
7.0 TTC Routes

Route: TTC 17A Birchmount

Type: Base

Description: A main north-south route operating along Birchmount Road in Markham southward to Warden subway station with peak service to Royal Crest Ct.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓		✓			
21 min	Not Applicable	17 min	Not Applicable	Not Applicable	Not Applicable

Major Trip Generators: Warden Subway Station, Birchmount Rd employment area

Boardings (2006):

Annual	70,273
Avg Weekday	251
Rev/Cost (%)	58.7
Boardings/Hr	40.7

Service Requests:

- Extend north to Hwy 7

Discussion/Issues:

- Birchmount Road will be extended further north to connect with Hwy 7
- In 2009, extend route north to Hwy 7 in order to service Markham Centre and connect with transit service along Hwy 7

Recommendation:

- N/A

Estimated Additional Costs:

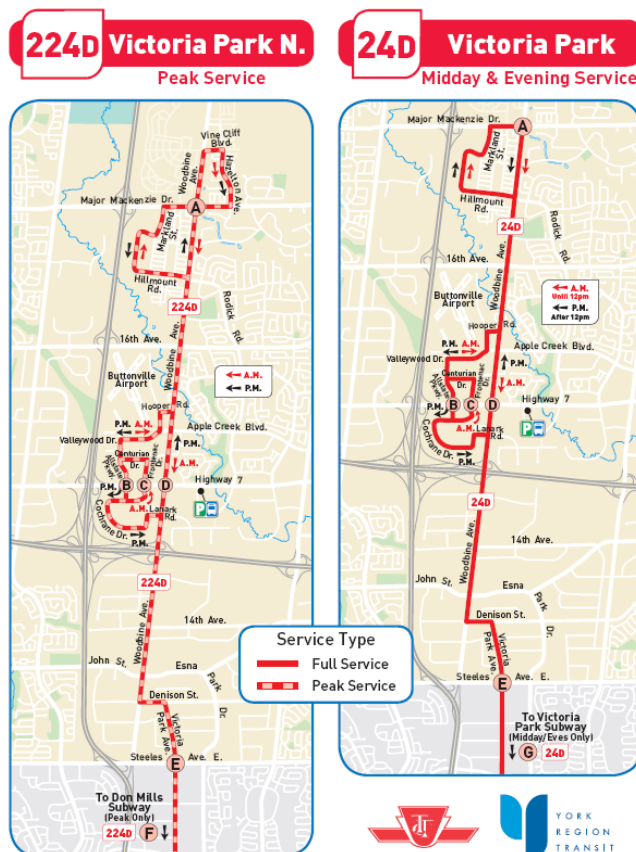
- N/A

Route: TTC 24D, 224 C/D Victoria Park N & YRT 224B Woodbine

Type: Base

Description: Main north-south route operating mainly along Woodbine Avenue between Major Mackenzie Drive and the Don Mills Subway Station (peak periods) and Victoria Park Subway Station (off peak periods). On weekends, YRT 224B Woodbine only operates north of Steeles Ave.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
40 min	30/40 min	40 min	18/19 min	60 min	60 min

Major Trip Generators: Scholastics/Phillips offices, Allstate Parkway employment area, Seneca Markham Campus, Denison employment area, Don Mills Subway Station & Victoria Park Subway Station.

Boardings (2006):

Annual	214,995
Avg Weekday	865
Rev/Cost (%)	30.6
Boardings/Hr	20.7

Service Requests:

- Improve the frequency during peak periods
- Later weekday evening service travelling northbound after 11pm
- Extend service further north of Vine Cliff Boulevard, as far north as Elgin Mills Road
- Late evening shift at Phillips ending at 11pm, need later service

Discussion/Issues:

- Current frequency level provided during weekday peak period does not meet the service frequency standard
- Weekday peak period service should be improved from 40 minute service to 15-20 minute service
- Extend north to Elgin Mills Road (during peak periods)
- The last pm southbound trip departs at 11pm. In order to better accommodate the pm shift at Phillips, the last pm trip to depart 10 minutes later

Recommendation:

- April 2008, improve the peak period frequency to every 15-20 minutes
- April 2008, extend peak period service further north to Elgin Mills Road
- April 2008, adjust the last pm trip to depart at 11:10pm

Estimated Additional Costs:

- \$379,500 annual operating cost to improve the frequency and last pm trip adjustment
- \$379,500 annual operating cost for route extension

Route: TTC 25D Don Mills

Type: Base

Description: Main north-south route operating along Leslie Street and Don Mills Road linking the Beaver Creek business park and Thornhill community to both Don Mills and Pape Subway Stations.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓		
14 min	31/32 min	16 min	27/28 min	Not Applicable	Not Applicable

Major Trip Generators: Beaver Creek business park, St Robert C.H.S., Shoppes on Steeles, Don Mills Subway Station, Pape Subway Station.

Boardings (2006):

Annual	306,338
Avg Weekday	1,254
Rev/Cost (%)	51.3
Boardings/Hr	35.6

Service Requests:

- No service requests at this time

Discussion/Issues:

- Operate the southbound routing via Commerce Valley Drive West

Recommendation:

- Conduct a route assessment in 2008 to determine future route changes

Estimated Additional Costs:

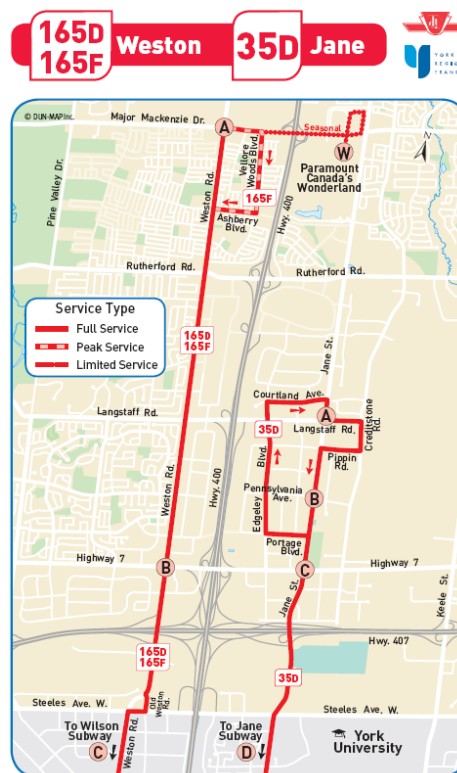
- N/A

Route: TTC 35D Jane

Type: Base

Description: A local north-south route operating mainly along Jane Street connecting Jane subway station with the Jane/Langstaff industrial area.

Current Routing:



Operating Hours and Frequency:

35D Jane

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	
11 min	21 min	17 min	26 min	25/28 min	Not Applicable

Major Trip Generators: Jane Subway Station, Steeles Ave Corridor, Jane/Langstaff industrial area, Jane Street corridor in Toronto.

Boardings (2006):

Annual	416,740
Avg Weekday	1,586
Rev/Cost (%)	70.2
Boardings/Hr	48.7

Service Requests:

- No significant service requests

Discussion/Issues:

- No significant issues

Recommendation:

- N/A

Estimated Additional Costs:

- N/A

Route: TTC 37D Islington

Type: Local

Description: Main route connecting the Pine Valley industrial area to Steeles Ave and Islington subway station.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓			
28 min	30 min	36 min	Not Applicable	Not Applicable	Not Applicable

Major Trip Generators: Islington subway station, Pine Valley industrial area.

Boardings (2003):

Annual	38,894
Avg Weekday	139
Rev/Cost (%)	18.4
Boardings/Hr	12.8

Service Requests:

- No significant service requests

Discussion/Issues:

- Service operating below performance standards. Consideration to be made with respect to review (e.g. marketing, operational assessment) in 2008

Recommendation:

- N/A

Estimated Additional Costs:

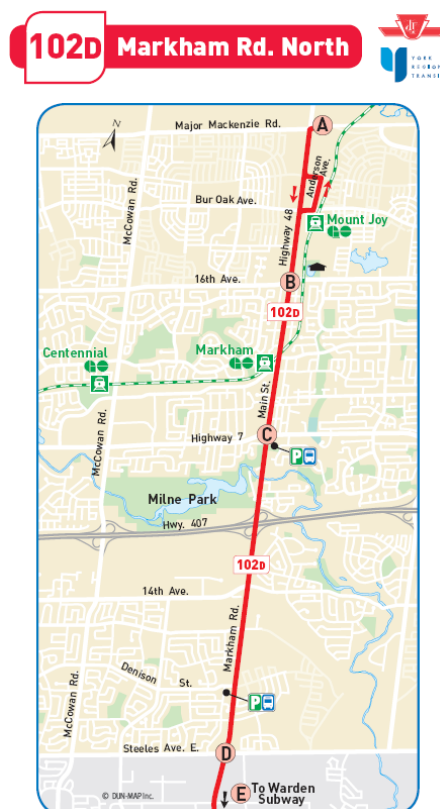
- N/A

Route: TTC 102D Markham Rd

Type: Base

Description: Main north-south route operating along Highway 48/Markham Road between Major Mackenzie Drive and Warden Subway Station.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
20 min	60 min	24 min	48 min	56/60 min	60 min

Major Trip Generators: Warden Subway Station, commercial strip at 14th Ave, Main Street Markham, Markham/Mt Joy GO Stations, Anderson Ave business area

Boardings (2006):

Annual	144,635
Avg Weekday	607
Rev/Cost (%)	23.3
Boardings/Hr	16.1

Service Requests:

- Extend service to Wal-Mart at Hwy 48 and Millard Street in Stouffville (3 service requests) (to be evaluated as part of the 2009 Service Plan)

Discussion/Issues:

- As the business park develops at Hwy 48 and Stouffville Road, evaluate extending the service further north
- Improve the current midday frequency from 60 minutes to 30 minutes
- Emerson Electric is selling the property at Major Mackenzie Drive and Markham Road, where Route 102D loops

Recommendation:

- April 2008, improve the current midday frequency from 60 minutes to 30 minutes
- In order to continue to service the Emerson Electronic, YRT will work with the new owner to set-up an agreement

Estimated Additional Costs:

- \$151,800 annual operating cost to improve the midday frequency to 30 minutes

Route: TTC 105 Dufferin North

Type: Base

Description: Main north-south route operating along Dufferin Street between Downsview subway station and Rutherford Road.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
17 min	30 min	13 min	30 min	30 min	60 min

Major Trip Generators: Downsview subway station, Confederation Parkway (Tudor East) employment area.

Boardings (2006):

Annual	468,166
Avg Weekday	1,596
Rev/Cost (%)	53.2
Boardings/Hr	36.9

Service Requests:

- To extend service north of Rutherford Road

Discussion/Issues:

- Significant new residential community being developed north of Rutherford Road between on the Dufferin Street corridor, representing considerable additional demand for ridership
- Although an extension of the service north of Rutherford Road is warranted, consideration will need to be made regarding future growth of transit service in the Dufferin Street corridor. The existing loop at the north end of the route should not be extended beyond Major Mackenzie due to impact on customer convenience
- With the planned District Centre node planned for the intersection of Rutherford Road and Dufferin St, this route may need to focus on operating into this node; while having the surrounding community serviced by a more locally oriented route that can be tailored to supply appropriate levels of service

Recommendation:

- For April 2008, to extend peak period service north of Rutherford Road and service the new Dufferin Woods community. (Please refer to Southern System Map on page 127.)

Estimated Additional Costs:

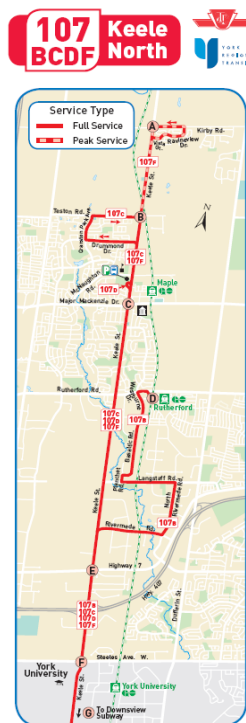
- \$120,000 annualized

Route: TTC 107B/C/D/F Keele North

Type: Base

Description: Main north-south route operating mainly along Keele Street between Downsview subway station and Teston Road in Maple.

