

# IMPACTS OF CYCLE TOURISM IN ONTARIO

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## Executive Summary

- This research was conducted for Transportation Options, and focused on fulfilling the objectives of determining the economic benefits of cycle tourism, a demographic profile of cyclists, best marketing distribution channels to reach cyclists, cycle tourism preferences, and cycling event preference and annual attendance.
- A survey containing 27 questions was created and conducted based on non-probability sampling and distributed at a retail outdoor store, a Toronto cycling event, and through an online survey tool.
- A total of 278 cyclists were surveyed, however only 256 surveys were found to be useable for the study.
- It was determined that generally respondents have been active cyclists for more than five years.
- When on holidays, cyclists spend time in destinations and typically do at least one other activity not related to cycling.
- It was found that cyclists are more commonly spending longer in destinations and use additional forms of transportation while on holiday.
- It was found that the longer the cycling holiday is, the more money they put into the local economy. This directly and indirectly benefits the cycling destination economically.
- Online methods of marketing were identified to be the most effective ways to reach cyclists.
- This report provides implications and recommendation on developing effective means of marketing to cycle tourists in Ontario based on their preferences, locations, and activities.

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## **Introduction**

The reasons for travel have changed over time and tourists are placing greater emphasis towards the environmental and social aspects of tourism (Ritchie, 1998). This shift in thinking about travel has started to bring increased demand to the cycle tourism industry. Research has shown Ontario to be a developing destination for cycle tourism with an increase in the amount of both off-road and on-road cycling trails. There has also been an increase of inbound tourists cycling while on vacation in Canada with 38 percent of cycle tourist traveling to Ontario in 2007 (Dodds & Singh, 2010).

The purpose of this research is to determine the economic benefits of cycle tourism in Ontario and to develop demographic profiles of different types of cyclists that include their purpose for cycling, cycling preferences and most effective marketing channels. The goal of this study is to provide insight to the client, Ontario Transportation Options, about the Ontario cycle tourism market. It is intended that this study will give a greater understanding of the markets' motivations and how they can best be reached. The feasibility of Ontario as a cycle tourism destination and potential market will also be investigated.

Cycle tourism is an important topic to study as it is an area of growth within the tourism industry. Before beginning a research study, it is important to conduct a literature review to gather information that will provide a context for the research. This literature review explored the definition of cycle tourism, market segmentation and demographics, motivations of cycle tourists and their media preferences, economic benefits and the sustainability of cycling as a tourism option.

## Literature Review

### Definition of Cycle Tourism

One cannot properly determine the size, scale or impact of cycle tourism without a definition. A comprehensive definition allows tourism planners to determine cycle tourism demand, marketing strategies and management requirements (Lamont, 2009).

Faulks, Ritchie and Fluker (2007) conducted a comprehensive study of existing research on bicycle tourism in South Australia. This study determined that the definition of cycle tourism should include both day trips and overnight stays (Faulks et al, 2007). This definition is both similar and contrary to other research findings within this literature review. Lamont (2009) argued that definitions of cycle tourism which state a tourist must be away from place of residence for more than 24 hours neglects a large portion of the market. Therefore, Lamont (2009) took the same position as Faulks et al. (2007) and stated that the definition of cycle tourism should include cycle tourists, multi-day events and excursionists, as well as single day cyclists. In addition, Downward, Lumsdon and Weston (2009) stated that any recreational cycling of local people, which offer the cyclists the same feelings and experience as a holiday would elsewhere, should be considered as leisure tourism. However, Ritchie (1998) took another stance for the definition of cycle tourism. According to this article, the definition of cycle tourism should be exclusive to tourists only and should not include excursionists.

Lamont (2009) regarded the purpose of the cycling trip as important when considering the definition of cycle tourism. Generally, Lamont (2009) found that many definitions exclude tourists who happen to briefly cycle during their vacation and only include those whose main purpose for travel was cycling. Lamont (2009) argues that by narrowing the definition to only those who primarily travel for cycling purposes, a destination is able to determine cyclists travel

motivations, preferences and economic impact. Cox (2012) also identified tourists who use a bicycle as the main mode of transportation during a trip as cycle tourists. Furthermore, the main purpose of the trip is to either be active cyclists or observers. To narrow the definition of cycle tourism, Lamont (2009) only includes four types of active cyclists. An active cyclist can travel for holiday and recreation; wellness and health purposes, leisure; reflection and relaxation and/or for competition; as well as for profit or charities. Additionally, an observer travels for the sole purpose of viewing the cycling event. Lastly, cycle tourism can be done independently or in a group (Lamont, 2009).

Without parameters for cycle tourism, the size and economic impact of this niche market could be overstated and portray false information to destinations (Lamont, 2009). For the purpose of the research study that will be conducted for HTR 841, the researchers have identified the duration of trip and the purpose of the trip to define cycle tourism. For the study, cycle tourism includes travelers whose main purpose is cycling on a holiday and/or travelers who participate in cycling for both day excursions and overnight stays outside of their usual environment.

### **Market Segmentation**

Cyclists cover wide demographics and enjoy cycling for various reasons. They differ in frequency of cycling, speed, and length of trip. Each type of cyclist has unique preferences of paths, accommodation and entertainment. Therefore, it is imperative for a potential cycling destination to determine if they have the resources to support the needs of any given type of cyclist.

In order to identify cycle tourism market segments, it is important to first explore the different types of cycle holidays. Keeling (1999) segmented cycle tourism holidays into three

broad categories which included cycling holidays, holiday cycling and cycling day visits. Cycling holidays were defined as a holiday with the core purpose of cycling. Holiday cycling was identified as holidays where cycling occurs among a variety of other activities. Finally, cycling day visits were defined as day trip where cyclists started from home (Keeling, 1999).

Previous research shows that there are many ways to segment cyclists. Faulks et al. (2007) found that bicycle tourists can be segmented based on either their motivations or activities. This resulted in the use of six segmentation bases; day touring, cycle hirers, pre-planned cycle touring, independent touring holidays, centred holidays and cycling events (Faulks et al, 2007). Keeling (1998) suggests that the segmentation of the cycle tourist market can be divided into four segments which are based on the frequency of cycle tourism trips. These four segments include infrequent leisure cyclists, occasional leisure cyclists, frequent leisure cyclists and cycling enthusiasts (Keeling, 1998). The Minister of Public Works and Government Services Canada (2000) also categorised cyclists into four groups: occasional cyclists, short distance riders, long distance riders, and competitive riders. Additionally, Transportation Options (2012) identified five categories of cyclists which included: leisure and family cyclists, recreational cyclists, touring cyclists, mountain bikers, and competition cyclists.

The Minister of Public Works and Government Services Canada (2000) went further into defining each market segment that they identified. Occasional cyclists are usually young adults or families with children who cycle only a few times a year for amusement. They tend to avoid areas with motor vehicles and are usually seen cycling on paths or sidewalks close to their residence. These cyclists normally cycle for less than two hours at a speed of less than 20 kilometres per hour. This segment does not go on cycling trips (Minister of Public Works & Government Services Canada, 2000).

The short distance riders and long distance riders are an older demographic, typically mature adults and retirees. The main purpose of cycling activities for this segment is fitness and social activity. Just like occasional cyclists, they do not like hills and areas with high motor vehicle traffic (Minister of Public Works & Government Services Canada, 2000). Short distance cyclists usually cycle 30 to 40 kilometres while long distance riders cycle up to 100 kilometres per trip. Short distance riders are typically seen cycling on rail trails, paths and roads with low volume traffic. Long distance riders, on the other hand, prefer paved roads to trails as they find trails uninteresting (Minister of Public Works & Government Services Canada, 2000). Both segments enjoy multi-day cycling trips either alone or in a group and normally stay in budget motels and dine in affordable restaurants (Minister of Public Works & Government Services Canada, 2000). It appears that how fast they ride is the main factor that differentiates the short distance riders and long distance riders.

Competitive riders comprise a wide demographic, young to mature adults who typically cycle alone or in a group. They regularly cycle to maintain their fitness levels and cover a distance of 100 to 160 kilometres every time at a rate of at least 30 kilometres per hour (Minister of Public Works & Government Services Canada, 2000). Competitive cyclists usually ride on paved roads and avoid trails because of slow moving riders. They seek challenging rides that cover longer distances and hills. When travelling, they prefer more economical choices for accommodation, such as camping and college residences (Minister of Public Works & Government Services Canada, 2000).

For the purpose of the research study being conducted for HTR 841, the researchers will be segmenting cyclists as found in the study conducted by Transportation Options. This

segmentation includes leisure and family, recreational, touring, competition cycling and mountain biking.

### **Demographic Profile of Cycle Tourists**

One must determine the demographic profiles of cycle tourists in order to understand their demands and characteristics. In search of a cyclist's demographic profile, Lang Research Inc. (2007) reported that the majority of Canadian cyclists are male. While Faulks et al. (2007) provided much research that corresponds with other articles within this literature review, some points were contrary to other findings. The researchers stated that 14 percent of men and only 7.1 percent of women participate in cycling. This is in contrast to other articles that state the proportion of men to women who participate in cycling is generally the same (Faulks et al., (2007). More research would be required to determine if there is a significant difference.

Lang Research Inc. (2007) continued to identify important demographic characteristics of cycle tourists. They determined that 54.9 percent of Canadian cyclists are said to represent a younger population from 18 to 44 years of age and are thought to have a higher average level of education with 38.9 percent attaining a university degree. Cyclists are also considered to be very affluent travelers with an average household income of \$78,827 (Lang Research Inc., 2007). The Cycle Tourism Assessment and Strategy Study (2011) reported that the age of cyclists are slightly older than previously reported, at an average age of 30, with a large group represented in the 65 to 74-age range. Studies also have shown that the average age of cyclists is expected to increase in the near future as cycle tourism is gaining significant interest in the baby boomer market. This market will help cycle tourism grow, as baby boomers will have the time and resources to spend on healthy, recreational activities (Cycle Tourism Assessment and Strategy

Study, 2011). From this demographic profile, cycle tourism's target market can be determined which is necessary for marketing purposes.

In addition, Dodds and Singh's (2010) research has shown that cycle tourists come from a wealthy socioeconomic background and therefore prefer to spend money on higher, better quality accommodations compared to low-end accommodations and campgrounds. Conversely, Ritchie (1998) and Lang Research Inc. (2007) found that the majority of cyclists who participated in their studies named commercial camping grounds as their first choice for accommodation. Lang Research Inc. (2007) reported that almost 50 percent of cyclists stayed in a public national or provincial campground while on their trip, with 35.1 percent and 32.8 percent of cyclists staying in a riverside resort and a private campground respectfully. This suggests that cyclists are willing to stay in more rustic low to mid-range accommodation (Lang Research Inc., 2007).

### **Motivations of Cycle Tourists**

It is important to research and understand the motivations and benefits of cycle tourism. This information is important for a destination to market effectively to cycle tourists and provide the requirements that are necessary for cyclists to have a positive cycling experience.

While much research focused on the economic impacts and motivations of bicycle tourists, Faulks, Ritchie, Brown and Beeton (2008) focused their study on what makes tourists choose a particular destination. Faulks et al. (2008) determined that there are five distinct consumer market segments. These 'clusters' are as follows: active socialisers, independent confident doers, emerging confidence seekers, beginners, and uninterested. The first three clusters comprise the majority of respondents and vary only slightly on demographics and motivations for taking a trip. The active socialisers and independent confident doers were most

likely to have participated in a cycle tourism trip, whereas the uninterested group was least likely to have ever been on a cycling trip. The most noticeable difference between the characteristics of each group was what they ranked as most important when choosing a destination. These preferred attributes of a destination generally reflect the confidence and experience level of the cyclists with the most experienced cyclists interested in a destination that had like-minded people and the opportunity to see more cyclists. The less experienced cyclists, such as those in the emerging confidence seekers and beginner clusters found availability of rental bicycles to be of importance (Faulks et al., 2008).

Ritchie's (1998) study also indicated that cyclists with different experience levels are motivated by different factors when choosing a destination. The study noted that inexperienced cycle tourists were more likely to be motivated by the mastery factors; to try something new and learn what someone is capable of, whereas experienced cyclists were motivated by the solitude factors; close to nature, away from crowds. Additionally, there was a difference between international cyclists, who were motivated by solitude and exploration factors and domestic cyclists, who were motivated towards physical challenge and social expansion factors (Ritchie, 1998). Cox's (2012) research stepped away from focusing on a cyclist's experience level as a means for choosing a destination, suggesting that in general, a cycle tourist selects his/her travel destination based on its physical geography and terrain. Furthermore, tourists are attracted to tranquil, secure and natural landscapes that embrace trends such as sustainability and wellness tourism (Cox, 2012).

In addition to the factors mentioned above, Canadian cycle tourists have reported that in choosing a destination for cycling trips it is important for their family to feel safe at the destination, have no health concerns about the destination, have lots of activities to see and do

for tourists and have mid-range accommodation available (Lang Research Inc., 2007). The Cycle Tourism Assessment and Strategy Study (2011) stressed that in developing a destination for cycle tourism, taking into account comfort and convenience is a big seller for tourists. Cycle tourists are attracted to a destination that can also provide accommodation at different price points, a safe and secure place to store their bicycles, healthy and easily accessible food and beverage venues, readily available bicycle shops and the possibility of luggage transfer services (Cycle Tourism Assessment and Strategy Study, 2011). Ritchie's (1998) study also found that scenery, road safety and congestion and the quality of driving were the most important factors to cycle tourists while on holiday. Cox's (2012) research found similar results and identified that signage and maps are also important to cycle tourists who are navigating rural routes. Visitor centers in Belgium, for example, have created maps which highlight cycle routes and nearby attractions; nature sites, restaurants, accommodation facilities and bike shops. In addition, the maps depict terrain types and potential traffic levels. In doing so, cycle tourists can plan their entire cycle holiday and fully experience the surrounding area (Cox, 2012). Contrarily, Ritchie (1998) discovered that some factors that were less important to cycle tourists included bike services, visitor information centers, accommodation, attractions and recreational activities. Although, it was noted that accommodation was rated as highly important to inexperienced cycle tourists (Ritchie, 1998). These factors all have the ability to directly impact the travel experience.

Lumsdon's (2000) research outlined a relationship between physically active travellers and cycle tourism. Cycle tourism presents a motivation to travellers possibly seeking "relaxation; physical challenge; escapism; and peace and quiet" (Lumsdon, 200, p. 365). Lang Research Inc. (2007) showed similar results reporting that cyclists are two to three times more likely to participate in outdoor activities than the average Canadian pleasure traveler while on their

travels. Some of the top activities included swimming in both oceans and lakes, sunbathing, boating, hiking, climbing and observing wildlife. In addition, cyclists are more likely to involve themselves in physical activity while not on trips compared to the average Canadian pleasure traveler. Some of the typical activities that cyclists enjoyed while at their place of residence included cycling, an outing to the park, hiking, swimming, exercising and gardening.

The Cycle Tourism Assessment and Strategy Study (2011) stated that “cyclists are looking for a unique experience that includes experiencing not only the scenery but also the culture of the area” (p. 24). Cycling communities in Ontario would benefit from showcasing First Nations and Mennonite communities, heritage properties and roadside attractions (Cycle Tourism Assessment and Strategy Study, 2011). Similar research conducted by Lang Research Inc. (2007) identified that cyclists are more likely to pursue cultural and entertainment activities than the average Canadian pleasure traveler. Some activities in which cyclists are twice as likely to participate in are attending literary and film festivals, participatory historical activities, comedy clubs and festivals, agro-tourism and high art performances. Additionally, cyclists are more involved in attending cultural and entertainment activities in their hometown when not on trips compared to the average pleasure traveler. Going to live rock and jazz concerts, visiting the ballet, botanical gardens and art galleries are some of these activities. However, cyclists did not exceed pleasure travelers in attendance at casinos (Lang Research Inc., 2007).

Lang Research Inc. (2007) determined that when cyclists go away on vacation the top three benefits they seek from that vacation are to have a well-deserved break from everyday life and their environment, to relax and relieve stress and to better the relationship with partners and family members.

From the research discussed, one can determine that cycle tourists participate in more activities while on a trip than the average tourists. By understanding the cycle tourists' motivations, destinations are able to provide a supportive environment, cycling trails, accommodations and activities that suit the needs of the cyclists target market.

**Media preferences.** When exploring what motivates tourists to participate in cycling trips, one must consider what forms of media they prefer to use to gather information about the destination they are visiting.

Tourists prefer to find all the information required to plan and book a trip in one place including cycling trails, accommodation, food venues and activities. Cycling tourists use Internet resources as their primary hub for all this information including viewing pictures of possible cycling trails (Cycle Tourism Assessment, 2011). Lang Research Inc. (2007) agreed that the majority of information was found on the Internet with 80.8 percent of cyclists finding information from websites. However, cyclists do use a variety of sources to find information about cycling destinations with 64.5 percent of cyclists gathering information from word of mouth and 59.7 percent using past travel experiences as a means to plan their next trip (Lang Research Inc., 2007).

