

2010 Expansion of the UTM BikeShare User Base

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1.0 Abstract

This report may give BikeShare and its commission members the ability to promote awareness amongst the community within the University of Toronto Mississauga and ultimately increase the user base. Through the collection of both primary and secondary research, we have assembled both quantitative and qualitative data that can be used in awareness promotion of the BikeShare program. Through analysis of primary research, we determined that only approximately 10% of the student population are users of the BikeShare program. Additionally, a large majority of the users became aware of the BikeShare program through advertisements (33%) and through word of mouth (27%). Continuing and amplifying BikeShare advertising may improve the awareness of the program amongst UTM students, faculty and staff. Targeted advertising, such as to RAWC students, may be the most effective method. Through secondary resource analysis and studies on other campuses with related programs, we further recommend that placing incentive – environmental, economic, social, and health – oriented tips in the BikeShare advertisements has the best chance at improving awareness of the program at the University of Toronto Mississauga.

2.0 Introduction

The UTM Bikeshare program allows students to rent bicycles for a 24 hour period free of charge, for use on and off campus. It has been a great program implemented by the university which exhibits much interest in fostering a sustainable mode of transportation. However, in recent years, this program has not been utilized to its full potential. This report has been created to provide advice about how to expand the user base by promoting awareness amongst UTM students, staff and faculty. Specifically, this project focused on creating recommendations aimed at improving the accessibility and approachability of the current BikeShare program. As part of

this project, we have collected and compiled qualitative and quantitative data from current users and non-users of the BikeShare program at UTM, selected BikeShare associates, academic advisers and, lastly, from various institutions that currently have a similar program to that of UTM. This report's recommendations shall act as an aid to potentially optimize the utility of BikeShare and work in harmony with the current physical and social setting of the University of Toronto Mississauga.

This report provides an insight into the BikeShare program currently being offered at UTM and presents the findings from both the primary and secondary research. It offers recommendations for BikeShare aimed at expanding the user base and improving the approachability of the program. Lastly, this report considers connections between the project and issues at the larger scale and thus will propose future works for BikeShare.

3.0 Background

The University of Toronto Mississauga's BikeShare program was established in 2004 and continues to serve the UTM community presently. The BikeShare program currently has 25 bicycles that are available for rent to UTM students and the program also provides free maintenance and repair of all bicycles. Currently, students at UTM pay a levy of \$0.50/year to the BikeShare program; unfortunately, this amount is not enough to allow BikeShare to operate at its fullest potential (See *7.6 Expanding Funding* for more details).

The goal of this project was to develop recommendations for BikeShare to allow the UTM community to better utilize the program. Currently, the program caters to a very small user base due to limited awareness, a small supply of bicycles to rent and an inadequate program budget. We have examined various model institutions - University of Waterloo, McMaster University, University of Toronto St. George campus and York University - that have had

success with their cycling programs in hopes to gain insight on how to improve UTM's BikeShare program. We have also observed the different behaviours of current and potential users through surveys and interviews to better help us understand levels of awareness, ideas and thoughts about various aspects of the program. The amount of success attributed by other institutions and their cycling programs, along with the suggestions and opinions of both users and non users of the program, have been taken into consideration when developing an effective response and proposal of solutions that may be implemented by the UTM BikeShare program to increase its user base.

Our project team embraced an environmentally friendly approach which promotes healthy active living and a wide range of other physical, social and economical benefits. Information was gathered through different methods: analysis of academic sources, such as scholarly journals; administration of surveys to a varied sample of students; and one-on-one key informant interviews were conducted with current users of the program to gain a higher understanding of the program.

4.0 Methods

We relied on two main methods of data collection; secondary and primary data were obtained through the use of a variety of techniques to help develop the most appropriate list of proposed solutions that UTM BikeShare may incorporate in their commission's current or future agenda.

4.1 Analysis of Secondary Source Data: Documents

Throughout the course of the project, collection and analysis of a wide range of academic and non-academic sources were undertaken. In particular, scholarly articles and government

websites were examined and we extracted data regarding the benefits associated with cycling. Many of these documented sources provided strong supporting arguments promote that cycling has many health, economic, physical, social and environmental benefits. These statements have been summarized and a list of recommendations have been developed so that BikeShare may incorporate them into their advertising and promotional techniques.

4.2 Analysis of Secondary Source Data: Various Institutions

As part of our research, we became familiar with several Canadian university cycling programs. This has helped us to develop a better understanding of successful cycling promotional techniques that could be potentially implemented by the UTM BikeShare. Four universities were examined: York University, the University of Waterloo, McMaster University and the University of Toronto St. George campus. Through examining these institutions, a significant amount of knowledge regarding the variations of cycling programs across cities, along with the different physical and social settings attributed to each institution, was collected. From these data, the project was able to select the best solutions or mechanisms that may help to increase the UTM BikeShare user base paying particular attention to those that would suit the physical and social setting of the UTM campus. Documents, web sites, reports and Facebook groups pertaining to bike share programs at these four Canadian universities were reviewed to help formulate the best possible solution to increase the UTM BikeShare user base. These qualitative and quantitative data also allowed us to become familiar with the findings regarding the benefits of BikeShare. The fundamental nature of this research has allowed the project to incorporate the positive outcomes that arise from cycling and BikeShare programs in our marketing recommendations.