Current Routing:



Operating Hours and Frequency *:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
16/33 min	30/40 min	13/35 min	30 min	60 min	80 min

* Note: Frequencies indicated are for all branches combined.

Major Trip Generators: Downsview Subway Station, York University, Keele/Langstaff industrial area, Rutherford GO Station, St. Joan of Arc S.S.

Boardings (2006):

Annual	934,380
Avg Weekday	3,722
Rev/Cost (%)	54.2
Boardings/Hr	37.6

Service Requests:

- Earlier first trip on weekday mornings, in order to meet the first southbound subway train departing Wilson Subway Station
- Provide all-day service to the Keele/Kirby area by replacing the existing 107-F branch with an extended version of the 107-C branch

Discussion/Issues:

- The first southbound trip on weekday mornings is not scheduled to meet the first southbound subway train departing from Wilson Subway Station. There is an increasing demand for this connection. Requests for this additional service to be reviewed as part of the 2009 budget cycle
- Requests for increased service to the Keele/Kirby area have been limited in number. Such requests to be reviewed as part of the 2009 budget cycle

Recommendation:

- N/A

Estimated Additional Costs:

- N/A

Route: TTC 129A McCowan North

Type: Base

Description: Main north-south route operating along McCowan Road between Major Mackenzie Drive and Scarborough Town Centre.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
15 min	28 min	15 min	40 min	27-40 min	40 min

Major Trip Generators: Scarborough Town Centre, Father McGivney C.H.S., Markville Mall, Centennial GO Station, Markville S.S

Boardings (2006):

Annual	742,549
Avg Weekday	2,991
Rev/Cost (%)	73.2
Rev Pass/Hr	50.8

Service Requests:

- Operate along Bur Oak Ave (since Route 18 is not operating early)

Discussion/Issues:

- As development occurs north of Major Mackenzie Drive, TTC Route 129A – McCowan will be extended further north of Major Mackenzie Drive therefore; do not include the looping to service Bur Oak Avenue

Recommendation:

- N/A

Estimated Additional Costs:

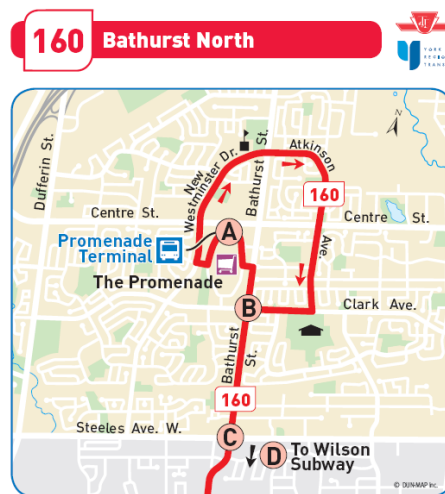
- N/A

Route: TTC 160 Bathurst North

Type: Base

Description: This route originates from Wilson subway station and serves the Thornhill community surrounding the Promenade Mall.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
20 min	25 min	21 min	24 min	24 min	24 min

Major Trip Generators: Wilson subway station, Promenade Mall, St. Elizabeth S.S., Westmount Collegiate.

Boardings (2006):

Annual	242,565
Avg Weekday	937
Rev/Cost (%)	64.9
Rev Pass/Hr	45.0

Service Requests:

- No significant service requests

Discussion/Issues:

- No significant issues

Recommendation:

- N/A

Estimated Additional Costs:

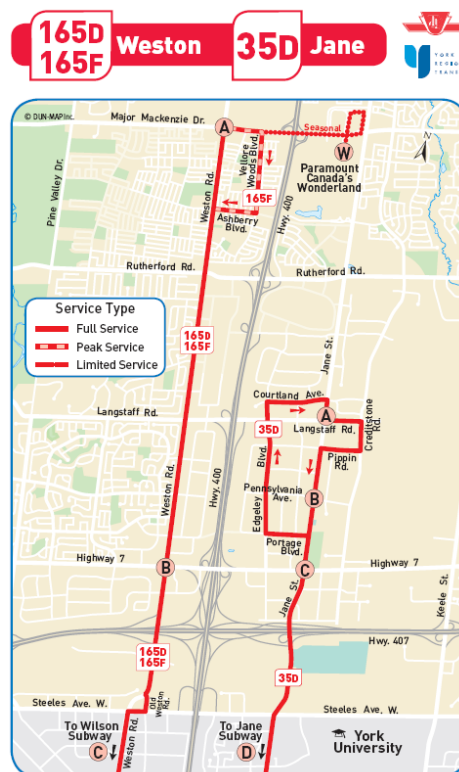
- N/A

Route: TTC 165 D / F Weston

Type: Base

Description: A main north – south route operating mainly along Weston Road between Wilson Subway station and Major Mackenzie Road with seasonal service to Canada's Wonderland. The 165F branch offers peak service along Vellore Woods Blvd and Ashberry Blvd.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
42 min	30 min	54 min	30 min	24/30 min	32/40

Major Trip Generators: Wilson Subway station, Steeles corridor, Canada's Wonderland (seasonal).

Boardings (2006):

Annual	424,974
Avg Weekday	1,641
Rev/Cost (%)	57.3
Boardings/Hr	39.8

Service Requests:

- To extend service north of Major Mackenzie Drive to address needs of new residents and the new PowerStream head office on Cityview Blvd

Discussion/Issues:

- Significant new residential communities being developed north of Major Mackenzie Drive between Weston Road and Hwy 400, representing considerable additional demand for ridership
- Although an extension of the service north of Major Mackenzie Drive is warranted, consideration will need to be made regarding future growth of transit service in the Weston Road corridor. The existing loop at the north end of the 165-F branch should not be extended beyond Teston Road due to impact on customer convenience

Recommendation:

- For April 2008, to extend service north of Major Mackenzie Drive and service the new Vellore Park community (Please refer to Southern System Map on page 127)

Estimated Additional Costs:

- \$120,000 annualized

Route: TTC 68B Warden North

Type: Base

Description: Main north-south route operating along Warden Ave between Major Mackenzie Drive and the Warden Subway Station.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓	✓	✓	✓
13/19 min	20/40 min	19/24 min	40 min	33/44 min	36-45 min

Major Trip Generators: Don Mills Subway Station, American Express, IBM, Motorola, Markham Civic Centre, Markham Theatre, Unionville H.S., Angus Glen Community Centre

Boardings (2006):

Annual	275,293
Avg Weekday	1,055
Rev/Cost (%)	38.2
Boardings/Hr	26.5

Service Requests:

- Provide service along Village Gate Drive and Calvert Road (previous routing)

Discussion/Issues:

- Due to the speed humps along Village Gate Drive, routing will not be reinstated along Village Gate Drive and Calvert Road

Recommendation:

- N/A

Estimated Additional Costs:

- N/A

8.0 Alternative Services Strategy

8.1 Community Bus

8.2 Demand Responsive Services

8.3 Zone Bus

8.4 Dial-A-Ride

Alternative Services Strategies

Strategy	Service Delivery
Charter	Riders book a YRT vehicle to take them from point A to point B (Minimum 3 hours service required)
Dial-A-Bus / Zone Bus	Riders call to reserve a vehicle that will pick-up and drop-off at closest bus stop (operation can be in-house or contracted out)
Community Bus	Accessible service on fixed routes
Flex Route	Fixed route service with off-route deviations (for drop-offs or pick-ups)
Demand Responsive Connector	Vehicles operate in demand-responsive mode within a zone, with one or more scheduled transfer points that connect with a fixed-route network.
Fixed Route	Vehicles travel on a fixed route and schedule
Express Service	Vehicles travel on fixed routes and schedules using limited stops



8.1 Community Bus

Community bus routes are fully accessible transit services typically designed for seniors and people with disabilities who can use fully accessible conventional transit. Rather than follow conventional routing patterns, these routes are specifically designed to provide better access to facilities oriented to this market group (door-to-door service), such as senior's residences, medical facilities, community centres, libraries, and shopping areas.

Currently, only three Community bus routes operate in York Region - Route 89 in Richmond Hill, Route 520 and Route 521 in Newmarket, and Route 522 in Markham. These routes have proven to be very popular with residents and provide an efficient alternative to the single use trips made using the more expensive Mobility Plus service.

Consideration will also be given to the socio-economic characteristics of the community and other factors such as travel demand management programs that may affect potential transit ridership.

Due to the nature of a Community bus route, operating and performance standards are somewhat less than for core or feeder routes.

Service Levels for Fixed Route Service - minimum service frequencies and spans of service as per the following, when operating:

Weekdays	60 minutes	6:00 am to 9:00 am / 3:00 pm to 7:00 pm
	120 minutes	9:00 am to 3:00 pm / 7:00 pm to 11:00 pm
Saturdays	120 minutes	6:00 am to 11:00 pm
Sundays/Holidays	120 minutes	9:00 am to 11:00 pm

Performance Targets Fixed Route Services – Community bus routes should equal or exceed the following performance levels; if they cannot meet these targets, possible remedies could include route changes, lower service levels or replacement by a demand responsive service:

Weekday Peak Hours	15 passengers per service hour, with a minimum performance of 5 boardings per hour
Other times	12 passengers per service hour, with a minimum performance of 4 boardings per hour

Service Warrants – Small community routes are dependent on the demand in residential or industrial areas. They can operate during weekday peak periods only, or can be extended to other periods and days depending on their ability to maintain the minimum performance targets after a one year trial period.

Route: 089 Richmond Hill Community Bus

Type: Community

Description: A Community bus route providing door to door service to various destinations in central Richmond Hill.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
✓	✓	✓		✓	✓
60 min	120 min	60 min	Not Applicable	60 min	60 min

Major Trip Generators: Senior residences along the route, York Central Hospital, Hillcrest Mall.

Boardings (2006):

Annual	35,015
Avg Weekday	102
Rev/Cost (%)	12.2
Boardings/Hr	5.7

Service Requests:

- One additional southbound trip

Discussion/Issues:

- Due to the increasing number of destinations along the route, consideration will be given to restructuring this route and possibly developing two separate branches. This will minimize travel time by providing more direct service

- Last southbound trip departs Richmond Heights at 4:30 pm and the inclusion of an additional southbound trip would allow for improved travel opportunities for existing Community Bus customers

Recommendation:

- Review route structure and schedules for possible route re-configuration
- Introduce one new southbound trip Monday to Saturday

Estimated Additional Costs:

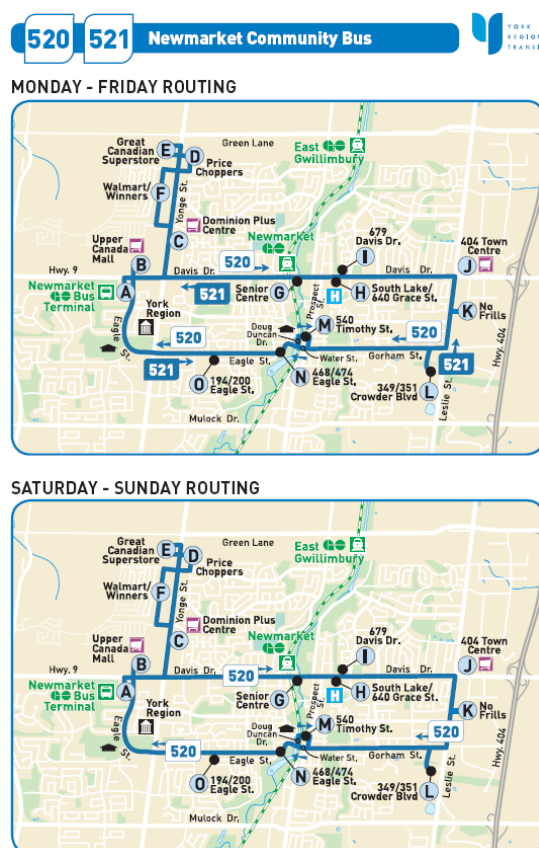
- Additional annual gross operating cost for restructuring Route 89 and adding one additional southbound trip Monday to Friday is \$25,000, however, it should be noted, due to pending budget constraints, the implementation of this service initiative has been identified for deferral to 2009
- Additional annual gross operating cost for restructuring Route 89 and adding one additional southbound trip Saturday is \$5,000, however, it should be noted, due to pending budget constraints, the implementation of this service initiative has been identified for deferral to 2009

Rte: 520/521 Newmarket Community Bus

Type: Community

Description: A community bus route providing door to door service to various destinations in Newmarket.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
	✓			✓	
Not Applicable	90 min	Not Applicable	Not Applicable	90 min	Not Applicable

Major Trip Generators: Senior residences along the route, Markville Mall, Markham Stouffville Hospital.

