

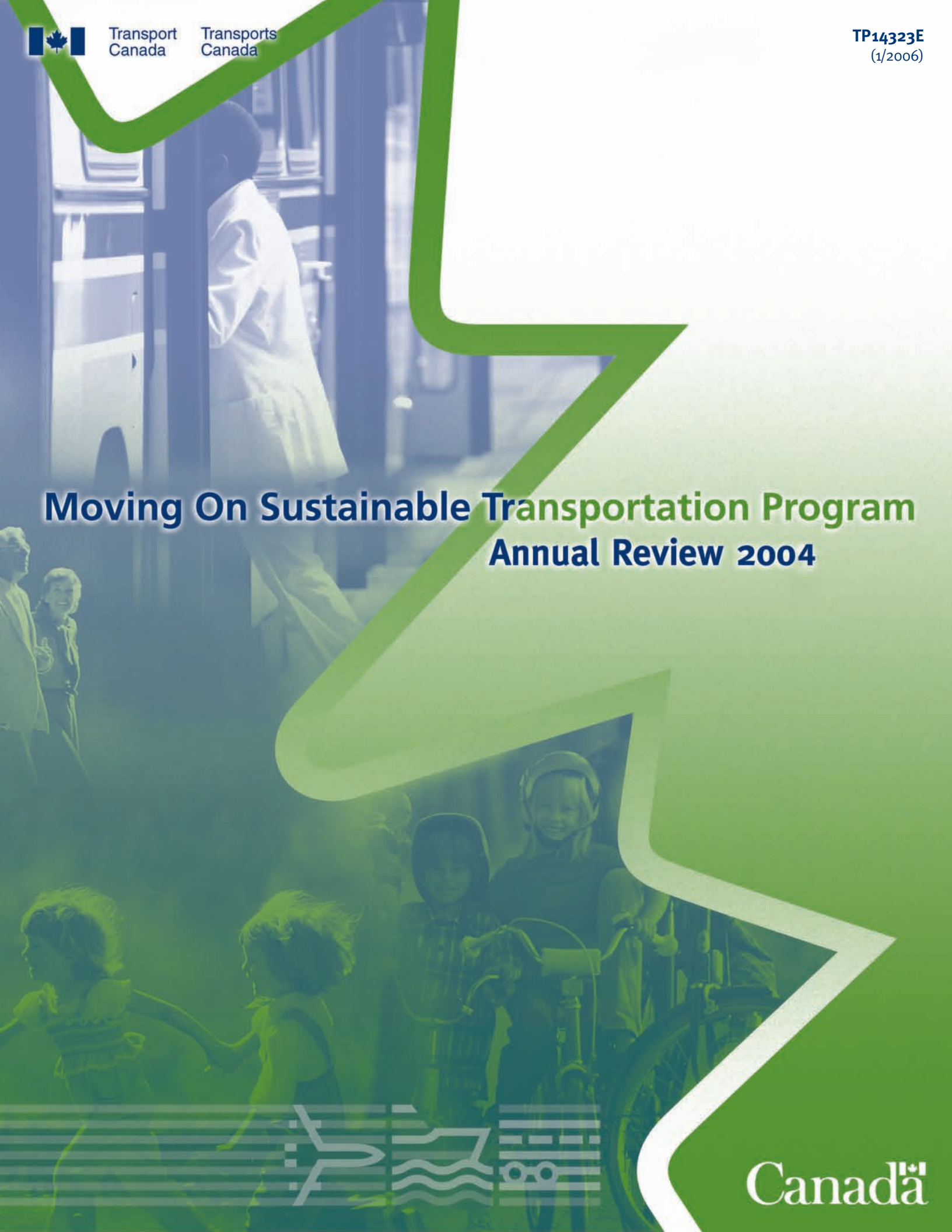


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# Moving On Sustainable Transportation Program Annual Review 2004



Canada

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The Moving On Sustainable Transportation (MOST) program is a Transport Canada contribution program that provides financial support to help organizations implement demonstration, research, education and pilot projects that create and support new sustainable transportation options for Canadians. While some projects are national in scope, many are regionally-focused initiatives that respond to local challenges.

The MOST program fulfills a commitment made in Transport Canada's first Sustainable Development Strategy, which was tabled in Parliament in 1997. The first phase of the program began in 1999 with more than \$1 million allocated over the first three years. In response to ongoing demand, the program was extended to 2007 with an additional \$2.5 million to allocate over five years.

As of December 2004, over 74 innovative projects have been supported by the MOST and \$2.6 million in funds distributed. The projects supported have been diverse -- they have varied in scope and scale. The projects were initiated in all regions of the country, involved a variety of partners, dealt with many aspects of our transportation system, and harnessed a variety of new and innovative approaches. Collectively these projects have worked to improve the sustainability of Canada's transportation systems. They have educated people on their personal transportation options. They have helped schools, businesses, associations and other community organizations take on leadership roles in developing healthy, safe and sustainable transportation options.

This is the second annual review of MOST projects. It highlights the results and lessons learned for projects completed in 2004. It also provides an overview of the other MOST-supported initiatives currently underway. All participants in the MOST program are required to monitor and evaluate the impact of their projects and to provide Transport Canada with a candid assessment of what worked well and what they would do differently. This report shares that information and directs readers to more detailed project information available at individual project websites.

As MOST only provides funding of up to 50% of project costs, many other contributors have worked with us in helping these projects become a reality. They include other levels of government, foundations, the private sector, universities and colleges, and other institutions. Transport Canada recognizes and commends all project partners for their leadership and commitment to sustainable transportation.

Transport Canada would also like to recognize the important contribution of the program's external Advisory Committee. This committee has reviewed and evaluated over 200 projects against the selection criteria, made suggestions on how selected projects might improve their results, and provided valuable advice on overall program direction. We are grateful for their ongoing efforts to help this program achieve its goals.

We welcome your feedback on any aspect of the MOST program. Please visit the MOST website at [www.tc.gc.ca/most](http://www.tc.gc.ca/most) or e-mail us at [MOST@tc.gc.ca](mailto:MOST@tc.gc.ca). The 2003 MOST Annual Review is also available on our website.

## 1 Moving on Sustainable Transportation

Transport Canada launched the Moving On Sustainable Transportation (MOST) program in 1999 to support projects that promote the education and awareness, carry out research, pilot new approaches and develop the tools needed to make sustainable transportation a reality.

MOST has three major goals:

- To provide Canadians with practical information and tools to better understand sustainable transportation issues;
- To encourage the creation of innovative ways to promote sustainable transportation; and,
- To achieve quantifiable environmental and sustainable development benefits.

## 2 Highlights

Building on a trend observed in the last reporting period, the quality and number of completed projects continued to increase in 2004. The program also maintained a balanced regional distribution across Canada.

At the beginning of 2004, 41 projects had been approved in Phase II of the program in five project categories:

- 25% of funding went to development of tools and practices
- 25% of funding went to education and outreach programs
- 22% of funding went to demonstration pilot projects
- 16% of funding went to workshops and conferences
- 12% of funding went to studies and analyses

Of the 41 projects, 18 were completed during 2004. They are detailed in Section 5 of this review.

Six projects were completed in 2003. They are described in the 2003 MOST Program Annual Review.



The MOST program helps make sustainable transportation a practical option for Canadians

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The MOST program fulfills a commitment made in Transport Canada's first Sustainable Development Strategy, which was tabled in Parliament in 1997. The first phase of the program began in the fiscal year 1999-2000, with more than \$1 million allocated over three years. In response to ongoing demand, the program was recently extended to 2007 with an additional \$2.5 million to be allocated over five years.

#### PURPOSE

MOST provides financial support to help organizations develop demonstration, research, education and pilot projects that create and support new sustainable transportation options for Canadians. Since 1999, MOST has provided over \$2.6 million in contributions to almost 100 environmental groups, community associations, academic institutions, business groups and professional associations in their efforts to develop more sustainable transportation options for Canadians from all walks of life.

#### OBJECTIVES

MOST funds projects that:

- Provide Canadians with practical information and tools to better understand sustainable transportation issues;
- Encourage the creation of innovative ways to promote sustainable transportation; and,
- Achieve quantifiable environmental and sustainable development benefits.

#### ELIGIBILITY

Project proposals are screened against detailed eligibility criteria.

Proposals must meet the following five criteria to be eligible for funding:

- Address at least one of the five project categories: The categories are described on page 4.
- Target the Canadian public: This includes the general public, the transportation sector, youth, municipalities, First Nations and Aboriginal peoples, and educators.



The Canadian Renewable Fuels Association is demonstrating the environmental advantages of using ethanol-diesel

- Share funding through partnerships: Proposals must obtain at least 50% of their resources (cash and/or in-kind support) from sources other than the Government of Canada.
- Demonstrate quantifiable results: Proposals must contain quantifiable sustainable transportation targets and performance indicators to measure and report on the project's environmental and sustainable development impacts.
- Share results and program materials: Proposals must contain a detailed communication plan for disseminating project related results and materials that will further the program's objective of giving Canadians practical information and tools to apply sustainable transportation thinking to their daily lives.

