

Community Cycling Program
Brampton Caledon
Final Report
March 24, 2020



"Basically, I just love everything about the Bike Hub! How well organized it is with all the relevant information promptly communicated through e-mails and posts on the Website. Besides Pedalwise/BikeWrx schedules, the Bike Hub Website, so up-to-date and has a very useful content, links and maps concerning growing active transportation in the community and road safety. I love learning about bike maintenance and repairs - it is very empowering knowing that I can probably manage OK by myself and not get completely stranded somewhere on the road. I love the rides guided by our mentors, from whom I learn, how to plan the routes that combine less busy or paved-shoulder roads with trails and multiuse pathways, how to safely make left-hand turns, where to wait on red lights to not obstruct the right turning cars, the riding skills and techniques, etc. I love the venue where we can bring our bikes right inside and get a helping hand and guidance from the (so patient and knowledgeable) certified bike mechanics on the drop-in evenings. And I love the social aspect of these meetings where we can exchange tips and advice and then also go out together to various local destinations and events."

Pedalwise Protégé comment, October 2019

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Executive Summary

The Community Cycling Program (CCP) in Brampton and Caledon is a natural extension and expansion of the **Peel Region Community Based Pilot Program for Active Transportation**¹ that was delivered in conjunction with the Toronto Centre for Active Transportation in the summer of 2015. The pilot became the **EcoAction program**² in December 2017, when <u>PCHS</u> (Punjabi Community Health Services), a Brampton based charitable health services agency, and BikeBrampton, a volunteer group, received an <u>Eco-Action grant</u> provided by the Government of Canada's Department of Environment and Climate Change and facilitated through Vélo Canada Bikes.

The Eco-Action program continued into the spring of 2019 and then morphed into the CCP. The CCP is being delivered by a consortium of community partners consisting of: PCHS, BikeBrampton, Town of Caledon, The Journey Community Centre, and Caledon Community Services. PCHS is the lead agency.

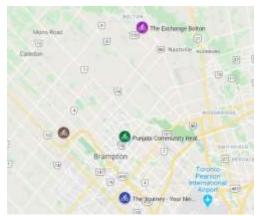


Figure 1 Brampton/Caledon Bike Hub locations

The CCP runs until May 2020. The CCP in Brampton and Caledon has been running for just over a year. This document reviews program activities and evaluates what the program has accomplished so far.

Over the past 13 months, the CCP delivered a basic DIY bike repair program known as "BikeWrx", and a bike mentorship program called "Pedalwise", where would-be riders are teamed with mentors who help improve their ridership knowledge, confidence and ability. The partners contributed a weekly 2-hour time slot at their facilities in the communities of Bolton, Caledon Southfields, Brampton Orenda/Ardglen and Brampton Springdale (see map). These

"Bike Hubs" are designed to be social centres and for BikeWrx and Pedalwise delivery.

BikeWrx and Pedalwise follow a behavioural change concept known as Community Based Social Marketing (CBSM). The CBSM methodology identifies the desired behavioural change, in this case increased utilitarian cycling. It then identifies facilitators and inhibitors which affect the desired behaviour. Next it delivers programs that work to enhance desired behaviour benefits and reduce or eliminate real or perceived inhibitors. The Bike Hubs act as the focal point for program delivery. They also facilitate social interaction and create a sense of



Picture 1 Southfields BikeWrx repair and socializing

¹ http://www.walkandrollpeel.ca/projects/pdf/peel-at-proj-report.pdf

² http://bikebrampton.ca/2019/09/27/ecoaction-brampton-bike-hub/

community where cycling for transportation becomes normalized.

This evaluation of the CCP is based on several inputs including, participant pre and post surveys, attendance records, recorded bicycle trip data, responses from focus group sessions, unsolicited comments and individual interviews.

The feedback from the participants both on the survey and from the focus group sessions was overwhelmingly positive on virtually every program aspect. According to the interim survey from program participants, the overall satisfaction score was 6.8 out of a possible 7. The comments received, both unsolicited and through focus group feedback, indicated that the program has had a substantial effect on people's lives, (see comments in the Appendix and at the beginning of this report).

The data indicate the CCP successfully scaled up the 2015 pilot, extending its reach both geographically and participatorily. Currently we have 83 Pedalwise participants who are referred to as protégés, and 14 volunteer mentors. Despite marketing efforts in both Caledon and Brampton, all the current protégés are limited to Brampton. We also have 33 bikes out on long-term loan and approximately 60 bikes in the library in serviceable condition. Attendance at the four bike hubs averages ninety participants per month. And the programming, with holiday and weather-related exceptions, continues all year long.

Fifty-five percent of the protégé participants are female. This is a win as females are typically underrepresented in the cycling community and it demonstrates that the Bike Hubs create an atmosphere that is both safe and welcoming. Participants also cover the spectrum across employment status, age, and new immigrants vs. native born Canadians.

The survey data show that the CCP favourably and significantly influenced participant attitudes towards cycling and cyclists. Admiration for cyclists increased as a result of the program as did the perception that cycling could sometimes be easier than driving.

The focus group feedback indicates the program positively affected participant cycling skills, cycling knowledge in terms of things like route planning and confidence in riding on the roads and trails.

The survey and trip data both indicate that the program increased cycling behaviour as measured by the number, length and seasonality of transportation cycling trips. The data indicated a statistically significant increase in bike rides in every month except January, when comparing the interim survey to the entry survey. The program also improved bicycle access as measured by the number of bikes on loan from the Bike Hub library. Finally, the focus group feedback indicates the program improved participant's perception of their own personal health and their connection to their community.

Many barriers stand in the way of increased transportation cycling. Some are actual barriers, such as unsafe infrastructure, while others are based on unsubstantiated fears. "Drivers in Brampton are crazy" is an example of a type of comment that is frequently heard. Still others are based on cultural norms and expectations of what defines a successful life here in Canada, "I'll ride the bus until I can afford a car" or "I won't ride in the winter; it's too messy".

The CCP, as an initiative in community based social marketing (CBSM), has demonstrated success at addressing many of those barriers in a modest sub-set of people who are socially and psychologically open to change. This openness is demonstrated by their willingness to sign up to the Pedalwise program and participate in Pedalwise events. Once that happens, the results indicate that CBSM programs such as the CCP can have a positive impact. Their attitudes become more favourable to cycling and they exhibit more cycling behaviours.

The program continues to encourage bicycle use in place of the automobile for short-range trips. Through the program, we are seeing a growing cycling community that works together to make both Brampton and Caledon sustainable and friendly places for active transportation.

It is therefore recommended that the Region of Peel continue investing in this program as one element in the strategy to change transportation habits in the Region of Peel.

CCP Brampton-Caledon Deliverables

Once the CCP contract was awarded, work began in early 2019 to transition existing staff and programs from Eco-Action to the Community Cycling Program, (See Appendix D for a summary of the CCP activities over the past 13 months). The sections below describe the programs and major activities that were delivered as part of the CCP.

Bike Hubs

Sunny Meadow, Brampton Bike Hub

The Sunny Meadow Brampton Bike Hub continued operating, transitioning from the EcoAction program to the CCP. The Sunny Meadow hub is in PCHS's store front at 50 Sunny Meadow Blvd, Unit 108, in the Bramalea Springdale community just north of Brampton Civic Hospital.

The space has been generously donated by PCHS and includes a 500 square foot locked storage cage in the parking garage where we keep tools, parts and bikes for the bike lending library.



Picture 2 50 Sunny Meadow Blvd Unit 108 - magnetic sign shows we are open



Picture 3 Bike cage at Sunny Meadow Bike Hub

Sunny Meadow is the longest running and most successful of the four hub locations and is open most Wednesday evenings from 6:30-8:30pm. Sign in sheets indicated there have been 1,245 personvisits since Sunny Meadow first opened in December 2017.

Each week, activities alternate between a BikeWrx basic bike mechanics training module and a more informal DIY drop-in session where participants bring their bikes in and work on repairs with the Hub tools under the supervision of the on-duty bike mechanic. The Bike Hub also plays host to regular



Picture 4 Elaine Matjasec and Alina Grzejszczak deliver Sunny Meadow Winter Cycling Seminar

seminars and workshops. Winter cycling and bike nutrition are but two of the topics that have been covered during the past year.



Picture 5 Elaine & Alina lead Winter Cycling Seminar



Picture 6 Lisa displays her winter handlebar covers, called 'pogies'

Lately, it has become rare that the mechanics deliver a pre-set training module. The drop-in nights have proven so popular that the module delivery has become eclipsed with less formal drop-in. With the help of the mechanic and/or other Pedalwise mentors, attendees work on specific issues with their own bikes, donated bikes, or observe work being done by others. Some protégés prefer to observe first before they tackle their own bikes.

Bike Mechanic Gerald spent his own time working on this portable storage unit for the Sunny Meadow bike tools. Outlines make it easy to see



Picture 7 Mentor Lisa repairs her bike, Sunny Meadow

where the tools hang. The storage cabinet is wheeled each week from the storage cage in the basement.

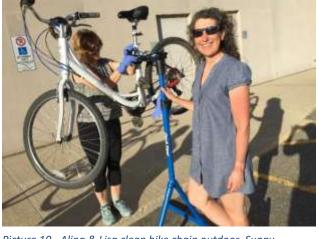


Picture 8 Bike Mechanic Gerald proudly shows off the new tool storage cabinet

There is much social interaction amongst the participants, which builds on the community-based social marketing theme. Friendships have been developed and cycling tips are shared. Protégés learn not only from their own mentors but also from others at the hub.



Picture 9 Mechanic Peter demonstrates bike repair



Picture 10 - Alina & Lisa clean bike chain outdoor, Sunny Meadow



Picture 11 Protege Audrien borrows bike from lending library for cycling to school

Students and new Canadians have found the bike lending library to be particularly useful. We've even provided bikes to international students living in Mississauga and attending U of T.

The Sunny Meadow Bike Hub continued to draw participants throughout the fall and winter. On Dec 11, 2019 we held the pot-luck winter festive party. Summer and winter socialization parties have become an annual tradition.



Picture 13 Peter & Steve ponder the nature of a banana as an art form, an important part of party discussion



Picture 12 Clearly this art form is an acquired taste, reflecting recent media report about the museum installation!



Picture 15 - Bike hub pot-luck party gathering, Dec 2019

Southfields, Caledon Bike Hub

The Southfields Bike Hub has been located at 12560 Kennedy Rd., Unit #5 at the northwest corner of Kennedy Rd and Dougall Avenue. The space was been generously donated by the Town of Caledon.



Picture 14 Mechanic Joe cycled to the party as "Father Christmas"



Picture 16 – Southfields storefront location

The Southfields Bike Hub opened on April 8th, 2019 and continues to be open on a weekly basis each Monday from 7:30-9:00pm. The Town of Caledon's lease on the storefront space expires at the end of March and the Town's new Recreation Centre is under construction until later this spring. To bridge the gap, Caledon has offered bike hub space at the Mayfield Recreation Centre. We are planning the transition to that space in early April.



Picture 17 - Southfields Caledon Bike Hub Official Opening Apr 8, 2019, pictured from left to right: Councillor Lynn Kiernan, Councillor Johanna Downey, BikeBrampton Chair David Laing, Councillor Christina Early, Mayor Allan Thompson, Alyson Monery Recreation Co-ordinator



Picture 18 – Southfields BikeWrx repair and socializing

On September 27, 2019, we hosted two Scout Troups at the Caledon Hub in Southfields, with 27 in attendance. The children participated enthusiastically, showing excellent attention.



Picture 19 - Bike Mechanic Peter demonstrated bike maintenance to the Cubs and Scouts, Southfields



Picture 20 - Father & son fix their bike with the help of mechanic Peter, Southfields

Bolton (The Exchange), Caledon Bike Hub

The Bolton Bike Hub is located at 55 Healy Road in The Exchange Building. The space has been generously donated by Caledon Community Services.



Picture 21 – "The Exchange" in Bolton

Bolton Bike Hub opened officially on April 15, 2019 and continues to be open on a weekly basis, Monday evenings from 6:30-8:30pm.



Picture 22 - Caledon Community Services Executive Director Monty Laskin welcomes participants at the opening of the Caledon Bolton (Exchange) Bike Hub April 15, 2019

On Oct 6, 2019 BikeBrampton attended the West Bolton SNAP (Sustainable Neighbourhood Retrofit Program) tree planting to promote the Bolton, Caledon Bike Hub program.





Picture 23 – West Bolton SNAP Tree Planting, promoting Bolton Bike Hub

Each Caledon location required different storage solutions and the volunteer teams spent many productive hours building the toolbox storage cabinet and the equipment shed.





