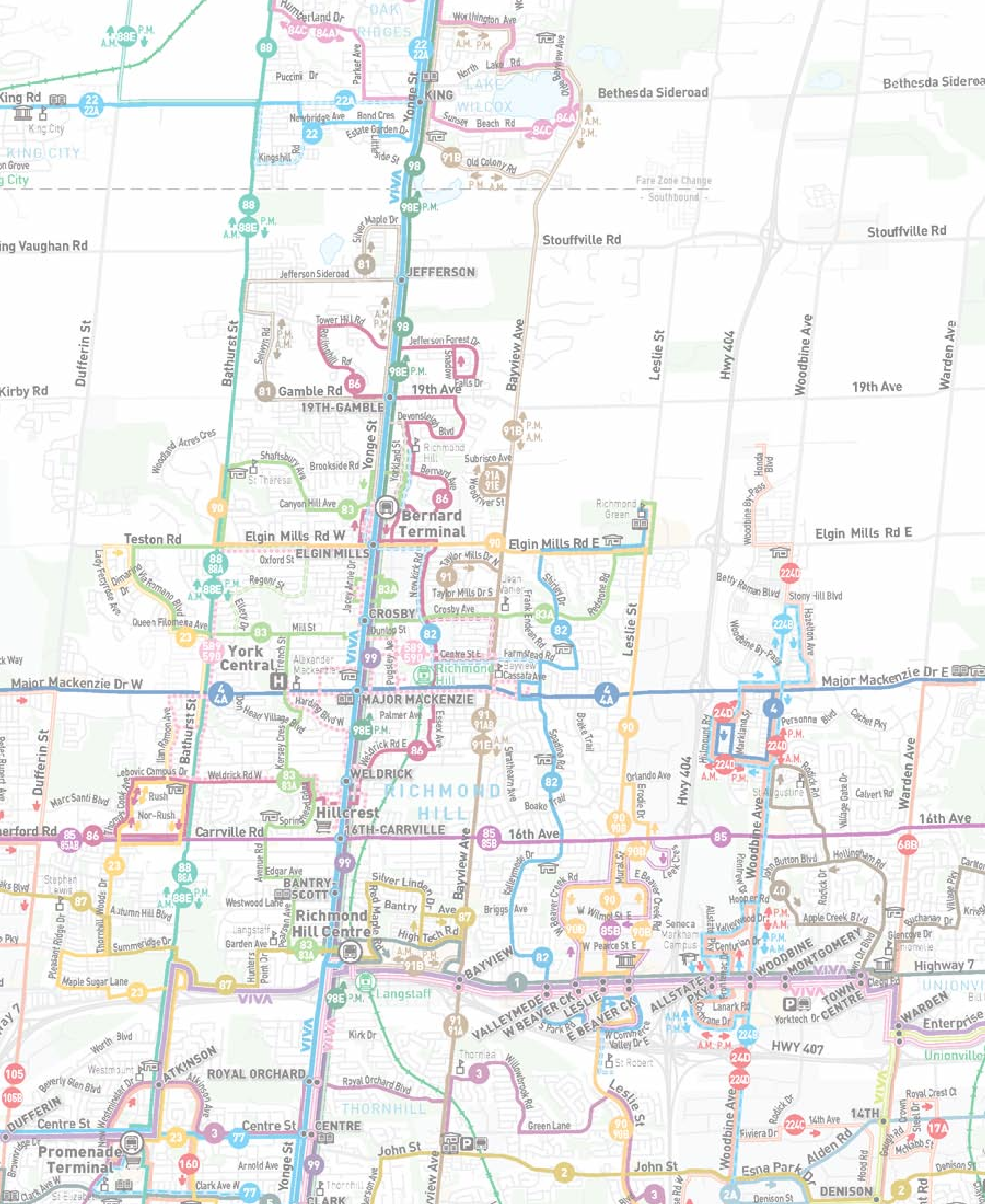
York Region Transit **Five Year Service Plan**

THE FUTURE OF PUBLIC TRANSIT

YORK REGION TRANSIT | VIVA



Humberland Dr
OAK RIDGES
Worthington Ave
King Rd
King City
KING CITY
Puccini Dr
Parker Ave
Yonge St
KING
North Lake Rd
LAKE WILCOX
Old Bayview Ave
Bethesda Sideroad
Newbridge Ave
Bond Cres
Estate Garden Dr
Sunset Beach Rd
Kingshill
Old Colony Rd
Fare Zone Change
- Southbound -
Silver Maple Dr
Stouffville Rd
King Vaughan Rd
Jefferson Sideroad
JEFFERSON
Tower Hill Rd
Jefferson Forest Dr
Shadow Falls Dr
Bathurst St
Dufferin St
Selwyn Rd
Bayview Ave
Leslie St
Hwy 404
Woodbine Ave
Warden Ave
Kirby Rd
Gamble Rd
19th Ave
19TH-GAMBLE
Devonsleigh Blvd
Richmond Hill
Woodland Acres Cres
Shaftsbury Ave
Brookside Rd
St Theresa
Subrisco Ave
Bernard Ave
Woodriver St
Canyon Hill Ave
Bernard Terminal
Richmond Green
Honda Blvd
Woodbine By-Pass
Teston Rd
Elgin Mills Rd W
ELGIN MILLS
Elgin Mills Rd E
Elgin Mills Rd E
Oxford St
Taylor Mills Dr N
Betty Roman Blvd
Stony Hill Blvd
Lady Fenyrose Ave
Dimarino Dr
Via Romano Blvd
Regent St
Jacey Anne Dr
New Kirk Rd
Jean Vanier
Shirley Dr
Redstone Rd
Taylor Mills Dr S
Crosby Ave
Frank Endean Rd
Hazelton Ave
Queen Filomena Ave
Ellery Dr
Mill St
CROSBY
Dunlop St
York Central
Trench St
Alexander Mackenzie
Pugsley Ave
Centre St E
Farmstead Rd
Richmond Hill
Bayview Cassata Ave
Major Mackenzie Dr W
MAJOR MACKENZIE
Major Mackenzie Dr E
Don Head Village Blvd
Harding Blvd W
Palmer Ave
Essex Ave
Boake Trail
Hillmount Rd
Markland St
Personna Blvd
Cachet Pky
Ian Ramon Ave
Kersey Cres
Weldrick Rd E
Strathearn Ave
Spadina Rd
Lebovic Campus Dr
Weldrick Rd W
WELDRICK
Orlando Ave
Brodie Dr
St Augustine
Rodick Rd
Calvert Rd
Village Gate Dr
Marc Santi Blvd
Thomas Cook Ave
Rush
Non-Rush
Hillcrest
RICHMOND HILL
Boake Trail
Carrville Rd
16TH-CARRVILLE
16th Ave
16th Ave
Rutherford Rd
Spring Farm Rd
Edgar Ave
Avenue Rd
Valleymede Dr
Leek Cres
John Button Blvd
Hollingham Rd
Carlton
Stephen Lewis
Oakwoods Dr
Westwood Lane
BANTRY-SCOTT
Silver Linden Dr
Red Maple Rd
Bantry Ave
Briggs Ave
W Beaver Creek Rd
Mural St
E Beaver Creek Rd
W Wilmot St E
Renfrew Dr
Hooper Rd
Rodick Dr
Apple Creek Blvd
Buchanan Dr
Village Pky
Autumn Hill Blvd
Richmond Hill Centre
High Tech Rd
W Pearce St E
Seneca Markham Campus
Allstate Pky
Valleywood Dr
Centurian Dr
Glencove Dr
Pleasant Ridge Dr
Thornhill Woods Dr
Summeridge Dr
Langstaff Garden Ave
Pearson Ave
Hunters Point Dr
WOODBINE
MONTGOMERY
Highway 7
Maple Sugar Lane
Langstaff
VIVA
BAYVIEW
VALLEYMEDE
W BEAVER CK
LESLIE
E BEAVER CK
ALLSTATE PKY
Lanark Rd
Cochrane Dr
Yorktech Dr
TOWN CENTRE
WARDEN
UNIONVILLE
Enterprise
Kirk Dr
S Park Rd
W Commerce Valley Dr E
HWY 407
Unionville
Worth Blvd
Westmount
New Westminster Dr
Beverly Glen Blvd
ATKINSON
Atkinson Ave
ROYAL ORCHARD
Royal Orchard Blvd
THORNHILL
Thornlea
Willowbrook Rd
St Robert
Leslie St
Royal Crest Ct
Rodick Dr
DUFFERIN
Centre St
Centre St
CENTRE
Green Lane
14th Ave
14TH
Riviera Dr
Alden Rd
Promenade Terminal
Brownridge Dr
John St
John St
Esna Park Dr
Hood Rd
Denison St
Arnold Ave
Clark Ave W
CLARK
Thornhill
Denison St
DENISON
A.M.
P.M.

Council Attachment 1

5-YEAR SERVICE PLAN 2011-2015

2015

THE FUTURE OF PUBLIC TRANSIT

YORK REGION TRANSIT | VIVA

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Executive Summary

On January 1, 2001, the Regional Municipality of York assumed responsibility for the funding and operation of public transit's conventional and specialized transit services, throughout York Region. Between January 2001 and January 2011 annual service hours tripled increasing from 353,000 to 1,120,000 hours. During the same period the revenue boardings more than doubled from 7.7 to 19.4 million.

The 2012-2016 Five-Year Service Plan is YRT/Viva's third Plan since amalgamation. The Plan is a strategic document identifying YRT/Viva's service, operating and capital requirements and objectives for the next five years.

The objective of the 2012-2016 Five-Year Service Plan is to guide YRT/Viva through the transit system's realignment phase, while focusing on effective ridership management, matching levels of service to meet demand and improving on-time performance. It focuses on mitigating impacts of vivaNext construction (rapidways and Spadina Subway extension) on residents, businesses and communities in an effort to maintain existing YRT/Viva service levels and ridership. Another key component of the Plan is to ensure rapid transit-readiness upon completion of the rapidways and the Spadina Subway extension.

The 2012-2016 Five-Year Service Plan outlines a strategic framework to address the challenges YRT Mobility Plus faces regarding demographic changes, the implementation of Accessibility for Ontarians with Disabilities Act (AODA) requirements and continued ridership growth.

The Plan is structured into three sections: Planning Framework, Transit Service Assessment and the Five-Year Service Plan. Each section serves a specific purpose.

- The Planning Framework describes YRT/Viva's Service Guidelines, Planning Process and Consultation Plan. These documents ensure consistency and clarity in YRT/Viva's planning process.
- The Transit Service Assessment examines the transit market, existing transit service and future transit services. These assessment identify opportunities for improvement.
- The Five-Year Service Plan builds on the opportunities identified in the Transit Service Assessment into service strategies. The service strategies are then further refined in the Annual Service Plans. Annual Service Plans consist of service initiatives that are strategic in nature, and are aimed towards guiding the direction of YRT/Viva service over the next five years. The service initiatives will be developed further as part of YRT/Viva's comprehensive Annual Service Plan process.

The Annual Service Plan is accompanied by Asset Management and Financial Plans.

- The Asset Management Plan consists of fleet, operation and maintenance facility requirements that support the initiatives identified in the Annual Service Plans.
- The Financial Plan forecasts revenue to be generated and operating capital costs over the next five years.

1 | Introduction

1. | Introduction

The York Region Transit (YRT/Viva) 2012-2016 Five-Year Service Plan is a strategic document identifying YRT/Viva's service initiatives over the next five years.

1.1 | York Region

The Regional Municipality of York (York Region) covers 1,756 square kilometres, stretching from the City of Toronto in the south to Lake Simcoe and the Holland Marsh in the north, and bounded by Peel Region in the west and Durham Region in the east. York Region consists of nine area municipalities Georgina, East Gwillimbury, Newmarket, Aurora, Richmond Hill, Vaughan, King, Markham, and Whitchurch-Stouffville as seen in **Exhibit 1**.

The Region is led by the Regional Chair and Council and is organized into six departments including the Office of the Chief Administrative Officer (CAO), Community and Health Services, Corporate Services, Environmental Services, Finance, and Transportation and Community Planning.

1.2 | Transportation and Community Planning Department

As of January 2012, the Transportation and Community Planning Department is responsible for:

- YRT/Viva (including Mobility Plus)
- Regional Roads
- Traffic and Technology
- Planning Policy implementation
- Development application review
- Co-ordinating development phasing and critical infrastructure

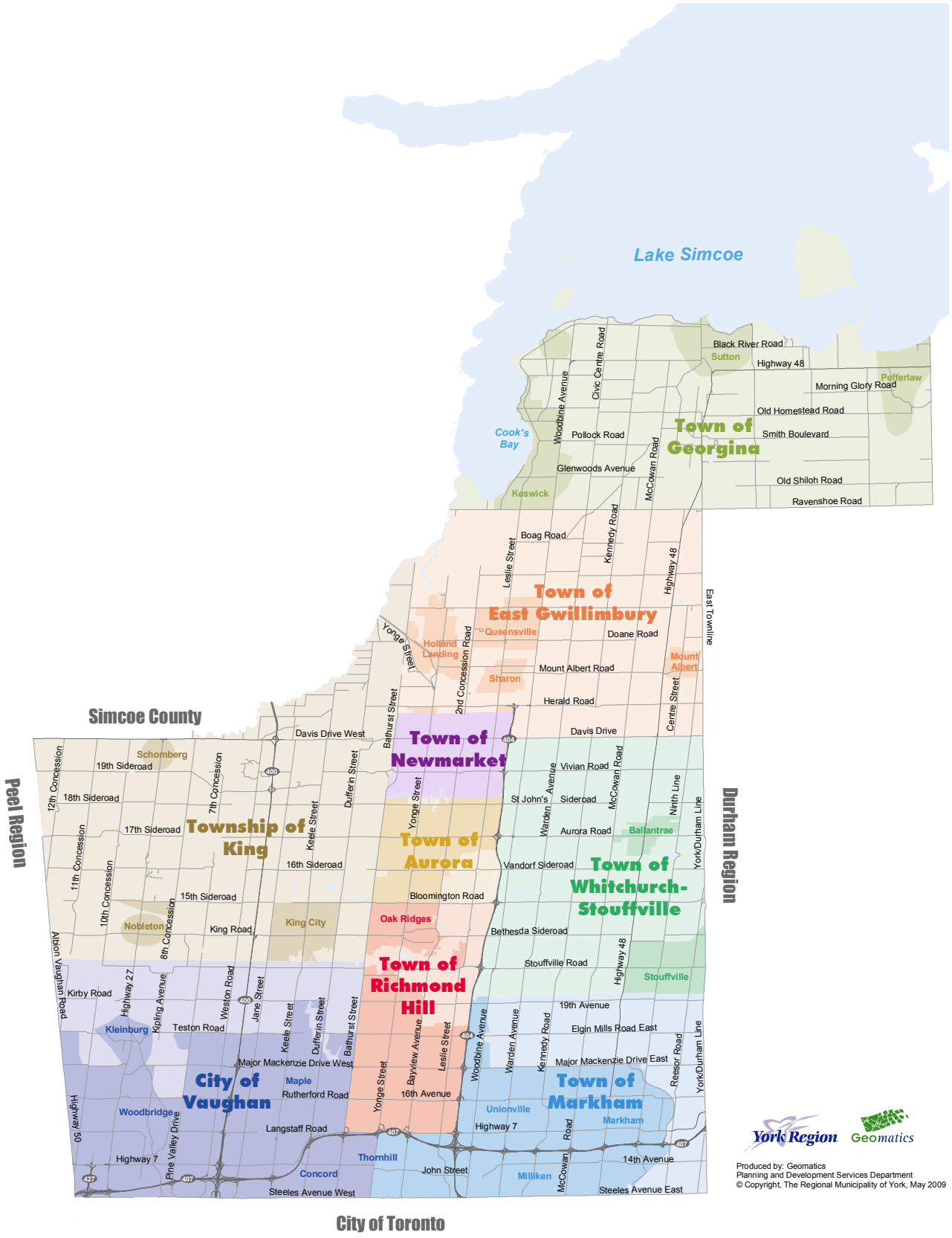
1.3 | York Region Transit/Viva

In January 2011, YRT/Viva celebrated its tenth anniversary. Since the amalgamation of the Region's local municipal transit systems on January 1, 2001, YRT/Viva has evolved from a transit system with 57 routes, carrying 7.7 million passengers to 85 routes carrying nearly 19.4 million passengers.

YRT/Viva's network consists of multiple service types known as the Family of Services listed below, and described in **Section 2.2**:

- Viva Bus Rapid Transit (BRT)
- Base Services
- Local Services
- Express Services
- GO Shuttle Services
- High School Specials
- Community Bus Services
- Dial-a-Ride Services
- Mobility Plus

Exhibit 1: Regional Municipality of York Map



Produced by: Geomatics
Planning and Development Services Department
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Exhibit 2: YRT / Viva System Map — Northern York Region

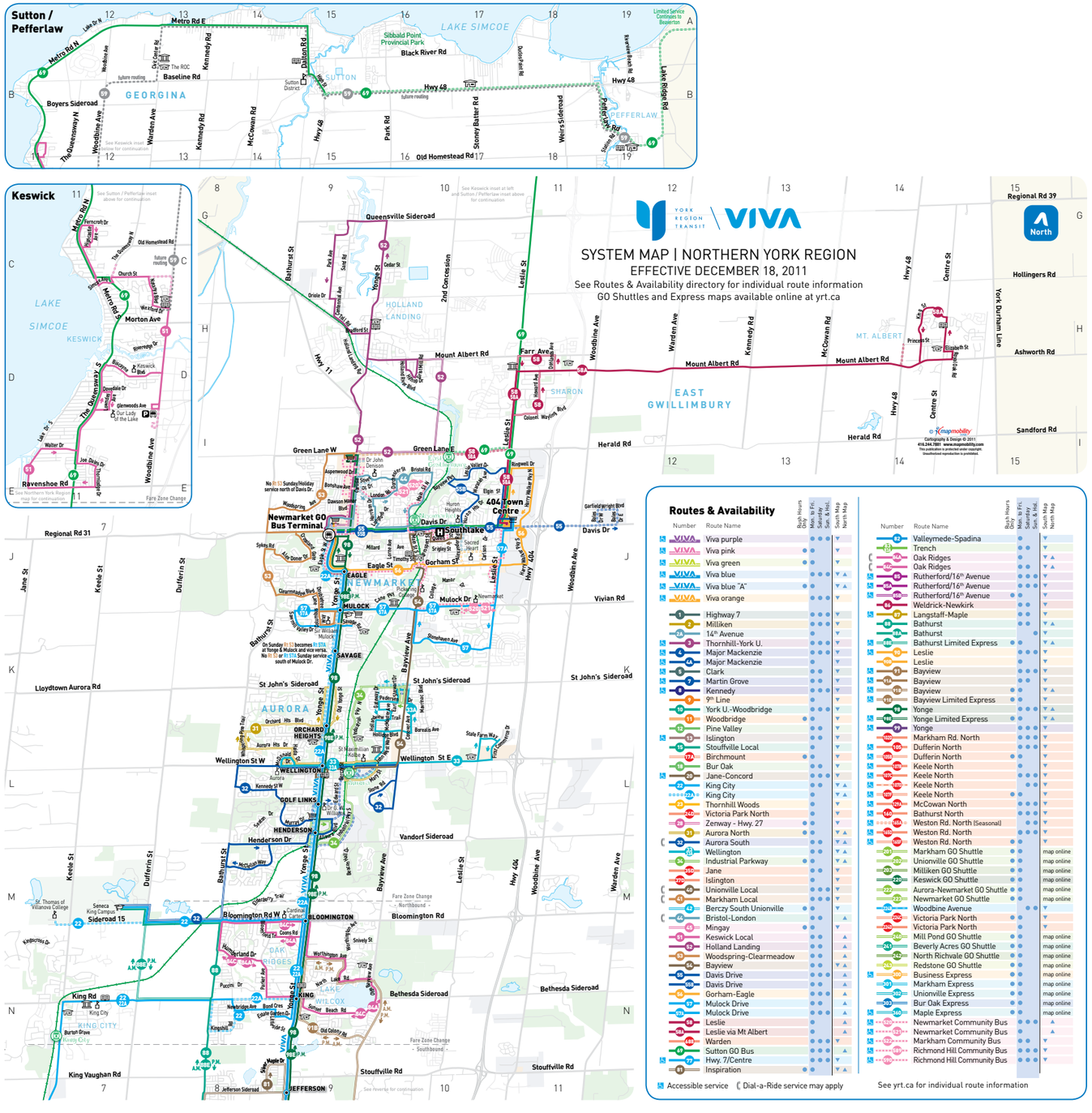
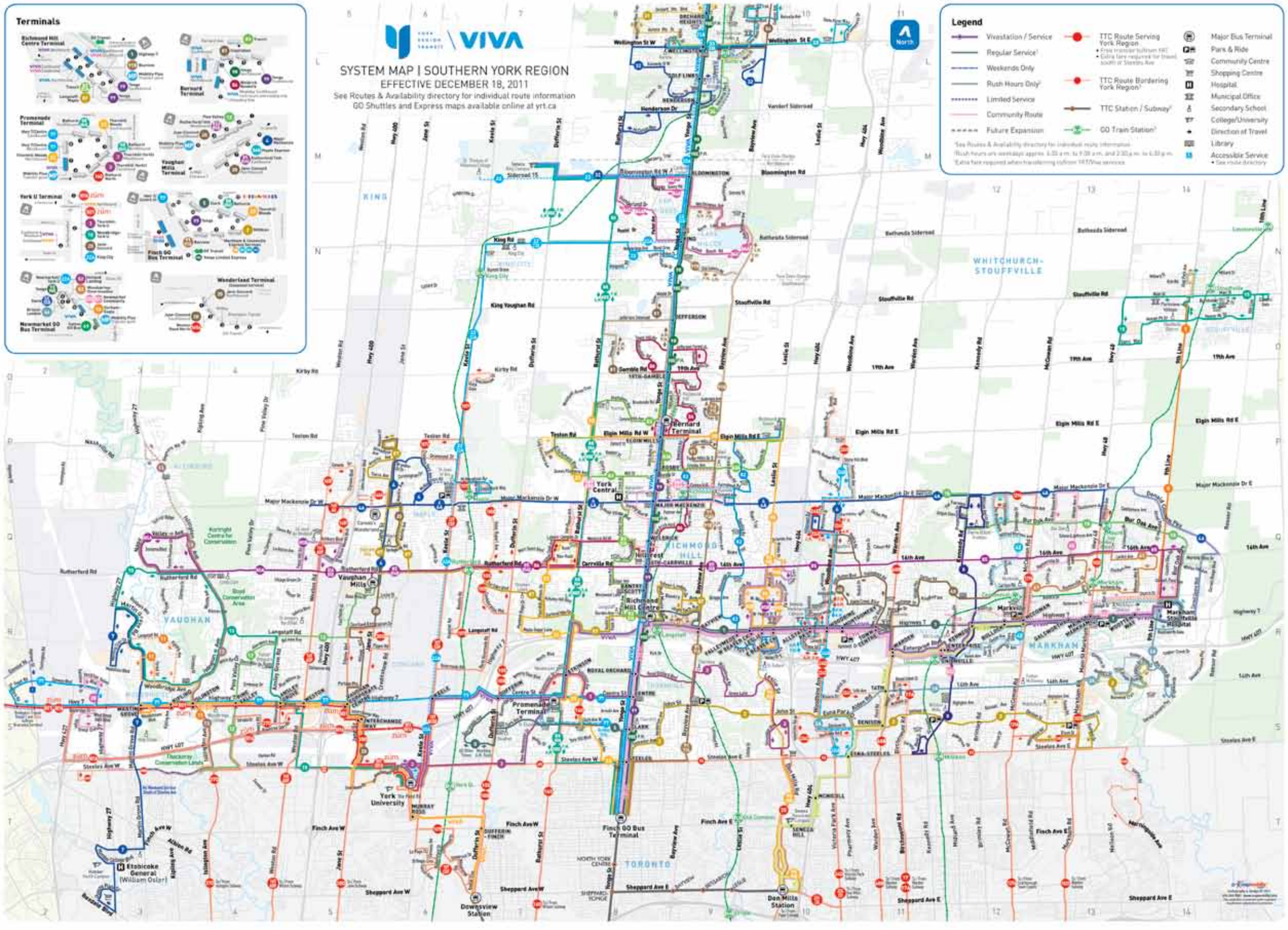


Exhibit 2: YRT / Viva System Map — Southern York Region



1.4 | Plan Principles

The 2012-2016 Five-Year Service Plan is YRT/Viva's third Five-Year Service Plan since amalgamation of York Region Transit in 2001. Each of the Plans focused on unique objectives, issues and opportunities associated with their approximate corresponding stage within YRT/Viva's transit life cycle shown in **Exhibit 3**.

2001-2005 Five-Year Service Plan: Start-up

The 2001-2005 Five-Year Service Plan, focused on developing standards, strategies and processes to guide YRT/Viva through the start-up phase. The Plan addressed amalgamating local transit services, expanding service to new development areas and smaller communities, improving service levels and introducing Viva bus rapid transit (BRT) in 2005.

2006-2010 Five-Year Service Plan: Rapid Growth

The 2006-2010 Five-Year Service Plan, focused on providing strategies to accommodate rapid growth in York Region. The Plan refined service standards, explored new ways YRT/Viva could continue to develop services using smaller buses, Express Services and Community Shuttles, identified effective planning tools to both monitor and adjust services, and an improved stakeholder consultation process. The 2006-2010 Service Plan also provided a basis for more innovative service delivery utilizing technology. New technologies, such as an automatic fare collection system, automatic tracking of buses, real-time passenger information displays at vivastations, and transit signal priority at signalized intersections on YRT/Viva routes, were implemented.

2012-2016 Five-Year Service Plan: Service Realignment

The 2012-2016 Five-Year Service Plan, will guide YRT/Viva through the transit system's realignment stage. The Plan Principles or key objectives include:

- Revising YRT/Viva's transit service guidelines to reflect service frequencies that better match demand
- Improving service reliability by increasing on-time performance
- Mitigating the impacts of vivaNext construction (rapidways and Spadina Subway extension) on residents, businesses and communities in an effort to maintain existing YRT/Viva service levels and ridership
- Developing an effective ridership management strategy focused on matching levels of service to meet demand
- Assessing GO Shuttles, High School Specials and Dial-a-Ride services
- Assessing contracted Toronto Transit Commission (TTC) service into York Region upon completion of vivaNext construction
- Addressing and implementing requirements of the Accessibility for Ontarians with Disabilities Act (AODA)

Exhibit 3: Transit Life Cycle

1.5 | Plan Structure

The 2012-2016 Five-Year Service Plan is structured into three sections: Planning Framework, Transit Service Assessment and the Five-Year Service Plan.

- The Planning Framework describes YRT/Viva's Service Guidelines, Planning Process and Consultation Plan. These documents ensure consistency and clarity in YRT/Viva's planning process.
- The Transit Service Assessment examines the transit market, existing transit service and future transit service. These assessments identify opportunities for growth and improvement.
- The Five-Year Service Plan develops the opportunities identified in the Transit Service Assessment into service strategies. The service strategies are then further developed into Annual Service Plans and subsequent Asset Management and Financial Plans.

The 2012-2016 Five-Year Service Plan is structured as follows:

Planning Framework

1. Introduction
2. Policy Framework
3. Planning Process
4. Public and Stakeholder Consultation Plan

Transit Service Assessment

5. Market Analysis
6. Existing Service Review
7. Future Service

Five-Year Service Plan

8. Service Strategies
9. Annual Service Plans
10. Asset Management Plan
11. Operating and Policy Agreements
12. Financial Plan
13. Conclusion

2 | Policy Framework

2 | Policy Framework

The policy framework enables YRT/Viva staff to apply a consistent and equitable approach to the planning of transit service.

2.1 | Vision and Mission Statement

The Regional Municipality of York's strategic direction is identified in its vision statement:

"Creating Strong, Caring, Safe Communities"

In support of York Region's vision, YRT/Viva has its own vision and mission statements:

YRT/Viva Vision Statement

"As a transportation leader, we will be recognized as the customers' choice and essential to the Region's success."

