

York Region Transit

# Transit Service Guidelines 2016



# Transit Service Guidelines

Service guidelines define how new services are designed, and how existing transit routes are evaluated for service adjustments. They are applied in tandem with route performance measures. For Mobility Plus specialized transportation service standards, all policies meet or exceed the standards and requirements outlined in the Accessibility for Ontarians with Disabilities Act (AODA), and the Integrated Accessibility Standards Regulation, Ontario Regulation 191/11 (O.Reg.191/11).

YRT/Viva's service guidelines include:

- > Service Coverage
- > Span of Service
- > Service Frequency
- > Vehicle Capacity
- > New Service Implementation
- > Mobility Plus Service Area
- > Mobility Plus Days and Hours of Service

A summary of the YRT/Viva service guidelines are provided in the **Appendix**.

## Service Coverage

Service coverage guidelines define the maximum walking distance to a bus stop for urban and rural areas. The service coverage is identified in **Table 13**. The average bus stop spacing may vary based on the type of transit service. The goal of locating bus stops is to minimize the number of bus stops to ensure fast and reliable service, while

optimizing the walking distance. Bus stop spacing for each route may differ from the recommended range depending on the land use and development patterns, topography, and street network. The average bus stop spacing is defined in **Table 14**.

Table 1: Maximum Walk Distance to a Bus Stop	
Urban area	90 per cent of residents within a maximum walking distance of 500 m to a bus stop
Rural area	90 per cent of residents within a maximum walking distance of 1,000 m to a bus stop, where transit is provided (the implementation of transit service in rural areas will depend on other standards for route performance and establishing new service)

Table 2: Average Bus Stop Spacing	
Vivastation (curbside)	Average curbside vivastation spacing should typically be no less than 1,000 m
Vivastation (rapidway)	Average rapidway vivastation spacing should typically be no less than 750 m
Base, Local, Shuttle and Community Bus services	Average bus stop spacing should typically be between 300-500 m
Express services	Exempt from stop spacing standards

## Span of Service

The span of service for individual routes may vary based on customer demand, and may operate outside the specific periods. In general, the span of service for the overall system is defined in **Table 15**.

Table 3: Span of Service	
Seven days a week	6 a.m. to 10 p.m.

## Service Frequency

Service frequency guidelines define the minimum level of service for each service type, during each service period. The service frequency for periods outside of the span of service is subject to the customer demand and performance of each route. Minimum service frequencies do not apply for Express services. The minimum frequencies are defined in **Table 16**.

**Table 4: Minimum Service Frequency (minutes)**

Service Period		Frequent Transit Network (Viva and Base)	Local	Shuttle and Community Bus
Weekday peak period	6 a.m. to 9 a.m. 3 p.m. to 6 p.m.	15	30	60
Weekday off-peak period	9 a.m. to 3 p.m. 6 p.m. to 10 p.m.	15	60	60
Weekends/Holiday	6 a.m. to 10 p.m.	15	60	60

## Vehicle Capacity

Vehicle capacity standards ensure that passengers experience a reasonable level of comfort, and that the system achieves reasonable vehicle productivity. YRT/Viva will design its services to ensure the number of passengers on its vehicles is always within the limits of safety.

YRT/Viva will design service to 130 per cent of the seated capacity with a maximum capacity of 150 per cent to account for rush hour demand. For vehicles that do not

accommodate standing passengers and for services that operate on a provincial highway, services will be designed at 100 per cent of the seated capacity. Vehicle loading is calculated based on the average number of passengers during one hour of the peak period, at the busiest point in the route.

The vehicle capacity guideline varies based on the type of vehicle and the seated capacity. The vehicle capacities are defined in **Table 17**.

**Table 5: Vehicle Capacity**

Vehicle/Service Type	Seated Capacity	Design Vehicle Capacity (130 per cent of seated)	Maximum Vehicle Capacity (150 per cent of seated)
60-foot Viva	52-54	69	80
40-foot Viva	36	47	54
40-foot Base & Local	39-43	51-56	59-64
30-foot Base & Local	26	34	40
40-foot Express	43	56 *	64 *
Shuttle	26-43	34-45 **	39-64**
Community Bus	26	34 **	39 **

\* Express routes that operate on highways should be designed to 100 per cent of the seated capacity

\*\* Some smaller vehicles do not accommodate standing passengers, and should be designed to 100 per cent of the seated capacity

## New Service Implementation

Decisions regarding the introduction of transit services into urban and rural expansion areas follow a clear framework to ensure that services are warranted, and implemented in an efficient and fair manner. New transit services will be classified within the Family of Services based on the function of the route. The new service implementation guidelines are defined in **Table 18**.

**Table 6: New Service Implementation**

- > Service implementation is subject to the provision of streets adequately located and constructed for transit use
- > Service implementation is subject to a minimum of 500 residents/employees within a 500 m radius of service
- > The location of developing service areas must be contiguous to existing service areas so that service can be provided efficiently and in accordance with the minimum ridership policies
- > Service implementation is subject to the potential to achieve the minimum ridership target (passenger boardings per hour)
- > Ridership on new routes will be monitored monthly, and minimum ridership targets must be achieved within 6 months. Route performance will be continually evaluated for modification, expansion into new service areas or service periods, or service reduction or cancellation.
- > Expansion of service will be staged by the service period sequence, based on achieving the ridership target for boarding passengers per operating hour. When minimum ridership targets are achieved during the first service period the route is implemented in, the service may then be evaluated for potential expansion into additional service periods. While the service period sequencing will be subject to the individual characteristics of the service area in response to customer demand, transit service within a service area should generally be staged as follows:
  1. Weekday a.m. and p.m. rush hour
  2. Weekday midday service between the a.m. and p.m. rush hours
  3. Saturday service
  4. Evening service on all weekdays and Saturdays
  5. Sunday/Holiday service

The service period sequence and the span of service during each service period will be adjusted based on the customer demand for each route.

## Mobility Plus Service Area

The Mobility Plus service area includes the area within 1,500 m of all YRT/Viva conventional bus routes. Trips that start or end outside of this service area, but are within the York Region boundaries, will be accommodated on a trip-by-trip basis. Mobility Plus will also facilitate connections with specialized transportation services provided in adjacent municipalities within contiguous urban areas.

## Mobility Plus Days and Hours of Service

Mobility Plus will operate on the same days and hours of service as YRT/Viva conventional transit services. Generally, Mobility Plus will operate all seven days a week, from 6 a.m. to 1 a.m. Trip requests that begin outside of the hours of service will be accommodated on a trip-by-trip basis.