Picture 24 - Team assembles Bolton exterior storage shed Picture 25 - Team assembles the Southfields inside storage cabinet

In June we hired a local teen in Bolton to work as a bike mechanic apprentice. Luca learned a lot under Bike Mechanic Gerald's expert guidance and was promoted to bike mechanic without certification in on Dec 9, 2019.



Picture 27 Luca receiving his certificate of achievement



Picture 26 Gerald instructing Luca on bike mechanic skills

Participation at the Caledon sites continues to be modest. We initially thought the pattern would be similar to the Sunny Meadow location. Sunny Meadow took many months of consistent operation combined with a wide range of promotional activities to "get the word out" and to build a regular clientele. For Caledon, we have used Town supported advertising plus various social media campaigns to build awareness. Interest has been sparse despite these efforts. We also sought advice from local Councillors. The Bolton location does have a perceived barrier of heavy truck traffic. Most of the Bolton community resides in the north, separated from South Bolton by a large steep bridge. The Southfields location has greater potential for walk-in traffic, with residential areas nearby.

The new Recreation Centre should be a big draw for attendance, provided there is enough promotion. It may be that we have not built enough trust in the community through events and promotion. Perhaps we are viewed as "outsiders", or it may be that the Caledon demographics are not broad enough to support a cycling hub. We continue looking at options including possibly moving the Hub locations.

Ardglen, (The Journey) Brampton Bike Hub

The Ardglen Bike Hub is located at 9 Ardglen Road, south of Peel Memorial Wellness Centre and just west of Kennedy Road. The space has been generously donated by <u>The Journey</u>, a neighbourhood community centre operated by a collaborative partnership of charitable organizations. The Ardglen Bike Hub opened May 23, 2019 and operated weekly until the end of October 2019.



Picture 28 Arglen (The Journey) Brampton Bike Hub

In June, 100 promotional door hangers were created and distributed to the Ardglen community to boost community awareness of the new Ardglen Hub.

Joe, our bike mechanic lives in the community and knows everyone. He is an iron worker, and a "blacksmith". The bike repair stand that came from the original 2015 BikeWrx program was broken. Joe fashioned a metal part to mend the stand. He brings that "repair and reuse" attitude that we have appreciated from our other bike mechanics, Gerald and Peter.

We were beginning to build a solid and regular clientele at Ardglen. Young people

and adults from the local community were starting to attend and bring their bikes.





Picture 29 – Joe assisting a young people repair their bikes, Ardglen The Journey Bike Hub



Picture 30 - Ardglen The Journey Bike Hub social gathering

Then, at the end of July, the residents at 51-67 Ardglen Drive, were given notice they would have to vacate their homes by the end of October. The townhouse complex required extensive renovations to comply with current fire and safety regulations and it was deemed that the work could not be completed unless the units were vacant.

The displacement notices affected 62 families including our Ardglen bike mechanic, Joe. After the notice of displacement and subsequent attendance

dropping, we decided to close the Hub temporarily, at the end of October. We will look at opening the

Hub again once the renovation work is complete and the community is intact once again. Joe is eager to return, and The Journey wants us to resume the hub.

Bike Library

The number of bike loans from the lending library has been increasing steadily with 24 new bike loans to individual Pedalwise participants since March 2019. We currently have 33 bikes on loan.



Picture 31 Protege Renuka receives bike loan fitting from Bike Mechanic Peter

Bikes are donated regularly to the bike hub. People learn about us through the BikeBrampton webpage which comes up when one does an internet search on bike or 'bicycle donation Brampton'. Some donated bikes require a small amount of work. Some need parts and significantly more work to make them ready for lending. Some of this repair is done during BikeWrx sessions. Gerald has spent many hours of his own time repairing bikes at home. Some can be salvaged for scrap metal. With our "EcoAction" program roots, this appeals to our environmental focus.

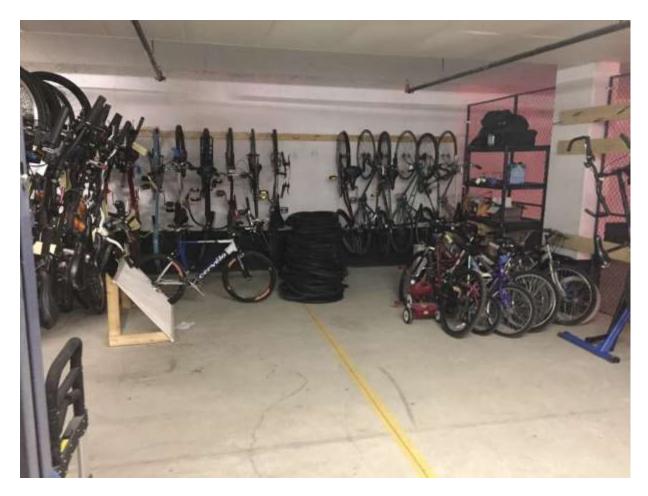
We have held "three scrap metal parties" this past year. Several BikeBrampton mentor members get together and take

apart the bikes, salvaging reusable parts and taking the aluminum and steel frames to local metal recyclers. The amount of money raised (which is a very small amount relative to the time taken to disassemble the bikes) is returned to the budget for the program.





Picture 32 - Scrap Metal "Party" beside Sunny Meadow bike cage, and Gerald's truck full of metal for recycling



Picture 33 - Sunny Meadow bike cage beautifully organized following one of the scrap metal parties

The bike lending library also continued to support institutions as well as individuals. Although the Transition Aids to Youth program with Peel Memorial Wellness Centre was not renewed in 2019, we did partner with the Toronto and Region Conservation Authority to lend over 20 bikes for their "Ride in Nature" Bike Tour program of 3 trail rides on Friday nights during June.



Picture 34 - TRCA Bike Tour, Rosalea Park with our lent bikes

We teamed with Massey Street Public School to donate 10 youth bikes for their bike swap program and repair over 20 additional bikes that were donated by the Massey community.



Picture 35 - Massey Street PS former student traded up to next size bike

We also lent a bike to MPP Minister Prabmeet Sarkaria so he could participate in the Bike the Creek event.



Picture 36 - Minister Sarkaria on borrowed bike, with other dignitaries cycling in Bike the Creek, Jun 22, 2019

Some of the protégés are new immigrants and need a bike to get to school or work. Some use the bike for 'first mile, last mile' to access public transportation.



Picture 37 - Proteges Eman and Eyad leaving with their newly borrowed bikes

Pedalwise

We currently have 83 protégés registered in the Pedalwise program with one joining in October and 2



more in November of 2019. Since the beginning of the program, seven have moved out of the area, two have resigned from the program and three protégés have since gained enough experience and skill that they have taken on a Pedalwise mentor role.

There seems to be an urgent and significant demand for adult cycling skills training. Several of the new protégés were new to cycling or had not ridden in many years. Many of them needed to first borrow a library bike.

Picture 38 – protégé receiving instruction from Alina

Teaching adults to learn to ride was beyond the scope of our original program plans. Given the apparent demand, we decided to give it a try.

It turns out that teaching adults to ride with confidence takes a lot of time and special skill which is not sufficiently taught as part of the CAN-BIKE program.



Finding the "balance point" on a bicycle becomes more difficult as we age and takes both patience and courage. Much practice is required. Cultural, mental and emotional barriers need to be addressed if we are to be truly successful. It has been a rewarding and challenging experience for the program and for our instructors. But, as can be seen from testimonials later in this report, learning to ride can have a dramatic impact on people's lives that goes well beyond physical strength and skill.

Picture 39 – protégé learning to ride



Group rides are being organized regularly. There are separate Facebook groups dedicated to Pedalwise with both weekend and weekday rides being organized. We continue hearing about protégé success stories with riders who previously lacked fitness, stamina, skills, knowledge and/or confidence, who have achieved a personal goal in their cycling journey.

Picture 40 - Protege group ride to Butter & Cup, a coffee shop in Southfields, Caledon



Picture 41 - Proteges learn the finer points of riding on the road skills



Picture 42 - Proteges learn how to navigate to destinations. This Pedalwise group ride cycled to Woodbridge



Picture 43 - Winter cycling protege group ride - bike parking at Butter & Cup

Promotion Activities



BikeBrampton displayed, presented, demonstrated and promoted Brampton and Caledon bike hubs at many locations, as indicated in the Work Plan.

Schools, Community organizations, City and Town events, and the Toronto Bike Show were part of our promotional activities.

Picture 44 Mar 1-3, 2019 Toronto International Bike Show display booth



Picture 45 Sandalwood Height SS Parent Council booth display



Picture 46 EcoSchools Professional Development Day, Albion Hills Conservation Area booth display and bike repair demo

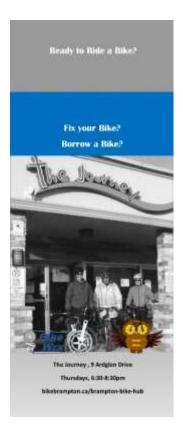
On Dec 4, 2019, McMaster Professor Léa Ravensbergen-Hodgins, attended a BikeWrx drop-in at Sunny Meadow, at the invitation of one of our mentors Steve. She is a post doctoral fellow at the McMaster Institute for Research on Aging. She completed her PhD at University of Toronto on the topic of "Reexamining the Gender Gap in Cycling: Perspectives from Feminist Geography".

Léa said in a follow up email: "It is always nice to leave my computer and talk to inspiring people working on the ground." She is looking forward to an invitation this spring to do a seminar or workshop on her research. She also indicated that she would like to bring her students to the hub.



Picture 47 - Sri Nanak Sikh Centre Gurdwara, Brampton

On Feb 7, 2020 Sonia, one of our protégés, invited a group of 4 mentors to meet with the Principal Harman Dhillon at Sri Nanak Sikh Centre, a Gurdwara in Brampton. This is an opportunity to connect with a faith-based community to promote our program. We agreed to provide a bike clinic and local escorted rides to the Gurdwara come the springtime.



Picture 48- Ardglen The Journey promo door hanger



Picture 49 - Brampton Bike Hub double-sided business cards



Picture 50 - Sunny Meadow promotional flyer



Picture 51 - Brampton Bike Hub web tile



Picture 52 – Brampton Bike Hub and Caledon Bike Hub 24x36" display posters



Picture 53 Winter Cycling Seminar poster



Picture 54 Cycling Nutrition Seminar poster

Focus Groups

With the help of Peel Public Health BikeBrampton delivered **six** focus group sessions during the summer and fall of 2019. Three sessions involved LINC (language instruction for new Canadians) classes at PCHS.

These participants were not involved with the Pedalwise or BikeWrx programs. Three sessions were delivered to Pedalwise mentors and protégés (mentees), one in June 2019 at the Ardglen Bike Hub, and two in November; one at Caledon Southfields Bike Hub and one at Brampton Sunny Meadow Bike Hub.

The focus group sessions were led by Angela Bennett, a BikeBrampton facilitator with assistance from David and Dayle Laing as well as Renuka Parashar, who is a protégé and university student. Kayle McMillan and Aprile Spence from Peel Public Health assisted with facilitation, note taking and analysis. Brandon



Picture 55 PCHS LINC class focus group July 2019

Quigley from Peel Public Works also attended one of the sessions.

Focus Group Sessions	Date	Number of Participants
Ardglen Bike Hub	June 27, 2019	8
LINC Focus Group am session	July 24, 2019	18
LINC Focus Group pm session	July 24, 2019	15
LINC Focus Group follow-up	September 25, 2-2019	12
Southfields Bike Hub	November 25, 2019	8
Sunny Meadow Bike Hub	November 27, 2019	12
Total	Program Participants	28
	LINC class participants	45



Picture 56 – Ardglen The Journey Focus Group, June 27, 2019



Picture 57 - Southfields Focus Group, November 25, 2019



Picture 58 - Sunny Meadow Focus Group, November 27, 2019

CCP Brampton/Caledon Evaluation

Methodology and Approach

We used the CCP evaluation matrix as defined by Peel Public Health in May of 2019, (see Appendix A). The following data sources to informed our evaluation:

1. Attendance Records at Pedalwise and BikeWrx events and activities.

Sign-in sheets were used to track attendance at Bike Hub weekly sessions. The participation data includes all four Caledon and Brampton Bike Hub locations

2. Pedalwise Protégé Bike Trip data

Protégé and mentor trips were tracked through a smart phone app called Strava. As we had no Pedalwise registrants living in Caledon, all the mentor and protégé data come from Brampton.

3. Focus Group Sessions

Four focus group sessions were conducted during the summer of 2019, two with Bike Hub participants and two with PCHS LINC classes. Overall, there were a total of 19 protégés and mentors in the two post focus group sessions plus one non-member (PSARTS representative).