YRT/Viva Mission Statement

"To provide quality public transit services which support the economic vitality, environmental sustainability, and health of the Regional community."

While the York Region vision statement provides overall direction to the Region's departments, YRT/Viva's vision and mission statements provides YRT/Viva staff with the framework to address its goals and objectives through actions, and the application of service guidelines.

To meet the YRT/Viva vision and mission statements, YRT/Viva provides a variety of services to meet the needs of various target markets through the Family of Services model.

2.2 | Family of Services

YRT/Viva presently operates Viva Bus Rapid Transit, seven different types of conventional transit, and Mobility Plus services in York Region.

Viva – Bus Rapid Transit

Viva bus rapid transit (BRT) service operates along Highway 7 and Yonge Street with connections to Don Mills and Downsview subway stations and Finch GO Bus Terminal. The service is designed to provide frequent, limited-stop service using distinct vehicles, intelligent technology systems, off-board payment, upgraded stations and queue-jump lanes. This service is integrated with YRT's conventional service to create a base grid feeder network. Vivanext is the second phase of a longer-term implementation strategy that will include dedicated bus-only rapidways providing significantly faster travel times.

Base Service

Throughout the YRT/Viva system, certain routes are designated as Base Services. In urban areas these services form a grid network of fixed routes, connecting major destinations. Base Services are designated in the major east-west and north-south travel corridors on York Region's main arterial roads.

Local Service

Local Services are feeders to the Base Services. They operate within the various communities connecting major local activity centres or corridors to the arterial grid network for transfers between routes.

Local Services operate mostly on minor arterial roads and collector roads to serve local transit destinations (e.g. Bernard Terminal) or a main activity centre (e.g. Beaver Creek employment area). Local Services only operate on local roads when required for operational needs (such as a turn-around), or to serve major passenger destinations.

Express Service
Express Services carry passengers between two distinct points, such as subway stations and major employers. Express Services use the shortest route (in terms of overall travel time) between two points, which may vary from time to time.

Where ridership in a corridor warrants, Overlay Express Services may be established to enhance customer service. For example, where buses are routinely filled to capacity at a certain point on a route, and most passengers are destined to a common point such as a subway station, consideration will be given to operating a bus in "express mode" from that point.

Overlay Express Services should be designed to ensure that 75 per cent of the passengers within the corridor can take advantage of the express service, and that the express service can be scheduled to save at least 15 per cent of the regular route travel time (minimum five minutes). Limited stop service may be used to meet the passenger access requirements.

GO Shuttle Service
GO Shuttle Services provide local service to GO Stations and are designed to be short and direct to maximize customer convenience. They are designed to connect with GO train trip times.

High School Specials
High School Specials are operated to provide easier access to secondary schools when there is limited availability of existing transit routes or capacity. They focus on servicing schools only for the morning and/or afternoon bell times.

Community Bus Service
Community Bus Services are accessible transit services typically designed for seniors and people with disabilities who can use accessible, conventional transit. Rather than follow conventional routing patterns, they are designed to provide better access to facilities oriented to this customer market such as senior's residences, medical facilities, community centres and shopping areas.

Dial-A-Ride
Dial-A-Ride is a demand-response based type of transit service. It is designed to provide immediate local travel within a specific travel zone, or neighbourhood, where demand for transit service is limited. Customers call and request a pick-up from their nearest conventional bus stop. An accessible vehicle is then dispatched to pick up customers and take them to a key bus stop along the route. This service is better suited to low-demand areas where limited ridership does not warrant the operation of regular local service.

Mobility Plus
Mobility Plus is York Region's door-to-door shared ride accessible public transit service for people with disabilities currently serving all nine municipalities in York Region.

2.3 | Transit Service Guidelines

YRT/Viva's Transit Service Guidelines apply to the YRT/Viva Family of Services . They are intended to ensure decisions relative to Family of Services support YRT/Viva's vision and mission, and are applied consistently across York Region. They are also intended to make transit services convenient and easy to use for customers, and to ensure that services are efficient, safe and reliable.

As part of the 2012-2016 Five-Year Service Plan process, YRT/Viva's 2006 Transit Service Guidelines were reviewed and updated to reflect the Plan Principles and key objectives. The revised Transit Service Guidelines address:

- Performance Guidelines to maximize transit investments
- Service Guidelines to ensure that services provided meet reasonable expectations based on minimum service levels and measured or expected performance
- Design Guidelines to ensure fairness in the decision-making process relative to where and when buses and other transit vehicles are provided
- Route Performance Indicators to ensure service is planned appropriately

2.3.1 | Performance Indicator Guidelines

Performance of the YRT/Viva system is measured using the following indicators:

- Service Reliability (on-time performance)
- Service Reliability (trips not accounted for)
- Service Effectiveness (revenue passengers per capita)
- Economic Performance (cost-recovery)
- Economic Performance (net cost per passenger)
- Amount of Service (hours of annual service per capita)
- Amount of Service (vehicle capacity)
- Service Design (passenger boardings per vehicle-hour)

These indicators identify how reliable and cost-effective service is. They must be considered together, not individually, with the goal to strike a balance between them.

Transit services are assessed based on select key performance indicator guidelines as shown in **Table 1**. Performance guideline targets are continuously reviewed as part of service quality improvements.

Table 1: Performance Indicator Guidelines

Measure	Existing Guideline	Revised Guideline
Service Reliability	N/A	To improve service reliability, two indicators are used: on-time performances and trips not accounted for. On-time performance goals for start-of-trip is 95 per cent for Viva and 90 per cent for conventional Base Services. For arrival at last stop, 85 per cent to 90 per cent has been established for both Base and Viva Services The goal for trips not accounted is between one to one and a half per cent.
Service Effectiveness	To maximize the transportation, environmental and mobility benefi ts of transit, YRT/Viva will strive to achieve an effectiveness target of 15 revenue passengers per capita	To increase the transportation and mobility benefits of transit, YRT/Viva will strive to achieve an effectiveness target of 20 revenue passengers per capita
Economic Performance	To balance customer service and community benefits with fiscal responsibility, YRT/Viva will strive to achieve an overall cost recovery ratio of 40 to 45 per cent during system expansion and the Viva implementation phase	To balance customer service, community benefits and affordability to users and non-users, YRT/Viva will strive to achieve an overall cost recovery ratio: - 30 to 40 per cent during the subway and vivaNext rapidway construction phases - 45 to 50 per cent when the planned construction is complete
Amount of Service	N/A	To ensure effective services with a growing population, YRT/Viva will strive to achieve and maintain a level of 1.0 hours of service per capita
Service Design	Individual routes are assessed on the basis of: - passenger boardings per vehicle-hour	Individual routes are assessed on the basis of: - Passenger boardings per vehicle-hour - Regional subsidy per route

2.3.2 | Service Guidelines

Service Guidelines ensure transit services meet reasonable expectations based on minimum service levels and performance. YRT/Viva's service guidelines address route coverage, service levels, span of service, vehicle capacity, route performance, and introducing new service.

Route Coverage

YRT/Viva will consider operating routes in urban areas that are beyond the maximum walking distance guidelines, as shown in **Table 2**. The objective of this guideline is to provide service to approximately 90 per cent of urban areas.

Urban Area

An urban area is generally defined as an area with a population of at least 1,000, and no fewer than 400 persons per square kilometre.

Suburban Area

A suburban area is generally a residential area, either existing as part of a city, or as a separate residential community, within commuting distance of a city.

Rural Area

Rural areas are not urbanized, have a low population density, and typically much of the land is devoted to agriculture.

Service Levels and Span of Service

Minimum span of service and service levels are defined for Viva BRT service, Base Service, Local Service and Community Bus Service, but not for Express or GO Shuttle Services.

Minimum service levels are defined for each operating period based on ridership levels. Express and GO Shuttles Services are designed to target locations such as GO Stations and subway stations. Express services are provided as demand warrants based on vehicle capacity whereas GO Shuttle services are scheduled to meet GO train trip times.

Table 2: Walking Distance Guidelines

Service Period	Maximum Walk Distance
Monday to Saturday 6:00 a.m. to 7:00 p.m.	500 metres of a bus stop
All other periods as defined in Span of Service Guideline (Weekdays and Saturday evenings and all day Sundays and holidays)	1,000 metres of a bus stop

The current transit service guidelines were updated as part of the development of the 2012-2016 Five-Year Service Plan, to match existing operating and budget conditions. New minimum frequencies have been established as shown in **Table 3**.

Table 3: Route Service Frequencies

Service Span		Service Frequency (Minutes)			
		Viva BRT Service	Base Service	Local Service	Community Service
Weekdays					
6:00 a.m. to 9:00 a.m. 3:00 a.m. to 7:00 p.m.	Existing:	15	20	30	60
	Proposed:	15*	30	60	120
9:00 a.m. to 3:00 p.m. 7:00 a.m. to 11:00 p.m.	Existing:	15	30	60	120
	Proposed:	15*	45	80/90	120
Saturdays					
6:00 a.m. to 11:00 p.m.	Existing:	15	30	60	120
	Proposed:	15*	45	80/90	120
Sundays/Holidays					
9:00 a.m. to 11:00 p.m.	Existing:	15	60	60	120
	Proposed:	15*	60	80/90	120

Note: Service frequencies are based on demand. The current range of frequencies for Viva BRT ranges from three minutes to 19 minutes during rush hour.

Vehicle Capacity

YRT/Viva designs its services to keep the number of passengers on its vehicles at a reasonable level, and within the limits of safety. This could result in some passengers standing on buses at times throughout the service day.

Passenger guidelines are calculated (on average) over one hour, in the rush hours, and at the busiest point on the route. For instance, if a service operates a 15-minute frequency, then four buses would pass the busiest point in an hour. The average number of passengers for these four buses must fall within the service guidelines, even though anyone bus may experience more riders than the average. **Table 4** shows the average maximum vehicle capacity. If the guideline is exceeded for the average calculation, YRT/Viva will adjust service to manage capacity.

Table 4: Vehicle Capacity Guidelines

Vehicle Type	Seating Capacity *	Average Maximum Capacity Per Vehicle
60-foot bus (Viva)	52-54	72 passengers
40-foot bus (Viva)	36	48 passengers
40-foot bus (Conventional)	39, 43	55 passengers
30-foot bus (Conventional)	26	40 passengers
Express Services		
(High-speed or Highway)	43	100 per cent of seating capacity
Shuttle Services	26, 39, 43	100 per cent of seating capacity
Community Bus Services	26	100 per cent of seating capacity

Note: Base, Local and most Express capacities are based on average maximum passengers per vehicle during non rush hour and measured over a 60-minute rush hour period.

* Seating capacities depend on vehicle year and/or model.

Target Performance

Target performance is established to determine minimum passengers using transit, per service hour. The target boardings per service hour is defined for each YRT/Viva service type, based on rush hour periods and non rush hour periods. The performance targets are shown in **Table 5**.

Table 5: Performance Targets by Service Type

Route Type	Weekday Rush Hours	Other Times
Base Services	All routes averaging 30 passengers per service hour, with a minimum of 10 boardings per hour	All routes averaging 22 passengers per service hour, with a minimum of seven boardings per hour
Local Services	All routes averaging 25 passengers per service hour, with a minimum of eight boardings per hour	All routes averaging 22 passengers per service hour, with a minimum of seven boardings per hour
Fixed Route Express	All routes averaging 30 passengers per service hour, with a minimum of 10 boardings per hour	All routes averaging 30 passengers per service hour, with a minimum of 10 boardings per hour
Business Express	All routes averaging 35 passengers per service hour, with a minimum of 30 boardings per hour	All routes averaging 35 passengers per service hour, with a minimum of 30 boardings per hour
Shuttle Services	All routes averaging 25 passengers per service hour, with a minimum of 20 boardings per hour	All routes averaging 25 passengers per service hour, with a minimum of 20 boardings per hour
Community Bus Services	All routes averaging 15 passengers per service hour, with a minimum of five boardings per hour	All routes averaging 12 passengers per service hour, with a minimum of four boardings per hour
Dial-A-Ride	All routes averaging 10 passengers per hour, with a minimum of five boardings per hour	All routes averaging eight passengers per hour, with a minimum of four boardings per hour

Note: Introduction of an Overlay Express Service must maintain the performance levels of the remaining route; and projected performance of the new Overlay Express Service must be better than that of the current route.

Establishing New Transit Service

Determining if service is warranted is based on forecasted levels as outlined in Table 5.

Other considers when establishing new routes include:

- Routes must be safe and operationally feasible
- There should be no major deviation of a corridor service
- The route should serve an area not already served
- There should be no duplication of service

If any of these criteria cannot be met, the proposal should be reconsidered. If it passes this initial screen, the proposal should be further assessed to ensure that it has a positive net benefit, that is, that more riders benefit from the change than those that are inconvenienced. Finally, the additional cost of the new route, route portion or routing change and the net cost per boarding are calculated. If the economic performance is above average, the change can be implemented, subject to budget and fleet availability.

Additional Periods of Service

Additional periods of service such as midday or evening are assessed for their economic performance only, assuming that the routing has already met the minimum operational standards during the current periods of service. While any additional period of service can be considered, routes are typically implemented in sequence:

- Rush Hours
- Midday
- Evening
- Saturday
- Sunday/Holidays

If the economic assessment shows the performance indicators for the period in question "to be above average", service can be implemented subject to budget availability. If an assessment is "below average" than the service proposal should be referred to the Annual Service Review process.

Modified routing proposals can be considered for additional periods of service to improve performance or ridership, provided they conform to the operation standards described in the assessment of new or revised routes.

Earlier or Later Trips

Routes are considered for earlier or later trips based on the economic performance of the existing first or last trip. This assessment compares the existing trip against three warrants:

- No existing service alternative
- Passengers per boarding equal to or better than the performance guidelines
- Seated load at the peak point of the trip

Additional trips can be considered outside of these warrants if specific information is available to indicate that a different trip time would accommodate new demand, such as a shift start or finish time for a major employer. In these cases, consideration should first be given to adjusting first or last trip times, before adding a new trip.

Improved Frequency of Service

The need for improved frequency is assessed on the basis of passenger loads, and confirmed by consistent closed-door reports from operators and from supervisory personnel. Part of this assessment includes consideration of assigning larger or smaller vehicles to the route to tailor capacity to demand.

Express Services

Express services can be considered if they meet two criteria, the:

- express service design saves at least 15 per cent over the current service design; and
- majority of passengers can board and alight at express stops.

Special Services

Special services, by definition, are not easily assessed within the Service Review framework. These could include requests for seasonal services, special events, or premium fare services. Each of these requests is assessed on an individual basis, applying the relevant standards and analysis procedures wherever appropriate.

Service Expansion Into New Areas

Services introduced in areas not previously served should be guaranteed for a minimum 12 months of operation. This ensures enough time for customer travel patterns to develop and for recording of seasonal ridership patterns. At the end of the 12 months, the service must meet the minimum route performance thresholds required for its type of service.

Within this trial period, interim targets are set to ensure that a new service is capable of meeting the ultimate targets. Targets for these interim periods are set at 25 per cent, 50 per cent and 75 per cent of the ultimate target. If the targets are not met, YRT/Viva will be able to identify and analyze potential issues as early as possible, and make changes to improve performance. Monitoring at three, six and nine months is completed to ensure that the new service is moving towards the appropriate standard. Should the performance not reach at least 75 per cent of the target value within the end of each period, the route is re-examined to identify potential changes to improve its performance. If the same guideline is not met in the next period, changes will be recommended.

Service In New Operating Periods

Providing service in new operating periods or modification to existing routes, are subject to similar evaluation as service expansion, but over a shorter six-month period. If service changes are substantial, YRT/Viva may recommend longer trial periods at the service introduction stage. Interim targets are reviewed at two and four months, with target levels of 33 per cent and 66 per cent of the ultimate target.

Others

Other requests, which do not fall into any of the previous categories, are also assessed on an individual basis. These are often non-service related, and may include requests for such things as fare concessions or special programs.

The introduction of a High School Special depends if the secondary school can be easily served by an existing service within the route network, and the limits of the route directness guideline (as described in section 2.3.3.) for those routes.

2.3.3 | Design Guidelines

YRT/Viva uses Design Guidelines to create the most effective services and ensure performance measures of each route are met. If a particular route does not meet these guidelines, remedial action is not necessarily required; however the route is carefully monitored to ensure its effectiveness. The Design Guidelines are:

- Route Directness
- Route Deviation
- Locating Bus Stops
- Locating vivastations
- Locating Bus Stations/Terminals
- Terminal Platform Requirements

Route Directness

Route directness is a measure of how much a route deviates from the most direct path between the start and end points of the route.

Base and Viva Services are designed to provide direct service, with minor deviations to serve major destinations only. Shuttle services can incorporate slightly more indirect routings to increase the service area. Community Bus Services are also expected to be more circuitous in order to serve more area residences and community destinations.

Route Deviations

Combined with the route directness, Route Deviation Guidelines provide assistance in determining the route structure for services to schools, GO Stations, or major employers. This measure considers the benefit of varying from a direct route to serve a major area versus the inconvenience to those passengers already on-board.

Route deviations must attract enough new passengers to the route (not merely reduce the walking distance for existing passengers) to make the change worthwhile. For example, additional travel time requires more service hours, therefore change should only be made if it improves the overall performance of the route.

If the deviation can be achieved with the existing resources (typically less than a one or two minute increase in travelling time), the new ridership gained should be no less than 25 per cent of the passengers affected by the detour. However, to support Viva and the grid network, deviation of Viva or Base Services is not recommended.

Locating Bus Stops

Bus stops should be placed at most intersections, passenger generators and transfer points subject to minimum spacing criteria. Stop spacing should not normally be less than 200 metres in developed areas and, where demand exists, 500 metres in undeveloped areas (specific major trip generators may require variances in stop spacing).

Development around major stops should be encouraged at greater density and should follow transit supportive design principles, i.e. closer to the street, favouring pedestrian connections and customer friendly uses in commercial areas or other passenger amenities.

Bus stops at intersections should be located in the safest position, considering traffic and street conditions. Where possible, stops should be located close to signalized intersections. At Viva transfer points, YRT/Viva stops on the intersecting routes should be located at the near side of the intersection wherever possible to facilitate transfers.

Priority factors in selecting bus stops as candidates for transit shelters include:

- All terminals and vivastations
- High ridership locations (more than 20 boardings per weekday)

Where possible, stops and the area around them should be made accessible to people with disabilities, including wheelchairs and other mobility aids. Sidewalks should be available along both sides of the street where transit operates.

Locating vivastations

The introduction of additional vivastations along established Viva BRT Services will add travel time and the potential for delay. Therefore, new vivastations should be added only when warranted by high anticipated demand and location relative to the other vivastations on the route.

Spacing between vivastations should normally average at least one kilometre, however, an additional vivastation on an existing Viva BRT Service should only be considered if:

- It is located at least 750 metres from the nearest adjacent vivastation on any Viva BRT Service serving the proposed station
- It will not reduce the average route-wide distance between vivastations on any route it serves to less than 1,000 metres

New vivastations to be located on extensions or realignments to the Viva system should be placed to maximize potential ridership.

A new 'infill' vivastation on an existing route should attract more new riders than it discourages, as a result of additional travel time, and shall be expected to attracted at least 300 new boardings per weekday (i.e. not including shifts from adjacent vivastations).

Recommendations for additional vivastations are subject to budget approval, and vivastation location criteria may be modified with the implementation of vivaNext rapidways.

Locating Bus Stations/Terminals

Bus terminals and minor turnaround facilities will be located at transit nodes identified in the 2009 Transportation Master Plan, or at the end of a line and convergence of two or more corridors, where local services connect.

Development around stations and terminals should incorporate York Region's transit-oriented development (TOD) design principles. TOD guidelines include locating employment uses around transit hubs, and discouraging low density, auto-oriented land use around transit stations.

Terminal Platform Requirements (New Guideline)

YRT/Viva's new bus bay assignment guideline is summarized in **Table 6**. It is based on the level of service provided on a bus route and the role the bus route plays in the system to determine bus bay requirements at a terminal.

Table 6: Bus Bay Assignment Guideline

Service Type	Peak Service Headway	Service Connection	Bus Bay Requirement
Viva Services			Designated bay
Base Services			Designated bay*
Local Services	Greater than 30 minutes	Required to connect to other services at the terminal	Designated bay/shared bay if service connection can be met*
	Greater than 30 minutes	Not required to connect to other services at the terminal	Shared bay
Others			Shared bay

* For a base or local route operating in both directions at a terminal, a designated bus bay is required for each direction if the scheduled arrival time is less than five minutes apart.

2.3.4 | Route Performance Indicators

YRT/Viva utilizes CAD/AVL (INIT) technology as a tool to help measure route performance. The INIT system was installed as part of the start-up cost for Viva and has since been added to the conventional fleet. MobileStatistics, an element of the INIT system, provides supporting operational data including travel time, passenger boarding and alighting activity, and tracks trips not accounted for.

On-time Performance

YRT/Viva has established a start-of-trip, on-time performance goal of 95 per cent for Viva BRT and 90 per cent for Base Services. An arrival at last stop goal of 85 to 90 per cent has been established for both Base and Viva services.

To improve on-time performance for both trip start times and arrival times, YRT/Viva has and will continue to update schedules to reflect actual travel times.

Monthly Average Trips Not Accounted For

For unaccounted trips, a target of one to one and a half per cent of all scheduled trips has been set. YRT/Viva has implemented a new process to track trips not accounted for by category, including:

- Mechanical breakdowns
- Operators sick/late
- Twenty plus minute delay due to traffic
- Accidents
- Police, Fire, EMS Emergencies

New key performance indicators hold YRT/Viva operations and maintenance contractors directly accountable for the number of unaccounted trips. The indicators provide an incentive/disincentive to ensure contractor accountability to provide all scheduled trips and operate a reliable service.

System performance has increased, and contractors are more accountable. YRT/Viva's ability to track on-time performance and the number of trips operated helps YRT/Viva to better understand the reliability of transit services.

Net Cost per Passenger

Route performance is measured at a system and individual route level. Each category of route serves a particular transit market and each plays an important role in the success of the overall system network. Although each route is reviewed individually, YRT/Viva must consider the overall system goals when evaluating changes or improvements to service.

YRT/Viva introduced a new process in 2011, focusing on net cost per passenger at the individual route level and by time period. The net cost per passenger measure helps the Region identify how much it is subsidizing individual routes. YRT/Viva uses this information to effectively utilize resources and match service with demand.

3 | Planning Process

3 | Planning Process

YRT/Viva's planning process is comprised of a consistent and objective approach that includes a fair and balanced appraisal of service requirements, sound technical analysis and effective consultation. This process provides YRT/Viva staff with an objective framework to plan transit service. The process incorporates:

- Service Guidelines to assess new and existing services against minimum requirements as described in **Section 2.3.2**
- Key Performance Indicators to assess on-going performance as described in **Section 2.3.4**
- Service Reviews consisting of:
  - Regular service reviews
  - Periodic service reviews are conducted to respond to minor requests from the public or address problems that have been identified
- Annual service plans to assess major requests for new or revised services that may meet minimum requirements
- Data collection program required to support the review process
- A comprehensive Public Consultation Process as described in **Section 4** and **Appendix A**

3.1 | Service Reviews

Regular Service Reviews

Transit service reviews are conducted on an on-going basis to ensure the most effective allocation of resources to individual routes. Each service is assessed to ensure the adequacy of its operation against several standards including adequate travel times equaling to service reliability, frequency in all periods, safety, and other factors. For the largest of the Base services, a workshop process is applied to comprehensively address planning, operations and customer service issues. Recommendations from this level of review can be implemented if they are minor or no cost, or if there is a specific budget allocation for them. Otherwise, recommendations are referred to the annual review process.

Given YRT/Viva's size and level of operation, a thorough review of each service in a stable environment should occur at least once every two years. New services or services serving rapidly changing areas may require more frequent monitoring.

Periodic Service Reviews

Periodic service reviews are conducted on an as needed basis. Services are assessed in response to customer requests or as part of the on-going monitoring process. Service requests fall into several categories described under the Annual Service Review. Recommendations from the review can be implemented if they are minor or no cost, or if there is a specific budget allocation for them. Otherwise, recommendations are referred to the annual review process.

Annual Service Plans

YRT/Viva's Five-Year Service Plan forms the basis to develop Annual Service Plans responding to population growth, demands for additional service and on-going improvements. Annual Service Plans build upon the successes of the previous year. The Annual Service Plan Process is summarized in **Exhibit 4**.

Before any work can be done to create an Annual Service Plan, a system review is conducted based on existing Transit Service Guidelines, key performance indicators (KPIs) and service requests. Based on this information, the first draft plan and corresponding set of proposed initiatives is developed for municipal, public and stakeholder consultation.

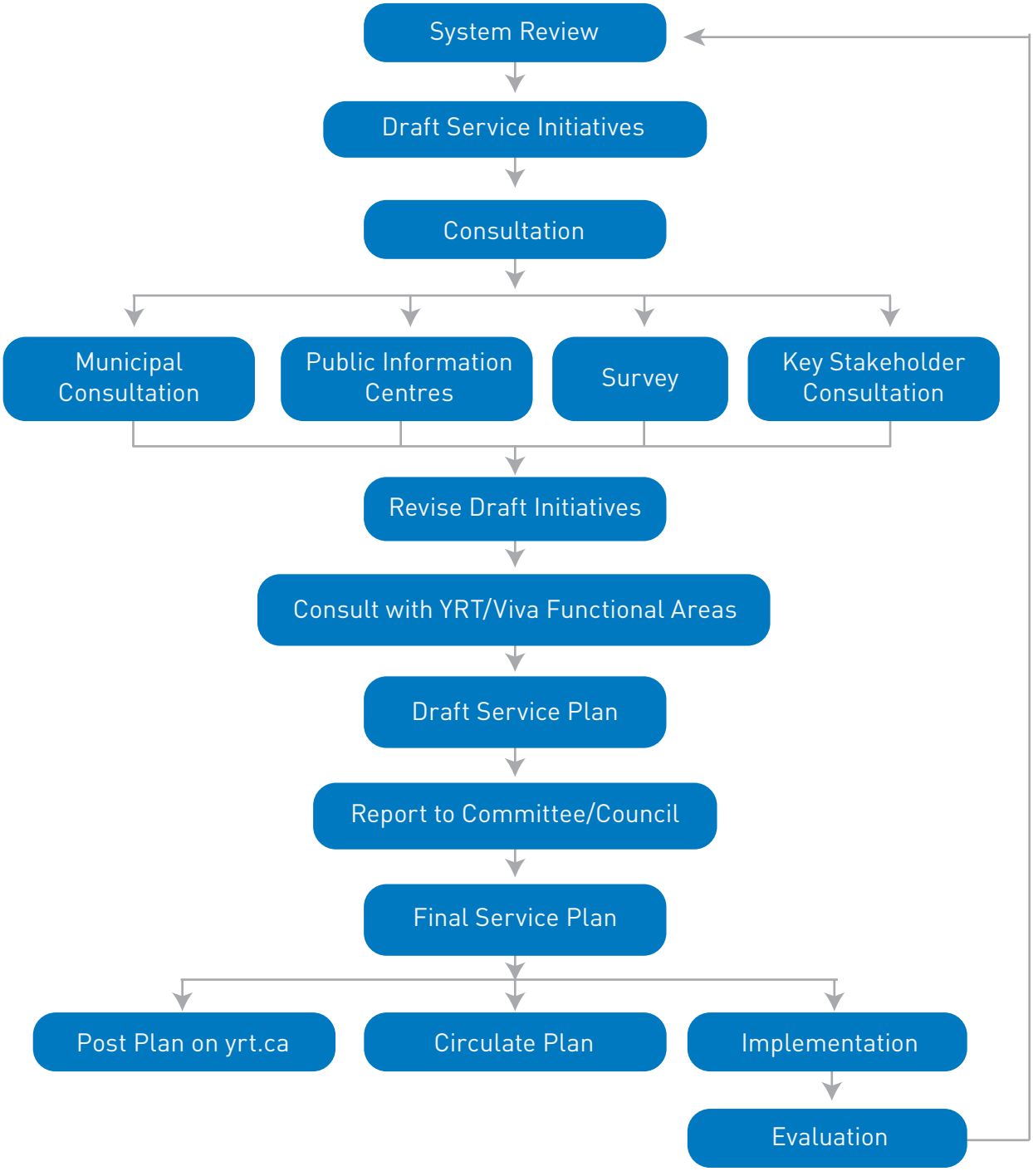
During the consultation process, YRT/Viva staff host workshops and Public Information Centres (PICs) with municipal representatives, residents and transit customers from all nine York Region municipalities to gather feedback on the draft Annual Plan. Customer surveys may be administered to supplement feedback where necessary.

