Urban Transportation Showcase Program

Case Studies in Sustainable Transportation

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Amenities and programs that encourage active transportation in all seasons

Overview

Active transportation is one of the best ways to improve health and local air quality as well as reduce personal and employer costs.

Active transportation programs and amenities can support greater travel choices in any season and, in turn, create long-term behaviour changes when it comes to daily transportation.

This issue paper reviews the most common barriers and benefits, provides information on general measures that can be taken to encourage active transportation, and also looks at a selection of successful initiatives.

Selected Resources

1. Go for Green's *Walk and Roll: A Guide to Active Transportation to, from and at the Workplace*.
2. Transport Canada's *Urban Transportation Showcase Program* case studies and issue papers.
3. Victoria Transport Policy Institute. *Nonmotorized Transportation Planning: Identifying Ways to Improve Pedestrian and Bicycle Transport*.

References are found at the end of this issue paper.

Context

Canada is an increasingly urbanized country, with the majority of the population living within five kilometres of work, school and other daily destinations (Statistics Canada, 2005). However, most Canadians still choose to drive rather than walk, cycle or combine active transportation with public transit, such as using bicycle racks on buses.

The benefits of active transportation, meanwhile, are becoming increasingly well known. Health, environmental quality, social equity and community safety all improve when Canadians choose active transportation over driving. Many of these benefits are outlined in more detail in the recent UTSP issue papers *The Links Between Public Health and Active Transportation* and *The Social Implications of Sustainable and Active Transportation*.

Barriers

With so many benefits to active transportation, why then do most Canadians—as indicated by the 2005 Statistics Canada figures—continue to choose the car for all of their daily travel needs?

Go for Green's *Walk and Roll* program suggests that although the simple answer may be that Canadians prefer to drive, "a more comprehensive examination suggests that there are a number of formidable barriers that reduce and undermine choices for more active modes."

These barriers include external and internal ones, including inclement weather; a lack of physical infrastructure such as bicycle lanes, or infrastructure that is not well maintained in all seasons; a lack of knowledge of pathways, trails or bicycle lanes; safety concerns; and time pressures (Go for Green, 1998).

For the purposes of this issue paper, the most common barriers are divided between those associated with the workplace and those associated with the community/municipality. Seasonal and/or weather-related barriers are also included.

For information specific to schools, see the UTSP issue paper *School Active Transportation Management*.

Workplace barriers

- A lack of amenities such as showers, change rooms, secure bicycle storage areas or bicycle racks, or a lack of knowledge that these facilities exist
- Inadequate knowledge of safe and convenient routes to and from work
- Unsafe routes to and from work including poorly lit paths, entrances, parking and storage areas
- Hostile attitudes towards active commuters (e.g., scorn by other employees, inflexible work hours, etc.)
- Hidden subsidies that favour automobile traffic, such as free parking or mileage expenses

Community barriers

- Lack of knowledge about safe, fast or convenient routes such as trails, bicycle paths, transit routes, etc.

- Inadequate skills or a lack of self-confidence to use active transportation such as cycling
- Poorly designed or maintained transportation infrastructure
- Neighbourhood design that favours cars over other modes of transportation
- Inadequate or non-existent inter-modal connections, e.g., bicycle racks on buses, trains or subways

Seasonal and/or weather-related barriers

- Inadequate maintenance of sidewalks, bicycle lanes and trails
- Lack of cycling skills and knowledge (e.g., dressing for different types of weather, best equipment to use, etc.)
- Fear of injury in winter or in other inclement weather conditions

Amenities & Programs

There are a growing number of initiatives that can overcome these barriers and, at the same time, make it easier—and more enjoyable—for people to choose active transportation.

Research shows that programs that offer many options for active transportation tend to be more successful. Broad transportation demand management (TDM) programs, for example, can be developed for specific workplaces or for whole communities. These types of programs are usually coordinated by one agency, so that all of the information is housed within one area, and offer a range of complementary strategies (VTPI, 2005).

Workplace amenities and programs

Physical amenities that encourage active transportation at workplaces include such things as showers and change rooms, bicycle racks and dedicated bicycle parking areas. These can be augmented by initiatives such as flex hours and telework, or guaranteed ride home programs in cases of emergency or when employees need to work late.

Comprehensive workplace programs are often delivered through transportation management associations (TMAs). TMAs are non-profit, member-controlled organizations that provide a range of transportation services within a specific area, such as an area of a community or a commercial district.

TMAs rely on the collective expertise and resources of all their members, so the overall programs and initiatives are often less expensive than if a workplace were to implement each service on its own.

TMAs provide a wide range of services and include both sustainable transportation initiatives, such as ridematching or carpooling services and programs that enhance transit use, as well as active transportation programs that encourage walking and cycling.