4. One on one interviews with Pedalwise participants

Two interviews were conducted with "dormant" (non-active) Pedalwise protégés

5. Surveys including comments and unsolicited testimonials

From Pedalwise participants and mentors. Participants completed a survey as part of registration. The questions asked about perceptions and attitudes towards cycling, as well as about the number, length, seasonality and purpose of cycling trips. In the fall of 2019, participants were asked the same set of questions as part of an interim survey. Individual responses were then compared using t-test analysis (where applicable). The interim survey also provided a participant program review.

What were we looking for?

• Formative:

- Document the enablers and barriers to cycling behaviour, including perceptions and attitudes in both participant and non-participant groups
- Document expectations of engaging in cycling behaviour both positive and negative in both participant and non-participant groups.

Process

- Document what was the usage and reach of the program (number of participants)
- Document who participated in the program (demographics of participants)
- Determine how effectively the program was delivered according to the participant, (including mentors), expectations and perceptions.

Outcomes

 Determine the degree to which the program changed perceptions, attitudes, expectations, and self-efficacy, in favour of cycling behaviour in the participant groups, including protégés and mentors Determine the degree to which the program changed cycling behaviour in the participant groups including protégés and mentors, as measured by the number of trips, length of trips, seasonality of trips and changes to mode share.

Evaluation Results

Formative

Barriers and enablers to cycling have been well documented in other research. We used the focus group sessions to provide local context and to record participant experiences and perceptions.

What are the perceived enablers and barriers to cycling?

Some barriers and improvements to cycling that were noted in the focus group sessions include: lack of infrastructure for cycling, car emissions, weather, improve program scheduling to meet the needs of the cyclists and grouping protégés together based on cycling skills. Weather and infrastructure are not controllable elements for us. We can, however, change attitudes and perceptions about the weather and infrastructure risk. Access to a working bicycle is another obvious barrier that we can address. Improving cycling skills and confidence as well as enhancing knowledge about what clothes to wear, what foods to eat and which routes to take, will also act as enablers to increased cycling behaviours.

What are the perceived enablers and barriers to cycling from focus group LINC participants?

Most LINC class participants indicated they use a car or public transit as their primary transit mode. A few indicated walking while only a small number indicated they used a bike. The most common reasons stated for using the car was convenience and comfort. It is easier to transport two or more people by car. Those using a bicycle or walking did it for short-range trips.

Despite the barriers, many participants indicated a desire to learn cycling skills, and to try riding more. They expressed interest in a cycling mentorship program and participating in group rides.

	Barriers to cycling for transportation	Facilitators to cycling for transportation
LINC	Fear:	Health
participant	 "Brampton drivers are crazy" 	Save money
feedback	• Lack of safe infrastructure, (bike lanes)	Having safety knowledge
	Fear of falling	Having cycling skills
	Previous bad experience with cycling or walking	Most students indicated a positive Hildhard approximate riding a hills
	walkingLack of confidence in their cycling skills	childhood experience riding a bike"Makes me feel happy"
	Convenience:	Better for the environment
	Cycling takes longer than bus or carNot easy to carry heavy or bulky items	More convenient than transit with multiple buses
	by bike	"I was in Pedalwise in 2015. Peter was
	"Can ride with others, drop off the"	my mentor. Now I bike everywhere
	kids"	that is 20 minutes or less away."
	Comfort:	"Want to learn to ride a bike for
	Don't want to arrive sweaty	independence"
	Time commitment to learn to cycle	"Want to enjoy cycling in a group. I'm

- Bike may break down and repairs are difficult
- Don't want to ride in winter
- Not in good enough physical shape
- Don't like riding on the road but the sidewalk is too slow"

Norms:

- "Biking is a kids' activity"
- "Cycling is something the men do with the kids not women"
- "A bicycle is only for recreation"
- "My husband won't let me ride because it is not safe in Canada"
- "I'm new here so I don't know the rules of the road"
- I will use the bus until I can afford to buy a car"

feeling lonely"

"I'd like a women's only group"

Pedalwise participant feedback

The main barriers to cycling were seasonal factors, car emissions and preparation time.

- Half of the protégés (5/10, 50%) and 22% of mentors (2/9) indicated the weather was a barrier cycling for the following reasons; damage to bike caused by the salt on the roads, cold weather, snowy winters and shorter days
- Half of the protégés (5/10, 50%) felt more time is needed to prepare and plan biking routes and attire.
- Thirty percent of protégés (3/10) felt the car/bus emissions was damaging to their health.

"Would cycle more if I didn't have to deal with car emissions and breath[e] it in, it's not good for my health."

Increasing my confidence levels and strong mentors helped to overcome challenges to cycling.

- Forty percent of protégés (4/10) and 22% of mentors (2/9) indicated their confidence levels increased by participating in community rides, being motivated by other cyclists and having mentors as role models.
- Forty percent of protégés (4/10, 40%) and 22% of the mentors (2/9) developed skills and strategies in cycling related to road safety and knowing how to navigate through trails and smaller streets to eliminate emissions and fumes.

Skill development in bike repairs and meeting like minded cyclists were key to registering.

- Most protégés (7/10, 70%) indicated they joined the program for the social aspect; to meet more cyclists and be part of a cycling group.
- Skill development in bike repairs/maintenance, Strava app., and understanding the privacy concerns were key to protégés (6/10, 60%).
- Mentors engaged in the program to

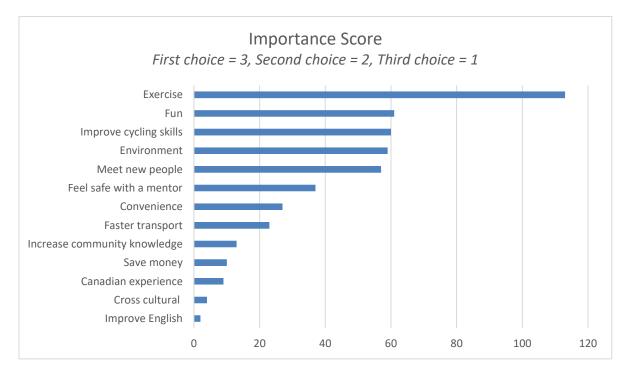
	learn and support bike
	repairs/maintenance, be an advocate
	for cyclists and to role model cycling.

Focus Group Recommendations

- Introduce cycling to new immigrants/arrivals to Canada to support and set new social norms around cycling for transportation and encourage a change in travel behaviours.
- Use barriers identified in the focus groups to tailor CCP promotion to new Canadians.
- Focus on promoting small steps and small wins, instead of big goals that can be overwhelming and perceived as unachievable.
- Explore ways to encourage active transportation by focusing on shorter distance cycling trips for errands, visits and shopping in the neighbourhood.
- Promote the CCP program through LINC classes (e.g. during classes or conversation circles and recruiting LINC instructors as champions).
- Provide education regarding cycling safety and health outcomes as opposed to perceived risks
- Provide education regarding techniques for reducing time to get ready for a cycling trip

What are the perceived expectations of engaging in cycling behaviour?

The graph below shows the expectations of participating in the Pedalwise program as ranked by the number of times they were selected by the protégé as their first, second or third choice as reasons for joining the program.



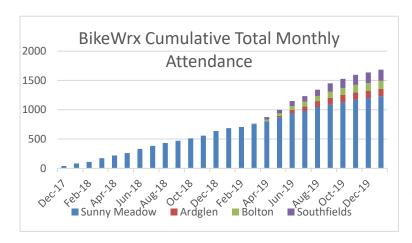
The top three reasons for Pedalwise registrants chose for participating were: Exercise, Fun and Improve Cycling Skills, followed closely by, Meet New People and Environment. This indicates participants do not

place much importance on cycling for transportation other than for environmental considerations. Their main purpose is for joining Pedalwise is primarily based on achieving better physical fitness, with, recreational, skills improvement, environmental, and social priorities grouped as a relatively distant second. The lack of newcomer population may skew the data away from the cultural and community aspects. Financial considerations were well down the list of priorities listed.

Process

What was the usage and reach of the CCP activities?

We offer mentoring and bike repair training and support through four Bike Hub locations.



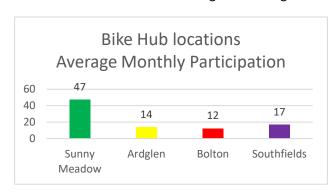
We monitor attendance at the weekly Bike Hub locations whether it be for modules, BikeBrampton meetings, drop-ins, seminars, social evenings, focus group sessions or other special events. To the end of January, the four Hub locations have drawn 1,684 participants.

The first graph at left illustrates cumulative attendance at all four Hub locations.

The second graph shows the average monthly attendance for each Hub location. Ardglen's average is

based on 9 months open, Southfields 11 months open, Bolton 11 months open and Sunny Meadow 26 months open.

Of the four Hubs, Sunny Meadow had by far the largest monthly average attendance at 47.4. Southfields was next at 17.2, followed by Ardglen at 14, then Bolton at 12.5.

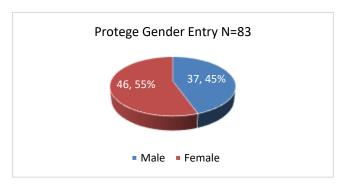


Who participates in the Pedalwise Program?

Demographic information was collected through the Pedalwise registration survey. The Pedalwise

program was designed to be welcoming and inclusive and we wanted feedback on program appeal to different population segments.

Pedalwise registration is open to any Brampton or Caledon resident 16 years or older and protégés can join the program at any time. We currently have 83 protégés registered. The first protégés have been in the program for more

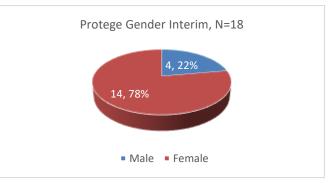


than a year and a half. The most recent protégé signed up in November of 2019. Of the 18 protégés completing the interim survey, the average time in Pedalwise was just over 8 months.

Gender

According to a recent CBC report, about one third of transportation cyclists in the GTHA are female³.

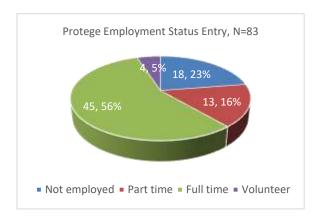
Furthermore, women's transportation habits, indicate a greater opportunity to increase transportation cycling in the female population assuming the right conditions⁴. We are therefore pleased to see that women represent almost two thirds of the Pedalwise registrants. It is also interesting that almost 80% of the interim survey respondents were women.

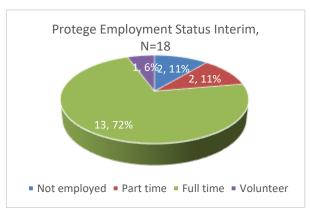


This may indicate that women are more committed to the program than their male counterparts.

Employment Status

Cost is one of the reasons for choosing sustainable modes of transportation including cycling⁵. A bicycle dramatically increases the geographical range of employment opportunities, particularly when combined with transit. While it doesn't indicate causality, it is interesting to note the dramatic increase in the full-time working status of interim survey respondents compared to the entry survey.





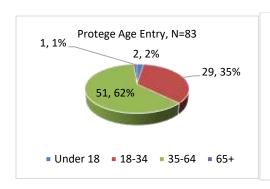
Age

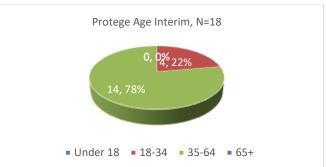
Given the inclusivity objective for the Pedalwise program it appears seniors are underrepresented in the program despite the promotion efforts that have been focused on this population. This suggests more emphasis should be placed in the future on seniors recruiting. We are considering including local language presentations at various senior groups and targeting senior role models.

³ https://www.cbc.ca/news/canada/toronto/one-in-three-cyclists-female-toronto-centre-for-active-transport-1.3802869

⁴ https://www.canadabikes.org/wp-content/uploads/2019/04/Gender-Equity-and-Cycling-in-Canada - Background-information-and-Literature-Summary.pdf

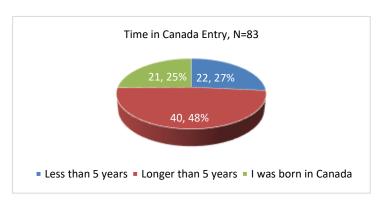
⁵ https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016029/98-200-x2016029-eng.cfm





Time in Canada

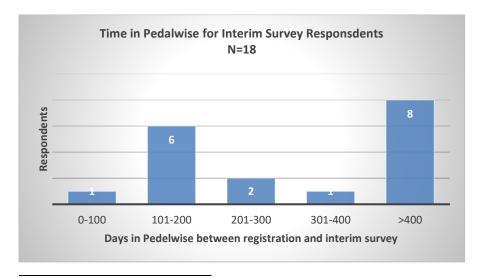
Behavioural change theory indicates that those experiencing major change or transition in one area of their life are more likely to be open to change in other areas⁶. Changing cities or moving to a new country is considered a significant transition so it would make sense to focus on that population when trying to create new transportation habits. Given the large percentage of new Canadians in the



general Brampton population, it is interesting that almost three-quarters of the Pedalwise registrants are long-time Canadian residents. That indicates that the Pedalwise program is not sufficiently appealing to recent immigrants, despite its association with immigrant-focused health and social services agencies.