#### EVALUATION OF PROPOSALS

Proposals that meet the initial requirements are sent to an independent advisory committee for further review and recommendations. Their recommendations go to the Director General of the Environmental Affairs Directorate at Transport Canada who has the final decision-making authority.

In addition to the basic eligibility criteria, the relative strengths of eligible proposals are further evaluated using the following criteria:

- Effectiveness in making direct environmental improvements through greater understanding and practical applications of sustainable transportation principles;
- Innovative nature of project and ease of replicability and transferability to other places in Canada; and,
- Experience and competence of the proponent.

Individual projects may receive up to a maximum of \$100,000 over two years. In keeping with the Government of Canada's commitment to partnership, applicants must also demonstrate that 50% of their eligible net costs are provided by other sources.



Several organizations across Canada are promoting more active transportation for adults as a healthier, cheaper and more environmentally sound alternative to the private automobile

At the beginning of 2004, 41 MOST projects were underway in following five project categories:

- **Studies and analyses:** Projects that study or analyze the state of transportation in a specific community, such as the future growth pressures a community will face and the direction it should take in managing its transportation system to effectively manage this growth.
- **Tools and practices:** Projects that lead to new sustainable transportation tools and practices and that give the public an opportunity to learn about and use non-polluting transportation options.
- **Demonstration pilot projects:** Projects that test new approaches to and alternatives for sustainable transportation.
- **Workshops and conferences:** Information sessions that support and highlight new ideas or approaches to sustainable transportation and that showcase contributions by stakeholders.
- **Education and outreach programs:** Programs that inform the Canadian public about sustainable transportation.

#### DESCRIPTIONS OF ONGOING PROJECTS

The following pages provide a summary of the 23 MOST projects that were still ongoing at the end of 2004. An additional 11 have been approved in 2005, with more expected to be approved during the year. The 18 projects that were completed in 2004 are discussed in Section 5 of this report. Additional information is available for all projects at [www.tc.gc.ca/most](http://www.tc.gc.ca/most).



Across Canada, cycling programs for younger riders are helping to develop more sustainable and healthier personal transportation habits

## STUDIES AND ANALYSES

Project	Lead Organization	Funding Provided	Project Objective
Circulation City: Research on Mobility in the Greater Toronto Area	Centre for Landscape Research	\$30,000	To research new strategies for relieving gridlock in urban areas
Genuine Progress Indicators of Sustainable Transportation for Nova Scotia	GPI Atlantic	\$35,000	To develop provincial indicators of sustainable transportation that enable intermodal comparisons
Sustainable Transportation in Calgary: Current and Future Contributions of Telework	Haskayne School of Business at the University of Calgary	\$45,000	To determine the current and potential level of telework in Calgary and its impacts on air pollution, road safety and traffic congestion
Off-highway Forestry Haul Feasibility Study and Pilot	Forest Engineering Research Institute of Canada	\$79,170	To evaluate the potential for GHG and cost reductions by increasing the use of private off-highway forestry routes

## TOOLS AND PRACTICES

Project	Lead Organization	Funding Provided	Project Objective
Project Site Plan Review Guidelines for Promotion of Alternative Transportation Modes	Canadian Institute of Transportation Engineers	\$20,000	To develop a 'how to' guide on incorporating sustainable transportation tools and approaches at the site design stage
A How To Guide to Establish Transit Services in Small Urban Centres	Bathurst Sustainable Development	\$30,000	To produce a 'how to' guide on implementing transit services in small urban centres and to test companion programs on increasing transit awareness and improved ridership
Step It Out!	Green Communities Association	\$98,115	To develop activities to increase school and student participation in Active and Safe Routes to School program
Moving to Sustainability: Car Sharing in Kitchener-Waterloo	The People's Car Co-operative Inc.	\$27,909	To increase membership in The People's Car Co-op and create multi-modal hubs to reduce GHG emissions
Smart Growth on the Ground in Maple Ridge, B.C.	SmartGrowth BC	\$75,000	To facilitate the development of a more sustainable town centre plan that includes active transportation options
Off Ramp Manitoba	Resource Conservation Manitoba	\$20,000	To implement a trip reduction project that targets high school students in Manitoba



## DEMONSTRATION PILOT PROJECTS

Project	Lead Organization	Funding Provided	Project Objective
Biodiesel Project	Environmental Youth Alliance	\$50,000	To develop a non-profit venture to promote and supply biodiesel fuel in the Vancouver area
Walking Routes Pilot Project	Green Communities Association	\$19,990	To expand the Toronto pilot project to other Ontario jurisdictions and to install walking route signs
Electric Vehicle Conversion Manual	Electric Vehicle Society of Canada	\$40,000	To produce a workshop manual for senior high school students on converting a standard gasoline-powered vehicle to an electric vehicle
Ross Industrial Park Baseline Study	Regina Eco-Industrial Network Association	\$30,000	To improve the sustainability, profitability and competitiveness of cooperating businesses while reducing their environmental impact

## WORKSHOPS AND CONFERENCES

Project	Lead Organization	Funding Provided	Project Objective
Villes cyclables, villes durables!	Velo Quebec	\$30,000	To host workshops for municipalities across Canada on technical guidelines for developing cycling infrastructure
Sustainable Transportation Speaker Series	The Community Bicycle Network	\$20,000	To launch a high profile, monthly speaker series to increase awareness of sustainable transportation issues in the city of Toronto
Smart Growth on the Ground in Squamish, B.C.	SmartGrowth BC	\$50,000	To facilitate the design of a sustainable development plan for the municipality that includes necessary by-laws and create relevant servicing plans

## EDUCATION AND OUTREACH PROGRAMS

Project	Lead Organization	Funding Provided	Project Objective
Lâche la pédale! Vers des citoyens auto-sages	Université de Moncton	\$25,000	To promote more sustainable driving practices through popular education
S-M-A-R-T Movement: Save Money and the Air by Reducing Trips - Phase 2	Pollution Probe	\$52,900	To expand a workplace-based trip reduction program directed at reducing employee single-occupant car trips
Car Sharing Education and Outreach Strategy	Victoria Car Share Co-op	\$25,680	To implement a targeted educational campaign for the land development community to raise awareness about the benefits of car-sharing for all types of people, institutions and businesses
On the Move: Transportation and You!	West Vancouver Museum & Archives	\$25,000	To launch an in-class education program for grade 5-7 students in West and North Vancouver to increase awareness of sustainable transportation issues
Personalized Transportation Plans	Équiterre	\$50,000	To create personalized transportation plans for individuals tailored to their travel patterns and needs
Lower Mainland Cycling Guide	Better Environmentally Sound Transportation	\$58,000	To produce a comprehensive regional cycling guide and distribute it to households in Greater Vancouver

During 2004, eighteen projects funded under Phase II of MOST completed their final reporting. This section briefly summarizes these projects and their results. They are organized by project category.

## STUDIES AND ANALYSES

### URBAN TRANSPORTATION PROJECT: ADDRESSING CLIMATE CHANGE IN THE CITY OF BATHURST

*Lead Organization:* Bathurst Sustainable Development  
*Funding Provided:* \$30,000

Public transportation is often one of the cornerstones of any sustainable transportation strategy. Establishing public transit in smaller communities, however, can be difficult and costly. To help improve sustainable transportation options in Bathurst, New Brunswick, a local environmental organization conducted a feasibility study to identify challenges and potential opportunities for implementing a bus transit service in the city.

Bathurst Sustainable Development is a not-for-profit organization that works to facilitate the interaction of local community, business and government for sustainable development. The organization worked with the City of Bathurst and other business and community partners to carry out information sessions and to conduct a major survey of potential transit users in the city. Approximately 80% of the 5,000 people surveyed reported that they would take transit if available with average weekly individual use of almost nine trips a week.

The results of the study indicated that the small city has both sufficient ridership demand for such a service, and that the service has the potential of being financially sustainable within two to three years. Based on these findings, Bathurst Sustainable Development and the City of Bathurst are moving forward and have implemented a one-year pilot bus transit program.

*Project Website:* [www.bathurstsustainabledevelopment.com](http://www.bathurstsustainabledevelopment.com)



## STUDIES AND ANALYSES

### TRANSIT NEIGHBOURS FOR HAMILTON: TOWARDS A NEIGHBOURHOOD TRANSIT PASS

*Lead Organization:* Environment Hamilton

*Funding Provided:* \$30,660

Discount transit pass programs targeting post-secondary institutions and large employers are popular methods of increasing transit ridership and improving modal splits to major destinations. More recently, some cities have begun to explore and implement innovative neighbourhood-based transit pass programs, or NECO pass. These programs offer discounted transit passes to neighbourhoods that mobilize a minimum number of households to purchase the passes. Although only a handful of these programs currently exist, they have proven very successful and are being actively explored by transit providers across Canada and the US.