The largest network of TMAs in Canada is the *Smart Commute* initiative, whose members represent nine municipal governments in the Greater Toronto Area and Hamilton.

In the absence of a TMA employers have several other options as illustrated by the following program examples.

Program Examples

An increasing number of programs make use of community-based social marketing (CBSM). CBSM is a practical approach that stresses direct contact among community members and focuses on removing structural barriers that prevent people from changing certain behaviours. For more information on the CBSM approach and the tools used, see the UTSP issue paper *The Role of Community-based Social Marketing in Supporting Active and Sustainable Transportation*.

TravelSmart, initially developed in Europe, uses a variety of CBSM tools to change people's travel behaviour. The approach, also referred to as individualized marketing, has been successfully applied in countries around the world.

In Canada, Vancouver's *TravelSmart* pilot program works with a number of private and public sector partners.

Organizers contact households directly to determine their level of interest in using alternative modes of transportation. If households indicate interest, they can then choose from a range of resources and materials that suit their travel needs, such as transit maps, cycling guides, trail routes, bike shop discount coupons, etc. Participants can also take advantage of "TravelSmart Ambassadors," who will come to a person's home and offer personalized travel advice.

The *Canadian Commuter Challenge* is an annual event that encourages employees to try active transportation for one week. It also offers employers an opportunity to test out certain initiatives on a short-term basis and decide whether to implement them over the longer term.

In the case of the Ottawa office of Export Development Corporation (EDC), the impetus to provide additional workplace amenities came about because of its participation in the *Commuter Challenge*. Upper management at EDC noticed a marked increase in the number of employees who continued to cycle to work even after the event was over, and particularly during spring, summer and fall. As a result, EDC arranged for permanent underground bicycle parking.

The Commuter Challenge also offers local delivery agents or NGOs the opportunity to develop active transportation programs for employers. Calgary's local *Commuter Challenge* organizer, Sustainable Alberta, for example, parlayed its participation into a series of programs aimed at reducing the number of vehicles on the road. It now offers the year-round *Saddle Up!* trip reduction program to employers and a series of free *Commuter Resources and Information Kit* (CRIKit) workshops.

For the past three years, the University of Washington in Seattle has run a similar "challenge" type of event called *Ride in the Rain* in which teams of faculty, students and staff are urged to cycle to campus. The campaign runs in January—when Seattle typically receives the most rain, two of out every three days—and asks participants to register all of their cycling trips online and note which of those days they "rode in the rain." Competing for prizes and trophies—including the "Soaked to the Gills Award"—more than 90 teams participated in 2006.

Several non-government organizations (NGOs) also offer training or resource programs for employers wishing to help their employees learn more about active commuting.

Ottawa's Citizens for Safe Cycling, for example, offers a *2 Wheels 2 Work* program. Employers can participate in lunchtime seminars and on-road bicycle training delivered by certified instructors.

Bike to Work in Victoria, which began as a week-long event, expanded its role and now offers a series of workshops aimed at teaching others how to implement cycling programs in their communities.

Transport Canada's *Commuter Options: The Complete Guide for Canadian Employers* also offers a wealth of information to employers looking to implement sustainable commuter options for their employees. The guide includes a full business case and a step-by-step commuter program planning model, as well as a chapter dedicated to active transportation issues.

Community / municipal amenities and programs

Providing community amenities for cyclists and pedestrians not only makes it more convenient and pleasurable for those who wish to engage in active transportation, but also makes the community safer for all residents.

For example, traffic control systems can provide longer traffic signal timing for cyclists and pedestrians, or ensure that bicycles are "sensed" by embedded road sensors.

General safety measures should also be considered when designing active transportation infrastructure. Crime Prevention through Environmental Design (CPTED) principles, for example, looks at all design elements of the built environment, such as adequate lighting, eliminating hidden corners, and ensuring proper sightlines.

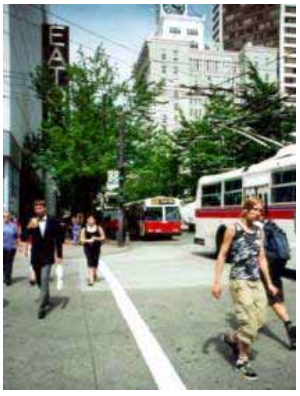
Bicycle racks at common destinations are a basic amenity. Most public buildings, such as libraries, community centres and municipal facilities already have bicycle racks, but in some cases they are not well-maintained or do not reflect today's bicycle design. For example, many older bicycle rack styles are not wide enough to fit the tires of a mountain bike.

Some shopping areas, such as large grocery stores and malls, may have inadequate, or non-existent, bicycle parking. Community groups and individuals can encourage the management of these retailers to provide these amenities, or municipalities can enact bylaws or development guidelines that require these facilities.