It was confirmed that one could not solely rely on the Internet as a source of reaching out to cyclists. All cycling material must be available in print form to be accessible to those that do not have Internet, especially with the growing baby boomer market who are often considered less technologically savvy (Cycle Tourism Assessment, 2011). Lang Research Inc. (2007) reported that cyclists could also be effectively targeted through a wide variety of travel-related media focusing on cyclists' interests. Over 88 percent of cyclists read the daily newspaper, over 45

percent of cyclists read magazines about outdoor activity, sports, science and geography and 51.6 percent watch science and nature shows (Lang Research Inc., 2007).

With this information on media preferences companies and destinations are able to gain valuable knowledge on which media channels are most effective when marketing to cycle tourists.

### **Economic Benefits**

The economic benefits of cycle tourism can be one of the most important components when examining the viability of a cycle tourism initiative. Without economic benefits it is unlikely a destination would be able to support such a venture. As such, this topic was featured heavily throughout the research and was extensively examined by the student researchers.

Research has shown that the development of cycle tourism, especially in rural areas stimulated the economy by increasing the demand for accommodation, food and beverage and bicycle shops. A destination should utilize tourism planners and policy makers in order to properly develop cycle tourism infrastructure and in turn, thoroughly benefit from cycle tourism (Lamont, 2009).

In addition, Keeling (1999) argues that cycle tourism has many benefits which include the reduction of pollution and traffic congestion, economic regeneration, as well as better physical health. In regard to the economic benefits of cycle tourism, it was noted that generally, cyclists frequent neighbourhood businesses while on holiday, putting money into the local economy. It was also found that cycle tourists spend at least as much money as other tourists in rural areas (Keeling, 1999).

Cycle tourism has been known to be a leading economic factor in the support of the rural economies, specifically in villages and small towns. As stated by Lumsdon (2000), "it is

estimated that cycle tourism in the UK generates 625 million pounds per annum” (p. 370). Such economic impacts are justified in the increased value of properties in rural areas near the cycling network. It was suggested that “by pursuing backward linkages with other sectors of the economy – agriculture, artisans, builders and suppliers – the local economy is diversified and more people share and participate” (Lumsdon, 2000, p. 370). The research by Lumsdon (2000) showed that the economic benefits associated with bicycle tourism are not only the direct revenue obtained from the practice but also the indirect revenue and benefits to the community and economy.

A study completed in the North East of England discovered that group size and income, as well as trip type and preference were significant variables that can have a direct impact on the economy. It was determined that larger cycling groups who are on longer trips contribute to generating higher tourism expenditures (Downward et al, 2009). This could affect the way marketing is done in cycle tourism as this research shows that it is more worthwhile to attract larger cycle touring groups.

By examining how cycle tourism has affected local economies in other destinations, it is possible to apply some best practices to the potential expansion of the industry in Ontario. In 2001, The North Sea Cycle Route (NSCR) was developed across Europe (Lumsdon et al., 2004). Research showed that while the economic impact of the route may not be significant to the continent’s tourism industry, the economic benefits to the local communities are substantial (Lumsdon et al., 2004).

Lumsdon et al. (2004) also determined that the total spending of cyclists had a positive relationship with the duration of the cycling trip, the number of hours cycling per day and annual income. It was found that larger groups tend to cycle for longer periods of time (Lumsdon et al.,

2004). It should be noted that there is no direct positive connection between group size and total spending, however; there is a positive relationship between group size and duration of trip and hours of cycling per day (Lumsdon et al., 2004). Therefore, individuals who are a part of a group tend to spend more as their trips are usually longer and they cycle for longer periods of time per day (Lumsdon et al., 2004). As the group size increases, the total individual spending increases as well, this can be explained by the idea that consumption is associated with the social environment (Lumsdon et al., 2004). Downward et al. (2009) also indicated a significant relationship between these variables. From this research, larger groups staying for a longer period of time are likely to have a greater impact simply because they are there for a longer period of time and in greater numbers. These findings can be used to develop marketing tools, which can encourage cyclists to increase the length of their trips in order to increase expenditures (Lumsdon et al., 2004). The research also showed that there was no connection between the level of experience a cyclist has and the duration of trip (Lumsdon et al., 2004). Therefore, the most experienced might not be the most profitable.

Quebec is another destination that has a reasonably successful trail route in their province. In 2000, Quebec enjoyed a total of \$166 million of spending by cyclists in the province. La Route Verte brought \$95.4 million of the total and 2,000 jobs (Minister of Public Works & Government Services Canada, 2000). La Route Verte attracted 16,700 out-of-province tourists and 26,400 from Quebec. Research showed that total trip spending of these visitors was “57 percent for food and lodging, 18 percent for transportation, 15 percent for entertainment services and 12 percent for other products and services” (Minister of Public Works & Government Services Canada, 2000, para.12).

While it can benefit the researchers to examine the economic benefits of other cycle destinations, there is existing research on the economic benefit of cycle tourism in Canada and Ontario. A total of 10.1 percent or 2,494,384 Canadians went cycling while on a trip during 2004 and 2005 which ranked cycling as the tenth most common outdoor activity. Of the 2,494,384 Canadians that went cycling on their trip, 28.4 percent identified that cycling was the main purpose of the trip (Lang Research Inc., 2007). Lang Research Inc. (2007) reported that cyclists are more likely to take a trip within their own province compared to other non-cyclist pleasure travelers. Just over 95 percent of the 2,494,384 Canadian cyclists in 2004 and 2005 took a trip involving cycling in their own province while almost 60.0 percent visited their neighbouring province and 36.7 percent traveled to a non-adjacent province. Ontario is the most visited province for cycling with 58.2 percent of the cyclist's visits. Approximately 51.5 percent and 39.1 percent of cyclists travel to Quebec and British Columbia respectively (Lang Research Inc., 2007). Although 58 percent of cyclists traveled to the United States, Lang Research Inc. (2007) has concluded that cyclists are less likely to travel outside of Canada than non-cyclist pleasure travelers.

According to Dodds and Singh (2010), Ontario is in a good position to support the growth in cycling tourism as Ontario has over 13,000 kilometres of cycling trails with 5,000 kilometres or 200 individual trails dedicated to off-road cycling. In 2008, approximately 1.2 million Canadian tourists traveled to Ontario and participated in some form of cycling activity. However, this only represents 29 percent of all Canadian tourists who went cycling throughout the country. Toronto, Ottawa and Niagara received some of the highest numbers of cycle tourists in Ontario with Toronto bring in 162,000 persons in 2008. This number represented only 0.8 percent of all tourists that traveled to Toronto, suggesting a great need and opportunity to make

tourists aware of the abundance of cycling trails available. Both Ottawa and Niagara saw over 70,000 cycling tourists in 2008 (Dodds & Singh, 2010).

Spending of all cycle tourists in Ontario was estimated at \$278 million in 2008 (Dodds & Singh, 2010). Dodds and Singh (2010) suggested that tourists to Toronto are lower spenders than other cycling destinations, as Canadian cycle tourists only spent \$18.1 million in Toronto compared to \$27.7 million and \$24.5 million spent in Ottawa and Niagara respectively. Dodds and Singh (2010) also identified a changing cyclist market in which tourists are interested in shorter daytrip vacations. This was shown in a decline of overnight visits in Toronto and Niagara and a significant increase in same day cycling tourists. In 2010, the residents of Ontario drove the cycle tourism industry in Ontario and represented 86 percent of same day visits and 73 percent of overnight visits (Dodds & Singh, 2010).

Dodds and Singh (2010) conducted a recent survey of cyclists who traveled to the Niagara Greenbelt. Over 85 percent of those surveyed came from Ontario with 81 percent traveling from the Greater Toronto Area. These tourists spent an average of \$118 while on their trip with 85 percent spent on food and beverage items. In 2009, cycling businesses in the Niagara region reported a 27 percent growth rate due to the increase of cycle tourists to the region as 52 percent stayed overnight (Dodds & Singh, 2010).

Dodds and Singh's (2010) research showed that cycle tourists in Quebec spent 1.3 times more than the average non-cycling tourist. This is also demonstrated in Australia and New Zealand's cycle tourism where cycle tourists double their average length of stay and spend 1.6 times more. This gives the tourists more opportunity to visit more towns in different regions causing these places to economically benefit (Dodds & Singh, 2010). It was also discussed that cycle tourists are often traveling to the smaller scenic areas of a region where tourism is not as

developed which helps to support small locally owned businesses which increased the multiplier effect in the communities. Additionally, because cyclists often must pack lighter than the average tourists they are more likely to spend and purchase more throughout their journey (Cycle Tourism Assessment, 2011).

Faulks et al. (2007) found that the benefits of cycle tourism can be based on economic, social and environmental impacts. The research discovered that cycle tourists spend more money in a destination, typically because of their longer length of stay. Contrary to other literature, Faulks et al. (2007) found that cyclists also visited serviced accommodations, such as hotels and motels, more than other type of tourists. These points illustrate the economic benefits received from cycle tourism initiatives as a source of revenue within the community. This article also cited a number of social benefits to the cycle tourism destination such as cycle tourism providing a beginning for sustainable development in the area and an uplifting in community culture and engagement. The research also presented evidence of the environmental benefits of cycle tourism, such as the refurbishment of unused railway trails into cycle trails (Faulks et al., 2007).

Overall, existing research on the economic benefits of cycle tourism shows that the industry has a positive future.

**Demand.** Research on demand for cycle tourism is highly imperative to ensure sustainable development and management of cycle tourism, as well as ensuring economic benefits are realized. Prior to planning and developing infrastructure for cycle tourism, it is critical to examine the pattern movements of visitors to determine the demand for facilities (Ritchie, 1998). Ritchie (1998) found that cycle tourists travel at a more relaxed pace in comparison to other tourists. Due to the slower pace of cycle tourists, they are more likely to travel to rural areas which commonly do not have sufficient infrastructure for this type of

tourism. Ritchie (1998) suggested that it is rural areas that are most likely to reap the economic benefits of cycle tourism and therefore it is important to have adequate infrastructure, such as bike lanes, to meet the demand.

**Employment.** In addition to its contribution in the travel and tourism economy, cycle tourism and the expansion of cycling networks has created employment opportunities, which is also economically beneficial for communities. Employment opportunities that have been created from cycle tourism are specifically in three sectors: “retail sales of bicycles and accessories, manufacturing and cycling infrastructure development and maintenance” (Grous, 2011, p. 8). In the United Kingdom, cycle tourism and its affected industries currently employ over 23,000 people, accounting for over 500 million pounds in wages distributed (Grous, 2011). Retail sales of bicycles and accessories are the primary employer across the sectors. The retail sales sector is dominated by a few conglomerates that control a large portion of the market. Growth in retail sales that have contributed to an increase in employment in the sector are due in part to the recent economic downturn and rising gas prices which have led people to “reconsider their expenditures for more cost efficient options for daily tasks and recreation, the bicycle being one of them” (Grous, 2011, p. 9). The United Kingdom has seen a decline in the manufacturing of bicycles however, due to an increase of cost effective products from Taiwan for example. Infrastructure development and maintenance, specifically provided by Sustrans, the company developing the National Cycling Network (NCN), as well as local authorities controlling access and connections from other routes have also been a significant employment provider in the United Kingdom. Employment from cycle tourism growth will see expansion in all three sectors with the expansion of the NCN and the growing enthusiasm for cycling in general (Grous, 2011).

## **Sustainability**

Transport for the purpose of tourism has seen a growth over the past few years, where cycle tourism has become a niche market as an option for transportation. Although vehicle and air transport remain the dominant choice for tourism transportation, cycle tourism has expanded, suiting the requirements of an evolving type of traveller. With a recent recognition of the issues threatening the environment that are led by the growing demand from the two forms of travel transportation, that being airplanes and vehicles, the tourism industry has shifted its focus on developing travel alternatives that take into consideration the need for more sustainable options. Even though greater attention is paid to the leading forms of transportations, there has been a consideration for the long-term development of cycle tourism as both a form of travel and tourism activity. Cycle tourism comes as an alternative to help in the reduction of “fuel consumption, noise and other emissions” (Lumsdon, 2000, p. 363). Examples of these developments exist in cycling networks such as La Route Verte in eastern Canada, as well as others in the United States, Europe and Australia. Such examples have successfully combined transportation options that encompass tourism components that attract many tourists (Lumsdon, 2000).

As the demand for travel and tourism is increasing, cycle tourism has become an option, which supports the positive aspects of the industry and assists in the alleviations of the negative impacts. The World Tourism Organization “predicts 1.6 billion international arrivals globally by the year 2020” (Lumsdon, 2000, p. 363). With a rise in travel transportation and an increased concern for the environmental impacts on the environment, cycle tourism presents a sustainable option. Cycle tourism is a necessary consideration in the sustainability of the tourism industry, having an extended impact on the environment, now and in the future (Lumsdon, 2000). Studies

have also indicated a steady decline in the “all-inclusive” form of tourism as it is being replaced with the demand of more environmentally conscious travellers (Lumsdon, 2000).

The tourism industry has experienced a greater demand for the “day visit market” as well as for the “short distance holiday trips” (Lumsdon, 2000, p. 363). The greatest benefit in the sustainability of cycle tourism is the opportunity for a linkage between existing motorcar, train and other networks that connect to cycling trails. This in turn creates a relationship between the transportation to the destination and the overall tourism experience, as well it justifies the longer duration of cycling trips (Lumsdon, 2000).

In today’s environment where people are living an intense, fast-paced lifestyle filled with endless obligations, it is interesting to see that tourists are more willing to choose slower means of travel, thus a change in behaviours, which creates opportunities for new forms of travel such as cycle tourism (Lumsdon, 2000).

The National Cycling Network developed in the United Kingdom spreads as a web of cycling routes, strategically connected with existing infrastructures to facilitate multi-transport connections. This in turn has encouraged local trips of travellers departing directly from their homes or trailheads, for example. “It is estimated the networks currently attracts 100 million trips of which 40 percent are for leisure purposes” (Lumsdon, 2000, p. 368). Principles of sustainable development have been specifically incorporated in the design of the network. Such components include reusing existing resources, with over 50 percent of the existing and underused roads being utilized in the expansion of the network. This helps in the elimination of waste as well as reducing any disturbances to the existing landscapes, flora and fauna. The structure of the networks also promotes a decrease in car trips by facilitating access by bicycle from roads outside the network (Lumsdon, 2000).

To determine the sustainability of the British network, cyclists in the United Kingdom were asked whether they used any other form of transportation to begin their trip. The research indicated that 85 percent of the respondents did not use any other form of transport; however, parts of the route have showed less satisfactory results (Lumsdon et al., 2004). The NSCR in the Netherlands showed that over 70 percent of cyclists did not use any other form of transportation (Lumsdon et al., 2004). As a result, cycling and tourism together promote an environmentally friendly and long-term sustainability of the industry. It is through the creation of networks that provides users with the best access and reduces the use of road and air vehicles that cycle tourism promotes sustainability.

### **Literature Review Conclusion**

A literature review on cycle tourism allowed the researchers to gain a better understanding of the topic through the process of reviewing, analyzing and summarizing existing research that is relevant to the purpose of the study that will be completed. The research has brought insight on aspects of cycle tourism, including the definition of cycle tourism, market segmentation, demographics, motivations, current economic trends and the sustainability of cycling. The literature review has reinforced the need to conduct primary research on the topic so as to obtain more current data for the province of Ontario. The cycle tourism industry is seeking demand and thorough research on the matter will assist in the positive and well-received development of the industry.

## Method

### Objectives

The purpose of this research is to determine the economic benefits of cycle tourism in Ontario and to develop demographic profiles of different types of cyclists that include their purpose for cycling, cycling preferences and most effective marketing channels.

The research study aims to achieve the following objectives by describing the:

- Economic benefits of cycle tourism
- Demographic profile of cyclists
- Best marketing distribution channels to reach cyclists
- Cycle tourists' preferences such as type of terrain, type of tour, accommodation, dining, and accessibility
- Cycling event preference and annual attendance

### Research Method

This study involves a primary research approach to obtain data directly from the targeted market that supports the purpose and objectives. Background conducted on economic impacts of cycle tourism helps to better understand the research topic. The research objectives listed above will be fulfilled using a survey research method.