YRT/Viva also hosts workshops with local transit agencies and other key stakeholders including Smart Commute agencies, large employers and post-secondary institutions, to receive comments. Once all public and stakeholder feedback is collected, reviewed and analyzed, modifications are made to the proposed initiatives for the upcoming year.

Following the consultation phase with the public and stakeholders, a follow-up internal consultation occurs between YRT/Viva functional areas. The recommended initiatives are then identified based on a review of demand, route performance, potential for cost recovery and fleet availability. Once prioritized, an implementation strategy and updated Draft Plan are developed.

A Committee report summarizing the Annual Service Plan is created. The Annual Service Plan and Committee report are then presented to Transportation Services Committee for endorsement. Once approved by Transportation Services Committee and Council, the Annual Service Plan is circulated to the municipalities, key stakeholders and posted on yrt.ca prior to implementation. The approved initiatives are implemented and monitored during the upcoming year to be evaluated for the next Annual Service Plan cycle.

Exhibit 4: Annual Service Plan Process



3.2 | Data Collection Program Requirements

The preceding Planning Process is supported by a comprehensive Data Collection Program.

Automatic Passenger Counters

Automatic passenger counters (APC) are equipped on 100 per cent of Viva vehicles and 71 per cent of conventional transit vehicles: the conventional bus are rotated from route to route. APCs are able to record passenger movements with up to 95 per cent accuracy. APCs provide reliable on/off counts at all locations, along with a variety of standard and custom reports.

On/Off Counts

On/off counts record the number of passengers boarding and alighting at each stop, along with supporting data such as time of day, arrival time at major time points, and exceptional circumstances. Full on/off counts should be conducted on each route, including weekdays, Saturdays and Sunday every two years to conform to the Regular Service Review. Regular counts should be conducted between September and May (excluding holiday seasonal, reading weeks, March break and prior to April for routes serving colleges and universities). Special summer counts should be conducted on routes subject to seasonal variation and as conditions warrant. Contracted services, Brampton Transit and TTC, require on/off counts to provide ridership information with York Region.

Standing Counts (single point or location)

Standing counts are supplementary counts taken by an individual "standing" at a single point along the route. The count records route and run numbers, scheduled and actual arrival times, and arrival and departure loads. Standing counts are typically conducted at the stop identified as the peak point along the route, but can also be completed at other points to meet specific needs.

Cordon Counts

Cordon counts are specially coordinated standing counts designed to assess the system performance at any given time across a cordon. These counts are taken at a series of points along a cordon around a particular area, such as downtown, to determine the level of transit ridership into and out of an area. Transit cordon counts should be coordinated with any automobile cordon counts conducted by the Region.

Transfer Trace

Transfer traces are counts that collect transfer information at specific points, or system-wide, to determine transfer characteristics at specific points, time periods or to/from certain routes. Transfer traces can be used to help design routes and interline routes to minimize transfers. They can also help to identify overall travel patterns for the design of new services.

4 | Public and Stakeholder Consultation Plan

4 | Public and Stakeholder Consultation Plan

The Consultation Plan identifies the process YRT/Viva undertook to obtain public and stakeholder input on the 2012-2016 Five-Year Service Plan.

4.1 | Public and Stakeholder Consultation Process

The purpose of the Public and Stakeholder Consultation Plan is to formalize a process ensuring the YRT/Viva 2012-2016 Five-Year Service Plan was communicated to the public and stakeholders. Input is obtained and considered during the revised draft stage of the Annual Service Plan process.

Regular and ongoing communication with the public and stakeholders is vital as it identifies concerns and provides valuable information and education to all involved.

A defined consultation plan with timeframes, topics, locations and identified issues enables YRT/Viva staff to focus on obtaining the broadest cross-section of public input in an effective manner. At each point of consultation and communication, it is important to present the objectives of the Five-Year Service Plan, and benefits of YRT/Viva to the broader community.

The components of a successful consultation plan are:

- Knowing your audience
- Defining the purpose of the consultation
- Reporting accomplishments to the community
- Reporting challenges and opportunities

Consultation can be tailored to the needs or characteristics of the individual group and include:

- Issue-specific meetings with one or more stakeholders
- Public meetings, forums or open houses
- Written submissions
- Workshops
- Regular newsletters and notices

At each of the meetings, YRT/Viva will receive or present:

- Specific proposals for the short and long-term strategies
- The transit service guidelines
- A comprehensive ranking of service alternatives
- Key performance indicators

YRT/Viva's Public and Stakeholder Consultation Process Guidelines, found in **Appendix A**, identifies the purpose, participants, timing and form of consultation held for area municipalities, areas experiencing change, external stakeholders, neighbouring municipalities, transit providers and the general public. The purpose of each consultation is summarized as follows:

- **Area Municipalities**: To obtain input for their preferences for service improvements and new services in their municipalities, on an annual basis.
- **Public Information Centres**: Public consultation forums (one per municipality of York Region) are suggested for York Region stakeholders and members of the public that would not have had an opportunity to provide input through the other venues.
- **Areas Experiencing Change**: Consultation with the local area residents and businesses, and the elected representatives to develop specific proposals for change to services or the introduction of new services into their community, for areas of significant growth.
- **External Stakeholders**: Consultation with community agencies, business groups, transportation management associations and ratepayers groups.
- **Neighbouring Municipalities and Transit Providers**: Consultation with the neighbouring municipalities and transit providers to ensure seamless services for those customers travelling beyond York Region.
- **YRT/Viva website**: Communication planning updates, proposed annual service plan initiatives, surveys and specific ways customers and residents can get involved.
- **E-alerts and social media**: Informs the public of planned service changes and upcoming events.

The Five Year Service Plan will be reviewed on an annual basis during the Annual Service Plan process to indentify updates to policies, guidelines and consultation process.

Municipal workshops will be held every threes years for the preparation of the Five Year Service Plan. The purpose of the workshop is to obtain feedback on YRT/Viva service initiatives and for municipalities to identify opportunities for service enhancements and efficiencies.

The Calendar of Events is based around the public and stakeholder consultation process shown in **Table 7**.

Table 7: Public and Stakeholder Consultation Process

Step	Process	Timeline
1	> Gather feedback from YRT/Viva staff (emails, CARES requests, on-street observations, etc.), customers and contractors	January
2	> Undertake system performance review and input findings into the draft Five-Year Service Plan	January
3	> Host meetings to gather formal feedback from YRT/Viva staff and from customer requests, then input feedback into Draft Five-Year Service Plan	February
4	> Prepare general consultation plan and meeting/out reach activities (based on experience from previous year)	February
5	> Prepare consultation strategy: · Half-day workshops (i.e. Smart Commute agencies , and neighbouring transit service providers) · Public Information Centres/meetings · External customers and elected officials · Newsletter/website updates and notices	February
6	> Prepare storyboards and materials for public presentation: · Short and long-term strategies · Options · Ranking of alternatives · Maps · Support materials	February
7	> Prepare Draft Five-Year Service Plan (including maps, budget and fleet requirements)	February - March
8	> Prepare list of stakeholders	March
9	> Meetings with Planning/Engineering staff from each municipality	March
10	> Host public and stakeholder consultation meetings: · Neighbouring Transit Agencies · Key Stakeholders · Public Information Centres · Surveys	April - May
11	> Update Draft Five-Year Service Plan Report as per comments received/evaluated	May - June
12	> Present Draft Five-Year Service Plan Report to Transportation Services Committee	September
13	> Circulate Final Five-Year Service Plan and post on yrt.ca	November
14	> Present to local Councils (if requested)	November

The public and stakeholder consultation process is supported and enhanced by communication material. The standard communications materials kit contains:

- Lists of stakeholders by category
- Standard report format to area municipalities
- Format for area municipal responses
- Notices of general public consultation (newspaper, on-bus notices, etc)
- Standard agendas for each type of consultation meeting
- Comment forms for participants
- Sign-in registers for each meeting
- Formal Letters of Invitation,
- A standard Presentation Kit including standardslides of YRT/Viva objectives, broad community benefits, service overview, annual accomplishments, service standards, performance targets, planning processes and communications plan.

4.2 | Consultation Outreach

In 2009, 2010 and 2011, YRT/Viva's extensive outreach program involved a series of Public and Terminal Information Centres across York Region, to engage and gather feedback from customers and the general public about YRT/Viva's transit services. Information boards that showed proposed service initiatives were distributed at the Public and Terminal Information Centres and posted on yrt.ca for public review and comment. In addition, several stakeholder workshops were held with partners including, local municipalities, Smart Commute agencies, neighbouring transit systems and post-secondary institutions. A list of the Five-YearService Plan's consultations is found in **Appendix B,** Consultation Outreach.

Feedback received from all of the outreach activities was positive and included support for a number of proposed initiatives. YRT/Viva reviewed, evaluated and considered all feedback in the development of the 2012-2016 Five-Year Service Plan.

Public Information Centres and Terminal Information Centres

Residents who attended were generally in support of the proposed initiatives. Some of the general comments received include:

- Support for restructuring proposal
- Request for additional service to GO Stations
- Request for specific timed trips for communities
- Request not to eliminate service
- Request for improved weekday midday, weekend and evening service
- Support for Viva frequency improvements

Customer Surveys

YRT/Viva conducted two customer surveys. The first survey, the Five-Year Service Plan Customer Survey, was prepared for existing transit customers and the general public to gather feedback on future rapid transit corridors, service enhancements and ridership growth strategies. The second survey targeted at York University Customers, was prepared to evaluate existing service and potential changes that could be made to better serve York University and surrounding areas. The York University survey asked questions regarding arrival/departure times, time required to get to/from campus destinations, routes used and current transit schedule needs.

4.3 | Moving Forward: Annual Service Plans

The Public and Stakeholder Consultation Plan has been updated for the next Annual Service Plans. **Table 8** is an updated list of calendar events outlining the process.

Table 8: Annual Service Plan — Consultation Plan

Date	Event
November to December	> Review Fall Route Performance
January to February	> Recommendations/ Regional Department Review*/Service Rationalization for 2013
January to March	> Prepare Draft Annual Service Plan > Review Five Year Service Plan for Objectives
March	> Municipal Workshops / Meetings* > Chairman's Letter to Council
April to May	> Public Information Centres
June	> Committee Presentation (Preview)
September	> Committee Report
October to November	> Municipal Councils
November to December	> Review Route Performance
December / January	> Discussion with Transit agencies

*Regional Departmental Review or internal stakeholders

Appendix A:

Public and Stakeholder Consultation Process Guidelines

Appendix A: Public and Stakeholder Consultation Process Guidelines

The Public and Stakeholder Consultation Process Guidelines identifies the purpose, participants, timing and form of consultation for Area Municipalities, Areas Experiencing Change, External Stakeholders, Neighbouring Municipalities and Transit Providers and General Public.

1. | Area Municipalities

Purpose

The purpose of communicating with each of the area municipalities is to obtain their preferences for service improvements and new services in their municipalities on an annual basis which feeds into the Five-Year Service Plan. This input is based on their knowledge of local development activities and community involvement and expectations expressed in their development processes. Informal requests can be considered under the periodic review process, but the process should be clear to the municipalities that the periodic review implementation is limited to minor adjustments, and all major proposals are considered annually.

Who is Involved

Recommendations from both staff and elected representatives should be requested (not necessarily required) during this phase of consultation. Municipal staff should be encouraged to provide specific input to changes in service in the following year as well as input that would be beneficial in the refinement or introduction of services anticipated in the medium-term. Local Council recommendations would be requested for transit service arising from areas undergoing secondary plan level of approvals as well as service requests that have significant service and budget implications.

Timing

As part of the Annual Service Review and as input to the Five-Year Service Plan, Area Municipality input should be requested early in March for response by mid-May.

Form of Consultation

A short report would be sent to each of the area municipalities in requesting their input and recommendations. A follow-up workshop should be organized for municipal and transit staff. This group workshop can facilitate both overview presentations and sub-group discussions for area-specific issues. This report should outline objectives and benefits of YRT/Viva; service improvements implemented in the previous year; changes to services identified to date; and requests for service improvements in the next year, and those anticipated in the medium-term (one–five years).

Submission and Feedback

Written submissions in the form of brief reports or letter submissions are the preferred format for response. Feedback to the municipalities is provided though the formal Service Plan recommendations and the public consultation process.

2 | Areas Experiencing Change

Purpose

The purpose of this component of the communications plan is to consult with the local area residents, developers and businesses, and the elected representatives to develop specific proposals for change to services or the introduction of new services into their community, for areas of significant growth. This element of the process is designed to deal with specific areas as they emerge. These sessions would normally be in addition to the formal annual requests for service, but specific proposals should also be incorporated in those requests.

Who is Involved

The participants should include the local area residents and businesses and the elected representatives for the specific area. Also, planning staff from the area municipality and other regional and local department's staff should also be involved.

These consultation sessions could typically be delivered in conjunction with local municipal or regional planning processes, at which time YRT/Viva would provide complementary consultation support. However, if service changes or introduction of facilities are anticipated in the immediate and short-term and planning meetings are not scheduled, then these workshops would be held at YRT/Viva's initiative. Approximately four to six of these area workshops should be anticipated annually.

Timing

Since these sessions could be linked to the planning processes for these areas, the timing would be dependant on the time of development application processes. Each broad planning and service area identified will be "on the books" for a few years from the initial residents moving in to full development of the particular area. Those sessions initiated by YRT/Viva should be held in the Spring and Fall. The Spring sessions should focus on specific route proposals for consideration in the upcoming round of reviews. The Fall sessions should focus on those emerging areas that are not yet ready for service implementation.

Form of Consultation

For those sessions initiated by YRT/Viva, the workshops should be held with specific set objectives, established by YRT/Viva in conjunction with the participants. A briefing with the local elected representatives and senior staff, if necessary, may be held prior to these workshops in areas where there is an expectation of significant concern and impact expressed by the participants. These workshops would typically be held in the evening, mid-week at an accessible location nearest to the specific area being considered.

Submission and Feedback

For these workshops, comments made by the participants on any aspect of YRT/Viva services would be acceptable and directed into the appropriate area for consideration. Staff should document verbal presentations and comments. The feedback from the participants would be in the form of summary of comments made at the forums prepared by YRT/Viva staff, specific proposals for service improvements developed at the workshops and individual comment sheets submitted by participants. It is expected that workshops will provide feedback to participants on previous discussions and identify what has been completed, considered and is still outstanding.

Potential Agenda Items

The agenda would typically consist of:

- Objectives and benefits of YRT/Viva to the community, highlighting accomplishments and community input of the past year
- Overview of service standards and performance targets
- Specific proposals, including issues and alternatives considered
- Development of alternatives by participants, including creation of maps
- Comments, suggestions, concerns, desires for service improvements and expansion from participants
- Identification of and commitment to next steps for both YRT and participants

The first three items would be a brief presentation by YRT/Viva staff as part of a standard consultation presentation. The reporting on what was heard the previous year, and what was heard in other venues is an important part of this consultation. The feedback to other parts of the community is intended to demonstrate that YRT/Viva is listening and helps to build public confidence and support.

The remaining part of the workshop would be facilitated (in an independent fashion) in response to participants. The interactive component would be conducted in such a manner that representatives of YRT/Viva would be asked at appropriate times to respond and explain items under discussion. The facilitator would then be in a position to summarize the comments made by both YRT/Viva and participants.

3 | External and Internal Stakeholders

Purpose

The external stakeholders, comprising community agencies, business groups, transportation management associations, residents' or ratepayers' groups (in other words those groups that represent a group of individual constituents), fall into two categories. The first are those organizations whose clients, members, employees are current or potential customers of YRT/Viva. The second are those organizations whose support for YRT/Viva would be beneficial to the community.

The purpose of communicating with these groups of external stakeholders is twofold. The first is to consult with those that are concerned about the availability and access to specific services available for their clients, members, employees, and so forth. The second is to build support for transit, based on the benefit accruing to the community as a whole and to draw out from those that are not directly involved, the attributes of a transit service that are important to them.

Consultations with internal stakeholders should be conducted as well. The purpose is to ensure Regional plans and efforts are coordinated.

Who is Involved

The external participants should include Region-wide service agencies, colleges, universities and school board and local area agencies, such as Chambers of Commerce, Business Improvement Areas, Transportation Management Associations and similar groups. The internal participants should include the Transportation Services Department, the other Regional departments and the Region's nine municipalities.

Timing

These sessions should be held within a similar timeframe as the sessions for the general public.

Form of Consultation

It is recommended that half-day workshops be held with these external stakeholders. For the workshops with the groups of participants who are interested about the specific services for their clients, the agenda would be tailored to more service specific areas of interest. For the other groups of stakeholders, the agenda would focus more on drawing out their general areas of interest and concerns. These workshops would typically be held in the workday at an accessible location.

Submission and Feedback: For these workshops, comments made by the participants on any aspect of YRT/Viva services would be acceptable and directed into the appropriate area for consideration. Staff should document verbal presentations and comments. The submissions from the participants would be in the form of a summary of comments made at the forums prepared by YRT/Viva staff, specific requests for service improvements developed at the meeting and individual submissions by participants. It is expected that workshops will provide feedback to participants on previous discussions and identify what has been completed, considered and is still outstanding.

Potential Agenda Items

The agenda would typically consist of:

- Objectives and benefits of YRT/Viva to the community highlighting accomplishments and community input of the past year
- Specific proposals, including issues and alternatives considered
- Development of alternatives by participants, including creation of maps
- Comments, suggestions, concerns, desires for service improvements and expansion from participants
- Identification of and commitment to next steps for both YRT/Viva and participants.

The first two items would be a brief presentation by YRT/Viva staff as part of a standard consultation presentation. The reporting on what was heard the previous year, and what was heard in other venues is an important part of this consultation. The remaining part of the workshop typically would be facilitated by YRT/Viva and allow for open dialogue in response to participants. The interactive component would be conducted in such a manner that both the participants and YRT/Viva have a better understanding of the issues, constraints and opportunities available. The agenda for a celebratory event would include opening remarks by political representatives, a brief overview of YRT/Viva accomplishments and plans for the coming year and in the medium-term, and most importantly a recognition of support (in expanding programs or ridership, visibility for transit) of the community participants.

4 | Neighbouring Municipalities and Transit Providers

Purpose

The purpose of this component of the communications plan is to consult with the neighbouring municipalities and transit providers to ensure seamless services for those riders travelling beyond York Region.

Who is Involved

The participants would include the transit planners and operators from Toronto, TTC, Brampton, Mississauga, Peel, Durham and Metrolinx (GO Transit), as well as school transportation providers. If service changes or the introduction of major facilities are anticipated in the immediate- and short-term, representatives from broader neighbouring municipal departments should also be involved.

Timing

It is expected that at minimum two of these workshops would be held annually, once in the Spring and once in the Fall. The Spring session should be designed to receive input to the annual planning process and the fall session to review upcoming changes. It is expected that YRT/Viva representatives would be involved in studies conducted by these partners, such as major service reviews, Environmental Assessments and such.

Form of Consultation

It is recommended that half-day meetings be held with the participants with preset agenda items.

Submission and Feedback

For these workshops, comments made by the participants on any aspect of YRT/Viva services would be acceptable and directed into the appropriate area for consideration. Staff should document verbal presentations and comments. It is expected that workshops will provide feedback to participants on previous discussions and identify what has been completed, considered and is still outstanding.

Potential Agenda Items

The agenda would typically consist of:

- Overview of major areas of residential, commercial or employment development (scale and timing)
- Overview of potential service changes and adjustments with potential impact on provision of seamless service from the riders' perspective
- Development of alternatives by participants
- Comments, suggestions, concerns, desires for service improvements and expansion from participants and development of alternatives, if necessary
- Identification of and commitment to next steps for both YRT/Viva and adjacent systems.

5 | General Public Consultation

Purpose

Two additional public consultation forums are suggested for those stakeholders and members of the public that would not have had an opportunity to provide input through the other venues.

Who is Involved

The general public, area residents' associations, and other stakeholder groups not notified through the other sessions should be issued notices of consultation and invited to attend one of two forums. These forums would be held in the northern and southern part of the Region.

Timing

These forums should be held once a year, in the April to June timeframe.

Form of Consultation

This consultation would be held as public forums, with the participants significantly directing the topics to be discussed and addressed. These would typically be held in the evening, mid-week at a public location.

Submission and Feedback

For these forums, comments made by the participants on any aspect of YRT/Viva services would be acceptable and directed into the appropriate area for consideration. Written submissions should be encouraged, including prepared submissions and comment forms completed at the event. Staff should also document verbal presentations and comments. After the first year, it is expected that the subsequent forums provide a feedback to the participants on what was heard the previous year and what had been completed, considered and is still outstanding.

Potential Agenda Items

The agenda for the public sessions would typically consist of:

- Objectives and benefits of YRT/Viva to the community highlighting accomplishments of the past year;
- Overview of what was heard from the community previously, what was completed and still to be done;
- Comments, suggestions, concerns, desires for service improvements and expansion from participants; and Broad action items arising from the forum (by both YRT/Viva and participants).

The first two items should be a brief presentation by YRT/Viva staff as part of a standard consultation presentation. The reporting on what was heard the previous year, and what was heard in other venues that were of a significant nature is an important part of this consultation. The feedback on the previous years demonstrates to the public that YRT/Viva is listening and helps to build public confidence and support. Reporting on issues of significance to other areas of the Region would also help to obtain a broader public input to the specific issues.

The remaining part of the consultation should be facilitated (in an independent fashion) in response to participants. The interactive component should be conducted in such a manner that representatives of YRT/Viva are asked at appropriate times to respond and explain items under discussion. The facilitator would then be in a position to summarize the comments made by both YRT/Viva and participants.

Appendix B:
Consultation Outreach

APPENDIX B: Consultation Outreach

Table 9: Public and Stakeholder Consultation Meeting Chronology

Consultation	Date
Municipal Engineering/Planning Staff	
Township of King	July 2011
Town of Newmarket	July 2011
Town of Markham	July 2011
City of Vaughan	July 2011
Town of East Gwillimbury	July 2011
Town of Richmond Hill	July 2011
Town of Aurora	July 2011
Town of Georgina	July 2011
Town of Whitchurch-Stouffville	July 2011
2. Neighbouring Transit Agencies	
GO Transit, TTC, Brampton Transit, Durham Region Transit	November 2010
GO Transit, TTC, Brampton Transit, Durham Region Transit	August 2011
3. Community Stakeholders	
large employers, transportation demand management agencies, post-secondary institutions, chambers of commerce	November 2010
large employers, transportation demand management agencies, post-secondary institutions, chambers of commerce	August 2011

Table 9: Public and Stakeholder Consultation Meeting Chronology

Public Information Centres / Terminal Information Centres	
York Region South Service Centre, Town of Richmond Hill	September 2009
York Region Administrative Centre,Town of Newmarket	September 2009
Newmarket GO Bus Terminal, Town of Newmarket	Fall 2009
Richmond Hill Centre Terminal, Town of Richmond Hill	Fall 2009
Finch GO Bus Terminal, City of Toronto	Fall 2009
Promenade Bus Terminal	Fall 2009
Hillcrest Mall, Town of Richmond Hill	November 2010
Newmarket GO Bus Terminal, Town of Newmarket	November 2010
Markville Mall, Town of Markham	November 2010
Vaughan Mills Mall, City of Vaughan	November 2010
Town of Newmarket	August 2011
Town of Richmond Hill	August 2011
Township of King	August 2011
Town of East Gwillimbury	August 2011
Town of Stouffville	August 2011
City of Vaughan	August 2011
Town of Markham	August 2011
Town of Aurora	August 2011
Town of Georgina	August 2011
City of Vaughan	September 2011
Public Surveys	
Five Year Service Plan Customer Survey	Fall 2009
York University Customer Survey	October 2011 to November 2011

5 | Market Analysis

Transit Service Assessment

The Transit Service Assessment examines the transit market, existing transit service and future transit service. The assessment assists staff in indentifying opportunities for improvement.

5 | Market Analysis

The 2012-2016 Market Analysis section consists of a review of demographics, intensification areas and existing and future travel patterns.

5.1 | Population and Employment Growth

Population Growth

Population in York Region is forecasted to grow over the near and long-term as shown in **Table 10**. Population is forecasted to grow by 10 per cent over the next five years and 21 per cent over the next 10 years.

Table 10: York Region Population Forecast

Year	Population
2006	950,674
2011	1,082,650
2016	1,200,100
2021	1,314,700
2026	1,415,200
2031	1,507,500

Source: York Region 2031 Population and Employment Forecasts (2009)

Table 11 expands on the information provided in Table 10 by indicating each municipality's population growth between 2006 and 2016. Population is anticipated to grow in each municipality through to 2016, and seven of nine municipalities will experience double digit growth.

Table 11: York Region Municipalities Population Forecast

Municipality	2011	2016	Growth
Georgina	48,700	52,800	8%
East Gwillimbury	26,300	34,700	32%
Newmarket	84,000	88,700	6%
Aurora	57,300	63,700	11%
Richmond Hill	195,000	216,900	11%
Vaughan	294,200	329,100	12%
King	23,400	27,000	15%
Markham	303,500	337,800	11%
Whitchurch-Stouffville	38,700	49,400	28%
Total	1,071,100	1,200,100	12%

Source: York Region 2031 Population and Employment Forecasts (2009)

Employment Growth

Employment growth is an important indicator in determining the potential demand for transit service. Employment is forecasted to continue to grow over the next five years in every municipality with double digit growth in eight of the nine municipalities as seen in **Table 12**. This will increase demand for employment centre oriented transit services such as rush hour period Express Services.

