

Community Action Plan for Life

Mississauga South Community





Walk and Bike for Life

Walk and Bike for Life is a not for profit organization dedicated to improving awareness of the benefits of walking and cycling as activities, and of urban parks and trails as great places. Walk and Bike for Life is committed to empowering communities through community participation and education. Currently, Walk and Bike for Life is working with 10 communities in the Hamilton, Halton and Peel regions as part of the Community Action Plan for Life project, funded by the Ministry of Health Promotion's Communities In Action Fund. This project provides these 10 communities with the tools to advocate for improved public spaces and pedestrian and bicycling facilities. It engages local citizens through a series of public meetings and workshops, culminating in the creation local Community Action Groups (CAGs) who will take on the implementation of their individualized action plan with Walk and Bike for Life's continuing support.

Biography: Gil Penalosa, Executive Director, Walk & Bike for Life



The Community Action Plan for Life project is the brainchild of Walk & Bike for Life Executive Director, Gil Penalosa. A leading executive and urban strategist with years of public and private sector senior managerial experience, Gil is celebrated around the world for his ability to create walkable, bike-able cities with healthier, happier residents.

Gil is perhaps most famous for his achievements during his tenure as Commissioner of Parks, Sport and Recreation for the city of Bogotá, Colombia. In Bogotá, a metropolis of 7 million people, Gil led his team to design and build over 200 parks, of which the best known is the Simon Bolivar (360 hectares/899 acres). Under

Gil's leadership, Bogotá was revolutionized through the opening of 91 kilometres of car-free city roads on Sundays. These Sundays are now known as the Ciclovía, where over 1.5 m people come out weekly to walk, run, skate and bike. The Ciclovía model has captured imaginations globally and is emulated in cities large and small.

Because of his uniquely effective blend of pragmatism and passion, Gil's leadership has been sought out by many organizations. Gil works as Director of Healthy Places Initiatives with NYC's Project for Public Spaces and as Senior Consultant for the renowned Danish firm Gehl Architects. He serves on the Boards of Directors of American Trails, City Parks Alliance, International Sport and Culture Association, as well as on Advisory Committees of America Walks, Green GTA and WalkON.

Gil is a much sought after international speaker and consultant. In his presentations and workshops on creating better communities, Gil demonstrates how walking and bicycling, and parks and trails, can promote economic development, environmental sustainability, public health, efficient transportation, and recreational opportunities for all people, regardless of social status or physical ability. The Community Action Plan for Life project makes Gil's expertise and flair for innovation available to communities throughout Southern Ontario as they attempt to build great places and become vibrant cities with happy, healthier residents.

Gil holds a Master in Business Administration degree from UCLA's Management School. He lives in Ontario, Canada and enjoys outdoor activities with his wife and their three children.



Ministry of Health Promotion - Active 2010

The Ministry of Health Promotion was created in 2005 with a mandate to support and deliver programs promoting healthy lifestyles and healthy choices in the province of Ontario. The Ministry focuses on a number of key priority areas including active living, healthy eating, injury prevention, Ontario's smoke-free strategy, and mental health. As part of its work the Ministry of Health Promotion has established the Communities in Action Fund, a \$5 million fund established to support the projects of over 100 not-for-profit organizations that are dedicated to increasing levels of physical activity and sport participation in Ontario.

Healthy Living Peel

A network of public and private-sector organizations, institutions and agencies collaborating to promote healthy living and healthy living lifestyle in Peel Region. Through its community grants, Healthy Living Peel helps Region of Peel community organizations and agencies establish programs that promote healthy living and chronic disease prevention.

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Foreword



Dear Walk and Bike For Life,

On March 12th, 2009, I had the pleasure of participating in an engaging presentation and community workshop, hosted by Gil Penalosa. He and the non-profit organization walk and bike for life was unknown to me at the time, therefore I went into it with an open mind towards his presentation. Within a few slides I was hooked. His demeanour, style, and his passion all came together to drive the point home, that we need to develop our cities to be open for people of all ages, from someone who is eight years old to someone who is eighty years of age. It is what Gil calls the "Eight Eighty Rule". If a person would not send an eight year old on the street or an eighty year old, then it is not a safe street. Walk and Bike for Life understands that the people of Port Credit and Mississauga are hungry for open spaces, where adults, children and the elderly can be outside and engage each other the way humans have been doing for thousands of years. Human engagement and interaction is the essence of what a community is all about. It is the beating heart of what creates a village that is alive. Port Credit is a town within a city that escaped the wrath of the demolition ball of the 1970's and 80's and instead of adopting the strip plaza, it maintained it's historic street front buildings and shops. However to maintain the status quo is not good enough. The City of Mississauga has a responsibility to nurture and develop this great village within the city. Its buildings need renovations, it's public spaces need to be developed with a purpose, not just creating a park and imagining something positive was created. People need things to do when they are outside to allow them to engage with other people. The streets need to be re-claimed from the automobile and returned to the people so they can walk and bicycle in a safe area. This is what I believe was the heart of Gil's message on the 12 of March at Chartwell Baptist church. Gil's presentation was

followed up by a quick question and answer session, with several city officials in attendance such as Councillor Mullin, who were able to address some citizen concerns. Following the Q&A, residents in attendance took part in a brainstorming session, writing down all of their suggestions on how to improve the Port Credit area. Some ideas included improved street lighting, bike lanes and an alternating centre lane. It is this type of public consultation that the City has to accept and take into consideration in its planning. Often citizens forget that public officials work the general interests of the community. The people are the employers of the councillors and the mayor and therefore have the right to demand that their interests be addressed. Gil mentioned in his presentation that if the people are not attending the public meetings then someone else is, such as a corporation and it is they who are setting the agenda. Port Credit is fortunate to have Walk and Bike for Life based in its community. Gil and his team are dedicated to promoting the common good for all people through public meetings and consultations while at the same time forcing the City and governments throughout Canada and the world to realize that society and communities should be returned to the people, to be enjoyed at 5km/hr rather than 100km/hr.

George Douzenis

Teacher, Glen Forest Secondary School

Workshop Participant

Executive Summary



Map 1: Context map of the Greater Golden Horseshoe area

The Mississauga South community is located along the southern portion of the City of Mississauga stretching from Oakville to Toronto south of the Queen Elizabeth Way (QEW). The district has a total population of 113,003 people and an area of 61 sq km¹. Mississauga South is home to a number of different neighbourhoods which are located within and around many beautiful natural spaces. This visual appeal coupled with current density levels and public transit access give Mississauga South tremendous potential to become a more walkable, bikeable, vibrant neighbourhood.

A city is only a means to a way of life. If we choose to plan and design our cities for people, we must do it in a way that maximizes people's happiness and quality of life. For decades, city planning has been focused on cars' mobility. A human-scaled approach to planning recognizes the benefits to providing safe and convenient facilities for people to walk and bike as a means of transportation and recreation. This approach also emphasizes the importance of parks, trails, and public spaces as great places for interaction and community cohesion.

Walk & Bike for Life initiated the Community Action Plan for Life (CAP) project to address these emerging issues in southern Ontario. The Mississauga South community was chosen as one of the 10 pilot communities of the CAP project, the goal of which is to engage citizens in local active transportation issues and empower them with tools and resources to promote walking and bicycling in their community.

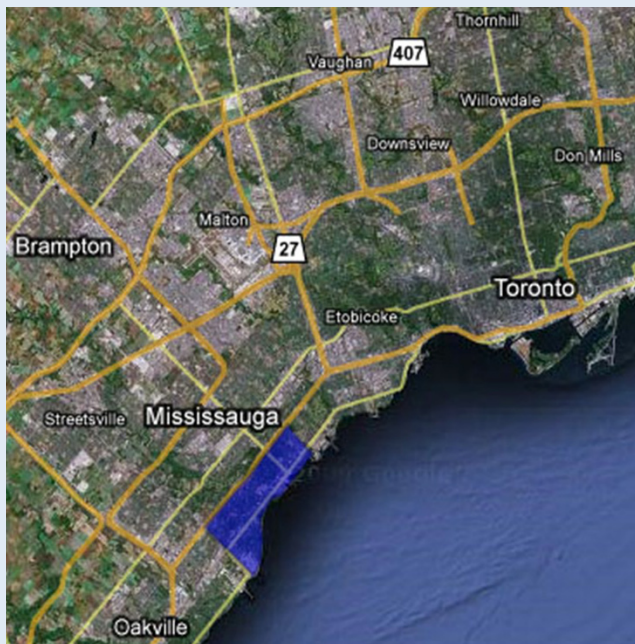
On Thursday March 12th 2009 members of the Walk and Bike for Life team facilitated a 3-hour workshop to gather ideas from citizens on how to improve the overall walkability, bike-ability, and quality of life in Mississauga South. A group of people attended the community workshop. It began with the "Walking, Cycling and Public Spaces" presentation by Gil Penalosa. Participants were split into groups of 3-4 people and each group was given a Group Activity Sheet to fill out concerning their long and short-term recommendations for making Mississauga South more pedestrian friendly, cycling-friendly and an overall great place. Each group then presented their recommendations to the room, discussing and comparing their ideas with those of other groups. Participants also filled out Individual Surveys. Recommendations distilled from the discussions, surveys, Group Activities Sheets and group presentations are compiled and summarized in the "What You Said" section of this report.

Prior to this workshop process, Walk and Bike for Life also conducted a workshop in Port Credit on January 17th 2008. During this workshop participants were also split up into groups of 4-6 people, but they were separated by topic. One half of the groups focused on pedestrian issues, while the other half concentrated on bicycling. Participants focused on both short term low cost initiatives as well as long term ones. In an effort to gather the best community recommendations and generate the most appropriate proposals, the results from both workshops will be taken into account in this report. The "What You Said" portion of this report will encompass recommendations from both processes without distinguishing which workshop the ideas were taken from.

Key recommendations from the community included programming initiatives such as Car-Free Days and Active and Safe routes to School; policy changes such as pedestrians first, increased standards of crosswalk design and maintenance and snow clearing; infrastructural improvements such as a higher quantity and quality of pedestrian crossings, a network of bikeways including separated lanes on arterial streets, lane reductions and street/public space beautification projects.

Snapshot

Mississauga South



Map 2: Context map of Mississauga South within the GTA

The Mississauga South community is located along the southern portion of the City of Mississauga stretching from Oakville to Toronto south of the Queen Elizabeth Way (QEW). The district has a total population of 113,003 people and an area of 61 sq km. The projected population growth for the Region of Peel, in which Mississauga South lies, is 703,400 people or 56%ⁱⁱ.

Mississauga South is home to a number of different neighbourhoods including; Cawthra, Sheridan Heights, Park Royal, Clarkson, Rattray Park, Lorne Park, Port Credit, Lakeview and Orchard Heights. Its close proximity to the waterfront of Lake Ontario and the Credit River make it a prime residential location. The communities of Mississauga South vary greatly in their density and walkability. The waterfront communities of Port Credit and Clarkson are quite walkable, whereas the northern neighborhoods of Sheridan Heights and Cawthra, located close to the highway, are of lower density and lower mixed use. Mississauga South has one main provincial highway (QEW) running along its northern border. This highway is used most often by western Greater Toronto Area residents as a commuting corridor into and out of the City of Toronto. The area's public transit is served through Mississauga Transit as well as their regional rail line (Go Transit) which runs east-west through the lakeshore of Mississauga South. Despite relatively high density levels and strong transit access, the modal split is still dominated by the car. In 2006, 72% of commutes were made by car, 15.8% by public transit, 3.5% by foot, and 0.7% by bikeⁱⁱⁱ.

Although the City of Mississauga has struggled to integrate sustainable land use and transportation strategies into their municipal planning and implementation, they have recently made efforts to mitigate the effects of this oversight. With the launch of their five pillar Strategic Plan, the Get Active Mississauga Program, and Mississauga Transit Expansion, Mississauga looks to be understanding and addressing these issues. That being said, given the high projected population growth rates within the city, it is important that they move as quickly as possible. The very decisions that have driven car dominance in the past continue to be made at this time, therefore major leaps must be taken to reduce car dependence, integrate land use into transportation planning, and promote active transportation.

