>Automobile Driver Mode Share (2011/12)</td>
<td>56% (Low)</td>
<td>59% (Medium)</td>
<td>59% (Medium)</td>
<td>55% (Low)</td>
<td>61% (Medium)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Opportunity to improve Local Transit / Active Transportation</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Low / Low</td>
<td>Medium / High</td>
<td>Low / Low</td>
</tr>
<tr>
<td>Parking Supply (May 2012)</td>
<td>2,460</td>
<td>1,437</td>
<td>1,348</td>
<td>840</td>
<td>637</td>
<td>0</td>
</tr>
<tr>
<td>Parking Utilization (2011/12 average)</td>
<td>85% (High)</td>
<td>92% (High)</td>
<td>55% (Very Low)</td>
<td>78% (Medium)</td>
<td>59% (Very Low)</td>
<td>-</td>
</tr>
<tr>
<td>Committed Parking Expansion (2012 to 2014)</td>
<td>1,200</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Proposed Parking Expansion (2014 to 2032)</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
<td>No expansion forecast</td>
</tr>
<tr>
<td>Land Availability / Values</td>
<td>Low / Medium</td>
<td>Low / High</td>
<td>Medium / Medium</td>
<td>Medium / Medium</td>
<td>Low / Medium</td>
<td>Low / High</td>
</tr>
<tr>
<td>Parking Type (2014 to 2032)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Timescale</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Corridor Context – Lakeshore East Line

- The Lakeshore East Line runs between Oshawa GO Transit Rail Station and Union Station, and has the second highest level of ridership after the Lakeshore West Line.
- Ridership is forecast to increase from 20,100 to 32,000 riders between 2011 and 2031, an increase of 59%, overtaking the Lakeshore West Line in ridership.
- Along with the Lakeshore West Line, the Lakeshore East Line has the highest frequency of rail service, with two-way, all day service on all days. Up to two early morning and one late night GO Transit bus services also serve the corridor.
- An additional AM and PM peak 12-car service is planned for 2014/15; and the frequency of inter-peak services is set to increase from hourly to half hourly in summer 2013.
- The corridor has approximately 14,100 parking spaces at its GO Transit rail stations, and an average parking occupancy of 87% in 2011/12 (excluding July and August).

Short Term Corridor Plan

- 2,300 additional parking spaces are committed for 2014 in a combination of surface parking expansion and new parking structures which are under construction at Ajax GO Transit Rail Station and Pickering GO Transit Rail Station.
- A further 800 plus spaces are recommended for Oshawa GO Transit Rail Station through a combination of shared parking and surface parking expansion either through the appropriation of adjacent sites currently used for light industry and commercial land uses, or to the north of Highway 401 in the medium term. Given the potential expansion to Bowmanville in the long term, shared parking may prove a more financially viable option compared to surface parking, unless that area could be well utilized for future development.
- Opportunities for improving station access infrastructure and opportunities to improve local transit connections to GO Transit rail stations through other modes have been identified (see Table 5.7).

Medium Term Corridor Plan

- The medium term plan for parking along the corridor includes investment in surface parking expansion at Whitby GO Transit Rail Station, in part, to redistribute demand from Oshawa GO Transit Rail Station.
- It is recommended that opportunities for improving station access by other modes should continue from the short term, through to the long term, particularly at Mobility Hubs, as well as the proposed pilots to raise awareness of other modes.

