June 2012 |

Making Active and Sustainable School Transportation a Priority in the Greater Toronto and Hamilton Area

## Stepping It Up – Final Report





### THANK YOU TO OUR PROJECT PARTNERS, COMMUNITY PARTNERS & PILOT SCHOOLS

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(All members during the project period)

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#### Hamilton

Hamilton Active and Safe Routes to School Steering Committee Hamilton-Wentworth District School Board Hamilton-Wentworth Catholic District School Board Green Venture Hamilton Police Services McMaster University Settlement and Integration Services Elizabeth Fry Society – Hamilton Chapter Heart and Stroke Foundation Crown Point Community Planning Team North End Neighbours New Hope Bicycle Co-op

#### **Pilot Schools in Hamilton:**

St. Patrick CES Holy Name of Jesus CES Blessed Kateri Tekakwitha CES St. Lawrence CES St. Ann (Hamilton) CES Mountview ES Earl Kitchener ES St. Ann (Ancaster) CES St. Thérèse of Lisieux CES St. Martin of Tours CES St. Margaret Mary CES St. Marguerite D'Youville CES Our Lady of Lourdes CES St. Mark CES St. Francis Xavier CES St. John the Baptist CES

#### **Pilot Schools in Peel:**

Ridgewood PS Eagle Plains PS Corliss PS Dunrankin Dr. PS Treeline PS Red Willow PS Larkspur PS Jefferson PS Grenoble PS James Potter PS Hanover PS Worthington PS Hewson PS Homestead PS

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"It makes me feel happy and it makes me feel energized 'cause you get more exercise walking to school than when you drive in a car." - Student, Hamilton

### **EXECUTIVE SUMMARY**

#### Reversing the Trend by Stepping It Up

The number of children walking to school in the Greater Toronto and Hamilton Area (GTHA) has declined steadily over the past 25 years. In the absence of organized active transportation plans, policies and programs to support walking or cycling, increasing numbers of parents are opting to drop off and pick up their children by car. These decisions contribute to growing car traffic congestion, safety concerns, and air pollution around schools during morning and afternoon 'school runs'. In response, a grassroots movement to reverse these trends has been building momentum in the GTHA and across North America.

The Stepping It Up pilot project used the Canadian School Travel Planning (STP) Model, created by Green Communities Canada, to promote active and sustainable modes of school travel for students, families and staff. It was delivered at 30 elementary schools in the cities of Hamilton, Brampton, and Mississauga. The project received funding from Transport Canada's ecoMOBILITY program, and was led by Metrolinx in partnership with the Region of Peel, City of Hamilton, Green Communities Canada and the University of Toronto.

At the school level, STP facilitators worked directly with school administrators and municipal partners to implement low cost actions, such as dedicated walk to school days; organized walking groups; additional crossing guard services; crosswalk markings and bicycle racks; and walking route maps and signage. Schools found that project goals and initiatives aligned well with both the Healthy Schools model endorsed by the Ministry of Education and the Ontario EcoSchools program.

Collectively, it is estimated that Stepping It Up pilot schools have achieved:

- an overall average decrease in school car trips of 7% in the morning period and 3% in the afternoon period, with an equivalent increase in pedestrian trips;
- added 746, 700 minutes of walking among students annually; and,
- prevented 101,635 vehicle kilometres travelled, 22 tonnes of greenhouse gas emissions (i.e. CO2 equivalent) and 884 kg of air pollutants annually.

At the GTHA level, Metrolinx consultations with more than 200 stakeholders demonstrated that provincial ministries, school boards, municipalities, school administrators, parents and students all have an important role to play in school travel. While school travel planning is a collaborative approach that is flexible enough to be applied on a broader scale, to be sustainable, its efforts need to work within a policy, planning, and servicing context that supports active modes of transportation.



"The project alleviates the parking problem, which seems to be getting worse every year. The effect it has had on me is I'm getting more exercise. I get to talk to my kids more." – Parent, Hamilton

"I think the issue behind the project is something that needs improvement in all communities across the province."

-Principal, Peel District School Board

#### Executive Summary continued...

#### Next Steps in Active and Sustainable Transportation

To leverage the success of Stepping It Up and have an even greater impact on school travel behaviour, stakeholders must move forward strategically and in a coordinated fashion. They must deliver supportive measures and consistent programming and messaging on matters relating to active and sustainable school travel.

In the GTHA, Metrolinx will continue to lead the coordination of efforts in active and sustainable school travel over the 2012 to 2014 period, with a focus on:

- building and transitioning the work to date into an initiative with long-term goals and targets
- developing strong leadership locally and provincially
- moving toward integration of active modes of school travel into policy and business operations, and
- securing dedicated resources for coordination of active and sustainable school travel in the region

The foundation has been laid. The next steps are to collectively move forward on the opportunities identified. Metrolinx, in further consultation with stakeholders, is developing a strategic work plan for advancing these priority areas. "As I'm walking, I see everyone who's parked along the street... all the exhaust... smells bad and I don't like it at all."

– 8th Grader, Hamilton Catholic District School Board, winter 2011



Students, parents and staff participating in a Walking School Bus, Hamilton.