To help determine the feasibility of such a program in Hamilton, Ontario, and to help promote transit use in that city, the non-profit environmental organization, Environment Hamilton, worked with OPIRG Hamilton and the City of Hamilton in two neighbourhoods to explore the feasibility of implementing a neighbourhood transit pass program in the city. The project utilized both quantitative and qualitative research methods to explore potential user travel habits and to determine the financial costs of implementing such a system. Four hundred surveys were distributed to the neighbourhoods and 14 households received free transit passes for two months to log their family's use of the passes. Representatives of each household also participated in pre and post focus group sessions to explore their transit experience and attitudes.

The research found a high level of public support for public transit and its environmental and economic benefits. It also confirmed a NECO program would be an effective tool for increasing transit ridership in selected areas when used in conjunction with other transit system improvements.

Based on the results of the program, the City of Hamilton City is pursuing the next phase of research in the implementation of a NECO program.

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*Project Website:* [www.environmenthamilton.org/transit/index.htm](http://www.environmenthamilton.org/transit/index.htm)



## TOOLS AND PRACTICES

### EXPANDING CBN (COMMUNITY BICYCLE NETWORK) BIKESHARE

*Lead Organization:* Toronto Christian Resource Centre

*Funding Provided:* \$25,000

Sustainable transportation systems are equitable and accessible with a variety of transportation options available to all income levels. However, often a seemingly cost effective transportation option such as cycling can be out of reach for some of Canada's poorest citizens. To help low income residents access bicycles, a Toronto-based non-profit has developed a low cost bicycle sharing system that provides bikes in community hubs throughout the city.

Started in 2000, The Community Bike Network (CBN) BikeShare program makes a fleet of 178 bicycles available to members for a \$25 annual fee or 4 hours of volunteer work. The bright yellow bicycles are located in eighteen 'hubs' spread around the city at community centres and other locations. The bikes can be borrowed for up to 3 days.

With the support of MOST and other project partners, BikeShare expanded the program to two new community centres, increased its fleet size, expanded membership, and developed a new database to track the location of the bikes, member status and activity and hub activity.

BikeShare also partnered with Moving the Economy to develop multi-modal hubs at key transportation sites that connect walking, biking, Toronto Transit Commission services and GO Transit trains for commuters and tourists.

*Project Website:* [www.communitybicyclenetwork.org](http://www.communitybicyclenetwork.org)



BikeShare bicycles at a community centre 'hub'

## TOOLS AND PRACTICES

### ACTIVE AND SAFE ROUTES TO SCHOOL (ASRTS)

*Lead Organization:* Greenest City

*Funding Provided:* \$20,000

Helping families choose more sustainable and active transportation options when getting their children to school is an increasingly important challenge, as schools contend with growing traffic congestion and related air pollution during peak drop-off and pick-up hours. Helping children walk and cycle safely to school not only reduces potentially dangerous traffic congestion and related air pollution around schools, but it is a healthier choice for children who are generally getting fewer opportunities for physical activity.

Organized by Greenest City, a not-for-profit organization dedicated to building healthy and livable urban environments, the "School Walking Routes" project is part of the larger Active and Safe Routes to School Program (ASRTS). Started in 1996, ASRTS encourages families to choose active transportation to improve visibility and child safety on neighbourhood streets, encourage healthier lifestyles, increase physical activity, and reduce pollution, greenhouse gas emissions and traffic congestion around schools.

The latest project phase expanded the number of "School Walking Routes" in smaller cities throughout southern in Ontario. Working with schools and government agencies, the project helped participants in 12 schools in six communities observe and analyze traffic around designated school routes, place signage along designated routes, and survey parents about the project. An Ontario-centred Resource Guide was also developed and 800 copies were distributed to Ontario communities. In addition, a new ASRTS Ontario website was created, making many sections of the Resource Guide accessible on line.

In 2004, 27 new School Walking Routes were created to help offset an estimated 68.24 tonnes of CO<sub>2</sub> by assisting 33% of participating families to switch from driving to walking at least some of the time.

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*Project Website:* [www.saferoutestoschool.ca](http://www.saferoutestoschool.ca)



Brantford's Walking School Route at Holy Family School

### DÉPLOIEMENT DES PROGRAMMES ALLÉGO

*Lead Organization:* Centre de Gestion des Déplacements du Centre-ville de Montréal

*Funding Provided:* \$25,000

Commuter options programs can be one of the more effective ways of improving the modal split of large employers. Car pooling, van pooling, employee transit passes, flexible scheduling, telecommuting, and bicycle sharing are just some of the tools that larger employers can use to improve workplace accessibility and motivate employees to use other means of transportation than the single-occupant vehicle when traveling between work and home.

The Centre de gestion des déplacements du Centre-Ville de Montréal (CGD) is a non-profit organization whose mission is to encourage corporate executives, developers, building managers and institutions to promote the use of alternative modes of transport by their employees or clients. Working with government and non-government partners, the CGD established a transportation management centre for businesses and institutions in Downtown Montréal called Voyagez Futé Montréal.

Voyagez Futé Montréal works to stimulate and coordinate in-company transportation initiatives, serves as a liaison between the private and public sectors and functions as a one-stop service by providing an array of custom-designed services for downtown businesses, including:

- Assessment services to determine an organization's transportation and commuting needs;
- Implementation and management of carpooling programs;
- In-company information sessions and promotional tools/activities;
- Event organization;
- Implementation of self-serve bike programs; and,
- Expert advice about ecological management of parking and equipment for cyclists.

To date, the centre has contacted over 183 organizations and generated significant amongst businesses community. Two employers have set up commuter options programs and a bike sharing program has been implemented with 57 bicycles at 12 offices.

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*Project Website:* [www.voyagezfute.ca/apropos.asp?lng=1](http://www.voyagezfute.ca/apropos.asp?lng=1)



## TOOLS AND PRACTICES

### VERTIGOGOGO - PHASE I

*Lead Organization:* Communications Tour du Lac Inc.  
*Funding Provided:* \$25,000

Although work-related travel tends to get the most attention in terms of developing alternative travel options to the single occupant vehicle, leisure and holiday trips also pose significant environmental challenges. The challenge is particularly troubling in major active recreation destination areas not served by transit where the leisure pursuit of choice is cycling or walking. Such is the case in the Outaouais and Laurentians regions of Quebec, popular destinations for day hikers and cyclists from Montréal and Ottawa.

To reduce the number of single-occupant vehicles traveling to the area, Communications Tour du Lac, a management consulting company that works to employ new communications technology in its projects, worked with the municipality of Val-Morin and other partners to develop an on-line ride matching service for cycle tourists coming to the region.

The Vertigogogo pilot project uses a high-speed internet site to match drivers with potential passengers going to the area. Users must first subscribe to the system and provide basic information regarding their travel preferences and contact information. To maintain personal privacy and user security, subscribers are given a choice of what personal contact information is made visible on the site and their preferred method of contact. Subscribers are then able to search for drivers or passengers traveling or departing from one of 600 rural and urban destinations and departure points spread throughout the Greater Montréal and the Laurentians regions.



*Project Website:* [www.vertigogogo.ca/lutece/jsp/site/Portal.jsp](http://www.vertigogogo.ca/lutece/jsp/site/Portal.jsp)



## TOOLS AND PRACTICES

### AUTOMATED ROUTE FINDER

*Lead Organization:* Whale Lake Research Institute

*Funding Provided:* \$25,000

Making transit easier to use for current and potential riders is an ongoing challenge for transportation planners across Canada. With the internet, however, convenient on-line trip planning and transit information pages help to improve services for existing users, help attract new riders and can help transit providers provide better services to meet current and new demands.

In Halifax, the Whale Lake Research Institute, a small research organization dedicated to developing of sustainable technologies, worked with the support of the region's transit agency, Metro Transit, the Halifax Regional Municipality and Dalhousie University to help develop an innovative, web-based tool called the Bus Route Finder.

The Bus Route Finder allows users to transit riders find the best route to their destination. Using an innovative graphical interface, users select their starting point and destination on an interactive map of the region. Users choose the maximum amount of transfers they wish to make and the software determines the best bus to take and displays the route, listing the bus stop numbers, the bus departure times, and any transfer locations and transfer times.

Although the software is still being fine tuned, it has been well received by project partners and users. As the software becomes better know and used it will also help Metro Transit track route demand and to develop new routes and stops based on user information.

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*Project Website:* <http://hughes-bus.ee.dal.ca/bus.htm>



## DEMONSTRATION PILOT PROJECTS

### DIESEL PARTICULATE FILTER DEMONSTRATION

*Lead Organization:* Alberta Clean Air Strategic Alliance

*Funding Provided:* \$45,000

Canadian municipalities operate large fleets of vehicles which are typically responsible for between 3% and 5% of total municipality-wide GHG emissions. Given the large number of diesel fueled vehicles found in these fleets, they are also responsible for significant particulate matter emissions.