Long Term Corridor Plan

- In the long term, there is potential service expansion on the Lakeshore East Line from Oshawa GO Transit Rail Station along a fork from Whitby GO Transit Rail Station to Bowmanville via Thornton Road in Oshawa, Downtown Oshawa, and Courtice, as identified in an Environmental Assessment (2011). Parking is anticipated at any future GO Transit rail stations but the amount and form of parking is yet to be determined.
<table>
<thead>
<tr>
<th>Station</th>
<th>Strategic Parking Forecast (from 2014)</th>
<th>Draft Opportunities to improve Station Access Infrastructure</th>
<th>Draft Opportunities to improve Transit Connections to GO Transit Rail Stations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danforth</td>
<td>No parking expansion forecast.</td>
<td>Explore the possibility of adding an entrance to the platform at the end of Dawes Road to enhance northern neighbourhood connection.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Scarborough</td>
<td>No parking expansion forecast.</td>
<td>Station traffic using residential streets is an issue to the community. Recommended that discussions take place between the City, Metrolinx and the Police to regulate and control traffic in the area aiming to minimize infiltration into the surrounding residential neighbourhood.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Eglinton</td>
<td>No parking expansion forecast.</td>
<td>Study the feasibility of increasing the Kiss &amp; Ride capacity. A project is currently underway to design a new station building and pedestrian bridge across Eglinton Ave to connect north parking lot.</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Guildwood</td>
<td>No parking expansion forecast.</td>
<td>No opportunities identified at this time</td>
<td>No opportunities identified at this time</td>
</tr>
<tr>
<td>Rouge Hill</td>
<td>No parking expansion forecast</td>
<td>Improve drainage on the existing road connecting the main lot and the west lot.</td>
<td>Add trips on the existing DRT bus route from the area bound by Altona Road, Whites Road, Finch Avenue, and Sheppard Avenue to meet more GO train departures and enhance flexibility for GO Transit passengers. Add a bus connection from the area west of Altona Road, between Finch Avenue and Sheppard Avenue.</td>
</tr>
<tr>
<td>City</td>
<td>No parking expansion forecast</td>
<td>Improvement actions</td>
<td>Additional actions</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pickering (MH)</td>
<td></td>
<td>Improve internal directional signage and pavement marking.</td>
<td>Add trips to many existing routes to increase bus access to train departures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investigate options to enhance bike lanes through the area.</td>
<td>Consider a comprehensive re-planning of bus routes to eliminate one-way loops.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Improve bike facilities at the station.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Region will be adding a southbound right turn lane to the Bayly-Liverpool intersection in 2013.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>It should also be noted that Bayly station driveway improvements are being investigated.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider Kiss &amp; Ride reconfiguration (including improved access).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Consider adding more bus bays for local transit.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A direct access ramp from southbound Liverpool Street to the GO Transit Station would improve station</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>access, especially in the AM peak.</td>
<td></td>
</tr>
<tr>
<td>Ajax</td>
<td></td>
<td>Improve signage and pavement marking in the south parking lots.</td>
<td>Add trips to many existing routes to increase bus access to train departures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bike parking facilities are at capacity. The Town has received requests for bike lockers and more</td>
<td>Split the bus route serving the area to the southeast of the station bound by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>shelters at station.</td>
<td>Pickering Beach Road, Audley Road, Bayly Road and Lake Ontario into two routes to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Westney Road / Fairall Street intersection should be studied to identify opportunities for capacity</td>
<td>create more direct service to the station.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>improvements and transit improvements.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The Town of Ajax, in their Transportation Master Plan Update, proposes to extend Hunt Street westerly to</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Westney Road at O’Brien Court (access to south parking lot).</td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td>Parking Spaces</td>
<td>Parking Type</td>
<td>Medium Term Measures</td>
</tr>
<tr>
<td>------------</td>
<td>----------------</td>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Whitby</td>
<td>200 – 600</td>
<td>Surface parking</td>
<td>Improve signage and paving marking around the station. Assess options for reconstruction and signalization of the Henry Street / Burns Street West intersection to start in 2013. Consider the introduction of an exclusive northbound right-turn lane on the south leg of Highway 401 and Brock Street intersection. This may necessitate the widening of the bridge over rail tracks. Investigate the potential for a dual eastbound lane at Victoria Street and Brock Street intersection. Assess the need for controlled walkways or pedestrian bridge between the station and the high rise residential development south of Victoria Street and station. Assess the feasibility of adding a bus only access lane from Brock Street Drive.</td>
</tr>
<tr>
<td>Oshawa (MH)</td>
<td>800+</td>
<td>Surface parking (with some shared parking)</td>
<td>Major traffic improvements, particularly on Bloor Street intersections are required, but need to be coordinated with widening of Bloor Street (due for completion 2017). Study the feasibility of increasing the Kiss &amp; Ride capacity. Discuss with the City opportunities to improve pedestrian and cycling facilities between station and residential neighbourhoods / commercial centers.</td>
</tr>
<tr>
<td>Oshawa Thornto Road*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oshawa Downtown*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courtice*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bowmanville*</td>
<td>To be determined as part of new station planning.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(MH) – Mobility Hub/ * Potential future station identified in Environmental Assessment
6 A Program of Pilots and Projects