Mississauga South has developed into a wonderfully diverse mix of neighbourhoods located within and around many beautiful natural spaces. This visual appeal coupled with current density levels and public transit access give Mississauga South tremendous potential to become a more walkable, bikeable, vibrant community. Walk & Bike for Life is very eager to help Mississauga South move from talking to doing!

Chapter 1

Walking and Bicycling: More than just fun and games

Walking and Bicycling



Walking and bicycling: More than just fun and games

It would be easy to write a laundry list of the perfect conditions needed to make the case for active transportation. These could include; increased public concern and awareness about environmental degradation, climate change, a global economic crisis, an obesity epidemic, and worsening traffic congestion. Today, all of these conditions exist, creating a perfect storm of challenges that make investing in safe and convenient walking and bicycling facilities relevant solutions to many of today's problems.

Walk & Bike for Life has developed the **EARTH** umbrella concept, which represents a shelter from the storm of challenges we are facing today and describes the numerous benefits of walking and bicycling in detail.

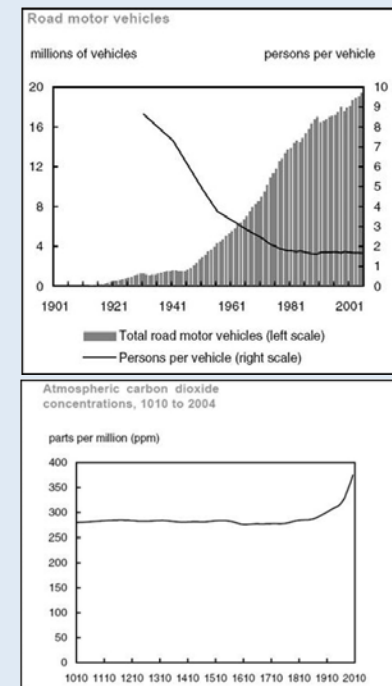


The **EARTH** concept Environment

Only a few years ago scientists questioned the very existence of human-induced climate change. Now there is general agreement within the scientific community that global atmospheric concentrations of greenhouse gases such as carbon dioxide have increased markedly as a result of human activities, particularly through the use of fossil fuels and land use change^{iv}. In 2004, emissions from the transportation sector accounted for 25 per cent of all the greenhouse gases emitted in Canada. Private vehicles alone (passenger cars and trucks) account for over 11 per cent of total GHG emissions. With such a significant portion of our emissions released through transportation, moving toward more sustainable transportation options such as public transit, bicycling, and walking could drastically reduce Canada's carbon footprint.

Shifting away from private car use and toward non-motorized forms of transportation is less daunting than one might think. Research shows that a large percentage of trips made by car are within walking and bicycling distance. Metrolinx, the regional transportation authority in the Greater Toronto and Hamilton Area, reported in 2008 that 40 per cent of the total trips taken across the GTHA were within biking distance (under 5 km) and 17 per cent were within walking distance (under 2km).

Calculations based on data from Environment Canada's greenhouse gas inventory, population statistics from Statistics Canada, and Transport Canada's urban transportation emission calculator reveal that if each Mississauga South driver walked or biked to work one week in a year, the neighbourhood could reduce its annual emissions by 255.67 tonnes (see *Appendix C* for calculations).



The number of motor vehicles on the road has increased sharply in the last 30 years, as the number of people per vehicle has decreased. A dramatic rise in Carbon Dioxide, the most prevalent Greenhouse Gas, has accompanied this trend. For each commuter in Mississauga South who switches from vehicular to active transportation, approximately 712.58 kg less of Carbon dioxide will be released into the atmosphere. If each Mississauga South driver walked or biked to work one week a year, the city could reduce its emissions by 255.67 tonnes (see *Appendix C* for calculations).

The EARTH concept



Economic Activity

In the 19th century, wealth was measured in terms of land, making land the most valuable of any asset. By the 20th century the market's focus had shifted to capital. Today, knowledge is at the heart of the economy. Attracting and retaining highly educated, creative people is the greatest challenge facing cities in the 21st century.

In an ever-more globalized world, the most skilled people – be they carpenters, artists or doctors – can live anywhere they choose. Why live in Mississauga South and not Vancouver, Paris or Sao Paulo? A walkable, bikeable community is a critical factor in creating lively, attractive neighbourhoods, and quality of life has become a main element of economic competitiveness.

Mercer's Quality of Living survey, used by thousands of companies to decide where to locate their offices, recognizes the importance of active transportation. Pedestrian and bicycling facilities positively influence 5 of the 10 categories used in the survey to determine the best places to set up a business.

Vibrant commercial districts, and the small businesses which populate them, rely heavily on foot traffic. Walkable, bikeable neighbourhoods are safer, more attractive, and more pleasant to shop in. Traffic calming is so good for business that business owners in affected areas often go from initial fear over the loss of parking to passionate support for further traffic calming, both in their own neighbourhood and others.^v

Have you ever heard anyone return from a vacation in Paris and talk about how beautiful the highways were?

Great public spaces, pedestrian plazas, parks and trails attract tourists and generate economic activity. Tourism is a billion dollar industry. In 2007, tourism in Canada generated \$19.7 billion in government revenue alone.^{vi} The cities making the most of this service industry are inclusive of all types of people. Crucially, these cities recognize that tourists are primarily pedestrians. Increased investment in the unique beauty of Canadian cities through well-placed trails, parks and public spaces will add to the appeal – and bank accounts – of our neighbourhoods.

¹ Categories positively affected by high quality pedestrian and bicycle infrastructure: Medical and Health Considerations (Air Pollution), Natural Environment (Climate), Public Services and Transit, Recreation (Sport and Leisure Activities), Socio-Cultural Environment (Limitation on Personal Freedom)



Local business owners in Copenhagen had a huge boost in economic activity from increased foot traffic after streets were replaced with pedestrian only streets.

The EARTH concept



Recreation

In the year 1700, most physical activity took place in the workplace. In North America in 2008, only about five per cent of our physical activity takes place in the work place, while recreational activities account for the highest percentage. (Figure 1).

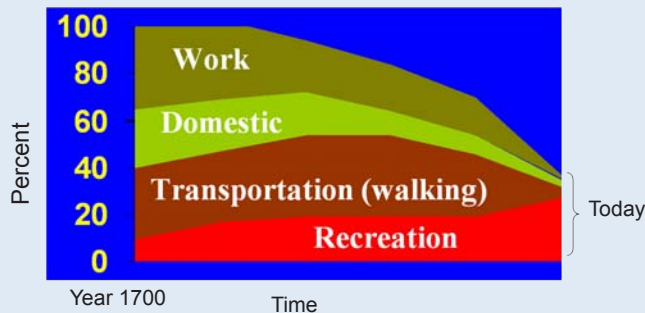


Figure 1: The ways in which we get our physical activity have changed drastically in the past 300 years, as recreation has come to play an increasingly important role in our lives and our physical health.

Walking, bicycling, and running are now some of the most popular forms of physical activities in the world.

In addition, current trends show that people are turning increasingly to unscheduled and unorganized activities such as walking and bicycling as a form of daily exercise. According to Statistics Canada's 2005 Community Health Survey walking is by far the most popular form of physical activity in Canada, with bicycling placing in the top five^{vii}.

These activities are free of charge, enjoyable in groups or alone, and accessible to all ages.

In order to build communities that facilitate participation in these activities, it is important to provide city dwellers with the facilities that encourage spending time outdoors. Well-maintained and managed trails, urban parks and public spaces allow residents to enjoy, relax and take pride in their city.

In addition, more localized recreational facilities encourage more frequent use by community members because people have both a physical and mental connection to them. That is, these facilities are physically accessible to users through a short walk or bike ride and mentally connected to them as a result of frequent events, festivals and promotions. For example, you are probably more inclined to take your dog for a walk on a Thursday evening if you can walk to the nearby neighbourhood trail or park as opposed to driving to it. You may even be more inclined to take that walk if you can grab a coffee on your way, or if there are interesting things happening in and around the trails or park.

Recreation is something more than what people do on the weekend.

By building and improving upon community trails, parks, greenways, and public spaces it can become part of people's daily routine and serve as a way to unwind, connect with nature, and to just have fun.



A functional and inviting public space provides a number of opportunities for different activities to take place; Portland, Oregon



Wading Pool; Portland, Oregon

The EARTH concept



Transportation

Transportation is about moving people, not about moving cars. Yet the way some North American cities have been built, it would appear the opposite is true. Thirty six percent of Greater Toronto and Hamilton area residents do not have a driver's license.^{viii}

To live up to Canadian principles of equity and accessibility, our cities must be built to allow the mobility of those who cannot - or choose not - to drive.

Furthermore, providing safe, extensive infrastructure for cyclists and pedestrians has been proven to alleviate congestion. Such infrastructure paves the way for affordable, convenient transportation, which in turn can have a profound impact on the economy. Traffic congestion contributes to delays in moving goods, lost productivity and higher fuel costs. Congestion costs Ontario over \$5 billion in lost GDP every year.



Transportation infrastructure must be designed for the mobility of all users, not just drivers

Cities like Copenhagen and Amsterdam have invested heavily in bicycling infrastructure and have achieved significant results. In Copenhagen, bike mode share has gone from less than 10% in 1975 to 36% in 2004, outperforming automobile mode share.^x

With 329 km of cycling tracks in place, Copenhagen has continuously been improving its infrastructure.^{xi} Furthermore, it recognizes that increasing active transportation use is a matter of planning-for-people and creating a cultural shift.

Health

Many Canadians today find themselves driving to the gym to walk on a treadmill. Meanwhile, 23 per cent of Canadians over the age of 18 are obese.^{xii} Obesity is at the root of a myriad of diseases and health problems, and inactivity is one of the major contributing factors to obesity. Sedentary living is creating a huge strain on our healthcare system and our wallets.

Today, health experts agree that 30 minutes of moderate physical exercise can cut vulnerability to heart disease in half, control blood pressure and reduce cholesterol. Experts say that exercise also increases energy levels and improves moods, sleeping habits and digestion.^{xiii}

Building convenient and accessible pedestrian and cycling infrastructure makes it easier for physical activity to become a part of our daily routine. A study from the American Journal of Preventative Medicine published in 2004 found that every additional hour spent in a car was linked to a six per cent increase in a person's chances of becoming obese. Conversely, each kilometer walked was linked to a 4.8 per cent decrease in the chance of becoming obese.^{xiv}

Furthermore, as illustrated in *Figure 2*, obesity rates for several highly industrialized countries consistently drop when alternative forms of transportation, such as walking, cycling, and public transit are used.

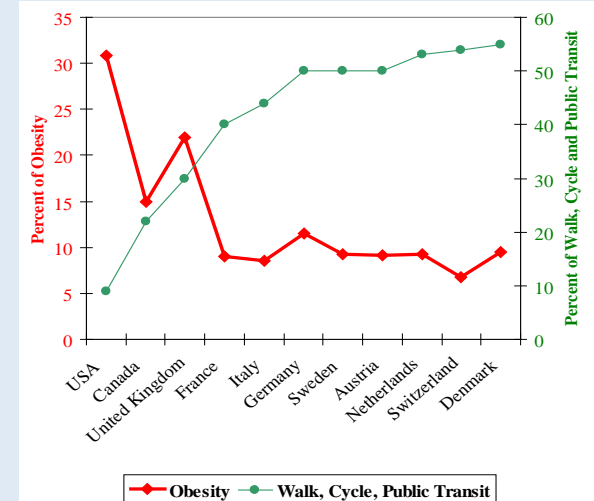


Figure 2: Obesity rates fall sharply with increased walking, bicycling and public transit use.