Time in the Pedalwise Program

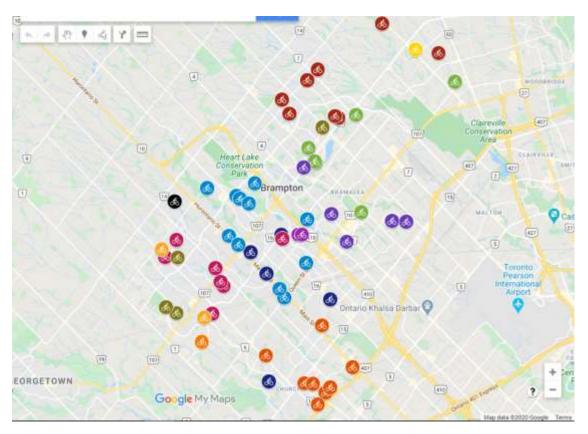
We considered analyzing to see if there were links between time spent in the program and the degree of behaviour or attitude change. Unfortunately, the interim survey data set was too small to look for meaningful comparisons.



⁶ https://www.nice.org.uk/guidance/ph41

Geographical Dispersion of Pedalwise Protégés

The map below shows that interest in Pedalwise is coming from all over the City. This indicates that demand for active transportation choices is not limited to those living in higher density neighbourhoods.



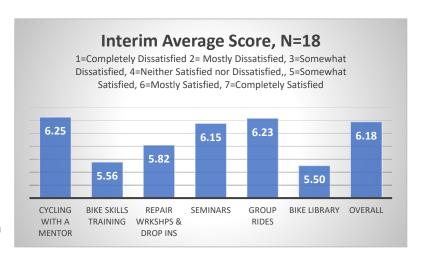
Dot colours represent protégés with the same mentor. In the future these protégé clusters might be better serviced by local or portable Bike Hubs that could be distributed throughout the City.

Survey Feedback on CCP Program Effectiveness

Survey feedback indicates that most respondents were mostly or completely satisfied with all program

aspects in which they participated. As can be seen in the graph at right, the overall program satisfaction score was 6.18 out of a possible 7.

Cycling with a mentor was the element of the program most enjoyed by the participants, Seminars and group rides were also well received. Bike skills and bike library received the lowest satisfaction scores. Repair workshops and drop-ins also received a lower than average score.



Looking beyond the numbers indicates an inconsistency in the mentor protégé satisfaction levels that may be contributing to these lower scores. Even though cycling with a mentor was well received overall, the comments indicate a small number of protégés had issues with mentor engagement. We had a few protégés with little or no cycling experience and the instructors and, as noted earlier, mentors were not fully equipped to deal with the challenges of teaching cycling skills at the adult level. Even the CAN-Bike Instructors indicated they were challenged in getting quality time with protégés and in being able to address protégé needs, particularly within the two-hour training limitation. In addition, a few protégés were dealing with personal issues and had difficulty engaging appropriately with their mentors and instructors.

As indicated previously, teaching fundamental cycling skills to adults was not in the original program scope and we had little previous experience on which to base our approach. Perhaps higher scores could have been achieved had these protégés been turned away, but that doesn't feel like the right answer. Instead we will look to improve the consistency and depth of mentor training as well as look for support from the municipalities and from the Region to offer and support fundamental cycling skill training at the adult level.

In terms of the library, there were no specific feedback comments indicating issues. The styles and quality of the bikes we can offer is dependent on the donations we receive and the parts we have at our disposal. In the future we will look to improving the quality of our "stock" through volunteer support and to offer a range of bikes that people can try to see what fits their need.

In terms of bike repair training, there was an expressed desire to have more formalized instruction time during the BikeWrx sessions and comments that we don't promote the modules enough. This is a challenge because the social aspect of the Bike Hub, supported by most participants, has made it difficult for the instructor/mechanic to create a classroom. If we had access to larger and more flexible space, perhaps it would allow us to set up a classroom in a corner of the space. In future we can promote the modules more at the start of the Bike Hub session and provide curriculum-based training assuming sufficient demand.

From other comments we need to do a better job of promoting the Bike Hub in general and in letting existing participants know about services and group rides. We already have a Facebook, Twitter and Instagram presence, but we can look to expand that in the future to other social media platforms. We also need more support from our municipal partners to help us get the word out about our programs and services. See Appendix F for more survey comment details and Appendix G for respondent feedback on the characteristics of a good mentor.

CCP Outcomes

In looking at outcomes, we used feedback from the surveys and focus groups to evaluate the CCP on the following factors:

- Improvements to participants' knowledge, cycling skills and confidence
- Changes to how participants' perception of cycling as normalized behaviour
- Changes in participants' perception of personal and social reinforcements

- Changes to participants' expectations of cycling
- Changes to participants' access to bicycles
- Changes to participants' number of cycling trips?

Improvements to participants knowledge, cycling skills and confidence

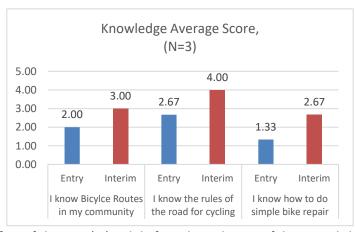
Focus group feedback indicates protégés felt the program helped them increase their confidence levels in cycling and noted an improvement in their physical and mental health since joining the program.

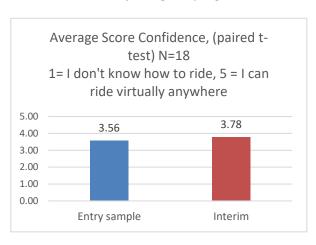
Several indicated their knowledge and awareness has increased in the following ways: knowing how to plan and prepare for cycling longer distances and how affordable cycling is.

Mentors indicated the program helped them enhance their communication and teaching skills and they also felt a sense of accomplishment in helping others learn to cycle.

The survey asked the following questions to indicate changes in cycling knowledge and skills.

- How confident do you feel riding a bicycle?
- I know the bicycle routes in my community
- I know the cycling rules of the road for cycling
- I know how to do simple bike repair





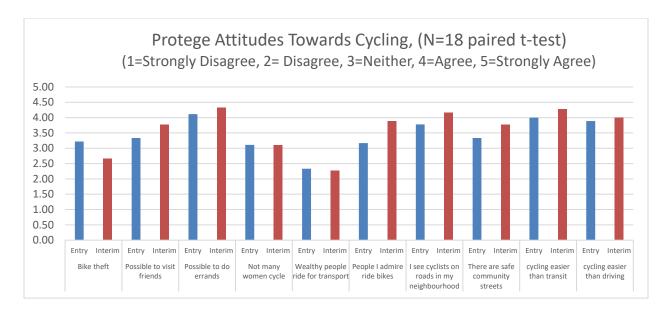
Feedback here was not as conclusive. Protégé respondents indicated that their cycling confidence remained unchanged. The other three questions were newly added to the Entry survey and the sample size was too small to be statistically relevant, although the means show slight improvement for each question.

The results here suggest the program helped build skills and confidence with a

few of the protégés while for others their confidence and skills were unaffected. A more consistent approach to mentor training may help to increase impact.

Changes in participants' perception of cycling as normalized behaviour

Of the 10 attitudinal indicators that were measured, only two indicated a change that was statistically significant. Respondents showed higher levels of admiration for cyclists. They also agreed more strongly that cycling was easier than driving.



The results indicate the program has made participants generally more aware of cycling as a viable transportation choice. Perhaps they have become more aware of other people riding and are feeling more admiration for what cyclists do. Perhaps participant's experiences have shown them that the roads are safer than what they thought. Participants clearly do not yet think of transportation cycling as normalized behaviour.

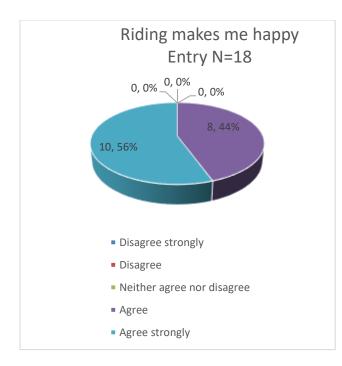
How did the program affect personal and social reinforcements?

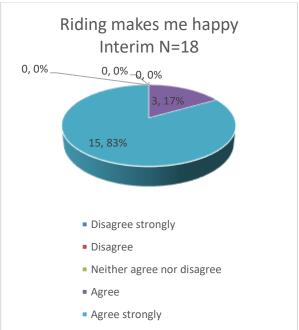
We believe that friends and family attitudes towards cycling behaviour can be either a facilitator or a barrier to cycling behaviour. We wanted to see if the participants perceptions regarding support levels from friends and family changed as a result of program participation. In the entry and interim surveys, we asked several questions about participants' perception of support from friends and family for cycling including:

- My friends and family see cycling as fun or cool
- People from my culture think it is important to drive a car
- People in my family think it is dangerous to ride a bike in my community
- My friends and family would think it is strange if I started to ride a bike to get around

The survey data showed no significant change as a result of program participation. The results suggest that the program is not an effective way to affect the attitudes of friends and family members.

In terms of affecting happiness, the vast majority of responsions either agreed or stongly agreed with the statement, "Riding makes me happy". More people strongly agreed with the statement in the interim survey than in the entry survey, but this change was not statistically significant.





Did the CCP change the participants' expectations of cycling?

As described in the *Formative section* above, the program, mostly met participant expectations. This can be further highlighted by comments we received from interim survey respondents and the two interviews we conducted with inactive or "dormant" protégés.

Respondents spoke about how welcoming the Bike Hubs were and how it improved their skills and confidence and enabled them to cycle more often and for longer distances. They mentioned the

"I didn't know how to change my bike gears. She told me how those gears work and also she showed me how to change a tire.

Her name is Lisa."

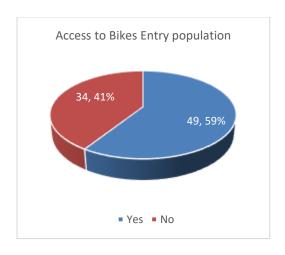
social aspect of meeting new like-minded people and how much fun it was. See **Appendix F** for a detailed comments list.

Did the CCP increase access to bicycles for participants?

The CCP has made bikes available to Pedalwise participants for both short and long-term loans. Thirty-four Pedalwise registrants did not have access to a bike when they signed up for the program and the library was able to provide them with bikes. Loan duration has been as short as two weeks and as long as 22 months. At this point the library has 33 bikes out on long-term loan.

We have lent bikes to non-participants to facilitate cycling events such as Bike the Creek and programs such as Transition Aids to Youth and the TRCA Bike Tours. We have donated bikes to individuals in need and to local school bike swaps.

Loans are currently restricted to one bike per participant and loans are offered on a first-come first served basis.





Did the CCP influence participants' number of cycling trips?

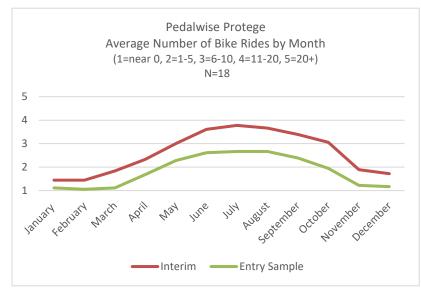
Both survey data and focus group feedback indicate that participation in the Community Cycling Program did influence cycling behaviour change and did increase the number and seasonality of cycling trips. The program also had an impact in reducing the number of car trips taken by CCP protégés. In addition, evidence indicates the CCP impact extends beyond those who are signed up or directly involved in the program. (See section

below on Strava data.)

Survey Data

In the survey we asked participants different questions about the number and type of their transportation trips. For the question, "In an average month, how many times do you currently ride your bicycle?", we asked for a response for each month from January through December.