Overview

Testing new approaches, or investing in additional research, to achieve mode shift can help to understand the impacts before rolling out initiatives system-wide. The following programs and projects have been proposed to test innovative options for varying station access mode share, as well as further developing the analysis for station access planning.

This program of pilots and projects should be coordinated and implemented along with on-going programs such as Carpool to GO, car sharing proposals currently under development, and the Smart Commute program between Metrolinx and the region’s Transportation Management Associations. In addition, Metrolinx is working with partner agencies in the region to develop a single source of scheduled and real-time transit service information for all services in the region.

The five recommended pilot projects and programs are:

- **GO Transit Shuttle Pilot (in progress):** Planning and delivery of pilot shuttle services to support station access and egress at both ends of a rail journey, providing end-to-end connectivity to improve accessibility, and support increased rail ridership.
- **GO Transit Website Station Pages (in progress):** Updated external GO Transit website station pages will provide customers with information about all transportation modes available to them, demonstrating sustainable modes as attractive and viable means of transport for both existing and future GO Transit customers.
- **Station Travel Plans:** Development of station-level plans to integrate and direct the delivery of active transportation access improvements, transit priority initiatives, and promotion of active transportation, transit and carpooling.
- **Further Station Catchment Analysis - Travel Times and Customer Profiling:** Enhancing the analysis to inform decision making for investment in other modes of station access.
- **Green Parking Zone:** A priority zone providing preferential space for more sustainable, low carbon station access including carpooling, car sharing, and ultra-low carbon vehicles and charging points.
Pilot Project 1: GO Transit Shuttle Pilot

Objectives
The GO Transit Shuttle Pilot Program will identify locations that would benefit from shuttle services to and from GO Transit rail stations and the most appropriate business model to accommodate the service. The concept proposed includes a shuttle to provide direct service for customers with trips of less than 20 minutes between their origin or final destination and the GO Transit rail station, designed to be competitive with personal vehicles. The shuttle routes would be designed to enhance any existing local service.

The GO Transit Shuttle Pilot program has the following objectives:

- modal shift from automobile travel to and from rail stations, particularly single occupant vehicles, to more sustainable, alternative modes of travel
- reduced demand for parking and associated costs
- reduced congestion at and around rail stations
- promotion of ridership growth through a broad range of access modes
- a broadened scope of services that supports increased reverse-flow and off-peak travel.

Scope
The GO Transit Shuttle Pilot, during its study phase, will develop a business case for:

- first mile: origin to/from GO Transit rail stations, focusing on residential areas
- last mile: GO Transit rail stations to/from destination, focusing on employment areas.

Each of the 61 stations on the GO Transit rail network (excluding Union Station) will be assessed for their suitability for shuttle services, with last mile segments focused on the Lakeshore East and West lines as they have two-way, all-day service. Suitability will be determined by a number of selection criteria, including parking utilization, station ridership, local transit service levels, catchment characteristics, schedule coordination, and walkability around stations.

Detailed analysis will be conducted for two rail station locations for the first and last mile (for a total of six locations), including:

- concept route planning
- estimation of service hours
- development of delivery models
- cost estimate analysis
- definition of Key Performance Indicators (KPIs).

At the conclusion of the study, a total of three stations will be recommended for implementation.

Governance and Program Management
An internal steering committee has been formed to provide input and support at the study stage of the project, including determining pilot locations. Metrolinx will clarify roles, particularly those of external stakeholders, prior to implementing projects at the recommended pilot locations.