4.3 Primary data: User/ non-user Surveys

Primary data were collected through a wider range of techniques. To obtain a fairly accurate figure regarding the number of users and non-users and suggestions regarding the UTM BikeShare, the project administered and compiled 200 surveys from UTM students of various ages and disciplines to reduce potential sample biases. This technique has been the most appropriate for such a project due to the time and resource constraints. These surveys have provided a relatively accurate and fairly diverse sample size of UTM users and non-users. These surveys helped us to obtain a better understanding of the current trends of users and non-users and any preferences or suggestions they may have which can be incorporated in developing a more user friendly, approachable and accessible program.

4.4 Primary Data: Key informant interviews with BikeShare users

We also used key informant interviews with current UTM BikeShare users to collect information. We conducted structured interviews with four current users to gain higher quality data that is more in-depth and personal to help supplement for the lack of responses of current users in the administered surveys. Issues such as personal opinions regarding the BikeShare program, improvements they would like to see, possible suggestions and their personal usage preferences were a product of this method. The personal feedback from current users has helped further contribute to a better marketing plan for BikeShare.

4.5 Primary Data: Key informant interview with BikeShare Coordinator, Mark Vas

An interview with Mark Vas, a BikeShare coordinator, was conducted to better understand usage patterns of the program, ranging from the types of people that use BikeShare to the growth/decline of BikeShare's usage over the past few years. The project has obtained user inventory records and investigated services and events provided by the BikeShare program from

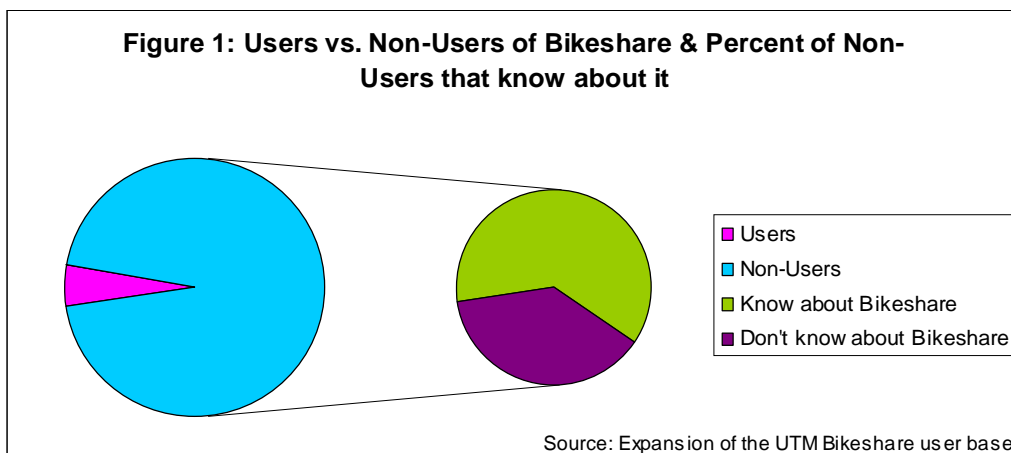
2008-2010. This helped to familiarize us with the trends associated with the BikeShare user base. From this, we were able to determine whether or not BikeShare's current promotional techniques have been successful over the past few years. These data has also helped familiarize the project with the ascribed characteristics of users and thus ultimately improve the adequacy of collected secondary data.

5.0 Primary Data Findings

5.1 Survey Findings

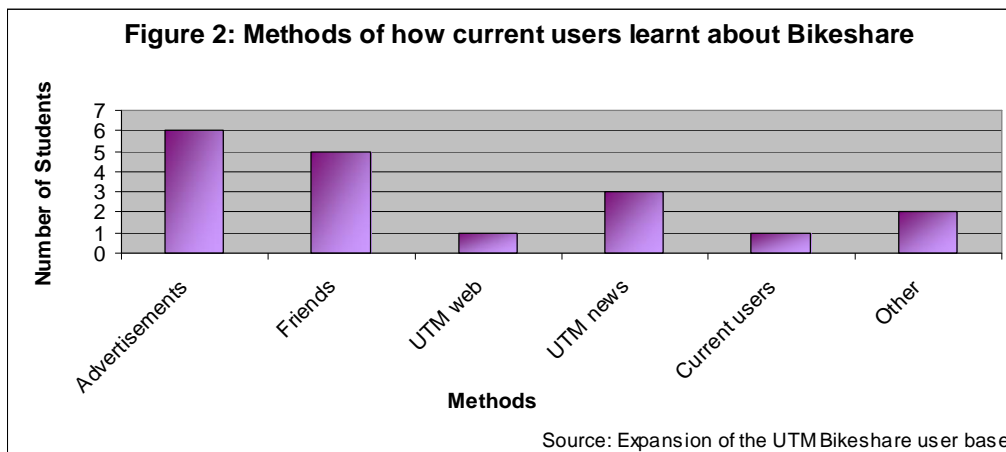
As noted above, we surveyed 200 UTM students of different disciplines and years. The survey was kept short and asked users and non-users to answer five questions specific to their choice to use BikeShare, or not, and five general questions (such as gender, primary mode of transportation, etc.). See Section 12.1 Appendix A for survey.

Prior to the administration of the survey, it was unclear how many users BikeShare had but it was predicted to be significantly low, at approximately 5-10% of the current UTM population. Results of the survey indicate that the prediction was correct with approximately 10% of those surveyed being current users of BikeShare. Furthermore, of the 90% who were not users of BikeShare, 33% did not even know that the program existed, as shown in Figure 1.