Table 12: 2011-2016 York Region Employment Forecast

Municipality	2011	2016	Increase
Georgina	9,300	12,000	29%
East Gwillimbury	7,400	11,500	55%
Newmarket	46,200	47,900	4%
Aurora	25,300	29,800	18%
Richmond Hill	75,900	88,500	17%
Vaughan	203,200	233,400	15%
King	8,000	9,800	23%
Markham	178,200	206,300	16%
Whitchurch-Stouffville	15,000	19,600	31%
Total	568,500	658,800	16%

Source: York Region 2031 Population and Employment Forecasts (2009)

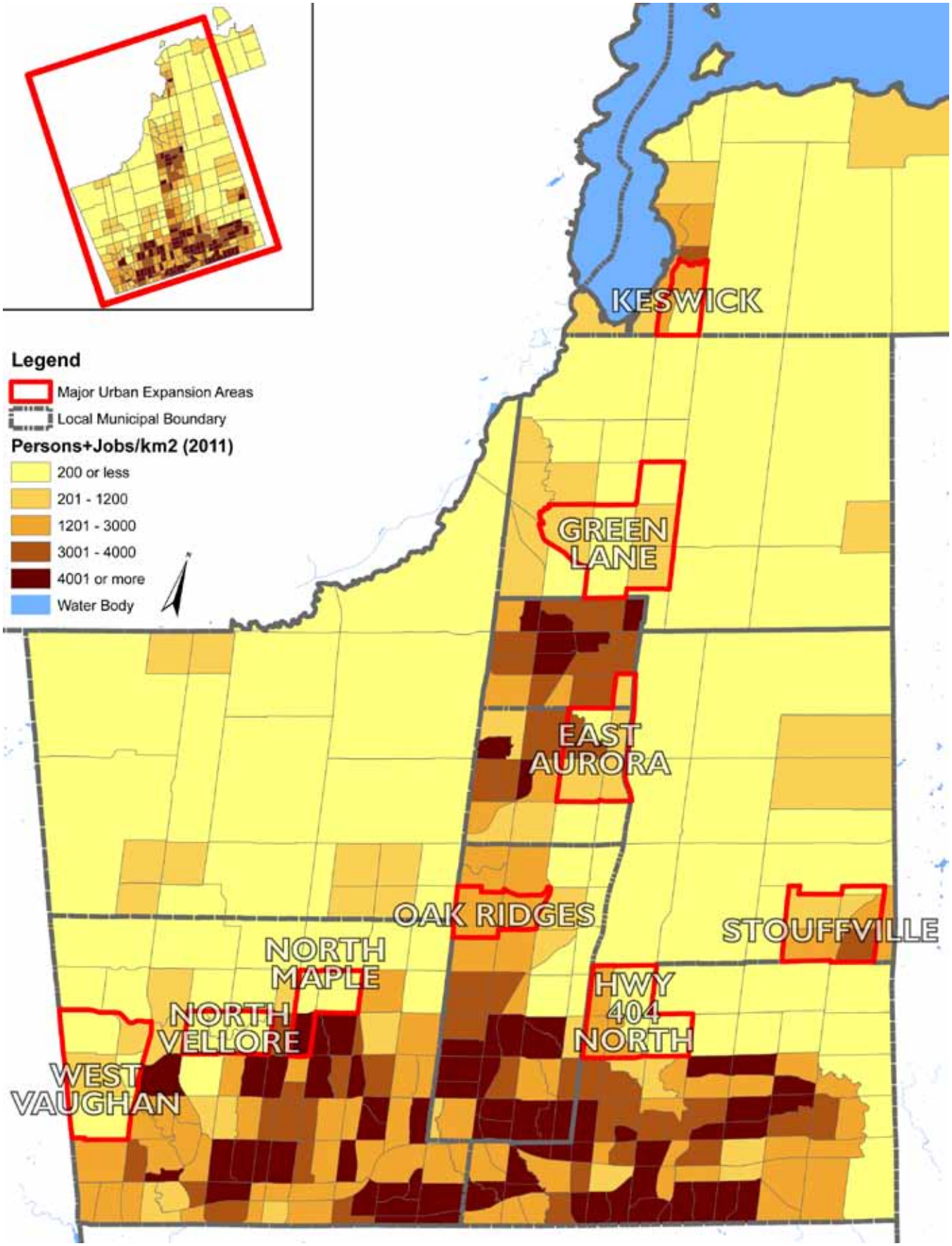
Population and Employment Density

Population and employment density (number of residents and workers per square metre) is a strong indicator of the potential transit market. **Exhibit 5** illustrates York Region's population and employment density forecast for 2016. Within the time frame of 2012-2016 Five-Year Service Plan and based on a geospatial analysis, nine new growth areas have been identified that include:

- East Aurora
- Green Lane
- Highway 404 North
- Keswick
- North Maple
- North Vellore
- Oak Ridges
- Stouffville
- West Vaughan

For each of the new growth areas, YRT/Viva will conduct a detailed analysis through the Annual Service Plan process.

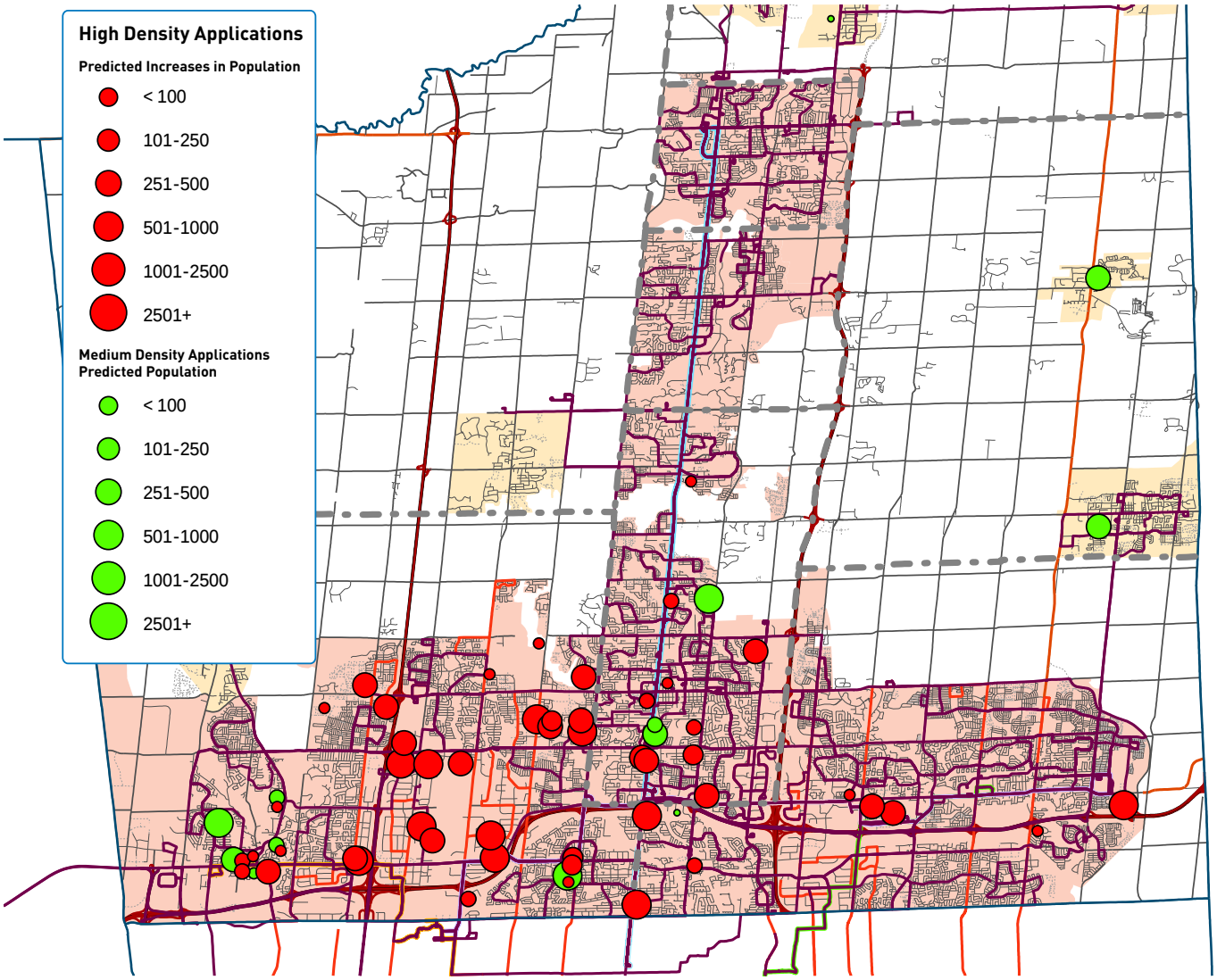
Exhibit 5: York Region Population and Employment Density



5.2 | Intensification Areas

As seen in **Table 10** through **Table 12**, York Region's population and employment is growing and it's being fuelled by both high and medium-density development applications. As seen in **Exhibit 6**, the majority of intensification is oriented in Vaughan, Markham, and Richmond Hill, as well as, Mt. Albert and Georgina. This population intensification and growth trends will have an impact on future transit demand. In the growth areas, service or new service will be required to serve these transit markets.

Exhibit 6: York Region's High and Medium Density Development Applications



Note: Based on 2009 data

5.3 | Travel Demand Assessment

As part of the 2012-2016 Five-Year Service Plan, existing and future travel patterns were assessed within the Region and adjacent municipalities. The analysis identifies key passenger flows between travel zones. The objective of this exercise was to identify transit travel demand within York Region, and to identify potential transit markets based on trip origins and destinations.

The demand data used to conduct the analysis is based on the 2006 Transportation Tomorrow Survey. The Transportation Tomorrow Survey is a survey conducted every five years in the Greater Toronto and Hamilton Area since 1981. The survey information provides travel information by trip purpose (i.e. home, work, school, other), origin and destination (i.e. traffic zone) and by mode (e.g. auto, transit etc.) among other factors. The information collected in the survey has been used to develop business cases for major transportation investments throughout the Region including vivaNext. The data obtained from the 2006 Transportation Tomorrow Survey includes:

- Transit demand for 2006 and 2021 (morning rush hour period)
- Auto demand for 2006 and 2021 (morning rush hour period)
- Geographical travel zone description

5.3.1 | Modal Split Analysis

Based on the 2006 Transportation Tomorrow Survey, an assessment shows that the 2006 overall transit modal split for the morning period is 10 per cent and varies depending on the trip type (internal, York origin, York destination). **Table 13** illustrates the variation in modal split based on trip type and the proportion of YRT/Viva's trips that can be attributed to each trip type.

5.3.2 | Origin Destination Analysis

Based on the 2006 origin and destination demand analyses shown in **Appendix C**, Travel Demand Assessment, the following conclusions are noted:

- There is significant travel demand within Aurora and Newmarket
- There is significant travel demand in the entire southern portion of York Region, half of which are external trips to Toronto and Peel Region
- There is a significant trend of travel demand from external origins to Markham and Vaughan's industrial zones

These results support an approach by the Region to focus efforts in the southern Region and enhancing transit service to industrial zones from external areas.

Looking ahead, the 2021 matrix, found in **Appendix C**, continues to identify significant demand growth in two main areas:

- Growing demand from York Region to external destinations (mainly Toronto)
- Growing demand within York Region areas including:
  - Markham to Richmond Hill
  - Vaughan to Richmond Hill
  - Aurora to King to Newmarket
  - Emerging demand within Georgina and East Gwillimbury

This demand can be addressed through service strategies and further developed within the Annual Service Plans.

Table 13: Transit Modal Split and YRT/Viva's Proportion of Transit Demand in 2006

Travel in the morning rush hour period	Transit Modal Split		Proportion of YRT/Viva Trips	
Internal Trips (York Region to York Region)	4%		40%	
York Origin Trips (York Region to external regions)	18%		34%	
York Destination Trips (External regions to York Region)	7%		26%	
	Avg.	10%	Total	100%

Appendix C:
Travel Demand Assessment

APPENDIX C: Travel Demand Assessment

Table 14: Most Significant Transit Links — Include Intra-Regional and Inter-Regional Trips

Trip ID	Origin	Destination	Trips	% of total trips
1	Toronto	Markham SW	29,106	5.2
2	Toronto	Vaughan SE	17,371	3.1
3	Markham SW	Toronto	13,488	2.4
4	Vaughan SE	Toronto	13,035	2.3
5	Vaughan NE	Toronto	11,427	2.0
6	Newmarket	Newmarket	10,790	1.9
7	Toronto -Rest	Vaughan SW	10,168	1.8
8	Markham SW	Markham SW	10,085	1.8
9	Markham NW	Toronto	9,498	1.7
10	Richmond Hill South	Toronto	8,656	1.5
11	Vaughan NW	Vaughan EN	8,558	1.5
12	Vaughan NW	Toronto	8,519	1.5
13	Peel	Vaughan WS	8,430	1.5
		Total of selected links	**159,132**	**28.2**
		Total	**563,565**	**100**

Exhibit 7: Most Significant Transit Links

Intra-Regional and Inter-Regional Trips

(Greater than or equal to 1.5% of total trips)

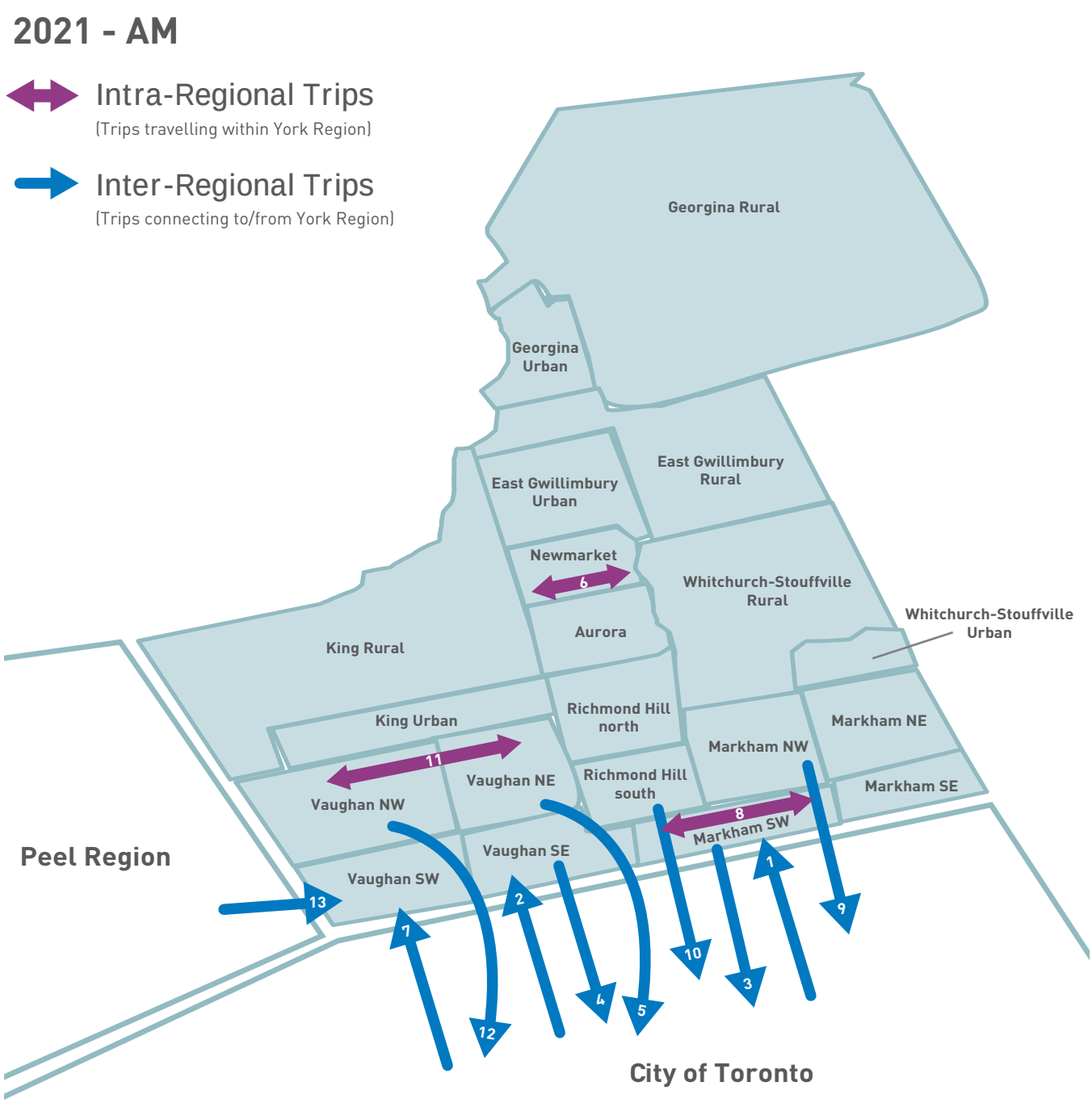


Table 15: Most Significant Transit Links – Intra-Regional Trips Only

Trip ID	Origin	Destination	Trips	% of Total Trips
1	Newmarket	Newmarket	10,790	4.4
2	Markham SW	Markham SW	10,085	4.2
3	Vaughan NE	Vaughan NE	8,558	3.5
4	Richmond Hill south	Richmond Hill south	7,996	3.3
5	Markham NW	Markham NW	7,151	2.9
6	Aurora	Aurora	6,879	2.8
7	Vaughan SE	Vaughan SE	6,737	2.8
8	Markham NW	Markham SW	5,906	2.4
9	Vaughan NE	Vaughan SE	5,801	2.4
10	Vaughan SW	Vaughan SW	4,886	2.0
11	Vaughan NW	Vaughan NW	4,290	1.8
12	Vaughan NW	Vaughan SW	4,285	1.8
13	Markham NE	Markham NE	3,944	1.6
14	Markham NE	Markham SW	3,586	1.5
15	Richmond Hill south	Markham SW	3,535	1.5
		Total of selected links	**94,432**	**38.9**
		Total	**242,727**	**100**

Exhibit 8: Most Significant Transit Links

Intra-Regional Trips

(Greater than or equal to 1.5% of total trips)

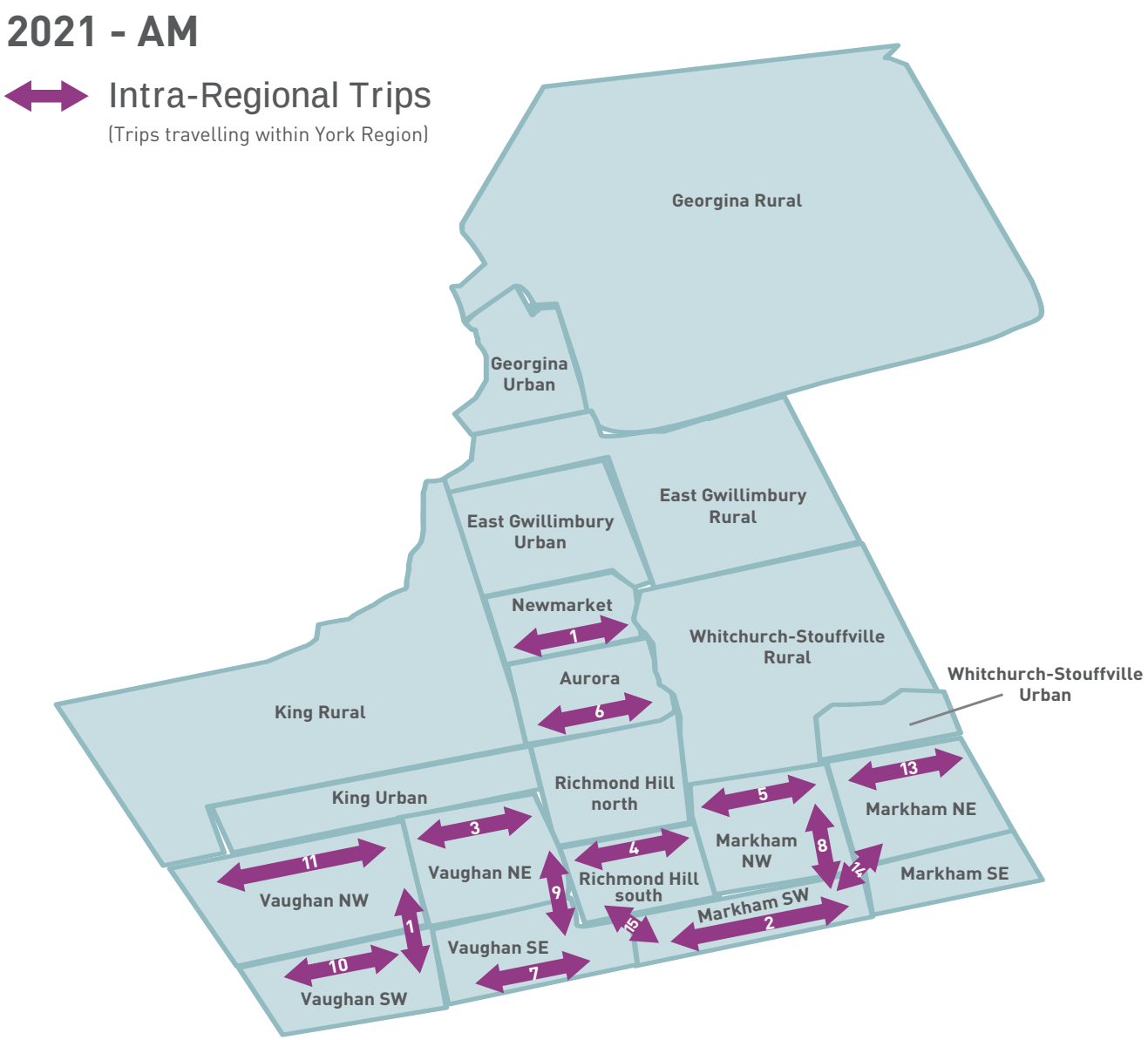


Table 16: Intra-Region and Inter-Regional Trips by Origin (2006)

2006 Origin	Total	% of Total	Internal (within York)	% of Internal Total	% of Entire Total	External (to outside York)
Georgina Rural	6,082	2.1	4,798	3.0	78.9	1,284
Georgina Urban	8,188	2.8	6,730	4.2	82.2	1,458
East Gwillimbury Rural	2,725	0.9	2,093	1.3	76.8	632
East Gwillimbury Urban	5,120	1.8	3,968	2.5	77.5	1,152
WhitchurchStouffville Rural	4,295	1.5	2,832	1.8	65.9	1,463
WhitchurchStouffville Urban	4,157	1.4	2,770	1.7	66.6	1,387
Newmarket	22,098	7.6	16,255	10.2	73.6	5,844
King Rural	3,704	1.3	2,218	1.4	59.9	1,486
King Urban	3,033	1.0	1,671	1.1	55.1	1,362
Aurora	13,937	4.8	9,400	5.9	67.5	4,536
Richmond Hill North	6,117	2.1	3,596	2.3	58.8	2,521
Richmond Hill South	32,386	11.1	16,850	10.6	52.0	15,536
Markham NE	17,128	5.9	9,088	5.7	53.1	8,040
Markham NW	23,115	7.9	12,492	7.9	54.0	10,623
Markham SE	16,650	5.7	7,848	4.9	47.1	8,801
Markham SW	32,971	11.3	14,457	9.1	43.8	18,514
Vaughan NE	22,649	7.7	12,433	7.8	54.9	10,216
Vaughan NW	18,429	6.3	8,833	5.6	47.9	9,596
Vaughan SE	28,222	9.6	11,401	7.2	40.4	16,821
Vaughan SW	21,529	7.4	9,267	5.8	43.0	12,263
Total	**292,534**	**100**	**159,000**			**133,534**

Exhibit 9: Intra-Regional and Inter-Regional Trips by Origin (2006)

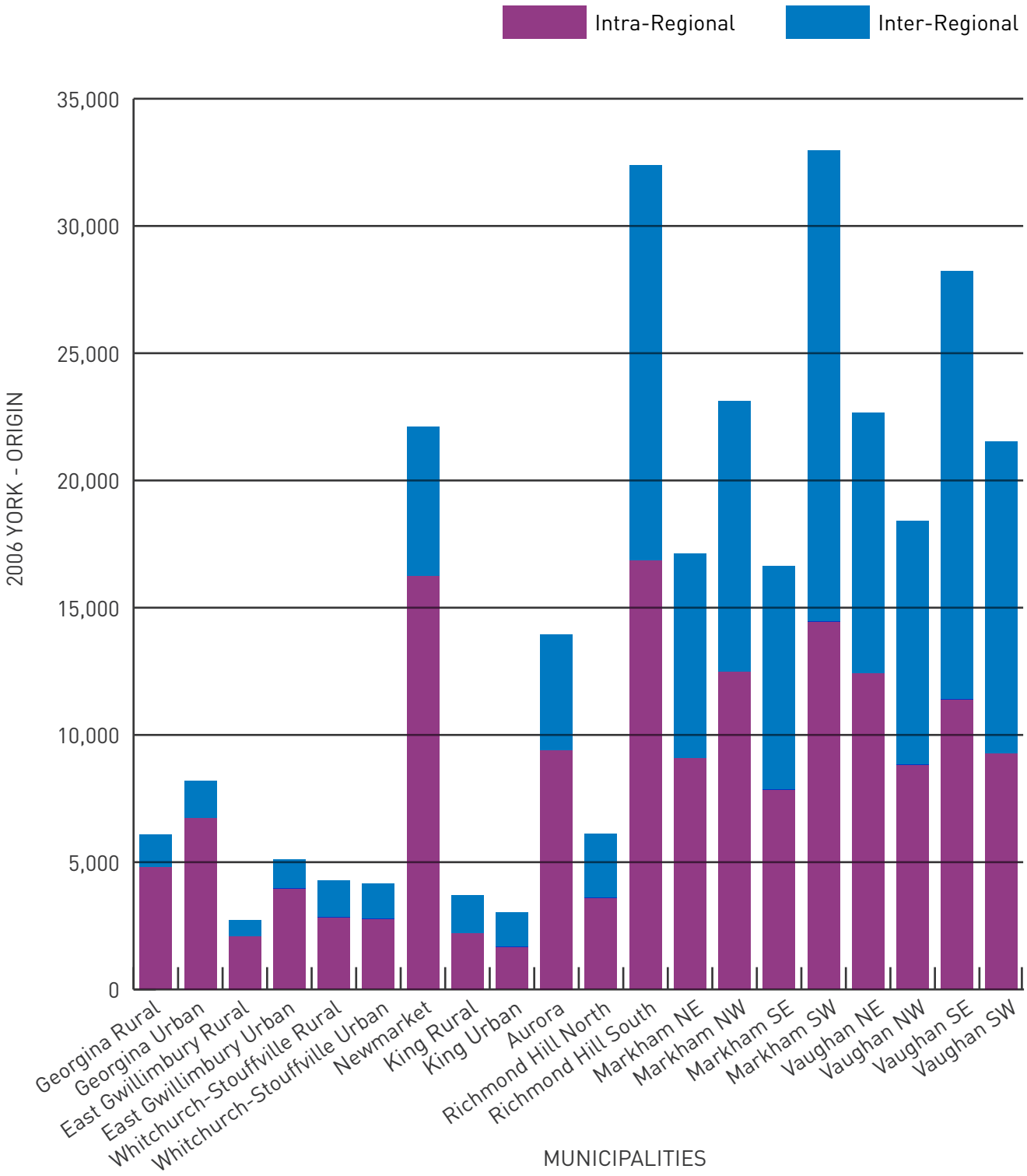


Table 17: Intra-Region and Inter-Regional Trips by Origin (2021)

2021 Origin	Total	% of Total	Internal (within York)	% of Internal Total	% of Entire Total	External (to outside York)
Georgina Rural	8,393	2.0	7,029	2.9	83.7	1,364
Georgina Urban	10,457	2.5	8,963	3.7	85.7	1,494
East Gwillimbury Rural	3,419	0.8	2,745	1.1	80.3	673
East Gwillimbury Urban	13,730	3.3	11,127	4.6	81.0	2,603
WhitchurchStouffville Rural	5,208	1.3	3,716	1.5	71.4	1,492
WhitchurchStouffville Urban	12,807	3.1	9,091	3.7	71.0	3,716
Newmarket	25,892	6.2	19,758	8.1	76.3	6,134
King Rural	4,222	1.0	2,842	1.2	67.3	1,380
King Urban	5,659	1.4	3,437	1.4	60.7	2,222
Aurora	20,066	4.8	14,372	5.9	71.6	5,694
Richmond Hill North	14,533	3.5	8,935	3.7	61.5	5,598
Richmond Hill South	36,530	8.8	19,789	8.2	54.2	16,740
Markham NE	25,459	6.1	14,153	5.8	55.6	11,306
Markham NW	35,264	8.5	20,230	8.3	57.4	15,033
Markham SE	20,247	4.9	10,082	4.2	49.8	10,165
Markham SW	39,620	9.5	18,751	7.7	47.3	20,869
Vaughan NE	43,728	10.5	24,786	10.2	56.7	18,942
Vaughan NW	31,676	7.6	16,765	6.9	52.9	14,911
Vaughan SE	36,332	8.7	15,465	6.4	42.6	20,867
Vaughan SW	22,025	5.3	10,689	4.4	48.5	11,336
Total	**415,265**	**100**	**242,727**			**172,538**

Exhibit 10: Intra-Regional and Inter-Regional Trips by Origin (2021)

