

Program Highlights

Project Purpose: to increase active transportation through the creation and implementation of a Community Based program as identified in Phase II of the Regional Active Transportation plan (2011).

PedalWise Pilot Program 2015 Results

- Mode share of Work/School/Shopping trips by private motor vehicle dropped from 54% to 42% for PedalWise program cohort
- Cycling mode share increased from 5% to 25%
- Participants averaged 177 minutes of cycling per week exceeding Canada's Physical Activity Guidelines of 150 minutes per week
- Participants' willingness to spend on bicycles and accessories increased from \$139 to \$292, demonstrating increased perception of the value of a bicycle
- Changes in mode share, minutes of weekly activity, and willingness to spend compared favourably to the control group, indicating that the program had a strong impact (see page 2)



Return on Investment

We calculated trips avoided by motor vehicles and transit as well as health benefits. Motor vehicle savings were calculated at .60 per km and transit savings at the \$2.80 Presto Fare. Health savings were calculated using figures on inactivity from the 2014 GTHA Medical Officers of Health Report (inactivity costs \$556 per person per year).¹ Community contributions were based on 2015 actuals. We project a 5-year investment of \$619k for program expansion will result in a net value (after expenses) of \$2.8 million, not including other un-costed benefits.²

	Pilot Year 1*	Year 2	Year 3	Year 4	Year 5	Total
HEALTH & TRANSPORT SAVINGS (Using difference between actual program exit trips per week and projected program exit trips per week without PedalWise intervention per participant)	\$ 35,380	\$ 187,006	\$ 535,747	\$ 919,868	\$ 1,303,989	\$ 2,981,990
Community Contribution (Time and monies contributed by community)	\$ 103,609	\$ 103,609	\$ 103,609	\$ 103,609	\$ 103,609	\$ 518,045
Total Value Produced by Project	\$ 138,989	\$ 290,615	\$ 639,356	\$ 1,023,477	\$ 1,407,598	\$ 3,500,035
Programming Cost (Scenario VII)	\$ 92,500	\$ 142,050	\$ 128,525	\$ 137,000	\$ 119,000	\$ 619,075
Net Value Produced by Project	\$ 46,489	\$ 148,565	\$ 510,831	\$ 886,477	\$ 1,288,598	\$ 2,880,960
*actuals						

FIGURE 1 RETURN ON INVESTMENT

¹ Improving Health by Design in the Greater Toronto-Hamilton Area A report of medical officers of health in the GTHA 2014 2nd edition <https://www.peelregion.ca/health/resources/healthbydesign/pdf/moh-report.pdf>

² Cycling activity generated by the BikeWrx program (at CycleFest, the Boys and Girls Club, Build-a-Bike and Bike Maintenance Clinics) are not included in the Estimated Five Year Impact (Figure 1) or in mode share shift as participants were not surveyed. However, planned High School programming is due to similarity to PedalWise. Additionally, improved air quality was not measured. Thus, the benefits of the program are understated in this estimate.