**Design.** The researchers followed a linear research path by first designing the survey, obtaining approval of the questions, formatting the survey online using Survey Tool, administering the survey, collecting and then analyzing the data, and finally preparing a research report on the findings. Following a chronological path, no task was pursued without the prior one being completed. Appropriate quantitative questions based on the research objectives were formulated and then administered on both a paper form and online questionnaire (Neuman &

Robson, 2012). Both formats presented the same questions. The questionnaire was a three page document asking both closed and open-ended questions on the components required to fulfill the research purpose. The questions were specific and generated data that provided new information to essentially create a general demographic profile of Ontario cyclist tourists. The researchers gained a better understanding of cycling and tourism preferences and most preferred methods of marketing. The researchers visited Mountain Equipment Co-op (MEC) on Thursday, October 11<sup>th</sup> 2012. The researchers were present at the retail store from 2:00pm to 9:00pm, to intercept the store's customers after checking out at the cash registers. A screening question was asked prior to the participant taking part in the study to determine eligibility based on their past experience with cycle trips. Additionally, the researchers were present at the Toronto International Bicycle Show held on Saturday, October 13<sup>th</sup> 2012. The researchers attended the event from 7:30am to 12:00pm at the Exhibition Place in Toronto, and intercepted people waiting in line to purchase their tickets prior to entering the show. As well, an online survey was sent to cyclists. The researchers had Louisa Mursell from Transportation Options email the survey link to an existing mailing list of cyclists in Ontario to complete the survey.

**Sample.** The questionnaire was conducted using non-probability sampling, an initial purposive type of sampling with the researchers being present in locations where cyclists can be found. Purposive sampling is an appropriate method under the circumstance where the researchers are seeking the input of a specialized population and use subjective information to go to locations where cyclist would most commonly be found (Neuman & Robson, 2012). The research used various locations and channels of communication to reach the specialized population that qualified for the research. In using purposive sampling, the researchers cannot determine if the participants represent the total population of cyclist. The researchers began the

survey by asking candidates a screening question to determine if they qualified to participate in the study. This was needed as active cycle tourists are a specialized population.

**Instrumentation.** The questionnaire was comprised of both open ended and closed ended questions. In all closed ended questions the respondents were given a multiple-choice selection of answers they could choose from. There were also a number of questions that were designed to be answered using a Likert scale. The survey began with questions pertaining to cycling habits and gradually shifted to the preferences of cycle tourists. The last few questions were demographic questions, designed to assist with the profile of Ontario cycle tourists.

**Data collection.** A total of 256 usable surveys were obtained in the data collection process, from an approximate total of 600 people who were approached. The researchers chose to exclude 18 surveys in the total collection as they were deemed incomplete and unusable as over 25 percent of the survey questions were left blank. The surveys were categorized based on the place where they were conducted to identify any variances in the responses based on the location of participants. The paper surveys were labeled on the top right corner. Paper surveys that were handed out manually were collected anonymously after completion as the participants placed the survey into a large bag. Online surveys responses were collected in one of the researcher's email inbox and then placed in a separate folder. They were also collected anonymously.

**Data analysis.** Survey results were manually entered using SPSS by the six members of the research group. The results of the survey were then analyzed in SPSS and visual representations were created based on the results. Specifically, the following analysis methods were used: frequency testing, cross-tabulations, chi square, and analysis of the mean, median, and mode. Each question's response options from the survey were coded into a document to

facilitate the input of the surveys from the participants. All researchers contributed to the data entry. The data was then merged into one main document from which the frequency tables were produced. Data cleaning occurred to ensure that the numbers assigned to the participant's responses corresponded to the survey coding. The researchers collapsed categories for the participants' city of residence to reduce the number of cities in the results. This collapse was also applied to the participant's preferred cycling destination. For example, if a participant indicated Port Dover as their city of residence, it was then changed to Norfolk County as Port Dover is located within Norfolk County. Finally, patterns and sequences were determined and compared to investigate potential relationships among key variables of interest such as the variables that provided insight into the preferences and motivations of cycle tourists, as well as demographic information.

## **Results**

The tables shown throughout this section display the findings of the research results. A total of 256 useable surveys were collected. Although the surveys were used to collect data, there are a number of instances where questions were left blank by the respondent. In the frequency tables, this is identified as 'Missing'. The results are based on the collection of surveys from volunteers who were intercepted at Mountain Equipment Co-op (n=37), the Toronto International Bicycle Show (n=141), and via email through a link to an online version of the survey (n=78). All respondents are active cyclists who have previously been on a cycle holiday or day trip. Based on the points of contact with these cyclists it is reasonable to assume that they have an active interest in cycling, and are interested in participating in research that would benefit cycle tourism initiatives by destinations.

### **Frequencies**

The frequency charts are used to calculate the breakdown of responses for each question asked in the questionnaire. When examining the frequency tables, the researchers concentrated on valid percent as it did not include the respondents who did not answer the question. The results of the study are broken down into sections, which mirror the objectives. Tables that do not relate specifically to the objectives discussed but were asked on the questionnaire are identified in the Appendix, Tables 1 through 11.

### Demographic profiles of cycle tourists.

Table 1

#### *Number of Years as an Active Cyclist*

Years as an active cyclist	Frequency (n)	Percent (%)
Less than one year	11	4.3
1 to 2 years	18	7.1
3 to 4 years	50	19.6
More than 5 years	176	69.0
Total	255	100.0

Table 1 illustrates that 69.0 percent of respondents have considered themselves to be an active cyclist for over five years. This is in contrast to the 4.3 percent who identified themselves as an active cyclist for less than one year.

Table 2

#### *Place of Residence in Canada*

Region	Frequency (n)	Percent (%)
Central/Southern Ontario	189	75.0
Western Ontario	35	13.9
Eastern Ontario	18	7.1
Resident of another country	7	2.8
Northern Ontario	2	0.8
Quebec	1	0.4
Total	252	100.0

Table 2 shows that the majority of cyclists surveyed for this research indicated that their place of residence is within Central/Southern Ontario (75.0 percent) while only 2.8 percent were residents of another country. Further information about place of residence that is not within Canada is detailed in the Appendix Table 12.

Table 3

*Place of Residence in Canadian Cities*

Top Canadian Cities	Frequency (n)	Percent (%)
Toronto	103	65.6
Haliburton	12	7.6
Mississauga	11	7.0
Hamilton	10	6.4
Ottawa	7	4.5
Minden	7	4.5
Burlington	7	4.5
Total	157	100.0

Table 3 shows the top seven Ontario cities in which the respondents are from. Toronto represents the largest market at 65.6 percent.

Table 4

*Age of Respondents*

Age	Frequency (n)	Percent (%)
Under 24	19	7.4
25 to 29	35	13.7
30 to 34	33	12.9
35 to 39	22	8.6
40 to 44	27	10.5
45 to 49	28	10.9
50 to 54	37	14.5
55 to 59	24	9.4
60 plus	30	11.7
Total	255	100.0

Table 4 depicts that the largest number of respondents are between 50 and 54 years of age, which represents 14.5 percent of those surveyed. A large percentage of cyclists also fell between the ages of 25 and 29 as well as 30 to 34, which represent 13.7 percent and 12.9 percent of the total respondents respectively.

Table 5

*Marital Status*

Marital Status	Frequency (n)	Percent (%)
Married/common law	158	62.7
Single	91	36.1
Other	3	1.2
Total	252	100.0

Table 5 identifies that 62.7 percent of those surveyed were either married or in a common law relationship. The other marital status category was single which represented 36.1 percent of the respondents.

Table 6

*Children Living at Home*

Children Living at Home	Frequency (n)	Percent (%)
No children at home	140	55.3
Children at Home	113	44.7
Total	253	100.0

Table 6 depicts that 55.3 percent of respondents have no children living at home and 44.7 percent have children living at home.

Table 7

*Number of Children and Ages*

Number of Children	0-14 Years		15-18 Years		18 plus Years	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
1	43	16.9	20	7.9	17	6.7
2	23	9.1	7	2.8	19	7.5
3	4	1.6	0	0	2	0.8
Total	70	27.6	27	10.7	38	15.0

Table 7 shows that of those respondents who have children at home 27.6 percent have at least one child under the age of 14.

Table 8

*Employment*

Employment Status	Frequency (n)	Percent (%)
Working full time	185	72.8
Working part time	29	11.4
Retired	21	8.3
Student	15	5.9
Not currently employed	4	1.6
Total	254	100.0

Table 8 displays that 72.8 percent of the respondents are currently working in a full time position.

Table 9

*Household Income*

Household Income	Frequency (n)	Percent (%)
Less than \$59,999	61	26.5
\$60,000 to \$99,999	73	31.7
\$100,000 to \$149,999	48	20.9
\$150,000 plus	48	20.9
Total	230	100.0

Table 9 illustrates that the household income bracket of \$60,000 to \$99,999 represents the largest amount of respondents at 31.7 percent. However, it should be noted that 41.8 percent have a household income of over \$100,000.

Table 10

*Level of Education*

Level of Education	Frequency (n)	Percent (%)
Bachelor's degree	89	35.3
College diploma	56	22.2
Master's degree	44	17.5
Some university	24	9.5
High school	18	7.1
Doctorate degree	11	4.4
Trade certificate	7	2.8
Other	3	1.2
Total	252	100.0

Table 10 demonstrates that the majority of cyclists have completed some form of post-secondary education. This can be seen as 35.3 percent of cyclists achieved a bachelor's degree, 22.2 percent achieved a college diploma, and 17.5 obtained a master's degree.

Table 11

*Gender*

Gender	Frequency (n)	Percent (%)
Male	184	72.4
Female	70	27.6
Total	254	100.0

As demonstrated in Table 11, a total of 72.4 percent of the cycle tourist respondents for this study were male, while only 27.6 percent were female.

### Economic impacts of cycle tourism.

Table 12

#### *Average Amount Spent on Cycling Trips*

Average Trip Spending	Frequency (n)	Percent (%)	Cumulative Percent (%)
\$0 to \$300	70	32.7	32.7
\$301 to \$600	58	27.1	59.8
\$601 to \$1000	43	20.1	79.9
\$1001 to \$2000	23	10.7	90.7
\$2001 to \$3000	10	4.7	95.3
\$3001 to \$15000	10	4.7	100.0
Total	214	100.0	

Table 12 shows that 32.7 percent of cyclists spend between \$0 and \$300, 27.1 percent spend between \$301 and \$600, and 20.1 percent spend between \$600 and \$1,000. Therefore, 79.9% of cyclists surveyed spend less than \$1,000 on an average cycling trip. Since this question was presented in an open-ended format in which respondents could respond with any number they deemed appropriate, a mean, median, and mode were conducted. As presented in the Appendix, Table 13, the mean of spending on a cycling trip is \$986.91 while the median and mode are both \$500.00.

Table 13

#### *Percentage of Spending on Cycling Holiday Expenses*

Percentage of Spending	Accommodation		Food and Beverage		Retail		Tourist Activities		Other Expenses	
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)
0 to 25	69.0	29.2	104.0	44.1	229.0	97.0	224.0	94.9	222.0	94.1
26 to 50	110.0	46.6	112.0	47.5	7.0	3.0	11.0	4.7	12.0	5.1
51 to 75	51.0	21.6	7.0	3.0	0.0	0.0	0.0	0.0	1.0	0.4
76 to 100	6.0	2.5	13.0	5.5	0.0	0.0	1.0	0.42	1.0	0.4
Total	236.0	100.0	236.0	100.0	236.0	100.0	236.0	100.0	236.0	100.0

Table 13 breaks cycle tourists' expenditures into five main categories including accommodation, food and beverage, retail, tourist activities and other. The respondents were asked to assign a percentage that best reflects their typical expenditures on a cycle holiday. As seen in Table 13, 46.6 percent of cyclist spent between 26 and 50 percent of their holiday budget on accommodation and 47.5 percent also spent between 26 and 50 percent on food and beverage. As well, 97 percent of cyclists spend between 0 and 25 percent on retail and 94.9 percent spend between 0 and 25 percent on tourist activities. Finally, 94.1 percent spend between 0 and 25.0 percent on other expenses. In the Appendix, Table 14 to Table 18, the original data collected from the respondents is displayed.

### **Preferred marketing channels.**

Table 14

#### *Preferred Source of Information*

Preferred Source of Information	1		2		3		Total	Total (%)
	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)	Frequency (n)	Percent (%)		
Preference of social media	51	20.4	11	4.8	17	8.2	79	11.5
Preference of e-mail	55	22.0	50	21.9	24	11.7	129	18.9
Preference of cycling magazines	29	11.6	43	18.9	29	14.1	101	14.8
Preference of websites	68	27.2	74	32.5	43	20.8	185	27.0
Preference of pamphlets	5	2.0	9	3.9	7	3.4	21	3.1
Preference of direct mail	2	0.8	0	0.0	7	3.4	9	1.3
Preference of newspaper	2	0.8	7	3.1	10	4.9	19	2.8
Preference of tourist information centres	4	1.6	9	3.9	15	7.3	28	4.1
Preference of friends and family	34	13.6	25	11.0	50	24.3	109	15.9
Preference of other	0	0.0	0	0.0	4	1.9	4	0.6
Total	250	100.0	228	100.0	206	100.0	684	100.0

Table 14 shows the results of a question that asked respondents to rank their top three preferred sources of information about cycling events and trips. The results show that overall 27% percent of the respondents choose websites as either their first, second or third preferred source of information. Additionally, 18.9 percent choose e-mail and 15.9 percent choose friends and family as other preferred sources of information.

Although social media and cycling magazines as a source of information do not fall into the top three categories, they could be considered as potentially significant sources of information as they represent 11.5 percent and 14.8 percent respectively.

### **Cycle preferences.**

Table 15

#### *Preferred Type of Trail*

Type of Trail	Frequency (n)	Percent (%)	Cumulative Percent (%)
Roads with paved shoulders or markings	112	43.8	43.8
Paved or hard trail	67	26.2	70.0
Mountain biking trails	50	19.5	89.5
No preference	27	10.5	100.0
Total	256	100.0	

Table 15 illustrates that generally, cyclists prefer paved surfaces. Roads with paved shoulders or markings and paved or hard trails were at 43.8 percent and 26.2 percent respectively. Combined, these trail types represent 70.0 percent of total respondents.

Table 16

*Number of People in a Cycling Party*

Number of People	Frequency (n)	Percent (%)	Cumulative Percent (%)
Solo	64	25.0	25.0
2	82	32.0	57.0
3 to 4	75	29.3	86.3
5 to 6	10	3.9	90.2
7 to 8	9	3.5	93.8
9 plus	16	6.3	100.0
Total	256	100.0	

Table 16 shows that generally, cyclists prefer to ride in smaller groups with 86.3 percent of respondents indicating that they cycle with four or fewer people. The most common number of cyclists in a group was two people, with 32.0 percent of the total responses.

Table 17

*Activities Participated in While on a Cycle Trip*

Activities Participated in While on a Cycle Trip	Frequency (n)	Percent (%)
Participated in hiking	142	55.5
Participated in wine/culinary tours	116	45.3
Visited museum/cultural sights	106	41.4
Visited a beach	104	40.6
Participated in shopping	84	32.8
Participated in art & studio tours	56	21.9
Visited attractions & theme parks	48	18.8
Other	29	11.3
None	20	7.8

In Table 17, it is evident that while on a cycling holiday, the common activities that cyclists participate in include hiking (55.5 percent), wine and/or culinary tours (45.3 percent), visiting museums and/or cultural sights (41.4 percent), and visiting a beach (40.6 percent). A list of 'other' activities indicated by the respondents is presented in the Appendix, Table 19.

Table 18

*Average Number of Nights Stayed*

Number of Nights	Frequency (n)	Percent (%)
0	14	5.7
1 to 3	178	72.4
4 to 6	31	12.6
7 to 9	13	5.3
10 to 12	4	1.6
13 to 15	1	0.4
16 to 20	2	0.8
21 to 30	3	1.2
Total	246	100.0

As shown in Table 18, 72.4 percent of respondents indicated that they tend to stay 1 to 3 nights while on a cycle holiday. There are also a noticeable number of cycle tourists who report spending 0 nights while on a trip (5.7%) which shows a preference that many cyclists may take day trips and short excursions. In the Appendix, Table 20 shows that the average number of nights stayed were 3.24, while both the median and mode are 2 nights.

Table 19

*Type of Accommodation*

Type of Accommodation	Frequency (n)	Percent (%)
Hotel 1 to 3 stars	54	21.3
Camping	51	20.1
Bed & Breakfast	37	14.6
Luxury hotel/resort	33	13.0
Friends and relatives	33	13.0
Motel	32	12.6
Hostel	8	3.1
Other	6	2.4
Total	252	100.0

Table 19 shows that hotels (1 to 3 stars) and camping are the most preferred types of accommodation, representing 21.3 percent and 20.1 percent respectively. A list of ‘other’ types of accommodation generated from the respondents is presented in the Appendix, Table 21.

### **Cycling event attendance.**

Table 20

#### *Participation in Cycling Events*

Participation in Cycling Events	Frequency (n)	Percent (%)
Charity fundraising	90.0	35.7
Recreational/promotional ride	87.0	34.5
Road racing	62.0	24.6
Touring events	62.0	24.6
BMX, mountain bike, specialty	58.0	23.0
Multi-sport events	48.0	19.0
None	47.0	18.7
Package tours	34.0	13.5
Other	14.0	5.6

Table 20 identifies that recreational/promotional rides and charity fundraisers are the most popular events, with respondents selecting them with 34.5 and 35.7 percent respectively. It should be noted that 18.4 percent of respondents do not participate in any cycling events. For additional information, a list of ‘other’ events generated from the respondents is presented in the Appendix, Table 22.