The graph at right shows the average number of rides per month is higher for the interim data set than for the

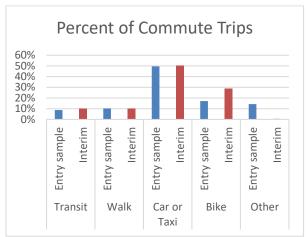


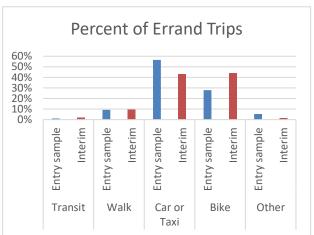
paired Entry Sample. The paired t-test analysis below shows that the difference is statistically significant for every month except January.

t-Test: Pair	red Two Sai	mple for M	eans																					
	Jan	January	Feb	February	Mar	March	Apr	April	May	May	Jun	June	Jul	July	Aug	August	Sep	September	Oct	October	Nov	November	Dec	Decembe
Mean	1.111111	1.444444	1.055556	1.444444	1.111111	1.833333	1.722222	2.333333	2.277778	3	2.611111	3.611111	2.666667	3.777778	2.666667	3.666667	2.388889	3.388889	1.944444	3.055556	1.222222	1.888889	1.166667	1.72222
Variance	0.222222	0.614379	0.055556	0.614379	0.222222	1.323529	0.683007	1.294118	0.918301	1.411765	1.781046	1.19281	1.764706	1.24183	1.764706	1.294118	1.428105	1.428105	0.996732	1.232026	0.535948	1.045752	0.5	1.153599
Observatio	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Pearson Co	0.176887		0.176887		0.470016		0.604823		0.309976		0.374431		0.543058		0.544949		0.423341		0.586857		0.506362		0.296904	
Hypothesia	0		0		0		0		0		0		0		0		0		0		0		0	
df	17		17		17		17		17		17		17		17		17		17		17		17	
t Stat	-1.68325		-2.12196		-3.0105		-2.82911		-2.40431		-3.09233		-3.98596		-3.57071		-3.30584		-4.89323		-3.11677		-2.14932	
P(T<=t) on	0.0553		0.024418		0.003938		0.005787		0.013941		0.003306		0.000478		0.001177		0.002089		6.85E-05		0.003137		0.023151	
t Critical o	1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607		1.739607	
P(T<=t) tw	0.110599		0.048836		0.007876		0.011573		0.027883		0.006612		0.000956		0.002354		0.004177		0.000137		0.006275		0.046302	
t Critical tv	2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816		2.109816	

The January result is not surprising since our experience indicates that even the most dedicated cyclists are deterred by January weather conditions.

We then asked participants to provide information about their weekly transportation habits, the number, distance and mode that they use for both commute and errand type trips. The survey data for commute trips show a small increase in the percentage taken by bike. The increase for errand trips was even larger. Yet neither results were statistically significant using a paired t-test. What is significant is the decrease in the number of both commute and errand trips taken by car.





t-Test: Paired Two Sample for Means

Commute			Errand	
		Interim		
	Entry Car	Car	Entry Car	Car
Mean	4.833333	2.583333	5.916667	2.333333
Variance	24.67647	10.97794	27.65441	3.647059
Observations	18	18	18	18
Pearson Correlation	0.482484		0.289936	
Hypothesized Mean Difference	0		0	
df	17		17	
t Stat	2.146806		3.011905	
P(T<=t) one-tail	0.023265		0.003926	
t Critical one-tail	1.739607		1.739607	
P(T<=t) two-tail	0.046529		0.007853	
t Critical two-tail	2.109816		2.109816	

Finally, we asked participants to about the number of recreation trips taken per week. The number of respondents answering this question was too small to be statistically significant, as this question was not in the original entry survey.

Strava Data for Commute Trips

In addition to the survey data, we also collected commute trip data using **Strava**, a smartphone app, https://analytics.strava.com/. Each week the Strava data was compiled into a report and posted on https://ecoaction.bikebrampton.ca/.



The following table illustrates that the number of trips logged through Strava has increased during the two years that we have been collecting data It also shows the number of participants who track their 'commute' trips through the Strava Eco-Action club have also increased.

Eco-action Strav	Eco-action Strava Club Year over Year Comparison									
	Number of commute trips	Avg. monthly participants								
2018	3472	12.67								
2019	4354	18.58								
% change	25%	47%								

The Brampton Eco-Action club has a total of eighty-one members, fifty-two of whom are either Pedalwise mentors or registered Pedalwise protégés. That represents 49% and 69% of the total number of protégés and mentors that are registered in the Pedalwise program. Only trips marked as "commute" are captured in the report below.

We reviewed publicly available Strava information for the 29 Eco-Action club members (35%) who are not part of Pedalwise. Most of them list Brampton as their home City. From their posts, trip lengths and associated pictures, we determined that the majority were casual cyclists who are logging short trips in their neighbourhood for transportation purposes. We have personally met more than one of these people, where that is the case. One person, for example, is not signed up to Pedalwise for personal reasons yet she faithfully logs her trips on Strava because she wants to contribute to the project.

For privacy reasons, we don't associate trip information with individual names. Strava data, therefore, cannot be compared with the trip information reported on the Pedalwise surveys. We also can't say for sure that individuals are cycling more or that this increase in cycling is attributable to CCP influence. But the data indicates that the CCP continues drawing more participants and that the average trips per participant and trip length is trending higher. It also indicates that the CCP influence extends beyond the Pedalwise registrants into the broader Brampton cycling community.

Month	Number of Trips	Participants	Average Trips per Participant	Average Trip Distance (KM)	Total Challenge KM Travelled	Total CO/2 Saved (Kg)
December 2017	66	6	11	5.5	362.0	113.2
January 2018	351	6	25	4.1	615.4	192.5
February 2018	121	9	13	5.1	620.7	194.2
March 2018	197		25	5.5	1091.2	341.3
April 2018	254	12	21	5.7	1439.3	450.2
May 2018	440	14	32	9.2	3658.9	1147.6
iune 2018	484	17	28	11.2	5424.6	1696.8
July 2018	471	18	26	11.2	5253.6	1643.3
August 2018	399	18	22	13.1	5246.4	1041.1
September 2018	341	19	18	16.5	9635.4	1762.8
October 2018	315	12	26	12.8	4029.6	1257.6
Vovember 2018	226	14	10	14.2	3202.3	1001.7
December 2018	239	14	17	14.0	33383	1044.2
tanuary 2019	220	14	16	8.6	1881.4	588.5
February 2019	156	13	12	11.6	1804.7	504.5
March 2019	290	17	17	17.2	5001.6	1564.5
April 2019	429	22	20	16.1	6904.8	21598
Vay 2019	314	25	21	21.0	10792.5	3375.9
June 2019	598	25	24	21.0	12091.8	4032.6
luty 2019	593	24	25	18.1	10760.7	3365.9
August 2018	467	23	20	16.4	7671.7	2399.7
September 2019	425	21	29	17.5	7416.8	2320.0
October 2019	428	17	25	13.3	5710.6	1796.3
November 2019	359	15	24	85.4	4078.5	1275.0
December 2019	186	15	12	12.0	2236.5	599 s
January 2020	249	13	19	8.5	2110.8	660.3
February 2020	100	9	11	9.3	930 7	291.1

Focus Group Feedback

A surprising finding was the change to mentor cycling behaviour as a result of program participation. Mentors indicated the program got them back into cycling, that they were now cycling in all weather, including winter, and that they enjoyed exploring new places to cycle in Brampton.

Other Changes Attributable to the CCP

Was the CCP associated with a change in participant's sense of community?

The survey asked participants to rate their community connection. The respondent sample size was too small to be statistically significant. On the other hand, focus group feedback did indicate participants felt a greater community connection resulting from participation in the CCP. Just under half of the participants indicated they liked meeting new people. And half of the Protégés indicated the community events and community support (sense of belonging to a group) gave them confidence and inspiration to cycle.

Was the CCP associated with a change in participants self-reported health?

The survey asked participants to rate their personal health. Here again, the respondent sample size was too small to provide statistically significant results. But once again, the feedback from the focus groups indicates participant improvements to their perception of being healthier and being more connected to their communities.

 Both protégés and mentors noticed a change in their comfort level and health since starting the program. Overall both protégés and mentors noted the following differences: increased

- comfort/confidence levels, motivated/influenced by other cyclists, more aware of driving habits, cycling improved physical health and mental health and helping to improve the environment, meeting other cyclists and learning how convenient biking is.
- Half of the protégés saw improvements in their health, fitness, mental health, improved stamina, cycling distance and frequency. Thirty percent of the protégés (3/10) found social benefit in being around like-minded cyclists, learning from each other and meeting new friends.
- A few participants indicated their health and stamina had increased and they used cycling as a form of meditation.

Final Word

The Brampton/Caledon CCP met the project objectives according to the defined evaluation criteria. The audience reach was extended, many barriers to cycling were addressed, cycling skills and knowledge was improved, attitudes were affected more favourably towards cycling and cycling behaviours increased. Yet, we still have a challenging time ahead to bring transportation into the mainstream.

The real and proven benefits to transportation cycling are overwhelmed by the pervasive negative messaging which is often based on perception rather than fact. Cyclists are considered outliers by the general population. While the CCP has established a small sub-culture of transportation cycling as normalized behaviour, the messaging is not yet resonating with the greater population.

The reality is that cycling for transportation will not substantially increase until we can narrow the gap of the perceived convenience and comfort of car travel versus travel by bike. Other communities have discovered there is really no such thing as a bike culture. Even in communities considered to be havens for transportation cycling, the primary reason people cycle is because the bicycle is the cheapest and most convenient option for them.

We know that building safe and convenient bicycle infrastructure is a key component to increase active transportation participation rates. We also know infrastructure alone is not enough⁷. Community based social marketing, such as the Community Cycling Program have demonstrated effectiveness at changing behaviour. The challenge is to do it at a larger scale by making cycling for transportation, both safe and convenient.

^{• &}lt;sup>7</sup> "Why culture matters for transport policy: the case of cycling in the UK", https://www.sciencedirect.com/science/article/abs/pii/S0966692313002202

Appendix A CCP Evaluation Map

Evaluation Questions	Indicator	Focus Group/Survey Question	Data Sources	Data Collection Methods	Data Analysis	Timeline	Person(s) Responsibl e
Formative							
What are the perceived enablers and barriers to cycling (physical, access to a bicycle, skills and knowledge, social norms)	EnablersBarriers	 What is your main mode of transportation? What do you like about travelling this way? What do you dislike about it? Have you used/or considered using a bicycle for travel? For what purpose? What has stopped or discouraged you from bicycling for travel? What would encourage you to start/continue cycling for travel? 	Target population LINC clients	Formative focus groups	Thematic analysis	May 2019	
What are the perceived expectations of engaging in cycling behaviour (positive or negative experience)	Positive expectationsNegative expectations	If you often used a bicycle as a way to get from one place to another, what would you expect to happen? (Expectations)	CCP Participants	Pre- survey	Thematic analysis	May 2019	
Process							
What was the usage and reach of the activities?	# participants	# participants	Community organizations	Mid and final reports	Descriptive	Oct. 2019	
Who participated in the CCP?	 Age demographics of participants % of participants male, female, other 	What is your age?Sex: Male Female Other	CCP Participants	Mid and final reports Pre-post survey	Descriptive	Oct. 2019	
How effective was the delivery of the CCP activities? What CCP activities could be improved?	•	Please rate how well the following program activities were delivered?	CCP participant, mentors and staff	Post survey Post focus group	Descriptive Thematic analysis	Oct. 2019	

How can CCP activities be improved?	•	• TBD	Participant, mentors and staff	Post focus group	Thematic analysis	Oct. 2019	
What are the characteristics of a good mentor?	•	What are the most important characteristics of a good mentor?	CCP participants	Post focus group	Thematic analysis	Oct. 2019	
What additional supports are needed by participants? Mentors? Community organizations?	•	What additional supports could have been offered to help you or others?	CCP participants Mentors and staff	Post focus group	Thematic analysis	Oct. 2019	
Evaluation Questions	Indicator	Question	Data Sources	Data Collection Methods	Data Analysis	Timeline	Person(s) Responsible
Outcomes				l			
Did the CCP influence behaviour cha	inge constructs from the soci	al cognitive theory?					
Behavioural capability: Did the CCP change participants knowledge and skills?	 Knowledge of rules of the road Bicycle skills Basic repair skills Knowledge of routes and trails 	 I know the rules of the road for riding a bicycle I know the bicycle routes and trails in my community I have the skills to ride a bicycle I have the skills for simple bicycle repair (like inflating a tire and fixing the chain) 	CCP Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
Observational Learning	Social norms (descriptive social norms)	I often see people bicycling in my neighbourhood	CCP Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
Reinforcements	 Social support (external responses) Happiness (internal responses) 	 Friends and family would be supportive of me bicycling Riding a bicycle makes me happy 	CCP participants	Pre-post survey	Statistical analysis (paired t-test)	May-Sept.	