The Alberta Clean Air Strategic Alliance (CASA), a non-profit association of senior representatives from government, industry and non-government organizations, undertook a project to determine the effectiveness of retrofitting diesel vehicles with particulate filters to reduce overall emissions. The project involved the fitting of a Continuously Regenerating Diesel Particulate Filter on two Edmonton Transit Service (City of Edmonton) diesel buses for a period of one year.

During the test period, the buses were equipped with data loggers to monitor engine minimum, maximum and average back-pressure and exhaust temperatures. They were operated on regular service rotation. Two test periods in February 2003 and January 2004 examined emissions of particulate matter, total hydrocarbons and carbon monoxide. To help build public awareness, the two test buses had vinyl wrap advertisements applied to their exterior as well as interior information panels.

Testing revealed that the particulate filters worked well even in the coldest winter weather and that significant emissions reductions were achieved. The filter did not impair bus performance, fuel economy, or driving performance, but did require annual cleaning to ensure proper operation. The range of emission reductions reported reflects the differences observed in the two test periods.

- Total hydrocarbons reductions of 51 - 87%
- CO reductions of 67 - 89%
- Total particulate matter reductions of 60 - 75 %

As a result of the filter's performance and reliability in cold weather, Regina and Ottawa have implemented a diesel particulate filter retro-fit program for their transit fleets.

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*Project Website:* <http://casahome.org/CleanBus/index.asp>



Two Edmonton Transit Service buses took part in the study

## DEMONSTRATION PILOT PROJECTS

### E-BUSES: A PROJECT FOR GREENING URBAN TRANSIT FLEETS

*Lead Organization:* Canadian Renewable Fuels Association

*Funding Provided:* \$50,000

To reduce the overall environmental impact of fleet operations and improve local air quality, many Canadian fleet operators are actively exploring and adopting the use of alternative fuels. Although biodiesel is one of the better-known alternative fuels, other fuels such as ethanol-blended diesel, or e-diesel are also beginning to emerge. Ethanol is made from renewable resources like corn and wheat that is processed with enzymes to produce a high quality alcohol that is then used as a fuel additive.

Leading the testing and pre-commercialization marketing of e-diesel in Canada is the Canadian Renewable Fuels Association (CRFA), a non-profit organization with a mission to promote and research renewable fuels for transportation uses.

The project tests used state of the art labs at Environment Canada's Environment Technology Centre and the Alberta Research Council. Although results varied with the blend used, test results for #2 e-diesel produced the following emission reductions:

- CO reductions of 5%
- CO<sub>2</sub> reductions of 0.4%
- Particulate matter reductions of 29%
- NO<sub>x</sub> reduction of 3%
- Sulphur reduction of 27%

The results, combined with those of the project's Education and Awareness Program, demonstrate that e-diesel offers significant environmental benefits. Additional testing and market development is planned to follow-up on this project.

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*Project Website:* [www.greenfuels.org/](http://www.greenfuels.org/)



## DEMONSTRATION PILOT PROJECTS

### CLEAN AIR ACHIEVERS

*Lead Organization:* Clean Air Champions

*Funding Provided:* \$60,000

At elementary schools in cities and towns across Canada, more and more students are being driven to school by their parents or guardians. In addition to the traffic congestion and air pollution emissions associated with this trend, the decrease in students choosing active transportation has coincided with increasing levels of inactivity amongst elementary school aged youth — a trend that carries with it significant health implications.

The Clean Air Achievers pilot program sought to promote and encourage more active and healthier sustainable transportation choices amongst elementary school aged children. The pilot took place in five elementary level schools in the Greater Toronto Area and involved almost 200 grade 5 and 6 students. The project had the students keep a travel diary that tracked the number of trips they made, their distance and the mode used. The students were encouraged to enter their information on a website which then calculated their GHG emissions per trip and overall. The website also contained active transportation games and quizzes and resource materials for teachers.

Prior to entering their trip diaries on the project website, participants were asked to set a simple personal travel goal against which their actual travel patterns were measured. As participants reached certain target levels, they were recognized for their achievements through Bronze, Silver, and Gold certificates. These certificates were awarded by national elite-level athletes who also gave the students presentations about active transportation choices and the associated physical and environmental benefits.

A second phase project will target older, high school aged children (grades 8 - 10) in four cities across Canada.

*Project Website:* [www.cleanairchampions.ca/index.asp?title=homepage](http://www.cleanairchampions.ca/index.asp?title=homepage)



Olympic Athlete Michael Holroyd at a Clean Air Champions presentation

"This program is an excellent way to teach and inspire about the environment. We appreciate it tremendously."

- Parent, St. Denis Catholic School, Toronto

## DEMONSTRATION PILOT PROJECTS

### CAR SHARING PILOT PROJECT

*Lead Organization:* Whistler Housing Authority

*Funding Provided:* \$7,750

Car sharing is an alternative system of car ownership and access that permits occasional drivers to 'share' a vehicle with other occasional drivers in their community on a fee-for-use basis (members pay for the time and kilometres they drive in addition to an annual access fee). It represents an environmentally responsible and economically sound choice for many people's travel needs, particularly for those occasional errands that demand the use of a vehicle, leisure trips and some work-related trips.

In the Resort Municipality of Whistler, the local housing authority launched a car sharing program in partnership with the municipality, a Vancouver-based car sharing organization and a local environmental organization. The project involved two vehicles, including one hybrid vehicle, and targeted residents living in employee housing developments. Residents in neighbouring dwellings were also encouraged to participate in the car share program.

As the first program of its sort in the area, the project included a comprehensive public awareness and media campaign that also promoted awareness of the hybrid vehicle selected for the project. After only four months, the project attracted considerable attention and 21 members.

The pilot project partners are committed to maintaining the program and making it a permanent transportation program in Whistler. Currently, the project partners are exploring the viability of corporate memberships to try to encourage more local businesses to participate in the program and the Whistler Housing Authority is planning to encourage developers to incorporate car sharing into new housing developments in the community.

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*Project Website:* [www.cooperativeauto.net/projects/whistler](http://www.cooperativeauto.net/projects/whistler)



Whistler's hybrid shared car in the Canada Day parade

## DEMONSTRATION PILOT PROJECTS

### RÉ-BÉCANNE

*Lead Organization:* ENvironnement JEUnesse

*Funding Provided:* \$40,000

Bicycles offer young people an accessible and affordable transportation option that is both environmentally sound and can help foster greater mobility and independence. Recognizing these benefits, ENvironnement JEUnesse (ENJEU), a non-profit organization dedicated to supporting environmental awareness amongst young people, developed an innovative bicycle awareness and maintenance workshop series for lower income youth.

The Ré-Bécanne project targeted people aged 12-17 who visit Montréal's downtown youth centres. The workshops provided participants an introduction to sustainable transportation and climate change and a workshop on maintaining, assembling and repairing bicycles.

For those youth without bicycles, a special "earn-a-bike" program provided youth participants with a recycled bicycle they helped to repair themselves. To earn the bike, youth had to complete 10 hours of volunteer service, helping project organizers collect bicycles for recycling in the Ré-Bécanne project, assisting with the creation of piece of public art using old bicycle parts in a Montréal park, or assisting at the free summer bicycle maintenance workshops ENJEU provides Montréal cyclists along city bike routes during the summer months.

The program not only helped participants develop practical skills, but it was also successful in introducing participants to sustainable transportation and climate change. Approximately 23 free bikes were earned by participants during the project.

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*Project Website:*

[www.enjeu.qc.ca/010/projets.cfm?pid=0000Ra05pxuB0BV0B8AU](http://www.enjeu.qc.ca/010/projets.cfm?pid=0000Ra05pxuB0BV0B8AU)



## WORKSHOPS AND CONFERENCES

### TILLICUM BURNSIDE URBAN VILLAGE COMMUNITY ROUNDTABLE

*Lead Organization:* SmartGrowth BC

*Funding Provided:* \$20,000

Roundtable charette processes have become an increasingly popular method of bringing stakeholders together to integrate smart growth principals into traditional planning processes. The charettes explore land use and design challenges, facilitate a more collaborative planning process, and to generate innovative design recommendations, all over a fairly short period of time.

SmartGrowth BC, a non-governmental organization dedicated to creating more livable communities, has been increasingly using charettes to bring together multiple stakeholders to work through land use planning challenges and arrive at common, more sustainable solutions.

In 2004, SmartGrowth BC organized a design charette to explore how to best redevelop a Victoria, B.C., neighbourhood characterized by heavy traffic, low-intensity land uses and a lack of pedestrians, cyclists and transit facilities. The charette involved a broad cross section of neighbourhood stakeholders and local government representatives, including residents, government, property owners, and developers, and was widely supported by the community.

