



School Travel Planning in the City of Toronto & Wellington-Dufferin-Guelph

A feasibility study conducted between April 2014 and November 2015
Final Report



Funding provided by





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Executive Summary

Green Communities Canada (GCC) received a financial contribution from the Ontario Ministry of Education in April 2014 to conduct a feasibility study to implement the School Travel Planning (STP) model in district school boards in Toronto and Wellington-Dufferin-Guelph (WDG). The key objectives of the study were to assess how the STP model performs at the district school board level rather than the individual school level, identify differences in delivering the STP model in a variety of community settings – inner city, inner and outer suburbs, and rural – while identifying the most appropriate funding model for local ownership of STP. The study also analyzed the associated costs with STP delivery and created a model to assess a benefits-cost ratio for each school, each region and combined results.

Three district school boards, fifteen schools, over 8,000 students, two school transportation consortia, and two Active & Safe Routes to School (ASRTS) committees participated in the study, providing a detailed understanding of the challenges faced by community stakeholders, as well as collating timely data on the shared costs and benefits of STP. In each region the study was led by STP Facilitators who were hired and trained by Green Communities Canada (GCC).

A School Travel Plan was produced for each of the fifteen schools, using the STP tools developed by Green Communities Canada (GCC). The University of Toronto developed a new tool to track the costs associated with STP delivery, which was used at thirteen of the schools. The cost data was analyzed along with classroom travel survey results to determine a benefit to cost ratio for STP delivery at each school.

The most significant differences between the two regions participating in the feasibility study are:

- the number of the municipalities in WDG (18) vs. Toronto (1);
- the number of public agencies with an interest in STP (27 in WDG vs. 6 in Toronto); and
- the differing types of school communities that required differing amounts of STP Facilitator time – rural and isolated urban neighbourhoods being the most challenging.

Despite the regional differences, the results of the study after one year of implementation are extremely positive. The overall results of the study have shown an increase in active and sustainable school travel. Across the thirteen schools analysed, the study recorded an overall 1% increase in cycling, a 4.3% reduction in car use, and a 3.2% increase in public transit for the morning commute. Similar travel mode shifts were observed for cycling (1%), car use reduction (3.2%), and public transit use (3.6%) in the afternoon.

Using the travel mode data and the details of costs collected by the STP Facilitators, the combined results from all 13 schools show a benefit-cost ratio of 2.4 after one year of implementation. The results demonstrate that the STP program is a cost-effective intervention, which when effectively coordinated and implemented can result in positive school travel behaviour change, and ultimately provide substantial economic, environmental and physical activity benefits. The data-collection and analysis tools developed by this study demonstrate that the STP model can be evaluated, and provides a refined method for assessing the cost-effectiveness of the model.



When extrapolated for a full school year, the benefits derived from the observed increases in active school travel and decreases in car use are estimated to have:

<ul style="list-style-type: none"> • avoided 556 vehicle trips each day
<ul style="list-style-type: none"> • reduced 189,799 vehicle kilometers travelled;
<ul style="list-style-type: none"> • increased physical activity, including 551,516 minutes of walking (or 39,393 km), and 382,896 minutes of cycling (or 51,053km);
<ul style="list-style-type: none"> • reduced 41.2 tonnes of greenhouse gas (GHG) emissions and 1.7 tonnes of air pollutants (CAC)
<ul style="list-style-type: none"> • annual societal benefits of approximately \$185,000
<ul style="list-style-type: none"> • net present value benefits of \$0.5 million and 0.9 million if STP is maintained for the respective 3 and 5 years
<ul style="list-style-type: none"> • average benefits per student of approximately \$72 and \$125 over the respective 3 and 5 years

This feasibility study identified unanimous support for the School Travel Planning (STP) model, acknowledging that successful implementation at the local level requires District School Boards to work in close partnership with student transportation services and with strong provincial and municipal stakeholder support. Further, the School Travel Plan (STP) Facilitator position requires funding and the Benefit-Cost Analysis (BCA) results presented later in this report reinforce the importance of an STP Facilitator to support successful STP implementation. The BCA results show benefits for urban, suburban and rural school locations.

The fifteen STP programs established during the study are going to continue until June 2016, beyond the study timeline, thanks to contributions from the local stakeholders. This will provide the opportunity for continued implementation of STP action items and for expansion of the existing evidence base through the collection and analysis of further data.



Study Overview & Objectives

GCC entered into an agreement with the Ontario Ministry of Education to conduct a feasibility assessment of Active & Safe Routes to School (ASRTS) using the School Travel Planning (STP) model in a variety of community settings and engaging schools boards serviced by one transportation consortia. Ten schools in the City of Toronto participated, eight schools new to the STP process and two schools entering their second year of STP, and five schools in the region of Wellington-Dufferin-Guelph, providing a good mix of urban, suburban and rural school settings.

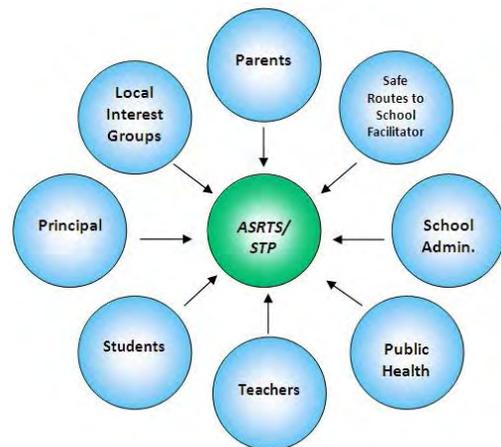
The objectives of the feasibility study were to:

1. Implement the STP model across school districts within the same transportation consortia, in two contrasting regions of Ontario
2. Evaluate the deliverability of the STP model, including:
 - Identify the differences in delivering the STP model in varying community types, i.e. urban/suburban vs. suburban/rural
 - Find the best models for local 'ownership' of active school travel
 - Assess various funding models and funding partners
 - Determine the impact of the scale of delivery on the STP model
 - Document case studies and lessons learned
3. Establish an accepted model for benefit-cost analysis of STP

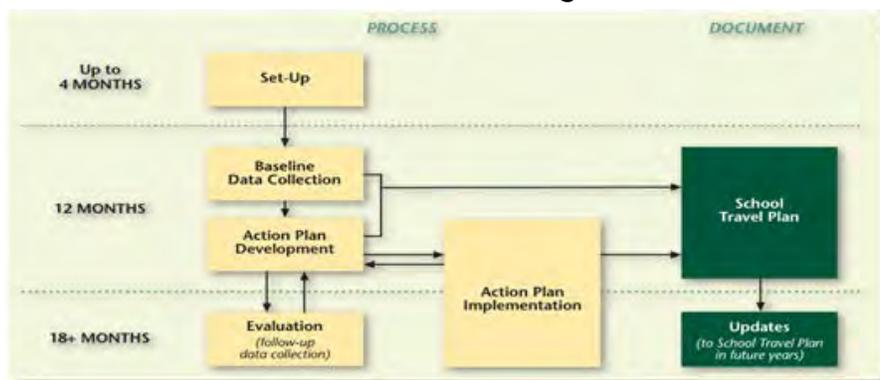
This report details the lessons learned from this study, differences in program delivery in different community settings, next steps for the future, and some results from the first year of delivering School Travel Planning to the 13 schools.

The **Canadian School Travel Planning (STP) model**, developed and disseminated nationally over the last 8 years, has been tested in over 100 schools in 28 Ontario communities (**Ontario case study**). At the national level, approximately 120 schools from every province/territory provided data after one full school year of implementation, showing that despite this short time frame, parental attitudes to active school travel were positively impacted.

The Canadian STP Model: Stakeholder Engagement



The School Travel Planning Process



Our collaborators at the University of Toronto have evaluated STP's impact across Canada since 2008. In terms of STPs primary outcome, the studies indicated that STP can facilitate increases in AST after one-year of implementation (Buliung et al., 2011; Mammen et al., 2013; Mammen et al., 2014, Mammen et al., 2015; Mammen et al., 2015b). However, changes were shown to vary between schools (1-23%). For instance, on a national scale, Mammen and colleagues (2014) found a 14% mode shift from driving to AST one year following STP implementation (parent-reported). This represented approximately 1000 families nationwide. On a local level, the same research team conducted a case study with two schools located in downtown Toronto (Mammen et al., 2015b). Results showed that STP can increase various forms of AST such as cycling (School A; 4%) and walking (School B; 15%) following one year of implementation. Overall, these findings are encouraging and contradictory relative to previous STP studies in the UK (Rowland et al., 2003) and New Zealand (Hinckson et al., 2011) which showed no change in AST after the first year of implementation.

Beyond its primary aim in increasing AST, the line of STP studies further identified secondary/ intermediate outcomes of STP that facilitates greater mode change including: multidisciplinary collaboration across sector (e.g., Education, Transportation, Safety); comprehensive strategy implementation; student involvement; generating an AST culture through dialogue and awareness; and completed infrastructure projects (e.g., sidewalks, pedestrian signage). Key challenges of implementation included the: lack of parental involvement; restricted length of implementation time (1 year); lack of program funding and safe pedestrian/cycling infrastructure; and AST limiting transportation and siting policies.

The majority of STP initiatives to date have been implemented as small pilot projects, initiated at the school level, rather than at the school district level. The Ontario Ministry of Education has indicated that it is open to reviewing strategies that encourage and promote active transportation to school boards and student transportation consortia.

Green Communities Canada has extensive experience of implementing STP projects across Ontario, from which it has identified a pressing need to adopt a coordinated strategy for STP at the school district level. This study therefore seeks to test the feasibility of STP implementation at the school district level and develop a strategy suitable for adoption across the Province.