Self-efficacy: Did the CCP change participants self-efficacy of cycling?	Confidence riding on busy roads, quiet streets and trails	 Rate how confident you are that you can do the following as of now: Ride a bicycle on trails Ride a bicycle on a quiet street Ride a bicycle on a busy road 	CCP Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
Expectations: Did the CCP change participants expectations of cycling?	 Safety Mode of transportation Expectations of joining the program Expectations of bicycling and value of the outcome 	 I feel safe riding a bicycle on the road Bicycling is a good way to get from one place to another Pre-Why do you want to join the program? /Post – Did you get what you wanted out of the program? Below is a list of potential benefits of bicycling. Please rank them from most to least important to you. 	CCP Participants	Pre-post survey	Statistical analysis (paired t-test) Thematic analysis?	May – Sept.	
Did the CCP increase access to bicycles for participants?	Access to bicycles	Do you have a bicycle you can use regularly? Yes Sometimes No	Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
Did the participants cycling behavior	urs change?						
Did participants number of cycling trips change? Total, for travel and for recreation?	Change in total number of cycling trips and by purpose	During a typical week, I usually ride my bicycle this many times for: fun and exercise, to and from work or school, to buy groceries or other errands	Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	

•	Did participants mode share change?	 Change in motor vehicle trips/mode share Change in bicycling trips/mode share 	Within a typical WEEK, how many times (#) each day do you use the following ways to travel? For example; travel to work, school, groceries, errands, to see friends.	Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
Ot	her							
•	Was the CCP associated with a change in participant's sense of community?	Change in perceived sense of community pre-post	How would you describe your sense of belonging to your local community? (Belonging is feeling you are part of something, connected and accepted.) Would you say it is?	Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	
•	Was the CCP associated with a change in participants self-reported health?	Change in perceived health pre-post	In general, how would you rate your health?	Participants	Pre-post survey	Statistical analysis (paired t-test)	May – Sept.	

Appendix B: Survey Analysis

General Survey Data Analysis Methodology

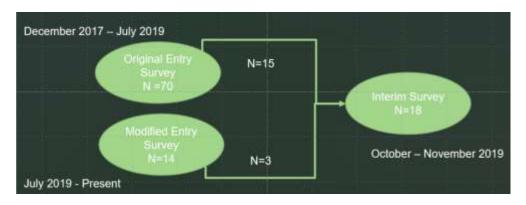
From program inception in December of 2017 to current, participants joining Pedalwise were required to complete an on-line registration form that doubles as an entry survey to the program. When the Eco-Action program ended in the spring of 2019, and the Bike Hub moved under the direction of the Community Cycling Program, Peel Public Health required additional questions be added to the survey. The entry survey was modified, and the revised survey was made available for responses in early July 2019. The modification of the entry survey also gave an opportunity to streamline and reorder questions logically into groups.

An interim survey was created matching the revised entry registration survey in all respects. Names and emails were collected to allow respondent matching. Demographic questions such as age, sex and employment status were excluded from the interim survey. The interim survey was made available to all Pedalwise participants, (including mentors), during late October and early November of 2019.

A total of eighty-three unique Pedalwise registrants completed the Entry survey. Of those, seventy completed the original entry survey and thirteen completed the modified entry survey. For the interim survey, a total of twenty-one unique responses were captured. Three responses were mentors. These responses were excluded from the analysis because mentors had not completed an entry survey and it was felt that the results would be skewed if they had been included. Of the eighteen remaining responses, only three had completed the modified entry survey.

The first protégés registered for the program in December 2017. The last protégé to be included in the entry data set signed up in December of 2019. For those completing both surveys, the average length of time in the program was 341 days. It would be interesting to see how much, if any, the length of time in the program affects the survey results. Due to the small data set size, however, we did not perform this analysis.

Of those responding to the interim survey, a summary of the number of survey responses is shown in the table below.



The response rate for the interim survey was 22% which was disappointing if not surprising. About 1/3 of the Pedalwise protégés were regularly active in the program. Of the other 2/3, some were involved

sporadically, some came out to rides or events for a short time and then were not heard from again, despite repeated efforts of the mentors and instructors to connect with them. Some only came to one Bike Hub to borrow a bike or repair their own. Some only filled out the survey but we never met them at all. We also had a few issues where the mentor did not follow up for protégé contact.

In the summer of 2019, we made a concerted effort to contact "dormant" protégés. We identified a list of 13 and made several attempts to connect, via phone, via text and via email. For that effort we got two responses, both of whom said very positive things about the program (see testimonials).

To perform the analysis, the entry and interim survey responses were matched using the name and email fields. Two approaches were used to compare data from the entry and interim survey answers. For the questions that were included in the original survey, the results from the interim survey were compared to the entire entry survey population. For questions that were added to the modified entry survey, only the modified entry responses were compared to the entire interim survey population as there would have been no prior data for those questions.

Because entry registration dates varied considerably across the original entry survey responses, we selected one question to test the correlation between the original survey and the modified entry survey respondents. A comparative analysis of all three data sets was done on the following question, "in an average month, how many times do you currently ride your bicycle?" The analysis of this question indicated a high correlation between the original and modified entry responses.

Survey Data Analysis Methodology by Question

The table below list the approach taken to analyze each survey question.

Survey questions

Question	V	/hich surv	/eys	How Analyzed
	Orig.	Mod	Interim	
	Entry	Entry		
Email	Yes	Yes	Yes	Not analyzed. Used as respondent identifier
First Name	Yes	Yes	Yes	Not analyzed. Used as respondent identifier
Last Name				
What is your phone	Yes	Yes	No	Not analyzed. Used by mentors for contact
number?				purposes
My primary telephone	Yes	Yes	No	Not analyzed. Used by mentors for contact
is				purposes
What is your street	Yes	Yes	No	Not analyzed. Used to match protégé to
address				mentor
What is your postal	Yes	Yes	No	Not analyzed. Used to map protégé location
code?				
What is your gender	Yes	Yes	No	Percentage of total protégé population
How long have you	Yes	Yes	No	Percentage of total protégé population

^{*} Questions highlighted in yellow were eliminated from the analysis because the sample size was too small to be statistically relevant.

lived in Canada?				
I have access to a smart	Yes	Yes	No	Not analyzed. Used to determine if the
phone				protégé can use Strava to log trips
My preferred	Yes	Yes	No	Not analyzed. Used by mentors for contact
communication method				purposes
is				
I have access to a	Yes	Yes	No	Not analyzed. Used to determine if the
computer at home				protégé can use a GPS tracker to log trips
I have access to a	Yes	Yes	No	Not analyzed. Used to determine if the
bicycle				protégé needs to borrow a bicycle from the
				library
There is a safe place to	Yes	Yes	No	Not analyzed. Used to determine if the
store my bicycle at				protégé requires a bicycle lock
home				
I currently attend	Yes	Yes	No	Percentage of total protégé population.
school				Could be used for further socio-economic
AAD at the same			NI -	indicator analysis
What is your	Yes	Yes	No	Percentage of total protégé population.
employment status?				Could be used for further socio-economic indicator analysis
What is your age	Yes	Yes	No	Percentage of total protégé population.
wildt is your age	163	163	INO	Could be used for further socio-economic
				indicator analysis
In general, would you	No	Yes	Yes	Text responses were converted to a 5-point
say your health is?	110	103	103	scale where 1= poor, 2 = fair, 3=good, 4 =
				very good, 5=excellent. Average point score
				was compared between the entry and
				interim survey responses.
How would you	No	Yes	Yes	Text responses were converted to a 5-point
describe your sense of				scale where 1=Very Weak, 2=Somewhat
belonging to your local				weak, 3=Somewhat strong, 4=Very Strong.
community?				Average point score was compared between
				the modified entry and interim survey
				responses.
How confident do you	Yes	Yes	Yes	Text responses were converted to a 5-point
feel riding a bicycle				scale where 1= I don't know how to ride a
				bicycle, 2 = I feel confident riding a bicycle
				on a trail, 3=I feel confident riding a bicycle
				on trails and quiet streets, 4 = I feel
				confident riding a bicycle on trails, streets and multi-lane roads, 5=I feel confident
				riding a bicycle virtually anywhere. Average
				point score was compared between the
				entry and interim survey responses.
I know the bicycle	No	Yes	Yes	Responses were already on a 5 point scale
routes in my	1.0			where 1= strongly disagree and 5= strongly
community				agree. Average point score was compared
				O O - P - m - c - c - m - c - c - m - c - c - c

				between the modified entry and interim
I know the rules of the road for riding a bicycle	No	Yes	Yes	Responses were already on a 5 point scale where 1= strongly disagree and 5= strongly agree. Average point score was compared between the modified entry and interim survey responses.
I know how to do simple bicycle repair	No	Yes	Yes	Responses were already on a 5 point scale where 1= strongly disagree and 5= strongly agree. Average point score was compared between the modified entry and interim survey responses.
In an average month, how many times do you currently ride your bicycle?	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=near zero, 2=1-5, 3=6-10, 4=11-20, 5=more than 20. Average point score was compared between the original entry and interim survey responses. Average point score was also compared between the modified entry and interim survey responses. Very little difference was noted between the original and modified data sets.
In a typical week, how many trips would you take in the following distance categories for commuting to school or work?	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=<1, 2=1 or 2, 3=3-5, 4=6-10, 5=11+. Average point score was compared between the original entry and interim survey responses.
For the commuting type trips noted above what is the usual method of travel you use currently?	Yes	Yes	Yes	The number of responses for each mode was counted and then recorded as a percentage of the total of trips in each distance category. For instance, three respondents chose "Transit" as their mode choice for trips 1-2km. That represents 4% of the eighty-three of mode selection choices in that distance category. The percentages were then compared between the original entry and interim survey responses.
In a typical week, how many trips would you take in the following distance categories for things like: purchasing groceries, community meetings, (including church or temple), visiting friends, etc., (does not include	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=<1, 2=1 or 2, 3=3-5, 4=6-10, 5=11+. Average point score was compared between the original entry and interim survey responses.

commuting to school or work)				
For the errand type trips noted above what is the usual method of travel you use currently?	Yes	Yes	Yes	The number of responses for each mode was counted and then recorded as a percentage of the total of trips in each distance category. For instance, three respondents chose "Transit" as their mode choice for trips 1-2km. That represents 4% of the eighty-three of mode selection choices in that distance category. The percentages were then compared between the original entry and interim survey responses.
In a typical week, how many cycling trips would you take for fun or exercise?	No	Yes	Yes	Text responses were converted to a 5-point scale where 1=<1, 2=1 or 2, 3=3-5, 4=6-10, 5=11+. Average point score was compared between the original entry and interim survey responses.
What do you think about cycling to destinations? (including 11 sub-questions	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=Disagree strongly, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Agree Strongly. Average score was plotted against each question.
What do your friends and family think about using a bicycle? (including 4 sub- questions)	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=Disagree strongly, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Agree Strongly. Average score was plotted against each question.
Using a bicycle for transportation is something(including 2 sub-questions)	Yes	Yes	Yes	Text responses were converted to a 5-point scale where 1=Disagree strongly, 2=Disagree, 3=Neither agree nor disagree, 4=Agree, 5=Agree Strongly. Average score was plotted against each question.
Your Expectations of the Pedalwise experience Below is a list of benefits you may receive from participating in this program. Please place one check mark in each column for your First, Second and, Third choice of the most important aspects of the Pedalwise program for you.	Yes	Yes	No	Meet new people, Cycling for convenience Cycling for faster transportation Cycling to save money Cycling for fun Exercise for better health Help the environment Cross-cultural interaction Improve cycling skills Increase community knowledge Improve my English Enjoy a "Canadian" experience Feel safe with a mentor Text responses were converted to a number. First choice was assigned a 3, second choice

				was assigned a 2 and third choice a 1. Total points for each of the thirteen criteria were summed and ranked.
Please rate your experience with each of the following activities that you participated in. Choose N/A if you did not participate in an activity. (including 7 sub-questions)	No	No	Yes	Text responses were converted to an 7point scale where 1=Completely Dissatisfied, 2=Mostly Dissatisfied, 3=Somewhat Dissatisfied, 4=Neither Satisfied nor Dissatisfied, 5=Somewhat Satisfied, 6=Mostly Satisfied, 7=Completely Satisfied. If a response was "N/A" the response was removed from the analysis. Average score was plotted against each question.
What, if anything, did you like about the Caledon/Brampton Bike Hub? Please explain.	No	No	Yes	Comments recorded and trends determined. Data was used to help inform the observations and recommendations.
What, if anything, did you dislike about the program? Please explain.	No	No	Yes	Comments recorded and trends determined. Data was used to help inform the observations and recommendations.
How could the program be made better? Please explain.	No	No	Yes	Comments recorded and trends determined. Data was used to help inform the observations and recommendations.