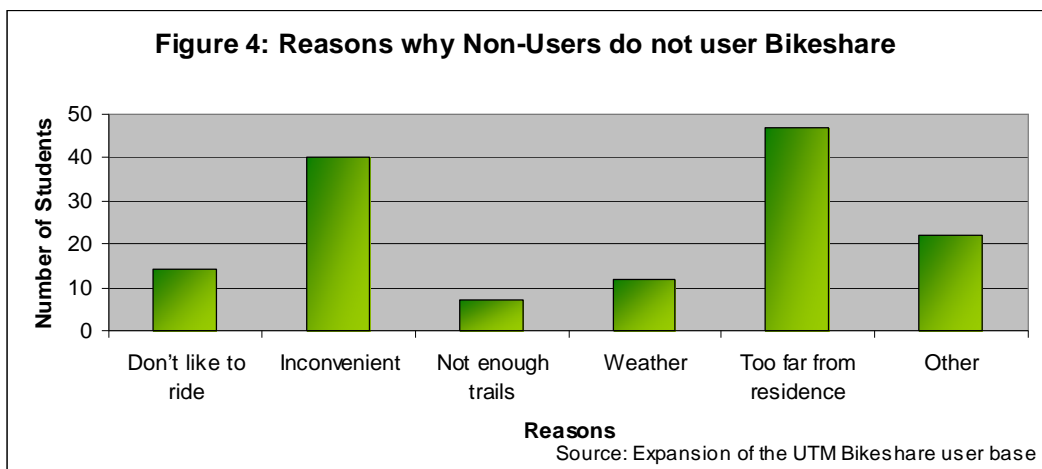
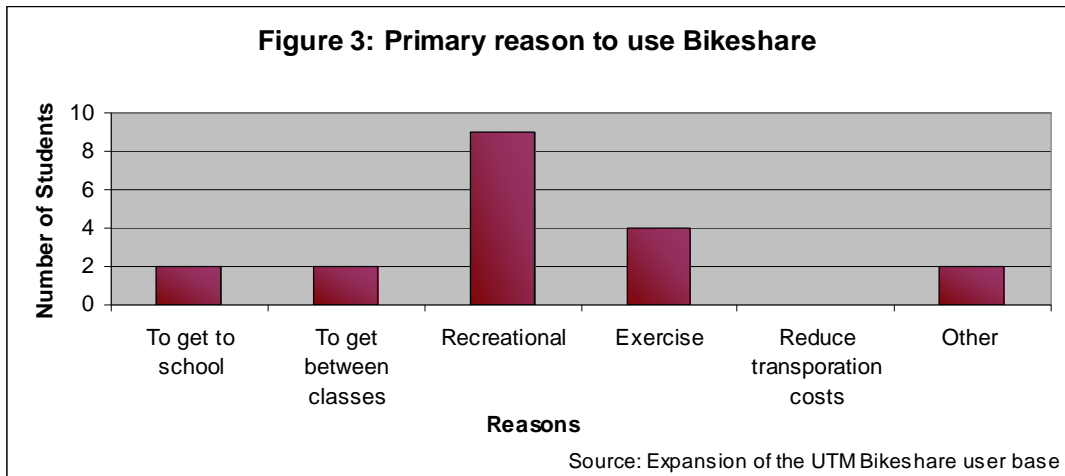
Given these results, we focused on finding ways to increase the awareness of the BikeShare program; if 90% of UTM students do not use BikeShare, of which 33% do not even know it exists, then the project needed to find methods to increase the approachability and accessibility of the program to allow more students to take advantage of it.

Further results from the survey indicate that the primary way the current users of BikeShare learnt about the program was through the form of advertising, as shown in Figure 2. Therefore, we realized that the most effective way to expand the BikeShare user base is to improve and increase the amount of advertising undertaken by the program and more specifically, targeting advertisements to certain groups of students, as discussed in *Recommendations 7.1- Expanding and Targeting Advertisements*.

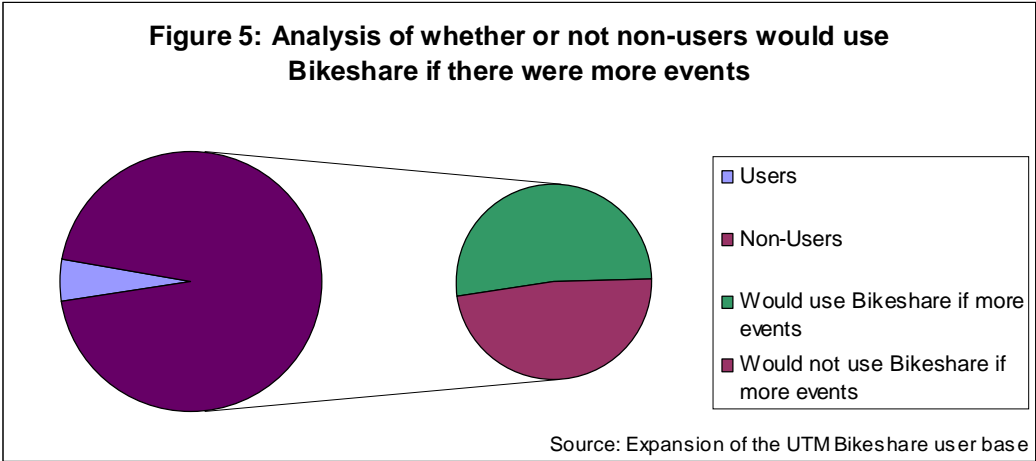


Of the students who identified themselves as BikeShare users, approximately 50% stated that they used the program for recreational purposes rather than as a means of transportation (See Figure 3). Furthermore, the majority of non-users stated that the primary reason that they did not use BikeShare was that it was too far from their place of residence and thus too inconvenient to use as a means to travel to and from school (See Figure 4). Therefore, compiling these results together, we focused on recommending advertising BikeShare as a form of recreation rather than as a transportation service. We think that promoting the trails on the UTM campus and the health