Characteristics of the Study Areas

Wellington-Dufferin-Guelph Region

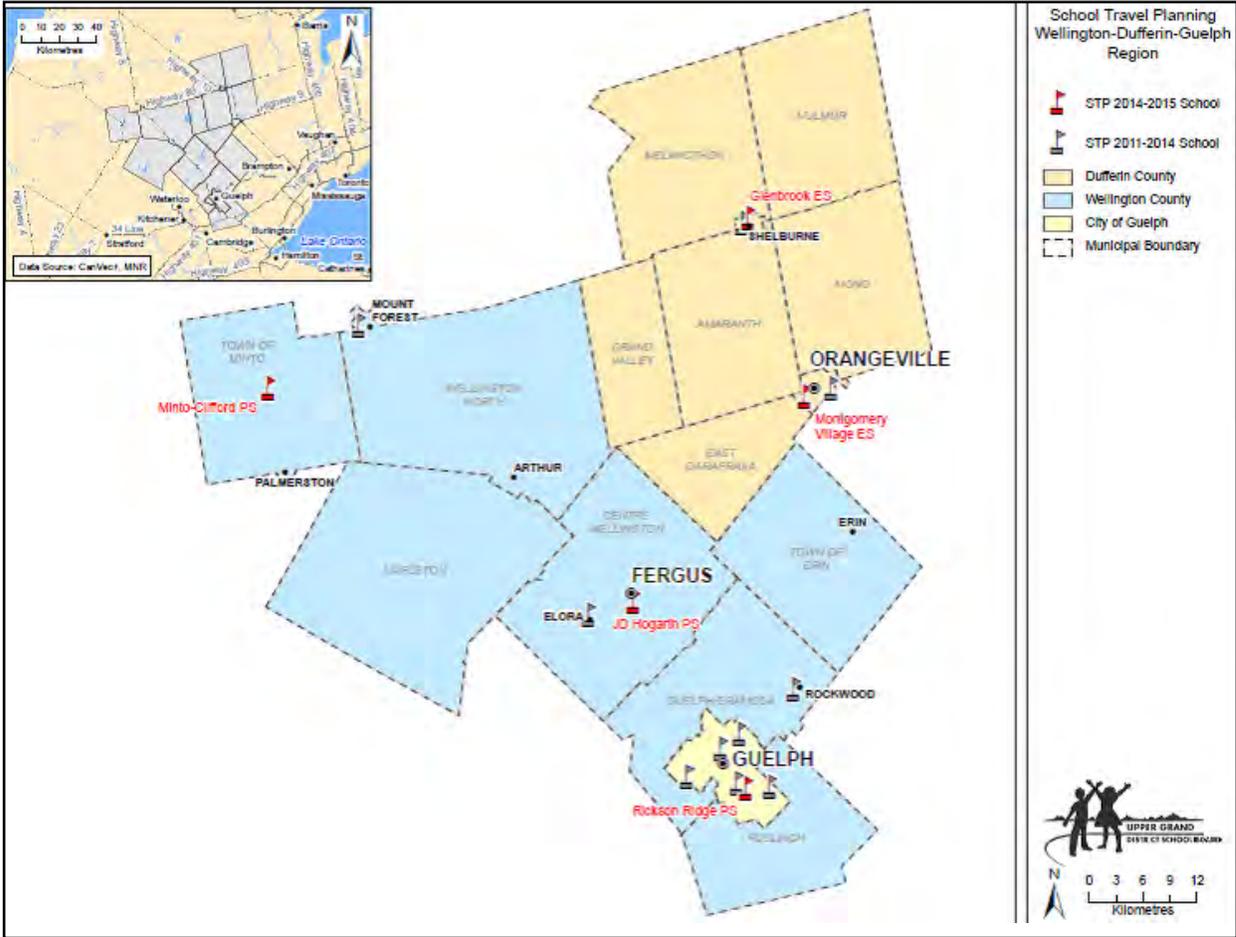
The Wellington-Dufferin-Guelph (WDG) region covers an area of almost 4,200 km² located in south central Ontario, approximately 70km west of Toronto. The WDG area is dominated by agricultural land-use, interspersed with small settlements. The population density is biased towards the south and west parts of the region, which are closest to the Greater Toronto Area. The main population centres are the City of Guelph and the town of Fergus in the south of the region, and the towns of Orangeville and Shelburne in the north-west.

The region is the administrative area served by Wellington-Dufferin-Guelph Public Health Agency, served by four different police services and made up of 1 unitary, 2 upper tier and 15 lower tier municipalities:

Upper Tier	Unitary	Lower Tier	Police Service
County of Dufferin		<ul style="list-style-type: none"> • Amaranth • East Garafraxa • Grand Valley • Melancthon • Mono • Mulmur 	Ontario Provincial Police
		<ul style="list-style-type: none"> • Town of Shelburne 	Shelburne Police Service
		<ul style="list-style-type: none"> • Town of Orangeville 	Orangeville Police Service
County of Wellington		<ul style="list-style-type: none"> • Guelph-Eramosa • Centre Wellington • Mapleton • Puslinch • Town of Erin • Town of Minto • Wellington North 	Ontario Provincial Police
	City of Guelph		Guelph Police Service

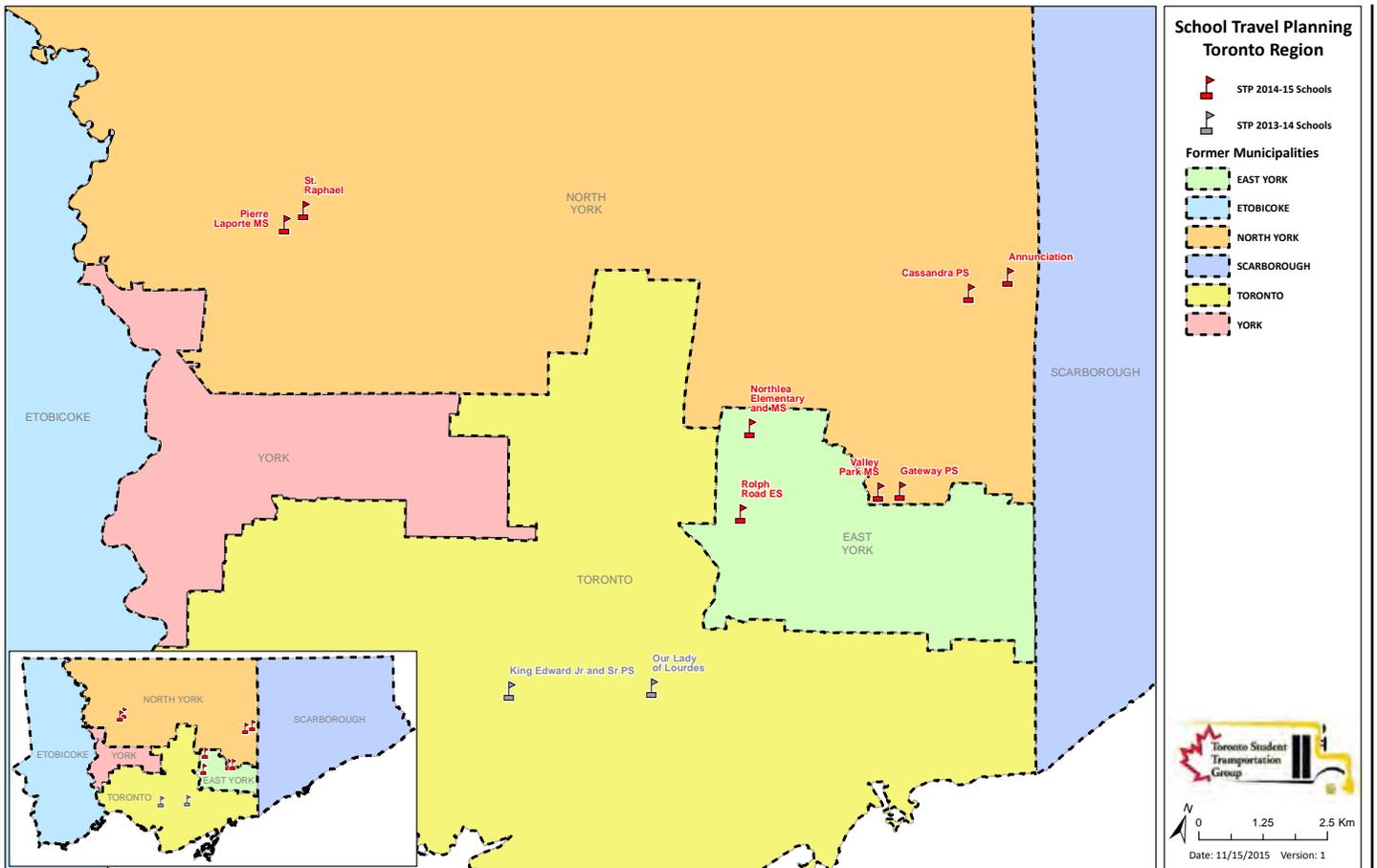


Transportation by private vehicle is a dominant means of conveyance for individuals in the Wellington-Dufferin-Guelph Region. Distance presents a considerable barrier to other forms of transportation including intercity and intracity transit. Vehicle use is necessitated by work based trips outside of county borders. In Wellington and Dufferin Counties, over 50% of the working population travels beyond their county border. In Guelph, this figure is much lower (24%), but the built environment remains conducive to intracity vehicle trip generation. The travel patterns imposed by the geographic scale, built environment and employment distributions, promote trip chaining with school and work based trips which can lead to congestion problems around schools. The predominantly suburban and rural make of the region, punctuated by small town centres, presents transportation challenges that are unique from those of larger urban areas.



City of Toronto

Toronto is Canada's largest city, the fourth largest in North America, and home to a diverse population of about 2.8 million people. It's a global centre for business, finance, arts and culture and is consistently ranked one of the world's most livable cities. Located on a broad sloping plateau cut by numerous river valleys, Toronto covers 641 km² and stretches 43 km from east to west and 21 km from north to south at its longest points. The perimeter is approximately 180 km (Source: [City of Toronto](#) web site).



Comparison of the Two Study Areas:

Characteristic	Wellington-Dufferin-Guelph	City of Toronto
Geographical Area:	4,194 km ²	641 km ²
Population:	Approx. 272,000 residents*	2.8 million
Number of Public Service Agencies:		
Municipalities:		
Unitary	1	1
Upper Tier	2	-
Lower Tier	15 Towns/Townships	-
Public Health Agencies:	1	1
Police Services:	4	1
District School Boards:	3	2
Transportation Consortia:	1	1
Average size of school catchment area:		
English Urban Schools	26 km ²	2.5 km ²
English Rural Schools	161 km ²	-
French Immersion Schools	317 km ²	N/A
Transportation Eligibility		
Eligible for bus service if distance between primary address and school is more than:		
Grades JK to Grade 6	1.6 km	1.5km / 1.6 km
Grades 7 to 8	3.2 km	1.5 km / 3.2 km
Grades 9 to 12	3.5 km	n/a / 4.8 km
Student population transported	The % of students across WDG schools varies widely between 0 and 100%-numbers shown are for the 5 WDG schools: <ul style="list-style-type: none"> • Glenbrook 0% • JD Hogarth 27% • Minto-Clifford 54% • Montgomery Village 6% • Rickson Ridge 44% 	<ul style="list-style-type: none"> • 16% student population transported by bus • 54% of students fall within the walk area to local schools based on board policy
Distance of students home from school:	Mean	Mean
Urban average	2.7 km	1.6 km
Rural average	6.8 km	

*Source: [WDG Public Health Website](#)



Methodology

The feasibility study followed the School Travel Planning process as detailed in the [STP Guide and toolkit](#).

- Setup: create steering committee; select schools
- Assess conditions: collect all baseline data; create school profile
- Action planning: create draft school travel plan
- Implementation: utilizing 5 E's (education, encouragement, enforcement, engineering, evaluation)
- Ongoing monitoring & improvement: follow-up data collection, comparison to baseline, adjust plan if needed, start year 2



To maintain consistency across both regions the same STP tools were used:

- School profile completed
- Classroom surveys: baseline and follow-up; includes Excel file for analysis of data
- Family surveys: baseline and follow-up (these were optional and were not mandatory for this study; some schools did conduct family surveys but we are not including those results in this report – details can be found in the individual school travel plans)
- School Neighbourhood Walkabout: individual walkabout reports were created for each school
- Traffic Observations around school zone
- Action planning template
- School travel plan template: includes school profile, walkabout report, classroom survey results, action plan with implementation timeline
- Benefit-cost Excel template: collection of project costs throughout the study

The University of Toronto provided the expertise to conduct the benefit-cost study. To extend the initial benefit-cost study, recommendations were made to use a methodology that would produce more conservative estimates of the benefit-cost results. Overall, the university produced: a refined school-level benefit-cost Excel template that will be used by prospective STP users; school and community-level mode share results stemming from the baseline and follow-up classroom data; and school and community-level benefit-cost results for each school and for each region.