Boardings (2006):

Annual	18,313
Avg Weekday	55
Rev/Cost (%)	7.5
Boardings/Hr	3.5

Service Requests:

- Service request to Bogart Mill Residence
- Service request to Germania Senior Residence (Stonehaven Road)

Discussion/Issues:

- Due to the existing route length, no other service requests can be accommodated without exceeding the two hour maximum frequency service standard for community bus

Recommendation:

- Not Applicable

Estimated Additional Costs:

- Not Applicable

Route: 522 Markham Community Bus

Type: Community

Description: A community bus route providing door to door service to various destinations in central Markham.

Current Routing:



Operating Hours and Frequency:

AM Peak	Midday	PM Peak	Evening	Saturday	Sunday/Holiday
	✓			✓	
Not Applicable	90 min	Not Applicable	Not Applicable	90 min	Not Applicable

Major Trip Generators: Senior residences along the route, Markville Mall, Markham-Stouffville Hospital.

Boardings (2006):

Annual	921
Avg Weekday	19
Rev/Cost (%)	5.0
Boardings/Hr	2.3

Service Requests:

- Provide a community bus to/from Anna Russell Way for shopping and medical
- Provide service to No Frills
- Extend Markham Community to Pacific Mall

- Provide a community bus to/from St Luke's Lodge for shopping and medical

Discussion/Issues:

- Extend service to Anna Russell Way, frequency level would need to change from every 1.5 hours to 2 hours (one service request)
- When the Markham Connector was converted to the Markham Community Bus, YRT provided St Luke's shuttle service to/from Markville Mall and to/from Participation House (4 days per week). Due to low ridership, St Luke's shuttle service was discontinued
- Received only one request for service to/from Pacific Mall

Recommendation:

- Maintain the current routing and schedule
- St Luke's shuttle to be reinstated to a conventional service or charter service and open the service to all St Luke's residence (not just Mobility Plus users). Work with St Luke's Lodge to determine if this facility would charter YRT services

Estimated Additional Costs:

- N/A (charter service or use some of the resources from the Markham community bus)

Proposed New Community Bus Routes

Vaughan - Maple

Residents of Maple have expressed the desire to have a local Community Bus service. Particularly, residents have requested travel to York Central Hospital, and other destinations such as the Maple Health Centre and Longo's Plaza.

Given the socio-economic mix of the community, a review will be completed in Vaughan for the suitability of a Community Bus, and YRT will consider operating a limited, fully accessible, fixed route service. Routing is to be determined however, various key medical and retail/commercial facilities will be the focus of the route.

However, it should be noted that, due to pending budget constraints, the implementation of this service initiative has been identified for deferral to 2009.

Estimated Additional Costs*:

- Community bus proposals for Vaughan could amount to \$216,000

8.2 Demand Responsive Services

Demand Responsive refers to the provision of transportation services on a per person demand basis. The service is usually provided with an advance call process, whereby detailed information is taken with respect to the origin and destination of the trip. Demand Responsive services are currently operated by YRT, but only for specialized para-transit services for persons with disabilities (Mobility Plus). In Canada, this type of service provision is normally used for specialized para-transit services only, when door-to-door driver assistance is required.

Demand Responsive services have also been used in the transit industry for areas where conventional fixed services are not warranted, but where there is a desire to provide some form of publicly subsidized transit service. In fact, in the former Town of Markham, a Demand Responsive service called Transcab operated for several years (during late evening hours in local neighbourhoods) where demand did not justify full fixed conventional transit routes.

8.3 Zone Bus

Another good example of Demand Responsive services is the Zone Bus currently being operated by Oakville Transit. In this operation, riders are required to call Oakville Transit to request a pick-up from the nearest bus stop or major intersection and provide a destination point (also the nearest bus stop or major intersection). All calls must be placed at least 2 hours before the requested pick-up time. In addition to serving the requested pick-ups and drop-offs, the Oakville Zone Bus also meets the GO train hourly, serving these riders needs. Key success factors include a knowledgeable and courteous dispatcher, and bus operators well-versed in the community. Zone buses can expect to carry between 6-12 passengers per hour.

8.4 Dial-A-Ride

Dial-a-Ride is one of a number of transit initiatives that fall into the category of demand-responsive transit service. Dial-a-Ride in North America has primarily been used for transporting seniors, persons with disabilities, and for specific target markets (e.g. employees in business parks). These services are designed to provide immediate local travel within a specific travel zone/neighbourhood in a community. Customers call a central number and request a pick-up from their nearest conventional bus stop. Dispatchers then send out an accessible vehicle, within a specified time frame, to pick up the customer and take them to a key common destination or bus stop where regular, conventional, fixed-route transit services are offered. This type of service delivery model has traditionally been applied in areas where demand for transit is less than 10 passengers per hour and when destinations are common, such as a GO Station or a shopping mall.

In the case of the route 44 Dial-a-Ride pilot, the proposed service will have a dedicated vehicle stationed at the Newmarket Bus Terminal between the hours of 7:00 pm and 11:00 pm, Monday to Saturdays to accommodate requests. The local, conventional, fixed route service will be discontinued during the period when Dial-a-Ride is operating.

9.0 School Specials

9.0 School Specials

Secondary school students are an important market for YRT services. In fact, in some areas of the Region, high school students comprise over 35% of the local market. As such, many YRT services are scheduled to meet school bell times and routes are configured to provide direct access to the schools. Due to the large volumes of student riders carried on specific runs during the day, it is sometimes necessary to add extra runs to regularly scheduled services in order to avoid overcrowding. These extra runs are referred to as 'School Specials'. Normally, School Specials operate along existing transit routes, however, occasionally parts of the route are diverted to provide additional service coverage.

As part of the annual service planning exercise, discussions are held with the York Region School Boards (Student Transportation Services) in order to determine the following year's needs. Discussions focus on the construction of new schools, scheduling of bell times and changes in walking distance criteria.

An example of a School Special routing is shown below. As of September 2007, YRT operates 26 School Special routes. These runs are included on the YRT website and are marketed to York Region high schools.



THINGS TO DO, PLACES TO GO.
Join the student freedom movement.



COOL HANGOUTS

FAIRVIEW MALL Routes 90; TTC 25D; Viva Green
MARKVILLE MALL Routes 1, 40, 41; TTC 129A; Viva Purple, Green
PROMENADE MALL Routes 3, 5, 23, 77, 88; TTC 160; Viva Purple
UPPER CANADA MALL Routes 52, 55, 56, 57A, 98; Viva Blue
VAUGHAN MILLS MALL Routes 12, 20, 85, 360
WOODBINE CENTRE Route 7
YORKDALE MALL Route 360

FUN UNLIMITED

IN PLAY INC. Routes 98, 57/57A; Viva Blue
LASER QUEST Routes 86, 99; Viva Blue
LUCKY STRIKE LANES Routes 12, 20, 85, 360
NASCAR SPEED PARK Routes 12, 20, 85, 360
PIONEER VILLAGE Route 20
REPTILIA INC. Route 85
THE HELICOPTER COMPANY Route 85
THE WAVE POOL Routes 4, 99; Viva Blue

IT'S SHOWTIME

AMC INTERCHANGE Routes 20, 77; TTC 35D; Viva Orange, Purple
AURORA CINEMAS Routes 31, 32, 33, 54
COLOSSUS Routes 10, 77; TTC 165; Viva Orange, Purple
ELGIN MILLS Routes 83, 86, 90, 98, 99; Viva Blue
FIRST MARKHAM PLACE Routes 1; Viva Pink, Purple
GEM THEATRE Route 51
SILVERCITY NEWMARKET Routes 52, 98
SILVERCITY RICHMOND HILL Routes 1, 83, 87, 99; Viva Blue, Pink, Purple

ROUTES///HIGH SCHOOL

AURORA

Aurora High School
Cardinal Carter CHS
Dr. G.W. Williams Secondary School

ROUTE NUMBER

31, 32, 33
22, 84A, 84C, 98, 443*; Viva Blue
32, 98; Viva Blue

GEORGINA

Keswick High School
Our Lady of the Lake CHS

50, 51, 424*
50, 51

KING

King City Secondary School

22

MARKHAM

Brother André CHS
Father McGivney Catholic Academy
Markham District High School
Markville Secondary School
Middlefield Collegiate Institute
Milliken Mills High School
Pierre Elliott Trudeau High School
St. Augustine CHS
St. Robert CHS
Thornhill Secondary School
Thornlea Secondary School

41, 85, 400*, 401*; TTC 102D
2A, 404*; TTC 129A
1, 2A, 409*
40, 41; TTC 129A
2, 2A
2A, 8
8, 18
40, 85; TTC 224D
3, 3B, 82, 90, 413*, 445*; TTC 25D
5, 77, 99; Viva Blue, Pink
3, 91, 91A

NEWMARKET

Dr. J.M. Denison Secondary School
Huron Heights Secondary School
Newmarket High School
Sacred Heart CHS
Sir William Mulock Secondary School

44, 52, 98
55, 55B, 422*
57, 57A, 58, 420*, 421*
56
57, 98

RICHMOND HILL

Alexander Mackenzie High School
Bayview Secondary School
Langstaff Secondary School
Richmond Green Secondary School
Richmond Hill High School
St. Theresa of Lisieux CHS

4, 4A, 83, 83A, 89
4, 4A, 82, 91, 91A, 442*
83, 83A, 87, 99, 444*; Viva Blue, Purple
82, 83A, 90, 449*
83, 86, 440*, 441*, 448*; Viva Blue
83, 88, 90, 440*, 446*

VAUGHAN

Emily Carr Secondary School
Father Bressani CHS
Holy Cross Catholic Academy
Maple High School
St. Elizabeth CHS
St. Jean de Brebeuf CHS
St. Joan of Arc CHS
Stephen Lewis Secondary School
Vaughan Secondary School
Westmount Collegiate Institute
Woodbridge College

10, 13, 85, 461*
10, 12
7, 460*
4, 20, 87, 360, 462*
3, 3B, 5, 23, 77, 83, 88; TTC 160; Viva Purple
85B; TTC 165D/F
4, 360; TTC 107C/F
23, 87; TTC 105
5; TTC 105
3, 3B, 23, 88; TTC 160; Viva Purple
11, 13, 77; Viva Orange, Purple

WHITCHURCH-STOUFFVILLE

Stouffville District Secondary School

9, 9A

*High school specials run on school days only.

FARES (1 ZONE)*

	CASH	10 TICKETS	MONTHLY PASS
Student*	\$2.50	\$17.00	\$60.00

*Full-time secondary school students must present a valid student I.D. card with tickets and monthly passes.

† For 2 zone fare information refer to the route map or visit our website

HOW TO REACH US

Call 1 866 MOVE YRT [1 866 668 3978] or
visit yrt.ca for schedules and ticket agent locations.