Best Practice Examples
There are a number of examples of shuttles from transit operators in Canada and the United States, six of which have been explored in detail. Transit operators interviewed include MiWay and York Region Transit (YRT) from the Greater Toronto and Hamilton Area, and Peninsula Traffic Congestion Relief Alliance, City of Irvine, TMA Bucks, and Metropolitan Transit System from US jurisdictions. Analysis of the services operated by these organizations has confirmed that shuttle connections to and from commuter rail stations should be direct and have a trip time target of 20 minutes or less for the longest riding customer. Customer
research at Clarkson Station assessing the customer response to station construction had indicated strong support for station shuttles as an alternative mode of station access.

Best practice examples highlight the following key recommendations:

I At the planning stage, analysis of local conditions (including current issues at the station and customer demographics) as well as customer surveying is important in determining the potential success of a shuttle.

I During operations, service reliability is crucial in gaining and retaining customers.

I Last mile and bi-directional services benefit from close collaboration with external stakeholders such as employers, as they best understand the needs of service users and can take an integral role in promoting it.

**Action Plan**

The study conducted as part of this program will prioritize three locations for pilot projects based on the selection criteria.

Implementation is targeted for operations beginning in Fall 2013, but the final launch date will depend on the delivery model selected, detailed service planning, and vehicle availability.
Pilot Project 2: GO Transit Website Station Pages

**Objectives**

Updated public-facing GO Transit website station pages will provide customers with information about all transportation modes available to them, demonstrating sustainable modes as attractive and viable means of transport for both existing and future GO Transit customers. Improving information about existing services and station amenities can help to achieve modal shift amongst customers who were not previously aware of the station access options. The new GO Transit website station pages will also be a platform to communicate with customers about local services and station infrastructure improvements.

Objectives of this program include:

- improved customer information about all station access modes to / from GO Transit rail stations
- provide an ongoing platform for communicating station and service updates to GO Transit rail customers
- modal shift from automobile travel to and from rail stations, particularly single occupant vehicles, to more sustainable, alternative modes of travel.

**Scope**

This project would include updates to pages for all stations on the GO Transit rail network, and could be expanded to the entire GO Transit service area, including bus-only locations. A number of elements have been proposed as additions to current GO Transit rail station pages, including dynamic maps and orientation tools, increased information for access by local transit (including schedules, maps, and real-time departures), cycling, walking, taxi and private vehicle, more visible GO Transit train and bus arrival and departure times, and information regarding amenities at stations.

**Action Plan**

These proposals will be delivered through Metrolinx business units, coordinated with the wider website programming.

**Governance and Program Management**

Metrolinx will ensure clarity of roles in developing and delivering improved GO Transit website station pages. Internal resources and committees will be leveraged and efforts synchronized to develop a product that meets the cross-departmental requirements of the organization. External stakeholders will play an important role in the delivery of content, including local transit schedules and maps, cycling and pedestrian maps and information, as well as cross-promotion of services.

**Best Practice Examples**

Transit operators around the world effectively use their websites to inform their customers about the wide array of available station access options, and several regional and international examples were reviewed during analysis. Some transit providers provide a significant amount of information in addition to maps of their stations on webpages.
Pilot Project 3: Station Travel Plans

Objectives
A travel plan is a plan for managing the travel demand generated by an organization or transit hub, with the aim of reducing the negative impacts of the associated travel. This typically involves promoting and improving facilities and services for walking, cycling, public transit, carpooling, and other more sustainable modes. In the context of rail stations, there are often constraints with parking capacity, resulting in illegal parking activity, stress on local on-street parking, growing egress times from station parking lots, and peak time congestion on the local road network.

The station travel plans pilot program has the following objectives:

- modal shift from automobile travel to and from stations, particularly single occupant vehicles, to other more sustainable modes of travel
- more rail customers using targeted stations as a result of the individual station travel plan
- improved customer satisfaction with end-to-end journeys.