### BACKGROUND

#### The Trend in School Travel: Fewer Feet on the Street and a Growing Ecological Footprint

The number of children walking to school has declined steadily over the past 25 years in the Greater Toronto and Hamilton Area (GTHA) (*Figure 1*). In the absence of organized active transportation plans, policies and programs to support walking or cycling, and in concert with factors such as lengthening work commute distances, increasing numbers of parents are opting to drop off and pick up their children by car. These decisions contribute to growing car traffic congestion, safety concerns, and air pollution around schools during morning and afternoon 'school runs'.

Students, families and other community residents must navigate through unsafe and unhealthy conditions on routes to and from school. School staff and local law enforcement agencies have assumed significant trafficrelated duties. Opportunities for students to enjoy daily physical activity and socialization with peers are being lost. Overall, the trend in school travel translates into a **growing ecological footprint for schools** and has significant social, economic, and health impacts for school boards and within the broader community. As depicted by *Figure 2*, the annual carbon footprint (CO2e) of an average GTHA elementary school due to car travel is 57 tonnes (see Appendix A for further breakdown).

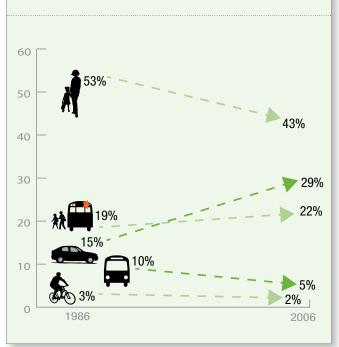
This scenario is likely playing out in your community, just as it is happening around the world.

### Reversing the Trend: Toward Active, Healthy School Travel

Solutions aimed at reversing the trend in school travel are gaining momentum across the globe. Well-funded Safe Routes to School programs are in place across the United States and abroad. In Canada, the Active and Safe Routes to School movement began in Toronto in 1996 and has since spread across the country with many municipal governments putting walking and cycling plans and strategies into place.

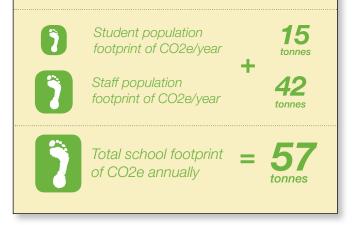
#### FIGURE 1:

Trend in Elementary School Travel in the Greater Toronto and Hamilton Area <sup>4</sup>



#### FIGURE 2:

An average GTHA elementary school's CO2e footprint due to student & staff car travel to & from school





Students promote a new walking school bus at an open-house event, Hamilton



Morning traffic at an Oakville elementary school

### **QUICK FACTS:**

"School administrators and staff spend an average of 30 minutes each school day managing car traffic at their school." <sup>20</sup>

"71% of GTHA parents said they walked to elementary school as a child, and only 39% said their child walks to elementary school."<sup>2</sup>

*"56% of GTHA parents strongly agree that there are too many cars around their child's school in the morning."*<sup>3</sup>

School Travel Planning is an international best practice being used in Canada to:

- 1) Assess the transportation-related issues at schools,
- 2) Work with the school and community to create a school travel plan with actions aimed at reducing car traffic at schools and creating safer, healthier conditions for students, staff and families; and,
- 3) Implement actions in the short, medium and long term in collaboration with the school population, school board and community partners.

Actions and measures undertaken by schools and community partners draw from among the 'Five Es', depending on the unique needs of each school (see below).

#### THE FIVE E'S<sup>6</sup>

**Engineering:** Creating operational and physical improvements to infrastructure in and around schools that reduce speeds and potential conflicts with motor vehicle traffic and establish more accessible crossings, walkways, trails and bikeways

**Education:** Teaching children and parents about a broad range of transportation choices; building walking and cycling safety skills; holding safety campaigns around schools

**Enforcement:** Ensuring traffic laws in school zones are obeyed; initiating crossing guard programs

**Encouragement:** Promoting walking and cycling through activities and events

**Evaluation:** Monitoring and documenting outcomes and trends through data collection before and after interventions

#### School Travel in the Greater Toronto & Hamilton Area

The Greater Toronto and Hamilton Area (GTHA) is Canada's largest region, with more than 6 million people. The region includes a student population served by approximately 1,500 elementary schools.

GTHA school trips make up the second largest proportion of weekday traffic in the morning peak period <sup>9</sup>. Recent regional studies found that most GTHA parents agree there is too much car traffic around their child's school, and they would prefer to see their children getting to school in an active, healthy and environment-friendly way. This is especially true among parents who regularly drive their child. <sup>3</sup>

#### **DID YOU KNOW...**

The Big Move, the regional transportation plan for the GTHA, envisions that 60% of children will walk or cycle to school by 2033. The plan includes a priority action to develop a transportation demand management policy and strategy for provincial ministries and agencies such as school boards.



The Canadian Active and Safe Routes to School (ASRTS) program was developed by Green Communities Canada (GCC). First introduced at a Toronto school in 1996, the program was developed in response to growing requests from principals, teachers and parents for help to address worsening car traffic around schools. ASRTS provides activities and resources that encourage and support active ways of school travel, such as walking and cycling, amongst students and families. The ASRTS movement has since spread across Canada, with approximately 40 communities now participating in Ontario. The Canadian School Travel Planning Model is a collaborative, measurement-based approach developed by GCC and modelled on successful international programs. As of 2011 the model had been introduced in all provinces and territories.<sup>10</sup>