10.0 Summary of Recommendations

2008 Service Plan - Draft Priority List

Revised: August 10, 2007 10:30am (further cuts to reflect later start dates on Priority-1 items only)

2008 Priority 1 Initiatives																Fleet Availability?			
Item #	Route	Municipality	Details	Date	2008 Rev. Hours	Annualized Rev. Hours	Fleet			Grwth	Enh	Yes (A)		No (B)		N/A (C)			
							60'	40'	30'			2008Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.		
1	2 - Milliken	Markham	Route extension east of Hwy 48 via Denison St. and Elson St. (Weekday peak periods, more running time required), add one new eastbound trip at 3:15 pm	Apr/27	1,368	2,024		1		G									
2	2A - 14th Ave	Markham	Route extension east of 9th Line via Copper Creek Dr., Donald Cousens Parkway & Box Grove By-Pass (peak periods)	Apr/27	1,368	2,024		1		G									
3	4 A - Major Mackenzie	Vaughan, Richmond Hill, Markham	Route extension to Ninth Line / Highway 7 (Terminal TBC) weekday peak; Implement 4A during midday & evening	Aug/31	2184	6578		1		G									
4	9 - 9th Line 15 - Stouffville Local	Markham, Whitchurch-Stouffville	Rt 9 along 9th Line between Bur Oak/Hwy 7 & Westlawn, Rt 15 Expand to new areas (ie Millard and Hwy 48)	Apr/27	1,710	2,530			1	G									
5	23 - Thornhill Woods	Richmond Hill, Vaughan, Toronto	Extend weekday peak period service north of Rutherford into 'Upper Thornhill Village' (Block 11)	Apr/27	1,197	1,771			1	G									
6	27 - Highway 27	Vaughan	Route extension further north to service new industrial development area (Vaughan Enterprise Zone) during weekday peak periods	Apr/27	1197	1771		1		G									
7	27 - Highway 27	Vaughan	To cover the assumption of full cost of existing weekday service (anticipating termination of Royal 'charter' arrangement)	Apr/27	1667	2467		1		G									
	27 - Highway 27 (Sat)	Vaughan	To cover the assumption of full cost of existing Saturday service (anticipating termination of Royal 'charter' arrangement)	Apr/27	341	507				G									
	27 - Highway 27	Vaughan	To cover the assumption of full cost of existing Sunday service (anticipating termination of Royal 'charter' arrangement)	Apr/27	419	595				G									
8	31 - Aurora North	Aurora	Reduce to weekday peak hour service. Annual operating cost savings to be used to offset the cost of New Route 33A branch	Apr/27															
	33A - Wellington (New)	Aurora	Route 33A Wellington to be introduced to replace Route 31 service in the Spring Farm and Berkshire Subdivisions Monday to Saturday	Apr/27															
9	34 - Industrial Pkwy	Aurora	Route to be discontinued due to poor performance. Approximately 2404 annual hours savings and one peak hour bus	Jan/28	-2233	-2404													
10	42 - The Bridle Walk (New)	Markham	Introduce The Bridle Walk route during weekday peaks (30 min frequency, makes GO Train connections)	Aug/31	1344	4048			2	G									
11	44 - Bristol London	Newmarket	Discontinue Route. Combine the existing service with current Route 55B to form a New local Route 59 Bristol – Leslie Valley	Apr/27															
	55B - Davis Dr	Newmarket	Discontinue Route. Combine the existing service with current Route 59 to form a New local Route 59 Bristol – Leslie Valley	Apr/27															
	59 - Bristol (New)	Newmarket	Combine the current Route 55B route with the current Route 44 routing to form a New local Route 59 Bristol – Leslie Valley	Apr/27															
12	53 - Woodspring (New)	Newmarket	Introduce Woodspring local route weekday peak service	Apr/27	3,078	4,554			2	G									
13	55 - Davis Dr	Newmarket	Route extension east to Harry Walker and West to service Upper Canada Mall (Harry Walker Restructuring)	Apr/27															
	56 - Harry Walker	Newmarket	Restructure route to service Harry Walker (Harry Walker Restructuring)	Apr/27															
	57 - Mulock	Newmarket	Restructure route to service Harry Walker. Stonehaven service to be discontinued (Harry Walker Restructuring)	Apr/27															
14	58 - Leslie North	East Gwillimbury, Newmarket, Aurora	Reverse the Sharon loop in order to improve schedule adherence and safety	Apr/27															
15	83 - Trench	Richmond Hill	Re-route route southbound service at Hillcrest Mall to operate on the North Service Road and the Back Service Road.	Apr/27															
16	84 - Oak Ridges	Richmond Hill	Restructure route to include new local service to Bayview and Old Colony Road	Aug/31															
17	85 - Rutherford/16th Ave	Vaughan, Richmond Hill, Markham	Route 85 restructuring - Discontinue west end service from Napa Valley to Vaughan Mills Mall. Route will operate from Vaughan Mills Mall to Markham Stouffville Hospital and Cornell, Monday to Sunday. Service from Napa Valley to be replaced with Route 85A.	Apr/27							E								
	85A - Rutherford	Vaughan, Richmond Hill	Introduce Route 85A to replace the existing Route 85 service from Napa Valley to Yonge Street only. The route would service Napa Valley, Vaughan Mills Mall, Rutherford GO Station and Viva Blue	Apr/27	2,565	3,795		2			E								
	85A - Rutherford / 16th Ave	Richmond Hill, Markham	Route 85A branch would be discontinued and replaced with a New Route 244 Beaver Creek Shuttle	Apr/27															
	244 - Beaver Creek Shuttle (New)	Richmond Hill, Markham	Introduce new route 244 Beaver Creek Shuttle to replace existing route 85A within Beaver Creek	Apr/27															
	85B - Rutherford / 16th Ave	Vaughan, Richmond Hill, Markham	Route 85B branch would remain unchanged and will be combined with the New Route 244 Beaver Creek Shuttle to offer a peak hour 10 minute service within the Beaver Creek Business Park	Apr/27	1,539	2,277													

2008 Service Plan - Draft Priority List

Revised: August 10, 2007 10:30am (further cuts to reflect later start dates on Priority-1 items only)

2008 Priority 1 Initiatives <i>(continued)</i>																	Fleet Availability?			
Item #	Route	Municipality	Details	Date	2008 Rev. Hours	Annualized Rev. Hours	Fleet			Grwth	Enh	Yes (A)		No (B)		N/A (C)				
							60'	40'	30'			2008Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.			
18	88 - Bathurst	King, Richmond Hill, Vaughan, Toronto	Improve weekday peak frequency from 20 to 15 minutes	Apr/27	3,848	5,693		3			E									
	88 - Bathurst - Sat	King, Richmond Hill, Vaughan, Toronto	Extend Saturday service north to Seneca King Campus; possible Frequency improvements to every 30 minutes	Apr/27	980	1,456					E									
	88 - Bathurst - Sun	King, Richmond Hill, Vaughan, Toronto	Extend Sunday service north to Seneca King Campus	Apr/27	1,118	1,586					E									
19	90 - Leslie South	Richmond Hill, Markham, Toronto	Route extension south to Don Mills Station and improve midday frequency to 30 minutes due to Viva Green Cancellation (option of widening Rt 25D midday frequency)	Apr/27	2,394	3,542					E									
	90 - Leslie South - Sat	Richmond Hill, Markham, Toronto	Route extension south to Don Mills Station and improve frequency to 30 minutes on Saturdays due to Viva Green Cancellation	Apr/27	840	1,248					E									
20	102D - Markham Rd North (TTC)	Toronto, Markham	Improve weekday midday frequency from current 60 min to 30 min	Apr/27	1,026	1,518				G										
21	105 - Dufferin North (TTC)	Toronto, Vaughan	Extend weekday peak period service north of Rutherford to Major Mackenzie	Apr/27	1,197	1,771					E									
22	165 - Weston Rd North (TTC)	Toronto, Vaughan	Extend weekday peak period service north of Major Mackenzie to Teston	Apr/27	1,197	1,771					E									
23	223 - Newmarket GO Shuttle	Newmarket	Route to be discontinued if targeted marketing campaign does not result in improved financial and ridership performance. Approximately 1012 annual hour	Aug/31	-336	-1012														
24	224D - Victoria Park North (TTC)	Toronto, Markham	Improving weekday peak frequency from 40 minutes to 20 minutes	Apr/27	2,565	3,795				G										
	224D - Victoria Park North (TTC)	Toronto, Markham	Route extension north of Major Mackenzie Dr to Elgin Mills Rd (weekday peak periods)	Apr/27	2,565	3,795				G										
25	242 - North Richvale GO Shuttle	Richmond Hill	Restructure route to operate within Upper Thornhill Village	Apr/27																
26	300 - Business Express	Markham	Reduce the service frequency from 15 minute service to 20 minutes during the AM peak period and from 20 to 30 minutes during PM peak period. Cancel the last pm trip at 7:06pm from the IBM loop. Approximately 1012 annual hours savings	Jan/07	-940	-1012														
27	303 - Cornell Express	Markham	Route extension along Bur Oak Ave to McCowan Rd	Apr/27	171	253				G										
28	522 - Markham Community Bus	Markham, Toronto	St Luke's shuttle to be reinstated as a conventional service and open the service to all St Luke's residence (no just Mobility Plus users)	Apr/27																
29	Inspiration/Macleod Landing (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 30 minutes during weekday peak periods	Apr/27	3,078	4,554			2	G										
	Inspiration/Macleod Landing (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 60 during minutes off-peak and evening	Apr/27	1,539	2,277				G										
	Inspiration/Macleod Landing - Sat (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 60 minutes	Apr/27	700	1,040														
30	Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)	Aug/31	2663	8020	5			G										
31	Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Weekday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)	Apr/27	7074	7615	3			G										
32	Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Saturday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)	Apr/27	1008	1092				G										
33	Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Sunday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)	Apr/27	1077	1153				G										
Priority 1 Total:					51,508	82,692	8	10	8											

2008 Priority 1 Initiatives Summary by Division			2008 Rev. Hours	Annualized Rev. Hours
Division 1 - Miller (Markham)			5,021	9,867
Division 2 - Laidlaw			510	1,139
Division 3 - Miller (Richmond Hill)			12,655	18,733
Division 4 - Canar			12,951	22,423
Division 5 - Stock				
Division 7 - Veolia			11,822	17,880
Division 11 - Tokmakjian				
TTC			8,550	12,650
Total			51,508	82,692

2008 Service Plan - Draft Priority List

Revised: August 10, 2007 10:30am (further cuts to reflect later start dates on Priority-1 items only)

2008 Priority 1a Initiatives - Defers to 2009																	Fleet Availability?
Item #	Route	Municipality	Details	Date	2008 Rev. Hours	Annualized Rev Hours	Fleet			Grwth	Enh	Yes (A)		No (B)		N/A (C)	
							60*	40*	30*			2008Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.	2008 Hrs.	Ann. Hrs.
34	1 - Hwy 7	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)	Jan/28	1880	2024		1		G							
	1 - Hwy 7 (Sat)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)	Jan/28	480	520				G							
	1 - Hwy 7 (Sun)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)	Jan/28	570	610				G							
35	2 A - 14th Ave	Markahm	Route Extension to Grand Cornell (Terminal TBC)	Aug/31	1130	3403		1		G							
36	33 - Wellington	Aurora	Route extension west to Bathurst & introduce new weekday midday service from 9:00 am to 1:00 pm	Apr/27	1710	2530					E						
37	45 - Mingay (New)	Markham	Introduce Mingay route during weekday peaks (30 min frequency, makes GO Train connections)	Aug/31	1344	4048			2	G							
38	58 - Leslie North	Aurora	Route extension south on Leslie St to State Farm at 60 minute frequency 6 am - 10 pm on weekdays	Apr/27	3078	4554			1	G							
39	69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 3 additional Weekday round trips from Newmarket to Sutton	Apr/27	1026	1518				G							
40	69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 6 additional Saturday round trips from Newmarket to Sutton	Apr/27	333	494				G							
41	85 - Rutherford/16th Ave - Sat	Vaughan, Richmond Hill, Markham	Improve Saturday late evening service - add one extra trip in both directions	Apr/27	140	208					E						
42	89 - RH Community Bus	Richmond Hill	Route Restructuring and add one extra southbound trip	Apr/27	171	253					E						
43	89 - RH Community Bus - Sat	Richmond Hill	Route Restructuring and add one extra southbound trip	Apr/27	35	52					E						
44	Vaughan Community Bus	Vaughan	New weekday Community Bus service in Maple	Jan/28	1718	1849			1	G							
	Vaughan Community Bus - Sat	Vaughan	New Saturday Community Bus service in Maple	Jan/28	176	190											
	Vaughan Community Bus - Sun	Vaughan	New Sunday Community Bus service in Maple	Jan/28	104	112											
Priority 1a Total:					13,894	22,365		2	4								