Table 21

*Annual Participation in Cycling Events*

Annual Participation in Cycling Events	Frequency (n)	Percent (%)
0	52	20.8
1 to 2	71	28.4
3 to 4	63	25.2
5 plus	64	25.6
Total	250	100.0

Table 21 illustrates the annual participation in cycling events. The results show that 28.4 percent of cyclists participate in one to two events per year, 25.2 percent participate in three to four events, and 25.6 percent of cyclists take part in five or more per year. Of all the cyclists surveyed, 20.8 percent do not take part in any cycling event.

Table 22

*Weeks Spent Planning a Cycling Holiday*

Weeks	Frequency (n)	Percent (%)
0	11	4.7
1 to 2	50	21.2
3 to 4	42	17.8
5 to 6	18	7.6
7 to 8	17	7.2
9 to 10	17	7.2
11 to 20	33	14.0
21 to 30	21	8.9
31 to 40	6	2.5
41 to 50	1	0.4
51 to 60	20	8.5
Total	236	100.0

Table 22 shows that 25.9 percent of respondents spend less than two weeks planning their cycle trip, while 17.8 percent spend three to four weeks planning a cycle holiday. As presented in

the Appendix, Table 23 the average number of weeks spent planning a trip was 12.56, while the median was 6 weeks and the mode was 2 weeks. Additionally, the full data set for the number of weeks spent planning for a cycling holiday is presented in the Appendix, Table 24.

### **Cross Tabulations**

For the analysis of the obtained data, the researchers used SPSS to generate cross tabulation charts. These charts compare two variables and allow the researchers to distinguish any patterns or trends within the data. Cross-tabulation and Chi-Square calculations were used to determine the relationships between the variables. The Chi-Square statistic was used to determine how meaningful the results of the cross tabulation are to the research study. Any Chi-Square result that is below 0.05 is deemed significant to the research study, and that there is a relationship between the variables analyzed. In the case of this study this result shows that the results of the cross-tabulation can be applied to the population and identifies a meaningful trend. Any Chi-Square that has a result above 0.05 is considered not significant, meaning that there is no relationship between the analyzed results and the trends are applicable only to the sample population and are not representative of cycle tourists as a whole (Chance & Rossman, 2005). Throughout the following section a number of cross tabulations will be presented which are valuable to the objectives. Some of the values were collapsed in order to draw relevant significance; therefore, the cross tabulations with the original data are presented in the Appendix Tables 25 to 39.

### Economic impacts of cycle tourism.

Table 23

#### *Tourist Activities in Relation to Average Trip Spending*

Activity/Trip Spending	Under \$1000		\$1001 to \$3000		\$3001 plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Participated in wine/culinary tours	78	36.3	13	6.0	6	2.8	97
Participated in hiking tours	101	47.0	15	7.0	5	2.3	121
Participated in art & studio tours	38	17.7	4	1.9	4	1.9	46
Visited museums/ cultural sights	71	33.0	14	6.5	5	2.3	90
Visited attractions & theme parks	35	16.3	4	1.9	0	0	39
Participated in shopping	48	22.3	16	7.4	5	2.3	69
Visited a beach	71	33.0	13	60.0	2	0.9	86
Participated in no other activities	12	5.6	5	2.3	0	0	17
Total	454		84		27		565

Table 23 displays the relationship between average trip spending and tourist activities.

Each activity had no significance shown on the Chi-Square tests except for shopping which displayed a significance of 0.044. This is shown in Appendix, Table 40. The results demonstrate that hiking is the most popular activity while on a cycling holiday for those that normally spend \$1,000 or less; and shopping is the most prevalent activity for those who spend between \$1,001 and \$3,000. Lastly, cyclists who spend an average of \$3,001 or more while on a cycle holiday participate in some sort of wine and culinary tour.

Table 24

*Average Trip Spending in Relation to Type of Accommodation*

Type of Accommodation/Average Spending	Under \$1000		\$1001 to \$3000		\$3001 Plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Luxury Hotel/Resort	16	7.48	5	2.30	5	2.30	26
Hotel 1 to 3 Stars	39	18.22	7	3.30	1	0.50	47
Motel	25	11.68	0	0.00	1	0.50	26
Hostel	7	3.27	0	0.00	0	0.00	7
Bed & Breakfast	20	9.35	10	4.70	2	0.90	32
Camping	33	15.42	8	3.79	1	0.50	42
Friends and Relatives	25	11.68	3	1.40	1	0.50	29
Other	5	2.34	0	0.00	0	0.00	5
<b>Total</b>	<b>170</b>		<b>33</b>		<b>11</b>		<b>214</b>
Chi-Square	28.593						
Degrees of Freedom (df)	14						
Significance (p)	<.0120						

Table 24 presents the relationship between the type of accommodation and the average spending on the cycling trip. This analysis illustrates that the relationship between the variables is significant as the Chi-Square calculation determined the significance to be .0120. The table demonstrates that many of the cyclists who spend less than \$1,000 on a cycling trip choose hotels with 1 to 3 stars and also stay at budget friendly accommodations such as camping. Most cyclists who spend between \$1,001 and \$3,000 stay at bed and breakfasts, while most of the cyclists who spend \$3,001 or more stay at luxury hotels and resorts.

Table 25

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Accommodation*

Budget Spent on Accommodation/ Average Spending	Under \$1000		\$1001 to \$3000		\$3001 Plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
0%	26	12.40	2	1.00	0	0.00	28
1 to 25 %	26	12.40	6	2.90	1	0.50	33
26 to 50%	78	37.30	14	6.70	8	3.80	100
51 to 75%	33	15.80	9	4.30	1	0.50	43
76 to 100%	4	1.90	1	0.50	0	0.00	5
Total	167		32		10		209
Chi-Square	7.656 <sup>a</sup>						
Degrees of Freedom (df)	8						
Significance (p)	<.4677						

Table 25 demonstrates a relationship between the average trip spending and the percentage of holiday budget spent on accommodation. This table is only representative of the respondents from the survey as the results of the Chi-Square were determined to be not significant. The data shows that the percentage of 26 to 50 percent of a cycling holiday budget is allocated to accommodation regardless of the amount spent.

Table 26

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Food and Beverage*

Budget Spent on Food and Beverage/ Average Spending	Under \$1000		\$1001 to \$3000		\$3001 Plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
0%	6	2.87	3	1.44	0	0.00	9
1 to 25 %	65	31.10	14	6.70	4	1.91	83
26 to 50%	79	37.80	13	6.22	5	2.39	97
51 to 75%	6	2.87	1	0.48	1	0.48	8
76 to 100%	11	5.26	1	0.48	0	0.00	12
<b>Total</b>	<b>167</b>		<b>32</b>		<b>10</b>		<b>209</b>
Chi-Square	5.207 <sup>a</sup>						
Degrees of Freedom (df)	8						
Significance (p)	<.7352						

The cross-tabulation deemed the relationship of the two variables in Table 26 as not significant with a 0.7352 Chi-Square calculation. Similar to the amount spent on accommodation, Table 26 indicates that the percentage spent on food and beverage was generally allocated between 26 to 50 percent of the trip budget. The exception is the \$1,001 to \$3,000 average trip spending range, in which case the allocation was 1 to 25 percent, with 26 to 50 percent being a close second.

Table 27

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Retail*

Budget Spent on Retail/ Average Spending	Under \$1000		\$1001 to \$3000		\$3001 Plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
0%	68	32.50	13	6.20	1	0.50	82
1 to 25 %	92	44.00	19	9.10	8	3.80	119
26 to 50%	7	3.30	0	0.00	1	0.50	8
51 to 75%	0	0.00	0	0.00	0	0.00	0
76 to 100%	0	0.00	0	0.00	0	0.00	0
Total	167		32		10		209
Chi-Square	5.633 <sup>a</sup>						
Degrees of Freedom (df)	4						
Significance (p)	.228						

It was determined that the relationship between the two variables in Table 27 is not significant. The results demonstrate that regardless of the participant's average spending on a cycling trip, the allocation of their overall budget to retail expenses is between 1 and 25 percent.

Table 28

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Tourist Activities*

Budget Spent on Tourist Activities/Average Spending	Under \$1000		\$1001 to \$3000		\$3001 Plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
0%	70	33.50	10	4.80	2	1.00	82
1 to 25 %	85	40.70	22	10.50	8	3.80	115
26 to 50%	12	5.70	0	0.00	0	0.00	12
51 to 75%	0	0.00	0	0.00	0	0.00	0
76 to 100%	0	0.00	0	0.00	0	0.00	0
Total	167		32		10		209
Chi-Square	7.533 <sup>a</sup>						
Degrees of Freedom (df)	4						
Significance (p)	.110						

It was determined that the relationship between the two variables in Table 28 is not significant as the Chi-Square is 0.110. Table 28 outlines that cyclists generally allocated 1 to 25 percent of their total budget to tourist activities.

Table 29

*Average Trip Spending in Relation to Average Number of Nights Stayed*

Average Spending/Nights Stayed	0		1 to 3		4 to 6		7 plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under 1000	9	4.27	135	64.0	16	7.6	7	3.3	167
1000 to 3000	2	0.9	13	6.2	8	3.8	10	4.7	33
3000 plus	1	0.5	3	1.4	3	1.4	4	1.9	11
Total	12		151		27		21		211
Chi-Square	43.593 <sup>a</sup>								
Degrees of Freedom (df)	6								
Significance (p)	<0.000								

The Chi-Square demonstrates that variables have a relationship as the significance is 0.000. Table 29 compares the average trip spending with the average number of nights on a cycling holiday. Cyclists who spend \$3,000 or less on their cycling trip on average stay one to three nights while cyclists who spend over \$3,000 normally stay seven or more nights.

Table 30

*Average Trip Spending in Relation to Number of People in a Cycling Party*

Average Spending/Number of people in a party	Solo		2		3 to 4		5 plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under \$1000	46	21.4	51	23.7	51	23.7	23	10.7	171
\$1001-\$3000	8	3.7	10	4.7	10	4.7	5	2.3	33
\$3000 plus	1	0.5	4	1.9	5	2.3	1	0.5	11
Total	55		65		66		29		215
Chi-Square	2.505 <sup>a</sup>								
Degrees of Freedom (df)	6								
Significance (p)	<.8679								

The average trip spending is compared to the size of cycling party in Table 30. Using the Chi-Square calculation, it was determined that there is no relationship between the variables. The table illustrates that the majority of participants in each trip budget level travel with four or less individuals. Only a small percent travel in larger groups of five or more.

Table 31

*Average Trip Spending in Relation to Household Income*

Average Spending/Income	Under \$59,999		\$60,000 to \$99,999		\$100,000 plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under \$1000	45	28.7	51	32.5	61	38.9	157
\$1000 to \$3000	6	20.7	10	34.5	13	44.8	29
\$3000 plus	1	11.1	1	11.1	7	77.8	9
Total	52		62		81		195
Chi-Square	5.933						
Degrees of Freedom (df)	4						
Significance (p)	<.204						

Table 31 compares the average trip spending with household income. The results of this data show the variables do not have a significant relationship and therefore this data is only representative of the survey. The table shows that typically cyclists have more than \$100,000 in annual household income. It is interesting to note that the proportion of respondents within this category is highest for those who spend \$3,000 or more on a trip.

### **Marketing channels.**

Table 32

#### *Preferred Marketing Method in Relation to Gender*

Marketing Method/Gender	Male		Female		Total
	Frequency	Percent	Frequency	Percent	
Friends and family	79	31.7	30	12	109
Travel information center	16	6.4	12	4.8	28
Newspaper	13	5.2	6	2.4	19
Direct Mail	3	1.2	6	2.4	9
Pamphlets	13	5.2	8	3.2	21
Websites	139	55.6	45	18	185
Cycling magazine	78	31.2	23	9.2	101
Email	91	36.4	38	15.2	129
Social Media	56	22.4	23	9.2	79
Total	488		191		680

Table 32 analyzed the relationship between the participant's gender and their preferred method of marketing in receiving cycling information. The question required respondents to indicate their top three preferred sources of marketing information, which results in total responses for some categories of more than 100 percent. None of the results are significant except for direct mail which had a significance of 0.0210. The result of the Chi-Square analysis is shown in Appendix, Table 41. Table 32 indicates that there are a higher percentage of females that preferred direct mailing over males. In general, both males and females share the same

preferences in terms of their top three preferred marketing channels, being websites, emails, and family and friends.

Table 33

*Preferred Marketing in Relation to Method Age*

Age/Marketing Method	Under 29		30 to 39		40 to 49		50 plus		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Friends and family	21	8.4	24	9.6	23	9.2	41	16.5	109
Travel information center	5	2	4	1.6	9	3.6	10	4	28
Newspaper	2	0.8	2	0.8	1	0.4	14	5.6	19
Direct Mail	1	0.4	2	0.8	0	0	6	2.4	9
Pamphlets	3	1.2	4	1.6	2	0.8	12	4.8	21
Websites	40	16	41	16.4	36	14.4	68	27.2	185
Cycling magazine	24	9.6	20	8	24	9.6	33	13.2	101
Email	15	6	27	10.8	31	12.4	56	22.4	129
Social Media	27	10.8	26	10.4	14	5.6	12	4.8	79
Total	138		150		140		252		680

Table 33 compares the age brackets of the participants with their preferred marketing method. The results of the Chi-Square show that there is a significant relationship between email and social media with age of cyclists. Both marketing methods had a significance of 0.000. The result of the Chi-Square analysis is shown in Appendix, Table 42. All age groups have selected websites as their most preferred method of gathering cycling information. Participants up to the age of 39 have selected social media as one of their top three preferred media sources whereas the older age groups of 40 to 60 plus prefer emails. All age categories identified websites as a popular method of communication. Friends and family is only identified as a top three media preference choice for cyclists aged 50 plus, while cycling magazines are used in the younger generation of under 29.

### Cycling event attendance.

Table 34

#### *Annual Purchases of Cycling Equipment in Relation to Annual Participation in Cycling Events*

Equipment/Events	0		1 to 2		3 to 5		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under \$1000	2	1.9	75	70.8	29	27.4	106
\$1000 to \$1999	1	1.4	25	36.2	43	62.3	69
\$2000 to \$2999	0	0.0	16	36.4	28	63.6	44
3000 plus	0	0.0	6	18.2	27	81.8	33
Total	3		122		127		252
Chi-Square	43.085						
Degrees of Freedom (df)	6						
Significance (p)	<.000						

The relationship of the two variables in Table 34 was determined to be significant from the Chi-Square result. Table 34 illustrates that 70.8 percent of cyclists who spend under \$1,000 on a trip are most likely to attend only one to two cycling events, whereas the majority of cyclists who spend more than \$1,000 attend three to five cycling events.

Table 35

#### *Age in Relation to Annual Participation in Cycling Events*

Age/Events	0		1 to 2		3 to 5		Total
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under 29	0	0.0	30	55.6	24	44.4	54
30 to 39	0	0.0	22	40.7	32	59.3	54
40 to 49	1	1.8	26	47.3	28	50.9	55
50 plus	2	2.2	45	50.0	43	47.8	90
Total	3		123		127		253
Chi-Square	4.911						
Degrees of Freedom (df)	6						
Significance (p)	<.555						

As illustrated in the Chi-Square calculation, the relationship between the two variables is 0.555, indicating that there is no significance. Table 35 demonstrates that the majority of cyclists aged under 29 and above 50 participate in one to two cycling events. Respondents between 30 and 49 years old typically partake in three to five cycling events each year.

Table 36

*Household Income in Relation to Annual Participation in Cycling Events*

Household Income/Events	Annual Event Attendance						Total
	0		1 to 2		3 to 5		
	Frequency	Percent	Frequency	Percent	Frequency	Percent	
Under \$59,999	1	2	30	50	29	48	60
\$60,000 to \$99,999	0	0.0	39	54.2	33	45.8	72
\$100,000 plus	2	2.1	42	43.8	52	54.2	96
Total	3		111		114		228
Chi-Square	2.996						
Degrees of Freedom (df)	4						
Significance (p)	<.559						

The relationship between the two variables in Table 36 is not significant as the calculation of the Chi-Square was 0.559. The above table depicts that those who have a household income of less than \$100,000 commonly participate in one to two cycling events. In addition, 54.2 percent of respondents who have a household income over \$100,000 participate in more than three events annually.

## **Discussion of Results**

The discussion of the research results was undertaken in this section of the report. The findings were used to determine the economic impacts of cycle tourism in Ontario and to produce demographic profiles of cycle tourists. Marketing distribution channels will also be discussed, as will cycling event attendance.

### **Economic Impacts of Cycle Tourism**

Data from the survey was used to assess the economic impacts of cycle tourism in Ontario. The answers to questions regarding the type of accommodation, activities undertaken, transportation methods used, purchases of cycling equipment, breakdown of expenditures, and total spending are examined.