Creating a Great Place



Characteristics of a Great Place

Public spaces have both “Emotional” and “Quantifiable” benefits. The “Emotional” benefits greatly increase the quality of life of its residents. They are social equalizers and sources of happiness for community members. They also strengthen communities and improve safety in neighbourhoods. The “Quantifiable” benefits of public spaces are ones that can be calculated in terms of several different criteria. They provide benefits that increase property values, increase tourism, increase economic activity, lower health care costs, and create greener more environmentally sound cities by reducing greenhouse gas emissions ^{xv}.

Creating great public places is one of the main characteristics of a successful city. One challenge that many cities face is the lack of such places and poor connections to surrounding neighbourhoods. It is difficult to define what exactly makes a great place, it is a subjective topic. Although each great place will be different to almost anyone, NYC's Project for Public Spaces has come up with some common symptoms of great public spaces. ^{xvi}

GOOD PLACES TO SIT



It is simple but often overlooked. Seating is critical to creating an inviting space for people to rest, people-watch and/or interact.

SOCIABILITY/PEOPLE IN GROUPS



People meeting in groups and being social with one another is an indicator of a great public space.

Creating a Great Place



DIVERSITY



A place with a diversity of ages, ethnicities, and abilities is another indicator of a great public space that is accessible and inviting to all.

HIGH PROPORTION OF WOMEN



Women are much more discerning when it comes to choosing a place. If there is a high proportion of women in a place it usually means the area is safer, cleaner and more aesthetically pleasing.

AFFECTION



People are generally affectionate when they feel comfortable in a place.

In a general sense, these symptoms paint the image of a safe, socially active, comfortable and happy place. The place can either be a neighbourhood corner, a park, an entire community, a district, or a whole city. A variety of these places connected by a great active transportation system can create a city that has so many great places in it that it eventually becomes one great city. This is the goal of many cities, but cities as big as they are, tend to forget that city life blooms on the street corner.

Chapter 2

Community Action Plan: Mississauga South



Community Action Plan for Life Methodology

At Walk & Bike for Life we recognize that citizens hold the greatest expertise when it comes to the communities in which they live, work or play. Walk & Bike for Life's Community Action Plan for Life project uses this idea as the basis for its approach with engaging communities in promoting more walking and bicycling-friendly places. Walk and Bike for Life spent time in Port Credit and Clarkson in Mississauga South, where we conducted a presentation, workshop and discussion period along with many other consultation sessions.

Community workshop

On March 12th, members of the Walk and Bike for Life team facilitated a 3-hour workshop to gather ideas from concerned citizens, public health, and decision makers on how to improve the overall walkability, bikeability, and connectivity of the various communities in Mississauga South. It began with the "Walking, Cycling and Public Spaces" presentation by Gil Penalosa. Participants were then split into groups of 3-4 people and each group was given a Group Activity Sheet to fill out concerning their long and short-term recommendations for making Mississauga South more pedestrian friendly, cycling-friendly and an overall great place. Each group then presented their recommendations to the room, discussing and comparing their ideas with those of other groups. Participants also filled out Individual Surveys.



Prior to this workshop process, Walk and Bike for Life also conducted a workshop in Port Credit on January 17th 2008. During this workshop participants were also split up into groups of 4-6 people, but they were separated by topic. One half of the groups focused on pedestrian issues, while the other half concentrated on bicycling. Participants focused on both short term low cost initiatives as well as long term ones. In an effort to gather the best community recommendations and generate the most appropriate proposals, the results from both workshops will be taken into account in this report. The "What You Said" portion of this report will encompass recommendations from both dates without distinguishing which workshop the ideas were taken from.

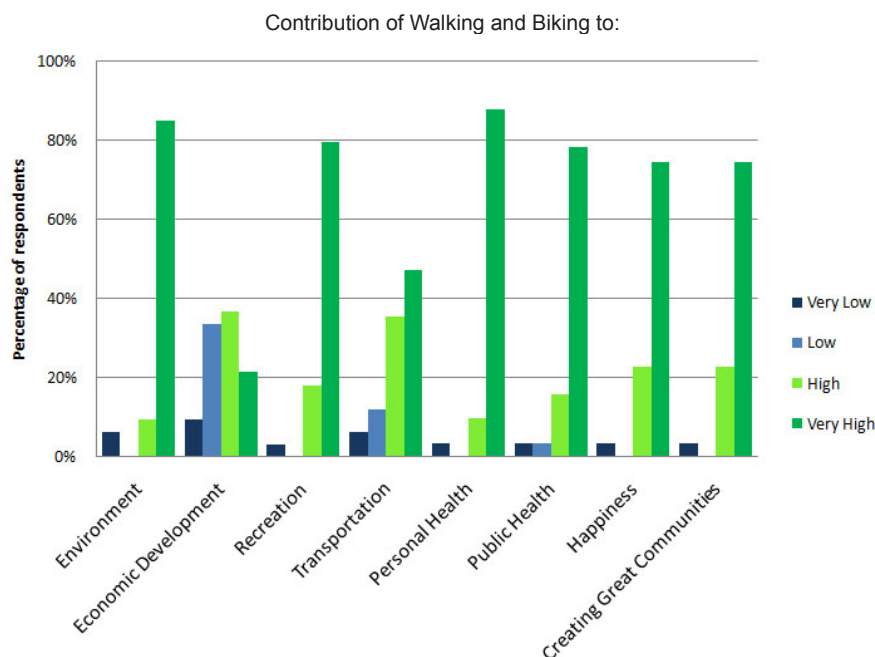
Approximately 100 people attended the community workshops and their recommendations are distilled directly out of the ideas and wishes expressed by survey respondents and workshop attendees.

What You Said: Results of the Individual Surveys



Thursday January 17th 2008

Question 1: Please rate the importance of active transportation for the following:



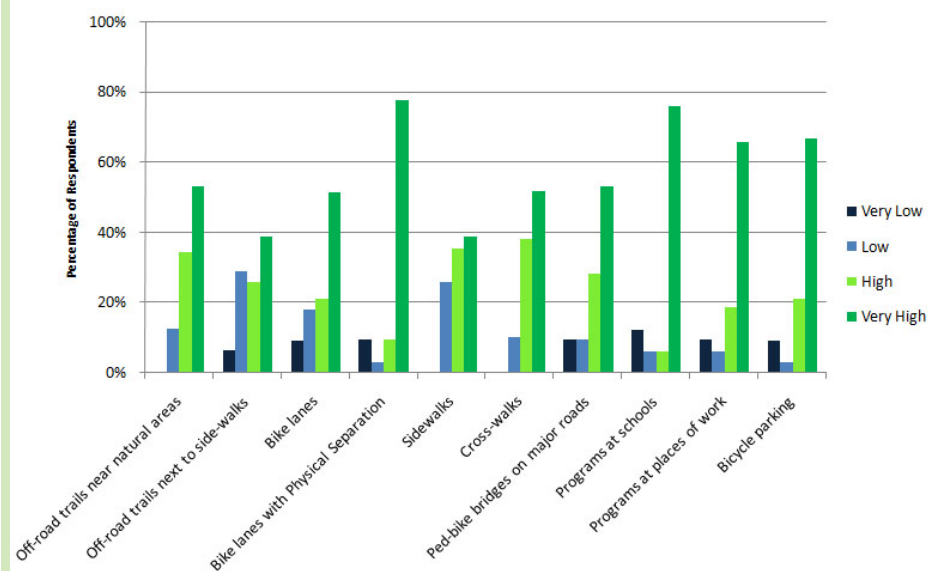
Graph 1: Respondents rate the contribution of Walking and Bicycling in regards to the environment, economic development, recreation, transportation, personal health, public health, happiness and the creation of great communities.

Although 'personal health' and the 'environment' were perceived as the two areas where walking and bicycling would have the most impact, at over 80% each, others were also high including 'recreation', 'public health', 'happiness' and 'creating great communities'.

The two areas where the participants did not perceive as high of a contribution were 'transportation' and 'economic development'.

Question 2: How would you rate the need for the following programs and facilities in the Mississauga South community in order to increase the number of people walking and bicycling on a regular basis?

Need for Facilities and Programs to Increase Walking and Cycling in Mississauga South



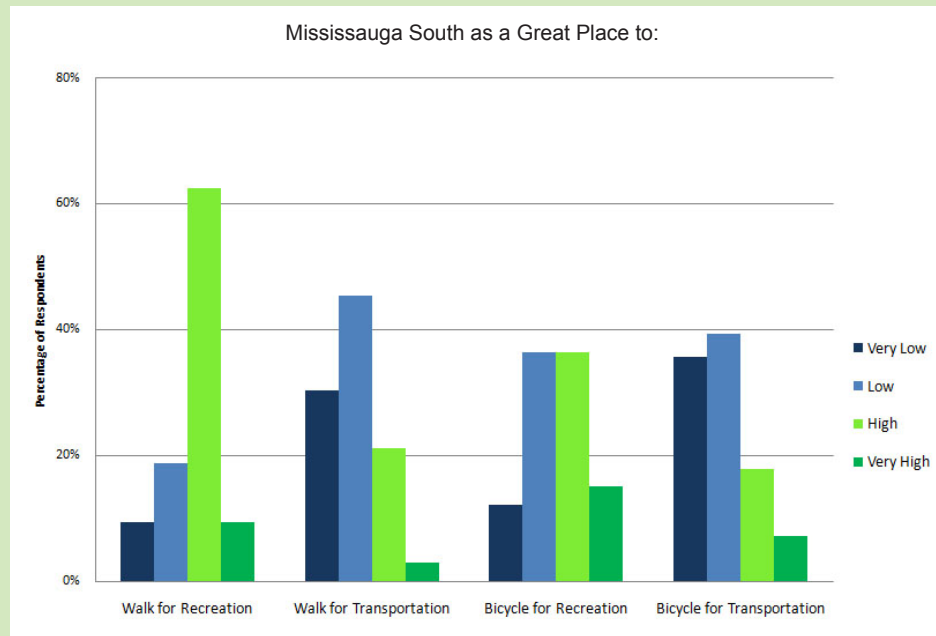
Graph 2: Respondents rate the need for different programs and facilities to increase walking and cycling in Mississauga South

The top suggestion to increase walking and bicycling was to have bikeways with physical separation from cars and from pedestrians. Out of the ten options, only other three others received more than 60% support and they were: programs at schools, bicycle parking, and programs at places of work. The lowest rated category was 'off-road trails next to sidewalks'.

What You Said: Results of the Individual Surveys



Question 3: How would you rate Mississauga South as a great place to:

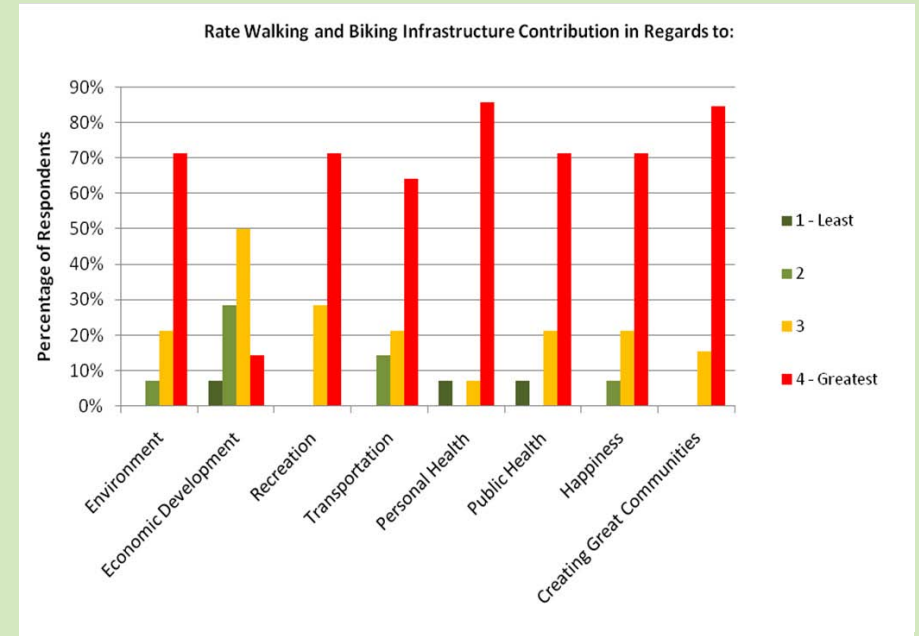


Graph 3: Respondents rate Mississauga South in the potential its citizens have to walk for recreation, walk for transportation, bicycle for recreation, and bicycle for transportation.