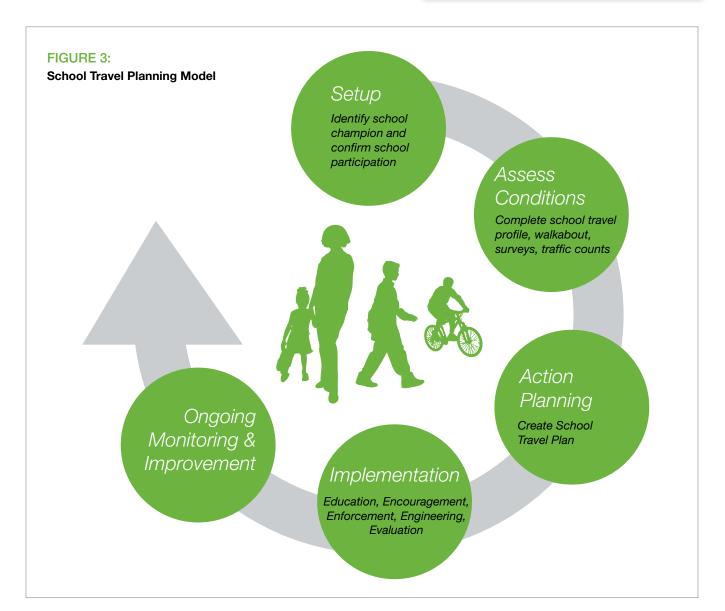
### **STEPPING IT UP**

#### Introduction

The Stepping It Up pilot project used the Canadian School Travel Planning (STP) Model (Figure 3) to promote active and sustainable modes of school travel for students, families and staff. It was delivered at 30 elementary schools in the cities of Hamilton, Brampton and Mississauga, all located in the GTHA (see Figure 3 and Project Structure). Stepping It Up was led by Metrolinx, in partnership with the Region of Peel, the City of Hamilton, Green Communities Canada and the University of Toronto. The project received funding from Transport Canada's ecoMOBILITY program and ran from April 2009 to December 2011. In addition to its school-based programming, the project also brought together a wide range of stakeholders from the education, health and transportation sectors in the GTHA and Ontario. Together, stakeholders identified key opportunities to support active and sustainable school transportation.

#### **PROJECT STRUCTURE**

STP Facilitators from Peel and Hamilton worked directly with pilot schools from the Peel District School Board, the Hamilton-Wentworth Catholic District School Board, and the Hamilton-Wentworth District School Board. Facilitators were supported with expertise and resources through their local Active and Safe Routes to School committees and by the Stepping It Up Steering and Advisory Committees. The Steering and Advisory Committees also coordinated school travel workshops and studies at the GTHA-wide level.



#### School Activities

#### **BASELINE ASSESSMENTS**

The baseline assessment for each of the 30 Stepping It Up pilot schools included:

- Student, family and staff surveys
- Baseline traffic counts (pedestrians-cyclists-cars)
- School profile
- Site walkabout

Data for each school was used to create a comprehensive school travel plan, including actions for the short, medium and long term. See *Figure 4* for key project targets and results.

#### **IMPLEMENTATION**

By the end of the project in December 2011, 95 actions had been implemented across 20 of the pilot schools. As depicted in Figure 5, schools chose to implement a range of actions to support walking and cycling, drawing from the 5 Es: education, encouragement, enforcement, engineering and evaluation. These activities engaged many community partners, including police and crossing guards, municipal transportation and public health staff, local neighbourhood groups and bicycle shops. Schools also connected their work on school travel into broader school policy and programming such as Healthy Schools frameworks and EcoSchools initiatives. Beyond the project timeframe, further actions may be implemented over the medium and long term, such as sidewalk improvements, and existing actions may also be repeated from year to year to engage new populations of students and staff.

#### FIGURE 4: Stepping It Up Project Overall Targets and Results

TARGETS	RESULTS	
30	✔ 30	Participating pilot schools
30	✓ 30	School travel data sets collected
20	🖌 20	School travel plans created
34	✓ 95	School travel initiatives, measures, programs introduced by 20 schools



Students using bicycle racks sponsored by the City of Hamilton

# FIGURE 5: Stepping It Up Schools. Top 6 Actions: 1. Walking to school announcements and newsletters

- 2. Dedicated weekly walk days and student reward programs
- 3. A Walking School Bus
- 4. Add or relocate bicycle racks
- 5. Crossing guards and police enforcement
- 6. Pedestrian, cycling and traffic safety education and signage

#### RESULTS

The project resulted in an average decrease of 7% in car travel at schools in the morning period and 3% in the afternoon period. These results were calculated based on two sets of follow-up survey measurements, conducted at 10 of the pilot schools in spring 2010 and 2011. The decreases in car travel were accompanied by equivalent increases in pedestrian travel (see *Figure 6* for a breakdown by region).