Providing "inter-modal" opportunities can also encourage active transportation. Many Canadian cities have incorporated measures such as bicycle racks on buses, allowing bicycles on light rail and subway systems, and installing bicycle parking, storage and change facilities at major transit hubs and stations.

Program examples

Many Canadian municipalities are now incorporating active transportation into their existing transportation and urban planning strategies. This allows for a more comprehensive view of all transportation modes, while also achieving local health and environmental goals.



In order to maintain and improve Vancouver's livability and economic performance, the City of Vancouver created a *Downtown Transportation Plan.* The main plan includes sub-plans that address pedestrian and cyclist issues.

The pedestrian plan, for example, includes measures such as mid-block crossings, wider crosswalks and automatic pedestrian detectors (including sensory devices for the sight and hearing impaired). Similarly, its cycling plan includes measures such as parking facilities, constructing

new bicycle lanes and developing a 25-kilometre cycling network that connects key downtown areas.

Toronto's *Master Bicycle Plan* was first introduced in 2001 and addresses all areas of safe cycling: street planning; developing bicycle networks; safety and educational training; bicycle parking; promoting cycling using communication materials and events; and incorporating bicycles into its public transit system.

Car-free days or other special events that close off vehicle traffic entirely in a particular neighbourhood can help to highlight the negative impact of cars, while encouraging people to consider and try out active transportation.

Montreal, for example, has held the *In Town Without My Car* event since 2003. A portion of the city's downtown is closed to vehicles and pedestrians are offered a variety of free entertainment activities. More than 25,000 people participated in 2004 and, among those surveyed at the event who typically travel exclusively by car, almost 40% used an alternative mode of transportation that day. A further 68% said that the event encouraged them to consider other modes for their daily travel habits.

Environnement Quebec took the opportunity to highlight air and noise pollutions on the day of the event. They discovered that nitrogen oxide and carbon monoxide (pollutants that help contribute to the formation of smog) were reduced by 90% between 10 a.m. and 3 p.m. compared to an intersection with normal traffic flows.

Some communities also hold safety blitzes at particular times of the year to educate drivers about pedestrian and cyclist safety. The City of Coquitlam, B.C.'s *Be Safe Be Seen* program, for example, runs in September when children are returning to school. Lawn signs remind parents and drivers to slow down, particularly in school zones; community police and volunteers conduct Speed Watches around school zones; and the municipality and its local partners hand out free reflective stickers for pedestrians and cyclists to make them more visible to drivers.

For more detailed information on active transportation related to children of all ages, see the UTSP issue paper *School Active Transportation Management.*

Seasonal and/or weather-related amenities and programs

Active transportation in inclement weather, particularly during the winter months or on rainy days can be a challenge to even the most seasoned cyclist or pedestrian.

In winter, one of the most common complaints of pedestrians is that sidewalks are not adequately cleared of snow or, in some cases, not plowed at all. Municipalities can help make active transportation easier by ensuring that sidewalks are cleared in a timely fashion. This not only makes the environment safer for those who are walking for their entire trip, but also for those walking to and waiting at transit stops.

In spring, a similar complaint applies to the dust and debris that collects during the winter and which accumulates on sidewalks and at roadsides. Regular street sweeping, particularly in the first weeks of spring, reduces particulate matter and other pollutants and makes walking and cycling healthier and more enjoyable.

Program examples

WalkSMART, a year-round program in Wilsonville, Oregon, offers incentives that make walking easier, safer and more enjoyable. Participants receive a pedometer so that they can track their progress; each month, participants log their distances and are then eligible for prize drawings, which include practical items such as umbrellas for rainy days or blinking lights that can be affixed to shoes for better visibility.

Canadian winters can make walking difficult, but Safe Healthy Active People Everywhere (SHAPE), the Alberta coordinators for Active and Safe Routes to School, organized a *Winter Walk Day* that saw 30,000 people from schools, community groups and workplaces participate on February 7, 2007.

In addition to publicizing the event through an electronic flyer that included information on dressing for the weather, some of the schools involved monitored temperatures to ensure that children and parents were aware of any frostbite warnings. Since the sun rises later and sets earlier in the north, a few northern schools also changed the time of the walk so that children weren't walking in the dark.

The event, which SHAPE organizers hope will become an annual event, was well publicized by local media, schools, colleges and universities, physical fitness organizations and other local partners.

Some private businesses also provide information about walking or running in winter. The Canadian company *Running Room Ltd.*, which specializes in running shoes and accessories, offers walking and running clinics that include information on the type of clothing to wear in wet or cold weather. A discussion board on their Web site also allows people to share their ideas.

For those interested in winter cycling, Go for Green offers a three-page primer that includes information on dress, the best type of bicycle to use, route planning, safety issues such as visibility and bicycle lighting, and bicycle maintenance.