Generally, not one category was rated exceptionally high. Walking for recreation was rated the most positively with 61% of the respondents giving it a rating of high. The lowest rated category was 'bicycle for transportation' with 75% of the respondents giving a combined rating of low and very low. Similarly, walking for transportation was also rated quite low with only 3% of the respondents giving it a rating of very high.

Thursday March 12th, 2009

Question 1: Please rate the importance of active transportation for the following:



Graph 4: Respondents rate the contribution of Walking and Bicycling in regards to the environment, creation of great communities.

Graph 4 shows that the overwhelming majority of respondents see walking and bicycling as contributing to a wide range of desirable community characteristics, with the holistic 'creating great communities' category receiving the highest rating from the most people. Respondents were most sceptical about the relationship between economic development and active transportation, although this category was still seen as connected by 64% of respondents.

What You Said: Results of the Individual Surveys



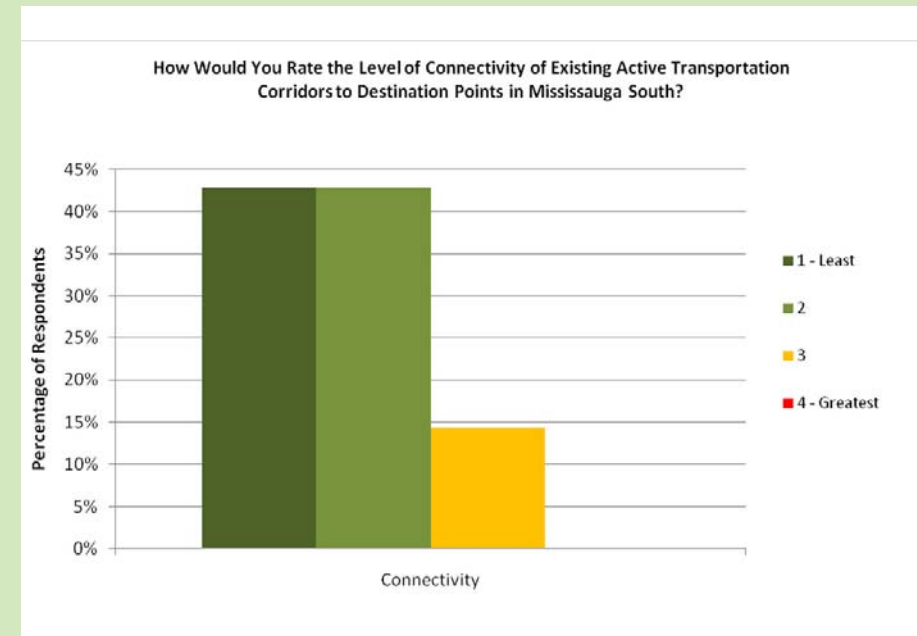
Question 2: How would you rate Mississauga South as a great place to:



Graph 5: Respondents rate Mississauga South in the potential its citizens have to walk for recreation, walk for transportation, bicycle for recreation, and bicycle for transportation.

Graph 5 shows that Mississauga South rated fairly well as a place to engage in recreational activities, with walking for recreation and bicycling for recreation both rated positively by 62% of respondents. Walking and bicycling for transportation were not rated well; walking for transportation received positive ratings from only 31% of respondents and bicycling for transportation received positive ratings from only 15% of respondents. Note that not a single respondent gave bicycling for either purpose a high score.

Question 3: How would you rate the level of connectivity of existing active transportation corridors to destination points in Mississauga South?



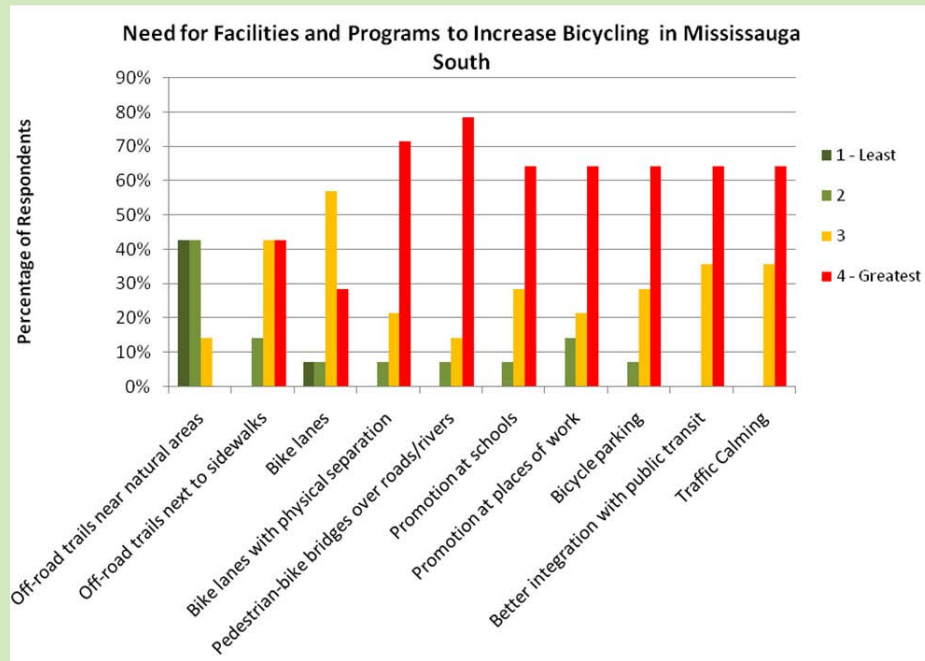
Graph 6: Respondents rate the current level of connectivity of existing transportation corridors to destination points in Mississauga South

Graph 6 shows that 86% of respondents rated the level of connectivity between existing active transportation routes in Mississauga South as poor or somewhat poor. In contrast, only 14% of respondents rated the level of connectivity in Mississauga south as somewhat good.

What You Said: Results of the Individual Surveys



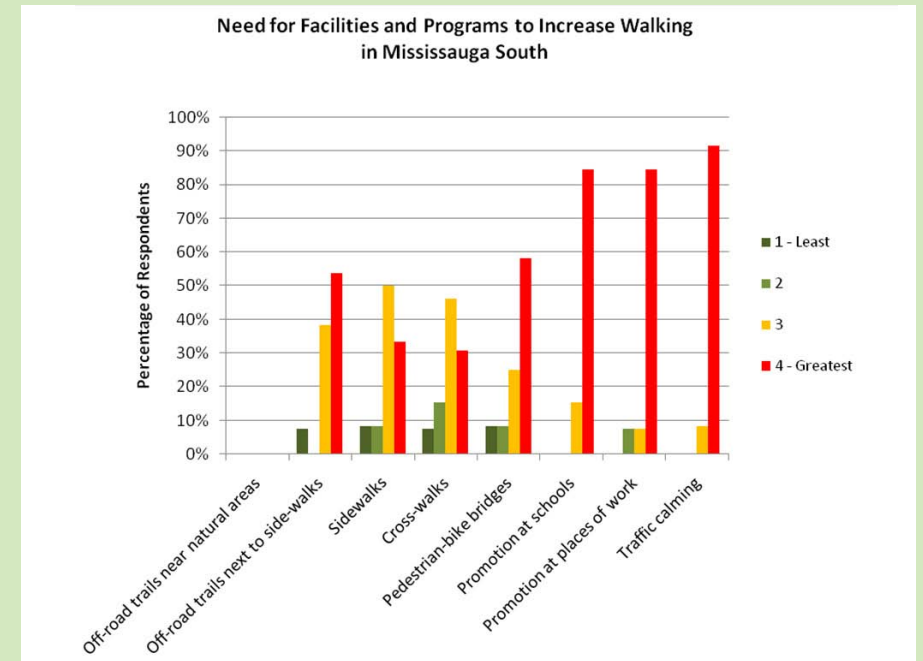
Question 4: How would you rate the need for the following programs and facilities in the Mississauga South community in order to increase the number of people bicycling on a regular basis?



Graph 7: Respondents rate the need for different programs and facilities to increase bicycling in Mississauga South.

Graph 7 shows that respondents identified many high needs areas in order to get more people riding bikes regularly in Mississauga South. While 'traffic calming' and 'better integration with transit' were rated as high or somewhat high need by 100% of respondents, 'bike lanes with physical separation' and 'pedestrian-bike bridges over roads/rivers' were rated as high need by more people and received combined high/somewhat high scores from 93% of people. Also rated as high or somewhat high need by over 90% of people were 'promotion at schools' and 'bike parking'.

Question 5: How would you rate the need for the following programs and facilities in Mississauga South in order to increase the number of people walking on a regular basis?



Graph 8: Respondents rate the need for different programs and facilities to increase walking in Mississauga South.

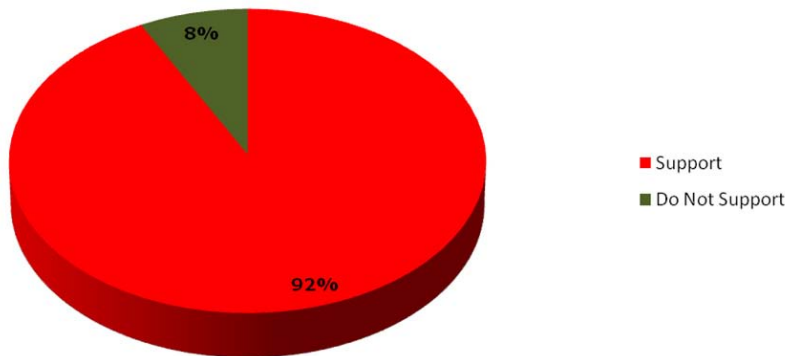
Respondents identified a need to improve walking conditions and shelter pedestrians from vehicle traffic. Graph 8 shows that traffic calming was rated as high need by the most respondents (92%) and as at least somewhat necessary by all respondents (100%). A less pressing, but equally popular need was 'off-road trails next to side-walks', which was rated positively by 92% of respondents. 'Promotion at schools' and 'promotion at places of work' were also seen as necessary or somewhat necessary by 100% and 92% of respondents, respectively.

What You Said: Results of the Individual Surveys



Question 6.1: Would you support a municipal policy that would ensure all transportation, planning, and development decisions take into account the needs of all users of public rights-of-way, in this order of priority: pedestrians, cyclists, transit users, motorists.

Percentage of Respondents Who Support Prioritizing Walking, Bicycling, and Transit in Transportation Planning

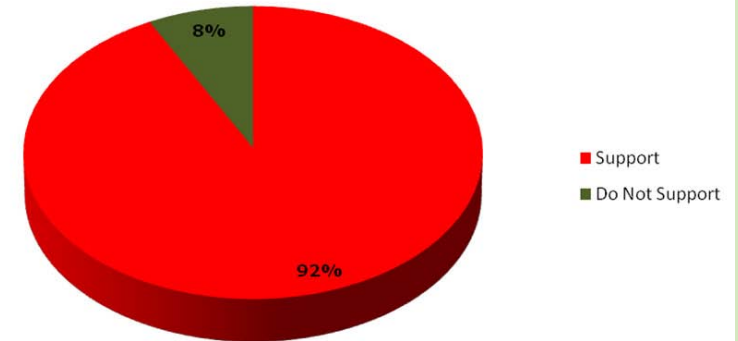


Graph 9: Respondents rate whether they would or would not support a town policy that would ensure all transportation, planning, and development decisions take into account the needs of all users.

This question resulted in a very positive response from the participants. 92% of the people would support a municipal policy that would ensure all transportation, planning, and development decisions take into account the needs of all users of public rights-of-way. This municipal policy would put the priority of: pedestrians, cyclists, transit users, motorists.

Question 6.2: Would you support a municipal policy that would ensure all transportation, planning, and development decisions give priority to the most vulnerable citizens: persons with disabilities, children, and seniors.