2015 PedalWise Cohort versus Control Group

Mode Share Comparison PedalWise vs Control

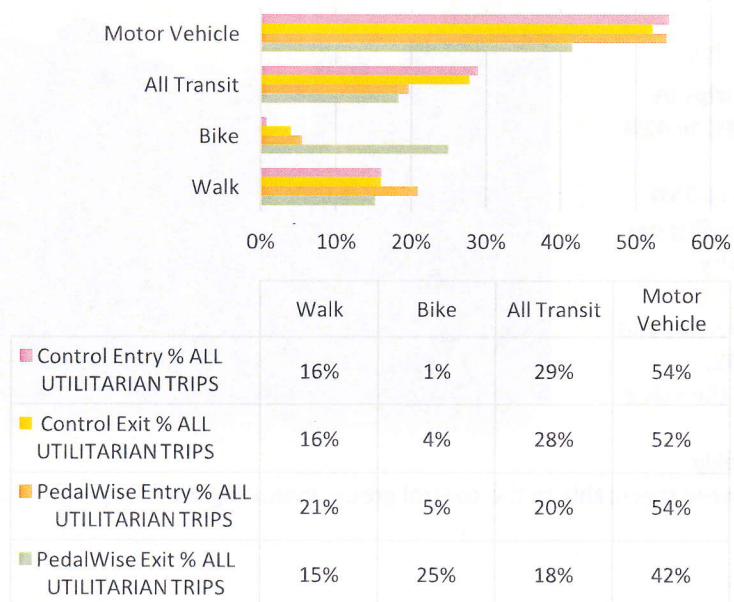


FIGURE 2 MODE SHARE COMPARISON PEDALWISE VS CONTROL

Bicycles and Accessories

% change in average willingness to spend on 2015 PedalWise vs Control

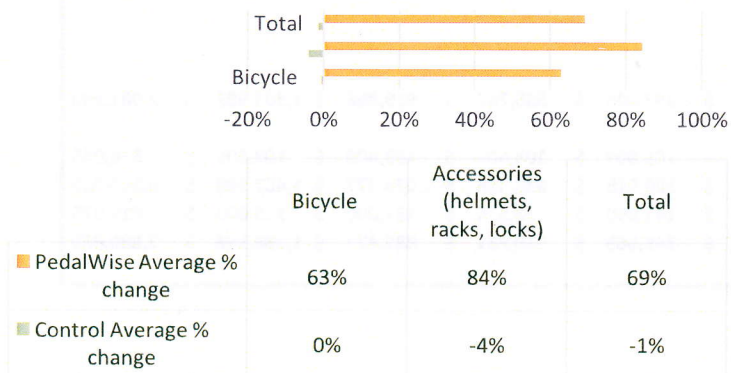


FIGURE 3 WILLINGNESS TO SPEND COMPARISON PEDALWISE VS CONTROL

Both groups started with an identical mode share of 54% for all utilitarian trips (work/school /shopping) by private motor vehicle (drive/passenger/taxi/ motorcycle). At exit, **trips by private motor vehicle** remained virtually the same for the control group (N= 52) at 52% but decreased to 42% for the PedalWise group (N=26). Bicycling mode share increased to 4% for the control group at exit and to 25% for the PedalWise group at exit. Most vehicle trips shifted from 'getting a ride' to bicycling indicating a strong impact on transportation independence.

People's **willingness to spend** on bicycles and accessories was another striking difference between the PedalWise cohort and the control group. The PedalWise group was willing to spend 69% more on bicycles and accessories at program exit than at program entry indicating a strong positive shift in their perception of the value of bicycles and accessories. On the other hand, the control group was willing to spend approximately the same amount at exit as at entry. We also compared **physical activity** levels between cohort and control. The control group averaged 25 minutes of physical activity per week while the PedalWise cohort averaged an impressive 178 minutes.



Program Description

A strategically targeted, three-pronged community based model for increasing active transportation was developed based on identification of partners and community needs. The pilot model included: a) an overarching community home for programming -- *The Community Bike Centre*; b) a mentor-based cycling program – *PedalWise* (see pages 1 & 2); and c) a bicycle mechanics garage and programming -- *BikeWrX*. The targeting of a suitable community was enabled through development of a GIS Tool (a legacy tool available for future targeting) to identify the neighbourhoods in Peel with the highest potential for increasing walking and cycling.

BikeWrX Pilot

- An **800 sq ft bicycle repair garage** was established to repair and refurbish bikes donated by the community and to train community members in bicycle maintenance and repair. Community members built workbenches and set up garage using equipment **donated by MEC**.
- **110 bicycles** were refurbished and put to use in the community, 67 of which were given to children at the All People's Church CycleFest event.
- A **partnership with Boys and Girls Club** was established. **50 new bikes** were built and safety checked and then donated to the community through this partnership. An initial short training program was delivered to 15 students.
- A **Build-A-Bike Earn-A-Bike program** was developed and established and the first cohort graduated.
- A **Bike Maintenance Clinic** was developed and established and the first cohort graduated.