When this modal shift is extrapolated to the population of the 10 pilot schools for a full school year, the project also:

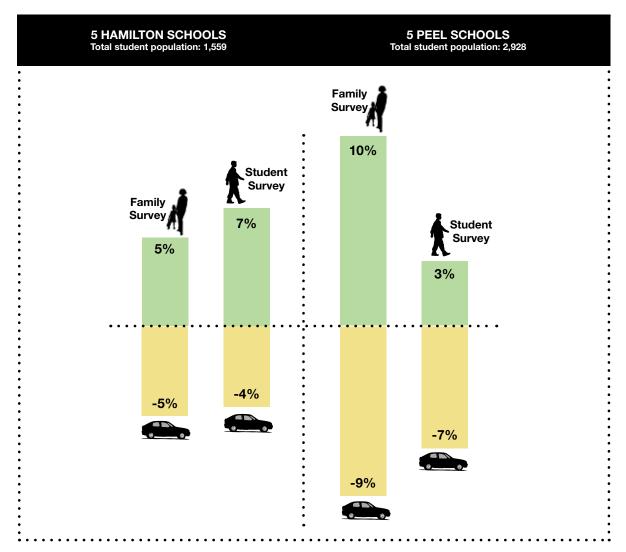
- Added 746,700 minutes of walking among students,
- Reduced 101,635 vehicle kilometres travelled, equivalent to 16 trips between Vancouver and Halifax
- Reduced 22 tonnes of greenhouse gas (GHG) emissions,
- Prevented 884 kilograms of air pollutants (i.e. Sulphur Oxides, Nitrogen Oxides, Carbon Monoxide).

Principals, teachers and parents also observed that:

- Conditions during the morning school run became safer and more orderly,
- Students were excited about walking to school,
- Children were getting more physical activity on the trip to/from school,
- Walking or cycling to school had become more convenient,
- People driving around the school were more aware of children walking and cycling.

See the *Stepping It Up Case Studies* for further project highlights and *Appendix B* for a school-by school breakdown of survey results and actions in Peel and Hamilton.

#### FIGURE 6: Stepping It Up Car & Pedestrian Travel Mode Shifts, 10 Pilot Schools





"I encourage kids to walk to school because it's way more fun than driving, you get to hang out with your friends, get away from your parents, it wakes you up in the morning and helps you focus." – Student, Hamilton

### **STEPPING IT UP CASE STUDIES**

#### **Ridgewood Public School, Peel Region**

One of the most successful pilot schools in terms of increasing walking to school and decreasing driving was Ridgewood PS in Mississauga. This school joined the project in 2009 to help fulfill its environment and health mandate, address school parking problems and safety issues around the school, and improve the transportation options available to students and staff.

Over the course of two school years, a number of priority actions from Ridgewood's School Travel Plan were implemented, including:

- the installation of walking route signage along commonly used routes to school (see sign example)
- a dedicated walk to school day every Wednesday ("Walking Wednesdays") promoted through announcements and phone calls to parents, and
- relocation of a school bike rack to increase visibility

Follow-up family travel surveys conducted in spring 2011 indicated an overall decrease in car trips to the school of 22% in the morning and 18% in the afternoon, and a corresponding increase in pedestrian trips of 18% in the morning and 16% in the afternoon.

Ridgewood's success in shifting behaviour comes from the combination of initiatives it has put in place and promotes regularly in the areas of engineering, education, encouragement and evaluation. Ridgewood's weekly Walking Wednesday program has created healthy competition between classrooms and strong student involvement. With the relocation of bike racks and the overall movement to promote greener forms of school travel, Ridgewood PS has gone from discouraging cycling to promoting it as a healthy transportation option.

#### **School Administrators' Experience**

When asked about their school's experience with the Stepping It Up project, 100% of school administrators indicated they were satisfied with the project overall and would recommend it to other schools, and 88% said they had actually discussed the project or school transportation more generally with other schools in their area. Administrators' top three reasons for participating in the project were:

- to fulfill the school's environment and health mandate
- to address safety issues with school travel
- to improve the transportation options available to students and staff

Administrators strongly agreed that the project has improved their understanding of ways in which they can change the school environment to encourage active school travel, and who they can work with to make positive changes related to school travel.

Overall, administrators recognized the importance of school travel planning, but acknowledged that it still faces many 'roadblocks' such as: a lack of active transportation infrastructure in the community like sidewalks and bicycle lanes, and the need to ensure sufficient 'buy-in' to active travel and integration into the culture of a school, so that efforts will continue even if a key champion leaves the school.



School Walking Route signage piloted in Mississauga, Brampton & other Ontario communities



Students and their families take part in a bicycle repair workshop, Hamilton

"The project has improved the students' awareness and their efforts to walk to school."

- Principal, Ridgewood PS, Peel

#### Staff Commutes 15

Janice is a teacher at a Stepping It Up pilot school in Brampton. She carpools to work regularly with a colleague (see photo at right): "My commute is almost 100 kilometres a day - I'm saving about \$200 a month by carpooling. Carpooling also gives me time to do some planning in the car - we actually talk about the kids and some of the things that we're planning to do for lessons during the day."

Travel surveys collected from 550 staff across 20 pilot schools revealed that 85% of Peel and Hamilton school staff drive alone to work, 13% carpool and just 2% use public transit regularly. Staff are travelling long distances to work, on average 15 to 20 km one way. While many are satisfied with their current commute, 60% said they would be willing to try carpooling, 27% would try walking or cycling, and 10% would try public transit. Staff selected the following as the top measures that would encourage them to try other travel modes:

- help in finding carpool partners
- a ride home in case of emergency
- shower and locker facilities at work
- cycling lanes and pedestrian routes on the way to work
- availability of convenient public transit in the area

Following from the Stepping It Up project, a Smart Commute for Schools pilot project will be tested at selected schools and board offices of the Hamilton-Wentworth Catholic District School Board to introduce targeted commute solutions for staff and learn lessons for broader application. See the Resources section for more information.



Hamilton school student participates in Photovoice activities

#### Hamilton Student Photovoice <sup>14</sup>

"Traffic, traffic please slow down. When you go by really fast, it makes us frown."

