Transportation Association of Canada 2016 Sustainable Urban Transportation Award Nomination Submission

**Active Transportation in Schools: Bicycle Parking Pilot Project** 

Submitted by:



## <u>Project Context - Active Transportation in the Region of Peel</u>

The Region of Peel approved its first Active Transportation Plan in 2012, outlining a strategy to improve active transportation infrastructure, and initiate targeted programming to encourage walking and cycling. The benefits of achieving a higher share of active transportation trips are well established. In addition to the reduction of vehicle emissions, the increase in physical activity can improve community health by reducing rates of chronic diseases.

The Region of Peel's Public Health 10-Year Strategic Plan also sets out a plan to implement its service delivery and initiatives to promote healthy lifestyles and prevent disease. Program priorities include healthy eating and establishing environments that support physical activity.

Aligning with the visions of the Active Transportation Plan and the Public Health 10-Year Strategic Plan, the Bicycle Parking Pilot Project was developed to provide safe and secure bicycle facilities at schools, contributing to the establishment of conditions that support cycling to and for school. The provision of high quality bicycle parking facilities is essential to underpin programs and measures to encourage youths to bike to school.

## **Development of the the Bicycle Parking Pilot Program**

The Region of Peel recognizes the importance of promoting active transportation to youths, particularly in light of statistics that show only 1% of grade 7-12 students in Peel cycle to or from school.

The introduction of the Bicycle Parking Pilot Program provides new bicycle racks at schools, supported by an education and outreach strategy. It complements other programs that have been implemented to support active transportation, namely School Travel Planning and the Peel Safe and Active Routes to School (PSARTS) committee.

The bicycle racks at many schools in Peel were substandard in placement, design, and condition. Surveys found that existing racks were often rusted, warped, and placed in inconvenient locations. The design of the racks often only allowed the bike wheel to be secured, which is less preferable to the frame being secured. Many schools did not have dedicated bicycle parking facilities at all, forcing students to park their bikes precariously to fences or other objects not intended for bicycle parking. Efforts to encourage cycling in the Region of Peel can only succeed if students who bike feel that their needs are met from the beginning to the end of the trip. Thus, enhancing bicycle parking facilities at schools is vital to promoting healthier and active lifestyles for schoolchildren.

The objectives of this program include:

- Recruiting 25-30 schools in Peel to actively participate in the program
- Identifying enablers and barriers of cycling to and from school
- · Understanding the enablers and barriers of the bicycle parking pilot program
- Delivering an education and cycling skill activity to participating elementary and middle schools

## **Program Approach and Partnerships**

The Bicycle Parking Pilot Program is a collaborative project between the Region of Peel's Public Works and Public Health teams, as well as the two school boards in Peel.

All elementary, middle, and secondary schools in Peel District School Board (PDSB) and the Dufferin-Peel Catholic District School Board (DPCDSB) were eligible to apply. After receiving the applications, a collaborative decision-making session was held with representatives from the three municipalities in Peel (City of Brampton; City of Mississauga; Town of Caledon), the PDSB, the DPCBSB, and team members from Peel Public Works and Public Health. The group reviewed the application and found that there was more interest than expected. It was decided that all schools that applied could participate in the program since both school boards were committed to installing the bike racks. 41 schools in total were provided with either one or two bike racks, exceeding the goal to involve 25-30 schools.

The chosen bike racks had an "Inverted U" design, featuring four rings. These racks were selected based on best practices identified by the Association of Pedestrian and Bicycle Professionals (APBP), as they enable the frame and one of the wheels to be secured, and the rings are spaced to support bicycles of various shapes and minimize handlebar conflicts. The racks were reasonably priced and were sturdy enough to withstand daily usage. The bike racks were funded through the program, and the school boards were responsible for installation procedures and costs.

The implementation process was aided by Public Health Nurses (PHNs) from the School Health Team, who were assigned to work with each school in the pilot program. The PHNs were the primary contacts between the project team and each participating school, and were involved with:

- Facilitating pre- and post-program data collection
- Developing action plans
- Engaging school staff and students in cycling safety education

#### **Outcomes**

Baseline data was collected at all participating schools to determine the condition of bicycle racks and the number of bicycles parked. The installation of the new Inverted U bike racks began in the Spring of 2014, although the majority of the racks were installed

in the Fall 2014 or Spring 2015. 15 elementary and middle schools satisfied the programming component by organizing a school-wide launch featuring cycling safety education. The launches were presented by a Public Health Nurse or a member of Peel Public Work's outreach and education team. Each launch included videos and interactive components to deliver safety messaging.

Site visits were made to 29 schools after the bicycle racks were installed to evaluate the installation and usage of the racks, with available staff resources. It was found that the bicycle parking did have an impact on the overall number of students cycling to and from school:

- A total of 211 bikes were observed after new racks were installed, compared to 175 before (only including the 29 schools where both "before and after" data was available)
- 48% of schools either saw an increase in the number of bikes parked on school property, or maintained the level from before the program
- 6 schools had no bikes parked in prior to the pilot program, but all of these saw some bikes parked after the new bike racks were installed

## **Program Evaluation**

The evaluation process also involved surveys of all of the key stakeholders, including school administrators and school board facilities staff. Some of the key feedback received about the program included:

#### Successes:

- Racks appear to be well used and visible
- Racks are sturdy and durable, but a design that could accommodate more bikes was preferred by some schools
- Parents' concern about safety remains a barrier to children biking to school
- Strong partnerships were built between the Region of Peel Public Works, Public Health, and school boards
- Program provided opportunity to champion active transportation at schools

## Challenges:

- Establishing standard installation processes
- · Long-term monitoring of bike rack usage

### **Innovation**

The pilot program was innovative as it brought together various parties including schools, school boards, Peel Public Health, and Peel Public Works, to establish a collaborative process to carry out the program. This partnership became a key element of the program. The elements of collaboration included:

· Developing application process with evaluation criteria

- Developing a legal agreement between school boards and the Region to install bicycle parking on school property
- Determining responsibilities between Region, schools, and the school boards with regard to capital costs for the bicycle parking and installation costs
- Data collection process for program evaluation, informing understanding of program outcomes

## <u>Transferability to Other Canadian Communities</u>

This pilot program, while developed in the Region of Peel, acts as a model for the implementation of bicycle parking facilities in other Canadian communities. Through the lessons learned here, the process can be adapted to other communities with slight modifications to the format. The core elements of the program are relatively simple to implement, and should include an analysis of baseline conditions and a monitoring plan after the program concludes. Most critically, the process of identifying and including multiple stakeholders and generating responsibilities should be adopted by those interested in implementing a similar program. The Region of Peel would be available to advise communities that are interested in implementing a similar program. As one of the first municipalities in the Greater Toronto Area to initiate a bicycle parking program for schools, the Region of Peel is particularly proud of the working partnerships we formed in the implementation of this program. The success of the program has opened the door to its continuation and expansion.

# Appendix: Images



New "Inverted U" Style Bike Rack, with Older Style Bike Rack in Background



New "Inverted U" Style Bike Rack