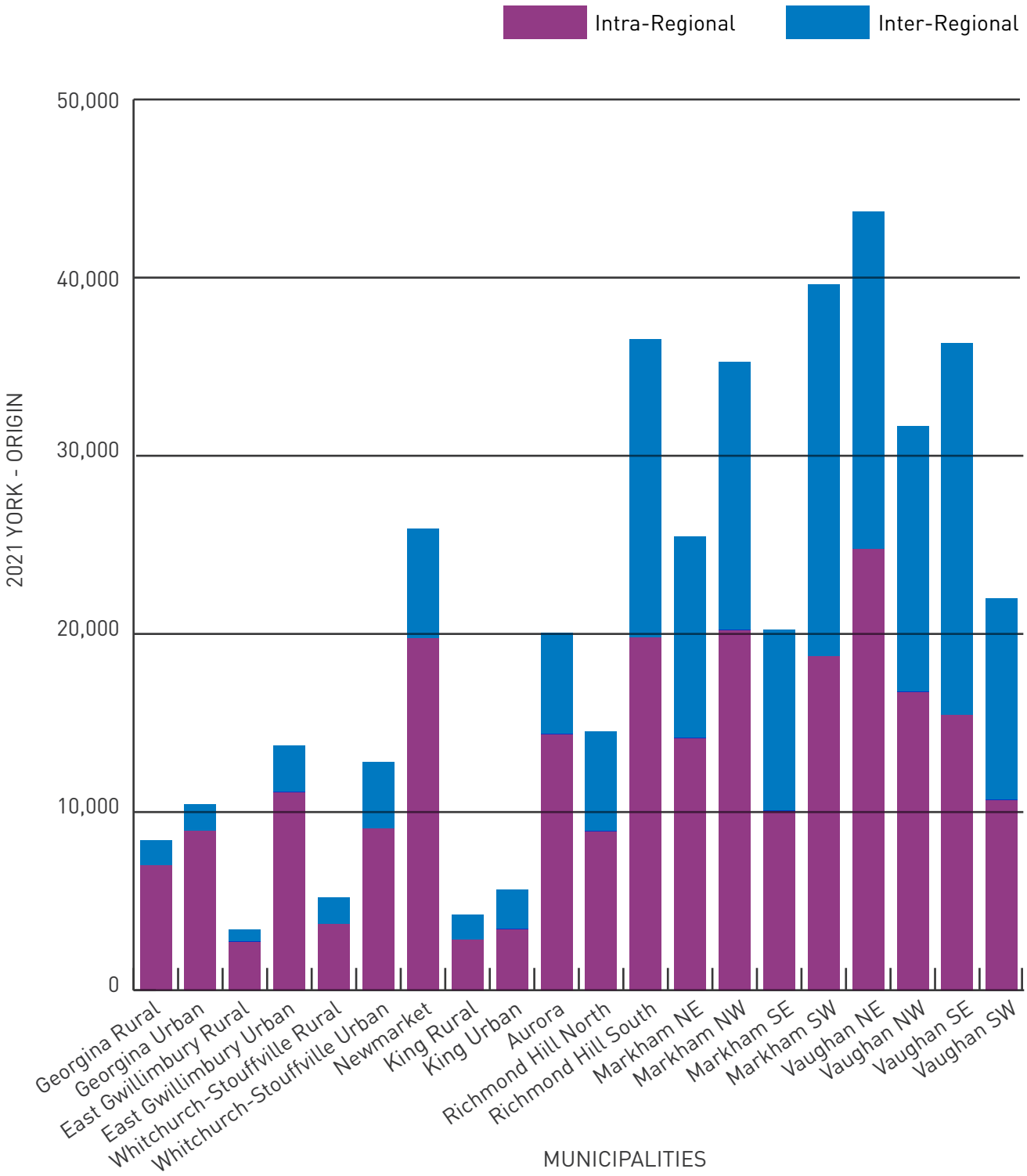


Table 18: Intra-Region and Inter-Regional Trips by Destination (2006)

2006 Destination	Total	% of Total	Internal (within York)	% of Internal Total	% of Entire Total	External (to outside York)
Georgina Rural	3,349	1.3	2,747	1.7	82.0	602
Georgina Urban	4,137	1.6	3,919	2.5	94.7	217
East Gwillimbury Rural	1,026	0.4	793	0.5	77.2	234
East Gwillimbury Urban	2,818	1.1	2,498	1.6	88.7	319
Whitchurch-Stouffville Rural	3,364	1.3	2,258	1.4	67.1	1,106
Whitchurch-Stouffville Urban	4,042	1.5	2,614	1.6	64.7	1,428
Newmarket	20,565	7.8	18,256	11.5	88.8	2,309
King Rural	3,706	1.4	2,478	1.6	66.9	1,228
King Urban	2,194	0.8	1,505	0.9	68.6	690
Aurora	9,765	3.7	8,583	5.4	87.9	1,182
Richmond Hill North	1,730	0.7	1,506	0.9	87.1	224
Richmond Hill South	19,541	7.4	14,009	8.8	71.7	5,532
Markham NE	10,899	4.1	6,932	4.4	63.6	3,967
Markham NW	15,703	5.9	10,907	6.9	69.5	4,796
Markham SE	7,391	2.8	4,925	3.1	66.6	2,466
Markham SW	64,757	24.5	29,064	18.3	44.9	35,693
Vaughan NE	13,259	5.0	9,389	5.9	70.8	3,870
Vaughan NW	7,305	2.8	4,655	2.9	63.7	2,650
Vaughan SE	43,424	16.4	20,172	12.7	46.5	23,252
Vaughan SW	25,518	9.6	11,789	7.4	46.2	13,729
Total	**264,494**	**100**	**159,000**			**105,494**

Exhibit 11: Intra-Regional and Inter-Regional Trips by Destination (2006)

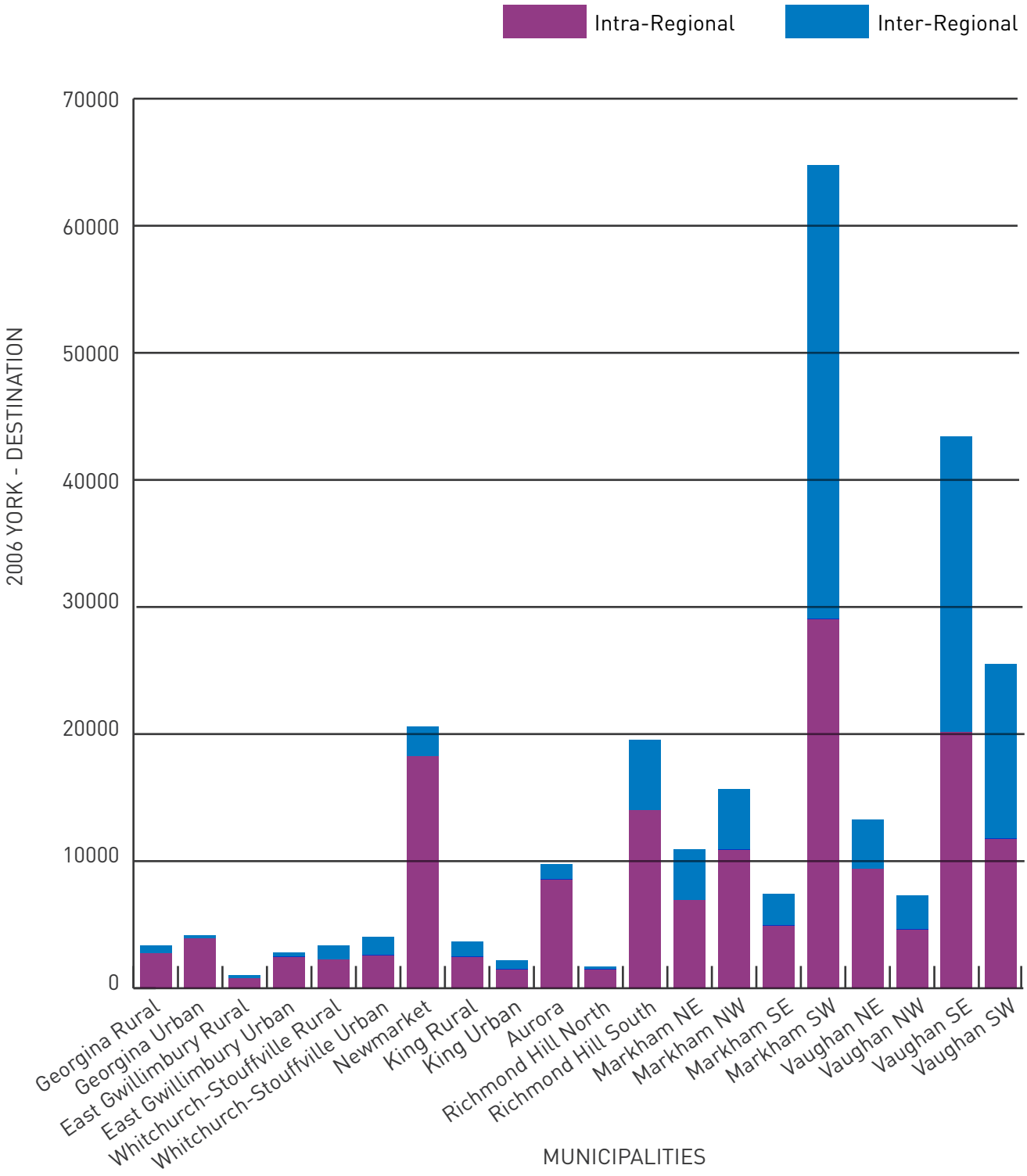
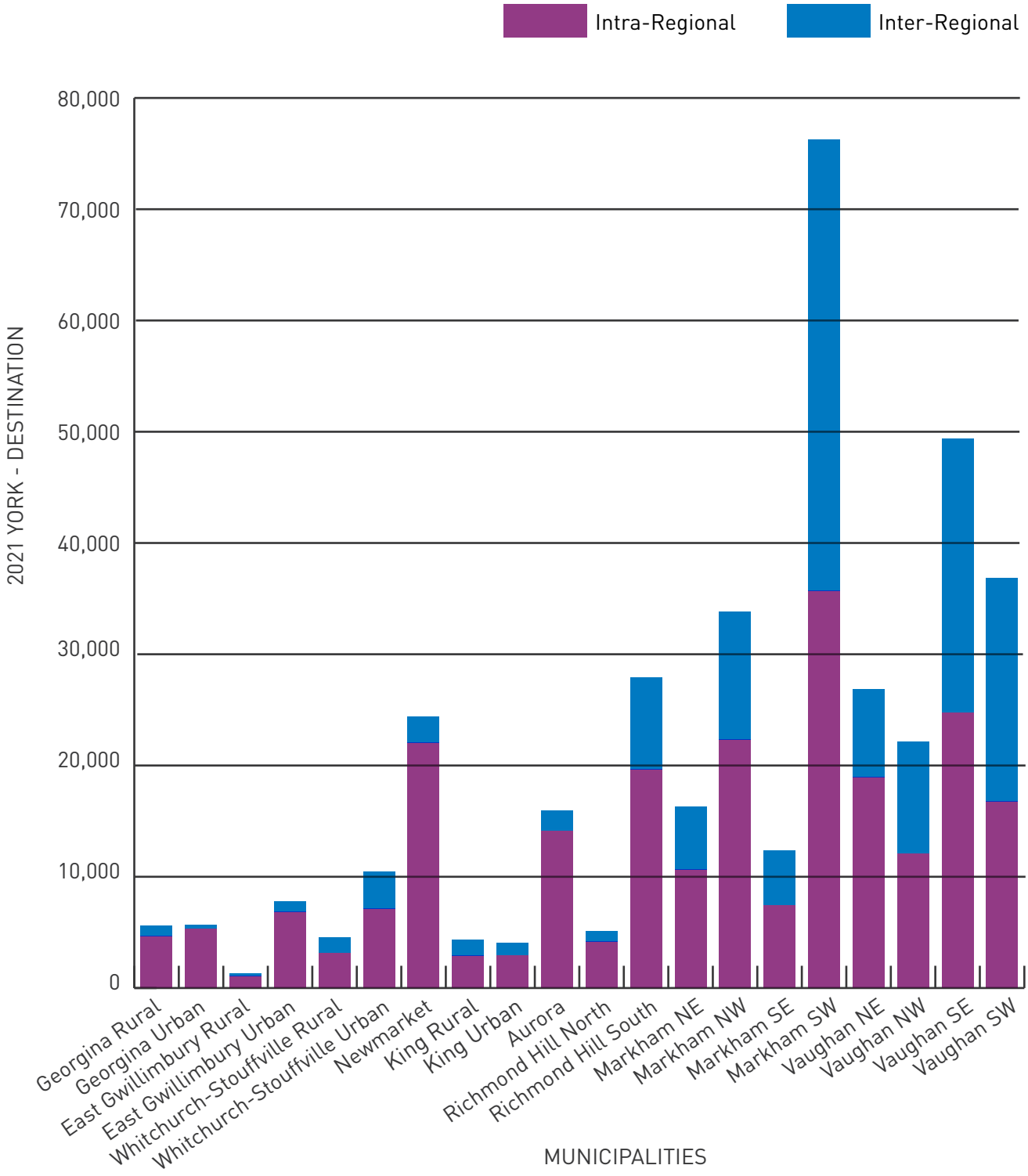


Table 19: Intra-Region and Inter-Regional Trips by Destination (2021)

2021 Destination	Total	% of Total	Internal (within York)	% of Internal Total	% of Entire Total	External (to outside York)
Georgina Rural	5,636	1.4	4,677	1.9	83.0	959
Georgina Urban	5,689	1.4	5,339	2.2	93.8	350
East Gwillimbury Rural	1,305	0.3	1,058	0.4	81.1	246
East Gwillimbury Urban	7,768	1.9	6,827	2.8	87.9	941
Whitchurch-Stouffville Rural	4,514	1.1	3,167	1.3	70.2	1,347
Whitchurch-Stouffville Urban	10,463	2.5	7,112	2.9	68.0	3,351
Newmarket	24,399	5.9	22,060	9.1	90.4	2,339
King Rural	4,346	1.0	2,932	1.2	67.5	1,413
King Urban	4,018	1.0	2,948	1.2	73.4	1,071
Aurora	15,905	3.8	14,140	5.8	88.9	1,765
Richmond Hill North	5,134	1.2	4,167	1.7	81.2	966
Richmond Hill South	27,888	6.7	19,637	8.1	70.4	8,251
Markham NE	16,333	3.9	10,637	4.4	65.1	5,696
Markham NW	33,818	8.1	22,320	9.2	66.0	11,499
Markham SE	12,312	3.0	7,456	3.1	60.6	4,856
Markham SW	76,279	18.4	35,686	14.7	46.8	40,593
Vaughan NE	26,859	6.5	18,941	7.8	70.5	7,918
Vaughan NW	22,135	5.3	12,099	5.0	54.7	10,036
Vaughan SE	49,379	11.9	24,768	10.2	50.2	24,612
Vaughan SW	36,846	8.9	16,756	6.9	45.5	20,090
Total	**391,026**	**94**	**242,727**	**100**	**62.1**	**148,299**

Exhibit 12: Intra-Regional and Inter-Regional Trips by Destination (2021)



6 | Exisiting Transit Service

6 | Existing Transit Service

The existing service review assesses YRT/Viva's system profile and performance. The purpose of the existing service review is to identify items requiring action over the next five years.

6.1 | System Profile

YRT/Viva system consists of a family of services that includes:

- Five Viva bus rapid transit (BRT) services, supplemented by Brampton Transit Züm services
- 19 Base services operating along major arterial corridors
- 31 Local services operating in local neighbourhoods
- 37 High School Specials providing direct service to high schools
- 10 GO Train shuttles providing direct service to GO Train stations
- Five Express services providing direct service to subway stations or employment areas
- Four Community Bus services (Richmond Hill, Markham and Newmarket)
- Five Dial-A-Ride services
- 11 TTC contracted routes operating north of Steeles Avenue

As of 2011, YRT/Viva delivered the above services, as seen in **Table 20**, with a fleet of 446 vehicles operating over 1,175,000 revenue hours . Prior to the Transit labour strike, YRT/Viva was trending towards carrying over 21 million revenue boardings. This success, in part, is due to improvements in service reliability, increased service and other service adjustments to match capacity with demand in high growth areas. Other factors influencing ridership include the price of fuel, population growth and the dropping unemployment rate in Ontario.

Table 20: YRT/Viva System Profile

Year	Service Area Size (km2)	Service Area Pop	Fleet Size	Revenue Hours	Revenue Boardings
2005	1,775	918,383	350	738,979	15,222,226
2006	1,775	950,674	359	995,146	17,108,258
2007	1,775	983,056	384	1,003,011	18,230,323
2008	1,775	1,011,360	396	1,040,912	18,846,645
2009	1,775	1,032,606	423	1,076,325	18,314,618
2010	1,775	1,062,000	430	1,117,579	19,395,721
2011	1,775	1,082,650	446	1,175,338*	21,800,000*

Note: * based on 2011 third quarter year-end forecast (not taking the impacts of the strike into account)

6.2 | Performance

The following section summarizes a portion of the system-wide and route level assessment undertaken as part of the YRT/Viva 2012-2016 Five-Year Service Plan.

System-Wide

At the system-wide level, performance was measured against three indicators:

- Service Effectiveness: 15 revenue passengers per capita
- Economic Performance: 40 to 45 per cent cost recovery
- Amount of Service: 1.0 hours of revenue hours per capita

As seen in **Table 21**, YRT/Viva's system-wide performance has been increasing in terms of service effectiveness (revenue passengers per capita), decreasing in terms of economic performance (cost recovery), and remaining steady in terms of amount of service (revenue hours per capita). Over the next five years, YRT/Viva will require strategies to address growing ridership demand and assess its economic investment in service to ensure it matches demand.

Table 21: System-Wide Performance

Year	Revenue Passengers per Capita	Cost Recovery	Revenue Hours per Capita
2005	16.6	45%	0.80
2006	18.0	40%	1.00
2007	18.5	41%	1.00
2008	18.6	41%	1.00
2009	17.7	40%	1.00
2010	18.3	39%	1.00
2011	20.1	38%**	1.08

** Based on 2011 third quarter year-end forecast (not taking the impacts of the strike into account)

Route Level

As part of the 2012-2016 Five-Year Service Plan process, route level performance was assessed against a number of indicators including:

- Boardings per vehicle hour (bph)
- On-Time performance
- Trips not accounted for

Specific attention was focused on boardings per vehicle hour as it indicates the productivity or effectiveness of YRT/Viva's service. Services identified as under-utilized, with a Regional subsidy equal to or greater than three times the average fare, became candidates for schedule and frequency adjustments. Over the next five years, a strategy is required for YRT/Viva to improve service effectiveness and efficiencies.

In addition, YRT/Viva's Customer Service section identified top customer concerns as schedule adherence/reliability and driver behaviour. To improve service reliability, YRT/Viva has been updating schedules to reflect actual travel times.

The 2011 on-time performance goals were:

- 90 per cent for conventional bus service, and 95 per cent for Viva BRT service (based on the departure time from start locations)
- A new goal for 2011 was set for conventional and Viva BRT services of 85 to 90 per cent arrival time at end locations

To achieve these goals, a working group consisting of members from Operations, Customer Service, Service Planning, and contractor staff was formed in February 2011. The purpose of the group was to:

- Indentify areas requiring improvements
- Analyze routes departing less than 90 per cent on-time
- Analyze routes arriving less than 85 per cent on-time
- Indentify corrective measures
- Indentify schedule changes
- Develop interim operational measures
- Recommend technology changes and upgrades
- Recommend bus operator training
- Develop contingency bus requirements

The group analyzed on-time performance data for each YRT/Viva route. This analysis provided data which allowed staff to make informed decisions to improve schedules. The on-time performance goals for Conventional and Viva BRT services are summarized in **Table 22**.

Table 22: On-Time Performance Goals

Service		Target (%)	2009 (%)	2010 (%)	July 2011 (%)
Conventional	Start of Trip	90	74	83	86
	Arrival Last Stop	85	49	50	63
Viva BRT	Start of Trip	95	86	87	90
	Arrival Last Stop	90	16	18	45

In 2011, system performance has improved, and contractors are more accountable for services provided. YRT/Viva's ability to track on-time performance, and the number of trips operated, helps YRT/Viva to better understand the reliability of the overall system.

7 | Future Transit Service

7. | Future Transit Service

7.1 | Rapid Transit Plan

Viva BRT service operates along the Highway 7 and Yonge Street corridors with connections to Don Mills and Downsview subway stations and Finch GO Bus Terminal. The service is designed to provide frequent, limited-stop service using distinct vehicles, intelligent technology systems, off-board payment, upgraded stations and queue-jump lanes.

With Viva "QuickStart" fully operational, the second phase of vivaNext is underway on 37 kilometres of dedicated bus lanes , known as rapidways. Rapidways will allow Viva service to pass congested traffic, in all times of the day, making travelling on transit more convenient and ultimately less time consuming.

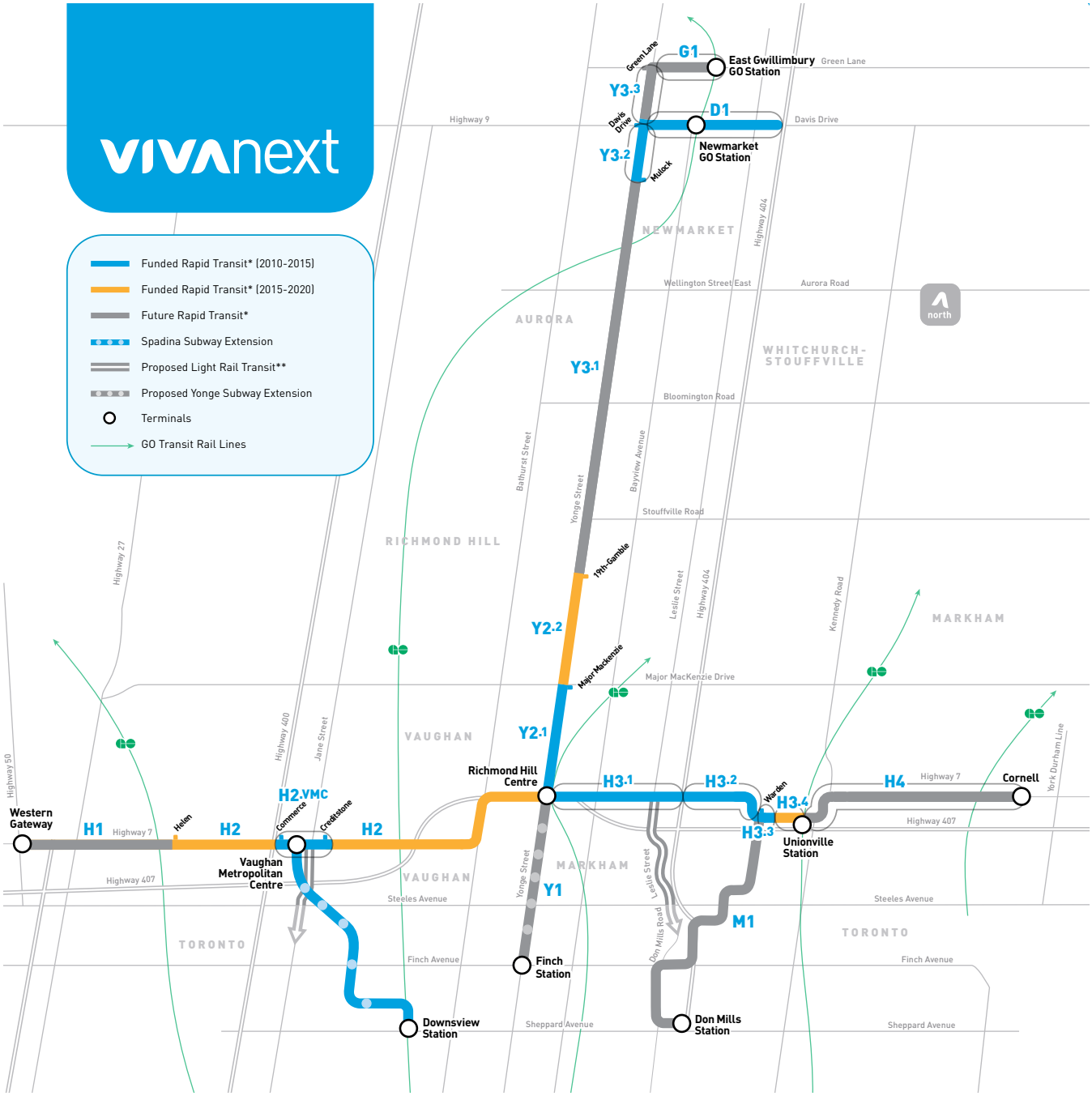
The construction of Viva rapidways commenced in 2010 and is scheduled to be completed in 2020. As described in **Table 23** and illustrated in **Exhibit 13**, rapidways will be constructed along the Region's primary corridors: Highway 7, Yonge Street and Davis Drive.

Table 23: YRT / Viva Phase 2 Rapid Transit Network Construction Schedule *

vivaNext Projects	Construction Timelines	
	Construction Start Year *	Year of Completion (Ready for Service) *
D1 – Davis Dr. (Yonge St. to Roxborough Rd.)	2012	2014
H2.VMC – Highway 7 (Commerce St. to Bowes Rd.)	2013	2015
H2 – Highway 7 (Bowes Rd. to Yonge St. & Helen St. to Edgeley Blvd.)	2017	2020
H3.1 & H3.2 – Highway 7 (Yonge St. to Warden Ave.)	2011	2013
H3.3 – Enterprise Drive (Warden Ave. to Birchmount Rd.)	complete	
H3.4 – Enterprise Drive (Birchmount Rd. to Kennedy Rd.)	2017	2020
Y2.1 – Yonge St. (Highway 7 to Major Mackenzie Dr.)	2013	2016
Y2.2 – Yonge St. (Major Mackenzie Dr. to 19th Ave.)	2016	2020
Y3.2 – Yonge St. (Mulock Dr. to Davis Dr.)	2016	2020
Cornell Terminal	To Be Confirmed	2014
Spadina Subway Extension	2011	2015

* Note: Dates subject to change

Exhibit 13: YRT / Viva Phase 2 Rapid Transit Network Map



Highway 7

Markham and Richmond Hill are becoming key destinations. Markham has plans to create the first transit-pedestrian mall in the Greater Toronto Area and a world-class mixed-use urban centre with businesses, residences, shops, restaurants, theatres and a 10-acre park.

In Richmond Hill, the Highway 7 rapidway will include the Richmond Hill Centre Terminal, a strategically located transit hub that will be the terminus for the planned Yonge subway extension. The terminal currently connects YRT/Viva and GO Transit services to move people to and from this busy and vibrant area.

In March 2011, the first rapidway and new vivastation opened on Enterprise Drive at Warden Avenue in Markham. The rapidway segment from Yonge Street to Warden Avenue is scheduled for completion in 2013. The remaining segments of the Highway 7 rapidways in Markham are dependent on available funding commitments.

In Vaughan, the Highway 7 rapidway will eventually extend west from Yonge Street to Helen Street. The first segment will be built around the Vaughan Corporate Centre. At this terminus for the Spadina Subway extension, subway riders will have seamless connections to YRT/Viva and other transit systems.

The rapidway from Edgeley Boulevard to Creditstone Road is scheduled to be completed by 2015. The segments from Creditstone Road to Yonge Street and from Helen Street to Edgeley Boulevard will be built between 2016 and 2020. The projected completion dates for the remaining segments of the Highway 7 rapidway in Vaughan are beyond 2020, and dependent on available funding commitments.

Yonge Street

In Richmond Hill, the Yonge Street rapidways will extend north from the Richmond Hill/Langstaff Urban Growth Centre at Highway 7 to 19th Avenue. They will make it easy for people to get to and from this strategically located centre, which will become a major transit hub and the terminus for the planned Yonge Subway extension. It will provide connections to YRT/Viva, GO Transit and other transit systems.

The plans for this area near Highway 407 ETR will bring a wide range of new development, including high quality urban design, signature architecture and attractive public spaces. The rapidways will connect people from the rest of the GTA to this busy and vibrant area, for its prestige business and professional offices, high-density residential units, great shopping and entertainment.

The projected completion date for the first segment from Highway 7 to Major Mackenzie Drive is 2016. The rapidways from Major Mackenzie Drive to 19th Avenue will be constructed between 2016 and 2020.

The stretch of Yonge Street from Mulock Drive to Davis Drive, with shopping, businesses and the Regional administration headquarters, is a busy and often congested stretch of road. The new Yonge Street rapidway will provide a convenient way for riders to travel and avoid the congestion, linking to the Davis Drive rapidway for access to the hospital, Newmarket's Heritage area and an improved Davis Drive.