Percentage of Respondents Who Support Prioritizing the Needs of Disable People, Children, and the Elderly in Transportation Planning



Graph 10: Respondents rate whether they would or would not support a municipal policy that would ensure all planning and development decisions give priority to the most vulnerable citizens of Ajax

Much like question 6.2, there was an overwhelming support for a municipal policy that would ensure that all transportation, planning, and development decisions give priority to the most vulnerable citizens, such as persons with disabilities, children, and seniors. In this regard, 92% of the respondents said that they would support such a policy.

Community Recommendations



Recommendations from the Community Workshop

Each group was asked to discuss possible ways to make the community more pedestrian-friendly, bicycling-friendly, and a **great place**.



The following recommendations were of highest importance for the groups and most in alignment with the results of the individual surveys. The full transcript of all ideas can be found in Appendix A.





YEAR 1 – Low cost, high benefit, good visibility and easy to implement actions that could be taken right away to make Mississauga South more:

BICYCLING - FRIENDLY:

- Install functional, secure bike racks in visible places at local retail areas, GO stations, schools, community centres, libraries, and other gathering places.
- Expand bicycle parking (quantity, quality, location)



Highly visible and accessible bicycle parking (Odense, Denmark).

- Implement a promotional campaign of trails around Mississauga South
- Maintain sidewalks and trails throughout the entire year so that they are safe and usable for both cyclists and pedestrians
- Create a pilot project similar to the Queens Quay where motorized traffic was separated from pedestrians and cyclists with a flower bed



Flowers were placed as a physical barrier in The Queen's Quay pilot project as a great way to introduce a new concept to Torontonians.

- Implement a tax credit for bikers



PEDESTRIAN-FRIENDLY:

- Reduce Lakeshore Rd. to three lanes by making a reversible centre that changes according to direction of rush hour traffic via overhanging traffic lights.
- Implement a Car Free Sunday's event along Lakeshore Road stretching from Clarkson to Lakeview.
- Install infrastructure to help pedestrians cross busy streets safely, including better lighting, expanded signage, coloured pavement in crosswalks, and countdown timers. Efforts could be focused on Lakeshore Rd, Hurontario St, Southdown Rd, and Cawthra Rd.



An intersection with adequate crosswalks, traffic calming measures, textured bike-ways, pedestrian and cycling oriented traffic lighting, and pedestrian islands.

- Subsidize small businesses more effectively to promote specialty shops in close proximity to homes as opposed to giant and distant shopping centres
- Implement a tax credit for those that do not drive
- Sidewalks and trails need to be maintained throughout the entire year, especially in the winter when a lack of snow removal reduces pedestrian safety and accessibility.



Waterfront at Port Credit in the winter lacks proper trail and sidewalk maintenance.

Community Recommendations



A GREAT PLACE:

- Improve and expand public transportation throughout Mississauga South to make it more accessible by foot or bike (See Boudreaux LRT case study).
- Undergo a variety of low cost beautification projects, i.e. plant more flowers in public spaces, especially perennials which are cost effective because they come back year after year.



Great public spaces and beautification programs bring people out of their homes to enjoy the streetscape. NYC's implementation program was so successful because it focused on low cost, visible changes.

- Test effectiveness of roundabouts on Lakeshore Rd. at Clarkson Rd., Meadow Wood Rd., and Stavebank Rd.
- More athletic infrastructure such as public tennis or basketball courts to promote physical activities to youth



Map 3: Recommended roundabout at Stavebank Rd.



Map 4: Recommended roundabouts at Meadow Wood Rd. and Clarkson Rd. on Lakeshore Rd. West.

Community Recommendations



YEAR 2 - 5 – Higher cost, longer-term initiatives that could be taken to make Mississauga South more:

BICYCLING - FRIENDLY:

- Plan and construct a network of high quality bicycle facilities. Most, if not all, streets in the area should be safely navigable by bicycle. On-street facilities should be separated from car traffic on arterial streets, and have differently coloured pavement or painted lanes and support at intersections on quieter streets. Off-road facilities should be continuous and well connected to other on and off road routes

- Make shower facilities mandatory in newly constructed commercial buildings.
- Make Mississauga South a greener place to bike by completing the connection along the waterfront, Credit River, and various creeks.



An example of separated bikeways in Paris.



Community

Re-envisions Lakeshore Road



One of the most common recommendations to come out of both Mississauga South workshops was to make space for two physically separated bike lanes on Lakeshore Road by removing one car lane and creating one reversible car lane in the middle. This idea is one that could transform the look and feel of Lakeshore Road and Mississauga South as a whole. In light of this, Walk & Bike for Life has created visual interpretations of this recommendation. There are three options which have been developed.



Rush-hour reversible centre lane with on street parking, moving east in the morning and west in the evening. Also present are widened sidewalks, physically separated bikelanes, and bus stops.

Community

Re-envisions Lakeshore Road



Left-turn centre lane with on street parking, widened sidewalks, physically separated bikelanes, bus stops, and car parking on north side.

Community

Re-envisions Lakeshore Road



Street car expansion with two rails along Lakeshore road with parking on north side, widened sidewalks, bus stops, and physically separated bike lanes.

Community Recommendations



Site Example - New York City

The before and after photos show the transformation these streets went through. The construction of the bike lanes with boulevards and a buffer area took a total of 30 days to complete. Crosswalks and interections took 60 days to complete.

New York's World Class Streets program is developing several new streetscape projects across the city to enhance public spaces. The World Class Streets initiative is incorporating several methods in enhancing public spaces. It includes: a public plaza program, Broadway boulevard project, complete street projects and design standards, safe streets for seniors and students, public art program, coordinated street furniture, and weekend pedestrian and cycling streets. New York is committed to achieving its goal of having a public open space for every resident within 10 minutes of walking for every resident. To do this, the city is creating or enhancing a public plaza in every community. In June 2008, New York launched the NYC Plaza Program that established long-term partnerships between the NYC Department of Small Business Services and community groups in order to maintain and program the plazas so they continue to be well managed and active destinations. One of the great accomplishments of the project is the revamping of 9th avenue. The before and after photos show the extensive transformation the street went through.



Madison Square after DOT pilot project



9th Avenue Before



9th Avenue After

Community Recommendations



PEDESTRIAN-FRIENDLY:

- Improve connectivity in Mississauga South with a pedestrian bridge or underpass on major roads across the QEW.



Map 6: Potential site for a pedestrian/cyclist only bridge that participants proposed for Mississauga South. It would create a better connection between Saddlington Park and the rest of the waterfront trail at Port Credit.

- Build a pedestrian bridge between Saddlington Park and Port Credit.
- Create a multi-use trail for pedestrian/biking linking north-south (Credit River) areas of the city.

- Improve the waterfront trail with a path above the water connecting Port Credit to RK McMillan Park.



A trail in Minneapolis that has been elevated along the water where the private property stretches right to the lakefront. This method could be used along the waterfront of Mississauga South both on the lake and along the Credit River along the golf courses to connect to Streetsville.

- Beautify space around Mississauga South by providing more parks and urban gardens; planting more flowers and shrubs in public spaces; planting street trees to provide shade for pedestrians; and encouraging the installation of green roofs on buildings.

- Close two lanes of Lakeshore Rd. to cars and open it for people every Sunday morning throughout the summer or the entire year.



NYC's "Summer Streets" opened the streets to people three Saturdays in August 2008.

- Implement the 'Complete Streets' policy city-wide and re-build all arterial roads into Complete Streets that are safe for pedestrians, cyclists, public transport and cars.

Community Recommendations



A GREAT PLACE:

- All new sidewalks should be considered for solar heating to improve sidewalk maintenance and reduce costs.
- Density and zoning standards must be re-evaluated in order to increase residential density and encourage mixed use; commercial, retail and residential.
- Public bike lockers should be placed at all mobility hubs (GO Stations and well used transit stops) and high traffic commercial areas.



Public bike lockers introduced in Toronto.

- Encourage school administrators and parents to organize 'walking school buses' to help students to walk to school. For more information about starting up this program in Mississauga South contact Green Communities Canada and their Active and Safe Routes to School Program.

ADDITIONAL COMMENTS

- Identify, support and reward champions in the community.
- Prioritize mixed use development that blends commercial and residential.
- GO Transit must implement actions to be more bike friendly.



An example of Go Transits newly implemented sheltered bicycle parking at a station in Southern Ontario.

- Improve the promotion of public events in Mississauga South so that a broad audience is reached.



CONCLUSION

The residents of Mississauga South have identified several key actions to take in order to make Mississauga South a more vibrant and active community.

In terms of making Mississauga South a more bike friendly area, the main recommendation was to implement physically separated bike facilities on arterial roads. This initiative was also proposed as an initial pilot project by creating a physical barrier using a bed of flowers similar to the Queens Quay project in Toronto. In addition, workshop participants also proposed removing a car lane from Lakeshore Rd. in order to put in separated unidirectional bike facilities on both sides. Increased bike parking, winter maintenance of trails, and an improved integration of biking with public transportation were also seen as important actions that would improve bicycle ridership in Mississauga South.

To make Mississauga South more pedestrian friendly the workshop participants believe that Mississauga South must undergo a beautification process. In addition to this, suggestions also included holding more events and festivals on the streets and implementing Car Free Sundays. One of the long term initiatives proposed by the respondents was a pedestrian bridge in order to improve the connectivity of walking trails.

There were also many recommendations for overall improvements in order to make Mississauga South a great place. These included roundabouts on a few intersections on Lakeshore Rd., bike lockers, a program to identify and support local champions as well as a program to encourage students to bike to school.

The aforementioned recommendations were developed as a resource for stakeholders to draw on when making any new plans or developments within Mississauga South. General ideas and examples for effective pedestrian-friendly, bicycling-friendly, and public place improvements can be found in the Toolkit contained in Chapter 4 of this report.



A waterfront destination point located along a trail. An example of a public space where people are able to stop, sit and relax.

Chapter 3

Next Steps

Moving from Talking to Doing



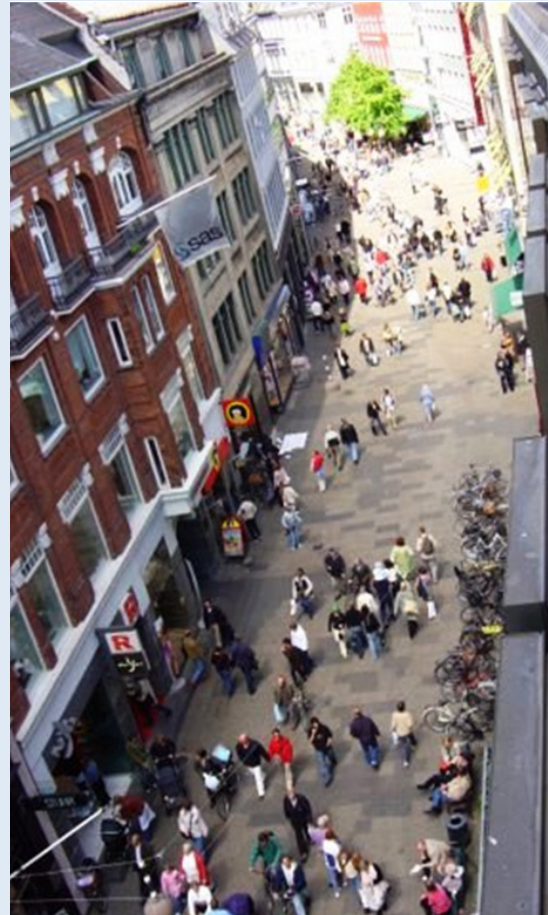
Harnessing this form of people-oriented planning can help cities become world class destinations. But how do we turn these ideas into action? Walk & Bike for Life, has spent many years working on walking and bicycling in cities.