STP Facilitation

Region	No. Schools	No. Students	No. of STP Facilitators	FTE
WDG	5	2376	1	0.4
City of Toronto	10	5651	2	1.6

There were two STP Facilitators, working 1.6 full-time equivalent (FTE) days/week, for Toronto and one STP Facilitator working 0.4 FTE for WDG. The facilitation role is critical to the success of the STP process: the Facilitators work directly with the schools acting as the liaison with the community STP steering committees. The Facilitators lead the collection of all data (baseline and follow-up), create the school profiles, analyze results and prepare reports, lead the action planning discussions, and create the school travel plans.



Study Activity Timeline and Notes

Timeline	STP Phase	STP Process	Activity	Notes	
				WDG	City of Toronto
April 2014	<ul style="list-style-type: none"> Planning 	<ul style="list-style-type: none"> Set-up 	<ul style="list-style-type: none"> Identify Study Areas 	The selection of two suitable study areas with a mix of urban, suburban and rural communities for participation in the study was accomplished through GCC's existing contacts in both the City of Toronto and the Wellington-Dufferin-Guelph (WDG) region. Agreements were in place with both jurisdictions by the end of May 2014. The Toronto District School Board Partnership Agreement was in place by Dec. 2014.	
May 2014			<ul style="list-style-type: none"> Secure Funding Appoint STP Facilitator 	The Ministry's funding contribution was leveraged through contributions from community stakeholders, covering the cost of project staff. Negotiations for funding contributions were completed within five months of the project start date.	
			A contract was signed with the City of Guelph and the Upper Grand District School Board (UGDSB) to lead the project, hire and support a project facilitator, and work closely with WDG Public Health.	Funding for Toronto STP facilitation agreed, shared equally among four stakeholders: <ul style="list-style-type: none"> City of Toronto Planning City of Toronto Transportation Services Toronto District School Board Toronto Catholic District School Board 	
			Agreements were in place and the facilitator hired to begin work at 0.4 FTE in October 2014.	Two STP Facilitators were hired for Toronto, one for the Ministry of Education feasibility study and one for the Heart & Stroke/RioCan pilot for a total of 1.6 FTE. Together they facilitated the STP process at all 10 Toronto schools.	
Sep 2014 – Jul 2015			<ul style="list-style-type: none"> Facilitator training 	The Facilitators received STP training (refer to Appendix 6 for training schedule).	
Oct 2014	<ul style="list-style-type: none"> Establish Steering Committee 	The existing WDG Active & Safe Routes to School (WDG-ASRTS) steering committee agreed to revise their Terms of Reference to include this feasibility study. WDG-ASRTS had worked previously with 11 schools in the region on School Travel Planning and was anxious to continue to expand on this work.	The Toronto STP steering committee was convened after GCC met with each stakeholder to request a representative. The steering committee grew as the study progressed to include other interested stakeholders from the City of Toronto.		
Oct 2014 – Dec 2014	<ul style="list-style-type: none"> Planning 	<ul style="list-style-type: none"> Set-up 	<ul style="list-style-type: none"> Select Schools 	The District School Boards within each region led the selection of the schools to participate in the study, with input from all stakeholders.	



Timeline	STP Phase	STP Process	Activity	Notes	
				WDG	City of Toronto
				Five schools were selected from Upper Grand District School Board, spread across the region to provide opportunity to assess the STP model in medium suburban and small rural communities. (A sixth school from Wellington Catholic District School Board was also selected, but later decided not to participate.)	Four schools were identified to participate, along with two existing schools involved in a 2013-14 STP pilot. A further four schools were added to that study as a result of additional funding, bringing the total number to ten. The selection process initially targeted schools with the highest frequency of school zone collisions, however, not all were able to participate. The steering committee selected the schools from those that were already certified as EcoSchools and that were located as close together as possible, resulting in 5 pairings of schools, representing dense urban to outer suburban areas of the city.
Oct 2014 – Jan 2015	Planning	Assess Conditions	<ul style="list-style-type: none"> • Neighbourhood Walkabout • Traffic Observation • Baseline Travel Surveys • Establish School STP Committee 	Majority of the assessment activities were undertaken during the coldest time of the year. This was good for recording motorized travel modes at worst-case conditions, but meant active travel modes were at a minimum. STP Facilitator did not have enough time available to work on establishing strong School STP Committees.	Initial assessments were started in October in the Toronto Catholic schools; assessments were conducted in January at the Toronto Public schools. All assessments were complete by Feb 2015.
Feb 2015	Planning	Action Planning	<ul style="list-style-type: none"> • Create School Travel Plan, including Action Plan 	Action Plan and Reports completed end of August 2015.	Walkabout reports and action plans completed and travel plans drafted by August 2015.
Sep 2015	Implementation		<ul style="list-style-type: none"> • Implement Action Plan 	The new school year saw several changes of school staff and public health nurses.	Some staff changes within Toronto Public Health and two new school Principals.
Oct – Dec 2015		Monitoring	<ul style="list-style-type: none"> • Follow-up Travel Surveys • Review and update Action Plan 	School staff were not able to support or participate in STP activities fully during Fall 2015 due to strike actions by Labour Unions, which resulted in delays to STP work.	Where possible STP Facilitator engaged parents and/or senior students to collect follow-up classroom surveys; but this was not possible in all schools.
				The STP Facilitator engaged a team of volunteers together with school students to undertake classroom travel surveys (because teachers were unable to do so)	
Jan 2016	Reporting		<ul style="list-style-type: none"> • Prepare final report detailing benefit-cost results • Prepare final report 	Agreement from both regions on the content of the report and the recommendations for moving forward.	



Schools

Wellington-Dufferin-Guelph

School	Municipality	No. of Students /Grades	Community type
Glenbrook Elementary School	Town of Shelburne	433 JK-8	Suburban
J.D.Hogarth Public School	Township of Centre Wellington	573 JK-8	Suburban
Minto-Clifford Central Public School	Town of Minto	388 JK-8	Rural
Montgomery Village Public School	Town of Orangeville	517 JK-8	Urban/Suburban
Rickson Ridge Public School	City of Guelph	467 JK-8	Urban/Suburban
	Total Students	2378	

Toronto

School	No. of students / Grades	Community type
*Our Lady of Lourdes Catholic School	642 K-8	Urban Toronto
*King Edward Public School	436 K-8	
Rolph Road Public School	403 K-6	Inner Suburban Toronto
Northlea Public School	722 K-8	
Annunciation Catholic School	331 K-8	Outer suburban: Don Mills
Cassandra Public School	277 K-5	Outer suburban: North York
Pierre Laporte Public School	385 6-8	Outer suburban: North York
St. Raphael Catholic School	551 K-8	Outer suburban: Downsview
Gateway Public School	940 K-6	Inner suburban: North York
Valley Park Public School	964 6-8	Inner suburban: East York
Total Students	5,651	
Total Students (Wellington-Dufferin-Guelph and Toronto)	8,029	

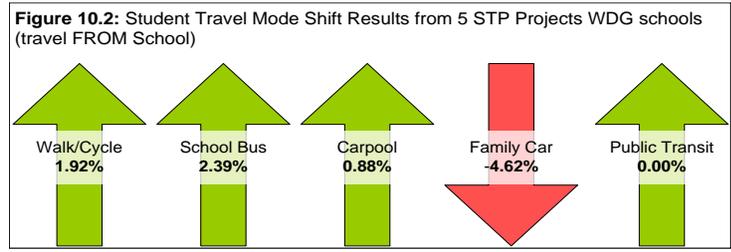
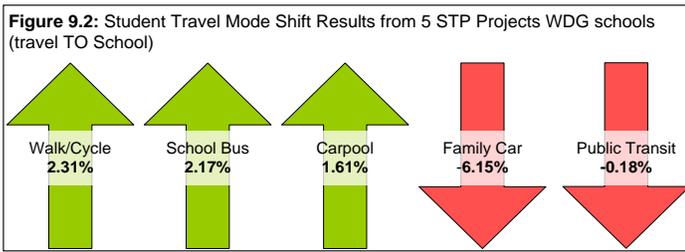
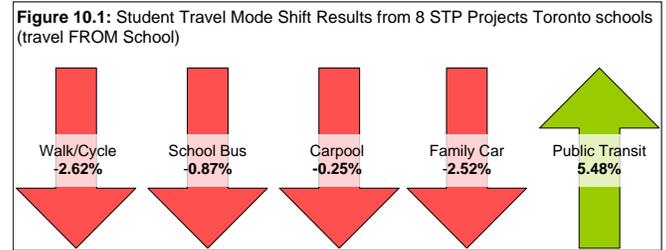
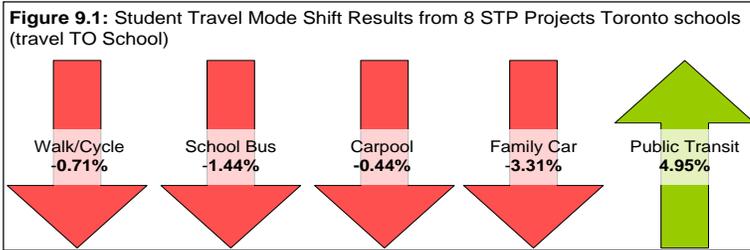
*Our Lady of Lourdes and King Edward were year 2 schools; their survey and benefit-cost results have been separated out to ensure consistency with reporting.



Results

This section provides a summary of the results of the classroom travel surveys undertaken as part of the STP process at each of the participating schools in this study. Detailed results are presented in Appendix 1.

Classroom travel surveys were completed in the Fall/Winter of 2014/15 (Baseline Data) and again in the Fall/Winter of 2015 (Follow-Up Data). A classroom survey template can be found in Appendix 2.



Discussion of travel survey results

Ideally, data collection on school travel modes should be collected within the same school year, starting with a baseline classroom survey completed by all classes in September and a follow-up classroom survey completed by all classes in early June of the same school year. This maintains consistency in student populations and school staff to start to build a picture of changes in school travel behavior year over two full years. Results from STP schools in Ottawa have shown that providing three years of support at each school allows enough time to create a culture of active travel and the benefits that accrue are significant ([Case Study](#), page 7).

However, the timeline of this feasibility study meant that the school travel data was collected part way through one school year and at the start of a second school year. Classroom travel surveys will be undertaken for a third time at all participating schools at the end of May 2016, which will allow us to compare travel mode results over two full school years.

Weather does play a significant role in travel mode choice. The [2010-12 Children’s Mobility, Health and Happiness CLASP](#) project collected data from more than 100 schools across Canada and the weather was cited by parents as one of the top three reasons why they would drive their children to and from school. It is impossible to control the weather. It has to be considered when reviewing survey results, therefore devising education strategies to encourage families to ‘dress for the weather’ and



holding events like **Winter Walk Day**, can start to challenge parental attitudes towards weather and mode choice.