Scope
In developing a station travel plan, site audits, along with the views of customers, operators, land owners, large employers, and other major trip generators, will contribute to the development of a phased program of improvements. Passengers’ views can be determined through survey work to analyse the impacts of improvements. Travel plans not only promote sustainable transportation choices through information provision and promotional activities (for example, door-to-door individualized marketing or workplace campaigns), but identify access requirements to the station. For example, in the station context, this might be the lack of cycling paths leading to the station entrance, a shortage of bicycle parking facilities, or narrow sidewalks and a lack of barrier free access, all impeding accessibility and connectivity to the station. The scope of each plan will be tailored to the needs and opportunities of each station and its surrounding area.

Governance and Program Management
Metrolinx will provide clarity of roles in developing and delivering the plan, and manage stakeholders’ input while implementing each plan’s recommendations. Key stakeholders will include municipalities, local transit agencies, and Transportation Management Associations.
**Best Practice Examples**

There are a number of examples, particularly coming from the UK, where central government has invested in a national pilot program in England and Wales. During 2008, Train Operating Companies, Network Rail, and local transportation authorities were invited to submit applications to participate in the pilot program. Following 70 applications, 24 pilots of one or more rail stations were selected. Analysis of the results of the pilot projects has shown that partnerships involving rail operators, land owners and highways authorities can be sustained, and allow the delivery of effective improvements around the immediate vicinity of stations and beyond to promote better access to public transit. Furthermore, by working in partnership, different stakeholders can identify synergies with one another’s funding streams to deliver larger and more efficiently planned improvement projects. Conversely, a key constraint identified has been the time and resources for managing the development and implementation of the plans, reinforcing the need for clear roles and responsibilities for plan managers and key partners.

**Action Plan**

This pilot program will set out a prioritised list of stations based on the potential of other modes to meet station access needs, the size, density, and demographics of the stations ridership catchment and of the local community, and the station’s Mobility Hub designation. In partnership with key stakeholders and the local community, needs and opportunities will be assessed at the pilot station to determine a prioritized program of activities and recommendations for implementing the plan, including roles, responsibilities and funding sources for activities and plans identified.
Pilot Project 4: Further Station Catchment Analysis - Travel Times and Customer Profiling

Objectives
One of the key determinants of customers’ choice of station access mode is travel time, however much spatial analysis of station catchments (i.e. riders’ travel area to a station) is based on distance. Understanding customers’ existing travel times, the travel times of alternative choices of station access mode, and how different measures (i.e. a new bus route) impact those travel times are important planning tools for increasing station access by other modes. In addition, geodemographic data can be added to the analysis to identify clusters of customers who are more (or less) likely to adopt different station access modes.

In developing Station Master Plans and Station Travel Plans, this analysis can be a cost-effective and important component of the analysis for identifying needs and opportunities, and for evaluating the impacts of different station access options. Furthermore, it can influence land use planning at and around stations, by helping to evaluate and compare the impacts of locating housing, employment, other key services, and leisure facilities in different locations.

The pilot program would have the following objectives:

- Map station access travel times by different modes, and combinations, of station access modes
- Identify the correlations between different demographic groups, travel times, and the use of different modes of station access
- Combine the analysis to identify opportunities for improving station access travel times by other modes in areas where the local demography is likely to be responsive to the opportunity.

Scope
In developing this pilot program, travel time isochrone maps will be plotted to indicate connectivity to and from a given location (i.e. stations), calculating the proportion of customers, and the population, within a certain travel time of the station. Areas of low connectivity can be identified, mapped, and analyzed along with concentrations of current and potential rail customers, car ownership, and different demographics which may have a higher propensity to use different station access modes, or respond to different transportation demand management measures. New station access opportunities can then be plotted to determine potential travel time savings and the increase in catchment within the travel time isochrone.

As part of the pilot project, stations that have been identified as having high potential for increasing station access mode share by other modes, as well as all Mobility Hub designations, will be analysed first, before assessing the wider applicability and usefulness of the approach.