After reflecting on his successes, Gil has identified the following **five elements which are necessary in order to move from talking to doing:**

Leadership

A Movement needs many leaders. Having passionate, committed, and knowledgeable leaders can inspire people to not only understand these issues but act upon them as well. It's not about knowing everything; it's about motivating others and making them understand the importance of your work. It is understood that planning and transportation issues can be incredibly complex and controversial. However, by having leaders who are more focused on doing the right things rather than doing things 'right', cities can begin to develop on a human-focused scale. Leaders often occupy positions of power but this is not always necessary. You can become a leader in your community by gathering the knowledge and resources necessary to inspire and create action. Getting involved in relevant community events is a great way to get yourself connected to other actors within your community. Nevertheless, whether it is you who is leading or not, it is imperative that you make your voice heard by those who are. This can be done through, emails, letters, petitions, or events.

Although having passionate, progressive leaders in your area makes it much easier to implement change, don't give up if this is not the case. There are still four more factors that can turn *talking* into *doing*.



One of Copenhagen's successful pedestrian plazas

Political Will

When it comes to building infrastructure in our city, community members can only do so much. The plans and proposals for new roads, trails, public spaces, and parks need to come from our politicians. It takes guts to take an innovative idea and move forward with it – but the rewards of being that person are considerable and long-lasting. In Copenhagen, the first steps towards improved public spaces were met with intense backlash on multiple fronts. Not only were business owners worried about the impact upon their profits, but drivers were also worried about decreased car mobility. Despite this reaction, leaders in office had a long term vision which they stuck with– and now residents are grateful for their politicians' foresight. With the improved economic activity and decreased congestion brought on by their plans, Copenhagen's placemakers proved that great politicians and city staff with the courage to create real change can build world class cities.

That being said, politicians work for the people, and if there is no visible support for an issue coming from constituents, then politicians will be much less likely to fight for it. With so many matters on their minds, we cannot expect politicians to focus on the issues that are not being brought to their attention. Local groups and citizens must work together to make these topics visible to politicians as well as encouraging them to make the gutsy decisions necessary to create real change.

Moving from Talking to Doing



“Doers” in the public sector

It's not enough for politicians to talk about their goals and ideas; someone needs to do the work to follow through upon those promises.

An excellent example is Janette Sadik-Khan, Transportation Commissioner for New York City who was inspired by the cycling facilities that she saw around the world. Thirty days after she announced New York City's new bike plan, a physically separated bicycle lane was set up on 9th Avenue. Sadik-Khan is now transforming the meaning of transportation in New York City and being hailed as a visionary for her actions.

It is a common theme within the public sector to find different departments, who often work on similar or neighbouring infrastructure, to lack communication or cohesion. Often you will find work being duplicated because certain departments don't think to, or prefer not to work together. Local organizations, citizens, and politicians must work to bring these departments together in order to improve co-operation and efficiency. For example, many municipal, regional, and provincial transportation, public works departments build infrastructure without consulting each other. This often leads to different areas of the same road or public space to be worked on at different times or with different characteristics. This is not only a waste of time, but a massive waste of money. Promoting a more cohesive communication system will help to align departments in both principle and practice. This alignment will in turn lead to more efficient and effective action. Everyone in the public sector should remember that citizens are paying them to get things done, not to have 20 reasons why things can't be done.



New York City's first physically separated bicycle lane.



New York City continues with impressive improvements on Broadway

Community Engagement

It takes the work of a strong and active community to make change in our cities. Everyone has their own cause, so if you aren't writing letters and making calls to city officials, then someone else is. If city representatives are not hearing about an issue, they have no way of knowing that it is a priority to their constituents. So citizens need to speak up, speak to their elected officials and make known that transportation is an important issue in this community – politicians are paid to listen.

Sense of Urgency

With carbon emissions pushing the globe's temperature to rise at record rates, and unpredictable fuel prices making it difficult for households and public agencies alike to budget from one year to the next - transportation is one of the most urgent issues facing us today.^{xvii} So why aren't we feeling the pressure to invest in active transportation? The connections are not being made concerning the important role that transportation will play in meeting the great challenges of this generation. A lack of urgency permits complacency and procrastination – attitudes that cities cannot afford. The importance of this issue must be made clear so that all stakeholders pay attention and to begin taking action now. In conclusion, with the issues of traffic congestion, obesity, global warming and the financial crisis, this should be very clear, but it is not.

Community Action Group



What is a Community Action Group?

The Community Action Plan for Life program aims to transform ideas into action, and to prompt real, tangible change by harnessing the energy and capability that exists within communities. Walk and Bike for Life acknowledges that the members of every community understand their unique challenges and solutions better than any outside organization. Therefore, the key actor in this process will be the Community Action Group (CAG), a locally driven coalition of individuals and organizations with the passion and capacity to advance initiatives for walkability, bike-ability, and the creation of great public spaces in a given jurisdiction. CAGs will include representation from any and every interested party: members of the public, government agencies, business leaders, environmental groups, school groups, and any other concerned community members. The Community Action Plan for Life program will generate action within a number of promising communities across Ontario through the development of each CAG. Our Walk and Bike for Life Community Action Groups will be given the opportunity and resources to work at a grassroots level to implement unique and localized solutions in their neighbourhoods.

When working with Community Action Groups, Walk and Bike for Life will serve a centrally supporting role, providing assistance with administration, public relations, media and advocacy strategy, and research. As the groups develop, Walk and Bike for Life will facilitate discussion and contact among CAGs throughout Ontario to create a mutually supportive network for information and resource sharing on walkability, bike-ability, and quality of life issues in the province.

**individuals and
organizations**
with the passion and capacity to
advance initiatives for
walkability, bikeability, and the
creation of great public spaces

Chapter 4

Tool Kit

Myths vs. Facts



When it comes to dedicating time and money to the creation of parks, trails, and people-friendly infrastructure, naysayers tend to raise the same objections time and again. Here we will take some time to put these common misconceptions and misunderstandings to rest. This will allow us to focus our time and energy on finding solutions to the challenges faced by our neighbourhoods and on overcoming real, rather than imagined, obstacles.

Myth: Walking and bicycling are not safe modes of transportation.

Fact: Walking and cycling should be made safe. Activities become safe when appropriate infrastructure and safety measures are implemented.

Statistics in Canada show that more and more people are choosing to use their cars as their main means of transport.^{xviii} An average of 7 pedestrians and 1 cyclist are killed in motor vehicle accidents every week in in Canada.^{xix} To put that in perspective - each year almost twice as many Canadians are killed by cars while walking and cycling than are killed by firearm violence.^{xx}

While there are dangers to walking and cycling in Canadian neighbourhoods, there is no reason to throw out walking and cycling as legitimate modes of transportation. Think about it - when water is contaminated, we don't tell people to start drinking juice, we clean up the water! In the same way, we need to clean up our streets by implementing the infrastructure that makes them safe for cyclists and pedestrians. Only through the construction of such infrastructure will pedestrian and cyclist deaths decrease.

Figure 3 shows that cyclist and pedestrian fatality rates decline in direct proportion to the quality of infrastructure in a city. The reasons behind this decline are multilayered. As infrastructure improves, more people cycle. As more people use their bicycles, cyclists become a common sight on the road, making drivers much more aware of, and reactive to, their presence. Conversely, drivers who are not used to seeing cyclists tend to be less respectful, aware and comfortable driving alongside them. In fact, Figures 4 and 5 show that cyclist and pedestrian fatality rates also decline in direct proportion to the number of pedestrians and cyclists using the sidewalks and roads. In the U.S, cycling and walking levels are only about 1% and 5% respectively, with death rates at about:

7 deaths/ 100 million km travelled for cyclists, and
14 deaths/ 100 million km travelled for pedestrians.

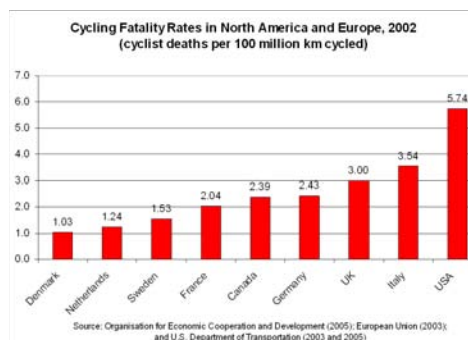


Figure 3: Cyclist fatalities per 100 million km of riding. Denmark, famous for their extensive walking and cycling infrastructure, has a fatality rate that is less than half that of Canada's.

In the Netherlands, where cycling and walking levels are more than 4 times higher than those in the US, death rates drop dramatically to 2.5 cyclists/ 100 million km travel and only 2 pedestrians per 100 million km travelled.

So, yes, walking and cycling *are* dangerous without the proper infrastructure in place. Once that infrastructure is in place, more people will use non-motorized transportation, cars will become more used to sharing the roads, and less pedestrians and cyclists will be killed – making our roads safer for all.

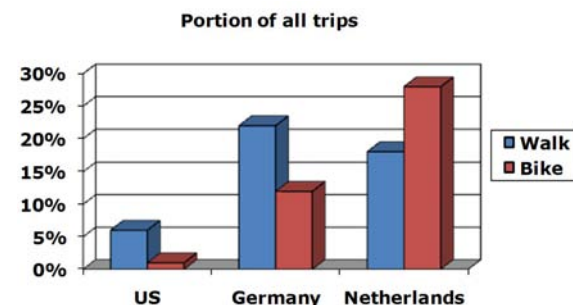


Figure 4: Percentage of trips made by foot and bicycle in the United States, Germany and the Netherlands

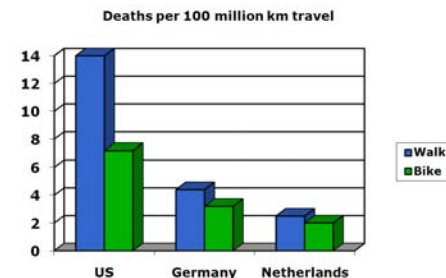


Figure 5: Cyclist and pedestrian deaths per 100 million km travelled. Fatality rates are dramatically lowered in countries where there are more pedestrians and cyclists on the roads and sidewalks.

Myths vs. Facts



Myth: Creating walkable, bikeable communities, trails and parks is too expensive.

Fact: Building healthier communities is a matter of priorities. It might be more expensive *not* to create healthier communities.

From 1995 – 2001 Bogota Colombia, a city with approximately one eighth the per capita income of Canada, built over 850 parks, including 5 metropolitan parks. In 3 years, a 280 km separated bicycle path network was built in the heart of the city. Furthermore, the city's bike share program increased to 300 000 users from 28 000. The point is -

changing our cities is more a matter of doers, not dollars.

With a cohesive long term plan, short term attainable goals and most importantly, a serious desire to make change, our cities' wealth can be used to reflect our priorities. Of course, cities cannot fund everything proposed, but to say that this infrastructure is too expensive is simply not the case. Pedestrian and cycling infrastructure is much cheaper and serves many more people per dollar than does infrastructure for motorized vehicles. Funding is dependent on how high these issues are on decision makers' list of priorities. Therefore, if they choose to make it a priority, they will always have the funding.

Myth: The people in this city love their cars, this will not transform into a city of cyclists.

Fact: Bicycle infrastructure increases bicycle commuting.

In 1990 Portland, Oregon had a disjointed and minimal trail network made up of bikeways which were often disconnected from one another. The city's residents were not all interested in biking. The majority of trips made to the city centre were by car, with only 2% made by bicycle in most places.^{xxi} All that changed when in 2000 a Transportation Master Plan was implemented that included an extensive, accessible and cohesive cycling network (Figure 6). A large part of the city now boasts ridership of over 5%.^{xxii}

In other words, Portland officials doubled their city's ridership by increasing the extent and integration of their bike trails.