Appendix C: Focus Group Methodology

Introduction

BikeBrampton (BB) implemented the Community Cycling Program (CCP) in Brampton in April 2019. The goal of the program was to increase cycling behaviours among program participants. Peel Public Health (PPH) supported this project through the development of an evaluation plan, materials and data analysis. As part of the evaluation, BB administered pre-post surveys and facilitated both interim and post-focus group sessions. Three focus group sessions were also conducted with PCHS LINC classes; the participants of which were not part of the CCP.

PPH supported the focus group process by taking notes and conducting thematic analysis of the BB CCP post-focus group data aligning with the evaluation plan. The goal of the post-focus groups was to gather information on the impact that the program had on participants' beliefs and attitudes related to mode share as well as the barriers, enablers and cycling expectations participants experienced in attending the BB workshops. Portions of the resulting analysis report were included in the appropriate sections of this report⁸.

Methods

The post-focus group was part of the formative evaluation, which aimed to inform the BB's delivery of the CCP in 2019 and into the future. BB conducted two post-focus groups. The first post-focus group was held on November 25, 2019 at the Southfield location in Caledon and the second one was on November 27, 2019 at the Sunny Meadow location in Brampton. The focus groups consisted of both protégés and mentors who were actively involved in the program. A consultant with BB co-ordinated and facilitated the focus groups and BB and PPH staff (AS, KM) were responsible for notetaking, coding and data analysis. Participation in the focus group was voluntary and recorded responses were anonymized. For all those who agreed to participate, a signed consent form provided by PPH was required. Mentor and mentee (protégé) feedback were compiled and analyzed by a Health Promoter (AS) who conducted thematic analysis to identify common themes and patterns that emerged.

⁸ Findings of this report represent the views of the participants and should not be generalized to a wider population.

Appendix D: CCP Brampton/Caledon Updated Work Plan

Category	Activity	Timeframe	Status	
	2018			
Operations	CCP Contract Awarded	November	Complete	
Operations	Official CCP Launch February 01, 2019			
	2019			
Operations	Sign Sub-contractor Level of Service Agreements	January	Complete	
Promotion	Age Friendly Brampton Seminar	January	Complete	
Operations	Meet with Caledon Cycling Shops	Jan-Feb	Complete	
Operations	Finalize Caledon Sites and Dates	Jan-Feb	Complete	
Promotion	PEYA (Peel Environmental Youth Alliance) EcoBuzz	Feb 20	Complete	
	presentation			
Promotion	Toronto International Bike Show CNE	March 1-3	Complete	
Pedalwise	Caledon Bike Hub Mentor recruitment and training	March 3	Complete	
Operations	Build and install Storage Shed at the Exchange	March 6	Installed	
Operations	Storage cupboard at the Caledon Store Front	March	Installed	
Pedalwise	Winter Cycling Workshop (Brampton)	March	Delivered	
Promotion	TRCA Bolton SNAP (Sustainable Neighbourhood	March 7	Delivered	
	Action Retrofit Program) presentation			
Promotion	Seedy Saturday, Century Gardens display booth	March 9	Complete	
BikeWrx	Bolton official opening	March 18	Complete	
Promotion	United Achievers, Chris Gibson Recreation Centre	March 21	Complete	
	presentation			
BikeWrx	Southfields site opens	April 01	Complete	
Promotion	Ontario Bike Summit, Share the Road Cycling	Apr 2	Delivered	
	Coalition presentation by BikeBrampton			
Promotion	Sandalwood Heights SS Parent Council display	Apr 11	Complete	
	booth			
Promotion	Harold M Brathwaite SS presentation	Apr 15	Delivered	
Promotion	Massey Street PS 'Spring into Health' display booth	May 1	Complete	
Promotion	Brampton 2040 Communities in Action display	May 11	Complete	
	booth, and panel discussion			
Pedalwise	Cycling Nutrition Seminar	May	Delivered	
Operations	Hire Luca as a mechanic apprentice in Bolton	May	Complete	
BikeWrx	The Journey Bike Hub opens	May 23	Complete	
Promotion	Louise Arbour SS Eco Open House display booth	May 16	Complete	
BikeWrx	Bike donation (10) to Massey St. PS bike swap	May	Complete	
Promotion	Countryside Village PS Bike to School Week	May 24	Complete	
	Assembly presentation			
Promotion	Fallingdale PS Bike to School Week Assembly	May 27	Complete	
	presentation			
Promotion	Brampton Bike to Work Day display booth	May 27	Complete	
Promotion	St Leonard Catholic School Bike Safety presentation	May 31	Complete	
Promotion	Bramalea CycleFest booth display	Jun 1	Complete	
Promotion	Cardinal Leger SS bike repair and display booth	Jun 4	Complete	
Promotion	Sunnyview MS Bike Safety presentation	Jun 3	Complete	

Ellwood Public School BBQ booth display	Jun 6	Complete
Built portable storage cupboard at Sunny Meadow	June	Installed
TRCA Bike Tours – Clareville Conservation Area,	Jun 7, 14, 21	Complete
Rosalea Park, Chinguacousy Park promotion		·
Red Willow MS Bike Safety presentation	Jun 12	Complete
Castle Oaks PS Bike Assembly presentation	Jun 14	Complete
Caledon Day	Jun 15	Complete
Bike the Creek booth display	Jun 22	Complete
Brampton Farmers Market 'Get Active'	Jun 29	Complete
presentations & booth display		
Create CCP surveys and focus group materials	June	Complete
Deliver focus group session at Ardglen	Jun 27	Delivered
Deliver Focus session to two LINC classes at PCHS	Jul 24	Complete
Massey Street PS Bike Safety SAIL class	Jul 17	Complete
· · · · · · · · · · · · · · · · · · ·		, , , , , , , , , , , , , , , , , , ,
	Jul 17	Complete
	+	Complete
	•	Complete
New Canadians		
Deliver focus group session to LINC class at PCHS	Sept 25	Complete
Delivered bicycle safety seminars to Caledon Cub &		Complete
· · · · · · · · · · · · · · · · · · ·		·
EcoSchools Professional Development Day, Albion	Oct 29	Complete
Hills Conservation Area presentation and booth		
display		
Sunny Meadow and Southfields	November	Complete
Close Ardglen Bike Hub temporarily	November	Complete
Winter Party	December	Complete
CCP Meeting	December	Complete
Bike Refurb		On-going
2020		
Program analysis and final report	February	Complete
Bike Scrap Metal recycling and sorting bikes	February	Complete
Move Southfields hube location to Mayfield	March	On-going
Orenda/Ardglen Community Fair	March	
Prof. Léa Ravensbergen – seminar / workshop	May	
PCHS Bike-a-thon as per President Anu Sharma	May	
Advanced Cycling Skills Workshop	June	
TRCA Bike Tours (3) – lend bikes & assist in tours	June	
Develop Bike Host program for the Algoma	June-	
University student body	September	
	•	
Develop program to combine arts, culture, nealth	Jany Colobe.	
and wellness programming with transportation	July Goldson	
	July Colonel	
	Built portable storage cupboard at Sunny Meadow TRCA Bike Tours – Clareville Conservation Area, Rosalea Park, Chinguacousy Park promotion Red Willow MS Bike Safety presentation Castle Oaks PS Bike Assembly presentation Caledon Day Bike the Creek booth display Brampton Farmers Market 'Get Active' presentations & booth display Create CCP surveys and focus group materials Deliver focus group session at Ardglen Deliver Focus session to two LINC classes at PCHS Massey Street PS Bike Safety SAIL class presentation McHugh PS Bike Safety SAIL class presentation Summer Party Catholic Crosscultural Services presentation to New Canadians Deliver focus group session to LINC class at PCHS Delivered bicycle safety seminars to Caledon Cub & Scout troops at Southfields Bike Hub EcoSchools Professional Development Day, Albion Hills Conservation Area presentation and booth display Sunny Meadow and Southfields Close Ardglen Bike Hub temporarily Winter Party CCP Meeting Bike Refurb 2020 Program analysis and final report Bike Scrap Metal recycling and sorting bikes Move Southfields hube location to Mayfield Orenda/Ardglen Community Fair Prof. Léa Ravensbergen – seminar / workshop PCHS Bike-a-thon as per President Anu Sharma Advanced Cycling Skills Workshop TRCA Bike Tours (3) – lend bikes & assist in tours	Built portable storage cupboard at Sunny Meadow TRCA Bike Tours – Clareville Conservation Area, Rosalea Park, Chinguacousy Park promotion Red Willow MS Bike Safety presentation Castle Oaks PS Bike Assembly presentation Caledon Day Bike the Creek booth display Jun 15 Bike the Creek booth display Brampton Farmers Market 'Get Active' Jun 29 Presentations & booth display Create CCP surveys and focus group materials Deliver focus group session at Ardglen Deliver Focus session to two LINC classes at PCHS Massey Street PS Bike Safety SAIL class Presentation McHugh PS Bike Safety SAIL class presentation McHugh PS Bike Safety SAIL class presentation Deliver focus group session to LINC class at PCHS Delivered bicycle safety seminars to Caledon Cub & Sept 30 Sept 25 Delivered bicycle safety seminars to Caledon Cub & Sept 30 Scout troops at Southfields Bike Hub EcoSchools Professional Development Day, Albion Hills Conservation Area presentation and booth display Sunny Meadow and Southfields Close Ardglen Bike Hub temporarily November Winter Party December Bike Refurb 2020 Program analysis and final report February Bike Scrap Metal recycling and sorting bikes February Move Southfields hube location to Mayfield March Orenda/Ardglen Community Fair More Southfields hube location to Mayfield March Orenda/Ardglen Community Fair More Southfields hube location to Mayfield March Prof. Léa Ravensbergen – seminar / workshop PCHS Bike-a-thon as per President Anu Sharma Advanced Cycling Skills Workshop June TRCA Bike Tours (3) – lend bikes & assist in tours Develop Bike Host program for the Algoma June

	work at PCHS full-time for 16 weeks and provide		
	community outreach cycling programs in		
	association with COB recreation and the school		
	boards		
BikeWrx	Modify the Caledon schedule to do more local	May-October	
	events rather than static weekly Hubs		

Appendix E Pedalwise Protégé Pre CCP Testimonials

The following testimonials and stories were collected over the past two years from Pedalwise protégés. Most stories reflect their time before the CCP started but are relevant to the Bike Hub story. The majority of these protégés are still active in the program.

Mina, a Sheridan College student and Pedalwise protégé who lives in Mount Pleasant "Hi David, I have some new experiences; I [now] bike everyday school ②. I really enjoy it. Thanks for all the support"

Renuka joined Pedalwise in the Spring of 2019. She is a new immigrant who just completed her doctorate at a University in New York. She now lives in Brampton with her husband. She doesn't own a car and uses the bike borrowed from the Hub library to get around town.

Jason started the program feeling very uncomfortable riding on Brampton's roads. He was primarily a recreational cyclist. His goal was to improve his skills so he could participate in a charity cycling relay from Toronto to Las Vegas. Last fall he did just that, completing over 694 km in 8 days. He is now using his bike regularly to commute to work and for errands and is regularly riding in the colder weather. Jason has become so proficient that he is now a Pedalwise mentor. This year he participated in the same event only this time pedalling to San Antonio Texas!

Raquel is a protégé with mental challenges. Despite this she and has been able to secure full-time employment with help from Brampton Community Living. The Pedalwise program has given Raquel the skills and confidence she needed to be able to commute the 7km from home to work by bicycle each day.

Peggy joined Pedalwise in the winter of 2017 and, with the help of her mentor, began cycling in earnest in May. From June to August she racked up over 750km on her bike! Then two serious injuries cut her cycling short. But that hasn't dampened her enthusiasm. Peggy has recovered and regularly rides her bike for both recreation and transportation.

Alex, a Pedalwise protégé, borrowed a bicycle from the library in the spring of 2018. Although she doesn't usually participate in the group rides, she now regularly uses her borrowed bike in and around her neighbourhood.

Caitlin, who started the program with little confidence riding on the roads last year completed her first ever Grande Fondo (100km distance) with her mentor's encouragement. At about 65km he started saying to her, "just 10km more and then you can quit if you want to." Adding to her challenge, she was on a heavy bike upright that she borrowed from the Hub library! Caitlin left the program last fall because she was moving to Toronto. We understand that she still uses a bike regularly for transportation.

Dharminder and Ramanjit joined Pedalwise as a couple. Neither were confident cyclists. Through Pedalwise, Dharminder gained the confidence to ride regularly for local errands and Raman learned to commute by bike to her work 15km away. Their mentor helped with planning the route and

practicing the commute on a weekend. This past fall the couple took their cycling skills to a new home in Niagara.

Lina, who was slow and uncomfortable on her bike when she started the program, now has joined several social rides and now regularly rides trips of over 50km.

Owen, a 14 year old protégé, can now ride to the local grocery store unaccompanied.