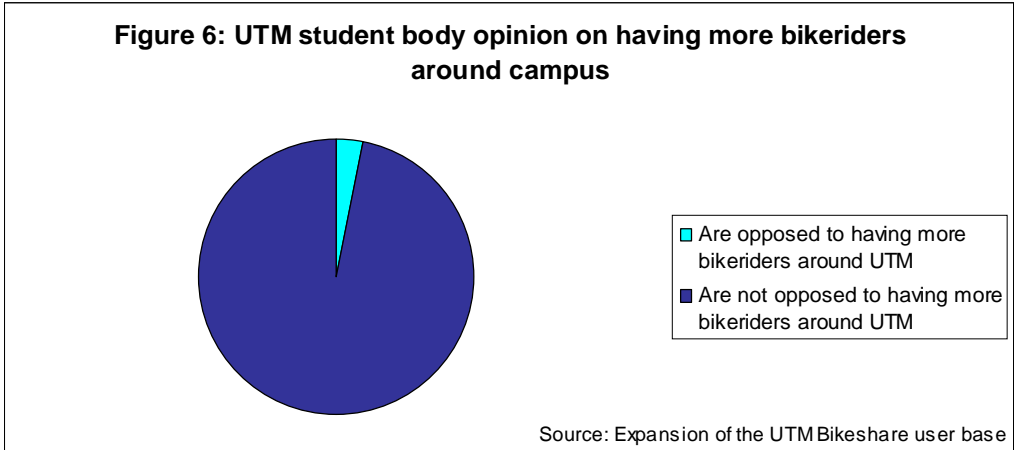
and social benefits of the program will likely expand the user base more effectively than promoting it as a way to travel to and from campus.



Prior to administrating the survey, a prediction was made that if BikeShare held more interactive events, such as cup races and marathons, the user-base of the program would inevitably expand. However, results from the survey displayed that only 54% of non-users would consider using BikeShare if such events were held (See Figure 5). Therefore, considering these results, the project moved away from focusing on holding more events to promoting the benefits associated with cycling to expand the user base.



An additional significant issue addressed in our survey is the impact of the expansion of the UTM BikeShare user base on the UTM community. If this project was successful and enabled the expansion of the BikeShare user base, the project wanted to ensure it would not disrupt the harmony currently in place at the university. Students were asked if they were opposed in any way to having more bike riders or bike racks around campus. While the majority of students were not opposed, 3% argued that the bike riders would get in the way of students walking to class and thus would increase the amount of accidents occurring on campus. Therefore, with this result, BikeShare may have to consider the physical layout of the UTM campus and consult with university services with the widening of pathways, as discussed in 8.0 *Future Works*.



One of the final, and arguably most important, questions addressed in the survey was what led current users transition from knowing about BikeShare to actually walking up to it and using its benefits? The most common answer given in the survey was the economic benefits associated with the program, especially in the summertime. Students stated that in the summertime, when there is no U-Pass offered, BikeShare provided them with an inexpensive mode of transportation. An additional answer that students said led them to use BikeShare was the recreational benefits associated with the program; students stated that exploring Erindale Park and The Riverwood Conservancy by bike instead of walking was more efficient and allowed them to de-stress during mid-term or exam seasons.

5.2 Key informant interviews with BikeShare users, findings

Key informant interviews were conducted with four current users of the BikeShare program in order to gain a more in-depth and personal account of their view of BikeShare (See *12.3 Appendix C* for interview questions). All four students used BikeShare as a recreational tool as opposed to a transportation service; one of the current users stated that he used BikeShare to ride to The Riverwood Conservancy during stressful times in the academic year. When asked why they transitioned from knowing BikeShare existed to actually using its benefits, all students answered similarly stating that they used BikeShare because it is a completely inexpensive recreational tool that could be used to de-stress or just enjoy an afternoon exploring the neighbouring areas of campus. When the students were asked whether or not they would like to see any improvements made to the program, three answered that more bikes needed to be launched (as there often were not enough bikes operating to meet the demand). The other student stated that he would prefer more events to be held by the program that would not only get more people involved but make the program more interesting and fun. Lastly, all students agreed to

pay a higher levy for the BikeShare program, where values ranged from \$1 per semester to \$5 per semester.

5.3 Key Informant interview with BikeShare Coordinator, Mark Vas, findings

An interview was conducted with Mark Vas, one of the BikeShare coordinators, in order to gain a better understanding of the program (See *12.2 Appendix B* for interview questions).

Mark provided us with statistics regarding BikeShare that were extremely helpful to us (See *7.3 Secondary Source data- Inventory records collected from Mark Vas*). Mark argued that UTM is unique from any other bike share program in Ontario due to the significant amount of trails leading into and out of the campus; the physical setting of UTM in Mississauga promotes biking as a great recreational activity (M.Vas, personal communications, October 15, 2010).