Significant Community Support & Impact

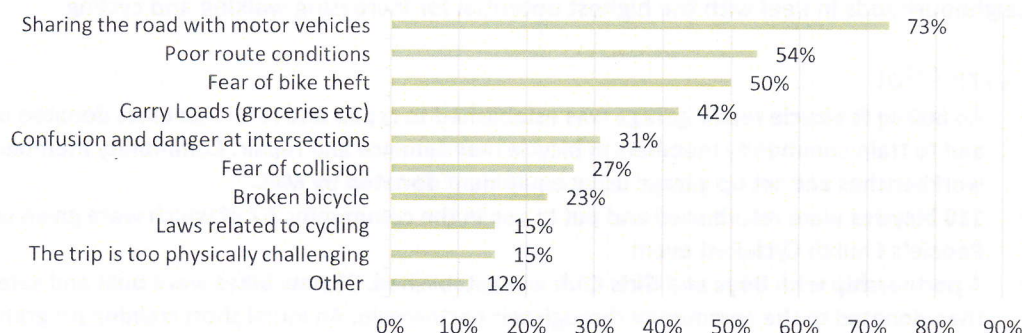
- **239 community members** were directly engaged (excluding those who donated bicycles and were not tracked).
- **1600 hours of community time** were contributed.
- **1236 new cycling related connections among people in the community** were made.
- **\$103,600 in cash and in-kind donations** from community members, partners and outside funders.
- **Partnerships and/or working relationships established** between Community Environment Alliance, Bike Brampton, All People's Church, Boys and Girls Club, and Region of Peel.
- Participants ranged from **ages 5 to 75 and came from 19 self-identified cultural/ethnic communities**.
- **The Region has increased community capacity** to support future program delivery through 10 newly trained community based cycling mentors, bicycle mechanics and cycling instructors.
- **4 new bicycling programs were developed** and piloted. With appropriate funding they are ready to be delivered in 2016. (PedalWise, Build-a-Bike Earn-a-Bike, Bike Maintenance Clinic, 6- week Bicycle Mechanic training).



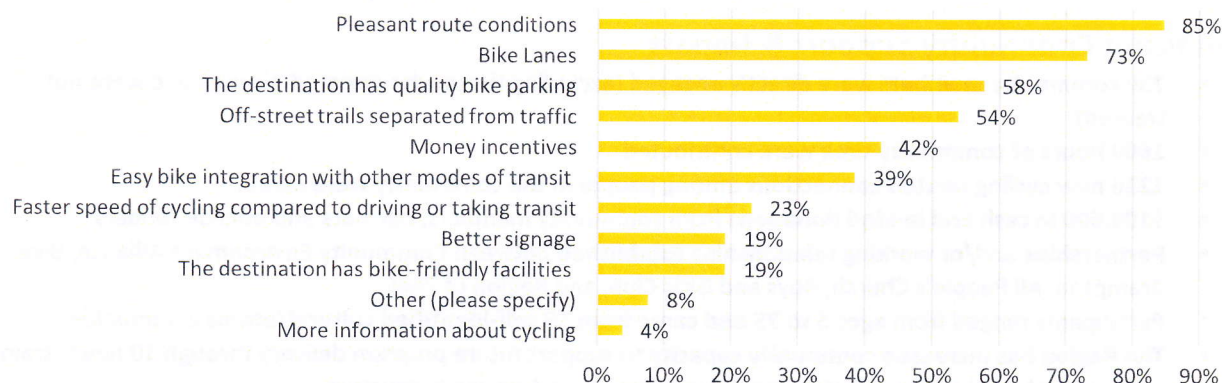
Barriers and Encouragement

The answers to two key questions are important for future cycling development in Peel. We asked PedalWise participants what factors would encourage them to ride their bicycle more often and what were the greatest barriers to using their bicycle more often. Sharing the road with motor vehicles was the biggest barrier (73%). Interestingly, the preferred solution was bike lanes (73%) over off-street trails. People want pleasant, **direct**, **safe** access to destinations.

What were the greatest barriers to using your bicycle?



What factors would encourage you to ride your bicycle more often?



Program directly addresses 2015 Term of Council Priorities:

"Working with the community to create a healthy, safe and connected community." This Community Based Pilot Program for Active Transportation is directly relevant to all three pillars of the new Region of Peel Council Priorities: "Living", "Thriving" and "Leading". First, the structure of the program involves direct partnering with community organizations, leveraging both their interests and their resources from the beginning of the project. Secondly, cycling is a key strategy to create healthy, safe and connected communities. Thirdly, cycling is an affordable, accessible means of transportation that increases access to employment and social activities thereby reducing transport costs and increasing disposable income that can then be spent in local businesses. Fourthly, it is environmentally friendly and sustainable. Finally, the health benefits are significant both for cyclists (physical activity) and the entire community due to reduced pollution from automobiles. The program is systematic and replicable and encourages people from all backgrounds and age groups to participate in changing transportation patterns in the Region of Peel.

This program and report were developed and delivered for the Region of Peel by the Toronto Centre for Active Transportation. For further information please contact walkandroll@peelregion.ca.