The majority of the respondents (69 percent) of this study indicated that they have been an active cyclist for five years or more. This information suggests the tendency of cyclists to remain active in the sport and continue to contribute to the economy in the long-term. Cyclists who have been active for many years would also be more likely to travel and participate in cycle tourism as they seek new experiences and new areas for cycling.

The demographic results shown in Tables 8 and 9 show that 72.8 percent of the cycle tourists surveyed are working full time and 31.7 percent have a household income between \$60,000 and \$99,999, with 73.5 percent having an income above \$60,000. These results indicate that cycle tourists are a prosperous market and have the potential to positively impact the destination's economy. These results are consistent with research provided by Lang Research Inc. (2007), which showed that cyclists have an average income of \$78,827, falling within the range generated from this study.

One of the most important indicators of economic impacts of the cycle tourism industry is the average amount spent by cyclists while on a cycling trip. The data presented in Table 12 shows that a large portion of people (32.7 percent) spend between \$0 and \$300 on a cycle holiday. It is interesting to note that the vast majority of respondents (79.9 percent) indicated that they spend less than \$1,000 on a typical cycle trip. The median amount indicated, as shown in the Appendix, Table 13 is \$986.91 per trip. Additionally, Table 29 of this report illustrates that cycle tourists who spend less than \$1,000 on their holidays generally only travel for one to three nights at a time. These results suggest that cycle tourists take trips on a smaller budget and travel for a shorter number of nights. However, regardless of the amount spent on a cycling holiday, it is most common for cyclists to spend a large amount of their budget on accommodation and food and beverage. The data in both Table 13 and Table 25 show that respondents tend to spend 26 to 50 percent of their total spending on accommodation. Consistent with research conducted by Dodds & Singh (2010), the respondents of this study indicated that they spend the majority of their budget on food and beverage items, with 13 percent assigning a value within the range of 76 to 100 percent of total expenditures to this category. Therefore, destinations should concentrate efforts in these areas when developing or improving a marketing plan for cycle tourists.

The cross tabulation of average spending and allocation of expenditures reveals consumer spending trends that can be useful in determining approximately how much cycle tourists spend in the categories of accommodation, food and beverage, retail, tourist activities, and other expenses. Tables 25 to 28 highlights that generally, consumers who have a total spending in the high range (\$1,000 plus) have a more balanced budget on their trip, usually allocation between 1 and 50 percent to each category. The respondents with a lower average spending allocate a

higher proportion of their budget to accommodations and food and beverage expenses, with lower allocations to optional activities such as retail spending and tourist activities. These results are supported by Dodds and Singh's (2010) findings which suggest that cyclists spend on average \$118 per trip and allocate 85 percent of this to food and beverage. Although the survey that was conducted showed a higher average amount spent, the results of the cyclists who spent less than \$1,000 corresponded to Dodds and Singh's (2010) finding which identified the trend and showed a high budget allocation to food and beverage.

The data presented in Table 17 supports Keeling's (1999) research that indicates that cycle tourists visit local businesses while on their trips and contribute to the local economy. As well, Lumsdon's (2000) research showed that destinations benefit from the indirect revenues of cycle tourism. The research from the study that was just conducted shows that 91.8 percent of cycle tourists responded that they participate in at least one activity while cycling on a cycle holiday. This supports previous research as cyclists are most likely contributing to the local economy of the cycle destination.

The local economy benefits from cycle tourists staying at local hotels. Table 19 indicates that there is a positive economic impact for the areas tourists visit as 84.6 percent of respondents identified that they stay in accommodations, such as hotels, which support the creation of revenues. The business nature of these establishments also provides other economic benefits to the area such as employment opportunities. Conversely, only 13 percent of respondents indicated that they stay with family and friends. These findings coincide with Faulk's et al. (2007) research which stated that cycle tourists frequently stay in serviced accommodations while on a trip.

It is important to look at the average number of nights cyclists stay when on a holiday to fully examine the economic impact of cyclists to a destination. Table 18 determined that 72.4

percent of cyclists spend one to three nights on a cycling holiday and 12.6 percent stay four to six nights, while only 5.7 percent do not stay overnight. The median and most frequent number of nights stayed are two nights. This illustrates that cyclists generally bring more money into the destination as they are spending more time on their holiday. This information conflicts with Dodds & Singh (2010) as their research suggests a decline in overnight trips and an increase in day trips and short excursions. Dodds and Singh (2010) found in a study of travellers to Niagara that 86 percent of tourists were taking a day trip. However, for this study, the researchers found that only 5.7 percent of respondents typically take day trips. The cause for this difference in results could potentially be the fact that Dodds and Singh's (2010) study focussed exclusively on cycling trips in the Niagara region, whereas this study focuses on cycle holidays in general.

In addition to generating revenue, Tables 5 to 11 in the Appendix shows that 81.9 percent of cycle tourists use another form of transportation while on a cycling holiday. The majority, 61 percent, 22.1 percent use a car or taxi, 15.7 percent use trains, and 20.1 percent use local public transportation. These additional methods of transportation generate spinoff revenue into the economy. Local public transportation is particularly indicative of additional revenue generated for the local community by cycle tourists.

Data presented in the Appendix, Table 4 shows that cycle tourists do not spend a considerable amount of money on the purchase of cycling equipment. The common response of those surveyed (42.5 percent) spend less than \$1,000 each year on equipment and only 13 percent spend \$3,000 or more each year. Research conducted by Grous (2011) shows that the retail industry for cycling equipment creates not only revenue, but also a range of employment opportunities that are beneficial for communities. The researchers conclude that the respondents do not provide a substantial contribution to retail sales or employment within the industry. In

addition, 88.7 percent of cyclists indicated that they do not rent a bicycle while on a cycling trip. These results, presented in the Appendix, Table 3 show that cycle tourists do not cause a large impact on revenues at destinations through this means of bicycle rentals. This information shows that it may not be economically beneficial for destinations to provide bike rental options. Research presented by Ritchie (1998) suggested that cyclists with low experience levels are more likely to rent bicycles. This shows that there are likely a high proportion of experienced cyclists within the sample.

The cross tabulation comparison of the average trip spending with average number of nights stayed reveals a pattern within the spending habits. Generally, the longer a cyclist stays the more money they spend on their trip. This result is consistent with Lumsdon's (2004) research that found a positive relationship between the duration of a trip and total trip spending. The researchers of the current study discovered the same relationship between these two variables. In addition, the respondents who indicated they spend less than \$1,000 on a trip were much more likely to stay only one to three nights.

The results of the cross tabulation comparing average trip spending and number of people within a cycling party show trip spending does not increase as the size of the cycling party increases. Respondents who spend \$1,000 or more are more likely to be part of a cycling party of four people or less. The respondents who spend less than \$1,000 are more likely than those with higher spending to travel in a large group of people. These results contrast with Lumsdon's (2004) research that showed a positive relationship between length of trip and spending. Lumsdon (2004) suggested that this relationship was due to the social atmosphere within a group cycling party that perpetuated spending. The researchers found this to not be true in the case of Ontario cycle tourists. However, larger cycling parties would still provide a greater economic

benefit to a destination as the total spending of the cycling party would be higher due to the larger number of people.

A cross tabulation showing the relationship between average household income and average trip spending shows that there is not a positive relationship between these two variables. The data does not show that as average income increases the cyclists will spend more on their trip. The data shows that those who have a higher income are likely to spend more on a cycling trip, however respondents who indicated a high household income most frequently responded that they spend \$0 to \$300. Cyclists within a high income bracket do not provide more economic benefits to a destination over other categories of cyclists.

A cross tabulation comparing the average spending on a cycling holiday with the types of recreational activities one participates in was also generated. A number of patterns can be determined from analysing this table. The likelihood of a cyclist participating in wine and culinary tours, art and studio tours, and visiting museums and cultural sights increases as their total trip expenditure increases. This could be partially attributed to the additional cost of these types of activities. Cyclists who have lower total trip expenditures are more likely to participate in hiking tours and to visit the beach, activities which are often free of charge for people to access. No relationship can be identified among tourists spending and their participation in theme parks, attractions, and shopping. These variables seem to be independent of total trip spending. The findings show that a cyclist's participation level in activities that require an additional cost such as tours and visiting sights increases their total trip expenditure. It shows a distinction in interests of types of cyclists. Those who are willing to allocate a higher budget to their cycling trip show an obvious interest in enriching their knowledge of the destination through formal familiarization methods such as tours and museums. Cyclists who spend less money on their trip

are more interested in outdoor activities and becoming familiar with the natural environment of the destination.

The final cross tabulation completed related to the economic impacts of cycle tourists compares the types of accommodations preferred and average trip spending. The table shows a general trend of respondents to stay in higher quality accommodations as they spend more on their trip. It is likely that their choice of more luxurious accommodation type has impacted the average spending on their trip. This finding is supported both Dodd's and Singh's (2010) research which stated that wealthier socioeconomic background caused cyclists to stay in higher end accommodations. However, the findings of this study conflict with Ritchie's (1998) and Lang Research Inc.'s (2007) research which suggested that the majority of cyclists stay in campgrounds.

### **Demographic Profiles**

Demographic profiles of cyclists were generated from the data. The following analysis provides a general profile of the respondent cycle tourists including their preferences.

As shown in Table 4, the largest concentrations of respondents are between the ages of 40 and 54, with 35.9 percent of all respondents falling into this category. The second highest age category is 25 to 29, with 13.7 percent belonging to this category. In relation to these findings, almost two-thirds of respondents are married; however the majority (55.3 percent) have no children living at home. These results conflict with the current research as Lang Research Inc. (2007) found that cyclists typically fall between the ages of 18 and 40. These results show that Ontario may have a slightly more mature cycling tourism market than other areas previously studied. Strategy Study (2011) also found results more consistent with the current study's findings as they showed an average age of 30 years old. As previously mentioned the results

show that most cycle tourists work full-time and have a household income of \$60,000 to \$99,999.

The average cyclist travels in a party of two people with 32 percent of respondents indicating so, and 29.3 percent of respondents stating they typically cycle with three to four other people. The cyclists are generally quite experienced and have been travelling for more than five years. Forty-four percent of respondents specify that they prefer to cycle on roads with paved shoulders or markings.

A total of 72.4 percent of respondents indicated their gender as male. This information corresponds with various research studies that present data showing a higher proportion of men who cycle as opposed to women (Lang Research, 2007; Faulks et al., 2007). The data gathered from this survey shows that men are almost three times more likely to be a cycle tourist than women. This is far greater than the two times more likely that Faulks et al. (2007) states.

### **Marketing Distribution Channels**

From the data presented, one can determine the best means of reaching cycle tourists. This section will examine their preferences in forms of communication, where to reach the largest market, and preferences of types of travel they may be interested in.

The most popular marketing methods were determined and ranked by the participants as their top three most preferred channels from a total of ten options. Online websites, emails, and friends and family, were determined as the top three marketing channels to distribute cycle tourism information. Comparing the research found in the literature review that determined that 80.8 percent of cyclists find their cycle tourism information on the Internet, the research conducted for this report supported the existing findings. However, Lang Research Inc. (2007) noted that cyclists use information gathered from a wide range of sources when conducting

research on cycle destinations. Lang Research Inc. (2007) reported that over 88 percent of cyclists read the daily newspaper, however, the research data suggested that the participants surveyed did not consider the newspaper a valuable marketing channel to communicate cycle tourism information.

Lang Research Inc. (2007) states that cycle tourism information must be available in forms other than electronic, such as print, due to the demand of baby boomers that are not as familiar with technology. Our results conflict with these findings as non-print sources were ranked as most popular among respondents. This is interesting considering the relatively high average age of respondents (40 to 54 years old). These results show that cycle tourism information in print sources such as magazines, newspapers, and brochures may not be necessary as it does not appeal to many consumers as a source of information.

The majority of respondents are from central or southern Ontario. This is due to the fact that this research study only surveyed cyclists in Toronto. Their top three most popular places to cycle are Toronto, Niagara, and Collingwood. These results are reflective of Dodds' and Singh's (2010) study which stated the top three Ontario cycling destinations as Toronto, Ottawa and Niagara.

The results show that cycle tourists take a median of six weeks to plan their cycling holiday. This information can help Ontario cycling tour companies to start promoting their trips with that information in mind. Also, the research shows that the majority of cyclists travel in groups of less than four people. As previous research has shown that larger groups bring more economic benefits to a cycle tourism destination, it would be beneficial to promote group packages to encourage cyclists to bring along more people. Furthermore, destinations should ensure they meet the needs of cyclists to encourage repeat visitors.

An important objective of this research was to determine an exemplary demographic profile of cycle tourists. For this, the researchers analyzed the gender of the participants and cross-referenced the value with the participants' top three media sources to receive cycling information from. Articles from Faulks et al. outlined that the participation of both genders in cycling events is generally the same, however the research concluded otherwise, as the majority of respondents who qualified for the study were males. There was a large gap between the participation of males versus that of women. This may be due to circumstantial attributes of the data collection such as the location where the surveys were conducted, or the fact that the research team was all females.

In terms of media sources, the researchers determined a parallel relationship between the top three preferences for both men and women, that being websites, email, and friends and family in order of preference. This supports existing research from the Cycle Tourism Assessment (2011), which depicts that cycle tourists prefer to use an array of sources to obtain cycle tourism information. Additional research by Lang Research Inc. (2007) suggested that cycle tourists also prefer print forms of marketing; however, no results of the research ranked any of the print forms of marketing as the participant's preferred forms of marketing. The top three sources outlined were electronic (websites and email) and verbal (friends and family). There is a direct symmetry between the responses of media preferences between men and woman, regardless of the fact that of the total participants, the majority were men.

The researchers also analyzed the relationship between the participants age and media source preference. Lang Research Inc. (2007) highlighted the need for alternate forms of marketing, such as print, specifically to appeal to the growing baby boomer market. The research indicated that the participants in the 50 plus category preferred electronic and word of mouth marketing sources, as opposed to the existing research's suggestion to have printed marketing.

Cycling trade publications were this category's fourth preference, which suggests that baby boomers are perhaps more adept with their computer skills and seeking convenience and variety when seeking cycling information. Electronic marketing may provide them access to international cycling information, whereas verbal marketing may offer them reliable and trustworthy sources to allow them to make sound decision for their cycling trips.

### **Cycling Event Attendance**

An objective of this study is to determine the cycling event attendance of cycle tourists in Ontario, as well as the type of events they prefer. The answers to these questions will be briefly discussed.

The results of the survey demonstrate that charity fundraising events are the most popular type of cycling. The second and third most popular cycling events were recreational/promotional riding and touring events. This information may be useful to users of this research as a good place to reach potential cycle tourists. This also coincides with the results indicating that the majority of respondents classify themselves as a leisure cyclist as competitive events such as road racing and BMX biking were not as popular, as shown in Appendix Table 1. From the data presented in Table 20 it shows that only 13.5 percent of those surveyed participated in package tours.

Cycle tourists in Ontario generally participate in one to two cycle events per year, with 28.4percent of respondents indicating this. However, the results shown in Table 21 demonstrate that the results to the question of annual participation in cycling events are quite evenly distributed across all categories.

To analyze the event preference and annual event attendance of cycle tourists some data sets were compared to discover any trends. The following cross tabulations were used to provide greater insight in to the characteristics of cycle tourists who attend events.

It was expected that comparing the number of events attended per year with the average amount spent on a cycling trip would show a trend of increased attendance with increased spending. However, the results do not reflect this and there is no noticeable trend. The results do show that those who spend between \$0 and \$300 on a cycling trip typically do not attend cycling events; however as spending increases attendance does not. Age was the compared with annual cycling attendance. A noticeable trend within this data set is that the respondents tend to participate in more cycling events when they are young adults, and middle aged. Some potential reasons for these results could be a higher energy level among young cyclists and a greater amount of experience among mature cyclists.

When comparing annual income with annual events attendance, the researchers hypothesized that attendance would increase with household income due to an increased amount of disposable income. This trend was present in the data and it showed a noticeable trend. Cyclists within the income category of \$100,000 plus indicated the highest level of event attendance, showing that income does factor into consumers' event decisions. The comparison of event attendance with annual purchases of cycling equipment showed that respondents generally attend more events as their expenditures on cycling equipment increase.

The results show those who spend less than \$1,000 on cycling equipment are least likely to attend a high number of cycling events and those who spend \$3,000 or more are most likely to attend five or more cycling events. These results indicate that the type of cyclist who attends events is also an avid cyclist who is interested in the latest cycling equipment. These cyclists

either make high quality or frequent purchases, spending a higher than average amount of money.

A recommendation to regions in Ontario is that destinations should help to facilitate the development of cycle tourism. Not only will it bring money to the destination but it will also create jobs for the communities. For example, more people will visit the area requiring more people to stay overnight, therefore more employment in the accommodation industry. Also there will be a need to create infrastructure for cyclists. Not only will this create jobs to build the infrastructure, it will also have a long-term job creation because they will need people to maintain the infrastructure.

