

4
YORK REGION TRANSIT
BICYCLE RACK UTILIZATION AT TRANSIT FACILITIES

The Transit Committee recommends the adoption of the recommendation contained in the following report, December 17, 2007, from the General Manager, Transit:

1. RECOMMENDATION

It is recommended that this report be received for information.

2. PURPOSE

This report provides information regarding the utilization of bicycle racks at York Region Transit (YRT) facilities.

3. BACKGROUND

The installation of bicycle racks at YRT facilities commenced in 2004, in preparation for the introduction of Viva, and included installations at Richmond Hill Centre Terminal and Bernard Terminal, as well as at 63 Viva stations. Since that time, bicycle racks have also been installed at the Promenade Terminal and two conventional bus stops that had a demand for them.

When selecting the locations for bicycle racks, the following criteria were taken into consideration:

- Location within York Region (i.e. does not include north side of Steeles Avenue).
- Adequate property available.
- Accessible by bicycle.
- Proximity to residential area.

The actual placement of the bicycle racks at the selected locations took the following into consideration:

- Maintain area for boarding and alighting of passengers from buses.
- Minimize impact on pedestrian circulation.
- Ensure that the maximum design capacity of the site can be utilized.
- Maximize bicycle visibility.
- Maximize convenience (i.e. minimize distance between bicycle racks and the bus stop boarding location).

Currently, there are 157 bicycle racks installed at 66 different locations.

The York Region *Draft Pedestrian and Cycling Master Plan* (September 2007) indicates that residents and employees are more likely to take public transit when their ability to access transit is convenient. Improving walking and cycling conditions in the Region and integrating walking and cycling facilities with transit will encourage more residents and employees to choose transit. One element to encourage cycling is to make provisions for cyclists to properly secure their bicycles in convenient locations by providing bicycle racks at transit facilities.

The installation of bicycle racks on transit buses themselves is included in the 2008 Draft Business Plan and Budget. If approved, YRT staff would proceed with the initial installation phase in the spring of 2008. This effort will encourage overall bicycle utilization which increases the demand for bicycle racks at transit facilities.

4. ANALYSIS AND OPTIONS

A field survey was conducted by YRT staff to determine the utilization of bicycle racks at designated transit facilities.

4.1 Bike Rack Survey Methodology

Staff surveyed all 66 locations with bicycle racks, plus 40 locations without bicycle racks including Viva stations, YRT terminals as well as two conventional bus stops, for a total of 106 locations.

The surveys occurred over three mid-week days: September 12, 20 and October 3. The weather conditions on the survey days ranged from clear to cloudy with no rain, and temperatures ranged from 18°C to 25°C. Each location was surveyed once in the morning (8:00 am to 11:00 am), afternoon (11:00 am to 3:00 pm), and evening (3:00 pm to 7:00 pm). The following data was collected at each location:

- number of bicycle racks.
- number of bicycles secured to bicycle racks.
- number of bicycles not secured to bicycle racks.

4.2 Survey Indicates 50% of Bike Rack Locations are Being Utilized

On average, 33 of the 66 locations with bicycle racks had bicycles secured to the racks resulting in a 50% location utilization rate (see *Table 1*). This utilization rate is considered to be reasonable at this time. There are six locations that currently do not have bicycle racks that had bicycles located in the near vicinity and 24 locations where bicycle racks are located where no bicycles were observed throughout the survey.

Table 1
Average Bicycle Rack Location Utilization

Locations with Bicycle Racks	66
Locations with Bicycles Secured to Bicycle Racks	33
Percent of Bicycle Rack Location Utilization	50%

The number of bicycles at transit facilities surveyed varies throughout the day with an average of 63 secured to bicycle racks and four not secured to bicycle racks at any given time. There is a total capacity to secure 314 bicycles system-wide as each bicycle rack is designed to have two bicycles secured. At present, the peak number of bicycles is 73 which results in a 23% peak utilization rate (see *Table 2*). There is, therefore, sufficient capacity available to meet future demand.

Table 2
Peak Bicycle Rack Capacity Utilization

Total Bicycle Rack Capacity	314
Bicycles Secured to Bicycle Racks	73
Percent of Bicycle Rack Capacity Utilized	23%

4.3 Relationship to Draft Pedestrian and Cycling Master Plan (September 2007)

The provision of bicycle racks at transit facilities relates to the *Draft Pedestrian and Cycling Master Plan* (September 2007) as part of the vision to implement “a regional-scale network integrated with local municipal pedestrian and cycling infrastructure and public transit service that connects communities and people of all ages with where they live, work and want to go.” The installation of bicycle racks at transit facilities works towards achieving this vision through the goal to “integrate the improved sidewalk system and proposed cycling network with Regional transit.”

4.4 Low-Use Bike Racks to be Relocated to High Demand Areas

One of the objectives of surveying the use of bicycle racks at transit facilities is to match bicycle rack supply with demand. High demand locations are identified and evaluated for their potential to accommodate additional bicycle racks. Low-use locations are found and their racks put under consideration for relocation, with care taken to maintain a minimum capacity in all areas. Future bicycle rack placements will be installed as needs arise as well as in conjunction with the *Draft Pedestrian and Cycling Master Plan* (September 2007).

In addition, YRT marketing staff will be reviewing opportunities to promote the use of the bicycle racks that are currently available.

4.5 Relationship to Vision 2026

The use of bicycle racks at transit facilities supports the Region's goal of "infrastructure for a growing Region" to "have efficient and environmentally sensitive transportation, waste management and water systems".

5. FINANCIAL IMPLICATIONS

The capital cost of a bicycle rack is approximately \$200 per unit installed. Currently, there are 157 bicycle racks installed valued at approximately \$31,400. There have been no maintenance costs for the bicycle racks since the first installations in 2004, and future maintenance will be provided by the successful co-ordinated street furniture proponent at no cost to the Region.

6. LOCAL MUNICIPAL IMPACT

The local municipalities benefit from bicycle racks on the boulevards by keeping parked bicycles where they are intended to be, not in the way of pedestrians or otherwise intruding on the streetscape. The availability of bicycle racks also encourages environmentally-sensitive transportation to transit facilities, reducing the number of vehicles on local roads.

7. CONCLUSION

Bicycle racks at transit facilities have been successful as the units are being utilized and there is currently adequate capacity for future demand at locations with existing bicycle racks. The presence of bicycle racks at transit facilities is supported by the *Draft Pedestrian and Cycling Master Plan* (September 2007) which aims to improve walking and cycling conditions in the Region and integrate walking and cycling facilities with public transit.

For more information on this report contact Rick Takagi, Manager, Operations (Ext. 5624) or Joshua Scholten, Facilities Supervisor (Ext. 5696) of the Transit Branch in the Transportation Services Department.

The Senior Management Group has reviewed this report.