Students, parents and staff from three Stepping It Up pilot schools, St. Patrick CES, St. Ann (Hamilton) CES and Holy Name of Jesus CES, took part in a photovoice activity as part of the pilot. While the mode share of students walking to school was already at 50-65% on

average, administrators identified social, economic and environmental issues that needed to be addressed to improve the safety and enjoyment of the students' walking experience.

With the guidance of adult facilitators, 46 students in Grades 4 to 8 took photos documenting what they saw, heard, and smelled on their walk to school. The students' photos helped raise issues such as garbage, graffiti, speeding traffic, prostitution, and neglected buildings. Students further expressed their concerns about these issues through poems, skits and drawings. Participants from the three schools were brought together in a seminar to share experiences and brainstorm solutions to the issues raised. View the full story at: *www.youtube.com/watch?v=KG4e5txF1r8* 



Carpool buddies: Brampton elementary school teachers who regularly carpool to work

#### **PHOTOVOICE ARTWORK**





### **KEY LEARNINGS FROM STEPPING IT UP**

### How Students, Parents and Staff Travel to and from School is a Significant Part of a School's Ecological, Social, Health and Economic Footprint.

How students, parents and staff get to and from schools makes up a significant and growing proportion of a school's overall footprint. School travel planning initiatives enable schools to reduce their emissions of greenhouse gases and air pollutants while creating safer and healthier conditions during the morning and afternoon school runs. This in turn helps to reduce vehicle-pedestrian conflict and prevent injury, increase opportunities for positive social interactions, promote health through greater physical activity, and even improve student concentration levels and academic performance <sup>13</sup>.

### To Reduce the School Travel Footprint and Get More Feet on the Street, Active and Sustainable School Travel Needs to be Supported on Many Levels.

The current trend in school travel is a result of policies, plans and services put in place by many stakeholders, including the province of Ontario, school boards, and municipalities. To facilitate significant behaviour change, parents need to see the right supports in place and feel comfortable choosing active and sustainable modes of travel for their children. School travel planning is a collaborative model that is flexible enough to be applied at a broader level. However, for school travel planning initiatives to be sustainable, they need to work within a context that explicitly supports active transportation. Such a context starts with stakeholders in positions of influence moving forward strategically, delivering consistent support on matters relating to active and sustainable school travel.



### FIGURE 7: Who has a stake in School Travel?



Students, parents and staff participate in a walking school bus, Hamilton

### Where do we go from here? Next Steps in Active and Sustainable School Transportation

In 2011, Metrolinx consulted with 230 representatives from 85 stakeholder organizations on the future of active and sustainable school travel in the GTHA. The key outcomes of these consultations were:

- 1. That active transportation modes need to be formally recognized as part of school transportation
- 2. That a provincial champion is needed to create a supportive context for active modes at the school board and local levels.

Stakeholders acknowledged that schools and municipalities have been leading efforts in active and sustainable school travel to date (current model). At the same time, there was agreement that, in the long-term, school boards and the province of Ontario must play a more significant role, one where active school transportation modes are formally supported and integrated into business operations (see sample areas to right). To get from the current to the long-term model, an interim champion and facilitator was identified as essential (see *Figure 8*, pg.19). Metrolinx was identified as one such facilitator.

Metrolinx has since endorsed a two-year plan to transition to the long-term model. Over the period 2012 to 2014, efforts will be focused on:

- Establishing common goals and directions and building the case
- Creating a supportive context for active and sustainable school transportation
- Securing local champions to lead and fund in their area, ensuring integration into business operations and programming; and,
- Transitioning the lead role to other appropriate lead(s).

#### SAMPLE OF AREAS OF OPPORTUNITY IDENTIFIED BY GTHA SCHOOL TRAVEL STAKEHOLDERS THROUGH WORKSHOPS IN 2011<sup>11,12</sup>

#### System

- Modernize student transportation services to include active transportation as part of formal service offerings – to enable transportation services to include options such as walking or cycling school buses
- Create a cross-governmental/sectoral plan
- Support school travel planning with dedicated transportation funding and resources
- Incorporate active school transportation into school curriculum, eco-certification and healthy schools programs.

#### Policy

- Amend policies related to school siting and catchment areas to ensure access to schools through active transportation modes is factored into decision-making
- Create a bike rack policy and a school walking route snow clearing policy (school board and municipality)

#### Planning

- Ensure school site and subdivision development and design include active transportation as a priority travel mode to schools, and ensure school planning links into municipal/regional planning.
- Conduct traffic impact studies for schools that include pedestrians, cyclists, and motor vehicles and ensure a school travel plan is in place to promote active transportation from the outset.