Action Plan
This pilot project would commence with the collation of Geographic Information Systems geocoded local transit stop locations, and the times of different services serving those stops (i.e. timetables) for different time periods and days of the week. Using a suitable software package, travel time isochrones can then be plotted, typically for a combination local transit and walk times.

Analysis of the likelihood for different demographic groups to access and egress stations by different modes would be required. This could be based on existing Rail Passenger Survey data combined with a demographic data set such as Experian’s Prism™ data.

The impact of station access by other modes, such as travel time saving, the number of additional trips that would made, and impacts on mode share (see Pilot Project 2 – station Travel Plans) should also be analyzed.
Governance and Program Management

Metrolinx would ensure clarity of role in acquiring, developing and managing the software and its associated analysis. This includes working with other transit agencies, municipalities, and Transportation Management Associations to collate the data, perform the basic analysis, and to identify and evaluate opportunities.

Best Practice Examples

In the UK, ‘accessibility planning’ was popularized following the 2003 Social Exclusion Unit report, "Making the Connections: Final Report on Transport and Social Exclusion". This examined the links between social exclusion, transportation, and the location of key services. It focussed on connectivity to key services opportunities that have the greatest impact on life-chances, such as work, learning and healthcare. Following this, the UK Government, through the UK Department for Transport, made it compulsory for local governments in England to develop a companion ‘Accessibility Strategy’ for their statutory Local Transport Plan (similar to a Transportation Master Plans). Whilst the approach appreciated that travel time was only one aspect of accessibility and connectivity, issues were identified and options tested, through mapping techniques and a series of core indicators, enabling decision makers to view the accessibility impacts of new transportation projects and (re)location of key services. Local transportation authorities subsequently developed their own accessibility targets for new developments and worked with operators, employers and healthcare providers to enhance accessibility in their areas, reporting on progress each year.
Pilot Project 5: Green Parking Zone

**Objectives**
A ‘Green Parking Zone’ prioritizing parking to incentivize the use of more sustainable modes of station access with spaces. The objectives are to:

- encourage mode shift to more sustainable modes of transport
- reduce congestion around and within stations.

**Scope**
The Green Parking Zone may include parking provision for bicycles, motorcycles, carpooling, car sharing vehicles, and low and ultra-low emission vehicles. The Green Parking Zone may also potentially provide electric vehicle charging facilities. The prioritized spaces would not replace existing prioritized parking spaces.

**Governance and Program Management**
Metrolinx will ensure clarity of roles in developing and delivering any green zones and monitoring and analysing the results.

**Best Practice Examples**
There are numerous examples from Europe where priority parking and reduced parking tariffs are offered for low-emission vehicles, including hybrid, electric and biofuel cars. Similarly, individual spaces are increasingly provided for electric vehicles. However, there have been few international examples of specific parking zones for low emission vehicle options.

**Action Plan**
This pilot project would build on the existing Carpool to GO initiative to prioritize the stations for the pilot, largely based on the existing demand for carpooling parking permits, Mobility Hub designation, and use of low carbon vehicles and motorcycles.

Potential candidate stations could be determined using a multi-criteria assessment examining the busiest stations in terms of immediate future development plans, existing challenges, and extent of likely local support.
Implementing the Plan

Overview
The system-wide and corridor strategies in Section 5, and pilot projects in Section 6 collectively contain the following four proposed workstreams:

- strategic parking forecasts with proposed phasing
- opportunities for improving station access infrastructure
- opportunities for improving transit connections
- a short term program of pilot projects, largely to promote other modes.

This section outlines a high-level action plan to develop the new processes, budgets and partnerships required to develop and implement these four proposed workstreams. The high-level action plan includes two broad headings 'New Internal Processes and Budgets' and 'New Partnerships', with key actions under each.

High Level Action Plan and Next Steps

New Internal Processes and Budgets

Delivery of the Plan and the four proposed workstreams will integrate and build upon existing structures, budgets, processes, and initiatives. However, there are proposals within the Plan that will require new internal processes and initiatives for implementation.