The preliminary design for the rapidway on Yonge Street between Davis Drive and Mulock Drive is nearly complete, with construction scheduled to begin in 2014 and a projected completion date of 2017. Rapidways on Yonge Street north to Green Lane and south of Mulock Drive are dependent on funding commitments.

Davis Drive

The rapidway along Davis Drive in Newmarket will result in benefits for the entire community. Upon completion, the rapidway will immediately make it easier for staff, patients, visitors and volunteers of the Southlake Regional Health Centre to get to the hospital and its new state-of-the-art cancer centre.

Since the rapidway will include urban design elements such as pedestrian-friendly boulevards and green, open spaces, Davis Drive will become an inviting environment for new development. Over time, Davis Drive will become an attractive urban destination to work, dine, relax, live and shop.

The rapidway will extend for 2.6 kilometers east along Davis Drive, from Yonge Street to just past the hospital. Viva service will continue another 2.3 kilometres east to Highway 404, operating similarly to existing Viva in the curbside lane.

Pre-construction activities for the Davis Drive rapidway have been underway since November 2009, including soil testing, archaeological assessments, removing some buildings, widening the Keith Bridge, building retaining walls and relocating utilities. The scheduled completion date for the Davis Drive rapidway is 2014.

7.2 | Spadina Subway

The Toronto-York Spadina Subway Extension is an 8.6km extension from Downsview Station through York University north to the Vaughan Corporate Centre in York Region. The Spadina Subway Extension, part of the vivaNext Plan, will connect the TTC subway system to the Highway 7 rapidway at Vaughan Corporate Centre and provide connections opportunities to residents in York Region and beyond. The Spadina Subway Extension is shown in **Exhibit 14**.

A key element of the subway extension is the construction of six new subway stations, of which three are located within York Region:

- Vaughan Corporate Centre Station (York Region)
- Highway 407 Station (York Region)
- Steeles West Station (York Region)
- York University Station
- Finch West Station
- Sheppard West Station

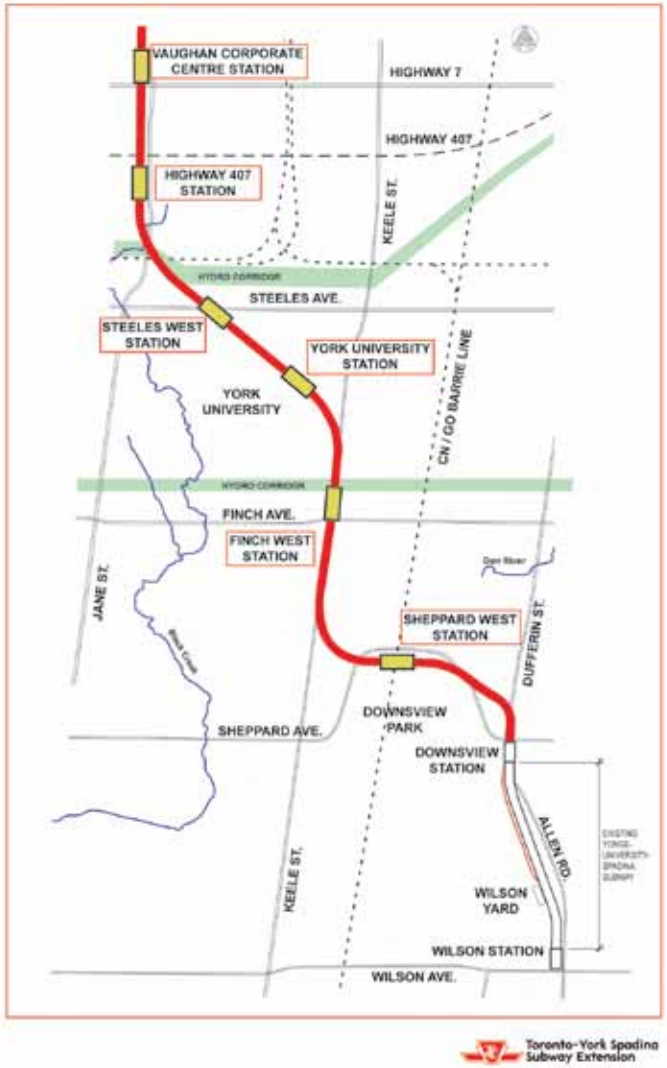
Vaughan Corporate Centre Station

Vaughan Corporate Centre Station is located along Highway 7 between Millway Avenue and Interchange Way. This station will be the terminal station for TTC's Spadina subway line. This station is forecasted to be the most utilized station of the three located in York Region. It will be the first point of contact with a subway station for customers using transit and travelling south into Toronto.

Highway 407 Subway Station

Highway 407 Station is located along Jane Street between Highway 407 and Steeles Avenue. This station will offer a 600 stall commuter parking lot. This station includes a shared YRT/Viva and GO Transit bus terminal facility which will connect the future 407 Transitway, as well as YRT/Viva local routes, making it a multi-modal transit hub.

Exhibit 14: Spadina Subway Extension Map



Steeles West Station

Steeles West Station is located along Steeles Avenue between Jane Street and Keele Street. This station is forecasted to be utilized by Park 'n Ride commuters. It will be the southernmost subway station for customers to utilize a commuter parking lot before travelling south into Toronto. Two bus terminals are planned in this station area. YRT/Viva routes will operate at the planned facility north of Steeles Avenue, while TTC routes will operate at a separate facility south of Steeles Avenue. Currently, there are 1,850 parking spaces planned for this station.

7.3 | Accessibility for Ontarians with Disabilities Act

The Accessibility for Ontarians with Disabilities Act - 2005 (AODA) aims to identify, remove, and prevent barriers to accessibility in Ontario by 2025. The AODA is composed of standards covering five areas including:

1. Customer Service
2. Information and Communications (part of Integrated Accessibility Standard)
3. Employment (part of Integrated Accessibility Standard)
4. Transportation (part of Integrated Accessibility Standard)
5. Built Environment

Ontario Regulation 191/11

The Accessibility Standards for Customer Service Regulation and, as of July 1, 2011, the Integrated Accessibility Standard has been legislated (Ontario Regulation 191/11) and are now in effect. The Transportation Standard in the Integrated Accessibility Standard has the greatest impact on YRT/Viva.

Key elements of the Transportation component of the Integrated Accessibility Standards include vehicle accessibility features such as on-board stop announcements (already completed by YRT/Viva), external vehicle announcements, and fare system accessibility. Also included is the need for transit agencies to operate a comparable paratransit service that include the same service span and coverage as the conventional network. A summary of the Integrated Accessibility Standard annual requirements can be found in **Appendix D**, AODA Integrated Standards Act, Provisions For Conventional and Specialized Transit.

Accomplishments

YRT/Viva has met or exceeded the requirements stipulated in the AODA Ontario Regulation 191/11 as of 2012. Accomplishments to date include:

- AODA Draft Training Manual
- Current State of Accessibility report
- myRide Travel Training Manual
- Existing fleet 100 per cent accessible
- 2,196 bus stops are accessible
- Fare parity
- Expanded Mobility Plus service hours to match conventional
- 24/7 booking
- Web based booking
- 14 day application processing
- Contacting clients when service is delayed
- Travel training for "Family of Services"
- Accessible formats for the Mobility Plus web pages

Appendix D:

AODA Integrated Standards Act, Provisions for Conventional and Specialized Transit

APPENDIX D: AODA Integrated Standards Act, Provisions for Conventional and Specialized Transit

The following summarizes the annual transportation standard requirements of the Integrated Accessibility legislation.

2011

- Must take reasonable steps to accommodate persons with disabilities who would otherwise use the accessibility equipment and the transportation service provider shall repair the equipment as soon as is practicable.
- There are, on request, pre-boarding verbal announcements of the route, direction, destination or next major stop.
- There are audible verbal announcements of all destination points or available route stops on its transportation vehicles while the vehicle is on route or while the vehicle is being operated.
- Specialized transportation service providers shall provide origin to destination services within its service area that takes into account the abilities of its passengers and that accommodates their abilities.
- No conventional transportation service provider shall charge a higher fare to a person with a disability than the fare, but a conventional transportation service provider may charge a lesser fare for a person with a disability.

2012

- Make current information on accessibility equipment and features of their vehicles, routes and services available to the public.
- Establish, implement, maintain and document emergency preparedness and response policies that provide for the safety of persons with disabilities; and make those policies available to the public.
- Conventional transportation service providers shall:
  - Deploy lifting devices, ramps or portable bridge plates upon the request of a person with a disability;
  - Ensure that adequate time is provided to persons with disabilities to safely board, be secured and deboard transportation vehicles and that assistance be provided, upon request, for these activities;
  - Assist with safe and careful storage of mobility aids or mobility assistive devices used by persons with disabilities; and
  - Allow a person with a disability to travel with a medical aid.
- Ensure that persons with disabilities are able to board or deboard a transportation vehicle at the closest available safe location, as determined by the operator, that is not an official stop, if the official stop is not accessible and the safe location is along the same transit route.
- Operators of their transportation vehicles must promptly report to an appropriate authority where a transit stop is temporarily inaccessible or where a temporary barrier exists.
- Every conventional transportation service provider shall, if safe storage is possible, ensure that mobility aids and mobility assistive devices are stored in the passenger compartments of its transportation vehicles
- Ensure there is clearly marked courtesy seating for persons with disabilities on transportation vehicles and that the courtesy seating meets the standards set out in the AODA legislation.
- Specialized transportation service providers shall allow companions and dependants (i.e. children) to travel with persons with disabilities if space is available and will not result in the denial of service to other persons with disabilities.

2013

- In their accessibility plan, conventional transportation service providers shall identify the process for managing, evaluating and taking action on customer feedback. Additionally, service providers shall annually hold at least one public meeting involving persons with disabilities to ensure that they have an opportunity to participate in a review of the accessibility plan and that they are given the opportunity to provide feedback on the accessibility plan.
- Specialized transportation service providers shall, in their accessibility plans:
  - Identify the process for estimating the demand for specialized transportation services; and
  - Develop steps to reduce wait times for specialized transportation services.
  - Describe procedures for dealing with accessibility equipment failures on their respective types of vehicles.
- A conventional transportation service provider that does not provide specialized transportation services shall ensure that any person with a disability who, because of his or her disability, is unable to use conventional transportation services is provided with an alternative accessible method of transportation.
- Ensure that the same fare structure and fare payment options are available for both conventional transportation services and specialized transportation services.
- Every specialized transportation service provider shall make specialized transportation services available to visitors; and
- Where specialized transportation services are provided in adjacent municipalities within contiguous urban areas, the specialized transportation service providers shall facilitate connections between their respective services.
- Ensure that the specialized transportation services have, at a minimum, the same hours and days of service as the conventional transportation services.
- Every specialized transportation service provider, where the specialized transportation services require reservations, shall provide information on the duration of service delays (30 minutes or more) to affected passengers by a method agreed to by the specialized transportation service provider and passenger.
- Where a route or scheduled service is temporarily changed and the change is known in advance of the commencement of the trip, conventional transportation service providers shall:
  - Make available alternate accessible arrangements to transfer persons with disabilities to their route destination where alternate arrangements for persons without disabilities are inaccessible; and
  - Ensure information on alternate arrangements is communicated in a manner that takes into account the person's disability.

2013 – Vehicles

Notes: Where a conventional transportation service provider has, on June 30, 2011, existing contractual obligations to purchase vehicles that do not meet the foregoing requirements, the transportation service provider may honour the existing contract.

Conventional transportation service providers are not required to retrofit vehicles that are within their fleet as of July 1, 2011 in order to ensure that the vehicles meet the foregoing accessibility requirements.

- All transportation vehicles that are manufactured on or after January 1, 2013 are equipped with grab bars, handholds, handrails or stanchions that are provided where appropriate.
- All transportation vehicles manufactured on or after January 1, 2013 must have:
  - Floors that produce a minimal glare and are slip resistant; and
  - Any carpeted surfaces have a low, firm and level pile or loop and are securely fastened.
- All transportation vehicles manufactured on or after January 1, 2013 must have two or more allocated mobility aid spaces, with each space being a minimum of:
  - 1,220 millimetres by 685 millimetres for vehicles designed to have a seating capacity of 24 passengers or less, and
  - 1,220 millimetres by 760 millimetres for vehicles designed to have a seating capacity of more than 24 passengers; and
  - Are equipped, as appropriate, with securement devices.
- All transportation vehicles manufactured on or after January 1, 2013 are equipped with accessible stop-requests and emergency response controls that are located throughout the transportation vehicle, including places within reach of allocated mobility aid spaces and courtesy seating locations.
- All transportation vehicles manufactured on or after January 1, 2013 are equipped with lights above or beside each passenger access door that are constantly lit when the door is open and that illuminate the lifting device, ramp, portable bridge plate or step nosings, as the case may be.
- All transportation vehicles manufactured on or after January 1, 2013 must display the route or direction of the transportation vehicle or its destination or next major stop.
- Where transportation vehicles are equipped with steps, the steps meet the following requirements:
  - The top outer edge of each step is marked by a colour strip that is high colour-contrasted with its background, to assist with visual recognition, that runs the full width of the leading edge of the step, excluding any side edge mouldings, and can be viewed from both directions of travel.
  - The steps have surfaces that are slip resistant and that produce minimal glare.
  - The steps have uniform, closed riser heights and tread depths, subject to the structural limitations of the vehicle.
- Where transportation vehicles have a ramp, lifting device or a kneeling function, each of them is equipped with a visual warning lamp indicator mounted on the exterior near the mobility aid accessible door and with an audible warning alarm.

2014

- Conduct employee and volunteer accessibility training on: safe use of accessibility equipment and features; acceptable modifications to procedures in situations where temporary barriers exist or accessibility equipment on a vehicle fails; and emergency preparedness and response procedures that provide for the safety of persons with disabilities.
- No conventional transportation service provider and no specialized transportation service provider shall charge a fare to a support person who is accompanying a person with a disability where the person with a disability has a need for a support person.
- If a person has completed an application for eligibility for specialized transportation services and the person's eligibility has not been determined within 14 calendar days after the completed application is received by the specialized transportation service provider, the person shall be considered to have temporary eligibility for specialized transportation services until a decision on his or her eligibility is made.
- A specialized transportation service provider shall establish an independent appeal process to review decisions respecting eligibility. A decision on an appeal with respect to eligibility must be made within 30 calendar days after receiving the complete appeal application, but if a final decision is not made within the 30 days, the applicant shall be granted temporary eligibility until a final decision is made.
- Specialized transportation service providers shall develop procedures respecting the provision of temporary specialized transportation services:
  - Where the services are required because of an emergency or on compassionate grounds; and
  - Where there are no other accessible transportation services to meet the person's needs.
- Every specialized transportation service provider shall, where the specialized transportation services require reservations:
  - Provide same day service to the extent that it is available; and
  - Where same day service is not available, accept booking requests up to three hours before the published end of the service period on the day before the intended day of travel.

2017

- There are electronic pre-boarding announcements of the route, direction, destination or next major stop on its transportation vehicles.
- Every conventional transportation service provider shall ensure that all destination points or available route stops:
  - Are announced through electronic means; and
  - Are legibly and visually displayed through electronic means.
- Every specialized transportation service provider shall have three categories of eligibility to qualify for specialized transportation services,
  - A person with a disability that prevents them from using conventional transportation services shall be categorized as having unconditional eligibility.
  - A person with a temporary disability that prevents them from using conventional transportation services shall be categorized as having temporary eligibility.
  - A person with a disability where environmental or physical barriers limit their ability to consistently use conventional transportation services shall be categorized as having conditional eligibility.

Note: No annual requirements identified in the Integrated Accessibility Standard for years 2015 and 2016.

8 | Service Strategies

8 | Service Strategies

Transit service strategies address existing and future needs and support the Plan Principles. The following identifies YRT/Viva's service strategies over the next five years.

Improving On-Time Performance

- Monitoring performance using monthly performance indicators
- Utilizing the results to support service enhancements and minor adjustments

Addressing Ridership Growth

- Managing ridership levels by adding service to routes where demand exceeds capacity; this will require:
- Allocating annualized hours to address annual system growth
- Procuring conventional and Viva buses annually

Minimizing impacts as a result of vivaNext and Spadina Subway Construction

- Increasing operating hours, fleet requirements, and route alignments where possible to account for delays along Highway 7, Yonge Street, Davis Drive and surrounding corridors
- Planning for Convenient and Direct Connections to Future Rapid Transit Services
- Rapid Transit: Restructuring routes to align with rapidways and Spadina Subway, which entails:
- Realigning routes in Vaughan to service new subway stations
- Transferring select TTC routes in Vaughan to YRT/Viva
- Adjusting conventional routes to support with the completion of Viva rapidways

Introducing Service Enhancements and Service Efficiencies

- Service Efficiencies: Adjusting schedules (frequencies, span of service) to better match service level with demand
- Service Enhancements: Address changing demand, as adapting to population and employment growth within the built-up area; consideration was also given to the financial efficiency of each route
- New Growth Areas: Enhancing and expanding service to accommodate new growth areas which requires allocating annualized hours throughout the Five-Year Service Plan

9 | Annual Service Plans

9 | Annual Service Plans

The Annual Service Plans consist of conventional transit and Mobility Plus service initiatives. The service initiatives presented in the following section are strategic in nature and are aimed towards guiding the direction of YRT/Viva service over the next five years. The service initiatives will be developed further as part of YRT/Viva's comprehensive Annual Service Plan process described in **Section 3.1**.

9.1 | Conventional Transit

The conventional transit annual service plans consist of short-term (2012, 2013), medium-term (2014, 2015) and long-term plans (2016). These plans include service initiatives based on the Service Strategies identified in **Section 8**. The associated resources required to implement these initiatives are identified in subsequent sections: Asset Management Plan and Financial Plan.

9.1.1 | Short-Term Plan (2012, 2013)

The primary focus of the short-term plans is to identify service enhancements and efficiencies to ensure transit services provided by YRT/Viva have the greatest system-wide return, while maintaining a basic level of service throughout the Region.

2012 Annual Service Plan

The 2012 Annual Service Plan is the most detailed of all the Annual Service Plans presented in the 2012-2016 Five-Year Service Plan.

To develop the 2012 Annual Service Plan, YRT/Viva analyzed the net cost per passenger for all routes and identified routes or variations of routes that York Region is subsidizing at a rate of three to four times the average fare per passenger. Based on route assessments, YRT/Viva recommended a series of 2012 service adjustments across York Region. The specific recommendations within the 2012 Annual Service Plan are intended to strengthen the grid network, match service to demand and simplify route structure. The modified route structure proposals strive to reduce one-way loops and connect customers to key destinations such as malls, schools, community centers, transit terminals, hospitals and senior facilities. To provide additional capacity and meet growing ridership demand on YRT/Viva service, frequency and schedule improvements are recommended throughout the year.

Based on route performance and feedback received through public and stakeholder consultation, a number of route service adjustments have been identified. **Table 24** lists the identified routes in the 2012 Annual Service Plan to be restructured or undergo frequency adjustments.

Table 24: 2012 Plan, Proposed Route Changes

Georgina > North - South Route
Newmarket > 44 – Bristol-London > 53 – Woodspring-Clearmeadow > 55/55B – Davis Drive > 57/57A – Mulock Drive
Richmond Hill > 81 – Inspiration > 83/83A – Trench > 86 – Newkirk-Weldrick > 87 – Langstaff-Maple
King City > 22/22A – King City
Whitchurch - Stouffville > 9 – 9th Line > 15 – Stouffville Local
East Gwillimbury > 58/58A – Leslie-Mt. Albert
Aurora > 31 – Aurora North > 34 – Industrial Parkway
Vaughan > 7 – Martin Grove > 10 – Woodbridge-York University > 11 – Woodbridge > 20 – Jane-Concord
Markham > 301 – Markham Express > 303 – Bur Oak Express > 304 – Berczy Express

In 2012, vivaNext and Spadina Subway construction is scheduled on the following rapidway segments:

- D1 – Davis (Yonge to Roxborough)
- H3.1 & H3.2 – Highway 7 (Yonge to Warden)
- Spadina Subway extension

The construction will have an impact on traffic including transit service. YRT/Viva will make ongoing service adjustments to affected transit services to maintain existing service levels. The mitigation plan includes updating schedules to reflect actual travel times through construction zones and improving service quality and reliability while maintaining existing service levels. In addition, as part of the mitigation plan, YRT/Viva will implement route deviations and bus stop relocations as required to maintain service levels.

2013 Annual Service Plan

In 2013, YRT/Viva will continue to focus on modifying routes which have a high subsidy rate. The modifications will include route realignments to strengthening the grid network, matching service to meet demand and support vivaNext initiatives.

In preparation for 2013, YRT/Viva will conduct assessments on GO shuttles, Dial-A-Ride Services and TTC routes operating in York Region. YRT/Viva staff will develop recommendations regarding restructuring and/or improvements to these services.

Similar to the plan for 2012, in 2013 YRT/Viva will prepare a mitigation plan that includes updating schedules to reflect actual travel times through construction zones, improving service quality and reliability while maintaining existing service levels, implementing route deviations and bus stop relocations as required to maintain service levels. In 2013, vivaNext and Spadina Subway construction is anticipated on the following rapidway segments:

- D1 – Davis (Yonge to Roxborough)
- H2.VMC – Highway 7 (Commerce to Bowes)
- H3.1 & H3.2 – Highway 7 (Yonge to Warden)
- Y2.1 – Yonge (Highway 7 to Major Mackenzie)
- Spadina Subway extension

Towards the end of 2013, the H3.1 and H3.2 – Highway 7 (Yonge to Warden) rapidway segment will open providing multiple benefits to customers and YRT/Viva. As part of the 2013 Annual Service Plan process, YRT/Viva will develop a rapid transit ready plan to ensure services are designed appropriately and complement the greater system-wide network.

9.1.2 | Medium-Term (2014, 2015)

The primary focus in the medium-term is to realign transit service in southern York Region to support future rapidways and the Spadina Subway extension.

2014 Annual Service Plan

In 2014, YRT/Viva will focus on realigning transit service in southern York Region to strengthen YRT/Viva's grid network in anticipation of rapidway and Spadina Subway completion in 2015. The realignment will reduce circuitous routing (e.g. one-way loops), enhance service along the Region's major corridors and provide frequent service to support and feed the Region's rapid transit network. The realignment process will include:

- Network review
- Route reviews
- Performance reviews
- Demographic analysis
- Development reviews

In addition to strengthening the grid network, YRT/Viva will continue to modify routes, where required. The modifications will focus on improving on-time performance, addressing ridership growth and introducing service enhancements and service efficiencies.

Similar to the previous Annual Service Plans, in 2014 YRT/Viva will prepare a mitigation plan to ensure vivaNext and Spadina Subway construction impacts on customers are minimal. Currently, the construction schedule identifies the following rapidway segments will be under construction in 2014:

- D1 – Davis (Yonge to Roxborough)
- H2.VMC – Highway 7 (Commerce to Bowes)
- Y2.1 – Yonge (Highway 7 to Major Mackenzie)
- Cornell Transit Terminal
- Spadina Subway extension

In anticipation of the completion of the D1 – Davis (Yonge to Roxborough) rapidway at the end of 2014, YRT/Viva will prepare a rapid transit ready plan as part of the comprehensive 2014 Annual Service Plan.

2015 Annual Service Plan

In 2015, YRT/Viva will continue to focus on realigning transit service in anticipation of rapidway and Spadina Subway construction completion.

While in 2014 the focus is on strengthening the grid network, 2015 will focus on realigning transit services in Vaughan and Markham to provide direct connections to the Spadina Subway in the west, and Cornell Transit Terminal in the east. In addition, TTC contracted service will also be reviewed as the Spadina Subway extension into York Region makes service to Downsview unnecessary. As in 2014, network and route reviews will be conducted to determine the appropriate transit network. Also in 2015, YRT/Viva will continue to focus on improving on-time performance, addressing ridership growth and introducing service enhancements and service efficiencies where required.

YRT/Viva will monitor the progress of vivaNext and Spadina Subway scheduled construction to identify any potential modifications that need to be made to service. At present, the following rapidway segments are scheduled for construction:

- H2.VMC – Highway 7 (Commerce to Bowes)
- Y2.1 – Yonge (Highway 7 to Major Mackenzie)
- Spadina Subway extension

By the end of 2015, H2. VMC – Highway 7 (Commerce to Bowes), Cornell Transit Terminal and Spadina Subway extension will all be completed and will require a rapid transit ready plan as identified earlier.

Pan/Parapan Am Games

Pan-Am Games (July 10 and 26, 2015) and Parapan Am Games (August 7 and14, 2015) will take place in the Greater Toronto and Hamilton Area including York Region. In total, approximately 280,000 athletes, tourists and volunteers will participate in the games. Events in York Region will be held:

- Centennial Community Centre, Markham: Table Tennis
- Markham Pool, Markham: Aquartics (Waterpolo)
- Bill Crothers Secondary School, Markham: Badminton
- Fletcher's Fields Rugby Park, Markham: Rugby Sevens
- Richmond Green Sports Centre and Park, Richmond Hill: Baseball

To ensure that service adequately supports the anticipated surge in demand, YRT/Viva will develop a strategy incorporating other Canadian experiences, such as Translink and the 2010 Olympic Winter Games. Potential strategies may include:

- Providing a mixture of scheduled and dispatched services to ensure supply meets demand. For example, buses staged at strategic locations throughout York Region dispatched to supplement service as required.
- Managing peak demand surges, particularly post-events. For example, include transit fares in event tickets to improve boarding time and load multiple buses simultaneously at venue.
- Operate charters for non-profit and private groups in accordance with YRT/Viva charter policy.

9.1.3 | Long-Term (2016)

The primary focus of the long-term plan is to identify service enhancement and modifications to support the growth of the rapid transit network.

2016 Annual Service Plan

In 2016, YRT/Viva will have a better understanding of the impacts of the rapidway and Spadina Subway extension will have on transit demand in York Region. The 2016 Annual Service Plan will focus on service enhancements and efficiencies to ensure the demand for transit service is managed appropriately. YRT/Viva will continue to focus on improving on-time performance and addressing ridership growth.

Similar to previous plans, in 2016 YRT/Viva will prepare a vivaNext and Spadina Subway mitigation plan for Y2.1 – Yonge (Highway 7 to Major Mackenzie). At the end of year, construction on this segment is scheduled for completion which will require a rapid transit ready strategy to make the best use of services operating along the rapidway.

9.2 | Mobility Plus

The following section provides a summary of Mobility Plus five-year strategy developed as part of the January 2010 Operational Plan. The Operation Plan's Executive Summary can be found in **Appendix E**, Operational Plan for Mobility Plus, Executive Summary.

Mobility Plus faces the challenges of demographic changes, AODA legislation and continued ridership growth. The response to these challenges is a multi-faceted strategic framework that involves utilizing the capacity of the accessible YRT/Viva fixed-route system, improving technology in the Mobility Plus fleet, and providing service delivery options to improve productivity in specific areas. Noted below are initiatives to be phased in over the next five years, and will generally increase the level of effectiveness over time.

Family of Services

- Identify existing and new customers capable of using YRT/Viva services for all, or a portion, of their trip.
- The customer is picked up at their origin and taken to an established YRT/Viva transfer location.
- The customer transfers onto a YRT/Viva route and continues to their destination.

Hub Transfers

- Identify existing and new groups of customers capable of using conventional YRT/Viva service for a portion of their trip.
- Mobility Plus picks up multiple customers at their origin, on several routes, and takes them to an established YRT/Viva transfer location.
- Customers then transfer onto a larger-sized Mobility Plus bus and are taken to their final common destination.

Fixed Route Feeders and Day Program Routings

- Pick up multiple customers at their origin and take them to an established Mobility Plus transfer location.
- Customers transfer onto a larger-sized Mobility Plus bus and are taken to their final common destination.
- Pick up multiple customers at their origin, using one large Mobility Plus bus, and take them directly to/from their Day Program.

Technology

- Expand the Automatic Vehicle Locator program to include all Mobility Plus-contracted vehicles.
- Implement web-based booking.
- Implement enhanced Interactive Voice Response telephone functions.
- Implement call-recording technology.