Furthermore, Mark stated that there was no really safe route to access the UTM campus via cycling since the roads leading to it did not have bike lanes; for this reason, he argues BikeShare needs to be more a recreational service than one based on transportation (M.Vas, personal communications, October 15, 2010), as our survey results indicated.

6.0 Secondary Data Findings

6.1 Secondary Source Data- Documents

Data were compiled from various literary sources and governmental websites. In particular, we directed our efforts to obtaining a better understanding of the benefits of cycling so that these findings could be incorporated in the UTM BikeShare marketing suggestions portion of the report. We have also obtained a detailed account regarding the economic, health and environmental benefits of cycling which are as follows:

Environmental benefits associated with cycling

Through the compilation of data, we found key reoccurring evidence that suggests cycling is beneficial to the physical environment. Many of the documents examined in our research greatly stressed the importance of cycling as a sustainable alternative to vehicle use. Riding a bicycle is a zero emissions transportation service that aids in reducing carbon footprints (Pucher, 2009). Pucher (2009) further argues that cycling helps mitigate greenhouse gas emissions, which have potentially hazardous implications for local biodiversity and sustainability of its surrounding ecosystem. By using BikeShare, users can detach themselves from the petroleum-dependent society and play their part in reducing greenhouse gas emissions (Pucher, 2009). A statement that we found appealing and could potentially be used in targeted BikeShare advertising was: “if one in four people commuted just 5 miles (about 8km), the air would be spared 6.7 billion tons of carbon dioxide” (Berkeley University, 2008). Cycling is a realistic and feasible option to aid in transforming the UTM campus into a sustainable one, especially since 50% of all car trips are 5 miles or less (8km or less) (Berkeley University, 2008).

Economic benefits associated with cycling

Cycling has many economic benefits, “it is cheaper, easier, and more dependable than formal exercise routines that require trips to gyms, home exercise equipment, and organized sports events” (Pucher, 2009). Bike rentals from BikeShare are free and include free maintenance and repair services; insurance, maintenance and increasing gas prices would no longer be a burden if people switched to cycling (Berkeley University, 2008). BikeShare, as opposed to purchasing your own bike, is a much affordable option for the many students struggling financially in their university years.

Health Benefits associated with cycling

One of the greatest benefits associated with cycling are those attributed to a person's health and well being. Oz (2010) analyzed the health benefits from cycling and found that "cycling two to three times per week caused one to be 46 times less likely to gain weight." An increasing number of scientific studies assessing the impacts of bicycling on levels of physical activity, obesity rates, cardiovascular health and morbidity depict promising figures favoring cycling (Pucher, 2009). According to the *Journal of Physical Activity and Health*, countries with the highest levels of cycling and walking generally have the lowest obesity rates (Bassett et al., 2008). BikeShare can be the program that allows an increase in daily physical activity for participants, thus improving personal health; it can be a safe and effective way to incorporate exercise into ones daily routine. Cycling can be one way to burn calories and help reduce patterns of obesity; studies have shown that with increased walking and cycling, chances of becoming obese fall sharply (Pucher, 2009). "Whether normal-weight, overweight or obese, physically inactive persons are 3 times more likely to die prematurely" (Pucher, 2009). Although many individuals do not cycle because they are afraid of getting into in accident, studies by Pucher (2009) suggest that cycling is much safer and less dangerous than automobile use as only one cycling injury occurs per 608,000 bike trips. Therefore, cyclists should not be worried about health and safety in comparison to other methods of transportation because on average the health benefits associated with cycling are "nine times greater than the risks associated with driving a car" (Hartog et. al., 2004).

BikeShare may include qualitative and quantitative statements like these in their current or future marketing plans to get through to the student body, hopefully persuading them to join

the UTM BikeShare program. BikeShare is a great program and its commission should not hesitate to promote the many benefits this program has to offer.

6.2 Secondary Source Data- various institutional cycling programs

We concentrated our efforts on analyzing other institutions and extracting potential marketing ideas that they currently have in their cycling programs to help develop solutions that may increase the UTM BikeShare user base. Analysis of the University of Waterloo showed that events such as wine tasting and tours, university cup races and book signings of professional bikers were effective methods in increasing the accessibility and interest among the student body (University of Waterloo, 2009). York University's Bicycle User Group (BUG) has created a Facebook page dedicated to users. Events as well as comments and concerns regarding BUG are openly shared for group members and the public to see; this indicates that York seems to embrace the cycling program (York University, 2010). BUG appears to be more resourceful and open-minded to the opinion of its users. Furthermore, York University actively informs the public and the student body about the benefits of cycling in and around campus (York University, 2010). This allows users and non-users to become more educated about the potential benefits that arise from leisurely cycling. Analysis of these institutions shall allow us to determine methods and practices currently used at other institutions that may be implemented at UTM to improve the BikeShare program. However, these practices may be modified or altered to suit the physical and social setting of UTM. We found that York University and UTM are fairly comparable when it comes to physical setting; York may be larger, however just like UTM, it is not within close proximity to surrounding commercial or vital access points. A conclusion has been made that York University is the most well-suited model institution for UTM to follow when it comes to its cycling program and practices. Thus, alternative recommendations (See

section 7.6- *alternative recommendations*) have been offered to UTM BikeShare on cycling activities or events that can be incorporated in their current or future program agenda (these are only to be implemented if the primary recommendations are unsuccessful).