## **Recommendations**

Based on the findings, the researchers provided recommendations about the most effective marketing channels to reach cycle tourists. Further recommendations, such as who should be targeted and in which locations, will also be addressed.

The research results of this study showed that online and web based methods were the most popular means of communication among cycle tourists. These findings were supported by research that indicated websites to be the most popular (Lang Research Inc., 2007). Based on these results, it would be best to use online resources such as Internet web pages and email to reach a wide variety of cyclists. Newspapers and other print sources may not be a necessary means of communication; however it would be useful to utilize these sources if one is targeting an older age segment as the research results show these appeal to more mature audiences.

While the results of this survey find that most respondents live in Toronto, this could partially be due to the limited area that surveys were collected in. Further research on the origin of cycle tourists in Ontario would need to be conducted in order to develop conclusive results. The results of this study and the results of Dodds' and Singh's (2007) study both suggest that Toronto and Niagara are the most popular cycling destinations in Ontario. If one is looking to conduct further research this would be a good location to reach cycle tourists. These results could also be used to provide a basis for the expansion of cycling routes and trails in the areas. Conclusive evidence as provided in these studies could be used to enlist government support for such a project.

An objective of this study was to develop a demographic profile of cyclists. From this primary research project and other secondary sources cyclists within in Ontario can be

summarized with the following demographic traits:

- Male
- Middle aged; between the ages of 40 to 54
- Married with no children at home
- Employed full-time
- Household income between \$60,000 to \$99,999
- Typically cycle in a party of two people
- Active as cyclists for five or more years

It should be noted that there are three outliers in the cross tabulation of average trip spending and average number of nights that indicated a stay of zero nights, but a spending of \$1000 plus which is inconsistent with the overall results. These outliers would need further investigation, as they could be due to a high spending on activities or retail purchases as opposed to spending on accommodation.

Further examination of the research results, Faulks' et al. (2007), Dodd's and Singh's (2010), and Ritchie's (1998) research studies would be needed to determine the average trip spending of their respondents. As seen from the results of the cross tabulation of average spending and accommodation, the spending amount is likely to impact their accommodation choices and could explain the difference between the studies' results. Faulks et al. (2007) stated that cycle tourists are more likely to choose serviced accommodation over other types of tourists. However, this data does not necessarily support that since there is still a high proportion of tourists who choose un-serviced accommodations such as family and friends and campgrounds. More research would need to be done on this topic to provide conclusive evidence.

Based on the results of the economic indicators of this study, cycle tourists generally do not spend large amounts of money on a cycle holiday. However, preliminary research revealed that cycle tourists are more likely than other tourists to spend money in an area, and also that cycle tourism can positively affect the economy in rural areas (Keeling, 1999 and Lamont, 2009). In addition, the research conducted found that cycle tourists do enjoy participating in other recreational activities, which can generate money for the local economy. Tour operators that are marketing to cycle tourists should consider creating tour package that include popular recreational activities such as hiking trips and wine and culinary trips. Results showed that travelers who have a higher income could potentially be influenced to spending more on their cycle tourism holiday. It is recommended that destinations wishing to attract cycle tourists for the economic benefits focus some marketing attention on cyclists with a high household income. This could be done by marketing to wealthy neighbourhoods or partnering with high end stores. In addition, regions wishing to reap the most economic gains from a cycle tourism initiative should promote longer trips as the results indicate those who stay longer spend more money. Lastly, food and beverage accounts for a large portion of cycle tourists spending showing that to attract cycle tourists to a destination it would be necessary to have adequate food and beverage outlets available. In addition, featuring unique food and beverage outlets in a marketing campaign could potentially appeal to cycle tourists who are planning a holiday.

Finally, the results of this survey showed that cycle tourists currently do not participate in many package tours. This shows that awareness of these types of tours needs to be brought to the cycling community to encourage participation and tourism in this form. Charity fundraising events are currently the most popular form of cycling event. Places wishing to increase

awareness of their region as a potential cycle tourism destination should make efforts to host this type of event as it would be attractive to cycle tourists and prompt them to visit the area.

## Conclusion

### Scope and Limitations

**Scope.** For this study, the researchers created a questionnaire by considering the research objectives. The survey's questions were created from existing information from journal articles, research studies and trade publications, as well as the recommendation from Louisa Mursell from Transportations Options, for whom the research is being produced. The total number of questions was 27, as the researchers considered that questionnaires would be conducted primarily in person and on a voluntarily basis and therefore should not exceed five minutes.

The researchers conducted the questionnaire through three different means, by intercepting customers at Mountain Equipment Co-op (MEC), attendees at the Toronto International Bicycle Show, and by sending the questionnaire's link to family, friends, and Ms. Mursell's existing cycle tourist database. The researchers conducted the surveys in Toronto, for the sake of obtaining primary data that would reflect the cycling patterns and preferences of Ontario cyclist.

The content of this study encompasses the analysis of cycle tourists' travelling motivation, demographics, preferences, and cycling event attendance.

**Limitations.** During the length of the research study, certain limitations of the results were discovered based on circumstances both within and beyond the researchers' control.

Firstly, as this research was done in the fall, it was challenging to find concentrations of cyclist groups at this time of year. The cold might have prevented some cyclists from attending the cycling event as it required a long wait in line. At Mountain Equipment Co-op (MEC), there may have been fewer cyclists shopping for cycling products due to the fact that the off season was beginning.

The tight deadlines were also major limitations to the research as it only allowed the research students to conduct a total of 256 surveys. Based on the findings, the results were generally found to not be statistically significant due to the relatively small sample size. The time limitation was also the reason only Toronto cyclists were surveyed to represent all of the cyclists in the province. Furthermore, time was the reason only two locations were used which might have resulted in an unfair representation of the cycling demographic in Ontario.

The results also showed a much larger number of male participants than women. Although the event attendees seemed to be fairly distributed among both genders and both genders were approached, women were generally more reluctant to take the survey than men. Many of the participants also left some of the answers blank which might have had an impact on the results.

Originally, the researchers planned to give out smoothie shooters to motivate cyclists to partake in the survey. However, the researchers were not allowed to enter the cycling event and were forced to survey only to those who waited in line as the event was held on private property at the Toronto Exhibition Place grounds. This made it impossible for the researchers to distribute any incentives or present themselves in an official manner (i.e. matching shirts), and therefore resulted in a lower rate of participation as there was no incentive or proper representation.

At MEC, the research students were also stationed near the exit of the store. At that point, after the customers had already paid for their items, they were typically rushing to leave and were not willing to stay behind to complete a survey. This made it very challenging and difficult to complete many surveys at that location.

One of the main objectives of this research was to determine the demographic profile of each type of cyclist. However, question number two on the survey, allowed the participants to

identify themselves as more than one type of cyclist. Therefore, the researchers were unable to segment the cyclists. For future studies' research, it is suggested that the participants are asked to only identify themselves as primarily one type of cyclist. The researchers may also ask an additional question that allows participants to identify themselves as more than one type of cyclist.

Furthermore, question number one of the survey that asked participants to select the number of years as an active cyclist was not formatted correctly to produce useful results. The participants were not given a large enough time range as the majority answered that they had been active cyclists for more than five years. Categories should have had a wider range of values. This was a limitation in the creation of charts, specifically cross-tabulation as it eliminated the opportunity of calculate particular relationships between the results of the questions asked.

Lastly, the reliability of the research was affected as the researchers could not perform a screening question to the online participants as Survey Tool did not permit this option. This occurred as the survey was shared on Facebook, emailed to friends and family, and was sent to Louisa Mursell's email list of cyclists. A total of 78 surveys were completed using the online option. Although a screening paragraph was included in the online survey, the researchers had to trust participants' responses according to the qualification criteria.

### **Contributions to Knowledge**

The results of this research study contribute to better knowledge on the habits and preferences of cycle tourists. Using this research one can develop an effective means of marketing to cycle tourists based on their preferences, locations, and activities. The contributions of this report can also be used to better understand the general profile of a cycle tourist. The

demographic information provided could be used by marketers, demographers, planners, and businesses in general.

This research also contributes to the knowledge of the economic impacts of cycle tourists. Information regarding their spending habits, and typical purchases or activities can be used to determine how cyclists may impact a destination. This research could result in the formulation of objectives targeting cycle tourists to a particular area if used by city planners and destination management organizations (DMOs).

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## Appendix

Table 1

### *Participation Level as Type of Cyclist*

Response	Participation level as a leisure/family cyclist (%)	Participation level as a recreation/exercise cyclist (%)	Participation level as a touring cyclist (%)	Participation level as a race/competition cyclist (%)	Participation level as a mountain biker (%)
Never	16.8	5.1	21.5	53.1	43.8
Rarely	12.9	1.6	22.7	10.2	16.4
Sometimes	29.7	9.8	27.7	13.7	14.5
Often	27.3	45.7	20.3	15.2	12.9
Always	13.3	37.9	7.4	7.8	12.5
Total	100.0	100.0	100.0	100.0	100.0

Table 2

*Favourite Cycling Destination in Ontario*

Destination	Frequency	Percent	Valid Percent	Cumulative Percent
	43	16.8	16.8	16.8
Albion Hills	2	0.8	0.8	17.6
Algonquin	2	0.8	0.8	18.4
Barrie	5	2	2	20.3
Bracebridge	1	0.4	0.4	20.7
Bradford	2	0.8	0.8	21.5
Bright Groves	1	0.4	0.4	21.9
Brockville	1	0.4	0.4	22.3
Bruce Peninsula	2	0.8	0.8	23
Buckwallow	1	0.4	0.4	23.4
Caledon	6	2.3	2.3	25.8
Cambridge	2	0.8	0.8	26.6
Collingwood	20	7.8	7.8	34.4
Dundas	3	1.2	1.2	35.5
Durham	2	0.8	0.8	36.3
Elgin County	1	0.4	0.4	36.7
Ganaraska	2	0.8	0.8	37.5
George Town	1	0.4	0.4	37.9
Glen Eden	1	0.4	0.4	38.3
Gormley	1	0.4	0.4	38.7
Grand Bend	2	0.8	0.8	39.5

Grey Bruce	1	0.4	0.4	39.8
Guelph	1	0.4	0.4	40.2
Haliburton	13	5.1	5.1	45.3
Halton	6	2.3	2.3	47.7
Hamilton	4	1.6	1.6	49.2
Hardwood Hills	5	2	2	51.2
Horseshoe Valley	2	0.8	0.8	52
Huntsville	1	0.4	0.4	52.3
Inglewood	1	0.4	0.4	52.7
Jaurson Point	1	0.4	0.4	53.1
Kelso	5	2	2	55.1
Kingston	3	1.2	1.2	56.3
Lake Scugog	1	0.4	0.4	56.6
Long Point	2	0.8	0.8	57.4
Manitoulin Island	1	0.4	0.4	57.8
Milton	4	1.6	1.6	59.4
Minden	1	0.4	0.4	59.8
Muskoka	6	2.3	2.3	62.1
Niagara	23	9	9	71.1
Norfolk County	4	1.6	1.6	72.7
Northumberland Count	3	1.2	1.2	73.8
Oakville	1	0.4	0.4	74.2
Ontario	4	1.6	1.6	75.8
Orillia	1	0.4	0.4	76.2
Ottawa	5	2	2	78.1
Outside of Toronto	1	0.4	0.4	78.5

Peel Region	1	0.4	0.4	78.9
Perth	1	0.4	0.4	79.3
Peterborough	2	0.8	0.8	80.1
Picton	1	0.4	0.4	80.5
Port Credit	1	0.4	0.4	80.9
Port Dover	1	0.4	0.4	81.3
Prince Edward County	9	3.5	3.5	84.8
Shorehill Park	1	0.4	0.4	85.2
Simcoe	1	0.4	0.4	85.5
Southern	1	0.4	0.4	85.9
St. Catherines	1	0.4	0.4	86.3
St.Thomas	1	0.4	0.4	86.7
Stouffville	1	0.4	0.4	87.1
Stratford	1	0.4	0.4	87.5
Terra Cotta	1	0.4	0.4	87.9
Thunder Bay	1	0.4	0.4	88.3
Toronto	25	9.8	9.8	98
Wasaga Beach	1	0.4	0.4	98.4
Waterloo	3	1.2	1.2	99.6
York Region	1	0.4	0.4	100
Total	256	100	100	

Table 3

*Rented a Bicycle While on a Cycle Trip*

Response	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	29	11.3	11.3	11.3
No	227	88.7	88.7	100.0
Total	256	100.0	100.0	

Table 4

*Annual Purchases of Cycling Equipment*

Amount	Frequency	Percent	Valid Percent	Cumulative Percent
Less than \$1000	108	42.2	42.5	42.5
\$1000 to \$1999	69	27	27.2	69.7
\$2000 to \$2999	44	17.2	17.3	87
\$3000 to \$3999	14	5.5	5.5	92.5
\$4000 to \$4999	3	1.2	1.2	93.7
\$5000 or more	16	6.3	6.3	99.2
Not Indicated	2	0.8	0.8	100
Total	256	100	100	

Table 5

*No Other Types of Transportation Used On a Cycle Trip*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	45	17.6	18.1	18.1
	No	204	79.7	81.9	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 6

*Car/Taxi Used on Cycling Holiday*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	152	59.4	61	61
	No	97	37.9	39	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 7

*Train Used on Cycling Holiday*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	55	21.5	22.1	22.1
	No	194	75.8	77.9	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 8

*Plane Used on Cycling Holiday*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	39	15.2	15.7	15.7
	No	210	82	84.3	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 9

*Charter Bus Used on Cycling Holiday*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	11	4.3	4.4	4.4
	No	238	93	95.6	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 10

*Local Public Transportation Used on Cycling Holiday*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	50	19.5	20.1	20.1
	No	199	77.7	79.9	100
	Total	249	97.3	100	
Missing	System	7	2.7		
Total		256	100		

Table 11

*Other Forms of Transportation Used on Cycling Holiday*

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	1	0.4	0.4	0.4
Valid No	248	96.9	99.6	100
Total	249	97.3	100	
Missing System	7	2.7		
Total	256	100		

Table 12

*Place of Residence*

Country	Frequency	Valid Percent (%)	Cumulative Percent (%)
Canada	249	97.3	97.3
France	1	0.4	97.7
Netherlands	1	0.4	98
Singapore	1	0.4	98.4
Trinidad	1	0.4	98.8
United States	3	1.2	100
Total	256	100	

Table 13

*Mean, Median, Mode of Average Amount Spent on Cycling Trips*

N	Valid	217
	Missing	39
Mean		986.91
Median		500.00
Mode		500
Sum		214160

Table 14

*Percentage of Holiday Budget Spent on Accommodation*

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	30	11.7	11.7	19.5
10	5	2	2	21.5
100	1	0.4	0.4	21.9
15	2	0.8	0.8	22.7
2	2	0.8	0.8	23.4
20	15	5.9	5.9	29.3
23	1	0.4	0.4	29.7
25	12	4.7	4.7	34.4
30	13	5.1	5.1	39.5
33	1	0.4	0.4	39.8
35	5	2	2	41.8
40	28	10.9	10.9	52.7
45	1	0.4	0.4	53.1
5	2	0.8	0.8	53.9
50	62	24.2	24.2	78.1
60	24	9.4	9.4	87.5
65	2	0.8	0.8	88.3
70	16	6.3	6.3	94.5
75	9	3.5	3.5	98
80	5	2	2	100
Total	256	100	100	

Table 15

*Percentage of Holiday Budget Spent on Food and Beverage*

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	10	3.9	3.9	11.7
10	10	3.9	3.9	15.6
100	7	2.7	2.7	18.4
15	7	2.7	2.7	21.1
20	45	17.6	17.6	38.7
23	1	0.4	0.4	39.1
25	31	12.1	12.1	51.2
30	47	18.4	18.4	69.5
Valid 33	1	0.4	0.4	69.9
35	6	2.3	2.3	72.3
40	25	9.8	9.8	82
45	1	0.4	0.4	82.4
46	1	0.4	0.4	82.8
50	31	12.1	12.1	94.9
55	1	0.4	0.4	95.3
60	1	0.4	0.4	95.7
70	3	1.2	1.2	96.9
75	2	0.8	0.8	97.7
80	3	1.2	1.2	98.8
90	3	1.2	1.2	100
Total	256	100	100	

Table 16

*Percentage of Holiday Budget Spent on Retail*

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	96	37.5	37.5	45.3
1	1	0.4	0.4	45.7
10	53	20.7	20.7	66.4
12	1	0.4	0.4	66.8
15	14	5.5	5.5	72.3
Valid 2	2	0.8	0.8	73
20	22	8.6	8.6	81.6
25	16	6.3	6.3	87.9
30	5	2	2	89.8
40	1	0.4	0.4	90.2
5	24	9.4	9.4	99.6
50	1	0.4	0.4	100
Total	256	100	100	