Some of the key transportation-related principles, goals and directives generated to guide future development in the area included:

- Improve pedestrian and bicycle circulation and amenities on all street rights of way;
- Introduce bike lanes;
- Use street parking to calm traffic;
- "Green" the streets, parking areas, and open spaces to improve the comfort, safety and appearance of the area;
- Implement traffic calming measures (particularly by reducing vehicle traffic lane widths to 3 metres), to discourage speeding and improve the safety and comfort of pedestrian sidewalks and street crossings; and,
- Relocate sidewalks behind landscaped boulevards and pedestrian-controlled street crossings.

The local municipality is currently developing an Action Plan for the area that will include many of these directives as guiding policies.

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*Project Website:* [www.smartgrowth.bc.ca](http://www.smartgrowth.bc.ca)



## WORKSHOPS AND CONFERENCES

### INTERNATIONAL YOUTH SUMMIT ON SUSTAINABLE URBAN TRANSPORTATION

*Lead Organization:* Canadian Urban Transit Association  
*Funding Provided:* \$45,000

Involving and engaging youth in the design and delivery of more sustainable transportation options is a critical component of building a sustainable transportation future. Building on the success of Canada's first Youth Summit on Sustainable Urban Transportation in 2002, the Canadian Urban Transit Association (CUTA) successfully organized a second International Youth Summit on Sustainable Urban Transportation.

Designed to link Canadian youth aged 17 to 24 with youth from around the world to discuss and discover the importance of sustainable transportation in their communities and to encourage participants to take action on sustainable transportation initiatives in their home communities, the conference attracted 80 participants from across Canada and international participants representing the US and Australia.

Some examples of action based solutions either promoted at the summit or ideas that youth participants incorporated into their regional/individual pledges include:

- Expand U-Pass programs nationally with the assistance of CUTA's U-Pass Toolkit;
- Create and maintain partnerships with other conference delegates, local transit systems, CUTA and other relevant organizations; and,
- Raise awareness about the conference and sustainable transportation issues through presentations given by IYS delegates at schools, City Council Meetings etc.

Based on the conference's success, CUTA has decided to hold the event every two years. In addition, organizations in Australia and the US are considering hosting similar conferences based on the Youth Summit model.

*Project Website:* [www.cutaactu.ca](http://www.cutaactu.ca)





## WORKSHOPS AND CONFERENCES

### SHIFTING GEARS: SUSTAINABLE MOBILITY FOR WESTERN MUNICIPALITIES CONFERENCE

*Lead Organization:* Climate Change Central

*Funding Provided:* \$35,000

Regional workshops and conferences are valuable venues for sharing success stories, lessons learned and technical information about sustainable transportation programs, policies and projects. They can also be venues for developing new partnerships and projects. Drawing on the experience of other jurisdictions when designing and implementing sustainable transportation projects can help municipalities avoid potentially costly and time consuming problems.

Shifting Gears: Sustainable Mobility for Western Municipalities was a two-day conference held in Edmonton, Alberta. Organized by Climate Change Central, a non-profit organization focused on the development of innovative responses to global climate change and its impacts, the conference focused on innovative and cost-effective solutions to mobility problems that Western Canadian Municipalities are currently facing. Key conference themes included Transportation Demand Management (TDM) strategies, transit system development and land-use planning initiatives that foster sustainable, environmentally friendly communities. The conference included 23 sessions, four site visits or tours, and a small trade show.

Over 100 delegates representing NGO's, provincial and municipal governments and private industry attended the conference. A post-conference survey found that 88% of respondents felt the event had helped them gain a better understanding of sustainable mobility issues, while 89% felt better prepared to implement a sustainable transportation initiative in their own community.

All conference presentations are available for downloading on the conference website and organizers are planning to organize a follow-up conference in the near future.

*Project Website:*

[www.climatechangecentral.com/default.asp?V\\_DOC\\_ID=776](http://www.climatechangecentral.com/default.asp?V_DOC_ID=776)



## EDUCATION AND OUTREACH PROGRAMS

### GETTING AROUND: A DRIVING FORCE FOR CHANGE

*Lead Organization:* Science West

*Funding Provided:* \$25,000

With the overwhelming majority of Canadian schools and homes connected to the internet, web-based learning resources can be made available to students and teachers cost effectively and efficiently. More organizations are turning to the web to introduce valuable sustainable transportation learning tools to school curricula in a variety of subject areas.

Science West is a Saskatchewan-based not-for-profit organization whose mission is to promote and develop scientific and technological literacy. With help from MOST and other project partners, Science West coordinated a consortium of educators, researchers, communications specialists to develop an engaging and fun on-line educational resource for sustainable transportation.

Targeted towards grade 7 and 8 students and their science teachers, the site includes interactive games, quizzes, accessible information resources, project ideas for youth and curriculum materials for teachers. Collectively, the materials are designed to present users with engaging and genuine opportunities to make a difference through their personal transportation choices.

To date, the website has been well received by educators and youth alike. The Canadian Urban Transit Association awarded the project an Innovation Award at its conference in June 2004. The project also received the Award of Excellence from the Association for Media and Technology in Education in Canada (AMTEC) at its conference in May 2005.

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*Project Website:* [www.science-west.ca](http://www.science-west.ca)



## EDUCATION AND OUTREACH PROGRAMS

### SOCIAL MARKETING OF THE COCKTAIL TRANSPORT

*Lead Organization:* Équiterre

*Funding Provided:* \$20,000

Social marketing is the use of marketing techniques to improve social well-being by changing attitudes and behavior in regard to a specific concept. Increasingly, environmental organizations and others have been employing the strategy to encourage environmentally supportive lifestyle changes.

Équiterre, a Montréal-based environmental organization developed a social marketing campaign for its Cocktail Transport project. The project employed strategic advertising, events and promotions targeting 19 to 25-year-old post secondary students to build their awareness of the impacts of single occupant vehicle use and the environmental, social and economic benefits of more sustainable transportation choices.

The campaign was built around the concept of a "transportation cocktail" that emphasized the mix of healthier alternative transportation available to students regardless of where they live and suggested that making good travel plans was like mixing a good cocktail. The campaign does not require abandoning the car, but rather mixing its use with other modes of transportation such as public transit, car sharing, car pooling, cycling and walking.

In addition to transit ads, roving information kiosks, a media campaign and direct mail, the project also included an innovative on-line calculator that allowed users to calculate the economic and environmental costs of their personal transportation choices.

According to pre and post campaign surveys, the campaign met most of its objectives, including an 8% decrease in the number of people commuting to university by single occupant vehicle, an 1% increase in bicycle commuters, a 1% increase in carpooling rates and an 11% increase in awareness of the Cocktail Transport program and its objectives. Over 600 people also joined the Club de Cocktails.

*Project Website:* [www.equiterre.qc.ca/english/transportation/index.html](http://www.equiterre.qc.ca/english/transportation/index.html)



## EDUCATION AND OUTREACH PROGRAMS

### IDLE FREE WORKPLACES

*Lead Organization:* Better Environmentally Sound Transportation  
*Funding Provided:* \$26,000

Idling vehicles when parked or waiting in non-traffic line-ups is a very common occurrence with considerable environmental impacts. The easily avoidable practice not only wastes fuel, but creates unnecessary air pollution.

Better Environmentally Sound Transportation (BEST) is Vancouver's leading non-profit sustainable transportation planning, advocacy and research organization. Together they worked with the Jack Bell Foundation, a vanpool organization, on a nine-month outreach campaign to educate targeted businesses and the general public on the environmental and economic benefits of avoiding excessive vehicle idling.

The Idle Free Workplace campaign had two major components. The workplace component focused on major regional employers with significant vehicle fleets and used on-site presentations, information sessions and pre and post project telephone surveys. The campaign's second component focused on the general public and included the distribution of information to community members at a series of 'Idle Free Ambassador' events throughout Greater Vancouver at ferry terminals, selected high schools and other transportation hubs.

The project also sought to build awareness with the general public through an "I'm Idle Free" recognition campaign that identified drivers who are helping to change attitudes towards sustainable transportation by shifting their driving behaviours. Participants included the City of Vancouver and many surrounding municipalities, BC Ferries, Novex Couriers and local taxi companies.

Some of the key successes of the campaign included:

- A reduction in frequency and idling times of 25% in participating organizations as tracked through pre and post telephone surveying;
- The distribution of nearly 20,000 idle free fact cards and recognition decals to partnering employers and drivers; and,
- Endorsement of a model "anti-idling" bylaw by the Greater Vancouver Regional District Board of Directors with interest and tentative plans by various member municipalities to adopt the by-law.

*Project Website:* [www.best.bc.ca](http://www.best.bc.ca)



"Every 10 minutes of unnecessary vehicle idling is worth about 10 cents of gasoline. Novex is eager for its drivers to participate and strives to be idle free because vehicle idling pollutes the air, wastes money, and doesn't get you anywhere."

Robert Safrata, CEO for Novex Couriers

This section provides an overview of some of the short-term results for the MOST projects completed in 2004.