2008 Priority 1a Initiatives Summary by Division		2008 Rev. Hours	Annualized Rev. Hours
Division 1 - Miller (Markham)		5,404	10,605
Division 2 - Laidlaw		6,147	9,096
Division 3 - Miller (Richmond Hill)		140	208
Division 4 - Canar			
Division 5 - Stock			
Division 7 - Veolia			
Division 11 - Tokmakjian		2,204	2,456
TTC			
Total		13,894	22,365

11.0 Appendices

Appendix A: 2006 Route Performance Assessment

Appendix B: Service Standards

Appendix C: Current Service Frequency and Span of Service

Appendix D: Service Initiatives by Municipality

Appendix A: 2006 Route Performance Assessment

Table Updated: May 16, 2007

Legend
Meets or exceeds the average within the route class
Between the average and half the average within the route class
Less than half the average within the route class

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Appendix B: Service Standards

York Region Transit

Five-Year Transit Service Plan (2006–2010)

Service Standards – Background Paper #1

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York Region Transit

Five-Year Transit Service Plan (2006–2010)

Background Paper #1 – Service Standards

ENTRA Consultants conducted a workshop with YRT planning staff to review the current service standards, examining strengths and weaknesses within the standards from a staff perspective, and reviewing opportunities for new standards. This discussion paper presents the results of a detailed review of the current standards, considering the workshop input and proposes revisions, additions and deletions for consideration by the Steering Committee.

This discussion paper is based on the existing standards as presented in Chapter 2 of the York Region Transit 5-year Service Plan – Conventional Transit (May 2002), and should be read in conjunction with that document (included in Appendix A). The purpose of this review is to confirm the existing standards, update or revise where necessary, and introduce new standards based on staff requirements for analysis tools.

Generally, ENTRA supports the current approach to service standards application, but believes that staff and the public are better served by standards that are phrased in such a way as to require action when they are not met, but provide flexibility in what action to take. This differs from the current approach that calls for flexibility in whether or not a particular standard is applied in any given case. The preferred presentation still gives staff flexibility to recommend the most appropriate course of action, considering different and possibly competing standards, while being able to demonstrate that a particular standard was applied in every case.

Many of the changes suggested in this brief are intended to conform to this approach, or to provide clarity where staff has indicated some concern. In other cases, revisions are suggested to explicitly revise the standards or its measure.

1. New and Updated Standards

1.1 Route Directness

A new standard is proposed to help define service and assist planners in route design. **Route Directness** is a measure comparing the actual travel distance to the most direct route, indicating the degree to which the route deviates from the direct path. It is measured as the actual route distance between the route terminals in a ratio to the most direct feasible route between the route terminals within the corridor served.

For routes involving loops, the route is measured from the furthest point of a one-way loop, and from the midpoint of a two-way loop. The ratio indicates the maximum deviation experienced on

the route (not all passengers will experience this maximum, based on specific origins and destinations).

Each route type is assigned a range of values in this standard, reflecting the intent of the route design in that category. Base Routes should have the lowest ratio, while local and community bus ratios should be higher.

1.2 Route Deviations

In combination with the Route Directness standard, an additional design guideline is proposed to assist staff in determining the route structure for services to schools, GO stations, major employers or other major attractors. This measure considers the added value of deviating from a direct route to serve the major area, versus the inconvenience to those passengers already on the bus.

Route deviations must attract net new passengers to the route (not merely reduce the walking distance for existing passengers) in sufficient numbers to warrant the deviation. The projected ridership should be evaluated in terms of the revised boardings per hour, based on the revised service design required to accommodate the deviation. For example, if the additional travel time requires additional resources in terms of service hours, the deviation should only be accommodated if it improves the overall performance of the route.

If the revised service design can be accomplished with the existing resources (typically less than one or two minutes), the new ridership gained should be no less than 25 percent of the passengers diverted through the detour.

1.3 Performance Standards

Staff expressed some concern over the threshold levels, the steps between peak and off-peak periods and between Base routes and other route types. Based on 2004 data, the system is currently averaging approximately 23.3 revenue passengers per hour and 26.2 boardings per hour on all routes during all time periods, equating to a cost recovery ratio of approximately 51 percent.

To establish thresholds for performance of routes requires an acknowledgement that various routes, even within the same class of service, will vary in their performance, with some exhibiting superior performance and others exhibiting lower performance levels. To meet a variety of system objectives, top-performing routes must be allowed to support other lower performing routes, ensuring that:

- ~ the average performance meets system objectives; and
- ~ a minimum performance level is established and met.

For this purpose, and in the balance of this discussion, ENTRA recommends that route performance be assessed on the basis of total boardings per hour, since this statistic will credit those routes that perform a significant transfer role in the system. Depending on the level of data available, this assessment can be conducted on the entire route, a route segment, or a specific period of the day.

Average performance levels should be established on the basis of overall requirements and minimum performance levels should be established relative to that average performance. Transit route performance typically reflects a pattern that is somewhat normally distributed, with a slight skew to below-average performing routes. This means that the above-average and below-average routes usually involve a similar number of routes, except that there is typically a small number of very poor performing routes that is not balanced by a similar number of extremely well-performing routes. This typical pattern gives us the opportunity to establish a minimum threshold for performance. Typically, a performance level equivalent to approximately one-third of the average performance centers the majority of the routes on the average performance and isolates the poor performers. In terms of boardings per hour, this would mean a value equal to one-third of the target rate would represent an appropriate minimum standard.

Based on peer performance, YRT routes would need to average approximately 25 to 30 boardings per hour, system-wide in all periods to achieve a cost recovery ratio of 50 to 60 percent. However, since the different classes of routes have different expectations and ridership potential, the values should be established separately for each route type, while ensuring that the overall average can be met.

1.3.1 Core Routes (Base Grid)

Routes currently designated as Core Routes account for approximately 72 percent of the service hours. This would suggest that Core Routes would need to average approximately 28 to 33 boardings per hour in all periods, with other routes accounting for an average of 22 to 26 boardings per hour, to achieve the 50 to 60 percent cost recovery range.

Base Grid routes, because they are required to meet the service coverage standards, and are mandated in all operating periods, are not strictly assessed against the performance standards.

Base Route average performance is established at 30 boardings per hour, with a minimum performance of 10 boardings per hour. This means that EACH route must exceed the minimum 10 boardings per hour, with the overall average at 30 boardings per hour. Any route that does not meet the minimum target must be examined to identify significant remedial action. If the overall average is not met, then other routes must also be examined for remedial action opportunities. Principles of continuous quality improvement suggest that the averages and thresholds be regularly updated and adjusted upwards. Establishing the minimum threshold at one-third the actual performance rather than the required target will ensure this continual improvement.

1.3.2 Other Routes

Within the existing framework, routes not designated as Base routes need to average 25 boardings per hour, with a minimum threshold of 8 boardings per hour to achieve the current productivity requirements.

1.4 Vehicle Loading Standards

These loading standards are typical of many systems' standards, but staff has indicated some concern over the specific threshold levels, and the clarity of the wording. With respect to thresholds, it is appropriate to strive for to provide a seat to all off-peak customers, in consideration of less frequent service.

For peak services, the 150 percent threshold is typical, but may be problematic with the range of vehicles currently operated throughout the region. The approach depends on whether the objective is to limit standees, or limit vehicle crowding. Similar sized buses in the YRT fleet have similar overall capacities but differ in their seating capacities depending on configuration. If the objective of this standard is to limit standees, then the 150 percent threshold remains appropriate, and consideration should be given to matching the capacity of the vehicles to the ridership levels on the route, to avoid unnecessary increases in service levels.

If the objective of this standard is to limit overall crowding on the vehicle, consideration should be given to a fixed numerical standard for each bus size as follows:

- ~ 40-foot bus: average of 55 passengers per vehicle (at the peak point of the route, measured over the peak 60-minute period)
- ~ 35-foot bus: average of 48 passengers per vehicle
- ~ 30-foot bus: average of 40 passengers per vehicle

2. Revised Standards

The remaining headings in this document are the same as those used in the current service standards.

2.1 Route Coverage

Generally, this standard providing for 500-meter coverage to 90 percent of the urban area is typical of many industry applications and appropriate for YRT in its intent. The limitation of this wording is in the implication of on-going monitoring and assessment of the route network that is not necessarily practical to achieve. The standard also implies a type of specific performance suggesting that services will be provided where the standard is not met.

2.1.1 Proposed Wording

YRT will consider new or revised routes to serve residents, places of work, secondary and post-secondary schools, major shopping centres and public facilities in the urban area that are beyond a walking distance of 500 metres of a bus stop during the daytime Monday through Saturday and 1,000 metres of a bus stop during the evening and all day Saturdays and holidays.

Areas within this standard may be considered for improved services based on performance criteria.

2.1.2 Discussion

In this format, the standard can be consistently applied by considering, but not necessarily implementing a route to serve new areas. There is no requirement for complex on-going measurements, but the intent of the original standard is preserved.

The objective of this standard is to provide service to approximately 90 percent of the urban area.

2.2 *Base Grid Route Standards*

In reviewing the definition of the Core Route, and its performance requirements, there is an apparent conflict between the need for Core Routes to provide the highest level of service at the best performance levels, and the need to provide “a basic level of mobility to all residents in the urban area”. Providing this basic level of mobility will necessitate the inclusion of some routes that do not warrant enhanced service levels and are not capable of achieving the prescribed performance levels. ENTRA recommends that the definition of a core route be revised to remove the reference to basic mobility. In so doing, the Committee adopted the name “Base Grid” or “Base Route” for this designation, reflecting the notion that these routes provide the base level of service, ensuring the coverage standards are met.

Base Grid routes will operate in the major travel corridors on the main arterial roads in the urban transit service area. Generally, they will form a basic grid route network, connecting major origins and destinations. As required routes to meet the coverage standards, the Base Grid of routes is not subject to the minimum productivity standards. However, these routes should always be reviewed in this context, and if a route or route portion consistently falls below standard, consideration should be given to re-designating the route, subject to maintaining the required coverage.

2.2.1 Route Structure

Base Routes shall operate in major east-west and north-south corridors focused on the main transit centres in or near the urban transit service area including the GO Stations, the TTC subway stations, and any designated transit terminals such as those in major shopping malls.

Viva routes should be considered for major Base Grid corridors where higher levels of service can be supported. These routes should be direct, with limited stops at key origins and destinations.

2.2.2 Route Directness:

Deviation from the corridor of Base routes should be kept to a minimum, with the route directness measure within a range of 1.0 to 1.10. Branches of Base routes designed to serve specific destinations during peak periods should be considered feeder routes, with those standards applied

2.2.3 Service Levels

DISCUSSION

For Base routes as redefined, the existing standards remain appropriate as minimum service frequency and service spans. However, clock-face schedules cannot always be achieved and can result in unwarranted additional operating cost and therefore should not be included in a prescriptive standard.