#### Curriculum

- Introduce 'Transportation' as a core category into EcoSchools programming to promote efforts in active, healthy school travel, and incorporate into Healthy Schools frameworks.
- Include active transportation education (cycling, walking skills) in the school curriculum and expand driver's education to include active transportation components

"75% of GTHA parents agree that it is important to them that their child gets exercise while travelling to and from school"



Students at Broadview PS in Ottawa carry "golden shoes" to school during IWALK Day 2010. Credit: Ottawa Citizen

CURRENT MODEL	TRANSITION MODEL (2012-2014)	LONG TERM MODEL (2014+)
Limited to no coordination; no common goals	Coordinated program; develop common goals	Long Term goals and targets
Lead: NGOs and municipalities Coordination: Metrolinx	Lead: Municipalities with school board support Coordination: Metrolinx	Lead and Coordination: School boards with provincial and municipal support
No integration into business operations	Strategize on integration into business operations	Full integration into business operations
No sustainable funding	Identify sustainable funding options	Sustainably funded

#### FIGURE 8: GTHA Active and Sustainable School Travel Models

## **SOCIAL MEDIA & WEBSITES**



#### Stepping It Up:

**Kids Say Walking to School is Healthy, Fun, and Good for the Environment** Watch and learn how elementary school students feel about their walk to school and why they are encouraging their peers to try it. Video: www.youtube.com/watch?v=r59\_rzKuAMA

#### Teacher's Guide to the Video

A resource that accompanies the video with activities for Grades 4-8 linked to the most recent Ontario Curriculum. The activities help students investigate local factors that are influencing their walk to school. Guide: <a href="https://www.tiny.cc/SIUTeachersGuide">www.tiny.cc/SIUTeachersGuide</a>



#### Stepping It Up:

**How to Get Active on the Trip to School Through School Travel Planning** Learn about the benefits of active school transportation from a parent, educational assistant and local and international experts and advocates of walkable communities. Video: www.youtube.com/watch?v=7XUyslpUCb4

#### Stepping It Up:

#### Smart Commune Smart Commune BIRE TO WORK DAY is and so can you. To work that a cardinate is a second to be a second to be a cardinate is a second to be a cardinate is a second to be a second to be a c





#### Incorporating Staff Commutes into School Travel Planning

Learn about trends in staff travel to schools, what school staff are saying about their workplace commute and perspectives and opportunities for encouraging staff to try other modes. Video: www.youtube.com/watch?v=FLbg2sl2EBo Webinar: gcclive.wimba.com/main/classroom.html?channel=stp\_2011\_1215\_1208\_27 Presentation:

www.smartcommute.ca/media/uploads/pdf/WebinarSTPforSchoolStaffDec15-11.pdf

#### Stepping It Up: Hamilton Students Talk a Better Walk Using Photovoice

Learn how students in Hamilton used Photovoice techniques to raise the issues they experience on their walk to school. See how students' photos and ideas are used to start conversations, connect with community partners and help kick-start neighbourhood revitalization.

Video: www.youtube.com/watch?v=KG4e5txF1r8 Webinar: gcclive.wimba.com/launcher.cgi?room=stp\_2011\_1115\_1204\_46 Report: www.smartcommute.ca/media/uploads/pdf/HamiltonStudentPhotovoice2011.pdf

Metrolinx school travel webpage: www.metrolinx.com/schooltravel Smart Commute workplace travel website: www.smartcommute.ca Green Communities Canada School Travel Planning Toolkit: www.saferoutestoschool.ca/school-travel-planning Peel Safe and Active Routes to School webpage: www.peelregion.ca/health/baew/physical-activity-school/encourage-pa/walk-school.htm Peel Walk+Roll webpage: www.walkandrollpeel.ca Hamilton Walks webpage: www.doitwell.ca/pages/Projects/Hamilton+Walks Smart Commute Hamilton website: www.smartcommutehamilton.ca

The following case studies highlight some of the innovative work in the area of active and sustainable school transportation happening in Halton Region, Waterloo Region, the City of Ottawa and province of Quebec, which may help inspire further progress in the GTHA & Ontario.

### CASE STUDIES: EXAMPLES OF SCHOOL BOARD LEADERSHIP ON ACTIVE SCHOOL TRAVEL



Walking School Bus at Sam Sherratt PS, Halton District School Board

Halton District School Board's (HDSB) Active and Safe Routes to School program<sup>16</sup> began when a health promoter was seconded from Halton Region to the position of HDSB Project Manager of ASRTS for the 2009 -10 and 2010 -11 school years. After working with 23 schools, having 940 students participating in Walking School Buses and seeing a reduction in car traffic of 25-30% at targeted schools after four weeks of the program, the key lessons included:

- a school board position dedicated to ASRTS is paramount to establishing student active transport behaviour
- not only does the ASRTS program increase student health, decrease the Board's carbon footprint, assist with student performance and increase safety, it also puts HDSB on the map locally, provincially, nationally and internationally

During the project, the ASRTS Project Manager also coordinated the development of school site design guidelines to support active transportation to schools, in consultation with Halton schools boards, the Region and municipalities. Further resources at: www.hdsb.ca/Programs/Pages/ActiveandSafeRoutes.aspx

#### Waterloo School Boards' Active Transportation Charter<sup>17</sup>

The Waterloo Region Active and Safe Routes to School Workgroup was formed in 2000 to promote active, healthy travel to and from schools. The group is made up of representatives from the public and Catholic school boards, the Student Transportation Services of Waterloo Region, the three area municipalities, Waterloo Region and Police Services, the Ontario Ministry of Transportation, and non-government organizations. After working on raising awareness among school personnel, students and parents, the workgroup came to realize that winning over individual school champions such as principals and teachers did not translate into sustainability from one year to the next. The workgroup realized that buy-in was needed from the top and on a systemic level. The group focused on an Active Transportation Charter for school boards, a document that could guide future policy development. The Charter was unanimously adopted in May 2011 by both school boards. Beyond the Charter, the workgroup is planning strategic next steps and hopes to work toward a full-time School Travel Planning Coordinator position. Read the full Charter: www.wrdsb.ca/planning/active-and-safe-routes-school/active-transportation-charter