6.3 Secondary Source Data- Inventory records collected from Mark Vas and Tamara Zuk

Much quantitative data regarding the amount of UTM BikeShare users between the years of 2009-2010 has been obtained. It is found that there have been a total of 465 distinct users and 1248 rentals in 2010 (T. Zuk, personal communications, November 25, 2010). Assuming there are approximately 12,000 UTM students, having only 465 users of BikeShare this year suggests only a 3.875% user base. The following table provides a summary of Tamara Zuk’s inventory records.

Table 1: Summary of BikeShare Inventory Records during 2009 & 2010

SUMMARY

		2009	2010
Total Number of Rentals	1622	374	1248
Total Number of Distinct Renters:	615	180	465
Average rentals per month:	108.13		

RENTALS BY YEAR AND MONTH

2009		2010	
374		1248	
April	17	April	43
May	31	May	76
June	39	June	152
July	79	July	233
August	59	August	257
September	83	September	281
October	40	October	206
November	26	November	
Average	46.75	Average	178.29

7.0 Recommendations

7.1 Expanding and Targeting Advertising

The primary recommendation to BikeShare is to improve and expand the amount of advertising currently being undertaken by the commission. Survey results showed current users learned about BikeShare primarily through advertisements around UTM. Furthermore, Mark Vas at BikeShare indicated that there is little to no advertising currently displaying the existence of the program or the advantages associated with it. Thus, advertising through posters, pamphlets, having a sign above their office (as shown in Figure 7 in *8.0 Future Works*) or being a part of the UTM orientation week to gain awareness can all be undertaken to help promote the accessibility and approachability of the program. Particularly, advertising can be targeted to a specific group of UTM students may allow for a better chance for students to personally relate to the program. For example, BikeShare can promote the health benefits associated with cycling to Recreation, Athletic & Wellness Center (RAWC) users as these students are active and are most likely health conscious; BikeShare would therefore be a perfect program for them to utilize.

7.2 Promoting Health Benefits

BikeShare shall take into consideration the promotion of the many health benefits associated with cycling through the use of advertising. Perhaps BikeShare can incorporate the many quantitative quotes associated with the health benefits of cycling, as listed in *6.1 Secondary Data Sources- Documents*. BikeShare should make students aware that cycling around and outside campus is an effective way to incorporate physical activity into their daily lives thus improving personal health. Cycling is a safe and effective way to incorporate exercise into one's daily routine; BikeShare should promote the idea of cycling between classes and recreational riding.

7.3 Promoting Economic Benefits

As cycling is an inexpensive way to travel around campus as well as to and from it, BikeShare should advertise the economic benefits associated with the program through the use of posters, pamphlets and seminars. Cycling is ideal because it does not require petroleum, it costs less than vehicles, are less dangerous and more compact than automobiles and promote a healthy lifestyle (Pucher, 2009).

Figure 7: The economic benefits associated with cycling



BikeShare shall target this message using the quantitative quotes listed in *6.1 Secondary Data Sources- Documents*. Students may also like the idea that using BikeShare, as opposed to purchasing your own bike, is a much more affordable option for those struggling financially during their college years.

7.4 Promoting the Environmental Benefits

With the growing concern of global climate change, BikeShare should advertise the environmental benefits associated with cycling. Perhaps BikeShare can target those who are environmentally conscious or those who seek to play a positive role in the fight against global climate change. Cycling is an excellent way to limit carbon dioxide emissions as well as waste

and minimizes the consumption of non-renewable resources; it is a sustainable alternative for the UTM community. If UTM students were to cycle more instead of using a car, the atmosphere would be spared tons of hazardous green house gas emissions. Perhaps, BikeShare shall use the bold quantitative statements discussed in *6.1 Secondary Data Sources- Documents* to persuade UTM commuters to use BikeShare.

7.5 Expanding the Number of Bikes and Accessibility Points

BikeShare should improve the accessibility and utility of their program, namely by increasing the amount of bikes being launched and creating more access points throughout its internal and external physical surroundings. Most students from the surveys suggested that one of the greatest problems associated with BikeShare was the fact of not having enough bikes launched. Therefore, launching more bikes may allow BikeShare to increase their user-base and expand further use of the program by current users. Survey results also stressed that students wanted to be able to obtain and drop off bikes at different areas on and off campus; perhaps BikeShare can set up a station on off campus sites (this would allow, for example, students to take the bus to South Common Mall and then cycle to UTM).

7.6 Expanding BikeShare Funding (Recommendation for the University of Toronto Mississauga)

In order to expand the amount of bicycles launched by BikeShare, we recommend for the University of Toronto Mississauga to increase the funding currently given to BikeShare. This increased funding can potentially come from increasing the levy currently being paid by UTM students or through direct grants given to BikeShare from the university. During the key informant interview with Mark Vas, he stressed that the only thing limiting the program from expanding is lack of funding; currently, all the workers are volunteers who are responsible for

fixing broken bikes, running the office, planning the events, etc. (M.Vas, personal communications, October 15, 2010). Therefore, increasing the funding will allow more bikes to be launched at different stations across campus and in the Mississauga community, will allow an expansion of advertising and may allow the BikeShare volunteers to be paid for the work they do.

7.7 Alternative Recommendations

It is worthy to note that in their advertising agenda, BikeShare shall also promote the social benefits that arise from such a program. For example, it can provide social networking opportunities, bringing people with the same love for cycling together. This can allow for the creation of constructive social change and a strong community spirit that embraces a sustainable form of recreation. From Pucher (2009), cycling groups have been found to improve social integration.