ENTRA recommends that clock-face headways be included as a service guideline, for any route operating with a headway wider than 10 minutes.

ENTRA also suggests that the provision to ignore the minimums in certain areas be removed, since services in these areas should not be defined as Base routes.

PROPOSED WORDING

Minimum service frequencies in the Base Route corridors (including supplementary feeder branches) and minimum spans of service:

Weekdays	20 minutes	6:00 to 9:00 am / 3:00 to 7:00 pm
	30 minutes	9:00 am to 3:00 pm / 7:00 to 11:00 pm
Saturdays	30 minutes	6:00 am to 11:00 pm
Sundays/Holidays	60 minutes	9:00 am to 11:00 pm

2.2.4 Vehicle Loadings

Vehicle loading standards for Local Routes are subject to the discussion as outlined in Section 1 on Page 4.

2.3 *Viva Standards*

Standards for Viva services are described separately in Background Paper #8 – Rapid Transit Considerations, prepared by the York Rapid Transit Corporation.

2.4 *Local Route Standards*

The definition for Local Routes is modified slightly to reflect the modification to Base Routes definition, recognizing that branches of Base Routes are essentially feeder routes. Also, a slight revision is incorporated to reflect the emphasis of the collector road network in providing local and feeder service. Also, the dual designation of Local (Feeder) is eliminated, since it serves no useful function in differentiating the routes.

Local routes will circulate the various communities in the urban transit service area and will connect the communities to the major local activity centres or corridors and to the Base network where transfers between routes can be made. They will provide a feeder or neighbourhood circulation function in the transit system supplementing the Base route network.

2.4.1 Route Structure

Local Routes should operate primarily on collector roads to serve a transit focal point or main activity centre local destinations. Operation on local roads should only be accommodated when required for operational needs (such as a turn-around), or to serve major passenger destinations.

2.4.2 Route Directness

Configuration of Local Routes should be designed to provide direct service, with deviations to serve local areas and major destinations. The route directness measure for Local Routes should be within a range of 1.0 to 1.20. Branches of Base routes designed to serve specific destinations during peak periods should be considered Local routes.

2.4.3 Service Levels

Minimum service frequencies spans of service as per the following, when operating. Decision to operate in any period is subject to achieving minimum performance requirements.

Weekdays	30 minutes 6:00 to 9:00 am / 3:00 to 7:00 pm
	60 minutes 9:00 am to 3:00 pm / 7:00 to 11:00 pm
Saturdays	60 minutes 6:00 am to 11:00 pm
Sundays/Holidays	60 minutes 9:00 am to 11:00 pm

2.4.4 Vehicle Loadings

Vehicle loading standards for Local Routes are subject to the discussion as outlined in Section 1 on Page 4.

2.4.5 Performance Standards

In the discussion of this standard, an overall performance target averaging 25 boardings per hour was identified. As with Base Routes it would be intuitive that the peak value would be higher than the average (perhaps 30), and the off-peak somewhat lower (perhaps 22).

Based on this information, ENTRA recommends a peak target of 30 boardings per hour and an off-peak target of 22 boardings per hour be established as the average threshold, subject to verification.

Weekday Peak Hours: all routes averaging 30 passengers per service hour, with a minimum performance of 10 boardings per hour

Other Times : all routes averaging 22 passengers per service hour, with a minimum performance of 7 boardings per hour

2.4.6 Service Warrants

The revision to the calculation of the performance standards eliminates the need to provide a service warrant standard.

2.5 *Express Routes (Updated Standard)*

Staff expressed an interest in developing a set of standards to guide the development and evaluation of express routes, and this section addresses this type of service. Express routes can be divided into two major categories, depending on how they operate and the main function they fulfill. *Overlay Express* routes are those that duplicate a service (typically a Base Route) in a specific corridor, and are used to enhance customer service. These are established in corridors where buses often fill to capacity along the route and most passengers are destined to a common point, such as the subway. *Point Express* routes are those that carry significant numbers of passengers between two distinct points, such as the subway and a major employer, and do not depend on a significant local service area for their passengers.

Currently, most Express routes operate in the Markham area, and would be considered point express routes.

2.5.1 Route Structure

OVERLAY EXPRESS

These routes follow the same route structure as the underlying route, with a designated express portion of the route where few or no stops are made. Express portions should be designed to ensure that 75 percent 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 percent of the regular route travel time (minimum 5 minutes).

POINT EXPRESS

A Point Express has no defined route structure, but should incorporate the fastest route in terms of overall travel time between the two points.

2.5.2 Route Directness

OVERLAY EXPRESS

The route directness measure for Overlay Express routes should be equal to or less than that of the underlying route. Within the express or limited stop portion of the route, no route deviations should be incorporated.

POINT EXPRESS

The route directness measure for Point Express routes should be 1.0 outside of any local service area. Local service areas should be limited to 2 stops.

2.5.3 Service Levels

Minimum service frequencies and spans of service do not apply. Service is determined by passenger loading and performance standards.

2.5.4 Vehicle Loadings

Vehicle loading standards for Express Routes are subject to the discussion as outlined in Section 1 on Page 4.

Point Express routes that use highway routings or otherwise operate at high speeds should be limited to 100 percent of seating capacity *per vehicle*.

2.5.5 Performance Standards

Current Express routes operate at performance levels between 31 and 58 boardings per hour, with a minimum 31 boardings per hour and average 37 boardings per hour.

POINT EXPRESS

These routes, by definition, serve specific connections, and are not available to the general ridership in the areas they serve. As such, these routes need to perform at a high standard to justify the exclusivity of the service. ENTRA recommends a performance level averaging 35 boardings per hour, with a modified minimum threshold for these routes set at 30 boardings per hour.

OVERLAY EXPRESS

These routes can be designed to be more widely available to the general ridership, and therefore should can incorporate a wider range of performance. The Base Route values for peak services are set as the performance standards for these routes in all operating periods.

All Operating Periods: all routes averaging 35 passengers per service hour, with a minimum performance of 12 boardings per hour, subject to the following conditions:

- ~ introduction of an overlay express route must maintain the performance levels of the remaining route at current levels; and
- ~ projected performance of the new overlay express must exceed that of the current route.

Service Warrants

Service warrants for Express routes are determined by performance levels.

2.6 GO Shuttles (*Updated Standard*)

Staff expressed an interest in developing a set of standards to guide the development and evaluation of GO Shuttle routes, as opposed to Local services and this section addresses this type of service.

The introduction of a GO Shuttle depends on whether or not the relevant GO Station is or can be easily served by a Local or Base Route within the route network and the limits of the Route Directness standards for those routes.

If a Local Route is not provided, the introduction of a GO Shuttle should consider the cost and effectiveness of introducing such a service, according to each of the standards and warrants for Local routes. For example, the first consideration is the overall cost in terms of service hours and equipment requirement to service the station with a Shuttle versus a local route. Second, is a determination of whether an existing route can be modified.

If a Local Route does serve the GO Station, then the GO Shuttle should be held to similar standards as a Point Express Route, for similar reasons.

2.6.1 Route Structure

GO Shuttles are designed to provide local service to GO Train Stations. Routes should be designed with consideration for the specific train schedule and to permit a schedule that assures train-meet service. This means limiting travel time to approximately 20 to 25 minutes to allow some flexibility in daily travel times.

2.6.2 Route Directness

Within the maximum travel time constraints, shuttle services can incorporate more circuitous routings to maximize the service area. Route directness value should always be minimized, but can range from 1.25 to 1.75.

2.6.3 Service Levels

Minimum service frequencies and spans of service do not apply. Service frequency is determined by train schedules as established by GO Transit. Decision to provide shuttle service to train-related bus services is based on minimum performance levels.

2.6.4 Vehicle Loadings

Vehicle loading standards for GO Shuttle routes are limited to 100 percent of seating capacity *on average*.

2.6.5 Performance Standards

GO Shuttle performance will vary depending on the design rationale. If the route was introduced instead of a Local Route, local route standards apply. If the Shuttle is introduced to provide enhanced service for a specific neighbourhood, a higher standard applies, similar to the Point Express model, but adjusted to account for the more local nature of the route configuration.

All Train/Bus meets: all routes averaging 25 passengers per service hour, with a minimum performance of 20 boardings per hour

Note that based on current performance, only 4 of the 11 Shuttle services meet this minimum standard.

2.6.6 Service Warrants

Service warrants for Express routes are determined by performance levels.

2.7 School Specials (Updated Guideline)

Staff expressed an interest in developing a set of standards to guide the development and evaluation of School specials, as opposed to Local services and this section addresses this type of service. This section recommends a new service design guideline, not a prescriptive standard.

The introduction of a School Special is similar to that of a GO Shuttle, in that it depends on whether or not the relevant school is or can be easily served by a Local or Base Route within the route network and the limits of the Route Directness standards for those routes.

If a Local Route is not provided, the introduction of a School Special should consider the cost and effectiveness of introducing such a service, according to each of the standards and warrants for Local routes.

If a Local Route does serve the School, then the School Special should be held to higher standards, similar to the GO Shuttle or Point Express, for similar reasons. Alternatively, a tripper (extra bus) scheduled to accommodate the surge in demand from the school and leave the regular route at normal loading standards should be considered.

2.8 Community Bus Standards (Including Small Communities)

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

For the purpose of these standards, local transit services in smaller communities outside of the urban areas in the 5 major municipalities are included in this category. This is because their smaller population levels may make it difficult for bus routes to meet the performance standards of base or local routes within the urban areas.

2.8.1 Route Structure

Where population and transit demand is sufficient to justify fixed route service, these routes operate on arterial and collector roads, focused on a transit centre or main activity centre. Where

population served does not justify fixed route service but does justify an alternative service, operate demand responsive service, either independently or integrated with specialized service.

POPULATION TARGETS

Population targets for considering services should not be included in a prescriptive standard, since a service in any community should be operated if it meets performance standards. However, the existing designation of 15,000 population is an appropriate guideline for considering service, and should be used to define communities where these standards will apply. In areas over 15,000 population,

2.8.2 Route Directness

For community bus routes in larger urban communities, the route is expected to be more circuitous to more directly serve area residences and community destinations. Where the route is intended to be a general-purpose route in low demand communities, more direct service should be considered.

The route directness measure for Community Routes should be no greater than 2.5. For local routes in small communities, the maximum should be 2.0 to encourage more attractive travel times.

2.8.3 Service Levels for Fixed Route Service

Minimum service frequencies and spans of service as per the following, when operating:

Weekdays	60 minutes	6:00 to 9:00 am / 3:00 to 7:00 pm
	120 minutes	9:00 am to 3:00 pm / 7:00 to 11:00 pm
Saturdays	120 minutes	6:00 am to 11:00 pm
Sundays/Holidays	120 minutes	9:00 am to 11:00 pm

2.8.4 Vehicle Loadings

Average maximum loads per bus will not exceed the following standards (increased frequencies will be considered if the loading standard is exceeded):

During peak periods	100% of seating capacity over maximum 60 min. period
During off-peak periods	100% of seating capacity over a 60 minute period

2.8.5 Performance Standards Fixed Route Services

Weekday Peak Hours: all routes averaging 15 passengers per service hour, with a minimum performance of 5 boardings per hour

Other Times : all routes averaging 12 passengers per service hour, with a minimum performance of 4 boardings per hour

2.8.6 Performance Standards Demand Responsive Services

Weekday Peak Hours: all routes averaging 10 passengers per service hour, with a minimum performance of 5 boardings per hour

Other Times : all routes averaging 8 passengers per service hour, with a minimum performance of 3 boardings per hour

2.9 Service Expansion Into New Developments

ENTRA recommends that the existing standard be modified with respect to trial periods and the identification of interim targets.