Effective March 1, 2015, children 12 and under are able to ride Toronto transit for free. Children simply show a Child Proof-of-Age Card which their parents obtain from the Toronto Transit Commission (TTC). This change to transit fares resulted in more students attending the 10 Toronto pilot schools using transit to get to and from school; in some cases it led to a decrease in both driving and walking trips, as indicated by the follow-up classroom surveys.

The type of actions that have been found to make the biggest shifts of parental behavior are Engineering, Encouragement and Education activities, as documented in the **2010-12 Children's Mobility, Health and Happiness CLASP** project. When parents were asked what would encourage them to use active school travel more often, the top four most effective activities were listed as changes to the built environment to place higher priority on active transportation (25%), safety education such as cycling skills instruction (21%), and the use of special events like Walk/Wheel Wednesdays, Winter Walk Day (15%); and there was positive support for forming active travel groups like Walking School Buses and Bicycle Trains (10%).

Full results are in Appendix 1.

Note: Our Lady of Lourdes Catholic School and King Edward Public School are not included in the travel mode results found in Appendix 1 because both schools have been involved in the STP project for two school years and so are not directly comparable to the rest of the data set. Instead, a short case study of the progress made at these two schools can be found in Appendix 7.

Walking makes my child healthy. Walking to school is also a time to have a great conversation with my child. It is also a learning process how to use the road properly

- Parent of a 6-year-old boy who walks 0.51-1.59 km to/from school. Follow-up family surveys 2014.



Study Findings: Challenges and Lessons Learned

Wellington-Dufferin-Guelph Challenges

Participation by all school boards in the region was not fully achieved: Unfortunately, the Wellington Catholic District School Board had to withdraw their school early in the process due to other commitments, which the STP Facilitator was not able to mitigate.

A Municipal structure with a large number of organizations: Although the STP Facilitator had five schools to coordinate, a typically manageable number of STPs, the nature of the municipal structure of the region meant that the Facilitator needed to engage with an entirely different municipality for each school, which proved difficult to achieve within the time frame and time available for the study.

Geographical scale of the region: The five schools were spread evenly across the region, which served well to assess STP in different communities, but resulted in significant chunks of Facilitator time used up with travel between locations, leaving less time to undertake implementation within the life span of the study.

Size of Municipalities: The size of the municipalities within the WDG region is variable and the level of support and input is therefore inconsistent from school to school. The smaller municipalities do not always have access to dedicated resources to deal with active transportation issues so are not able to actively support the STP work.

Change of personnel for STP Facilitator: The contract for the STP Facilitator for WDG expired before the study was complete and, due to other commitments, the role was taken over by a Upper Grand District School Board staff member.

Toronto Challenges

City and School Board Approval Processes: Working in a single tier municipality certainly has its advantages, as outlined under Conclusions. However, the City of Toronto and the Toronto District School Board are very large organizations with quite complicated processes resulting in a period of several months to gain approvals, after the initial presentation of the feasibility study. With this in mind, any future STP projects in large single-tier municipalities should allow for a start-up period, which would be outside of the STP process timeline.

Principal Turnover: Five of the ten STP schools in Toronto experienced a change in principal in year 2. This resulted in some delays as the new principals were introduced to the project.

Level of Support from municipal Councillors: The extent to which Councillors were involved in the STP process and their level of support for active transportation varied by ward. In wards with vocal residents in favour of more car-oriented development, it can be difficult for Councillors to implement



infrastructure changes and make plans for street improvements that enhance cyclist and pedestrian safety while slowing vehicles. The support for car-oriented development in these wards stems from many factors, including the ongoing perception that personal vehicles are the most efficient and only mode of transportation given the longer distances, lower accessibility and frequency of public transit and lack of infrastructure for active transportation. In these wards, it is especially important to widely share the success stories from STP schools and ensure they are communicated to the Councillor and local resident groups, demonstrating the strong, unified voice of school communities for safer streets.

Common Challenges for both WDG and Toronto:

School staff union action: Public elementary teachers were under work-to-rule conditions during the fall of 2015 resulting in a significant delay in collecting follow-up travel survey data from most of the public schools. Teachers at these schools were unable to undertake the classroom surveys as they did for the baseline data collection, and were unable to participate in any STP committee meetings and activities. Both Toronto and WDG Facilitators assembled teams of volunteers to collect the surveys, and/or coached students on the process, but this meant that the data collection was spread out between October and December.

Weather: Although definitely out of the control of the project teams, severe and inclement weather can impact results of data collection. During the week of collection of the follow-up survey data for several schools, a severe storm hit Toronto and for two days many families did not attempt to use active travel to get to and from school, skewing the numbers from otherwise very active schools.

Implementation of infrastructure upgrades can exceed the project time frame: School action plans that identified infrastructure modifications can take time to implement as they need to be approved by City Council and allocated funds in the budget. In communities where these modifications are required, it can be difficult to change the parental behaviour of driving to/from school in a short time frame. However, smaller changes can be implemented and education strategies introduced to create excitement within the school community about active school travel in preparation for the major infrastructure changes that will further support them.



Conclusions and Lessons Learned

The Feasibility Study involved 15 schools and over 8000 school students. Overall the study has achieved its objectives:

Objective 1

Implement the STP model across school districts within the same transportation consortia, in two contrasting regions of Ontario

The purpose of this objective was to investigate the impact of implementing STP at the school district level and test the theory that STP could have more impact if applied at the district level than when applied piece-meal at individual school level.

The District School Boards in both regions have been enthusiastic partners and their support and participation has been fundamental to the success of this study.

In Toronto the feasibility study was thoroughly embraced by both District School Boards. Both provided a financial contribution for the hiring of the STP Facilitator. A Partnership Agreement put in place with TDSB clearly articulated the expectations and contributions of both GCC and TDSB and this agreement is being extended to June 2016 to incorporate updated deliverables. The Toronto Catholic District School Board approved the study at the Director level and assigned a staff person to represent their schools. In addition, both Toronto boards have provided in-kind contributions of office and meeting space.

The Toronto Student Transportation Group (TSTG) has provided the feasibility study with excellent support throughout and was a regular participant in the Toronto STP steering committee meetings. Both District School Boards and TSTG participated in the hiring committee for the STP Facilitators. With the assistance of the TSTG both Public and Catholic schools were selected, in close proximity to each other.

In the Wellington-Dufferin-Guelph region, both of the two main District School Boards participated in ASRTS programs and both were engaged in the study initially, but only the Upper Grand District School Board (UGDSB) was able to participate to the full duration of the study. The Wellington Catholic District School Board (WCDSB) unfortunately had to withdraw their school's participation due to a competing priority.

Whilst UGDSB represents the majority of the region's student population, it is unfortunate to not have participation from the WCDSB because many of their schools are located in close proximity to UGDSB schools and share common transportation challenges that could be overcome by the District School Boards working together in partnership with the Municipality.

The advantages of involving District School Board in the implementation of STP in a region include:

- Identification of common issues
- Pairing up of schools in neighbourhoods
- Sharing of best practice
- Opportunity to pool resources and purchasing powers

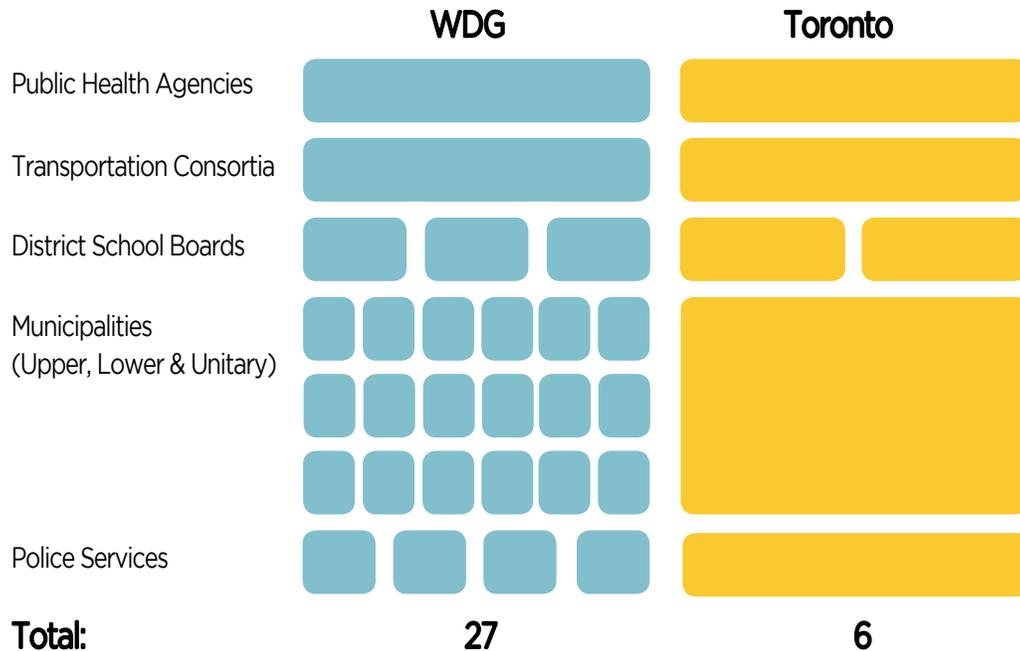


Objective 2

Evaluate the deliverability of the STP model, including:

- a) Identify the differences in delivering the process in varying community types, i.e. urban/suburban vs. suburban/rural

The most significant differences between the two regions participating in the feasibility study are the number, structure and sizes of the public agencies that form the STP steering committee:



WDG has more than four times as many separate public agencies with an interest in the STP process, than the City of Toronto. The key impacts of this are:

- More STP facilitator resource needed to engage all agencies
- More agencies involved in decision-making
- More variation in organizational awareness, priorities and resources
- Longer timeline required to establish working committees
- More difficult to agree standardized methodologies and solutions

The WDG region has a total of 18 municipalities (upper, lower and unitary) and the existing WDG-ASRTS steering committee does not currently have representation from all of these municipalities. This is because many of the smaller, rural municipalities do not currently have the capacity or resources to dedicate time to school travel and traffic issues.

Where there is one single large public agency providing services for a whole region, such as the City of Toronto, it is likely that that organization will have one or more staff dedicated to active travel and transportation. In contrast, many of the small municipalities in the WDG region do not have staff specifically assigned to active travel or traffic safety duties. The impacts of this are:



- More difficult to fully involve small rural municipalities in the STP process.
- Small municipalities likely to have very limited pool of experience, inspiration, tools and resources to draw upon when seeking to address active travel and traffic issues. Staff may be dealing with a problem that has not been encountered before.
- More difficult to implement Action Plan items, such as engineering works that require municipal support.

However, there are municipalities within the WDG region that serve larger populations and have resources more readily available to support STP, for example the City of Guelph has a Transportation Demand Management staff position who acts as the liaison between the WDG-ASRTS committee and the City, and provides direct support to the STP steering committee. This demonstrates that implementation of STP at the regional level presents the opportunity for the sharing of STP best practice and resources and for larger municipalities to support smaller municipalities through knowledge sharing. It could improve the cost efficiency of achieving regional increases in active travel and reductions in traffic congestion by avoiding the need for each small municipality to develop their own tools and resources i.e. avoid re-inventing the wheel.