#### SUBMISSIONS

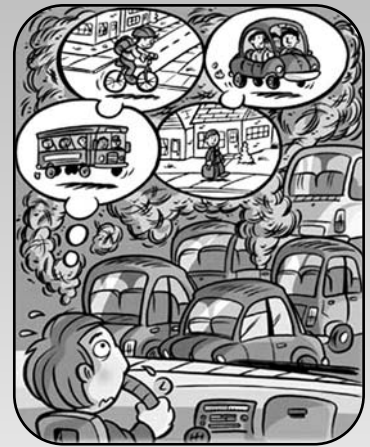
The quality of submissions to MOST has consistently improved during Phase II. This improvement has been matched by a corresponding decrease in ineligible funding requests (3% in Phase II compared with 13% in Phase I).

#### FUNDING BY PROVINCE

In Phase I of the program, 88% of projects funded were initiated in only three provinces — British Columbia, Ontario, and Quebec. The remaining 12% were funded in Alberta and Nova Scotia.

In Phase II, a commitment was made to improve the regional balance of funded projects. In the period covered by this report, 70% of the 41 projects were initiated in British Columbia, Ontario, and Quebec. Of the remaining 13 projects, two were national in scope and one focused on the four western provinces, while the remaining 10 (23% of all projects) were funded across Alberta, Saskatchewan, Manitoba, New Brunswick and Nova Scotia. Across Canada, the regional balance looked like this:

- 7% of projects were national or extra-provincial in scope
- 25% of projects in BC
- 10% of projects in Alberta, Saskatchewan and Manitoba
- 30% of projects in Ontario
- 15% of projects in Quebec
- 13% of projects in New Brunswick and Nova Scotia



Lâche la pédale!, New Brunswick

## WEBSITE USAGE

Unfortunately, data for most of 2004 was corrupted so accurate estimates are difficult to calculate. However, for those months that data was usable, website usage was up 8% over 2003. The MOST web site also kept current during 2004 and updated 5 times with new project profiles, final reports and media releases on funded projects.

## PARTNERSHIPS

The 18 projects completed in 2004 received \$564,410 in contributions from MOST and involved over 100 partners, including provincial and municipal levels of government, foundations, the private sector, non-profit organizations and academic institutions. Together, these partners provided over \$600,000 in additional project funding and over \$2,000,000 in in-kind assistance that was leveraged and attracted by MOST funding. This is a significant increase over 2003.

## STUDIES AND ANALYSES

Project	Reach	Increased Awareness	Partnership Legacy
Urban Transportation Project: Addressing Climate Change in the City of Bathurst (Bathurst Sustainable Development)	<ul style="list-style-type: none"> <li>City of Bathurst is now implementing a pilot municipal transit service, in partnership with non-profits, the MOST program and over 20 businesses</li> </ul>	<ul style="list-style-type: none"> <li>Almost 5,000 completed potential user surveys</li> <li>53 consultations and information sessions with neighbourhood groups, businesses and residents</li> </ul>	<ul style="list-style-type: none"> <li>Comprehensive communications campaign with local and regional radio and television coverage and direct interaction at information sessions</li> </ul>
Transit Neighbours for Hamilton: Towards a Neighbourhood Transit Pass (Environment Hamilton)	<ul style="list-style-type: none"> <li>Targeted information packages to 3,500 individuals in two study neighbourhoods</li> <li>14 families involved directly in research</li> </ul>	<ul style="list-style-type: none"> <li>Several hundred thousand people were exposed through distribution 8,000+ flyers, project website and extensive media coverage</li> <li>Numerous public meetings</li> </ul>	<ul style="list-style-type: none"> <li>Hamilton Transit Users Group (HTUG) formed as an autonomous and ongoing citizens transit advocacy group in fulfillment of project objectives</li> </ul>

## TOOLS AND PRACTICES

Expanding Community Bicycle Network BikeShare (Toronto Christian Resource Centre)	<ul style="list-style-type: none"> <li>18 "hubs" allowing members to access bikes now operational at community centres around Toronto</li> <li>BikeShare membership expanded to 900</li> </ul>	<ul style="list-style-type: none"> <li>Extensive print, TV and radio coverage</li> <li>Distinctive yellow bikes are widely recognized throughout Toronto</li> <li>Bikes now have front basket information panels</li> </ul>	<ul style="list-style-type: none"> <li>Strong partnerships with current 'hub' operators</li> <li>Growing relationship with GO Transit and Toronto Transit Commission</li> </ul>
Active and Safe Routes to School - ASRTS (Greenest City Environmental Organization)	<ul style="list-style-type: none"> <li>12 schools in 6 communities implemented ASRTS programs and events</li> <li>Parent, teacher and student workshops with partner schools</li> <li>Distributed 800 Active and Safe Routes to School manuals throughout 17 schools</li> </ul>	<ul style="list-style-type: none"> <li>Widespread media coverage with over 30 newspaper articles with a circulation of 1.5 million</li> </ul>	<ul style="list-style-type: none"> <li>Partnerships to continue to expand program with over 80 groups throughout southern Ontario, including Regional Health Units, municipalities, county and regional governments, School Boards, Police and community organizations</li> </ul>
Vertigogogo -Phase I (Communications Tour du Lac Inc.)	<ul style="list-style-type: none"> <li>187 subscribers signed on during the shortened monitoring period</li> </ul>	<ul style="list-style-type: none"> <li>20+ guided tours of the Centre d'Accès communautaire à l'Internet de Val-Morin</li> <li>32 meetings with municipal directors, transportation employees and public institutions</li> </ul>	<ul style="list-style-type: none"> <li>Supported by destination local and regional governments</li> <li>Organizer to pass on lessons learned if questions are referred from Transport Canada on similar initiatives</li> </ul>

## STUDIES AND ANALYSES

Project	Development of Innovative Tools and Practices	Quantifiable Impacts
Urban Transportation Project: Addressing Climate Change in the City of Bathurst (Bathurst Sustainable Development)	<ul style="list-style-type: none"> <li>Commitment to use "naturally occurring bus stops" for pilot, i.e., stops will be set up at businesses and buildings where seating, weather protection and other user amenities already exist</li> </ul>	<ul style="list-style-type: none"> <li>4,562 potential riders identified (79% of survey respondents)</li> </ul>
Transit Neighbours for Hamilton: Towards a Neighbourhood Transit Pass (Environment Hamilton)	<ul style="list-style-type: none"> <li>Facilitated formation of Hamilton's first transit users group, Transit Users Group (TUG), with a paid membership of over 80 individuals, a contact list of over 200 individuals, regular meetings, newsletters and campaigns.</li> </ul>	<ul style="list-style-type: none"> <li>5% decrease in number of SOV trips with family study group</li> <li>66% of individuals living in multi-unit residences in target neighbourhood indicated they would purchase a Neighbourhood Transit Pass if available</li> </ul>

## TOOLS AND PRACTICES

Expanding Community Bicycle Network BikeShare (Toronto Christian Resource Centre)	<ul style="list-style-type: none"> <li>New database tracks the location of the bikes, member status and activity and hub activity</li> </ul>	<ul style="list-style-type: none"> <li>16% increase in use of the program over 2003</li> <li>An estimated 50,260 km was traveled by BikeShare bikes resulting in the following reductions: <ul style="list-style-type: none"> <li>CO<sub>2</sub> = at least 15,583 kg</li> <li>NO<sub>X</sub> = at least 22,667 kg</li> <li>CO = at least 283,333 kg</li> </ul> </li> </ul>
Active and Safe Routes to School - ASRTS (Greenest City Environmental Organization)	<ul style="list-style-type: none"> <li>New ASRTS manual has is intended for Ontario audiences in smaller communities</li> <li>New ASRTS Ontario website (<a href="http://www.saferoutestoschool.ca">www.saferoutestoschool.ca</a>) online January 2004</li> </ul>	<ul style="list-style-type: none"> <li>27 new Walking School Bus routes established</li> <li>An estimated 33% of Walking School Bus participants are mode switchers</li> <li>68.24 tonnes of CO<sub>2</sub> offset (2.3 tonnes per participating school) through project events</li> </ul>
Vertigogogo - Phase I (Communications Tour du Lac Inc.)	<ul style="list-style-type: none"> <li>Unique, automated, subscriber-based ride matching software</li> </ul>	<ul style="list-style-type: none"> <li>187 individual subscriptions</li> <li>106 pairing searches and 38 successful pairings during evaluation period (a 36% success rate)</li> </ul>