2.9.1 Service in New Areas

Services introduced in new areas not previously served should be guaranteed for a minimum 12 months of operation to ensure adequate time for travel patterns to adjust and for 4-season ridership patterns to be accounted. At the end of the 12 months, the service must meet the minimum performance thresholds required for its class of service.

Within this trial period, interim targets are set to ensure that a service that is clearly not capable of meeting the ultimate targets is identified as early as possible. Monitoring at 3, 6 and 9 months is completed to ensure that the new service is trending towards the appropriate standard. Targets for these interim periods are set at 25 percent, 50 percent and 75 percent of the ultimate target, respectively. If the performance at the end of each period has not reached at least 75 percent of the target value, the route should be re-examined to identify potential changes to improve its performance. If the same standard is not met in the next period, the changes should be recommended.

2.9.2 Service in New Operating Periods

Routes that introduce service in new operating periods where routes already exist, or modify the existing route are subject to similar evaluation, but over a shorter 6-month period. If the service change is substantial, staff may recommend a longer trial period at the service introduction stage. Interim targets are established at 2 months and 4 months, with target levels of 33 percent and 66 percent of the ultimate target.

2.10 Bus Stop Standards

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

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 stops should be located at the near side of the intersection wherever possible to facilitate transfers.

Bus bays should be considered for stops located near major trip generators, transfer points, timing points or anywhere else where a bus is likely to have an extended stop time.

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

- ~ all terminals and transfer points;
- ~ high boarding locations (more than 35 passengers in peak periods);
- ~ unique exposure to inclement weather; and
- ~ in front of senior residences and other institutional facilities.

Stops and the area around them should be made accessible to people with disabilities, including wheelchairs and other mobility aids. The long-term objective of YRT is to accommodate accessible features at all of its stops. Stops and the area around them should also have a high priority for snow clearing.

The standards for the location of Vivastations are described in detail in Background Paper #8 - Rapid Transit Considerations, prepared by York region Rapid Transit Corporation.

Appendix C: Current Service Frequency and Span of Service

Route Assesment - Service Frequency and Span of Service



Minimum Standards (as per 5-Year Service Plan 2006-2010)							
Route Class	Frequency (min)				Span of Service		
	Weekday Peak	Weekday Off-Peak	Saturday	Sunday / Holiday	M-F	Sat	Sun/Hol
Base Routes	20	30	30	60	6am - 11pm	6am - 11pm	9am - 11pm
Local Routes	30	60	60	60	6am - 11pm	6am - 11pm	9am - 11pm
Community Bus Routes	60	120	120	120	6am - 11pm	6am - 11pm	9am - 11pm
Viva Routes	15	15	15	15	6am - 12am	6am - 12am	9am - 11pm

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			Route Assesment						
Route #	Route Name	Route Class	Frequency (min)				Span of Service		
			Weekday Peak	Weekday Off-Peak	Saturday	Sunday / Holiday	M-F	Sat	Sun/Hol
1	Highway 7	Base	15 - 20	30-40	30	60	6:00am - 12:30am	7:00am - 1:30am	8:30am - 11:30pm
2	Milliken	Base	15 - 30	30	30	60	5:35am - 11:15pm	8:00am - 12:00am	9:00am - 11:00pm
2A	14th Ave	Local	30	30	-	-	5:55am - 8:45pm	-	-
3	Thornhill - York U.	Local	20	20 - 45	40	40	6:38am - 10:40pm	8:50am - 9:30pm	10:10am - 9:30pm
15	Stouffville Local	Local	30 - 60	45 - 50	-	-	6:35am - 6:25pm		
40	Unionville Local	Local	20 - 40	35 - 60	45 - 60	60	5:45am - 1:45am	8:10am - 1:15am	9:10am - 8:20pm
41	Markham Local	Local	20 - 40	35 - 60	40 - 60	40 - 60	5:40am - 1:40am	8:00am - 1:40am	8:40am - 7:40pm
8	Kennedy Rd	Base	15 - 25	30 - 60	60	60	6:00am - 10:00pm	8:00am - 10:00pm	8:00am - 8:00pm
9	Ninth Line	Local (small community)	30	120	-	-	6:30am - 7:15pm	-	-
18	Bur Oak	Local	30 - 40	60	60	-	5:53am - 9:10pm	8:30am - 6:02pm	-
522	Markham Community Bus	Community	90	-	90	-	9:00am - 3:35pm	9:00am - 3:35pm	-
17A	Birchmount	Local	15 - 20	-	-	-	5:14am - 6:21pm	-	-
224B/C/D	Victoria Park/Woodbine	Base	40	55	60	60	6:14am - 7:40pm	6:30am - 8:30pm	9:30am - 8:30pm
25 D	Don Mills	Base	15	30	-	-	5:20am - 10:57pm	-	-
68 B	Warden	Base	15 - 20	30 - 40	35 - 45	35 - 45	5:48am - 10:55pm	5:58am - 10:47pm	8:34am - 10:45pm
102 D	Markham Rd	Base	20 - 25	50 - 55	55	60	5:40am - 11:47pm	7:22am - 8:00pm	8:00am - 8:00pm
129A	McCowan	Base	15	25	25 - 40	40	5:33am - 11:30pm	6:00am - 11:00pm	9:00am - 11:00pm
4	Major Mackenzie	Base	15 - 30	30	30	30	5:31am - 11:19pm	6:22am - 11:58pm	7:52am - 11:58pm
5	Clark	Base	12	30	30	-	5:30am - 10:45pm	7:15am - 7:45pm	-
7	Martin Grove	Local	15 - 20	20 - 30	45	-	5:25am - 10:40pm	8:00am - 10:20pm	-
10	York U. (Woodbridge)	Local	45	45	45	45	5:54am - 10:05pm	9:53am - 6:53pm	9:53am - 6:53pm
11	Woodbridge	Local	35	40 - 45	45	40	5:30am - 9:35pm	8:00am - 9:55pm	10:00am - 7:00pm
12	Pine Valley	Local	30	45 - 60	45	-	6:00am - 10:25pm	7:45am - 10:15pm	-
13	Islington Ave	Base	30	40	45	-	6:45am - 9:50pm	7:15am - 10:20pm	-
20	Jane	Base	20	30	30	45	5:56am - 10:42pm	6:11am - 10:56pm	7:56am - 7:11pm
23	Thornhill Woods	Local	30	40	-	-	5:45am - 10:15pm	-	-
27	Highway 27	Local	30	30	30	30	6:30am - 7:18pm	6:30am - 7:18pm	6:30am - 7:18pm
77 (excl. BT)	Hwy 7 - Centre St	Base	15 - 25	15 - 30	30	45	4:35am - 12:05am	5:30am - 11:45pm	8:05am - 10:40pm
99	Yonge	Base	9	30	30	30	4:45am - 1:40am	5:30am - 1:50am	5:30am - 1:50am
35-D	Jane	Local	10 - 15	20 - 25	25	-	5:30am - 10:40pm	6:15am - 7:22pm	-
37-D	Islington	Local	30 - 35	30	-	-	5:49am - 7:13pm	-	-
105	Dufferin N.	Base	15	30	30	60	6:15am - 11:30pm	6:00am - 10:30pm	8:30am - 10:30pm
107-C/D/B/F	Keele N.	Base	15 - 30	30 - 40	30 - 40	40	5:15am - 12:45am	6:45am - 10:40pm	8:40am - 10:45pm
160	Bathurst N.	Local	20	25	25	25	5:23am - 10:06pm	5:15am - 6:31pm	8:00am - 7:30pm
165-D/F	Weston Road N.	Base	20 - 30	30	25 - 30	30 - 40	5:25am - 10:55pm	5:31am - 10:51pm	8:19am - 9:14pm
82	Valleymede - Spadina	Local	30	25 - 60	60	-	6:00am - 8:57pm	8:30am - 8:00pm	-
83	Trench	Local	25 - 60	60	60 - 120	-	5:50am - 9:55pm	7:05am - 9:05pm	-
84A/C	Oak Ridges	Local	30	30 - 40	40	-	5:42am - 8:25pm	6:57am - 8:25pm	-
85	16th Ave/Rutherford	Base	10 - 30	30 - 60	30 - 60	30 - 60	5:55am - 11:00pm	6:20am - 10:30pm	8:30am - 8:30pm
86A/B	Weldrick - Newkirk	Local	30	30 - 60	60	-	5:40am - 9:25pm	7:32am - 7:40pm	-
87	Langstaff - Maple	Local	15 - 60	60	60	-	6:00am - 7:25pm	7:15am - 7:15pm	-
88	Bathurst	Base	20	30 - 45	35	45 - 55	6:15am - 10:15pm	6:10am - 10:30pm	8:10am - 9:05pm
89	RH Community Bus	Community	60 - 120	120	60	60	9:25am - 5:25pm	9:25am - 5:25pm	9:25am - 5:25pm
90	Leslie South	Base	30	60	60	60	6:35am - 8:30pm	6:40am - 8:40pm	8:40am - 8:40pm
91	Bayview South	Base	10 - 20	30 - 60	30 - 60	40 - 60	5:25am - 12:00am	7:00am - 12:00am	7:00am - 12:00am
22	King City	Local (small community)	30 - 40	90	90	-	6:00am - 7:20pm	9:00am - 6:35pm	-
31	Aurora North	Local	30 - 60	30 - 60	60	-	6:00am - 9:05pm	6:20am - 8:50pm	-
32	Aurora South	Local	15 - 35	30 - 60	60	-	6:10am - 10:15pm	6:14am - 8:48pm	-
33	Wellington	Base	30	30	-	-	6:32am - 6:57pm	-	-
34	Industrial Parkway	Local	20	-	-	-	6:33am - 7:35pm	-	-
44	Up.Canada Mall-Glenway	Local	30 - 45	40	40	-	5:50am - 9:40pm	7:20am - 9:40pm	-
51	Keswick Local	Local	25 - 40	60	60	-	6:30am - 9:35pm	8:00am - 9:10pm	-
52	Holland Landing Local	Local	20 - 40	60	60	-	5:40am - 10:42pm	8:15am - 10:42pm	-
54	Bayview North	Base	20 - 22	45	40	-	5:47am - 11:13pm	8:29am - 10:39pm	-
55	Davis Dr.	Base	15 - 20	25 - 30	20 - 30	15	5:30am - 11:45pm	6:00am - 11:45pm	8:30am - 11:45pm
56	Gorham-Eagle	Local	30	60	60	60	6:00am - 11:38pm	6:00am - 11:38pm	8:00am - 11:30pm
57	Mulock Dr.	Base	30 - 40	60	60	60	6:08am - 11:10pm	6:25am - 9:55pm	8:25am - 9:55pm
58/58A	Leslie North	Local (small community)	30 - 90	30 - 40	-	-	6:10am - 10:45pm	-	-
98	Yonge North	Base	30	30	30	30	5:40am - 2:05am	5:30am - 2:05am	7:05am - 2:05am
99	Yonge South	Base	9	30	30	30	5:30am - 2:15am	5:30am - 2:25am	6:00am - 1:30am
520	Newmarket Community Bus	Community	90	90	90	90	9:10am - 5:35pm	9:10am - 5:30pm	9:10am - 5:30pm
521	Newmarket Community Bus	Community	90	90	-	-	9:00am - 4:30pm	-	-
603	Viva - Purple	Viva	10	15	15	15	5:34am - 12:06am	6:29am - 11:39pm	8:08am - 11:54pm
601	Viva - Blue	Viva	10	12 - 15	12 - 15	15	4:55am - 12:07am	5:55am - 12:12am	7:55am - 12:10am
606	Viva - Green	Viva	15	-	-	-	6:00am - 6:45pm	-	-
605	Viva - Orange	Viva	10	15	15	15	5:20am - 12:00am	6:20am - 11:44pm	8:10am - 12:05am
604	Viva - Pink	Viva	10	-	-	-	5:45am - 7:15pm	-	-

Meets or Exceeds Minimum Standards
Below Minimum Standards

Notes:

- 1. Weekday Peak Periods are from 6:00am to 9:00am and 3:00pm to 7:00pm
- 2. Weekday Off-Peak Periods are from 9:00am to 3:00pm and 7:00am to 11:00pm
- 3. Service Span is measured from the start time of the first trip to the end time of the last trip.
- 4. GO Shuttle & Express Services: standards are not measured based on service levels and are therefore not included in the above listing.
- 5. Routes are assesed with a 15 minute tolerance.