Unlike Toronto where there is one transit agency dedicated to providing service across the city, WDG lacks regional transit services and few children, if any, are travelling to/from school by transit. In Toronto, however, where children 12 and under can now travel for free, a noticeable increase in transit use for the school journey was noted.

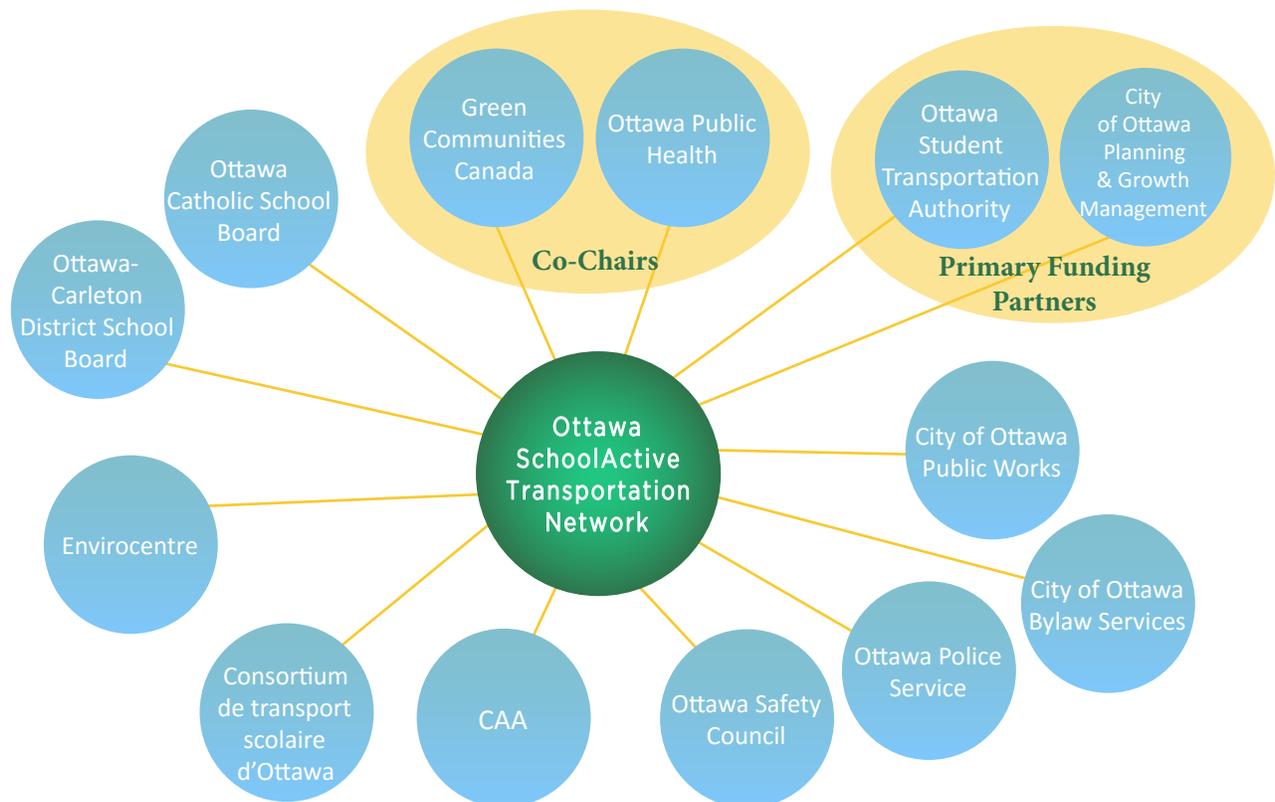
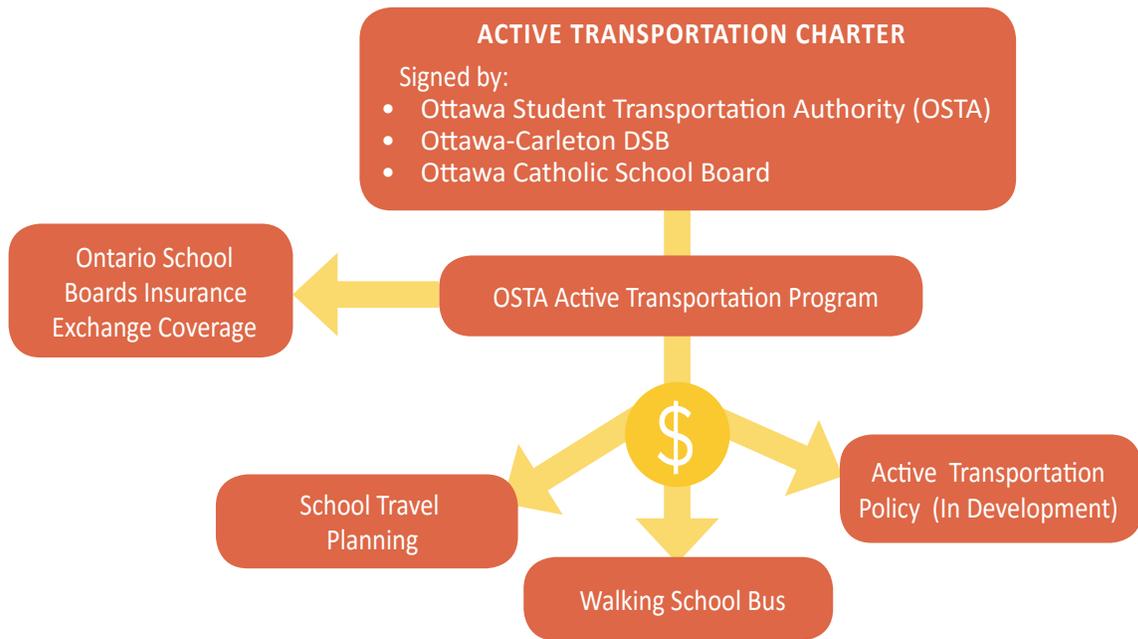


b) Find the best models for local 'ownership' of active school travel

The Ottawa ASRTS ownership model is an example of an active school travel program that has achieved success through local ownership of the STP process. This model typically works well in urban populations that are managed by single large public agencies. The Ottawa model could be adapted for the City of Toronto in a way to involve all stakeholders while meeting their own objectives for active transportation.

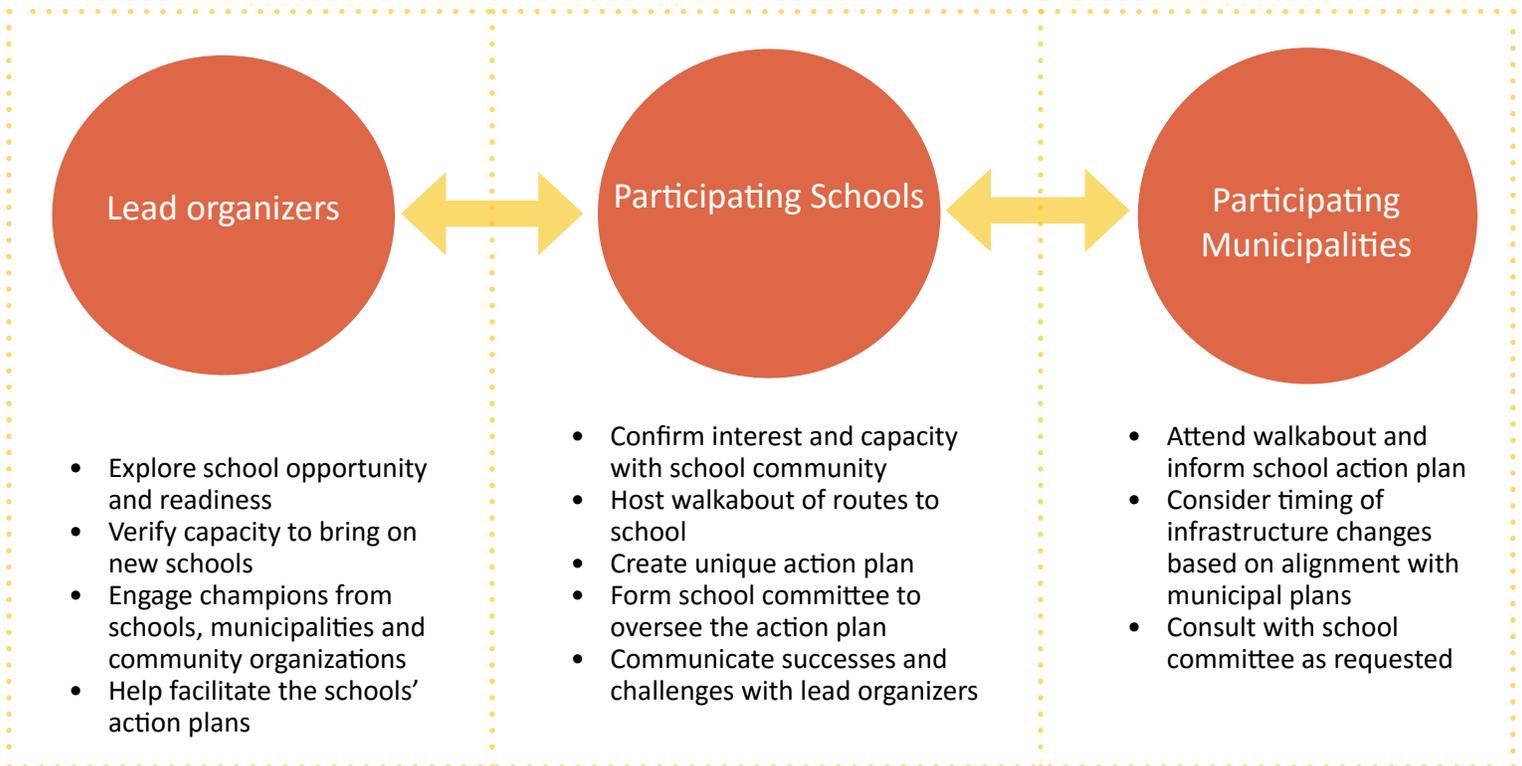
The Ottawa ASRTS model evolved over several years and today, its success is due in part to the leadership of GCC and the two English-language school boards and the strong partnership developed with a broad cross-section of Ottawa stakeholders.

Ottawa Framework for Active School Travel



Additionally, an organic and evolving model for active school travel is emerging in Niagara. Based on promising results from a pilot phase and feedback from participants, local organizers modified the STP program to a menu-based approach. There is strong local support for STP from across the Region and work is underway to increase capacity to sustain and expand the program. Niagara Region Public Health designated a Health Promoter at .5 FTE to perform the STP Facilitator role, working in close partnership with the Transportation Consortia and two school boards. All municipalities that have schools participating in STP have embraced the program and work with schools to help implement their action plans.

Niagara Framework for Active School Travel



Stakeholder Engagement at St. Raphael Catholic School in Toronto



This study has shown that the challenge is how to achieve a similar level of participation and local ownership across a mixed region of urban and rural communities, administered by multiple small municipalities.