Table 17

*Percentage of Holiday Budget Spent on Tourist Activities*

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	93	36.3	36.3	44.1
10	57	22.3	22.3	66.4
15	10	3.9	3.9	70.3
19	1	0.4	0.4	70.7
2	1	0.4	0.4	71.1
20	28	10.9	10.9	82
25	11	4.3	4.3	86.3
Valid 3	1	0.4	0.4	86.7
30	4	1.6	1.6	88.3
35	1	0.4	0.4	88.7
4	1	0.4	0.4	89.1
40	3	1.2	1.2	90.2
5	20	7.8	7.8	98
50	3	1.2	1.2	99.2
6	1	0.4	0.4	99.6
80	1	0.4	0.4	100
Total	256	100	100	

Table 18

*Percentage of Holiday Budget Spent on Other Expenses*

	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	151	59	59	66.8
10	29	11.3	11.3	78.1
12	1	0.4	0.4	78.5
15	3	1.2	1.2	79.7
20	21	8.2	8.2	87.9
Valid 25	5	2	2	89.8
30	7	2.7	2.7	92.6
40	3	1.2	1.2	93.8
5	12	4.7	4.7	98.4
50	2	0.8	0.8	99.2
60	1	0.4	0.4	99.6
90	1	0.4	0.4	100
Total	256	100	100	

Table 19

*Other Activities Indicated While on a Cycling Trip*

Activity Indicated	Frequency	Percent	Valid Percent	Cumulative Percent
	2	.8	.8	.8
Camping	1	.4	.4	1.2
Camping & Dining	1	.4	.4	1.6
Coffee Shop	1	.4	.4	2.0
Drink beer	1	.4	.4	2.3
Eat	1	.4	.4	2.7
Eating food at unique cafes, restaurants, etc.	1	.4	.4	3.1
Golfing	1	.4	.4	3.5
Historical	1	.4	.4	3.9
Lacrosse	1	.4	.4	4.3
Long Boarding	1	.4	.4	4.7
Longboarding	1	.4	.4	5.1
NA	230	89.8	89.8	94.9
Nature	1	.4	.4	95.3
Patio Bar	1	.4	.4	95.7
Photos	1	.4	.4	96.1
Picnic	1	.4	.4	96.5
Roller Blading	1	.4	.4	96.9
Running	2	.8	.8	97.7
Shopping for fresh local food	1	.4	.4	98.0
Skiing	1	.4	.4	98.4
Spa	1	.4	.4	98.8
Triathlon	1	.4	.4	99.2
Visit bike shops	1	.4	.4	99.6
Walking around town	1	.4	.4	100.0
Total	256	100.0	100.0	

Table 20

*Mean, Median and mode of Average Number of Nights Stayed*

N	Valid	246
	Missing	10
Mean		3.24
Median		2.00
Mode		2
Range		30
Sum		798

Table 21

*Other Type of Accommodation Indicated*

Other Type of Accommodation	Frequency	Percent	Valid Percent	Cumulative Percent
Day Trips	2	0.8	0.8	0.8
Home	1	0.4	0.4	1.2
NA	251	98	98	99.2
None	1	0.4	0.4	99.6
Rented cottage	1	0.4	0.4	100
Total	256	100	100	

Table 22

*Participation in Other Cycling Events Not Listed*

Other events	Frequency	Percent	Valid Percent	Cumulative Percent
NA	248	96.9	96.9	99.6
Not indicated	2	.8	.8	.8
Bike Packing	1	.4	.4	1.2
Blue Mountain Centurion 2013	1	.4	.4	1.6
Brevets	1	.4	.4	2.0
Community Cycling Events	1	.4	.4	2.3
Cycling Awareness Event	1	.4	.4	2.7
Triathlon	1	.4	.4	100.0
Total	256	100.0	100.0	

Table 23

*Average Number of Weeks Planning*

N	Valid	236
	Missing	20
Mean		12.56
Median		6.00
Mode		2
Range		52
Sum		2965

Table 24

*Number of Weeks Spent Planning a Cycling Holiday*

Number of weeks	Frequency	Percent	Valid Percent	Cumulative Percent
	20	7.8	7.8	7.8
0	11	4.3	4.3	12.1
1	16	6.3	6.3	18.4
1.5	1	0.4	0.4	18.8
10	17	6.6	6.6	25.4
12	16	6.3	6.3	31.6
13	2	0.8	0.8	32.4
14	1	0.4	0.4	32.8
15	1	0.4	0.4	33.2
16	4	1.6	1.6	34.8
18	1	0.4	0.4	35.2
2	33	12.9	12.9	48
2.5	1	0.4	0.4	48.4
20	7	2.7	2.7	51.2
22	1	0.4	0.4	51.6
24	6	2.3	2.3	53.9
25	1	0.4	0.4	54.3
26	6	2.3	2.3	56.6
3	14	5.5	5.5	62.1
3.5	1	0.4	0.4	62.5
30	7	2.7	2.7	65.2
31	2	0.8	0.8	66
32	1	0.4	0.4	66.4
36	2	0.8	0.8	67.2
37	1	0.4	0.4	67.6
4	27	10.5	10.5	78.1
4.5	1	0.4	0.4	78.5
5	5	2	2	80.5
50	1	0.4	0.4	80.9
52	20	7.8	7.8	88.7
6	12	4.7	4.7	93.4
7	1	0.4	0.4	93.8
8	16	6.3	6.3	100
Total	256	100	100	

Table 25

*Average Trip Spending in Relation to Tourist Activities*

Average Trip Spending		Wine/Culinary Tours	Hiking Tours	Art & Studio Tours	Visited Museums/ Cultural sights	Visiting Attractions & Theme Parks	Shopping	Visiting a Beach	No Other Activity	Total
\$0 to \$300	Count	30	37	12	26	7	17	34	5	168
	% within Average trip spending	17.9%	22.0%	7.1%	15.5%	4.2%	10.1%	20.2%	3.0%	100.0%
\$301 to \$600	Count	31	38	15	26	18	18	22	4	172
	% within Average trip spending	18.0%	22.1%	8.7%	15.1%	10.5%	10.5%	12.8%	2.3%	100.0%
\$601 to \$1000	Count	17	26	11	19	10	13	15	3	114
	% within Average trip spending	14.9%	22.8%	9.6%	16.7%	8.8%	11.4%	13.2%	2.6%	100.0%
\$1001 to \$2000	Count	7	10	3	10	3	12	10	4	59
	% within Average trip spending	11.9%	16.9%	5.1%	16.9%	5.1%	20.3%	16.9%	6.8%	100.0%
\$2001 to \$3000	Count	6	5	1	4	1	4	3	1	25
	% within Average trip spending	24.0%	20.0%	4.0%	16.0%	4.0%	16.0%	12.0%	4.0%	100.0%
\$3001 to \$15000	Count	5	4	3	4	0	4	2	0	22
	% within Average trip spending	22.7%	18.2%	13.6%	18.2%	0.0%	18.2%	9.1%	0.0%	100.0%
Total	Count	96	120	45	89	39	68	86	17	560
	% within Average trip spending	45.3%	55.7%	22.0%	41.6%	18.8%	32.9%	40.8%	7.8%	

Table 26

*Average Trip Spending in Relation to Type of Accommodation*

Average trip spending		Type of accommodations								Total
		Luxury hotel/resort	Hotel 1 to 3 stars	Motel	Hostel	Bed & Breakfast	Camping	Friends and relatives	Other	
\$0 to \$300	Count	3	13	8	2	10	17	12	4	69
	% within Average trip spending	4.3%	18.8%	11.6%	2.9%	14.5%	24.6%	17.4%	5.8%	100.0%
\$301 to \$600	Count	5	15	9	1	6	13	9	0	58
	% within Average trip spending	8.6%	25.9%	15.5%	1.7%	10.3%	22.4%	15.5%	0.0%	100.0%
\$601 to \$1000	Count	8	11	8	4	4	3	4	1	43
	% within Average trip spending	18.6%	25.6%	18.6%	9.3%	9.3%	7.0%	9.3%	2.3%	100.0%
\$1001 to \$2000	Count	3	4	0	0	7	6	3	0	23
	% within Average trip spending	13.0%	17.4%	0.0%	0.0%	30.4%	26.1%	13.0%	0.0%	100.0%
\$2001 to \$3000	Count	2	3	0	0	3	2	0	0	10
	% within Average trip spending	20.0%	30.0%	0.0%	0.0%	30.0%	20.0%	0.0%	0.0%	100.0%
\$3001 to \$15000	Count	5	1	1	0	1	1	1	0	10
	% within Average trip spending	50.0%	10.0%	10.0%	0.0%	10.0%	10.0%	10.0%	0.0%	100.0%
Not indicated	Count	7	7	6	1	6	9	4	1	41
	% within Average trip spending	17.1%	17.1%	14.6%	2.4%	14.6%	22.0%	9.8%	2.4%	100.0%
Total	Count	33	54	32	8	37	51	33	6	254
	% within Average trip spending	13.0%	21.3%	12.6%	3.1%	14.6%	20.1%	13.0%	2.4%	100.0%

Table 27

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Accommodation*

Average trip spending		Percentage of holiday budget spent on accommodation					Total
		0	1 to 25	26 to 50	51 to 75	76 to 100	
\$0 to \$300	Count	21	11	24	12	2	70
	% within Average trip spending	30.0%	15.7%	34.3%	17.1%	2.9%	100.0%
\$1001 to \$2000	Count	2	4	9	6	1	22
	% within Average trip spending	9.1%	18.2%	40.9%	27.3%	4.5%	100.0%
\$2001 to \$3000	Count	0	2	5	3	0	10
	% within Average trip spending	0.0%	20.0%	50.0%	30.0%	0.0%	100.0%
\$3001 to \$15000	Count	0	1	7	1	0	9
	% within Average trip spending	0.0%	11.1%	77.8%	11.1%	0.0%	100.0%
\$301 to \$600	Count	3	6	31	12	2	54
	% within Average trip spending	5.6%	11.1%	57.4%	22.2%	3.7%	100.0%
\$601 to \$1000	Count	2	9	23	9	0	43
	% within Average trip spending	4.7%	20.9%	53.5%	20.9%	0.0%	100.0%
Total	Count	30	39	112	49	6	236
	% within Average trip spending	12.7%	16.5%	47.5%	20.8%	2.5%	100.0%

Table 28

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Food and Beverage*

Average Trip Spending		Percentage of holiday budget spent on food and beverage					Total
		0	1 to 25	26 to 50	51 to 75	76 to 100	
\$0 to \$300	Count	5	21	32	2	10	70
	% within Average trip spending	7.1%	30.0%	45.7%	2.9%	14.3%	100.0%
\$301 to \$600	Count	0	24	26	3	1	54
	% within Average trip spending	0.0%	44.4%	48.1%	5.6%	1.9%	100.0%
\$601 to \$1000	Count	1	20	21	1	0	43
	% within Average trip spending	2.3%	46.5%	48.8%	2.3%	0.0%	100.0%
\$1001 to \$2000	Count	3	8	9	1	1	22
	% within Average trip spending	13.6%	36.4%	40.9%	4.5%	4.5%	100.0%
\$2001 to \$3000	Count	0	6	4	0	0	10
	% within Average trip spending	0.0%	60.0%	40.0%	0.0%	0.0%	100.0%
\$3001 to \$15000	Count	0	3	5	1	0	9
	% within Average trip spending	0.0%	33.3%	55.6%	11.1%	0.0%	100.0%
Total	Count	9	82	97	8	12	208
	% within Average trip spending	4.3%	39.4%	46.6%	3.8%	5.8%	100.0%

Table 29

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Retail*

Average Trip Spending		Percentage of holiday budget spent on retail			Total
		0	1 to 25	26 to 50	
\$0 to \$300	Count	33	35	2	70
	% within Average trip spending	47.1%	50.0%	2.9%	100.0%
\$301 to \$600	Count	20	32	2	54
	% within Average trip spending	37.0%	59.3%	3.7%	100.0%
\$601 to \$1000	Count	15	25	3	43
	% within Average trip spending	34.9%	58.1%	7.0%	100.0%
\$1001 to \$2000	Count	9	13	0	22
	% within Average trip spending	40.9%	59.1%	0.0%	100.0%
\$2001 to \$3000	Count	4	6	0	10
	% within Average trip spending	40.0%	60.0%	0.0%	100.0%
\$3001 to \$15000	Count	1	7	1	9
	% within Average trip spending	11.1%	77.8%	11.1%	100.0%
Total	Count	96	130	10	236
	% within Average trip spending	40.7%	55.1%	4.2%	100.0%

Table 30

*Average Trip Spending in Relation to Percentage of Holiday Budget Spent on Tourist Activities*

Average Trip Spending		Percentage of holiday budget spent on tourist activities			Total
		0	1 to 25	26 to 50	
\$0 to \$300	Count	38	28	4	70
	% within Average trip spending	54.30%	40.00%	5.70%	100.00%
\$301 to \$600	Count	20	32	2	54
	% within Average trip spending	37.00%	59.30%	3.70%	100.00%
\$601 to \$1000	Count	12	25	6	43
	% within Average trip spending	27.90%	58.10%	14.00%	100.00%
\$1001 to \$2000	Count	6	16	0	22
	% within Average trip spending	27.30%	72.70%	0.00%	100.00%
\$2001 to \$3000	Count	4	6	0	10
	% within Average trip spending	40.00%	60.00%	0.00%	100.00%
\$3001 to \$15000	Count	2	7	0	9
	% within Average trip spending	22.20%	77.80%	0.00%	100.00%
Total	Count	92	130	13	236
	% within Average trip spending	39.00%	55.10%	5.50%	100.00%

Table 31

*Average Trip Spending Compared to Percentage of Holiday Budget Spent on Other Expenses*

Average Trip Spending		Percentage of holiday budget spent on other expenses					Total
		0	1 to 25	26 to 50	51 to 75	76 to 100	
\$0 to \$300	Count	49	15	6	0	0	70
	% within Average trip spending	70.0%	21.4%	8.6%	0.0%	0.0%	100.0%
\$301 to \$600	Count	34	18	2	0	0	54
	% within Average trip spending	63.0%	33.3%	3.7%	0.0%	0.0%	100.0%
\$601 to \$1000	Count	28	12	2	0	1	43
	% within Average trip spending	65.1%	27.9%	4.7%	0.0%	2.3%	100.0%
\$1001 to \$2000	Count	13	8	0	1	0	22
	% within Average trip spending	59.1%	36.4%	0.0%	4.5%	0.0%	100.0%
\$2001 to \$3000	Count	6	2	2	0	0	10
	% within Average trip spending	60.0%	20.0%	20.0%	0.0%	0.0%	100.0%
\$3001 to \$15000	Count	5	4	0	0	0	9
	% within Average trip spending	55.6%	44.4%	0.0%	0.0%	0.0%	100.0%
Total	Count	135	59	12	1	1	208
	% within Average trip spending	64.9%	28.4%	5.8%	0.5%	0.5%	100.0%

Table 32

*Average Trip Spending in Relation to Average Number of Nights Stayed*

Average trip spending		Average number of nights stayed								Total
		0	1 to 3	4 to 6	7 to 9	10 to 12	13 to 15	16 to 20	21 to 30	
\$0 to \$300	Count	9	54	1	1	2	0	0	0	67
	% within Average trip spending	13.4%	80.6%	1.5%	1.5%	3.0%	0.0%	0.0%	0.0%	100.0%
\$301 to \$600	Count	0	47	9	1	1	0	0	0	58
	% within Average trip spending	0.0%	81.0%	15.5%	1.7%	1.7%	0.0%	0.0%	0.0%	100.0%
\$601 to \$1000	Count	0	33	7	2	0	0	0	0	42
	% within Average trip spending	0.0%	78.6%	16.7%	4.8%	0.0%	0.0%	0.0%	0.0%	100.0%
\$1001 to \$2000	Count	1	11	5	3	0	1	2	0	23
	% within Average trip spending	4.3%	47.8%	21.7%	13.0%	0.0%	4.3%	8.7%	0.0%	100.0%
\$2001 to \$3000	Count	1	2	3	2	0	0	0	2	10
	% within Average trip spending	10.0%	20.0%	30.0%	20.0%	0.0%	0.0%	0.0%	20.0%	100.0%
\$3001 to \$15000	Count	1	3	3	2	0	0	0	1	10
	% within Average trip spending	10.0%	30.0%	30.0%	20.0%	0.0%	0.0%	0.0%	10.0%	100.0%
Total	Count	12	150	28	11	3	1	2	3	210
	% within Average trip spending	5.7%	71.4%	13.3%	5.2%	1.4%	.5%	1.0%	1.4%	100.0%