Eligibility

- Undertake a comprehensive review of the use of a third party for the registration and appeal process.

Travel Training

- Continue with the voluntary approach and gradually expand the program to include more participants.
- Clients are trained on using combined Mobility Plus and conventional services.

Fares/Operating Hours

- Implement changes to fares and operating hours as per the AODA legislation.

One of the key recommendations of the Mobility Plus Operational Plan is to better utilize the entire Family of Services at YRT/Viva. This involves the use of Viva BRT, conventional buses, community buses, and door-to-door services to transport customers to their destination. Mobility Plus eligible customers are serviced by using a combination of Mobility Plus and YRT/Viva vehicles for all or a portion of their trip. This method of transportation allows Mobility Plus to provide more trips within the allocated budget, provide a trip at a requested time for someone not able to take the conventional service, and mitigate the impact of the expected increase in Mobility Plus demand.

Appendix E:
Operational Plan for Mobility Plus, Executive Summary

Appendix E: Operational Plan for Mobility Plus, Executive Summary

The purpose of the Mobility Plus Operational Plan study is to develop an operations plan that will provide strategic direction for the efficient and cost-effective provision of services to people with disabilities in York Region.

As Mobility Plus faces challenges of increasing demands from factors such as increasing health transportation requirements, increasing day program enrollment and potential implications of emerging Accessibility for Ontarians with Disabilities Act (AODA) regulations, it is crucial that the response be more than continued operation of existing services. While current operations are shown to be both effective and efficient, this plan explores a variety of service strategies that can be used by Mobility Plus to limit growth in ridership while enhancing mobility by making maximum use of conventional transit services through travel training programs, feeder services to conventional transit and Viva and facilitating travel on fixed routes.

This report examines the future of Mobility Plus in terms of the challenges in meeting the growing demands of an aging population, along with increased mobility choices for people with disabilities. It examines the projected ridership increases and the implications of a status quo response, compared to the opportunities to utilize innovative service strategies for both conventional fixed route and paratransit services to help manage the cost of increasing service, while continuing to enhance mobility.

1 | Existing Service Review

The review of existing services shows YRT Mobility Plus to be both effective and efficient. While still carrying substantially fewer trips per capita, based on fewer registrants per capita, than most of its peer group, this lower demand is typically explained by the younger population and more suburban, rural and auto-oriented characteristics of the region compared to that of its peers.

In terms of efficiency however, the performance of Mobility Plus is very good, especially when considering the lower density of the region compared to the peer group. Mobility plus' overall trip rate is at the Canadian average for all systems, and higher than that of several members of the peer group. This good level of efficiency is despite having an average trip length that is almost 40 per cent longer than the national average and longer than many of average trips lengths of the peer group.

Details of the existing performance and peer group comparison are included in **Section 2** of the main report.

2 | Challenges of Demographic Change and Ridership Growth

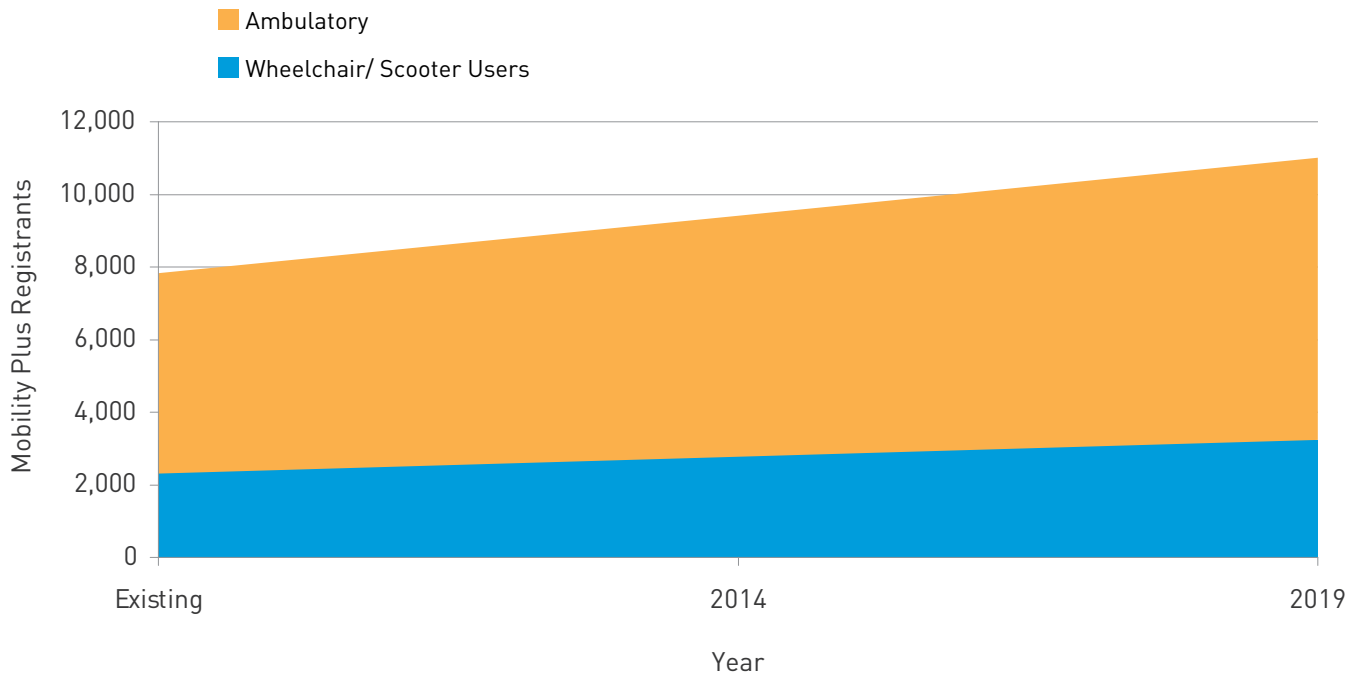
2.1 | Demographic Change in York Region

Compared to the last 10 years, population growth in York Region is moderating. From 2001 through 2011, population growth is projected at about 41 percent, but in the five-year period to 2006 the population grew by 22 per cent, while in the five years from 2006 the growth is projected at only 15 per cent. To 2016, growth is projected at about 12 percent, then only eight per cent in the following five years to 2021. Translating this to the period covered by this analysis, from 2009 through 2019, the population of York Region is expected to grow by about 13 per cent to 2014 and by a total of 25 per cent through 2019.

However, the population of people with disabilities, and therefore the number of potential Mobility Plus registrants is expected to grow much faster in the same period. As shown in **Exhibit 15,** the number of Mobility Plus registrants is expected to grow by more than 20 per cent from 2009 through 2014 and by a total of more than 40 per cent through 2019. Of these, registrants who are ambulatory are expected to grow faster than those who use wheelchairs or scooters.

This demographic change, and growth in Mobility Plus registrants sets the stage for substantial ridership growth potential in the coming 10 years, which as described in the next section, could grow faster than population growth, and even faster than the growth of Mobility Plus registrants.

Exhibit 15: Projections of Mobility Plus Registrants



2.2 | Ridership Growth

Ridership growth for Mobility Plus over the next 10 years was projected using a disaggregate model that examined separate growth rates of individual markets served by Mobility Plus. These included day programs, which make up a larger percentage of the existing trips, dialysis trips, commute trips (both work and school) and other trips. This model accounted for the growth in population, as well as the increase in disability rates. It also accounted for the growth in trip rates among several markets of passengers with disabilities. For example, trip rates among people who use wheelchairs and scooters are increasing and expected to continue to increase as accessibility within the community increases.

The model also examined the effect of relaxing eligibility criteria to meet the potential requirements of the draft AODA transportation standard. While YRT Mobility Plus already has more relaxed criteria than several of the neighbouring systems, there is still considerable potential for the requirements of the draft AODA transportation standard to increase travel demand in paratransit.

The combination of all of these factors means that not only will Mobility Plus demand outpace the growth in population as disability rates increase, it is also projected to outpace the growth in registrants, as trip rates also continue to rise.

Exhibit 17 shows the projected growth in ridership based on status quo assumptions for service delivery, and the expected demographic changes. As shown in the graph, overall ridership is expected to grow by almost 100 per cent over the 10-year period and 50 per cent over the next five years.

3 | Service Challenges

The ridership forecast based on the status quo delivery model, described in the previous section, creates a significant challenge for YRT Mobility Plus over the next five and 10 years. As shown in **Table 25**, the number of required service hours and the number of peak vehicles increases in direct proportion to the ridership growth, approximately 50 per cent over five years and about double over 10 years.

With the status quo service delivery, costs follow the same patterns, with an increase in annual operating costs of about five million dollars over five years, and about $10 million over 10 years, in constant dollars. With the price of fuel expected to outpace inflation over this time period, real increases will be higher.

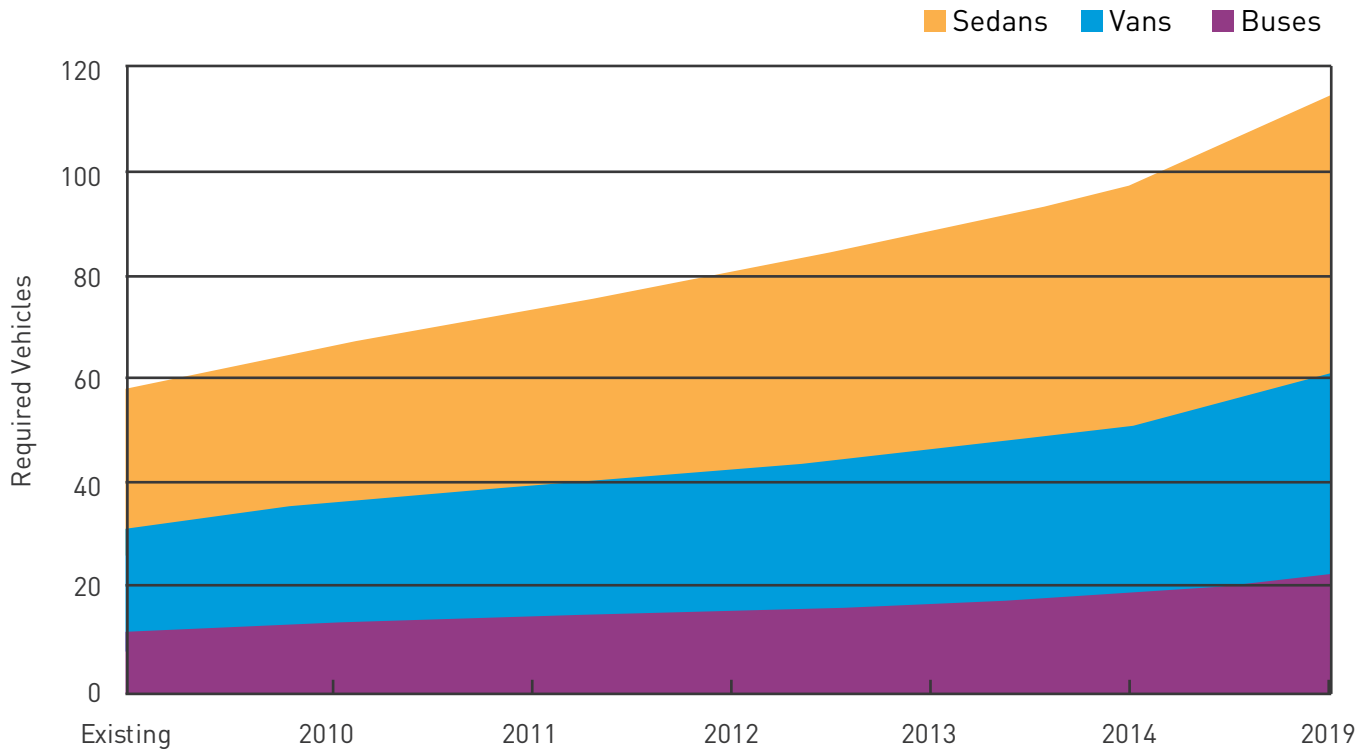
Table 25: Service Characteristics -Status Quo Scenario

Status Quo	Eixisting Total	2010 Total	2011 Total	2012 Total	2013 Total	2014 Total	2019 Total
Demand							
Buses	53,903	58,999	64,581	70,696	77,395	84,735	103,044
Vans	96,931	106,663	117,378	129,175	142,165	156,469	186,840
Sedans	136,243	151,369	168,154	186,777	207,436	230,354	266,541
Script	10,923	12,133	13,474	14,962	16,613	18,443	21,361
Total	**298,000**	**329,164**	**363,587**	**401,610**	**443,609**	**490,001**	**577,785**
Rush Hour Vehicles							
Buses	11	13	14	15	16	18	22
Vans	23	26	28	31	34	38	45
Sedans	31	35	39	43	48	53	61
Revenue Vehicle Hours							
Buses	20,610	22,559	24,693	27,031	29,593	32,999	39,400
Vans	54,573	60,052	66,085	72,727	80,040	88,093	105,192
Sedans	66,161	73,507	81,658	90,701	100,734	111,863	129,436
Script	3,076	3,416	3,794	4,213	4,678	5,193	6,015
Total Vehicle Hours							
Buses	21,001	22,986	25,161	27,543	30,153	33,013	40,146
Vans	63,995	70,421	77,495	85,284	93,860	103,303	123,355
Sedans	85,385	94,865	105,384	117,056	130,003	144,366	167,045
Script	7,143	7,934	8,811	9,784	10,864	12,061	13,969
Operating Cost							
Buses	$1,440,027	$1,576,171	$1,725,297	$1,888,656	$2,067,625	$2,263,712	$2,752,838
Vans	$244,618	$2,690,071	$2,960,306	$3,257,840	$3,585,449	$3,946,190	$4,712,149
Sedans	$2,644,388	$2,937,980	$3,263,758	$3,625,211	$4,026,204	$4,471,017	$5,173,390
Script	$221,231	$245,720	$272,888	$303,025	$336,451	$373,522	$432,611
Contract cost	**$6,750,264**	**$7,449,943**	**$8,222,249**	**$9,074,732**	**$10,015,728**	**$11,054,441**	**$13,070,989**
Total including other cost	**$10,700,000**	**$11,809,077**	**$13,033,277**	**$14,384,568**	**$15,876,163**	**$17,522,651**	**$20,719,127**

Fleet requirements also increase in a similar pattern, with a total of 11 more buses required over the 10-year period, and additional contractor vehicles comprising 19 vans and 26 sedans.

The conclusion of this analysis is that not only is this level of increase unsustainable – it is also unnecessary, as a variety of options exist for YRT Mobility Plus to enhance its already good performance and temper the growth in demand to moderate the overall growth in service requirements without compromising on quality of service.

Exhibit 16: Future Growth Implications - Status Quo



4 | Service Response

4.1 | Strategy Framework

The proposed response to this challenge is a multi-faceted approach that involves utilizing the capacity of the accessible fixed route system, improved and expanded technology in the broader Mobility Plus fleet, and service delivery options to improve productivity in specific areas.

Table 26 shows the strategy framework for this approach, where each of the various initiatives is presented with anticipated effects comprising a range of approaches from conservative through aggressive. In the recommended strategy, each initiative has its own starting point and generally increases the level of effectiveness over time. For example, with travel training, the status quo approach is a pilot project. At the conservative level, recommended in the short-term, the program gets expanded on a voluntary basis, but in the longer-term, becomes a mandatory part of the eligibility process for selected applicants.

Table 26: Strategy Framework

Initiative / Impact	Status Quo	Conservative	Moderate	Aggressive
Technology	> MDT on YRT vehicles > IVR confirm cancel	> MDT on all vehicles > Inc. productivity on contractor vehicles	> IVR and Web Booking > Reduced admin costs	
Third Party Contract	None	> Fully contracted, interview plus functional assessment > Improved assessment		
Brokerage Model	Multiple contractors	> Status quo > None	> Increased contractors / capacity > Reduced per trip cost?	> Cooperative with community agencies > Reduced per trip cost?
Cross-boundary	Designated points	> Reduce points > Increased productivity?	> Zone-based > Increased productivity?	> Reciprocal trips with TTC > Reduced trips?
Fixed Route Feeder Family of	Voluntary policy	Diverted trips	> Encourage all possible trips > Diverted trips	> Link Mobility and fixed route system > Diverted trips
Day Program Routing	2-route pilot	> Increase routes/ vehicles > Increased productivity on portion of day program trips	> Increase routes/ vehicles > Increased productivity on greater trips	> Increase routes/ vehicles > Increased productivity on greater trips
Travel Training	Pilot	> Voluntary > Diverted trips	Diverted trips	> Mandatory with eligibility > Diverted trips

4.2 | Service and Policy Options

The proposed strategy includes recommendations in each of the initiative areas shown in Exhibit 5. The following sections provide a brief overview of the initiative and the recommendation.

4.2.1 | Technology Opportunities

YRT Mobility Plus already takes significant advantage of proven and emerging technology in the paratransit field, including computerized scheduling, interactive voice response (IVR) telephony functions and computerized communication with drivers through on-board mobile data terminals (MDT).

The recommended strategy includes expanding the MDT program to all Mobility Plus vehicles (including contractor vehicles), continuing the successful deployment of IVR technology to include reminder calls and telephone booking, and implementing web-based booking.

4.2.2 | Third Party Contracting

This report completed a comprehensive review of third-party contract options for the intake and registration process.

This assessment recommends that YRT Mobility Plus move immediately to a third-party contract for its intake and registration process, including eligibility review and appeals, to meet the objectives of:

- Ensuring fair and accurate assessments of eligibility
- Ensuring high quality service provision to qualified registrants
- Promoting a system that is transparent and fair, and perceived to be fair by all those involved in it

4.2.3 | Cross-Boundary Trips

The provision of cross-boundary trips, especially into Toronto, has been a long-standing issue with YRT Mobility Plus, driven by the historical pattern of trips between southern York Region and Toronto, and the legacy of pre-amalgamation policies that permitted cross-boundary trips only to and from the City of Vaughan.

This analysis examined the options of reducing the number of approved destinations, limiting travel to adjacent zones, and entering into a reciprocal trip arrangement with the neighbouring systems. Initial discussions with TTC staff have been held in this matter.

ENTRA recommends the status quo approach in the short-term, with close monitoring of the trip volumes to specific locations, and continued evaluation of each on an annual basis. YRT Mobility Plus should also continue discussions with adjacent systems with specific consideration for:

- Impact on deadheading and vehicle availability
- Customer service and ridership
- Total cost and cost per trip
- Future implications for joint dispatching

4.2.4 | Brokerage Services

This study briefly examined potential for brokerage systems, although in fact, YRT Mobility Plus already operates as a brokerage service, with multiple contracts let on the basis of the most suited transportation provider.

It may be possible to improve the effectiveness and efficiency of the system by increasing the number of contractors for sedan and van services, identifying either geographical or temporal divisions where specific contractors may be more suited.

Expanding beyond this level where YRT becomes a broker for all accessible transportation in the Region would require substantial additional study into the transportation programs of all the relevant providers in the region. An information sharing and coordination role for the Region or YRT may be possible, but would do little if anything to affect the specific effectiveness and efficiency of YRT Mobility Plus services.

4.2.5 | Fixed Route Feeders

YRT Mobility Plus has potential to moderate demand by diverting trips to the fixed route system, in conjunction with an effective travel training program. With all Viva vehicles and vivastations currently accessible, the Viva system represents a logical candidate for accommodating trips of those Mobility Plus registrants capable of using accessible fixed route services. While few destinations in the current system are within easy access of the Viva system, this option should still be available to all registrants capable of using it.

Providing access to Viva to complete trips to the subway is an important element of the strategy and with the planned subway extensions, will grow more important over time. Accordingly, ENTRA has also recommended that key vivastations in each community be constructed as part of the vivaNext program to accommodate YRT Mobility Plus vehicles at the stations, to allow safe and convenient transfers.

In the same way, the conventional YRT transit fleet can also accommodate trips from Mobility Plus users. To be truly effective, considerable work will need to be completed, over time, to make stop locations and neighbourhoods more accessible, and to ensure that passengers can safely travel between their origin or destination and the transit stop.

To facilitate these trip diversion programs. It may be possible to link the Mobility Plus trip booking system to the YRT fixed route scheduling system, to automatically flag when a required Mobility Plus trip can be taken on the fixed route system.

4.2.6 | Day Program Routing

Day program trips make up a substantial portion of current YRT Mobility Plus ridership, and the volume of terse trips is expected to increase in the future. To help deal with the growth of these trips, ENTRA recommends the acquisition of a small number of larger vehicles, capable of carrying more passengers, along with careful planning of trips to accommodate more passengers on single trips, subject to maximum ride times.

This can lead to more efficient trips, and streamlined pick-up and drop-off procedures at the day program location. In designing these routes, it will be important to consider the cost differential between sedan/van trips and the cost of larger bus trips to ensure that improved productivity results in actual cost savings.

4.2.7 | Travel Training

YRT Mobility Plus has already begun to implement a travel training program, with a successful pilot in 2008-2009. Results of this program are positive and the experience of other systems point to travel training as one of the most effective initiatives for diverting trips from paratransit to the fixed route system – a move that not only saves money, but also improves mobility by providing access to spontaneous trips.

Initially, a conservative approach is recommended, with voluntary participation. Over the short- and medium term, capacity for travel training should be expanded incrementally. In the longer-term, participation for selected registrants, identified through the registration process, could become mandatory to maximize the effectiveness of the program.

4.2.8 | Other Recommendations

Other recommendations from this study related to service delivery initiatives include:

Examining the potential to use the Newmarket terminal as a transfer point for rural paratransit trips from East Gwillimbury, Georgina and north King and Whitchurch-Stouffville, coordinating transfers to both the fixed route and Viva system as well as higher capacity Mobility Plus vehicles

Exploring the potential for passenger assistant programs, where an on-board assistant works to improve boarding and alighting times and provide customer assistance during the trip. ENTRA recommends that these programs, be staffed by relevant staff from among Mobility Plus agency customers, and YRT Mobility Plus continue to explore logistics and funding options with potential agency partners.

5 | Financial Plan

The recommended financial plan is based on a step-wise implementation of each of the recommended initiatives, designed to moderate demand, increase efficiency and reduce administrative costs.

Table 27 shows a summary of the service characteristics for the proposed strategy in a similar format to that of **Table 25**, which showed the same data for the status quo scenario.

Comparing the two tables, it is clear that the proposed strategy has a significant effect on the service characteristics, reducing the increase in total cost to just over four million dollars in five years (from more than five million dollars in the status quo scenario) and to seven million dollars over 10 years (from more than $10 million in the status quo scenario). This represents a reduction from the status quo of about 13 per cent over five years and more than 20 per cent over 10 years.

Table 27: Service Characteristics - with Proposed Strategy

Status Quo	Eixisting Total	2010 Total	2011 Total	2012 Total	2013 Total	2014 Total	2019 Total
Demand							
Buses	53,903	77,382	85,201	114,450	126,486	160,651	192,911
Vans	96,931	98,476	108,252	106,785	117,227	111,829	133,416
Sedans	136,243	139,380	154,672	152,519	168,991	159,780	184,346
Script	10,923	12,054	13,387	14,383	15,969	16,657	19,294
Total	**298,000**	**327,292**	**361,513**	**388,136**	**428,674**	**448,917**	**529,967**
Rush hour Vehicles							
Buses	11	16	17	23	25	31	37
Vans	23	24	26	26	28	27	32
Sedans	31	32	36	35	39	37	42
Revenue Vehicle Hours							
Buses	20,610	28,874	31,791	41,758	45,900	56,905	68,332
Vans	54,573	55,304	60,794	59,971	65,592	62,493	74,557
Sedans	66,161	67,515	74,923	73,880	81,509	76,970	88,804
Script	3,076	3,386	3,760	4,040	4,452	4,638	5,373
Total Vehicle Hours							
Buses	21,001	29,421	32,394	42,550	46,770	57,983	69,627
Vans	63,995	62,466	68,667	67,737	74,086	70,586	84,211
Sedans	85,385	82,228	91,251	89,980	99,272	93,743	108,156
Script	7,143	7,863	8,733	9,382	10,340	10,772	12,477
Operating Cost							
Buses	$1,440,027	$2,017,398	$2,176,830	$2,859,294	$3,142,847	$3,896,391	$4,678,822
Vans	$2,444,618	$2,386,203	$2,491,929	$2,458,163	$2,688,575	$2,561,557	$3,056,028
Sedans	$2,644,388	$2,546,614	$2,684,729	$2,647,343	$2,920,736	$2,758,068	$3,182,123
Script	$221,231	$243,523	$256,925	$276,034	$304,222	$316,937	$367,102
Contract cost	**$6,750,264**	**$7,193,738**	**$7,610,414**	**$8,240,835**	**$9,056,380**	**$9,532,953**	**$11,284,074**
Total including other cost	**$10,700,000**	**$11,402,960**	**$12,063,444**	**$13,062,738**	**$14,355,478**	**$15,110,906**	**$17,886,648**

Table 28 shows the overall financial summary for each year in the five-year projection and the ten-year outlook.

Table 28: Financial Summary

	Existing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10
Revenue Vehicle Hours							
Buses	20,610	28,874	31,791	41,758	45,900	56,905	68,332
Vans	54,573	55,304	60,794	59,971	65,592	62,493	74,557
Sedans	66,161	67,515	74,923	73,880	81,509	76,970	88,804
Script	3,076	3,386	3,760	4,040	4,452	4,638	5,373
Total Vehicle Hours							
Buses	21,001	29,421	32,394	42,550	46,770	57,983	69,627
Vans	63,995	62,466	68,667	67,737	74,086	70,586	84,211
Sedans	85,385	82,228	91,251	89,980	99,272	93,743	108,156
Script	7,143	7,863	8,733	9,382	10,340	10,772	12,477
Deadhead Ratio	23%	17%	17%	17%	17%	16%	16%
Contract Cost							
	$6,750,264	$7,193,738	$7,610,414	$8,240,835	$9,056,380	$9,532,953	$11,284,074
Total Operating Cost							
	$10,700,000	$11,402,960	$12,063,444	$13,062,738	$14,355,478	$15,110,906	$17,886,648
Savings Comparing to Status Quo							
	—	$406,117	$969,833	$1,321,830	$1,520,685	$2,411,745	$2,832,480
Travel Training Cost [1]							
Registrants attending training	—	407	422	1,316	1,364	2,354	2,755
Trainers required	—	2	1	4	2	6	4
Cost	—	$130,000	$65,000	$260,000	$130,000	$390,000	$260,000

Table 28: Financial Summary

	Existing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10
Registrants [2]							
Wheelchair/ Scooter	2,303	2,394	2,484	2,579	2,675	2,770	3,242
Ambulatory	5,527	5,745	5,963	6,191	6,419	6,647	7,780
Total	7,830	8,138	8,447	8,770	9,093	9,416	11,021
Cognative Disabled	401	560	782	1,092	1,525	2,130	2,283
Increase in registrants	—	3.9%	7.9%	12.0%	16.1%	20.3%	40.8%
Demand							
Wheelchair/scooter	56,085	60,424	65,269	69,859	75,460	80,330	102,248
Ambulatory	206,939	228,293	253,499	272,280	302,342	315,287	364,879
Assistant	34,976	38,575	42,745	45,998	50,872	53,300	62,840
Total	298,000	327,292	361,513	388,136	428,674	448,917	529,967
Demand due to change of Eligibility Criteria	—	3,852	7,418	14,287	27,516	52,993	61,286
Passenger Revenue	$774,000	$850,081	$938,964	$1,008,112	$1,113,400	$1,165,979	$1,376,491

Note:

1 ENTRA's assumption based on YRT staff input -250M+ registrants can be trained by one full time trainer
-$65,000 per year for one trainer and associated equipment and materials
-25% recovery ration: re-train previous trainees or train new registrants to maintain the required training ratio

2 do not include additional cognative disabled registrants

3 Unit cost for MDT was assumed at $2,000 per unit including installationg

4 ENTRA's assumption on one-time investment

Table 29 shows the expected performance indicators based on the projected financial summary. As shown in Table 33, most indicators improve, including declines in the cost per passenger over both the five-year and the 10-year projection, and increases in the cost recovery ratio and passengers per hour statistics. Net operating cost per passenger increases over the life of the plan, but not as much as projected under the status quo scenario.