In the City of Toronto the municipality works closely with the two District School Boards and this relationship has been strengthened through this study; given time the Toronto STP model will evolve into a similar model to Ottawa with School District ownership and shared responsibility with the City.

In contrast, in the WDG region it has taken far longer to establish committees, secure participation and achieve any local ownership due to the spatial and organizational diversity. The challenges of coordinating STP programs in rural communities and isolated urban communities are exacerbated by a combination of local economic barriers, a lack of active travel infrastructure, and the rural nature of the schools. These barriers limit opportunities to engage in active transport, necessitating travel to school by bus or car.

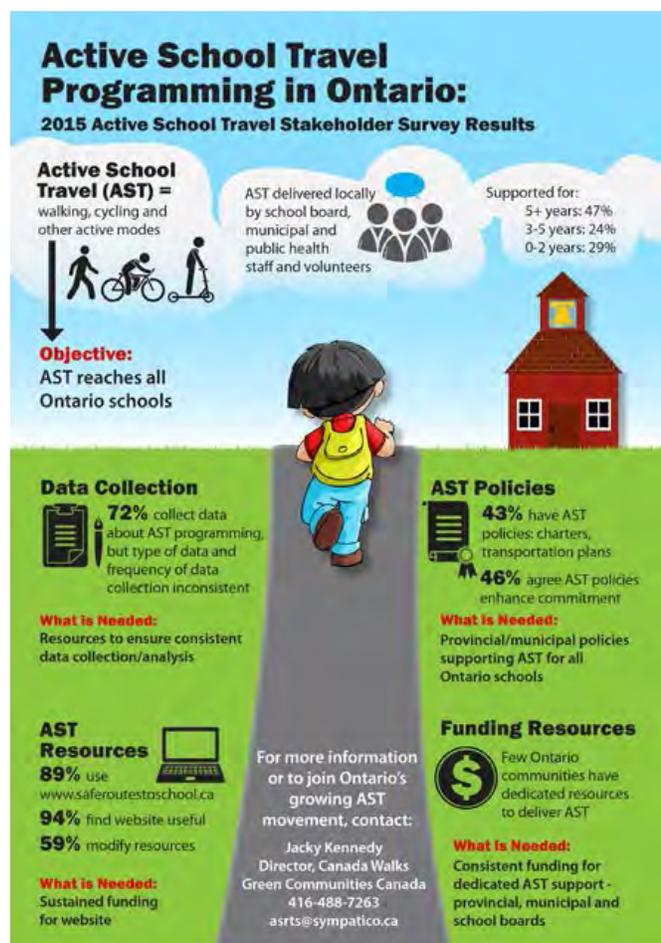
It therefore makes sense that in regions with a mix of rural and small urban centres, support be coordinated through District School Boards working in partnership with Public Health Units. In principle, this model would work in the same way as in larger urban centres, so long as the resources for active school travel are provided and supported provincially (active travel policies, charters, adaptable tools, training, etc.) with capacity provided to support the STP Facilitator resource.

A **2015 survey of ASRTS practitioners across Ontario**, conducted by The Heart and Stroke Foundation (HSF) and GCC, backs up the need for building local capacity. There was strong support from respondents for provincial leadership to address barriers to expansion of the STP model.

c) Assess funding models and funding partners

Funding for dedicated STP facilitators is difficult to locate and depends on the priority that municipalities and school districts place on active transportation. Current school district and municipal transportation budgets do not provide funds for active school transportation despite quite generous budgets for school busing, transit and motor vehicle access. The recommendations below recognize this discrepancy and strongly recommend that a percentage of funds be redirected to active school travel personnel and resources.

A 2010 study completed by GCC, **Saving Time and Money with Active School Travel**, found that students who are eligible for busing cost the provincial government \$371.74 per student per year. Funds dedicated to ensuring the safe passage of students using active transportation to school are \$0.



In the U.S. the organization that coordinates centrally is the Safe Routes to School Partnership--their model could be replicated in Ontario. The **U.S. Safe Routes to School Partnership** has been strongly supported through federal government contributions matched at the State level, providing over \$1.15B over the last decade. The results have been well-documented and recent **research** is showing significant increases in children's active travel with larger community spin-offs as families become more active, traffic fatalities are reduced, and seniors take advantage of streets designed for pedestrians.

d) Determine the impact of the scale of delivery on the model

The proximity of participating schools has a considerable impact on Facilitator time management. When schools were separated spatially by increasing distance the amount of travel time increased. In Toronto a clustered or neighbourhood approach was chosen by the steering committee and this enable two or more schools to be visited on the same day. This was a more efficient use of the Facilitator's time and travel budget. It was also found that schools located in close proximity to each other tend to have similar transportation related issues and could be dealt with by stakeholders as one neighbourhood. In the WDG region where a clustered approach is more challenging to achieve budgeting for increased travel time or reducing the scope to focus more intensely on fewer communities could be successful.

Objective 3

Establish an accepted model for benefit-cost analysis of STP

In 2013 Green Communities Canada, in collaboration with Metrolinx and University of Toronto, conducted the first Canadian study to identify the associated costs and derived benefits of STP, using data collected from 19 STP interventions across Ontario. The results of that study, detailed in the **full report**, showed a benefit-cost ratio of 1.8 supporting the Canadian STP model as a relatively cost-effective intervention which can result in positive school travel behavior change, while providing economic, environmental and physical activity benefits.

This Benefit-Cost Analysis (BCA) extends the 2013 study in three notable ways. First, projects costs were recorded on an on-going basis relative to the retrospective-recall approach from the first BCA that likely contained issues around recall biases. Second, the primary benefits measured included benefits from cycling, in addition to the increases in kilometres walked and reductions in motor vehicle kilometres travelled. Third, the benefits and costs were collected for Year 1 and subsequently projected for Year 3 and Year 5. Based on current STP practices in Canada, the first 3-5 years is a more realistic and applicable time period to assess the program's cost effectiveness relative to the projected 11 year benefit-cost ratios used in the original BCA.

This current BCA examined the costs and benefits of the 13 STP projects taking place as part of the feasibility study in Toronto and Wellington-Dufferin-Guelph. The methodology was followed as per the original BCA report that included the same benefit values from the Victoria Transport Policy Institute's **"Evaluating Active Transport Benefits and Costs" report**. For each of the selected STP projects, existing student travel mode data was compiled, and data regarding project costs, time, and initiatives

delivered was collected from each school and community. For the full BCA report including detailed methodologies and results, see Appendix 3. The following is an executive summary of the full report.

We have provided short case studies on two Toronto schools and one WDG school below.

Case Studies

Success in Toronto

Each of the 8 participating Toronto schools has a positive story to share from their involvement in School Travel Planning. Two of the schools that stand out for their exceptional engagement are Annunciation Catholic School and Gateway Public School.

At **Annunciation CS**, a group of mostly Grade 6 students formed a new student club focused on active transportation. They decided to call themselves the “Walking with Friends Club”. The core students of the group, now in Grade 7, dedicated many lunch hours to planning and promoting activities such as Spring Walk and Roll to School Day, International Walk to School Month, and sharing their own stories about how they travel to school in posters, announcements, and a video.

The follow up classroom data for Annunciation CS was taken the week of a severe storm that hit Toronto. This resulted in fewer students than normal using active travel modes, thereby affecting the overall results. However, we believe that the stories shared by the parents and students paint a more accurate picture of the school’s commitment to active transportation, and particularly the leadership of the student club. Several families gave walking or cycling a try for the first time on the special event days, and were excited to note that it was easier and more enjoyable than they expected. One father, in spring of 2015, said he was impressed that discussions about transportation among students at school were making their way home to parents, and that if similar to his own daughter’s remarks, could be positively changing families’ attitudes towards walking to school.



PROJECT PROFILE:	Community: Toronto Annunciation Catholic School <ul style="list-style-type: none"> • Student Population: 331 • Project Timeline: December 2013-June 2016 		
PHASE 1: PLANNING	<ul style="list-style-type: none"> • Stakeholder Committee: Toronto committee • School Work Group: 1 STP facilitator, 1 Public Health Nurse, 1 Police officer, 2 City Councillors, 1 Principal, 2 teachers, 1 transportation engineer, 1 TSTG representative, 1 school board representative 2 meetings <ul style="list-style-type: none"> • Walkabout • Parent Survey • Student Classroom Survey 		
PHASE 2: IMPLEMENTATION	School Work Group – 2 meetings Education: School assembly; police classroom presentations, morning announcements, booth at parent-teacher interview night, booth at 50th Anniversary BBQ Encouragement: Newsletter inserts, presentation to school council, Walking with Friends Club, student video, Spring Walk and Roll to School Day, iwalk-iwheel day Engineering: Bike rack, request for four-way stop study at nearby intersection Enforcement: Police enforcement		
PHASE 3: MONITORING	<ul style="list-style-type: none"> • Student classroom survey • Benefit-cost analysis 		
MODE SHIFT:	To School: <ul style="list-style-type: none"> • Car : +3% • Walk: -4% • Bicycle: +2% 	From School: <ul style="list-style-type: none"> • Car: +5% • Walk: -6% • Bicycle: +2% 	
ESTIMATED ANNUAL HEALTH/ ENVIRONMENTAL BENEFITS	VKT Reduced Kilometres: 0 km Walking Kilometres Increased: 0 km Cycling Kilometres Increased: 4,528 km		
BENEFIT-COST RESULTS	Monetary Benefits 1st year from: Walking: \$0 Cycling: \$1,449 VKT reduction: \$0 Total: \$1,449 CB Ratio: 0.2	Monetary Benefits after 3 years from: Walking: \$0 Cycling: \$4,222 VKT reduction: \$0 Total: \$4,222 CB Ratio: 0.4	Monetary Benefits after 5 years from: Walking: \$0 Cycling: \$6,835 VKT reduction: \$0 Total: \$6,835 CB Ratio: 0.5





Similar success has been demonstrated at **Gateway PS**, where a very committed school council has helped support School Travel Planning among a very large, multi-cultural student population. With a group of administrators, parents, teachers, and terrific support from the local police division, Gateway PS has excelled in many areas of STP. Their bike rodeo in spring 2015 saw over 100 students bring bicycles to school to participate, and a great group of parents dressed up in rodeo theme to assist the police officers leading the event. The Eco Club conducted the baseline and follow up classroom surveys, and student representatives participated in a student walkabout as well as a neighbourhood cycle-about.

The Gateway PS community has shown impressive leadership in working towards neighbourhood infrastructure changes to create safer streets for students to walk and cycle to school, and has already successfully acquired a crossing guard for a nearby dangerous intersection. The STP committee at Gateway PS is continuing to build relationships with City staff and the local Councillor, and their dedicated efforts are sure to see a suite of infrastructure improvements implemented around the school over the coming years.