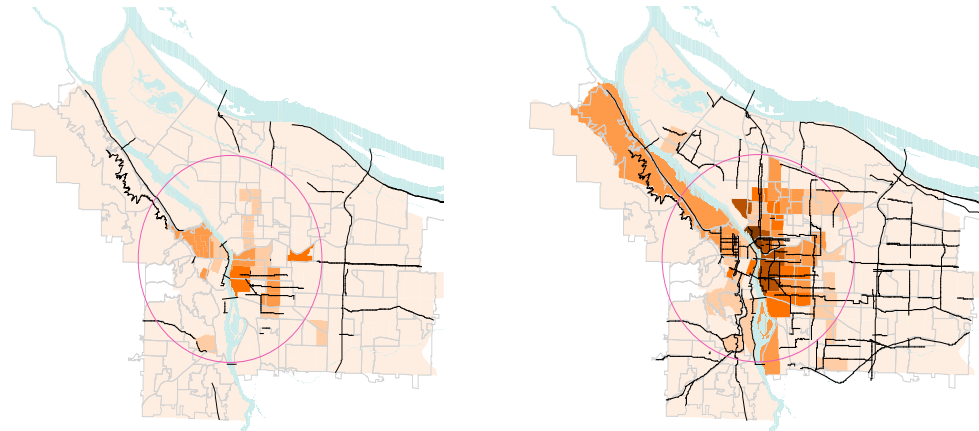


Figure 6: Portland's cycling trails moved from disconnected in 1990 (left) to cohesive and extensive in 2000 (right). Ridership doubled as a result of the change.

Myths vs. Facts



Myth: Winter makes active transportation impossible in Mississauga.

Fact: Winter is a challenge that can be met. With proper maintenance of sidewalks and well-designed trails, all residents can enjoy active mobility all year round.

Average annual snowfall in Mississauga is 115 cm.^{xxiii} That is less than nearby Toronto (133 cm) and Montreal (217), or even Calgary (126 cm), and not really that much more than Canada's cycling haven, Vancouver (47 cm).^{xxiv} Winter makes it even more important to implement measures which prevent residents from being stranded once the snow begins to fall. With proper year-round maintenance, including ploughing and salting of sidewalks, walking can remain viable and safe throughout the winter – and remember that every trip includes at least a short walk, even if it's just a dash from the parking lot. Bike lanes should be cleared through the fall and spring seasons. With careful design of off-road trails, snowshoeing, cross-country skiing, and snow biking can be substituted for bicycling in winter months. With proper support, Mississauga South community members can enjoy an active outdoor lifestyle and good personal mobility all year round.



Year-round maintenance of trails allows people to use active transportation even in the winter months

Myth: Canadian people want more cars and more highways.

Fact: When citizens become engaged, cities focus on people.

In the Economist's 2007 ranking of the world's cities, **Vancouver was rated the number 1 most liveable city in the world.** When asked, the Economist Intelligence Unit cited low crime rates, little threat from terrorism, and advanced **communications and transportation infrastructure as the reasoning behind Vancouver's rank.**^{xxv} The city's award winning transportation isn't car focused. In fact, city staff, politicians and citizens haven't allowed new highways into Vancouver's city centres in 30 years! No one group is dictating these decisions – Vancouver prides itself on extensive citizen engagement and has actively chosen a people-centred way of life.



City planners in Vancouver, with extensive citizen input, coordinate their planning of Land Use and Transportation.

Myths vs. Facts



Myth: European cities can't be used as a guide to make this city more walkable and bikeable. They were built to be people-centred hundreds of years ago.

Fact: Many European cities have seen drastic turnarounds in the last 20 years by taking risks and making the tough decisions during their urban planning development.

Fifteen years ago citizens of Copenhagen, Denmark thought that a vibrant public life based around walking and bicycling was impossible – residents were too dependent on cars, the city's weather was too harsh, and extensive walking and biking was not part of Danish culture. Today, residents know better.

Figure 7 shows that in 25 years the number of people using bicycles as their primary vehicle in Copenhagen has doubled. In those 25 years the number of bicycles entering Copenhagen during the morning rush hour has increased from 8 000 to over 20 000, while the number of cars entering the city has decreased from 23 000 to only 18 000. Copenhagen's planners made a choice and took the necessary measures to create a walkable, bikeable city. The result has been citizens who are proud, happy and comfortable in their community- no wonder outsiders think that life has always been this way.



Figure 7: Morning rush hour commuters into Copenhagen. From 1990-2005 bicycle use increased dramatically and now surpasses car use in the downtown core.



Copenhagen has put active transportation as a top priority issue and has made the necessary changes in the past two decades to create a safe and accessible transport network for all users

Myths vs. Facts



Myth: Walking and cycling infrastructure is about painting lines on the pavement.

Fact: Designing proper infrastructure is about re-evaluating our priorities.

A survey in Portland showed 65% of cyclists to be male and 70% of cyclists aged between 25 and 50 (See Figure 8).^{xxvi} This gender and age imbalance in the cycling community is a direct result of the design of our streets. A prevalent attitude among decision makers seems to be that if there is enough money left over, a bike lane might be painted onto the road. The result is roadways that are great for cars, but intimidating and unusable for most cyclists, and dangerous for those who do cycle.

Transportation, just like all other government matters, must be inclusive, and must reflect the needs of all citizens, especially the most vulnerable. Riding a bike beside a large transport truck when separated by only a painted line makes even experienced cyclists feel threatened. So, if you wouldn't feel comfortable putting your 80 year old grandparents out on a bike in your city, consider it a sign that you've still got work to do.

Building better infrastructure requires the recognition that all means of transportation are equally important and, therefore, need to be given equal consideration in planning. That means investing money in physically separated bike lanes, wider sidewalks, clearly marked intersections, and coherent trail systems. It means making the transportation of people, rather than cars, into the primary consideration of road design.



Physically separated facilities are safe and comfortable for all users: drivers, cyclists, and pedestrians.

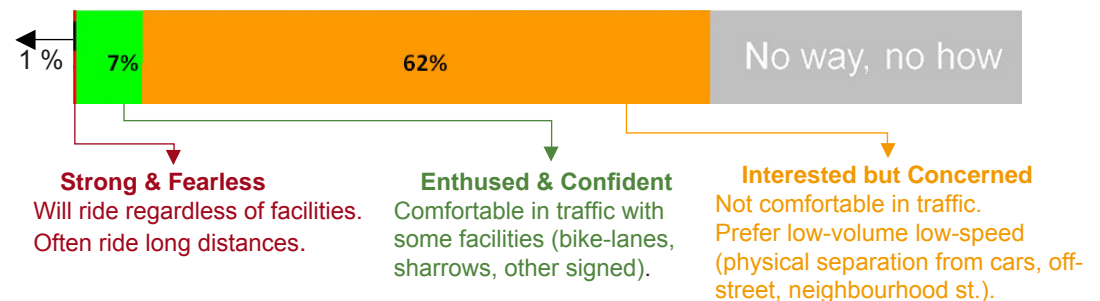


Figure 8: A study of cyclists in Portland shows that 62% of riders fall into the "interested but concerned" category. To make a real difference in the habits of residents, planners must satisfy the concerns of this group. A bikeway should not be considered finished until it is safe enough for the most vulnerable commuters—namely children and elderly.

Case Studies



People Are Doing It! Case Studies in Walkable, Bikeable Communities

Sometimes you need to see it to believe it. Each of the following cities had hurdles to overcome similar to those faced in Hamilton. Taking inspiration from their innovation and experiences can help us to work toward building our cities into unique, healthy, and happy communities.

Chain of Lakes – Minneapolis

Putting their beautiful waterfront scenery to good use, Minneapolis created their famous “Chain of Lakes.” With parks and trails located along the lakeshore and 21.4 kilometres of walking/jogging/biking friendly pathways the Chain of Lakes provides a safe and accessible opportunity for residents to actively transport and enjoy themselves.^{xxvii} It also draws over 14 million visitors a year. With the purchase of food, services and accommodations that those visitors make, the trails are generating millions of dollars in revenue for the city.



Minneapolis residents and visitors making the most of their waterfront location

Winter Cycling- Copenhagen, Denmark

In light of Ontario's winters, some might say that cycling infrastructure is a waste of time and money, claiming that even if bikeways were cleared and salted, no person would want to leave the comfort of their car for the cold of winter. In fact, a number of cities with cold, snowy winters have looked past this perceived impediment and found such perceptions to be unfounded. In Copenhagen, Denmark 30% of residents cycle to work and 70% of those cyclists continue to bike even during Copenhagen's cold, snowy winters.^{xxviii}



Commuters make their way to work during a Copenhagen winter. 70% of cyclists continue to ride during Copenhagen's winters.

Case Studies



Car Free Sunday – Ottawa, Canada

Every Sunday from Victoria Day to Labour Day, Ottawa closes its streets to cars and opens them to people. Over 50 km of roadways are shut down each week allowing citizens and tourists to actively enjoy the city's streets. Car free Sundays are a great way to foster a community atmosphere – not only do they keep people active, but they change our perceptions by presenting our well paved, wide and comfortable roads as public places for all citizens.



Taking back the streets – enjoying Ottawa's wide open road space on the city's summertime car-free Sundays.

LRT in Bordeaux, France

The city of Bordeaux, France has implemented a new LRT system in an historic and visually sensitive town. The Bordeaux LRT uses innovative technology that removes overhead wires from the streetscape. Using a ground level power supply system the new LRT has managed to diminish the effects of visual pollution that are associated with many rail systems across cities. The ground level power supply system works on the principle that the conductor is only energized when the LRV is over it. In addition, the city used the opportunity of this large construction project and piggy backed on the investment with enhancements to the overall streetscape, facades and beautification. Overall, the citizens of Bordeaux have embraced their new LRT system and commend it for urban rebirth, visual unobtrusiveness, and more open green spaces in the area.^{xxix}

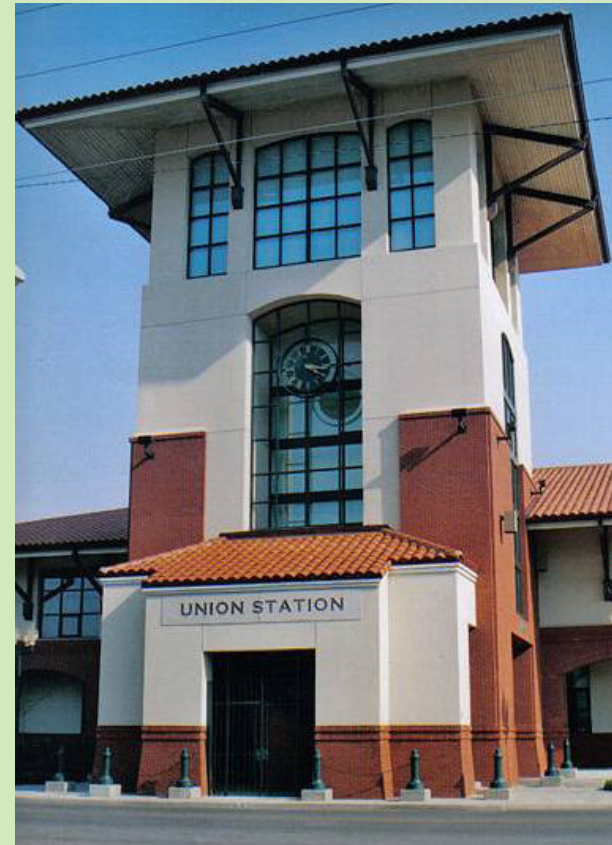


Bordeaux LRT



Multi-Modal Transportation Centre – Meridian Mississippi

In 1997 Meridian Mississippi, a city of only 38 314 people transformed their central railway station into a community hub and money maker. After consulting with architects, engineers, specialists and, most importantly, the local community, Meridian made a decision to capitalize on the potential of their transit station. Today the Station hosts a railway museum and conference room and is surrounded by a farmer's market, public park, restaurants and a designated festival and events area – all largely supported by the local Business Development Corporation. Local citizens love the station's integration into the community and have shown their financial support. The station offers a patron's program which allows citizens to donate anywhere between \$40 and \$2500 to dedicate plaques around the station. These plaques have been placed on anything from bricks to lampposts. Tourists are also showing their support for the transformation as the local industry has been stimulated and the station now regularly hosts events such as weddings, conferences and private parties.