## TOOLS AND PRACTICES

Project	Reach	Increased Awareness	Partnership Legacy
Déploiement des programmes Allégo (Centre de Gestion des Déplacements du Centre-ville de Montréal)	<ul style="list-style-type: none"> <li>2 businesses recruited for trip reduction programs</li> <li>Bicycle sharing available at 12 offices with 57 bicycles and 25,000 potential office users</li> </ul>	<ul style="list-style-type: none"> <li>183 organizations and businesses contacted</li> <li>500 businesses reached through direct mail campaign</li> <li>Multiple television and newspaper stories</li> <li>10,000 website visitors over a 6 month period</li> </ul>	<ul style="list-style-type: none"> <li>19 private and public-sector and partners supported the project financially, technically or through service agreements</li> <li>9 organizations serve on Board of Directors</li> </ul>
Automated Route Finder (Whale Lake Research Institute)	<ul style="list-style-type: none"> <li>2,000 site visits per month are projected</li> </ul>	<ul style="list-style-type: none"> <li>Increased awareness of software potential amongst partners</li> </ul>	<ul style="list-style-type: none"> <li>Metro Transit, Halifax Regional Municipality and Dalhousie University committed to ongoing support and partnership</li> </ul>

## DEMONSTRATION PILOT PROJECTS

Diesel Particulate Filter Demonstration (Clean Air Strategic Alliance)	<ul style="list-style-type: none"> <li>Results advertised on project buses</li> <li>Results reported to the CASA board which has senior industry and government representatives</li> </ul>	<ul style="list-style-type: none"> <li>20+ stories in all media</li> <li>10,000 brochures handed out on two pilot buses</li> </ul>	<ul style="list-style-type: none"> <li>Project reinforced existing partnerships between CASA members</li> </ul>
E-Buses: A Project for Greening Urban Transit Fleets (Canadian Renewable Fuels Association)	<ul style="list-style-type: none"> <li>Reached wide technical audience in both Canada and US through research and stakeholder involvement</li> </ul>	<ul style="list-style-type: none"> <li>Considerable exposure through the involvement of high profile team members, including Environment Canada's Environment Technology Centre and the Alberta Research Council</li> </ul>	<ul style="list-style-type: none"> <li>Project partners strategically selected for ability to support pre-commercialization efforts and ability to market e-diesel once available</li> </ul>
Clean Air Achievers (Clean Air Champions)	<ul style="list-style-type: none"> <li>942 individuals directly reached through presentations and events, including 185 student participants</li> </ul>	<ul style="list-style-type: none"> <li>Very positive reception amongst parents, teachers and children</li> </ul>	<ul style="list-style-type: none"> <li>Partners included four environmental organizations, Toronto's two School Boards and the Canadian Association of Physicians for the Environment</li> </ul>
Car Sharing Pilot Project (Whistler Housing Authority)	<ul style="list-style-type: none"> <li>21 new car share members joined the Car Sharing Project over four months</li> </ul>	<ul style="list-style-type: none"> <li>Excellent local media coverage in papers, radio and on TV</li> <li>Substantial communications program with radio and print advertising, posters, direct mail and 1,000 info pamphlets</li> </ul>	<ul style="list-style-type: none"> <li>Partnership formed between local environmental organization, the municipality and Canada's second largest car sharing organization</li> </ul>
Ré-Bécane (Environnement Jeunesse)	<ul style="list-style-type: none"> <li>150 youth participated in bicycle repair and sustainable transportation workshops</li> </ul>	<ul style="list-style-type: none"> <li>100% of participants had a better understanding of sustainable transportation issues according to post workshop surveys</li> </ul>	<ul style="list-style-type: none"> <li>11 partner Youth Centres</li> <li>5 non-profit partners (environmental and cycling groups)</li> <li>Provincial support for future phases</li> </ul>

## TOOLS AND PRACTICES

Project	Development of Innovative Tools and Practices	Quantifiable Impacts
Déploiement des programmes Allégo (Centre de Gestion des Déplacements du Centre-ville de Montréal)	<ul style="list-style-type: none"> <li>One-stop service centre for delivery of sustainable transportation solutions targeting businesses and institutions in Downtown Montréal</li> </ul>	<ul style="list-style-type: none"> <li>2 Allégo programs underway</li> <li>Bicycle sharing available at 12 offices with 57 bicycles and 25,000 potential office users</li> <li>Over 2,000 bike share trips</li> </ul>
Automated Route Finder (Whale Lake Research Institute)	<ul style="list-style-type: none"> <li>Innovative graphical user interface handles new map imaging technique (i.e., users pick destination and departure points on a map as opposed to by address)</li> </ul>	<ul style="list-style-type: none"> <li>Limited to date given site's short 'live' time</li> </ul>

## DEMONSTRATION PILOT PROJECTS

Diesel Particulate Filter Demonstration (Clean Air Strategic Alliance)	<ul style="list-style-type: none"> <li>Continuously Regenerating Diesel Particulate filter tested and efficiency confirmed</li> </ul>	<ul style="list-style-type: none"> <li>Hydrocarbons reductions of 51 - 87%</li> <li>CO reductions of 67 - 89%</li> <li>Particulate matter reduced 60 - 75 %</li> </ul>
E-Buses: A Project for Greening Urban Transit Fleets (Canadian Renewable Fuels Association)	<ul style="list-style-type: none"> <li>Confirmed practicality of e-diesel in Canadian climactic conditions</li> </ul>	<ul style="list-style-type: none"> <li>CO reductions of 5%</li> <li>CO2 reductions of 0.4%</li> <li>Particulate matter reductions of 29%</li> <li>NOx reductions of 3%</li> <li>Sulphur reductions of 27%</li> </ul>
Clean Air Achievers (Clean Air Champions)	<ul style="list-style-type: none"> <li>An easy to use GHG calculator developed for use on the project website</li> </ul>	<ul style="list-style-type: none"> <li>Participants increased weekly physical activity through active transportation choices</li> <li>Results limited by age of target audience who were too young for required data entry and tracking tasks</li> <li>75% of participants enjoyed the project</li> </ul>
Car Sharing Pilot Project (Whistler Housing Authority)	<ul style="list-style-type: none"> <li>First car sharing opportunity in the Resort Municipality of Whistler</li> <li>First car sharing project targeting residents of employee housing</li> </ul>	<ul style="list-style-type: none"> <li>21 people registered for car share pilot project within first 4 months</li> <li>1 car share member sold their personal vehicle while another deferred purchase indefinitely</li> </ul>
Ré-Bécane (Environnement Jeunesse)	<ul style="list-style-type: none"> <li>Skills-based program builds environmental awareness and ensures participants can maintain and repair their sustainable transportation choices (i.e., their bicycles)</li> </ul>	<ul style="list-style-type: none"> <li>91% of participants committed to using bicycles for primary transport</li> <li>25 participants awarded free bicycles</li> <li>47 bicycles recycled</li> </ul>

## WORKSHOPS AND CONFERENCES

Project	Reach	Increased Awareness	Partnership Legacy
Tillicum Burnside Urban Village Community Roundtable (SmartGrowth BC)	<ul style="list-style-type: none"> <li>Over 60 residents, business owners and local government representatives attended events</li> </ul>	<ul style="list-style-type: none"> <li>Supporting education pieces and editorials published in local paper</li> <li>First charette process for most participants</li> <li>Significant support from local community association translated into widespread community participation and support</li> </ul>	<ul style="list-style-type: none"> <li>Supporting partnerships and linkages with University of B.C. research units and local government</li> </ul>
International Youth Summit on Sustainable Urban Transportation (Canadian Urban Transit Association)	<ul style="list-style-type: none"> <li>80 participants from across Canada</li> <li>7 international presenters and delegates from Italy, Columbia, the US and Australia</li> <li>3 plenary sessions, 13 sessions, 4 workshops, 2 technical tours, a regional roundtable and 3 keynote addresses</li> </ul>	<ul style="list-style-type: none"> <li>4,7000 poster distributed nationally</li> <li>Limited media coverage</li> <li>Links to conference site placed on several external sites</li> </ul>	<ul style="list-style-type: none"> <li>US and Australian partners are considering holding similar events based on conference model</li> <li>Partners have begun planning for the next summit to be held in 2006</li> </ul>
Shifting Gears: Sustainable Mobility for Western Municipalities (Climate Change Central)	<ul style="list-style-type: none"> <li>Over 100 municipal and NGO participants from BC, Alberta, Saskatchewan and Manitoba</li> <li>Over 20 post-secondary institutions and 52 municipal and private sector organizations represented</li> <li>Conference included 23 sessions on various sustainable transportation planning and design topics, four site visits and tours and a small trade show</li> </ul>	<ul style="list-style-type: none"> <li>2,000+ unique hits to conference website</li> <li>88% of post-conference survey respondents reported improved understanding of issues facing sustainable transportation systems</li> </ul>	<ul style="list-style-type: none"> <li>Over 17 organizations involved on planning committee or as sponsors</li> <li>Ongoing partnerships with Alberta Municipal Affairs, Cities of Calgary and Edmonton, Alberta Transportation, Sierra Club of Canada-Prairie Chapter and the Alberta Urban Municipalities Association</li> </ul>