PROJECT PROFILE:	Community: Toronto Gateway Public School		
	<ul style="list-style-type: none"> • Student Population: 940 • Project Timeline: January 2015-June 2016 		
PHASE 1: PLANNING	<ul style="list-style-type: none"> • Stakeholder Committee: Toronto committee • School Work Group: 1 STP facilitator, 1 Public Health Nurse, 1 Police officer, 1 City Councilor, 1 Vice-Principal, 2 teachers, 2 parent volunteers, 1 transportation engineer, 1 planner, 1 community member, 1 TSTG representative, 1 school board representative <p>3 meetings</p> <ul style="list-style-type: none"> • Walkabout • Student Walkabout • Student Classroom Survey • Cycle-about 		
PHASE 2: IMPLEMENTATION	<p>School Work Group – 2 meetings</p> <p>Education: Bike rodeo, Eco Club activities, morning announcements</p> <p>Encouragement: Newsletter inserts, presentation to school council, Spring Walk and Roll to School Day</p> <p>Engineering: Bike rack, parking lot signs</p> <p>Enforcement: Police enforcement, crossing guard</p>		
PHASE 3: MONITORING	<ul style="list-style-type: none"> • Student classroom survey • Benefit-cost analysis 		
MODE SHIFT:	To School:	From School:	
	<ul style="list-style-type: none"> • Car : -6% • Walk: +2% • Bicycle: +1% 	<ul style="list-style-type: none"> • Car: -7% • Walk: +1% • Bicycle: +1% 	
ESTIMATED ANNUAL HEALTH/ ENVIRONMENTAL BENEFITS	<p>VKT Reduced Kilometres: 41,792 km</p> <p>Walking Kilometres Increased: 7,144 km</p> <p>Cycling Kilometres Increased: 6,430 km</p>		
BENEFIT-COST RESULTS	Monetary Benefits 1st year from: Walking: \$3,643 Cycling: \$2,057 VKT reduction: \$33,016 Total: \$38,717 CB Ratio: 5.0	Monetary Benefits after 3 years from: Walking: \$10,615 Cycling: \$5,994 VKT reduction: \$96,191 Total: \$112,801 CB Ratio: 9.0	Monetary Benefits after 5 years from: Walking: \$17,186 Cycling: \$9,705 VKT reduction: \$155,740 Total: \$182,631 CB Ratio: 12.4



Success in Wellington-Dufferin-Guelph

Within the first year of the STP project in the Wellington-Dufferin-Guelph Region, Glenbrook Elementary School showed great enthusiasm for STP and very good potential for achieving sustained increases in active travel.

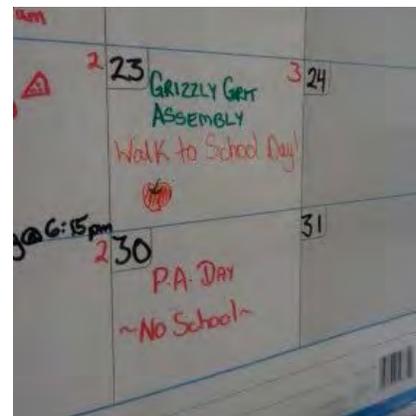
The school and its community are relatively young, having opened in 2013 in a growing suburb of the town of Shelburne. The town has a population of approximately 6,000 residents and is located 100km north-west of Toronto, in a predominantly agricultural area. The Town of Shelburne is the fastest growing municipality in Dufferin County with a population increase of 13.5% between 2006 and 2011. Hence, not only is the school itself a new community, but many of the staff, students and parents at the school are quite new to the area. There is a lot of energy and enthusiasm at the school and it benefits from having a proactive and engaged parent council.

The school is classed as a ‘walkable school,’ with all students living within the defined walking distance boundary (1.6km for Grades JK–6). However, baseline travel surveys in December 2014 showed that more than half of students were travelling to school by car. A consequence of this trend is that the school has experienced ‘teething problems’ in terms of how the site is being used by pedestrians and vehicles and the potential for conflict is currently high.

A key benefit of the STP process has been that it has enabled the school community to work with the district school board, the municipality and the local police service to formally assess traffic problems and identify feasible solutions. Only a limited number of improvements have been implemented so far in the short life-span of the project, but further engineering and infrastructure works will be investigated and implemented in Year 2.

The school’s Parent Council has been working with the Public Health Nurse to promote healthy lifestyles. A successful walk to school day in October 2015 was organized, with all walkers rewarded with crispy apples on arrival to the school yard. Based on a hands-up travel survey carried out by teachers and students at the school, the event encouraged 20% more walkers than usual.

The follow-up travel survey showed a significant increase in walking rates, with a corresponding drop in car trips due to a combination of the School’s encouragement and education efforts, with the warmer weather conditions.



Many of the families who already walk their children to Glenbrook School also have toddlers and use strollers making pedestrian access and safety very important. The School STP Committee aims to improve pedestrian access and traffic management around the school site, including implementing new traffic signs to control vehicle access and designating a kiss'n'ride drop-off area.

PROJECT PROFILE:	Community: Town of Shelburne (Wellington-Dufferin-Guelph Region) Glenbrook Elementary School <ul style="list-style-type: none"> • Student Population: 462 • Project Timeline: October 2014-November 2015 		
PHASE 1: PLANNING	<ul style="list-style-type: none"> • Stakeholder Committee: WDG ASRTS Committee • School Work Group: 1 STP facilitator, 1 Public Health Nurse, 1 Principal, 1 Vice-Principal, 2 parent council members, 1 school board representative - 1 meeting • Walkabout • Classroom Travel Survey 		
PHASE 2: IMPLEMENTATION	School Work Group – 1 meeting Education: School assembly; morning announcements, Encouragement: Newsletter inserts, Walk to School Day Oct 2015 Engineering: New traffic signage; Assessment of traffic management improvements required for implementation in Year 2 Enforcement: Police enforcement on a regular basis		
PHASE 3: MONITORING	<ul style="list-style-type: none"> • Student classroom survey • Benefit-cost analysis 		
MODE SHIFT:	To School: <ul style="list-style-type: none"> • Car : -18% • Walk: +14% • Bicycle: 0% 	From School: <ul style="list-style-type: none"> • Car: -9% • Walk: +7% • Bicycle: 0% 	
ESTIMATED ANNUAL HEALTH/ ENVIRONMENTAL BENEFITS	VKT Reduced Kilometres: 40,494 km Walking Kilometres Increased:19,120 km Cycling Kilometres Increased: 999 km		
BENEFIT-COST RESULTS	Monetary Benefits 1st year from: Walking: \$9,751 Cycling: \$320 VKT reduction: \$31,991 Total: \$42,061 CB Ratio: 10.4	Monetary Benefits after 3 years from: Walking: \$28,410 Cycling: \$931 VKT reduction: \$93,204 Total: \$122,544 CB Ratio: 18.4	Monetary Benefits after 5 years from: Walking: \$45,997 Cycling: \$1,508 VKT reduction: \$150,903 Total: \$198,408 CB Ratio: 25.1



This feasibility study identified unanimous support for the School Travel Planning (STP) model, acknowledging that successful implementation at the local level requires District School Boards (DSBs) to work in close partnership with student transportation services and with strong provincial and municipal stakeholder support. Further, the School Travel Plan (STP) Facilitator position requires funding and the Benefit-Cost Analysis (BCA) results presented later in this report reinforce the importance of an STP Facilitator to support successful STP implementation. The BCA results show benefits for urban, suburban and rural school locations.

In consideration of all the information gathered throughout this study, the following Next Steps are recommended by Green Communities Canada (GCC) as an outcome of the feasibility study and data analysis obtained through the pilot schools. Further, stakeholder representatives were interviewed to gather their feedback on such subjects as the School Travel Planning process, the importance of the STP Facilitator position, sustainability of program, etc. As indicated in the summary of stakeholder interview comments provided in Appendix 4, there were some variances in responses.

Next Steps for Consideration

Active School Travel (AST) is a key part of the toolkit that District School Boards (DSBs) can use to achieve the goals outlined in *Achieving Excellence: A Renewed Vision for Education in Ontario*¹, in particular the goal of Promoting Well-Being:

- Walking, cycling or scooting to school with family and friends helps children to develop enhanced mental and physical health and a positive sense of self and belonging in their school community and neighbourhood.
- Active School Travel directly contributes to achieving the long-term goal for children and youth to have access to 60 minutes of activity connected to their school day.
- Active School Travel initiatives bring together partners inside and outside the education sector to increase interest among children and youth in being physically active, and to increase their motivation to live healthy, active lives.
- The School Travel Planning process enables parent, guardian and caregiver engagement and involvement in their children's learning, well-being and school experience.
- Several studies have demonstrated strong links between Active School Travel and positive academic achievement for students, due to better concentration in class and reduced stress levels.

The long-term benefits of Active School Travel for DSBs include:

- sustained increased physical activity and well-being of students
- reduced traffic congestion and air pollution on and surrounding school sites
- reduced burden of traffic management on school staff
- reduced maintenance of driveways and parking lots (asphalt, signs, paint markings)
- improved infrastructure for walking and cycling
- enhanced school and neighbourhood safety
- greater engagement between school and local community

1. Ministry of Education (2014). *Achieving Excellence: A Renewed Vision for Education in Ontario*. <http://www.edu.gov.on.ca/eng/about/renewedVision.pdf>



District School Boards Need Local Support for Active School Travel

Implementing Active School Travel is a challenge shared between multiple stakeholders including Municipalities, Public Health, Police Services, School Boards and Student Transportation Services. Whilst each stakeholder has an important role to play, to date, an overall lack of ownership, leadership and long-term planning has limited the health, social and environmental benefits of Active School Travel initiatives. This has resulted in the role of the School Travel Plan Facilitator, likely the most critical role of the process, being under-funded. During this study we asked stakeholders to rate this position on a scale of 1-10 and overwhelmingly, the position was rated as a 9 or 10 (10 being “critical to the program” and 1 being a “nice to have”). All stakeholders felt that if this position had not existed, the project would not have been able to reach completion due to the time commitment required of stakeholders whose work responsibilities extend beyond school travel planning specifically.

A dedicated STP Facilitator is able to:

- Work with the Principals, school staff and volunteers enabling them to focus their efforts on the important action planning and implementation stages of AST.
- Provide greater consistency to local initiatives; that could not otherwise be achieved due to the multiple priorities of school staff and administration and evolving school communities.
- Bring expertise and experience to the AST activities which would enhance school site safety and increase the potential for successful outcomes.
- Provide opportunities and efficiencies for knowledge sharing and joint efforts in AST across DSBs.

Green Communities believes that DSBs are well-placed to take a leadership role on STP, given that:

- DSBs hold detailed knowledge and data related to schools including student populations, demographics and catchments, facilities and traffic management, school site operations and maintenance, school staff, programs and activities.
- DSBs can provide a consistent link between the individual school communities and all of the municipal stakeholders involved in AST. This is particularly beneficial in a geographical region with multiple small municipalities, such as Wellington-Dufferin-Guelph.
- There are already strong linkages between Active School Travel initiatives and existing School Board programming that promote well-being of children and students:
 - The provincial **EcoSchools** model;
 - The Ministry’s **Healthy Schools** initiative;
 - OPHEA’s recent **Healthy Schools Certification Program**;
 - The Ministry’s **Safe Schools** initiatives;
 - **Daily Physical Activity** 20 minutes a day within the school day; extend this to include active school travel;
- Engagement with AST also helps schools to meet criteria required to leverage the legislative and funding changes being made as part of the **#CycleON** Strategy and the **Healthy Kids Strategy**.