Meridian Station, Mississippi

The 8/80 Rule



The 8/80 Rule



When roads are built, planners do not build one road for new drivers and a separate road for experienced drivers. When creating sidewalks and bikeways, we cannot make them only accessible to experienced cyclists and agile pedestrians. Walk & Bike for Life has created a rule of thumb to help individuals when they are evaluating bicycling and pedestrian infrastructure, we have dubbed it the 8/80 rule.

Step 1:

Think of a child that you love and care for who is approximately **8 years of age**. This could be a child, grandchild, sister, brother, cousin etc.

Step 2:

Think of an older adult, approximately **80 years of age** who you love and care for. This could be a parent, grandparent, friend etc.

Step 3:

Ask yourself: Would you send that 8 year old along with the 80 year old on a walk, or a bike ride on that infrastructure? If you would, then it is safe enough, if you would not, then it is not safe enough.

This rule may seem simple but it holds many implications. Interestingly, when you are forced to think of the ability of most cycling and pedestrian infrastructure to safely serve all citizens, they often fail.



Helpful Groups and Websites



Helpful Groups and Websites:

Walk and Bike for Life: www.walkandbikeforlife.org

WalkON: <http://www.walkon.ca/>

Ministry of Health Promotion: www.mhp.gov.on.ca

Canada Walks: www.canadawalks.org

Green Communities Canada: www.gca.ca

Waterfront Regeneration Trust: www.waterfrontrail.org

Ontario Trails Council: www.ontariotrails.on.ca

Complete the Streets: www.completestreets.org

Project for Public Spaces: www.pps.org

Transportation Alternatives: www.transalt.org

Gehl Architects: www.gehlarchitects.com

Footnotes



ⁱ Elections Ontario: Mississauga South, 2009.

ⁱⁱ Ministry of Finance, 2007.

ⁱⁱⁱ Region of Peel: Ward Profiles, 2008.

^{iv} IPCC, page 2

^v Drennen, E. 2003.

^{vi} Statistics Canada, 2007.

^{vii} Statistics Canada, 2008.

^{viii} Metrolinx, 2008, p. 62

^{ix} Ontario Chamber of Commerce, 2004, p. 8.

^x Nelson et al., 2007, p. 9.

^{xi} Unknown author (b).

^{xii} Statistics Canada, 2005.

^{xiii} Heart and Stroke Foundation of Ontario, 2008.

^{xiv} Frank, Anderson, & Schmid, 2004.

^{xv} Ontario Trails Council

^{xvi} Project for Public Spaces

^{xvii} Ontario Ministry of Public Infrastructure Renewal, 2006, p. 3.

^{xviii} Statistics Canada, 2008, p. 72.

^{xix} Transport Canada, 2008.

^{xx} Statistics Canada, 2008b.

^{xxi} Portland Office of Transportation, 2008.

^{xxii} Portland Office of Transportation, 2008.

^{xxiii} Environment Canada, 2008.

^{xxiv} Environment Canada. (Date unavailable).

^{xxv} Economist, 2007.

^{xxvi} Portland Office of Transportation, 2007.

^{xxvii} Minneapolis Board of Parks and Recreation..

^{xxviii} Unknown author (a), 2007.

^{xxix} Farran, 2005

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4. [Figure 3](#): Organization for Economic Cooperation and Development (2005), European Union (2003), and Us Department of Transportation (2003 and 2005)
5. [Figures 4 and 5](#): Complete the Streets
6. [Figure 6](#): Portland Department of Transportation
7. [Figure 7](#): Gehl Architects
8. [Figure 8](#): “Why Aren’t People Cycling”

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Greenhouse Gas Diagrams from Human Activity and the Environment

Appendix A

Group Activity Sheets



Walking, Cycling, & Public Spaces
Mississauga South Workshop

Group Activity Sheet

1. How would you like to see the Mississauga South community in 20 years?
Think about what would make this area a vibrant, healthy community with happy residents:
2. What are the key destination points in Mississauga South? (public spaces, parks, shopping, amenities, employment)
Please use the map at your table to visually define using the markers provided.
3. **PETUNIAS** YEAR 1- low cost, high benefit, good visibility and easy to implement.
List at least two actions that could be taken right away and that wouldn't cost a lot to make Mississauga South more:

Bicycling-friendly
Pedestrian-friendly
A Great Place

4. **ORCHIDS** YEARS 2-5- higher cost, longer-term
List at least two actions that could be taken in the long term that would have the biggest impact to make Mississauga South more:

Bicycling-friendly
Pedestrian-friendly
A Great Place

5. List any barriers or obstacles that must be overcome in order to implement your suggested actions within the community (Please be as specific as possible):
6. What local partnerships or local talent can you identify that could help implement some of your proposed improvements? (Please be as specific as possible).

Appendix B

Group Activity Sheet Answers



Group Activity Sheet Mississauga South

1: How much you like to see the Mississauga South community in 20 years? Think about what would make this area a vibrant, healthy community with happy residents.

- Ease of transportation
- No trucks other than local delivery
- Round about: Meadow Wood, Clarkson Rd.
- Village: working, real cycle/walk to destinations
- Divided traffic
- Really wonderful transit shelters especially at go stations
- Fix break in south service road
- All vehicles powered by electricity
- Entire city is “free” wireless internet zone
- An increase in “work from home” employment (reduce lengthy commutes)
- Rent a bike or moped program available to everyone
- “no car” zone in Port Credit and Clarkson

2: What are the key destination points in Mississauga South? (public spaces, parks, shopping, amenities, employment) Please use the map at your table to visually define using markers provided.

- Parks
- Jack Darling
- Marina,
- Lakeshore
- Port Credit
- Clarkson

Appendix B

Group Activity Sheet Answers



3: PETUNIAS (YEAR1) – low cost, high benefit, good visibility and easy to implement.

List at least two actions that could be taken right away and that would not cost a lot to make Mississauga South more:

Bicycling-friendly:

- Bike parking – more locations.
- Promotion of trails
- Car free Sundays
- Seasonal maintenance
- Benches
- Water fountains
- Do the Harbour front Thing: Close lane and flowers. Do an event
- More designated bike lanes
- More bike parking
- Close off designated streets during low traffic times ie. Sundays
- No car day on Sunday for specific areas (ie Port Credit)
- Increase proliferation of bike lanes (just paint some more lines!)
- Camera surveillance at key bike lock locations to discourage theft (Go Stations)

Pedestrian-friendly:

- Events
- Garbage/recycling
- Signage
- Facilities
- Traffic circle –trial project
- Round about: Clarkson/Lakeshore, Meadow Wood/Lakeshore, Stavebank/Lakeshore
- Implement car insurance system that increases the rate based on odometer reading (the more you drive the more you pay for insurance)
- Subsidize small businesses more effectively to promote specialty shops in close proximity to homes as opposed to giant shopping centres
- Tax credit for individuals that do not own a car

A Great Place:

- Introduce more athletic facilities (tennis) and mandate all youth to get involved.

Appendix B

Group Activity Sheet Answers



4: ORCHIDS (YEAR 2-5) – higher cost, long term.

List at least two actions that could be taken in the long term that would have the biggest impact to make Mississauga South more:

Bicycling-friendly:

- Separating – specific bike lanes
- Removing car lanes and making it reversible
- Implement bike tax credit
- Mandatory shower facilities for new building
- Covered sidewalks – Luscious
- Bike racks and shelters – along the street
- Real bike lanes – separate
- Go- more bike friendly
- Public bike-sharing program
- Bike traffic signals
- Bike path maintenance
- Physically Separated Bike Lanes
- Prioritize “mixed” construction projects that blend commercial and residential
- Free access to publicly owned bikes for all citizens

Pedestrian-friendly:

- Pedestrian oriented Main St
- Physical activity linked with home, school and kids and part of accessibility
- Financial investment in walk/bike infrastructure
- Identify, support and reward champions
- School routes with volunteer the way for biking
- Connectivity – bridge, underpass
- Beautiful space
- Multi use trail pedestrian/biking
- TAX the fossil-powered car!
- Incentivize electric powered transportation at industrial and private level through rebates and other financial mechanisms.
- Convenient access to green spaces and reliable public transit
- A focus on science as driver of policy as opposed to commercial interest

A Great Place:

- High density residential – public bike lockers
- Heat sidewalks to be ice free

5: List any barriers or obstacles that must be overcome in order to implement your suggested actions within the following areas (Please be as specific as possible):

- Priorities (political)
- Money
- Lack of active transportation committee
- Mississauga’s rear view mission and inertia
- Political reform of entire country around proportional representation in the electoral system
- Replace the “GDP” as official measure of social prosperity and well-being with a formula that makes sustainability, public health, and life satisfaction central
- Increase legal and scientific oversight in matters pertaining to natural resource extraction and environmental assessments to ensure that any future projects (ie power plants) do not jeopardize future well-being.

6: What local partnerships or local talent can you identify that could help implement some of your proposed improvements? Please be as specific as possible

- Healthy Living Peel
- Smart Commute Mississauga
- City and region transportation and planning
- Clarkson Visioning group
- Green Party of Canada
- NGO’s that focus on environmental and social concerns over industrial and commercial ones

Appendix C

Environmental and Health Impact Calculations



Environmental (& some Health) Number Crunching for Mississauga South

Canadian GHG Emissions 2006		
	Absolute (in Megatons)	% Share
Total	721000	100.00
Transport	190000	26.35
Light Duty Gas Vehicles (LDGV)	38900	5.40
Light Duty Gas Trucks (LDGT)	44800	6.21
Passenger Total	83700	11.61

Canada GHG Emission Baselines		
GHG Factors (carbon equivalent kg/L)		
LDGV		2.479
LDGT		2.556
Fuel Efficiency (L/100km)		
LDGV		9.8
LDGT		12.6

GHG Emission Factors for Mississauga South		
<i>Assumptions:</i>		
	Fleet Split	
LDPV		60%
LDPT		40%
	Annual Workdays (50 weeks x 5 days)	
	250	
	Annual Worktrips (250 x There N Back)	
	500	
<i>Therefore:</i>		
	Fleet Fuel Efficiency	
L/100km		10.92
L/km		0.1092
	Fleet Emissions	
	Carbon equivalent (CO ₂ e)	
kg/L		2.5098
Mississauga South GHG Emission Factor		
	Carbon equivalent (CO ₂ e)	
kg/km		0.274

Mississauga South Background Information		
Population		110,935
Labour Force Participants		62,365
	Journey to Work by Mode	
	Number	%
Total Commuting Population	53,845	100.00
1% of Commuting Population	538.45	1.00
Car, truck van as driver	38,725	71.92
Car, truck, van as passenger	3,760	6.98
Public transit	8,790	16.32
Walked or biked	2,170	4.03
Other	400	0.74
Mississauga South Trip Statistics		
Median Trip Length by Mode (km)		
C, t, v, as driver	6.4	
C, t, v, as passenger	4.1	

Potential GHG Emissions Reductions in Mississauga South (CO ₂ e)		
<i>Annually, for each driver that switches to active modes</i>		
kg/km x km/trip x Annual worktrips		Kg
<i>Annually, for each 1% of trips shifted from driving to active modes</i>		
kg/km x km/trip x worktrips x 1% of commuting population		Kg
		Tonnes
<i>Annually, if each driver biked or walked to work one week a year</i>		
kg/km x km/trip x 10 trips x total drivers		Kg
		Tonnes

Appendix C

Environmental and Health Impact Calculations



Potential Weight Loss in Mississauga South		
Assumptions:		
Calories per pound of body fat	3500	
Average cycling speed	km/h	17
	km/minute	0.28
Calories burned by cycling	per hour	500
	per minute	8.33
Therefore:		
Average duration of work trip (minutes)	23	
Calories burned during average <u>worktrip</u>	188	
Pounds burned per trip	0.054	
<i>Annually, each driver that switches to cycling</i>		
Lbs. burned per trip x Annual <u>worktrips</u>		26.89
<i>Annually, for each 1% of population that switches from driving to biking</i>		
Annual <u>worktrips</u> x 1% of commuters x Lbs./trip		14,479
<i>Annually, if each driver biked one week per year</i>		
Total drivers x 10 trips x Lbs./trip		20,827