BikeShare may also choose to promote the time-saving potentials of the program. Students have the opportunity to cycle between classes as opposed to walking; it is an immediate and fast form of transportation with no problem of traffic (except for pedestrians) or parking issues.

From the primary data that was collected, it was found that exactly half of the users and non-users interviewed showed interest in joining BikeShare if it held cycling events. If none of the primary recommendations are successful in expanding the user base of BikeShare, perhaps BikeShare can implement similar cycling events to that of York University because its physical and social setting most similarly correlates to that of UTM. Events such as cup-races, marathons, book signings, cycling workshops, etc. may be implemented at UTM to aid in the expansion of the BikeShare user base (York University, 2010).

8.0 Future Works

After analyzing the different universities with successful bicycle programs, there are many possible steps that UTM BikeShare can undertake in the years to come to raise awareness in the community. Location is an important aspect of any program's success and the UTM BikeShare office is small and hard to spot. A change in location would be advisable, with a larger amount of space and a more visible office. Additionally, a more recognizable banner, as shown in Figure 8, would benefit the UTM BikeShare office, as many students are unaware of its existence or where it is located.

Figure 8: Advertising the UTM BikeShare office to make it more recognizable



Before

After (Potentially)

Furthermore, to better increase the approachability of the program, BikeShare may adopt cycling events currently held by other institutions with successful bike programs and offer

incentives for competing. Such events would generate more knowledge about the program and possibly bring out students that may have never otherwise considered renting a bicycle from BikeShare. Finally, the construction of more bike racks and other bicycle structures such as larger bike paths, bicycle storage units and lockers would allow for more bikes to be purchased by the program which in turn would allow for a larger user base. These bicycle structures could be placed around the campus as well as at locations such as the South Common Mall bus terminal or the Clarkson Go station.

9.0 Conclusion

The goal of this project is to assist BikeShare and its committee members to increase awareness of the program offered at University of Toronto Mississauga campus. Through surveying the student body at the campus, it was concluded, that most students were non-users of the BikeShare program. Additionally, through interviewing individuals from the small BikeShare user base on campus, we learned that most of them became aware of the program through the limited advertisements around campus and word of mouth. Through careful analysis, it was determined that the best method to gain awareness of the BikeShare program on campus is through targeted advertising. Research on similar programs in other institutions and articles on benefits of cycling, from the basis of many recommendations to assist BikeShare in gaining awareness on campus. By increasing the number of advertisements around campus that consider a target audience, it is believed the awareness of BikeShare would increase dramatically. As a catalyst to increasing awareness, placing advertisements focused on health, economic, environmental and social benefits would assist BikeShare in raising awareness and targeting students who prioritize these incentives. In conclusion, from the research conducted on campus and through various academic sources, it would be best practice for BikeShare to increase

advertisements that target the various health, economic, environmental and social incentives and benefits of cycling.

10.0 Acknowledgements

We would like to thank Professor Daniere and Aubrey Iwaniw for their direction and support throughout this project. We would also like to thank Mark Vas and the rest of the BikeShare commission for donating their time and knowledge through interviews and email correspondence. Finally, we would like to thank all of the UTM students who completed a survey and/or participated in an interview.

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12.0 Appendices

12.1 Appendix A- Student Survey

Please note: If you are currently a Bike Share user, answer questions 1-6. If you are not a Bike Share user, please answer questions 7-10. Both users and non-users are asked to answer questions 11-15 at the end of the survey.

For Users:

1. How did you learn about the Bike Share program? (choose more than one if applicable)

<input type="checkbox"/> Advertisements on school	<input type="checkbox"/> UTM newspaper/magazine
<input type="checkbox"/> Friends	<input type="checkbox"/> Current users
<input type="checkbox"/> UTM website	<input type="checkbox"/> Other

2. What made you transition from learning about Bike Share to actually using it?

3. How often do you use Bike Share?

<input type="checkbox"/> Once per week
<input type="checkbox"/> 1-3 times per week
<input type="checkbox"/> Once every month
<input type="checkbox"/> Once every semester
<input type="checkbox"/> Once every year
<input type="checkbox"/> Other: _____

4. Why do you use the Bike Share program? (choose more than one if applicable)

<input type="checkbox"/> To get to school
<input type="checkbox"/> To get between classes
<input type="checkbox"/> For recreational purposes
<input type="checkbox"/> For exercise
<input type="checkbox"/> Reduce transportation costs
<input type="checkbox"/> Other: _____

5. If there were more racks available to park Bike Share bikes in different areas (such as at South Common Mall, Square One Mall, etc.) would you use the Bike Share program more frequently?

<input type="checkbox"/> Yes
<input type="checkbox"/> No
<input type="checkbox"/> Destinations are not applicable

6. Would you like to see any improvements made to the Bike Share program?

<input type="checkbox"/> Yes
<input type="checkbox"/> No

If you answered yes, please list some improvements you would like to see:

For non-users:

7. Are you aware of the Bike Share program offered at UTM?

<input type="checkbox"/> Yes (see question 8)
<input type="checkbox"/> No (see question 9)

8. If you answered yes to Question 7, is there a reason as to why you do not use the Bike Share program as a form of transportation? (choose more than one if applicable)

- Don't like to ride a bicycle
- Too inconvenient
- Not enough trails to get to UTM via bicycling
- Unpredictable weather
- Too far from residence
- Other: _____

9. If you answered no to Question 7, the UTM Bike Share program is a program where students can rent bicycles for 24 hours at time completely free. It offers a healthy, environmentally friendly mean of transportation to and from campus as well as around campus. Now that you know what the UTM Bike Share program is, will you consider it?