Table 33

*Average Trip Spending in Relation to Number of People in a Cycling Party*

Average trip spending		Number of people in cycling party						Total
		Solo	2	3 to 4	5 to 6	7 to 8	9 plus	
\$0 to \$300	Count	21	19	22	3	2	3	70
	% within Average trip spending	30.0%	27.1%	31.4%	4.3%	2.9%	4.3%	100.0%
\$301 to \$600	Count	15	21	14	1	2	5	58
	% within Average trip spending	25.9%	36.2%	24.1%	1.7%	3.4%	8.6%	100.0%
\$601 to \$1000	Count	10	11	15	3	1	3	43
	% within Average trip spending	23.3%	25.6%	34.9%	7.0%	2.3%	7.0%	100.0%
\$1001 to \$2000	Count	6	6	6	2	2	1	23
	% within Average trip spending	26.1%	26.1%	26.1%	8.7%	8.7%	4.3%	100.0%
\$2001 to \$3000	Count	2	4	4	0	0	0	10
	% within Average trip spending	20.0%	40.0%	40.0%	0.0%	0.0%	0.0%	100.0%
\$3001 to \$15000	Count	1	4	5	0	0	0	10
	% within Average trip spending	10%	40%	50%	0%	0%	0%	100%
Total	Count	55	65	66	9	7	12	214
	% within Average trip spending	25.7%	30.4%	30.8%	4.2%	3.3%	5.6%	100.0%

Table 34

*Average Trip Spending in Relation to Household Income*

Average trip spending		Household income								Total
		Under \$20,000	\$20,000 to \$39,999	\$40,000 to \$59,999	\$60,000 to \$79,999	\$80,000 to \$99,999	\$100,000 to \$149,999	\$150,000 to \$199,999	\$200,000 plus	
\$0 to \$300	Count	4	6	11	12	8	13	3	6	63
	% within Average trip spending	6.3%	9.5%	17.5%	19.0%	12.7%	20.6%	4.8%	9.5%	100.0%
\$301 to \$600	Count	2	5	7	6	12	14	8	1	55
	% within Average trip spending	3.6%	9.1%	12.7%	10.9%	21.8%	25.5%	14.5%	1.8%	100.0%
\$601 to \$1000	Count	1	2	7	8	5	6	6	4	39
	% within Average trip spending	2.6%	5.1%	17.9%	20.5%	12.8%	15.4%	15.4%	10.3%	100.0%
\$1001 to \$2000	Count	1	1	2	5	3	3	1	3	19
	% within Average trip spending	5.3%	5.3%	10.5%	26.3%	15.8%	15.8%	5.3%	15.8%	100.0%
\$2001 to \$3000	Count	1	0	1	0	2	1	1	4	10
	% within Average trip spending	10.0%	0.0%	10.0%	0.0%	20.0%	10.0%	10.0%	40.0%	100.0%
\$3001 to \$15000	Count	0	0	1	1	0	2	1	4	9
	% within Average trip spending	0.0%	0.0%	11.1%	11.1%	0.0%	22.2%	11.1%	44.4%	100.0%
Total	Count	9	14	29	32	30	39	20	22	195
	% within Average trip spending	4.6%	7.2%	14.9%	16.4%	15.4%	20.0%	10.3%	11.3%	100.0%

Table 35

*Gender in Relation to Preferred Marketing Method*

Gender		tourist centre	family and friends	newspaper	direct mail	pamphlets	Websites	cycling mag	email	Social media	Total
Female	Count	12	30	6	6	8	45	23	38	23	191
	% within Gender	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%
	% of Total	42.9%	27.5%	31.6%	66.7%	38.1%	24.3%	22.8%	29.5%	29.1%	312.4%
Male	Count	16	79	13	3	13	139	78	91	56	488
	% within Gender	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%
	% of Total	57.1%	72.5%	68.4%	33.3%	61.9%	75.1%	77.2%	70.5%	70.9%	587.1%
Total	Count	28	109	19	9	21	185	101	129	79	680
	% within Gender	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%
	% of Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.00%

Table 36

*Age in Relation to Preferred Marketing Method*

Age		Social media	Email	Cycling Magazine	Websites	Direct Mail	Newspaper	Tourist Information Centre	Family and Friends	Total
Under 24	Count	11	5	8	15	0	2	3	7	51
	% within Age	21.6%	9.8%	15.7%	29.4%	0.0%	3.9%	5.9%	13.7%	100.0%
25 to 29	Count	16	10	16	25	1	0	2	14	84
	% within Age	19.0%	11.9%	19.0%	29.8%	1.2%	0.0%	2.4%	16.7%	100.0%
30 to 34	Count	17	19	9	24	1	2	2	13	87
	% within Age	19.5%	21.8%	10.3%	27.6%	1.1%	2.3%	2.3%	14.9%	100.0%
35 to 39	Count	9	8	11	17	1	0	2	11	59
	% within Age	15.3%	13.6%	18.6%	28.8%	1.7%	0.0%	3.4%	18.6%	100.0%
40 to 44	Count	8	19	10	19	0	0	4	10	70
	% within Age	11.4%	27.1%	14.3%	27.1%	0.0%	0.0%	5.7%	14.3%	100.0%
45 to 49	Count	6	12	14	17	0	1	5	13	68
	% within Age	8.8%	17.6%	20.6%	25.0%	0.0%	1.5%	7.4%	19.1%	100.0%
50 to 54	Count	6	20	14	28	3	3	4	20	98
	% within Age	6.1%	20.4%	14.3%	28.6%	3.1%	3.1%	4.1%	20.4%	100.0%
55 to 59	Count	2	14	11	16	1	3	3	9	59
	% within Age	3.4%	23.7%	18.6%	27.1%	1.7%	5.1%	5.1%	15.3%	100.0%
60 plus	Count	4	22	8	24	2	8	3	12	83
	% within Age	4.8%	26.5%	9.6%	28.9%	2.4%	9.6%	3.6%	14.5%	100.0%
Total	Count	79	129	101	185	9	19	28	109	659
	% within Age	12.0%	19.6%	15.3%	28.1%	1.4%	2.9%	4.2%	16.5%	100.0%

Table 37

*Annual Purchases of Cycling Equipment in Relation to Annual Participation in Cycling Events*

Annual purchases of cycling equipment		Annual participation in cycling events				Total
		0	1 to 2	3 to 4	5 plus	
Less than \$1000	Count	33	42	15	14	106
	% within Annual purchases of cycling equipment	31.1%	39.6%	14.2%	13.2%	100.0%
\$1000 to \$1999	Count	8	17	26	17	69
	% within Annual purchases of cycling equipment	11.6%	24.6%	37.7%	24.6%	100.0%
\$2000 to \$2999	Count	7	9	14	14	44
	% within Annual purchases of cycling equipment	15.9%	20.5%	31.8%	31.8%	100.0%
\$3000 to \$3999	Count	1	1	4	8	14
	% within Annual purchases of cycling equipment	7.1%	7.1%	28.6%	57.1%	100.0%
\$4000 to \$4999	Count	0	1	1	1	3
	% within Annual purchases of cycling equipment	0.0%	33.3%	33.3%	33.3%	100.0%
\$5000 or more	Count	3	0	3	10	16
	% within Annual purchases of cycling equipment	18.8%	0.0%	18.8%	62.5%	100.0%
Total	Count	52	70	63	64	249
	% within Annual purchases of cycling equipment	20.9%	28.1%	25.3%	25.7%	100.0%

Table 38

*Age in Relation to Annual Participation in Cycling Events*

Age		Annual participation in cycling events				Total
		0	1 to 2	3 to 4	5 plus	
Under 24	Count	9	3	4	3	19
	% within Age	47.4%	15.8%	21.1%	15.8%	100.0%
25 to 29	Count	7	11	8	9	35
	% within Age	20.0%	31.4%	22.9%	25.7%	100.0%
30 to 34	Count	5	9	9	9	32
	% within Age	15.6%	28.1%	28.1%	28.1%	100.0%
35 to 39	Count	4	4	5	9	22
	% within Age	18.2%	18.2%	22.7%	40.9%	100.0%
40 to 44	Count	5	6	9	6	27
	% within Age	18.5%	22.2%	33.3%	22.2%	100.0%
45 to 49	Count	5	10	7	6	28
	% within Age	17.9%	35.7%	25.0%	21.4%	100.0%
50 to 54	Count	6	13	11	7	37
	% within Age	16.2%	35.1%	29.7%	18.9%	100.0%
55 to 59	Count	6	8	4	6	24
	% within Age	25.0%	33.3%	16.7%	25.0%	100.0%
60 plus	Count	5	7	6	9	29
	% within Age	17.2%	24.1%	20.7%	31.0%	100.0%
Total	Count	52	71	63	64	250
	% within Age	20.8%	28.4%	25.2%	25.6%	100.0%

Table 39

*Household Income in Relation to Annual Participation*

Household Income		Annual participation in cycling events				Total
		0	1 to 2	3 to 4	5 plus	
Under \$20,000	Count	4	4	1	1	10
	% within Household income	40.0%	40.0%	10.0%	10.0%	100.0%
\$20,000 to \$39,999	Count	5	3	3	4	16
	% within Household income	31.3%	18.8%	18.8%	25.0%	100.0%
\$40,000 to \$59,999	Count	5	9	8	12	34
	% within Household income	14.7%	26.5%	23.5%	35.3%	100.0%
\$60,000 to \$79,999	Count	5	18	7	8	38
	% within Household income	13.2%	47.4%	18.4%	21.1%	100.0%
\$80,000 to \$99,999	Count	10	6	8	10	34
	% within Household income	29.4%	17.6%	23.5%	29.4%	100.0%
\$100,000 to \$149,999	Count	7	14	16	10	48
	% within Household income	14.6%	29.2%	33.3%	20.8%	100.0%
\$150,000 to \$199,999	Count	6	8	3	7	24
	% within Household income	25.0%	33.3%	12.5%	29.2%	100.0%
\$200,000 plus	Count	4	3	10	6	24
	% within Household income	16.7%	12.5%	41.7%	25.0%	100.0%
Total	Count	46	65	56	58	225
	% within Household income	20.4%	28.9%	24.9%	25.8%	100.0%

Table 40

*Tourist Activities in Relation to Average Trip Spending Cross Tabulation Chi-Square*

	Wine/culinary tours	Hiking tours	Art & studio tours	Museums/ cultural sights	Attractions & theme parks	Shopping	Beach	No other	Other
Chi-Square	.848 <sup>a</sup>	2.634 <sup>a</sup>	3.223 <sup>a</sup>	.071 <sup>a</sup>	3.867 <sup>a</sup>	6.240 <sup>a</sup>	2.352 <sup>a</sup>	3.509 <sup>a</sup>	.078 <sup>a</sup>
Degrees of Freedom (df)	2	2	2	2	2	2	2	2	2
Significance (p)	.654	.268	.200	.965	.145	.044	.309	.173	.962

Table 41

*Preferred Marketing Method in Relation to Gender Cross Tabulation*

	Friends and family	Travel information center	Newspaper	Direct Mail	Pamphlets	Websites	Cycling magazine	Email	Social Media
Chi-Square	.807 <sup>a</sup>	4.221 <sup>a</sup>	.312 <sup>a</sup>	7.572 <sup>a</sup>	1.557 <sup>a</sup>	2.512 <sup>a</sup>	2.160 <sup>a</sup>	1.955 <sup>a</sup>	.751 <sup>a</sup>
Degrees of Freedom (df)	2	2	2	2	2	2	2	2	2
Significance (p)	.668	.121	.856	.023	.459	.285	.340	.376	.687

Table 42

*Preferred Marketing in Relation to Method Age Cross Tabulation*

	Friends and family	Travel information center	Newspaper	Direct Mail	Pamphlets	Websites	Cycling magazine	Email	Social Media
Chi-Square	.820 <sup>a</sup>	2.767 <sup>a</sup>	13.176 <sup>a</sup>	4.988 <sup>a</sup>	5.100 <sup>a</sup>	1.388 <sup>a</sup>	1.553 <sup>a</sup>	17.901 <sup>a</sup>	29.474 <sup>a</sup>
Degrees of Freedom (df)	3	3	3	3	3	3	3	3	3
Significance (p)	.845	.429	13.176 <sup>a</sup>	.173	.165	.708	.670	.000	.000

### **Cycle Tourism Questionnaire Verbal Script**

Good Morning/ Afternoon,

I am a student from Ryerson University and we are currently conducting research on behalf of Ontario Transportation Options to determine the economic impacts and benefits of cycle tourism in Ontario. Would you mind taking a few minutes to fill out this survey for our study? When you have completed the survey, you may leave it in the sealed box. Thank you for your time.



8) When considering all of your cycling trips, what type of accommodations do you generally use the most when you require an overnight stay? (Please check one)

- Luxury hotel/resort (4-5 stars)       Motel       Camping  
 Hotel (1-3 stars)       Hostel       Friends & relatives  
 Bed & Breakfast       Other: \_\_\_\_\_

9) When considering all of your cycling trips, what is the average number of nights that you require accommodations in total? \_\_\_\_\_

10) Generally, do you use other modes of transportation while on a cycling holiday? (Check all that apply)

- No other transportation       Plane       Local Public Transportation  
 Car/Taxi       Charter bus       Other: \_\_\_\_\_  
 Train

11) How far in advance do you start planning a cycling holiday?  
 \_\_\_\_\_ (weeks)

12) What would be an estimate of your annual purchases of cycling equipment, clothes and cycling accessories?

- Less than \$1,000       \$2000 - \$2,999       \$4000 - \$4,999  
 \$1000 - \$1,999       \$3000 - \$3,999       \$5000 or more

13) When considering all of your cycling trips, on average, how much do you typically spend on a trip?  
 \_\_\_\_\_

14) Please assign a percentage to the following expenses of a cycle holiday that best describes a typical breakdown of your expenditures, for a total of 100%.

_____ %	Accommodation
_____ %	Food & Beverage
_____ %	Retail
_____ %	Tourist Activities
_____ %	Other
100 %	Total

15) Do you participate in any cycling events? (Check all that apply)

- Road Racing Event       Multi-Sport Event  
 Mountain Bike/BMX/Specialty Event/Competition/Race       Package Tour  
 Touring Event       None  
 Recreational /Promotional Ride Event       Other (Specify) \_\_\_\_\_  
 Charity Fundraising Event

16) Annually, how many times do you participate in a cycling event?

- 0       3-4  
 1-2       5+

**17) Please rank the top 3 sources you prefer to receive cycling information from about events, tours, equipment, etc. (Use 1 for your most preferred)**

- |   |               |                               |
|---|---------------|-------------------------------|
| — Social media (Facebook, Twitter, etc) | — Websites    | — Tourist information centers |
| — E-mail                                | — Pamphlets   | — Friends and Family          |
| — Cycling magazines                     | — Direct mail | — Other: _____                |
|   | — Newspaper   |                               |

### Demographics

**18) Are you a resident of Canada?**

- Yes  
 No

**19) If “Yes”, what’s your main city/town of residence? \_\_\_\_\_**

**20) If you answered “No” to question 18, what country are you from?**  
 \_\_\_\_\_

**21) To which age bracket do you belong?**

- |                                      |                                      |                                      |
|--------------------------------------|--------------------------------------|--------------------------------------|
| <input type="checkbox"/> Under 15    | <input type="checkbox"/> 30-34 years | <input type="checkbox"/> 50-54 years |
| <input type="checkbox"/> 15-19 years | <input type="checkbox"/> 35-39 years | <input type="checkbox"/> 55-59 years |
| <input type="checkbox"/> 20-24 years | <input type="checkbox"/> 40-44 years | <input type="checkbox"/> 60-64 years |
| <input type="checkbox"/> 25-29 years | <input type="checkbox"/> 45-49 years | <input type="checkbox"/> 65 plus     |

**22) What is your marital status?**

- Single  Other (please specify) \_\_\_\_\_  
 Married/Common Law

**23) How many children are in your household? (Please place a number next to the appropriate age bracket.)**

- 0-14 years  
 — 15-18 years  
 — 18 plus years

**24) What is your main employment status? (Please check one)**

- Student  Retired  
 Working Full-Time  Not Currently Employed  
 Working Part-Time

**25) Do you mind indicating which household income bracket you belong to? (Please check one)**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Under \$20,000  | <input type="checkbox"/> \$60,000-79,999   | <input type="checkbox"/> \$150,000-199,999 |
| <input type="checkbox"/> \$20,000-39,999 | <input type="checkbox"/> \$80,000-99,999   | <input type="checkbox"/> \$200,000 Plus    |
| <input type="checkbox"/> \$40,000-59,999 | <input type="checkbox"/> \$100,000-149,999 |  |

**26) Please check the highest level of education you have obtained?** (Please check one)

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> High School     | <input type="checkbox"/> Master's Degree   | <input type="checkbox"/> Doctorate Degree |
| <input type="checkbox"/> College Diploma | <input type="checkbox"/> Trade Certificate | <input type="checkbox"/> Other _____      |
| <input type="checkbox"/> Some University | <input type="checkbox"/> Bachelor's Degree |   |

**27) Please indicate your gender:**

\_\_\_\_\_

**Thank you for your time and interest in this study!**