#### School Boards in the Nation's Capital Step Up on STP<sup>18</sup>

School Travel Planning was introduced in Ottawa in late 2009 and has quickly grown. Facilitated by Green Communities Canada, eight elementary and two secondary schools were recruited for a successful pilot in 2010-11 funded through the Canadian Partnership Against Cancer/Public Health Agency of Canada's CLASP initiative as well as the City of Ottawa, Community Foundation of Ottawa and the Heart & Stroke Foundation. In mid-2011 additional new funding from the Ottawa-Carleton District School Board and the Ontario government (Healthy Communities Fund) set the stage for further expansion to an additional eight elementary and six secondary schools by June 2013. The program has garnered strong support from local stakeholders and growing visibility among municipal councillors, school board trustees and media. For more information contact: *wbeaton@greencommunitiescanada.org* 

#### On the Move to School: Quebec's Active and Safe Routes to School Program<sup>19</sup>

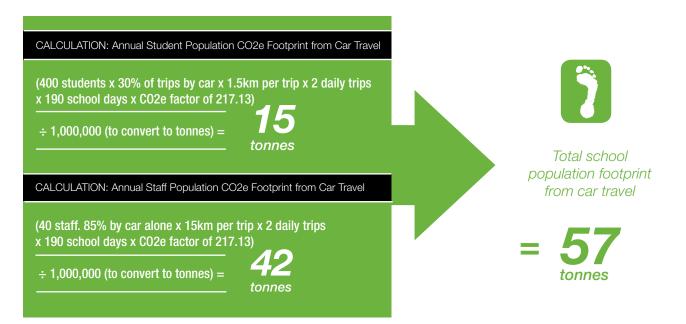
Vélo Québec established On the Move to School! in 2005 to encourage elementary and high school students to integrate active transportation into their daily lives. Established in 210 schools at 39 school boards across the province, the program is centrally coordinated by Vélo Québec and deployed by 14 regional partners. The program has reached 75,000 students and families. Each school receives three years of programming, which includes a school travel plan, in-class activities and educational/promotional campaigns. Schools have observed a 4% increase in walking and cycling and a 5% decrease in automobile use over the course of only one year of implementation. For more information visit www.velo.qc.ca/en/Home

### **APPENDICES**

#### **APPENDIX A:**

### CALCULATING THE AVERAGE GTHA ELEMENTARY SCHOOL'S ANNUAL CO2e FOOTPRINT FROM STUDENTS AND STAFF DUE TO CAR TRAVEL TO AND FROM SCHOOL

The values used in the following calculations represent average amounts in terms of school size, car mode-share, and distance travelled one way to school by car. These values are derived from a number of sources, including Stepping It Up project data (i.e. average trip length for students and staff, and staff mode share by car)<sup>21</sup>, regional survey data (i.e. average percentage of student travel mode share by car)<sup>4</sup> and Ontario Ministry of Education data (i.e. average school student population in the GTHA)<sup>22</sup>. The calculations assume two trips made daily for 190 school days per year. The CO2e factor comes from Transport Canada greenhouse gas coefficients. Note: the results below include emissions from car travel to and from school only, they do not include any travel by school buses.



#### **APPENDIX B:**

### BREAKDOWN BY SCHOOL – STEPPING IT UP SCHOOL TRAVEL CAR AND PEDESTRIAN MODE SHARE AND IMPLEMENTED ACTIONS

The tables 1 and 3 below provide a school-by-school view of car (i.e. single occupant vehicles and vehicles with one adult and one or more child passengers) and pedestrian mode-shift from family travel surveys and student travel surveys from 10 of the schools that participated in the Stepping It Up pilot project. These schools completed baseline data collection prior to implementation of actions in fall 2009 or winter 2010 and then collected follow-up data for a full school year post-implementation in spring 2011. The data is broken down for the City of Hamilton and the Region of Peel. The family travel survey data represents student travel behaviour as reported by parents for walking and car travel (i.e. via a take-home survey). The student travel survey represents student travel behaviour as reported by students for walking and car travel (i.e. via a hands-up classroom survey). Actions implemented by schools in the period between baseline and follow-up surveys are presented below in tables 2 and 4 to illustrate the types of measures and interventions that contributed to the measured mode-shifts.

H5	9gnan') qu wollo∃	None	None	37% (-2%)	None	None	None	61% (+6%)	None
Ť	Baseline	33%	32%	39%	17%	61%	67%	55%	77%
H4	Follow up Change	22% <mark>(-13%)</mark>	26% ( <mark>-9%)</mark>	26% (-14%)	22% (-14%)	52% (+10%)	53% (+3%)	52% (+22%)	53% (+18%)
	enilessB	39%	31%	40%	36%	42%	50%	30%	35%
H3	Follow up Change	34% <mark>(-2%)</mark>	29% <mark>(-6%)</mark>	None	None	None	31% (2%)	None	None
Ť	enilessB	36%	35%	32%	26%	28%	29%	27%	34%
H2	Follow up Change	26% <mark>(-5%)</mark>	26% <mark>(0%)</mark>	26% <mark>(-3%)</mark>	26% (-4%)	33% (+9%)	37% (+8%)	33% (+7%)	37% (+11%)
Ť	enilessB	31%	26%	29%	30%	24%	29%	26%	26%
표	Follow up Change	22% <mark>(-8%)</mark>	21% <mark>(-1%)</mark>	22% <mark>(-4%)</mark>	21% (-5%)	72% (+9%)	72% (+1%)	72% (+1%)	None
Ē	enilessB	30%	22%	26%	26%	63%	71%	71%	72%
		AM Family Survey Modeshare	PM Family Survey Modeshare	AM Student Survey Modeshare	PM Student Survey Modeshare	AM Family Survey Modeshare	PM Family Survey Modeshare	AM Student Survey Modeshare	PM Student Survey Modeshare
		AM	VEHICLE PM TRIPS	AM	N A	W	PEDESTRIAN TRIPS	AM	M