- Yes
- No

10. If the UTM Bike Share held events, such as marathons, cup-races, fundraisers, etc., would you consider using Bike Share to participate in these events?

- Yes
- No

For both users and non-users:

11. Are you a male or female?

- Male
- Female

12. What year of study are you in?

- First
- Second
- Third
- Fourth
- Other

13. How do you get to and from campus?

- Dropped off
- Shuttle bus
- Transit
- Drive
- Other: _____

14. Do you think having more bike racks around campus or the community will negatively affect you in any way?

- Yes
- No

15. Would you be opposed to having more bike racks and more bike riders on the UTM campus?

- Yes
- No

If you answered yes, please explain why:

16. Would you pay more to fund BikeShare (currently all students pay \$0.50 for the program)?

- Yes
- No

If yes, how much more are you willing to pay? _____

12.2 Appendix B- Question guidelines for interview with Mark Vas, coordinator of BikeShare

1. How many bikes are currently involved with the BikeShare program?
2. Approximately how many current students are using the BikeShare program?
3. Are you able to provide a membership list with user emails?
4. Have the amount of students increased or decreased over the years?
5. Do you know if there are more female or male users?
6. How do you see BikeShare in the future?
7. What improvements would you like to see happen to the program?
8. Do you think the idea of more events, such as marathons, cup-races and increased advertising, will help increase the user base of the program?
9. What would you like to see come out of this project?

12.3 Appendix C- Question guidelines for interview with current BikeShare users (adapted from survey questions)

1. How did you learn about the BikeShare program?
2. What made you transition from learning about BikeShare to actually using it?
3. How often do you use BikeShare?
4. Why do you use the BikeShare program?
5. If there were more racks available to park BikeShare bikes in different areas (such as at South Common Mall, Square One Mall, etc.) would you use the Bike Share program more frequently?
6. Would you like to see any improvements made to the BikeShare program?
7. Would you pay more for the BikeShare program?

12.4 Appendix D- Additional Findings from the Survey

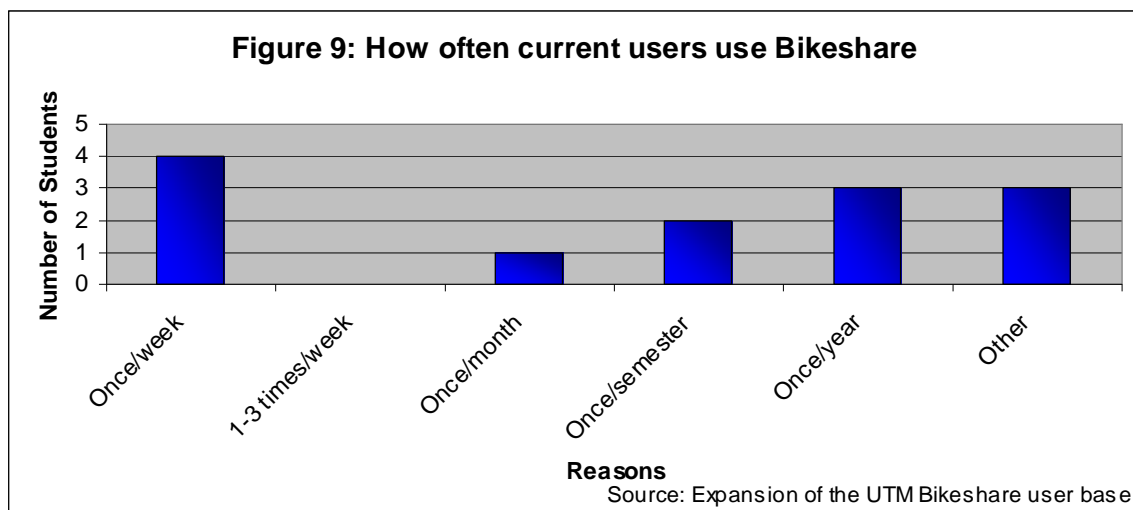
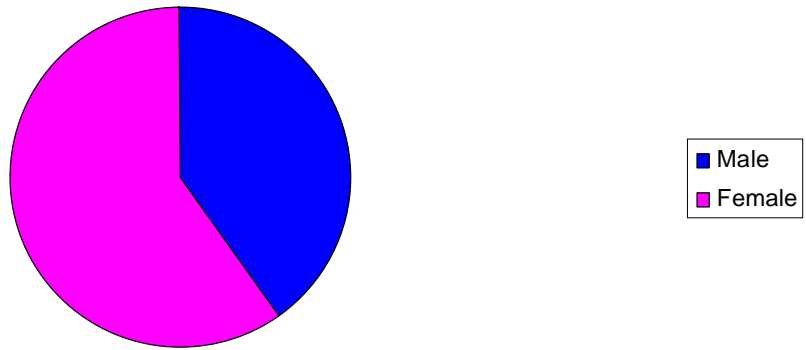


Figure 10: Gender breakdown of current users of Bikeshare



Source: Expansion of the UTM Bikeshare user base