One of the most comprehensive Web sites devoted specifically to winter cycling is the U.S.-based *ICEBIKE*.

Billed as the "Home of the winter cyclist and other crazy people," the site includes practical information about clothing and footwear that have been tested for cold weather, bicycle equipment, and winter cycling techniques, as well as articles, photos and event listings.

Bicycle user groups (BUGs) are also an excellent source of practical information. A BUG is a group of cyclists—whether as part of work, school or community—who collaborate to improve conditions for cyclists or who just enjoy riding together. BUGs offer social opportunities as well as the security of cycling with other riders.

Citizens for Safe Cycling's *Bicycler Users Group* guide provides information on starting and maintaining a BUG, including how to approach employers and building managers. The guide includes free promotional materials that can be reproduced, sample site assessment surveys, bicycle maintenance information and safety tips for cycling in all types of weather.

Go for Green's *Winter Green* program includes ideas on all types of active living, including active transportation, during the winter months. For example the *Walking School Bus*, an active transportation program where adults take turns walking school-aged children to and from school, can operate year-round to encourage more physical activity among young people.

Inclement weather is not the only seasonal factor that should be considered when implementing active transportation programs. Summer smog days can be used as a starting point to promote active transportation.

Detroit, Michigan's *Ozone Action Program*, for example, uses summer smog alerts as a rallying call to get people to take action. Employers that participate in the program receive communication materials that help to spread the word among their employees and which offer active transportation solutions, such as cycling or telework, and other sustainable transportation solutions, such as transit or carpooling.

Additional Ideas & Lessons Learned

Information on many of the programs and ideas included in this issue paper are available online and are listed in the ***References*** section below.

In addition, Go for Green's *Walk and Roll Guide* offers the following active transportation ideas.

At the workplace

- Establishing an active transportation committee serves as an in-house resource to other employees and can help disseminate information resources, such as cycling or walking guides and routes; coordinate lunch-hour activities or commuting initiatives such as a "bike buddies" program where seasoned cyclists bike with newer cyclists to and from work; or encourage participation in yearly events such as the Commuter Challenge.
- Employers can disseminate active transportation information by including it in orientation packages for new employees, ensuring that employees know where showers, change rooms and secure bicycle parking are located, and providing taxi chits or transit tickets in the case of employees who occasionally need to travel outside of the office for work.
- If space is limited for amenities such as bicycle parking or showers, employers may wish to consider partnering with other nearby employers to share these types of facilities.

In the community

- Community newspapers, libraries, community or recreation centres and schools all offer opportunities to make active transportation information available and, in some cases, can also provide inexpensive space for skills training programs.
- Municipalities can develop an active transportation plan that includes a community advisory committee. Municipalities that have incorporated active transportation into their existing transportation and urban planning often discover a number of side benefits, such as improved community health and social equity and a cleaner environment.
- Community groups or municipalities can sponsor community awards or other types of recognition programs for leadership and innovation in active transportation.
- Local stores can be encouraged to offer discounts or other promotional features for active transportation shoppers. Many local stores also include driving directions on their Web sites and can be encouraged to include directions on how to get to their business by bicycle or public transit as well.

Lessons for Stakeholders

Partnering with a variety of organizations can bring about several benefits, such as accessing expertise or sharing program costs.

A good example of a community group working in partnership with a municipality was Toronto's *BikeShare* program. *BikeShare* was set up in a similar fashion as a car-sharing program to offer access to a fleet of bicycles at 16 downtown locations. Several private and public sector partners came together to deliver the program. Although the program was discontinued in 2007 due to a lack of funding, at its height it had more than 2,000 regular

members and 65% to 75% of the fleet was in use at any given time.

Or take Halifax's *Reclaiming Streets for People* initiative as another example. Business owners lease portions of the sidewalks from the city to operate boardwalk cafés along Argyle Street, a busy downtown thoroughfare. Between 1995 and 2004, overall pedestrian traffic increased in the downtown core by almost 30%.

Argyle St. Economy Shoe Shop Boardwalk Sidewalk Café

In the workplace, employers play the major role and may have more influence over their employees' travel behaviours than community or municipal partners.

Workplace programs that are the most successful offer a wide variety of travel options. Guaranteed ride home programs, for example, can be critical factors for those who wish to cycle to and from work. People may be more likely to adopt cycling as a regular commuting option in the presence of these programs because they know they have options in case of emergency, if they need to travel to another office during the day, or simply if the weather turns bad.

Conclusion

Successful active transportation programs remove barriers, provide the necessary infrastructure and amenities, create safe environments, and ensure that all of the benefits of active transportation are well understood.

By incorporating active transportation into workplaces and communities, all stakeholders stand to gain tremendous health, environmental, financial and social benefits.

Ultimately, the objective of any active transportation program is to encourage people to use active modes more often and for longer trips, regardless of the season.

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