TABLE 1: Hamilton Stepping It Up School Data, Schools H1 - H5 (2009-2011)

TABLE 2: Stepping It Up School Travel Planning Actions in Hamilton, Schools H1 to H5 (2010-11)

ACTION CATEGORY	TYPE OF ACTION	H1	H2	H3	H4	H5
	Presentation & skit to school council		•			•
	Letter to encourage Active Transport			•		
	"Stepping It Up" Booth					•
Education & Awareness	ASRTS Brochures & Active Transport Display			•		
	Active Transport encouraged to JK/SK parents			•		
	Active Route Identification	:		:	•	:
	"I Think First" Helmet Use Promotion			•	•	
	International Walk to School Day	•	•	•	•	
	Winter Walk Day	•	•			
	Wear Yellow Day	•	•	•		
	Cycle to School Week				•	
Activities & Events	Walking School Bus			•		
	Bike Repair Workshop		•			
	Contest to Increase Active Transport				•	•
	Walk on Wednesdays				•	
	Walking School Bus Promotion			•	•	
	Installed Bike Racks		•	•	•	
Engineering	40km/hr Speed Limit Sign Installed	•	•	•		:
	Unsafe Areas Along School Route Closed Down	:		:		•
Enforcement	Parking Enforcement, bylaw officer present	•				•
Emorcement	Parking Lot Changed to Staff Only		•			
	TOTAL ACTIONS BY SCHOOL	5	8	10	8	5
	TOTAL ACTIONS: H1-H5			36		

TABLE 3: PEEL STEPPING IT UP SCHOOL DATA, SCHOOLS P1-P5 (2009-11)

VEHICLE TRIPS AM Family Survey Modeshare 33% AM Student Survey Modeshare 28% AM Student Survey Modeshare 25% PM Student Survey Modeshare 25% AM Family Survey Modeshare 25%						-			Ω 1
AM Family Survey Modeshare 33% PM Family Survey Modeshare 28% AM Student Survey Modeshare 25% PM Student Survey Modeshare 25% AM Family Survey Modeshare 54%	Baseline Follow up Change	9nil9≳sB	Follow up Change	Baseline	Follow up Change	Baseline	egnañd un wollof	Baseline	Follow up Change
PM Family Survey Modeshare 28% AM Student Survey Modeshare 24% PM Student Survey Modeshare 25% AM Family Survey Modeshare 54%	33% <mark>(-22%)</mark>	25%	None	32%	16% (-16%)	27%	None	37%	23% <mark>(-14%)</mark>
a 24% 25% 54%	28% 10% (-18%)	20%	None	31%	20% (-11%)	18%	None	26%	19% <mark>(-7%)</mark>
a 25% 54%		32%	31% (-1%)	30%	26% (-4%)	26%	13% (-13%)	32%	24% (-8%)
54%		26%	None	15%	None	18%	6% (-12%)	23%	22% (-1%)
	<b>54%</b> (+18%)	44%	50% (+6%)	54%	67% (+13%)	65%	None	35%	55% (+20%)
PEDESTRIAN PM Family Survey Modeshare 62% (-	62% 78% (+16%)	50%	None	56%	64% (+8%)	71%	None	49%	57% (+8%)
AM Student Survey Modeshare 63%		41%	None	59%	61% (+2%)	74%	81% (+7%)	40%	43% (+3%)
PM Student Survey Modeshare 56%		46%	None	66%	None	80%	81% (+1%)	52%	None



Students, staff and parents participate in a 'wear yellow day' walk to school event, Hamilton

ACTION CATEGORY	TYPE OF ACTION	P1	P2	P3	P4	<b>P</b> 5
Education	Raise awareness of Importance of Physical Activity		•			
& Awareness	Traffic Safety Education for Students & Parents				•	•
	Walking Wednesday (or Walking Fridays)	•	•			
	Walking Reward Program		•		: : :	•
Activities	Walking School Bus Day (ongoing)		•			•
& Events	Promotion of Cross Walk/ Proper Use of		•		: : :	
	Walking to school announcements/ newsletter	•	•	•	•	•
	Carpool Zone Online Ridematch Program for Staff				•	
	Relocate Bike Rack to Increase Visibility	•				
<b>Fuerine enine</b>	Crosswalk Markings Made Clear		•		:	
Engineering	Speed Monitor Display Installed				•	
	Walking Route Signage Program	•	•	•		•
Enforcement	Crossing Guard		•			
	TOTAL ACTIONS BY SCHOOL	4	9	2	4	3
	TOTAL ACTIONS: P1-P5			22		

#### TABLE 4: Stepping It Up School Travel Planning Actions in Peel, Schools P1 to P5 (2010-2011)

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