## WORKSHOPS AND CONFERENCES

Project	Development of Innovative Tools and Practices	Quantifiable Impacts
<p>Tillicum Burnside Urban Village Community Roundtable (SmartGrowth BC)</p>	<ul style="list-style-type: none"> <li>• Design charette tool had not previously been used by the District</li> <li>• Charette approach generated more sustainable design solutions than more standard planning process</li> </ul>	<ul style="list-style-type: none"> <li>• Charette results to be included in new area plan</li> <li>• Final report downloaded 735 times over 11 months</li> </ul>
<p>International Youth Summit on Sustainable Urban Transportation (Canadian Urban Transit Association)</p>	<ul style="list-style-type: none"> <li>• International Youth Summit model may be replicated in US and Australia</li> </ul>	<ul style="list-style-type: none"> <li>• Canadian Urban Transit Association has committed to holding International Youth Summit conference every 2 years</li> </ul>
<p>Shifting Gears: Sustainable Mobility for Western Municipalities (Climate Change Central)</p>	<ul style="list-style-type: none"> <li>• First sustainable transportation conference focusing on western Canada</li> <li>• Carbon neutral conference - GHG emissions from associated travel, materials and accommodation offset by donation to Tree Canada Foundation</li> </ul>	<ul style="list-style-type: none"> <li>• 88% of participants claimed better understanding of sustainable mobility issues</li> <li>• 89% of participants felt better prepared to implement sustainable transportation initiatives in their communities</li> </ul>

## EDUCATION AND OUTREACH PROJECTS

Project	Reach	Increased Awareness	Partnership Legacy
Getting Around: A Driving Force for Change (Science West)	<ul style="list-style-type: none"> <li>• 740+ web hits per month</li> <li>• 240+ downloads of teacher resource materials</li> </ul>	<ul style="list-style-type: none"> <li>• Presentations made at Alberta Science Teachers Conference, Saskatchewan Science Teachers Conference and the Canada Wide Science Fair</li> <li>• Canadian Urban Transit Association Innovation Award, June 2004</li> <li>• Association for Media and Technology in Education in Canada Award of Excellence, May 2005</li> </ul>	<ul style="list-style-type: none"> <li>• Partnerships with three Saskatchewan municipal and provincial agencies, two non-profits and the private sector</li> </ul>
Cocktail Transport (Équiterre)	<ul style="list-style-type: none"> <li>• 78,000 reached directly through info kiosks, conferences, events and the project website</li> <li>• 50,000 project post cards distributed</li> <li>• 14,725 info pamphlets distributed</li> </ul>	<ul style="list-style-type: none"> <li>• 536 strategically placed transit ads and 28 bus shelter ads at universities and student housing areas</li> <li>• 3,600+ visits to website during campaign month</li> </ul>	<ul style="list-style-type: none"> <li>• 24 government, corporate and non-profit partners will continue to assist with future project phases</li> </ul>
Idle Free Workplaces (Better Environmentally Sound Transportation)	<ul style="list-style-type: none"> <li>• 30 presentations to companies, municipalities, and post secondary institutions in Greater Vancouver</li> <li>• 16,000+ fact cards distributed</li> <li>• 16,000+ decals distributed</li> </ul>	<ul style="list-style-type: none"> <li>• TV and radio media spots reaching over one million residents within Greater Vancouver through paid public service announcements on 12 radio stations</li> <li>• 406 on-line employee surveys completed</li> <li>• 1,000 hits per month on project website</li> </ul>	<ul style="list-style-type: none"> <li>• Long-term partners include City of Vancouver - Cool Vancouver Task Force, Capilano College and BC Ferries</li> </ul>

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Project	Development of Innovative Tools and Practices	Quantifiable Impacts
Getting Around: A Driving Force for Change (Science West)	<ul style="list-style-type: none"> <li>• Unique educational resources available on-line for grade 7 and 8 science classes, games, teacher information and lesson plans</li> </ul>	<ul style="list-style-type: none"> <li>• 240+ downloads of teacher resource materials</li> </ul>
Cocktail Transport (Équiterre)	<ul style="list-style-type: none"> <li>• Innovative, effective and professionally coordinated social marketing campaign targeting university and college students</li> <li>• On-line economic and environmental calculator to compare costs of car oriented transportation vs. more sustainable choices</li> </ul>	<ul style="list-style-type: none"> <li>• Comparison of 2003 and 2004 university student surveys indicated 5% increase in respondents putting off buying a car permanently or temporarily</li> </ul>
Idle Free Workplaces (Better Environmentally Sound Transportation)	<ul style="list-style-type: none"> <li>• Broad-based and coordinated media campaign resulted in excellent media coverage</li> <li>• Coordinated project media and communications with other campaigns, e.g. City of Surrey's garbage and recycling calendar which goes to 80,000 households</li> </ul>	<ul style="list-style-type: none"> <li>• Average 25% reduction in idling times with pilot organizations</li> <li>• 22 Idle free signs installed throughout Greater Vancouver, including the University of B.C., Simon Fraser University and BC Ferries</li> <li>• Web links for Idle Free site placed on 7 external sites, including BC Ferries</li> </ul>

One of MOST's key objectives is to help share lessons learned on developing and implementing more sustainable transportation options. The following key lessons distilled from the 18 projects completed in 2004 and were identified by two or more project organizers.

- **Engage relevant governments and elected officials early:** Small projects by non-profit groups often work to attain the same policy and program objectives as governments. Involving municipal and regional councils can be an effective way of building project support and broadening a project's constituency. Having government support can also help formalize and/or institutionalize project goals and ensure the sustainability of the endeavour (i.e., help the project continue beyond MOST's funding horizon or have resulting policies adopted by local governments). When seeking government support and buy-in, it can also be effective to invite outside experts or practitioners to share their success stories with local politicians where feasible and practical. Having local officials participate at project events, workshops and conferences and introducing them to key project partners can garner greater support for the project and give the event itself greater credibility.
- **Identify 'Project Champions' and seek to involve them in the project:** A Project Champion is an individual who not only supports the project, but is in a position to help move the project forward financially and in terms of political support. Often these individuals are more active in politics, communities and the media than the general population, and are therefore more visible. They can help promote sustainable transportation to a wider audience, "lead by example" and should be specifically targeted in communication campaigns.
- **Utilize low cost, effective and efficient communication tools:** With the number of Canadian households, schools and businesses on-line in Canada, projects need to harness the effective and low cost communication tools available with the internet. Many project groups established list serves, employed targeted 'e-lets', set up email groups and shared resources and information on-line to cost effectively and efficiently broaden the reach of the project.



Many organizations across Canada, including Équiterre in Montréal, have begun using social marketing to better "sell" the idea of sustainable transportation

- **Consider establishing a Project Advisory Committee:** Project organizers should consider establishing a Project Advisory Group made up of project stakeholders, partners and experts to help oversee the project. These groups can bring expertise and advice to the project, can be an avenue to developing strong partnerships, provide project leadership, and can help improve project communications between project groups and the larger community. The Advisory Committee should be formed at project inception and meet every few months.
- **Allow for extra time in negotiating partnerships:** Effective and broad-based partnerships are at the foundation of many of the more successful projects. Partnerships and partnership agreements can, however, take extra time to negotiate, particularly when they bring together organizations and businesses that have no previous working relationship. Extra time should be given for cultivating and formalizing project partnerships.
- **Avoid shorter information and awareness campaigns:** Many project organizers found that year-long or shorter campaigns can be too short to realize project goals or to develop the necessary relationships with project partners. This is of particular importance in the business community, where partnerships and programs may take longer to establish given time and cost pressures. Municipalities also do not necessarily work on issues with such short-time horizons. A longer term campaign that can implement regular annual activities may be a more effective approach.
- **Involve business groups in projects where feasible and practical:** Business groups such as Chambers of Commerce, local business associations and trade groups are important to involve. These groups can help promote events, provide financing and can help organizers in meeting overall project goals, particularly as project goals may be consistent with business goals (i.e., improved mobility, less traffic congestion, easier goods movement, improved transit access, etc.). Their involvement can also broaden the project constituency and help further legitimize the project's sustainable transportation goals and methods. This can also be an opportunity to demonstrate the economic benefits of sustainable transportation.



- **Support volunteer component of projects:** Many of the projects require considerable volunteer support, particularly those projects involving youth and community groups. Be aware of volunteer needs when arranging meetings, scheduling project events and carrying out project activities. Regular follow-up and recognition is critical. Where practical and feasible, volunteer recognition events can be an enjoyable and effective way of both recognizing project volunteers and sustaining project momentum. On the business side, securing volunteer support can be difficult when voluntary employee programs have not traditionally been a business priority and can take time to get support from senior management.
- **Consider economic sustainability of non-profit driven projects:** It can be difficult for non-profits to sustain projects without ongoing financial support and assistance. Developing a longer term business plan to identify future funding needs, incorporating fee-for-service elements where feasible and practical, and securing longer term or phased financial commitments from funding partners can all help secure greater sustainability for ongoing projects.



### For More Information

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