Appendix D: Service Initiatives by Municipality

Service Initiatives - Aurora

Route Name	Municipality	Notes
33 - Wellington	Aurora	Route extension west to Bathurst & introduce new weekday midday service from 9:00 am to 1:00 pm
58 - Leslie North	Aurora	Route extension south on Leslie St to State Farm at 60 minute frequency 6 am - 10 pm on weekdays
Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)

Service Initiatives - East Gwillimbury

Route Name	Municipality	Notes
69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 3 additional Weekday round trips from Newmarket to Sutton
69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 6 additional Saturday round trips from Newmarket to Sutton

Service Initiatives - Georgina

Route Name	Municipality	Notes
69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 3 additional Weekday round trips from Newmarket to Sutton
69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 6 additional Saturday round trips from Newmarket to Sutton

Service Initiatives - King

Route Name	Municipality	Notes
88 - Bathurst	King, Richmond Hill, Vaughan, Toronto	Improve weekday peak frequency from 20 to 15 minutes
88 - Bathurst - Sat	King, Richmond Hill, Vaughan, Toronto	Extend Saturday service north to Seneca King Campus; possible Frequency improvements to every 30 minutes
88 - Bathurst - Sun	King, Richmond Hill, Vaughan, Toronto	Extend Sunday service north to Seneca King Campus

Service Initiatives - Markham

Route Name	Municipality	Notes
1 - Hwy 7	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
1 - Hwy 7 (Sat)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
1 - Hwy 7 (Sun)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
2 - Milliken	Markham	Route extension east of Hwy 48 via Denison St. and Elson St. (Weekday peak periods, more running time required), add one new eastbound trip at 3:15 pm
2A - 14th Ave	Markham	Route extension east of 9th Line via Copper Creek Dr., Donald Cousens Parkway & Box Grove By-Pass (peak periods)
2 A - 14th Ave	Markahm	Route Extension to Grand Cornell (Terminal TBC)
4 A - Major Mackenzie	Vaughan, Richmond Hill, Markham	Route extension to Ninth Line / Highway 7 (Terminal TBC) weekday peak; Implement 4A during midday & evening
9 - 9th Line 15 - Stouffville Local	Markham, Whitchurch-Stouffville	Rt 9 along 9th Line between Bur Oak/Hwy 7 & Westlawn, Rt 15 Expand to new areas (ie Millard and Hwy 48)
42 - The Bridle Walk (New)	Markham	Introduce The Bridle Walk route during weekday peaks (30 min frequency, makes GO Train connections)
45 - Mingay (New)	Markham	Introduce Mingay route during weekday peaks (30 min frequency, makes GO Train connections)
85 - Rutherford/16th Ave	Vaughan, Richmond Hill, Markham	Route 85 restructuring - Discontinue west end service from Napa Valley to Vaughan Mills Mall. Route will operate from Vaughan Mills Mall to Markham Stouffville Hospital and Cornell, Monday to Sunday. Service from Napa Valley to be replaced with Route 85A.
85A - Rutherford / 16th Ave	Richmond Hill, Markham	Route 85A branch would be discontinued and replaced with a New Route 244 Beaver Creek Shuttle
85B - Rutherford / 16th Ave	Vaughan, Richmond Hill, Markham	Route 85B branch would remain unchanged and will be combined with the New Route 244 Beaver Creek Shuttle to offer a peak hour 10 minute service within the Beaver Creek Business Park
102D - Markham Rd North (TTC)	Toronto, Markham	Improve weekday midday frequency from current 60 min to 30 min
224D - Victoria Park North (TTC)	Toronto, Markham	Improving weekday peak frequency from 40 minutes to 20 minutes
224D - Victoria Park North (TTC)	Toronto, Markham	Route extension north of Major Mackenzie Dr to Elgin Mills Rd (weekday peak periods)
244 - Beaver Creek Shuttle (New)	Richmond Hill, Markham	Introduce new route 244 Beaver Creek Shuttle to replace existing route 85A within Beaver Creek
303 - Cornell Express	Markham	Route extension along Bur Oak Ave to McCowan Rd
Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Weekday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Saturday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Sunday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)

Service Initiatives - Newmarket

Route Name	Municipality	Notes
53 - Woodspring (New)	Newmarket	Introduce Woodspring local route weekday peak service
69 - Sutton GO Bus	Georgina, East Gwillimbury, Newmarket	Estimated operating cost for 3 additional Weekday round trips from Newmarket to Sutton
Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)

Service Initiatives - Richmond Hill

Route Name	Municipality	Notes
Inspiration/Macleod Landing (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 30 minutes during weekday peak periods
Inspiration/Macleod Landing (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 60 during minutes off-peak and evening
Inspiration/Macleod Landing - Sat (New Rt 81)	Richmond Hill	Introduce Route into Inspiration and Macleod Landing subdivision every 60 minutes
1 - Hwy 7	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
1 - Hwy 7 (Sat)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
1 - Hwy 7 (Sun)	Markham, Richmond Hill	Route Extension to Cornell - to Bur Oak & Hwy 7. (Terminal TBC)
4 A - Major Mackenzie	Vaughan, Richmond Hill, Markham	Route extension to Ninth Line / Highway 7 (Terminal TBC) weekday peak; Implement 4A during midday & evening
23 - Thornhill Woods	Richmond Hill, Vaughan, Toronto	Extend weekday peak period service north of Rutherford into 'Upper Thornhill Village' (Block 11)
85A - Rutherford	Vaughan, Richmond Hill	Introduce Route 85A to replace the existing Route 85 service from Napa Valley to Yonge Street only. The route would service Napa Valley, Vaughan Mills Mall, Rutherford GO Station and Viva Blue
85 - Rutherford/16th Ave	Vaughan, Richmond Hill, Markham	Route 85 restructuring - Discontinue west end service from Napa Valley to Vaughan Mills Mall. Route will operate from Vaughan Mills Mall to Markham Stouffville Hospital and Cornell, Monday to Sunday. Service from Napa Valley to be replaced with Route 85A.
85A - Rutherford / 16th Ave	Richmond Hill, Markham	Route 85A branch would be discontinued and replaced with a New Route 244 Beaver Creek Shuttle
85B - Rutherford / 16th Ave	Vaughan, Richmond Hill, Markham	Route 85B branch would remain unchanged and will be combined with the New Route 244 Beaver Creek Shuttle to offer a peak hour 10 minute service within the Beaver Creek Business Park
90 - Leslie South	Richmond Hill, Markham, Toronto	Route extension south to Don Mills Station and improve midday frequency to 30 minutes due to Viva Green Cancellation (option of widening Rt 25D midday frequency)
90 - Leslie South - Sat	Richmond Hill, Markham, Toronto	Route extension south to Don Mills Station and improve frequency to 30 minutes on Saturdays due to Viva Green Cancellation
244 - Beaver Creek Shuttle (New)	Richmond Hill, Markham	Introduce new route 244 Beaver Creek Shuttle to replace existing route 85A within Beaver Creek
88 - Bathurst	King, Richmond Hill, Vaughan, Toronto	Improve weekday peak frequency from 20 to 15 minutes
88 - Bathurst - Sat	King, Richmond Hill, Vaughan, Toronto	Extend Saturday service north to Seneca King Campus; possible Frequency improvements to every 30 minutes
88 - Bathurst - Sun	King, Richmond Hill, Vaughan, Toronto	Extend Sunday service north to Seneca King Campus
89 - RH Community Bus	Richmond Hill	Route Restructuring and add one extra southbound trip
89 - RH Community Bus - Sat	Richmond Hill	Route Restructuring and add one extra southbound trip
Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Weekday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Saturday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Sunday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)

Service Initiatives - Stouffville

Route Name	Municipality	Notes
9 - 9th Line 15 - Stouffville Local	Markham, Whitchurch-Stouffville	Rt 9 along 9th Line between Bur Oak/Hwy 7 & Westlawn, Rt 15 Expand to new areas (ie Millard and Hwy 48)

Service Initiatives - Vaughan

Route Name	Municipality	Notes
4 A - Major Mackenzie	Vaughan, Richmond Hill, Markham	Route extension to Ninth Line / Highway 7 (Terminal TBC) weekday peak; Implement 4A during midday & evening
23 - Thornhill Woods	Richmond Hill, Vaughan, Toronto	Extend weekday peak period service north of Rutherford into 'Upper Thornhill Village' (Block 11)
85A - Rutherford	Vaughan, Richmond Hill	Introduce Route 85A to replace the existing Route 85 service from Napa Valley to Yonge Street only. The route would service Napa Valley, Vaughan Mills Mall, Rutherford GO Station and Viva Blue
27 - Highway 27	Vaughan	Route extension further north to service new industrial development area (Vaughan Enterprise Zone) during weekday peak periods
27 - Highway 27	Vaughan	To cover the assumption of full cost of existing weekday service (anticipating termination of Royal 'charter' arrangement)
27 - Highway 27 (Sat)	Vaughan	To cover the assumption of full cost of existing Saturday service (anticipating termination of Royal 'charter' arrangement)
85 - Rutherford/16th Ave	Vaughan, Richmond Hill, Markham	Route 85 restructuring - Discontinue west end service from Napa Valley to Vaughan Mills Mall. Route will operate from Vaughan Mills Mall to Markham Stouffville Hospital and Cornell, Monday to Sunday. Service from Napa Valley to be replaced with Route 85A.
85A - Rutherford	Vaughan, Richmond Hill	Introduce Route 85A to replace the existing Route 85 service from Napa Valley to Yonge Street only. The route would service Napa Valley, Vaughan Mills Mall, Rutherford GO Station and Viva Blue
85B - Rutherford / 16th Ave	Vaughan, Richmond Hill, Markham	Route 85B branch would remain unchanged and will be combined with the New Route 244 Beaver Creek Shuttle to offer a peak hour 10 minute service within the Beaver Creek Business Park
88 - Bathurst	King, Richmond Hill, Vaughan, Toronto	Improve weekday peak frequency from 20 to 15 minutes
88 - Bathurst - Sat	King, Richmond Hill, Vaughan, Toronto	Extend Saturday service north to Seneca King Campus; possible Frequency improvements to every 30 minutes
88 - Bathurst - Sun	King, Richmond Hill, Vaughan, Toronto	Extend Sunday service north to Seneca King Campus
105 - Dufferin North (TTC)	Toronto, Vaughan	Extend weekday peak period service north of Rutherford to Major Mackenzie
165 - Weston Rd North (TTC)	Toronto, Vaughan	Extend weekday peak period service north of Major Mackenzie to Teston
Vaughan Community Bus	Vaughan	New weekday Community Bus service in Maple
Vaughan Community Bus - Sat	Vaughan	New Saturday Community Bus service in Maple
Vaughan Community Bus - Sun	Vaughan	New Sunday Community Bus service in Maple
Viva Blue	Newmarket, Aurora, Richmond Hill, Vaughan, Markham, Toronto	Weekday peak frequency increase from 10 to 8.5 minutes Finch-Newmarket; and from 10 to 8.5 minutes Finch-Bernard (combined 4 minute headway)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Weekday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Saturday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)
Viva Purple	Toronto, Vaughan, Richmond Hill, Markham	Sunday route extension to Cornell - On street or further east of Bur Oak (Terminal TBC)