It is a Guiding Principle of the Plan that the financial efficiency of the network continues to be supported. This relates to both the capital and operating funding. Additional funding sources will be required to deliver the Plan in its entirety.

Internal Processes

Management Structure for the Coordination of Workstreams: Develop the internal framework and management structure to lead, coordinate and monitor the delivery of the four workstreams. This internal framework and management structure should include:

- Appointment of a lead staff member to manage and monitor the delivery of the Plan and work closely with other staff and Directors
- A proposed approval process and schedule for progress reports
- Integration of new proposals with existing workstreams. For example, integrating proposals for transit connections with existing initiatives on service and fare integration, and coordinating pilot projects with existing Metrolinx and GO Transit programs, including Smart Commute, Carpool to GO, and reserved parking.
Budgets

The capital and operating costs of delivering the Plan will be calculated and integrated with broader capital and revenue budget planning exercises. It is likely that, across the planning horizon timescales, capital costs would decrease, broadly in line with lower levels of parking expansion, while annual incremental operating costs will increase, most notably from improvements to transit connections. Actions include:

- **Optimize and Re-align Existing Budgets.** Optimize existing budgets for parking expansion and station access infrastructure, and re-align to deliver the proposals in the Plan for parking expansion, station access infrastructure improvements, and related pilot programs.
- **Plan and Secure New Budgets.** Cost and secure necessary funding to deliver opportunities identified to improve transit connections.
- **Develop Benefits Case of Proposals:**
  - Evaluate the benefits of the proposals for parking expansion and station access infrastructure.
  - Evaluate the business case for an operational and capital program, and budget to support additional transit connections to GO Transit rail stations.
  - Evaluate the impacts of the Pilots, and evaluate the benefits to secure long term funding for delivering the initiatives more widely across the network.

Implementation and Monitoring

Actions for the implementation and monitoring of the plan include:

- **Develop Implementation Plans.** For each workstream, develop implementation plans with partners, identifying prioritized actions, timescales, lead partners, supporting partners and stakeholders, funding mechanisms, and potential risks.
- **Develop Monitoring Plans.** Establish a monitoring plan, including indicators and targets for each workstream, and in turn, each project, to monitor the performance of the workstream and the delivery of the Plan. The monitoring plan should include:
  - The targets and indicators contained within Table 7.1 below
  - ‘Before’ and ‘after’ monitoring for specific projects, including pilot projects, to measure the impacts and to identify lessons learned.
- **Report on Delivery of the Plan:** Report on the delivery of projects, and the implementation of each workstream. Share progress with municipalities and other partners who collaborate on performance, monitoring, and management.
- **Review the Plan:** Review of the Plan and its applicability every five years or more frequently, should the need arise.
TABLE 7.1  GO TRANSIT RAIL PARKING & STATION ACCESS PLAN INDICATORS AND TARGETS

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Target</th>
<th>Timescale</th>
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<tr>
<td>System-wide number of additional parking spaces for every 10 additional riders</td>
<td>0.74</td>
<td>Base Year (2011/12)</td>
</tr>
<tr>
<td></td>
<td>0.67</td>
<td>2017/18</td>
</tr>
<tr>
<td></td>
<td>0.60</td>
<td>2022/23</td>
</tr>
<tr>
<td></td>
<td>0.50</td>
<td>2032/33</td>
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<tr>
<td>System-wide automobile mode share for station access</td>
<td>67%</td>
<td>Base Year (2007/08)</td>
</tr>
<tr>
<td></td>
<td>57%</td>
<td>2017/18</td>
</tr>
<tr>
<td></td>
<td>53%</td>
<td>2022/23</td>
</tr>
<tr>
<td></td>
<td>50%</td>
<td>2032/33</td>
</tr>
<tr>
<td>Maximum walk time from new parking to station building or platform access point</td>
<td>Five minutes (or 400m equivalent)</td>
<td>From 2014</td>
</tr>
</tbody>
</table>

**New Partnerships**

Successful delivery of the Plan will require joint planning and engagement with external stakeholders, including those at a provincial and municipal level, other transit agencies and operators, customers, local communities, and land owners and developers, considering the time required to coordinate services, as well as the initiatives and projects already implemented in each jurisdiction.