Table 29: Projected Performance Indicator Results

	Existing	Year 1	Year 2	Year 3	Year 4	Year 5	Year 10
Performance Indicators							
Revenue/Cost Ratio	7.2%	7.5%	7.8%	7.7%	7.8%	7.7%	7.7%
Net Operating Cost/Capita	9.8	10.1	10.4	11.0	11.8	12.1	13.0
Total Expenses/Passenger	35.9	34.8	33.4	33.7	33.5	33.7	33.8
Total Expenses/Hour	$60	$63	$60	$62	$62	$65	$65
Registrants/Capita [1]	0.0077	0.0078	0.0079	0.0080	0.0081	0.0082	0.0087
Passengers/Capita	0.29	0.31	0.34	0.35	0.38	0.39	0.42
Passengers/Registrant[1]	38.06	39.74	41.92	42.63	44.12	42.05	42.52
Passengers/Revenue Hour - Total	2.06	2.11	2.11	2.16	2.17	2.23	2.24
Passengers/Revenue Hour - Dedicated	2.03	2.08	2.08	2.13	2.14	2.20	2.20
Passengers/Revenue Hour - Buses	2.62	2.68	2.68	2.74	2.76	2.82	2.82
Passengers/Revenue Hour - Vans	1.78	1.78	1.78	1.78	1.79	1.79	1.79
Passengers/Revenue Hour - Sedans	2.06	2.06	2.06	2.06	2.07	2.08	2.08
Passengers/Revenue Hour - Script	3.55	3.56	3.56	3.56	3.59	3.59	3.59

Note

1 Do not include additional cognative disabled registrants

Table 30 shows the projected fleet requirements and associated vehicle and technology costs. As certain service strategies require larger vehicles to improve the productivity, the number of projected buses increases significantly particularly when a more aggressive strategy is proposed. Also, the strategy relies on a shift to larger capacity buses to achieve improved productivity, resulting in higher capital costs than originally forecast.

Table 30: Projected Capital Requirements

	2010		2011		2012		2013		2014		2015	
	Fleet	Cost	Fleet	Cost	Fleet	Cost	Fleet	Cost	Fleet	Cost	Fleet	Cost
Existing YRT Capital Plan												
Replacement	0	0	5	$1,500	3	$900	8	$2,400	0	$0	8	$2,400
Expansion	0	0	2	$600	1	$300	2	$600	1	$300	5	$1,800
5-Year Strategy Plan												
Replacement	0	0	5	$1,125	3	$675	8	$1,800	0	$0	8	$1,800
Expansion Peak Buses	0	0	1	$225	6	$1,350	2	$450	6	$1,350	6	$1,350
Spare Buses		-		-		-	3	$675				-
Vans	3	-	2	-	0	-	2	-	-1	-	5	-
Sedans	1	-	4	-	-1	-	4	-	-2	-	5	-
Technology												
MDT		$122		$126		$134		$138		$140		$160
IVR								$100				

Note

1 Do not include additional cognative disabled registrants

From Table 30, the total projected requirement in the current plan includes 35 vehicles (24 replacement and 11 expansion) at a total cost of $10,125,000. In the revised five-year strategy plan, the total projected requirement for YRT buses includes 48 vehicles (24 replacement and 21 expansion and three spares) at a total cost of $10,800,000.

Adding projected technology costs of $760,000 in the five-year component and about $160,000 more over the next five years brings the total capital requirement to $11,720,000. This is approximately $1,595,000 more than the current ten-year Mobility Plus capital plan.

10 | Asset Management Plan

10 | Asset Management Plan

The Asset Management Plan consists of fleet and operations and maintenance (O&M) facility requirements needed to support the initiatives identified in the Annual Service Plans.

10.1 | Fleet

Based on the preceding Annual Service Plans, **Table 31** displays YRT/Viva's five-year fleet plan. As seen, bus purchases to accommodate replacement, growth and construction are planned for 2013, 2015 and 2016. As shown in **Table 31**, YRT/Viva will maintain no less than a 25 per cent spare ratio. Spare buses are included in the projected fleet numbers and are required to manage on-time performance and on-going fleet maintenance programs.

Table 31: Five-Year Fleet Plan

Year		September Fleet Size	Fleet Adjustment		Garage Pull Out	Spare ratio %	Bus Purchase Replacement	Bus Purchase Growth/ Construction	Total Bus Purchase
2012									
	YRT	330	6	3	262	26.0	0	0	0
	Viva	116	4	6	82	41.5	0	0	0
2013									
	YRT	349*	6	3	271	28.8	18	5	23
	Viva	137	4	6	92	48.9	0	35	35
2014									
	YRT	349	6	1	278	25.5	0	0	0
	Viva	137	4	0	96	42.7	0	0	0
2015									
	YRT	389	33	0	311	25.1	10	40	50
	Viva	137	12	0	108	26.9	0	0	0
2016									
	YRT	411	6	0	317	29.6	0	22	22
	Viva	152	6	4	118	28.8	0	15	15

Note: * Fourteen 40 foot Viva buses to be converted to conventional fleet in 2013.

10.2 | Facilities

The number of Operations and Maintenance (O&M) facilities required to maintain the Region's future transit fleet is based on the projected fleet size and distribution of transit services and fleet between the operating divisions across the Region. **Table 32: Facility Requirements** presents the detailed annual projected fleet totals by operating division to 2016. The Southeast (Woodbine Avenue) and North (Kent Street) division facilities are now operating at capacity. The Viva fleet is currently split between the Caldari and Yonge Street facilities which will be replaced by the new 250-articulated bus Viva facility in 2014.

YRT/Viva is updating its Operations and Maintenance Facility strategy to reflect the changes in fleet size. Staff are nearing completion of an updated transit operations and maintenance facility strategy. This will provide an update to the initial strategy Council approved in 2006 showing revised forecast demand for transit services and vehicle requirements since that time. The strategy will review the short-term need for new facilities particularly in the southeast and north areas of the Region as well as long-term needs to the year 2031.

Based on the 2006 strategy and preliminary results of the current strategy, there is a need for new facilities or modifications to existing facilities by 2016 as shown in **Table 32**. The York Region Rapid Transit Corporation is proceeding with the design-build procurement process for the new facility for Viva service.

Table 32: Facility Requirements

Contract Expiry	Regional Service	2011 Fleet Size	2011 Facility Capacity	2016 Fleet Size	2016 Facility Capacity
September 2013 (option to extend to September 2015)	York BRT Service LP (Viva)	116	120	152	250
June 2012 (option to extend to June 2014)	First Canada (North Division)	63	65	77	125
August 2015 (option to extend to August 2020)	Veolia Transportation Canada Ltd. (Southwest Division)	116	220	156	220
October 2016	Miller Transit (Southeast Division)	151	150	164	250

As the Annual Service Plans' initiatives will be furthered developed during YRT/Viva's comprehensive Annual Service Plan process, the future vehicle distribution estimates may change. This, in turn, influences the number and size of future transit facilities needed for each of the operating divisions.

11 | Operating and Policy Agreements

11 | Operating and Policy Agreements

The Operating and Policy Agreements section identifies fare, service delivery and facility agreements which the Region has entered into with external agencies in order to provide inter-regional transit services.

11.1 | Metrolinx / GO Transit

The following identifies fare, operating and facility agreements with Metrolinx and its operating division GO Transit.

PRESTO

The PRESTO Fare Payment System is an electronic fare integration system available across the Greater Toronto and Hamilton Area's transit regions. PRESTO provides transit customers with a single card that allows for 'seamless' travel between all participating transit systems. Each time the card is used, the exact fare amount, including built-in discounts and transfer policies is automatically deducted from the card balance. PRESTO cards can currently be used on:

- York Region Transit [1]
- Burlington Transit
- GO Transit
- Hamilton Street Railway
- Toronto Transit Commission (TTC)[2]
- Mississauga Transit
- Brampton Transit
- Durham Region Transit
- Oakville Transit

1 Exceptions include TTC buses operating in York Region, Mobility Plus services, Dial-a-Ride services and on GO Transit Route 69 - Sutton.
2 Select subway stations only: Union, Bloor/Yonge, College, Dundas, Queen's Park, St. George, St. Patrick, Kipling, Islington, Don Mills, Finch and Downsview.

YRT/Viva launched the PRESTO smart card fare system on July 18, 2011 which was supported with over 70 PRESTO customer outreach events. YRT/Viva set up display booths at bus terminals, post secondary schools, hospitals, malls and local businesses to educate customers about the fare integration system. YRT/Viva staff distributed 4,250 fee-waived (no fee) PRESTO smart cards. By the end of November, the system had recorded over 185,000 transactions, with over 57,471 'taps' (a fare was either deducted or a transfer was recorded) in September alone.

The Accessibility for Ontarions Disability Act (AODA) requires all public transportation systems to administer the same fare media options to all passengers, or "equivalent" alternative options to Para-transit (Mobility Plus) customers. Para-transit services have unique characteristics which distinguish them from conventional public transit services, particularly the use of contracted services such as taxis and vans. There has been significant progress towards making PRESTO accessible to persons with disabilities. The main challenge to date is to find an economically and operationally acceptable means of extending the PRESTO solution to contracted Para-transit services. A proactive approach will be undertaken to engage individuals and groups representing persons with disabilities to address: device design, Man-Machine Interface (MMI), physical location of devices, audio sound bites (sound distinctiveness and volume), among others identified during the system's deployment. Once a solution is approved, an implementation plan will be developed.

Fare Integration Agreement

YRT/Viva has a fare integration agreement with GO Transit. Monthly GO Pass holders can purchase a YRT/Viva Fare Integration Sticker. The sticker allows passengers to board connecting YRT/Viva services to and from GO Train stations without having to pay. GO riders with valid tickets or passes pay $0.50 exact cash per ride to travel to and from the following GO stations in York Region on York Region Transit (YRT/Viva):

- Aurora
- Centennial
- East Gwillimbury
- Langstaff (Richmond Hill
- Centre Terminal)
- King City
- Maple
- Markham
- Milliken
- Mount Joy
- Newmarket
- Richmond Hill
- Rutherford
- Stouffville
- Unionville
- York University

Local Fare Agreement between Metrolinx (GO Transit) and York Region

YRT/Viva has a local fare agreement with GO Transit to provide local service to the Town of Georgina with direct connections to YRT/Viva services in Newmarket with Route 69-Suttion GO Bus. The fare agreement applies to all trips on Route 69 trips, Monday to Sunday. The agreement was amended with GO Transit (Metrolinx) to provide additional GO Route 69 – Sutton bus service between Newmarket GO Bus Terminal and the intersection of High and Burke Streets in the Town of Georgina – at an original cost of $288,000 with an annual adjustment to the operating costs as determined by GO Transit.

Bus Terminal Services Agreement

YRT/Viva has a formal agreement for YRT/Viva to access Finch GO Bus Terminal and Newmarket GO Bus Terminal. The cost sharing for the two terminals is based on the percentage split of York Region's and GO Transit's respective ridership from the previous year and is calculated annually. GO Transit does not require the Region to share in net operating and maintenance costs at the other GO Train Stations as these services are of benefit to GO Transit since YRT/Viva services the GO trains. Reciprocally, a similar maintenance cost agreement is in place for Richmond Hill Centre Terminal where GO Transit has three platforms which accommodates GO's York University Hwy 407 bus service and the Airport Express bus service.

Memorandum of Understanding York Region and GO Transit Bus Operations

The intent of this Memorandum of Understanding is to establish the principles of how comprehensive, transit services will be provided in the Yonge street corridor, and how new York Region rapid transit services will be introduced, in a way that is sensitive to GO Transit's operational issues. The principles recognize both parties' responsibility to the citizens of its respective and overlapping service areas to deliver the transit services necessary to meet current and future transportation and development needs of the Greater Toronto Area.

11.2 | Toronto Transit Commission

The following identifies fare, operating and facility agreements with the Toronto Transit Commission.

TTC-York Region Cross-Boundary Agreement

YRT/Viva contracts service to the TTC to operate 11 routes into York Region. The contracted service greatly enhances customer convenience as transit customers can travel on a single bus when travelling between Toronto and York Region, thereby eliminating the need to transfer to or from YRT and TTC buses at the Toronto/York boundary (Steeles Avenue). York Region pays the full operating cost for TTC service provided outside Toronto. The prevailing YRT and TTC fares are applicable in the respective municipalities, therefore an extra fare is charged to those transit customers travelling cross-boundary between Toronto and York Region. The TTC credits the Region with the cash fares deposited in the fareboxes while travelling in York.

Memorandum of Understanding: Fare Integration – York University to Downsview Subway Station

YRT/Viva and the TTC have also developed a shared service concept which allows TTC customers to ride Viva orange between York University and Downsview Subway Station for no additional fare. The benefits of shared Viva and TTC service and the fare integration include:

- New revenue opportunity for YRT/Viva
- Optimum use of spare capacity on the Viva orange service
- Reduces/eliminates overcrowding on TTC buses
- Reduces the need for TTC to increase fleet and service levels
- New access to late evening and Sunday service on Viva orange for TTC customers

With this initiative, TTC passengers holding a valid GTA pass, Metropass, weekly pass, day pass or TTC transfer are permitted to ride Viva orange between Downsview subway station and York University. The TTC pays YRT/Viva $0.52 per passenger carried on the segment of Viva orange between Downsview subway station and York University.

The service is monitored on a monthly basis to assess ridership increases using automatic passenger counters currently installed on all Viva vehicles to calculate invoices to TTC. These agreements will continue until the completion of the Spadina Subway extension at which time service in Vaughan will be revised and oriented towards the Subway Station.

TTC Don Mills Lease Agreement/TTC Downsview Lease Agreement

YRT/Viva has an agreement with the TTC to pay license and maintenance fees for access to bus platforms at Don Mills and Downsview Subway Stations. These agreements are required to provide direct connections at terminal with TTC services.

Sublicence Agreement – Bus Way between Dufferin Street and York University

YRT/Viva has an agreement with City of Toronto and TTC to permit the Region and its contractors the temporary non-exclusive right to operate its transit service for the general public along the Bus Way. The Region agreed to pay to the TTC its proportionate share of the total costs associated with all necessary repairs, maintenance and other services provided to the Bus Way.

The bus way agreement with York University and ORC has not yet been approved. YRT/Viva is not operating along that portion of the Bus Way.

11.3 | Brampton Transit

The following identifies fare and operating and facility agreements with Brampton Transit.

Cross Boundary Agreement (between The Regional Municipality of York and The Corporation of the City of Brampton)

Viva orange shares routing with Brampton Transit's Züm express bus route between Martin Grove Road and York University, and has been fare integrated with it since the implementation of Züm in September 2010. Both Brampton Transit and York Region Transit proof of payment are accepted for the entire length of both bus routes. Prior to the creation of Züm, there was a similar fare agreement in place on Route 77 – Highway 7/Centre, which operated between Bramalea City Centre Terminal and Finch GO Bus Terminal, and was jointly operated by York Region Transit and Brampton Transit.

11.4 | York University

The following identifies fare and operating and facility agreements with York University.

York University Lease Agreement

Several YRT/Viva routes access York University. York University does not charge a fee for the use of space or maintenance. YRT/Viva is viewed as a beneficial service to York University which assists in the reduction of parking requirements, in addition to the transportation service to the University for both the students and faculty.

11.5 | Future Spadina Subway Agreements

Over the next five years, YRT/Viva will be entering into other agreements pertaining to vivaNext and the Spadina Subway. **Appendix F** identifies possible agreements as part of the vivaNext and Spadina Subway project.

Appendix F:
Spadina Subway, Possible Agreements

Appendix F: Spadina Subway, Possible Agreements

York Region Rapid Transit Corporation (YRRTC)

YRRTC is responsible for the vivaNext initiatives, which is anticipated to necessitate a clear allocation of responsibility or cost sharing through agreements between York Region and other jurisdictions for several projects that involve:

- Bus-only lanes
- Crane Platforms
- Future ROWs
- Substations
- Fire / Life Safety
- Fibre connections
- General Maintenance and Liability - Pathways / Access / PPUDO
- YRT Terminal Facilities Servicing
- Bus Terminals: alarms, power, security access, roadway and vertical access, bus circulation, etc.
- Subway Station Fire Venting
- Refuse and Recycle Rooms
- Structural Maintenance PRESTO Equipment
- Fire Department Access
- Storm Water Management
- Bridge maintenance
- Access roads
- Bus layovers Water Service
- Electrical rooms and supply
- Art
- Bus Driver Accommodation Rooms
- Vertical Transportation Elements
- Viva equipment in TTC owned areas

Customer Security

Customer safety and security measures will be implemented and place the highest priority on people while protecting the taxpayer's investment in transit. Maximum security and enforcement can be attained by maximizing the use of available technology that is being explored and incorporated:

- CCTV (Close Caption TV)
- Emergency Alarms
- Alarm System
- Key System
- PA System
- Station Access
- Emergency Services Access
- Telephones
- CPTED (building safety design features)
- Security Review 30/60/90/100
- Electronic Access System
- Security Agreements/Joint Services Agreements
- Areas of Control/ Jurisdiction/ Demarcation
- Communications Systems
- Lighting
- Response Agreements

12 | Financial Plan

12 | Financial Plan

The Financial Plan forecasts revenue, operating and capital costs over the next 5 years to support the Annual Service Plans.

The revenue projections presented in **Table 33** are based on the ridership projections associated with the Annual Service Plans.

Table 33: Ridership and Revenue

	2012	2013	2014	2015	2016
Viva	15,120,000	15,792,000	16,464,000	17,136,000	17,808,000
YRT	7,380,000	7,708,000	8,036,000	8,364,000	8,692,000
Ridership	22,500,000	23,500,000	24,500,000	25,500,000	26,500,000
Revenue ($)	61,851,000	65,725,000	69,701,000	72,501,000	75,344,000 *

Note: * Assuming no fare increase

Table 34 displays total revenue hours, total operating cost and cost recovery.

Table 34: Revenue Hours and Operating Cost

	2012	2013	2014	2015	2016
Revenue Hours	1,159,223	1,188,204	1,217,909	1,248,357	1,279,566
Operating Cost	157,905,412	166,944,395	177,136,016	186,981,580	197,353,000
Cost Recovery	39.2%	39.4%	39.3%	38.8%	38.2%

Table 35 provides YRT/Viva's annual fleet procurement plan and the corresponding capital cost requirements.

Table 35: YRT and Viva Fleet Requirements and Capital Cost

		2012	2013	2014	2015	2016
Replacement						
	YRT	0	18	0	10	0
	Viva	0	0	0	0	0
Growth/ Construction						
	YRT	0	5	0	40	22
	Viva	0	35	0	0	15
Total						
	YRT	0	23	0	50	22
	Viva	0	35	0	0	15
Capital Cost						
		$0	$57,444,000	$0	$27,650,000	$31,291,000

Source: YRT/Viva Facility Strategy

13 | Conclusion

13 | Conclusion

The 2012-2016 Five-Year Service Plan is YRT/Viva's third Five-Year Service Plan since amalgamation. The objective of the Plan is to guide YRT/Viva through the transit system's realignment phase over the next five years and focuses on the following Plan Principles or objectives:

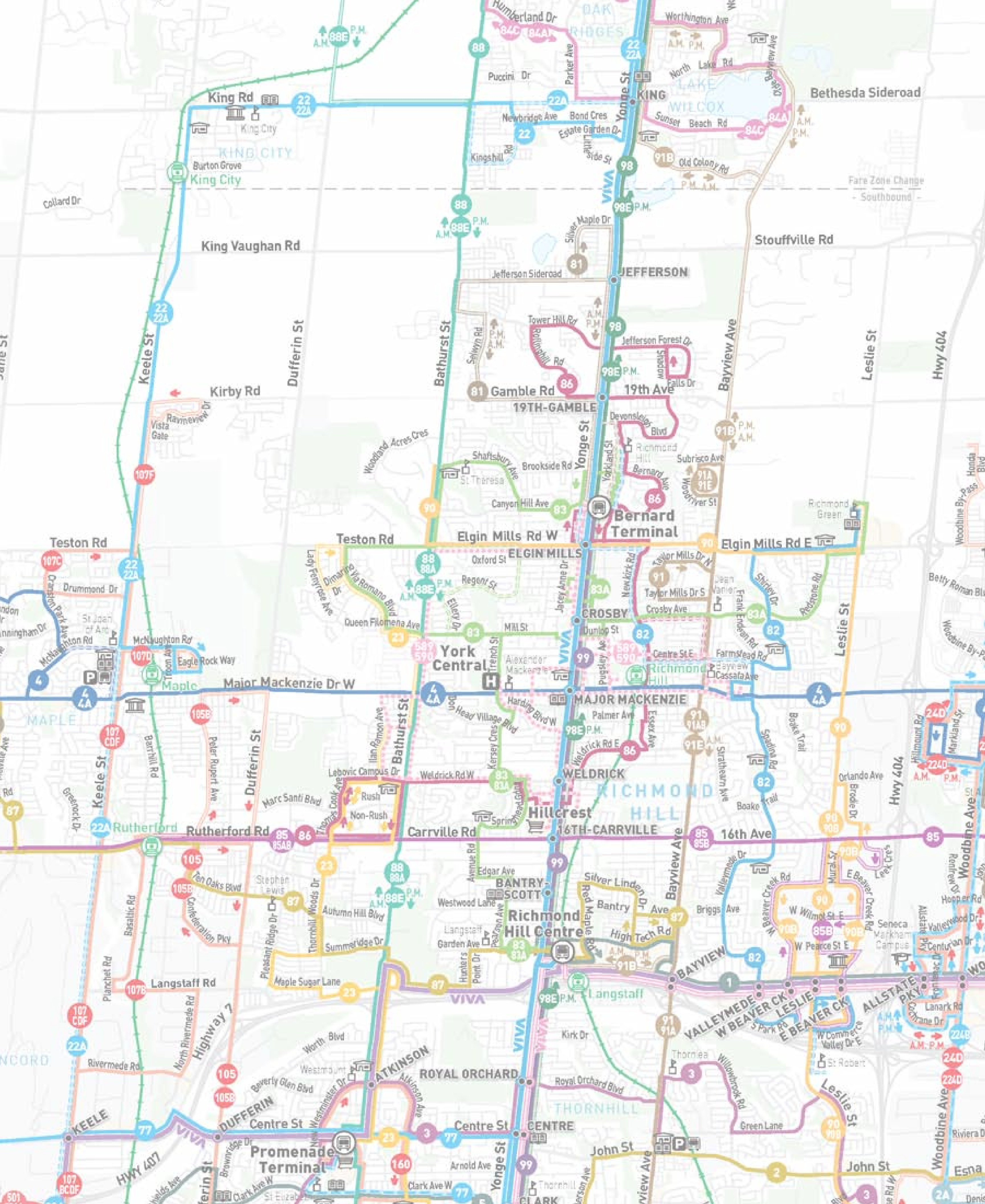
- Revising YRT/Viva's transit service guidelines to reflect service frequencies to better match demand
- Developing an effective ridership management strategy focused on matching levels of service to meet demand
- Improving service reliability by increasing on-time performance
- Mitigating the impacts of vivaNext construction (rapidways and Spadina Subway extension) on residents, businesses and communities in an effort to maintain existing YRT/Viva service levels and ridership
- Assessing GO Shuttles, High School Specials and Dial-a-Ride service
- Assessing contracted Toronto Transit Commission service into York Region upon completion of vivaNext construction
- Developing strategies to address the Accessibility for Ontarians with Disabilities Act (AODA)

The 2012-2016 Five-Year Service Plan report defines YRT/Viva's Planning Framework, Transit Service Assessments and provides direction for upcoming Annual Plans. The Planning Framework describes YRT/Viva's Service Guidelines, Planning Process and Consultation Plan. These documents ensure consistency and clarity in YRT/Viva's planning process. The Transit Service Assessment examines the transit market, existing transit service and future transit service. The purpose of the assessment is to identify opportunities for improvement. The Five-Year Service Plan develops the opportunities identified in the Transit Service Assessment into service strategies. The service strategies are then further refined in the Annual Service Plans, Asset Management Plan and Financial Plan.

The Annual Service Plans consist of service initiatives that are strategic in nature and are aimed towards guiding the direction of YRT/Viva service over the next five years with specific attention to:

- **Short-Term (2012, 2013):** identifying service enhancements and efficiencies to ensure that the transit services provided by YRT/Viva have the greatest system-wide return while maintaining a basic level of service throughout the Region.
- **Medium-Term (2014, 2015):** realigning transit service in southern York Region to support future rapidways and the Spadina Subway extension.
- **Long-Term (2016):** identifying service enhancement and modifications to support the growth of the rapid transit network.

The service initiatives identified in the Annual Service Plans will be developed further through YRT/Viva's comprehensive Annual Service Plan process.



Humberland Dr
Oak Ridges
Worthington Ave
Parker Ave
Puccini Dr
King Rd
King City
Newbridge Ave
Bond Cres
Estate Garden Dr
Yonge St
KING
North Lake Rd
Lake Wilcox
Sunset Beach Rd
Bethesda Sideroad
Kingshill Rd
Old Colony Rd
Burton Grove
Fare Zone Change
- Southbound -
Collard Dr
King Vaughan Rd
Silver Maple Dr
Stouffville Rd
Jefferson Sideroad
JEFFERSON
Tower Hill Rd
Jefferson Forest Dr
Keele St
Dufferin St
Bathurst St
Bayview Ave
Leslie St
Hwy 404
Kirby Rd
Gamble Rd
19th Ave
19TH-GAMBLE
Vista Gate
Woodland Acres Cres
Devonsleigh Blvd
Richmond Hill
Bernard Ave
Shaftsbury Ave
Brookside Rd
Subrisco Ave
St Theresa
Canyon Hill Ave
Bernard Terminal
Richmond Green
Teston Rd
Elgin Mills Rd W
ELGIN MILLS
Elgin Mills Rd E
Oxford St
Regent St
Taylor Mills Dr N
Taylor Mills Dr S
Drummond Dr
Via Romano Blvd
Queen Filomena Ave
Jean Vanier
CROSBY
Crosby Ave
Betty Roman Blvd
McNaughton Rd
Mill St
Dunlop St
York Central
Alexander Mackenzie
Centre St E
Farmstead Rd
Eagle Rock Way
Maple
Richmond Hill
Bayview Cassala Ave
Major Mackenzie Dr W
MAJOR MACKENZIE
MAPLE
Don Head Village Blvd
Harding Blvd W
Palmer Ave
Weldrick Rd E
Lebovic Campus Dr
Weldrick Rd W
WELDRICK
Marc Santi Blvd
Rush
Non-Rush
RICHMOND HILL
Hillcrest
Boake Trail
Orlando Ave
Rutherford
Rutherford Rd
Carrville Rd
16TH-CARRVILLE
16th Ave
Ten Oaks Blvd
Stephen Lewis
Edgar Ave
BANTRY-SCOTT
Silver Linden Dr
Bantry Ave
Briggs Ave
Confederation Pky
Autumn Hill Blvd
Westwood Lane
Richmond Hill Centre
High Tech Rd
Summeridge Dr
Langstaff Garden Ave
Seneca Markham Campus
W Wilmot St E
W Pearce St E
Langstaff Rd
Maple Sugar Lane
BAYVIEW
VIVA
Langstaff
VALLEYMEDE
W BEAVER CK
LESLIE
E BEAVER CK
ALLSTATE PKY
Lanark Rd
Cochrane Dr
Rivermede Rd
Worth Blvd
Kirk Dr
Thornlea
Willowbrook Rd
St Robert
Highway 7
Westmount Blvd
ATKINSON
ROYAL ORCHARD
Royal Orchard Blvd
THORNHILL
Beverly Glen Blvd
KEELE
DUFFERIN
Centre St
CENTRE
Green Lane
Promenade Terminal
John St
Arnold Ave
Clark Ave W
HWY 407
Woodbine Ave
Riviera Dr
Esna
CLARK

YORK
REGION
TRANSIT

VIVA