Heidi never thought about cycling for anything other than recreation before joining Pedalwise. She now rides regularly for local errands and commutes from Brampton to Caledon East to work at least a couple of days per week.

Ewa has continuously and quietly worked on both her riding and bike repair skills. She is not afraid to get her hands dirty and is now proficient at changing flats, adjusting brakes and maintaining the drive train. When Ewa and her husband Rado go on trips to Europe, instead of renting a car, they temporarily purchase bikes locally and travel to many places by either bike or bus.

"I have always believed in the health benefits of walking and biking, and the need to reduce pollution and greenhouse gases by switching to sustainable modes of transportation. I usually walk to stores, library, rec centres that are within 2 km radius and I have been taking a bus to work for the last seven years. I was already thinking about using a bike for these in between distances of 2 to 8 km and I bought a city bike earlier but then this bike was just sitting in my shed for over a year and I never rode it – not even once! I think it was because biking is different from walking and busing... It involves some initial investment of time and effort in learning how to pick the best routes for my destination, how to ride on a road, some more thought on what to wear, how to transport stuff (baskets and panniers for groceries, etc.), and obviously tuning and maintaining the bike which I knew nothing about. Pedalwise and BikeWrx helped me with all that and I am seriously grateful for all the support and encouragement. Yes, I know that there are YouTube videos on some of that and they are nice learning tools too, but there is nothing better than somebody showing you how to do it and then watching over your shoulder as you do it yourself. This hands-on approach worked best for me in BikeWrx. The same can be said about actually riding with mentors in Pedalwise. Not even mentioning meeting all the great folks coming together to those weekly meetings. I am still a work in progress, but I am already feeling more confident to keep on biking to those places several km away and now possibly even longer distances. I must admit I felt very apprehensive about going on that 60 km ride yesterday for a get-together lunch so it was great to realize that I can actually do it! So thank you very much again for the very positive experience this past year."

Appendix F: Focus Group and Interview Comments and Feedback Answers to Focus Group Questions

What, if anything, did you like about the Caledon/Brampton Bike Hub?

Everyone is very nice and welcoming and supportive of getting new riders on the road.

It is available should I need to go and take someone new to riding

Very friendly

The welcome from the host(s)

Basically, I just love everything about the Bike Hub! How well organized it is with all the relevant information promptly communicated through e-mails and posts on the Website. Besides Pedalwise/BikeWrx schedules, the Bike Hub Website so up-to-date and has a very useful content, links and maps concerning growing active transportation in the community and road safety. I love learning about bike maintenance and repairs - it is very empowering knowing that I can probably manage OK by myself and not get completely stranded somewhere on the road. I love the rides guided by our mentors, from whom I learn how to plan the routes that combine less busy or paved-shoulder roads with trails and multiuse pathways, how to safely make left-hand turns, where to wait on red lights to not obstruct the right turning cars, the riding skills and techniques, etc. I love the venue where we can bring our bikes right inside and get a helping hand and guidance from the (so patient and knowledgeable) certified bike mechanics on the drop-in evenings. And I love the social aspect of these meetings where we can exchange tips and advice and then also go out together to various local destinations and events.

The variety of the sessions

Meeting new fellow cyclists and expanding and increasing my rides.

Friendly, helpful groups of people

Help and tools are available but important is the guidance from experienced mechanics, updates on the biking community is provided at the [BikeBrampton] meetings, bike training sessions available, this activity gives me opportunity to meet like-minded community folks and expand biking knowledge and experience in doing so while maintaining a healthy lifestyle, inclusiveness and sense of belonging to my community through participation

making new friends

Raising awareness about cycling as a means to improve health AND as transportation.

Great group of people who are passionate about cycling. Terrific information on what is happening within the city and region with respect to cycling advocacy, events and planning.

Open every week, availability of activities

It gave me confidence to ride a bike and borrow one! Thank you.

What i like about it (even though i did not do anything to participate other then join) is that it is a place for like minded people of Cycling to come together and be able to discuss important topics. I believe [it's] a good hub to keep people like this together and eventually it could grow into something even bigger.

It brings people together with a common interest.

Working on my bike, socializing, making new friends, sharing my experience with others

Got me excited again about riding a bike

I was encouraged to ride a bike and they helped me do it

How could the program be made better?

Comment Recommendation

More rides and social events; maybe an online group where	We currently have a Pedalwise
people can share the rides they want to go on so people can	Facebook page and Messenger groups.
group up	Need to better publicize.
It would be nice to have a mentor who is not always too	Need to recruit more mentors, better
busy.	mentor screening and training
Insure that Caledon and Ardglen has a full set of tools	We've purchased more tools for
	Ardglen. Southfields & Bolton have
	complete sets.
Maybe on the not-so-busy drop-in nights, we could have	When the drop-in traffic is light, the
some brief (like 15-20 minutes refresher or module	mechanic will offer a class each week.
expansion on certain aspects of bike repair and	Will use a library bike for
maintenance, e.g. disc brakes, gear limits adjustment, how	demonstration.
often to clean and oil the chain, etc.	
To see more remainders on the messanger	This is very labour intensive, but we will
	try to do better.
Perhaps education on how to use/ what to expect when we	This is currently happening with some
see 'xyz', especially with the new biking infrastructure being	mentors. More mentor training for
built, for motorists and cyclists alike.	consistency.
Have the community bike rides earlier in the morning than	Will pass this along to City of
at 10 am, sun feels hotter at that time. Also have the	Brampton's BCAC, who organize the
community rides later in the evenings, when its cooler, more	Community Rides
people will ride.	
I have not participated enough to give a clear answer to this	
question.	
I personally would like a little more structure to the	See comment above re instruction.
instructional portion of the meetings.	
Delivering the bike or landing a bike car holder.	We don't have capacity to do this in the
	current program.

The program seems very well off. Thank you to the people who keep up the hard work to make it keep turning. Community support is a great factor in making anything better and can always be a great benefit to keep in mind.	
More publicity	We will budget for more promotion in the future.

What, if anything, did you dislike about the program?

Comment Recommendation

Sunny meadows location is inconvenient for me	We are looking to reopen the Ardglen Hub later in the year
Was paired with a mentor but I was never asked to go on a ride with him.	See above re mentor screening and training.
Lack of all tools at Caledon and Ardglen	Both sites now have a complete tool set.
There is nothing that I disliked really! Also, even though I am retired, I still commute to school every day by walking 2 km with my grand-kids.	
I wish Caledon started earlier	We've asked for an earlier time slot if it becomes available at Southfields.
Nothing to mention	
Would be nice to extend the community rides into the late fall, if at all possible.	Will pass the comment along to BCAC
I have not participated enough to give a clear answer to this question.	
The location is not ideal for me, but I am willing to make the trip by car. I would ride my bike to the meetings if there was better cycling infrastructure in place such as bike lanes.	Mentor will follow up with this person to show how they can ride to the Hub
Nothing.	

What additional supports are needed?

Feedback we heard from the focus groups

Program location, scheduling and sustaining interest was identified for program improvement.

- Half of the protégés (3/6, 50%) indicated that Southfields was a difficult location to get to and the program should consider starting earlier in the evening.
- Some protégés (3/10, 30%) suggested that modules be offered more frequently.
- Over half the mentors (6/9, 67%) felt it difficult to maintain the protégés' interest, often had noshows or had difficulty connecting to their protégé.
- Needs to be more focus on the bike repair modules

Mentorship and program promotion were a few improvements protégés suggested for the program.

• Mentorship/skill development:

- More time spent on teaching and skills training
- Use adult teaching principles
- Cyclist to be matched with other protégés/mentors based on skill level
- o Identify and acknowledge goals/milestones

• Program Promotion & Materials:

- o Increase advertising of program to increase membership
- Increase visibility at community/cycling events (volunteers to wear program identifiers such as t-shirts)
- o Improve BB website (overwhelming, difficult to locate information)
- Ensure each location has a full set of bike tools and equipment
- "Promote modules more, didn't know about them until tonight."

Improvements to mentorship role.

- Few mentors indicated that the expectation of their roles needs to change to improve protégé retention in the program.
- Mentors would like to see an outline of the base skills required to become a mentor to ensure consistency of training and information being shared with mentees.
- Mentors also commented that they would like to see more opportunities to share skills and knowledge among the group to enhance individual skill levels.

What are the characteristics of a good mentor?

Feedback we heard from the focus group sessions.

Protégés used words like "experienced" and "knowledgeable" to describe a good mentor and areas of improvement involved being organized and prepared.

- A good mentor is: friendly, flexible, knowledgeable, experienced, trusting, stays connected and identifies milestones.
- Overall mentors felt that being a part of the program helped them to improve on their communication skills, develop teaching skills, improve patience and understanding of the needs of the protégés.
- Mentors also felt a sense of accomplishment/satisfaction in helping others learn about cycling.

"Being a mentor helped me to improve my communication skills."

"Feels good to help someone try something new that they may not have tried before."
Feedback we heard from the interviews

• A mentor needs to be knowledgeable about planning routes in the City that are safe for cycling

Dormant Protégé Interviews Comments.

We conducted interviews with two protégés who had not been active in the program for a long time. We felt these interviews to be insightful enough to be included here.

1. Your reasons for joining Pedalwise. You took time to respond to the PedalWise questionnaire. What was your motivation for signing up? Did the program meet your expectations? If so, why? If not, why not?

To learn about how to fix my bike. I felt like that was really important and I always wanted to do that. After joining the program I got busy at work and I was always working on Wednesdays so I never got the time.

I went for a ride with a mentor and another time with the mentor and another person.

That was very helpful. I didn't know how to change my bike gears. She told me how those gears work and also she showed me how to change a tire. Her name is Lisa.

My reason to join Pedalwise was to learn cycling and become an active of this community. This program did more then what I had expected. David not only helped me learn this sport, he also put me through a mentor Alina. Alina is a very kind and gentle lady who taught me cycling by giving me one on one lessons. David helped me buy a cycle from Bike Show.

2. What parts of the Pedalwise program did you participate in?

One-on-one rides with a mentor,	Yes	Yes
Cycling skills training	Yes	Yes
Bicycle repair drop-in or workshop	Yes	Yes
Borrow a bike from the bike hub library	I wanted to and asked David and after that I got busy and never got the time to pick up my bike	Yes had to
Group rides	One with my mentor	No
Route planning		No
Use of Strava to track your kilometres	No i didn't have a current phone so couldn't use an app.	Yes
Information seminars		Yes
Something else		No

3. What did you like most about the program?

I felt like the bike club was not only for people who want to ride it was more than that; that is what i really liked about it. I had a really positive experience with David. He came to me to drop my phone and we negotiated a place where he is going to give me my phone. When I told him I had no one to drive me back to Pedalwise and he told me "you are not alone. we are with you." I. hadn't heard that in years. The first time I went to the club they asked me how much I know about the bike and what skills I want to learn. They asked me about me my short-term and long-term goals but that's what I really loved about that. They actually had a plan about the whole thing.

Are participants are very friendly and encouraging

4. What did you like the least?

The only thing I wished they had is 2 days of meet up instead of just one day.

5. Mentor relationship. How would you describe the help you received from your mentor? [Probe for communication level and frequency].

I wished I could meet your mentor twice a week. Otherwise very happy with her. She was amazing. I was amazed to see how she was so dedicated to me. She wanted me to ride my bike instead of taking my car or the bus. I was so amazed to see how people are so dedicated to this thing. You guys are working toward building a better environment. I was amazed at the dedication.

Alina is very charming and friendly lady. She was regular and consistent in our training sessions. I plan to connect with her again once I am back in town.

6. How has the program affected your cycling?

I am riding every day to my work place about 5kms. It's not a lot but i'm doing every day! It's all because of Lisa and David. They really taught me how I can instead of using public transportation.

It taught me the skill from zero, which is amazing.

7. Are you riding more for transportation or recreation than you were before joining?

Unfortunately not these days due to personal issues. It is limited for recreation as for now but I plan to take it for transportation as well.

8. Have your riding skills or confidence changed?

I am getting there \bigcirc

9. Would you say that you are still active in the program?

Once I am back in town, I will connect myself. I do receive regular emails from David

10. Are there fears or other types of barriers that discourage you from learning to ride/cycling?

I noticed there are no bike lanes in Brampton. I like to ride on roads and I miss them. If Peel Region could do something about it. It would be a great help.

11. Have you had a memorable experience, either positive or negative, in the past with cycling?

Once I fell and hurt my hand. Alina told me you are not ready to ride on trails. Now I feel scared for cycling in trails. Are there any easy and smooth trails in Brampton?

12. What could make it easier for you to learn/to ride in future?

Cycling should be promoted more on Government level, like more cycling events and lowering the cost of quality cycles in Canada.