New partnerships are required to plan and deliver proposals, including walking and cycling links and infrastructure, improvements to transit connections, new wayfinding and signage, and delivery of pilots. In turn, municipalities are encouraged to use the Plan as an input into their own plans and studies. These partnerships support delivery of solutions that benefit all transit users, in addition to GO Transit customers, and support integration with wider networks.

**Engagement Plan:** Develop an engagement plan including communications and planning processes, where municipalities and multiple transit service providers are partners. This will identify the Plan for engaging partners in the planning, funding, delivery, and monitoring of all four workstreams, and particularly in the development of Station Master Planning and improved transit connections (see next section).
Strategic Parking Expansion and Station Access Improvements (Station Master Plans)

Although parking forecasts have been planned for the short, medium and long term planning horizons, the exact phasing of the delivery of the recommendations is dependent on:

- the timing of rail service enhancements, forecast ridership growth, parking occupancy, or any other station planning
- funding, the availability of land, and other development opportunities
- the policies and initiatives of key partners and stakeholders, and their willingness to engage.

Actions for Station Master Plans include:

- Develop Prioritized Program of Station Master Plans: It is recommended that Station Master Plans are the primary mechanism for planning strategic parking expansion and other station access improvements. A schedule should be developed for the phased development of Station Master Plans considering the phasing criteria above.

- Station Master Plans: The level of detail and the extent of engagement should proportionate the scale of needs and opportunities being addressed, the value of the proposed investment, and the anticipated impact of the proposed investment. Station Master Plans should include:
  - Station-specific objectives, demonstrating policy alignment with provincial, regional and local policies and plans, and the needs and opportunities to be addressed by the plan.
  - Demonstration of adherence to the Plan, including the Parking Policy & Station Access Policy Statement and Decision Making Framework.
  - Improvements that consider pedestrian access, including any necessary lighting, coverings and maintenance, bicycle storage and cycle connections to municipal links, bus loop capacity and design, transit priority measures, local transit integration, potential redesign of Kiss & Ride areas, taxi accesses and wait areas, wayfinding and signage for customers arriving by all modes of stations access, promotion of other modes, including integration with pilot projects in the short term, vehicle access / egress enhancements, parking expansion, and any necessary or desirable updates to standards and designs.
  - Evaluated packages of alternative proposals to meet the objectives, and address the needs and opportunities of the Master Plan, using a standardized multiple-account evaluation approach.
  - Demonstration that the preferred approach / design provides the most net benefits and meets the objectives of the Master Plan.
  - Engagement and buy-in from partners and other key stakeholders.
  - An implementation plan of projects for delivering the Station Master Plan that includes timescales, costs, funding mechanisms and revenue generation, lead partner, key partners, feasibility and potential risks.
  - Proposed mode shift targets, performance indicators, and a monitoring plan.
Transit Integration

Actions for enhancing transit integration with GO Transit rail stations include:

- Engage Local Transit Agencies: engage local transit agencies on recommendations to further integrate transit services with GO Transit rail services. Local transit agencies will need to evaluate any recommendations to understand ridership potential, costs, and impacts on overall network performance.
- Develop Proposals: develop proposals for improving the coordination of GO Transit and other transit agencies planning for transit services.

Pilot Program - Promoting Other Modes

Delivery of the program of pilot studies and projects for the promotion of other modes requires:

- Develop Pilot Action Plans: For each pilot develop an action plan that includes:
  - interactions between pilot projects;
  - analysis to underpin the pilot project, including an assessment of potential stations for delivery;
  - identifying and engaging partners in planning and delivery; and
  - integrated monitoring plans.
## Project/Proposal Name
GO Transit Rail Parking and Station Access Plan

## Document Title
Final Report

## Client Contract/Project No.
110744

## SDG Project/Proposal No.
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## ISSUE HISTORY

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<td>Work in Progress Draft for Client</td>
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## REVIEW

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