I’ll be quite frank with you, if anyone asks me what makes STP successful, I say the facilitator. Without the facilitator, its volunteer led, and we know that it usually falters and fizzles out. The facilitator is the key to success.

- (Funder, School A)



Provincial government to create policies to ensure collaboration between District School Boards and Public Health Agencies to advance the well-being of students through Active School Travel.

Additional assistance to DSBs can be obtained through Ontario's network of Public Health Units who have been a consistent champion for this work. Currently, Public Health Nurses are optimally positioned to support STP facilitators due to their presence in schools, and their role in promoting increased daily physical activity and providing guidance on injury prevention. Furthermore, the engagement of health units and boards of health in built environment matters creates another strong linkage between transportation, environment, and air quality.

Based on the Ontario Public Health Standards (OPHS), health units and boards of health are mandated to collaborate with, and support, schools and municipalities with the creation or enhancement of policy, and supportive and built environments. Although Public Health is mandated through the OPHS to work with school boards, school boards are not mandated to work with Public Health with regards to active school travel. Establishing a formalized agreement between the associated Ministries would clearly solidify the relationship between local health units and school boards within this realm. Supporting this recommendation would guarantee a more sustainable impact across schools and the broader community.

Public Health Ontario's **Evidence Brief: Impact of adopting school-based active transportation policy** ¹aims to investigate the effectiveness of active transportation planning by asking: What are the benefits of adopting AT plans and policies? Conclusion: the development of Canadian support strategies is needed to increase evidence and to assess the impact of adopting school-based active transportation. These strategies needing support include working with school boards to encourage municipalities to make the community environment around schools more supportive of AT. (e.g., develop Active Transportation Master Plans)

1. Public Health Ontario (2015). *Evidence Brief: Impact of adopting school-based active transportation policy*. www.publichealthontario.ca/en/eRepository/Active_Transportation_%20EB_2015.pdf

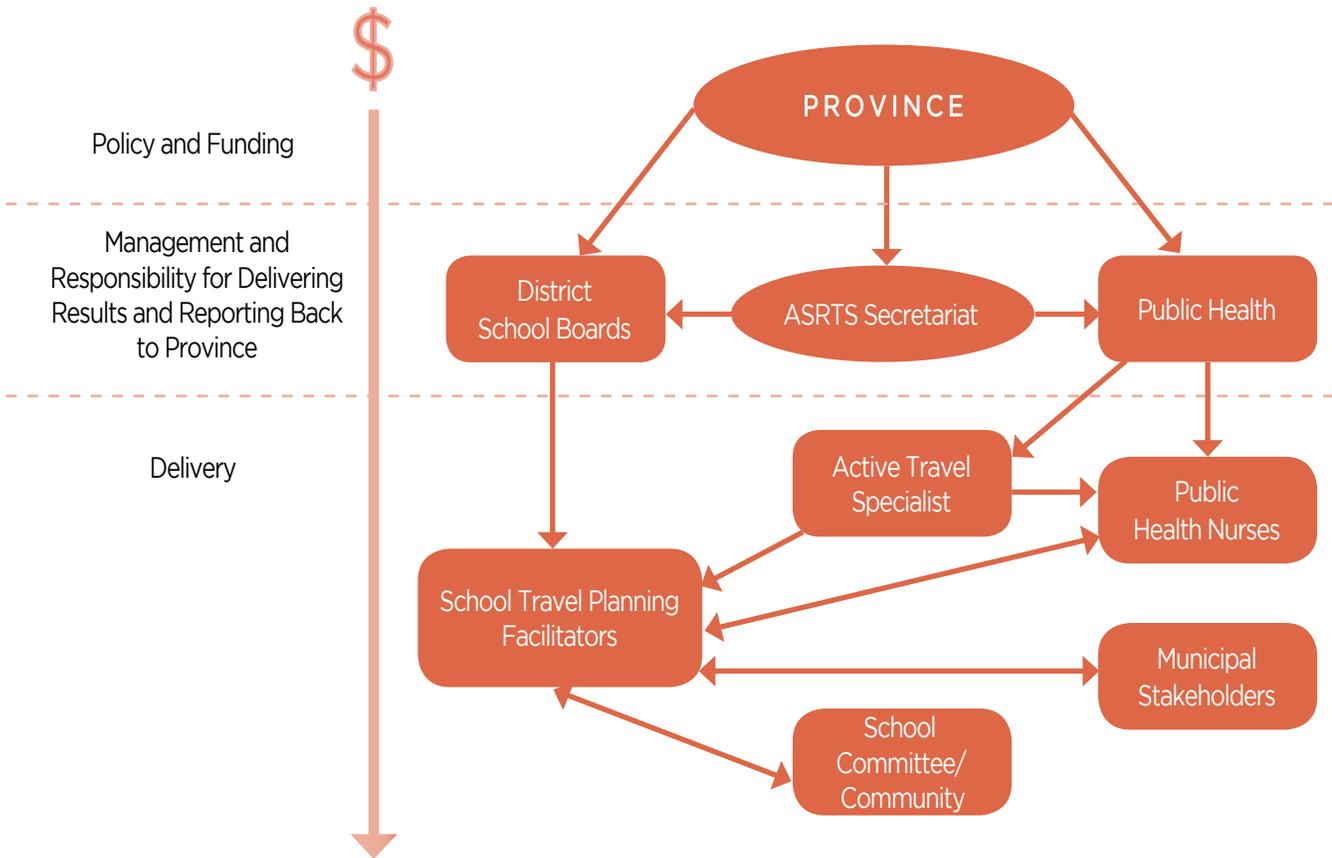
Each Ontario District School Board should receive increased support and guidance to expand Active School Travel (AST) initiatives, with a centralized Active School Travel support service available to all District School Boards.

Central coordination and management of common AST tools, resources and measurements will ensure rigorous data collection for provincial results, while reducing duplication of effort through the use of common and adaptable resources. Currently this role is performed in Ontario by Green Communities Canada, however, support is dependent on fluctuating levels of funding and the resource support available is unsustainable in the longer-term. Providing a centrally located clearing house and support function for District School Boards will enhance and facilitate knowledge and sharing of best/most promising practices across regions, common communications and marketing materials.

We have provided examples of other Ontario Active School Travel models in this report as well as a link to a Metrolinx led Active Sustainable School Travel Roadmap Strategy for Ontario: **Active and**



Recommended Provincial Model for Active School Travel



I feel that walking to and from school gives me and my daughter time to talk about what kind of day she had and what we will be doing for the rest of the evening

- Parent of a 6-year-old girl who walks to/from school



Appendix 1: School Travel Results

The results on the following pages are based on data collected through classroom surveys in the Fall/Winter of 2014/15 and again in the Fall/Winter of 2015. A classroom survey template can be found in Appendix 2.

The information contained here shows the results of the baseline and follow-up classroom surveys, weather for each data collection period, the benefits to costs ratio and some highlights of actions for each of the 13 participating schools. A full copy of the benefit-cost study conducted at the 13 schools is attached as Appendix 3.

Note that some of the schools decided to collect additional data from family surveys to further assist detailed action plan decisions, even though this was not a requirement of the project; these results can be found in the associated school travel plans for each school.

In addition to the classroom survey travel data we have also included the results of the Benefit-Cost Analysis (BCA), full report in Appendix 3.

Summary of Travel Mode Change Outcomes and the Health/Environmental Benefits

Following one year of STP implementation, the 13 STP projects recorded an overall 1% increase in cycling, a 4.3% reduction in car use, and a 3.2% increase in public transit for the morning commute. Similar travel mode shifts were observed for cycling (1%), car use reduction (3.2%), and public transit use (3.6%) in the afternoon. When extrapolated for a full school year, the benefits associated from the observed increases in AST and decreases in car use are estimated to have:

- avoided 556 vehicle trips each day
- reduced 189,799 vehicle kilometers travelled;
- increased physical activity, including 551,516 minutes of walking (or 39,393 km), and 382,896 minutes of cycling (or 51,053km);
- reduced 41.2 tonnes of greenhouse gas (GHG) emissions and 1.7 tonnes of air pollutants (CAC)
- annual societal benefits of approximately \$185,000
- net present value benefits of \$0.5 million and 0.9 million if STP is maintained for the respective 3 and 5 years
- average benefits per student of approximately \$72 and \$125 over the respective 3 and 5 years



Summary of Project Costs

The STP cost data compiled includes school-level planning, implementation, and monitoring for Year 1, Year 3, and Year 5. The total costs for each school were summed based on the ‘cost of people’ (e.g., stakeholder time) and ‘cost of materials’ (e.g. paper, incentives). Modelling these STP costs across 5 years resulted in the following:

- The average ‘one-time’ planning costs for STP is \$2436
- The average costs of materials for Year 1 is \$674 and Years 2-5 is \$361
- The average costs of people for Year 1 is \$2,809 and Years 2-5 is \$1,349
- The average total cost of a 1 year STP intervention is approximately \$5,500
- The average total cost of a 3 year STP intervention is approximately \$8,700
- The average total cost of a 5 year STP intervention is approximately \$10,000

Cost-Effectiveness of School Travel Planning

Based on the estimated net present value benefits and total costs, the benefit-cost ratio for 1, 3 and 5-year durations are as follows for all 13 STP interventions.

Benefit-Cost Ratio [1 year project duration] =	$\frac{\text{Total Present Value Benefits}}{\text{Total Costs}} = \frac{\$186,369}{\$76,950} = 2.4$
Benefit-Cost Ratio [3 year project duration] =	$\frac{\text{Total Present Value Benefits}}{\text{Total Costs}} = \frac{\$542,982}{\$119,494} = 4.5$
Benefit-Cost Ratio [5 year project duration] =	$\frac{\text{Total Present Value Benefits}}{\text{Total Costs}} = \frac{\$879,123}{\$139,546} = 6.3$

The benefit-cost ratio of 2.4 after one year of implementation supports the program as a relatively cost-effective intervention that when effectively coordinated and implemented can result in positive school travel behaviour change, and ultimately provide substantial economic, environmental and physical activity benefits. Additionally, this study demonstrates that the STP model can be evaluated, and provides a refined method for assessing the interventions’ cost-effectiveness.



Individual School Results

This section summarizes the travel results for each individual school in the project. Further information on the STP process in these schools can be found in their individual School Travel Plans.

Glenbrook Elementary School



Glenbrook ES opened in 2013 in a suburb of the growing town of Shelburne in the County of Dufferin. The school is classed as a 'walkable school' with all students living within the defined walking distance boundary. However, baseline travel surveys in December 2014 showed that more than half of students were travelling to school by car.

Year 1 of STP

The school's Parent Council has been working with the Public Health Nurse to promote healthy lifestyles. A successful walk to school day in October 2015 was organized, with all walkers rewarded with crispy apples on arrival to the school yard. Based on a hands-up travel survey carried out by teachers and students at the school, the event encouraged 20% more walkers than usual.



Travel Mode Surveys

The follow-up travel survey (see results on the next page) showed a significant increase in walking rates, with a corresponding drop in car trips due to a combination of the School's encouragement and education efforts, with the warmer weather conditions.

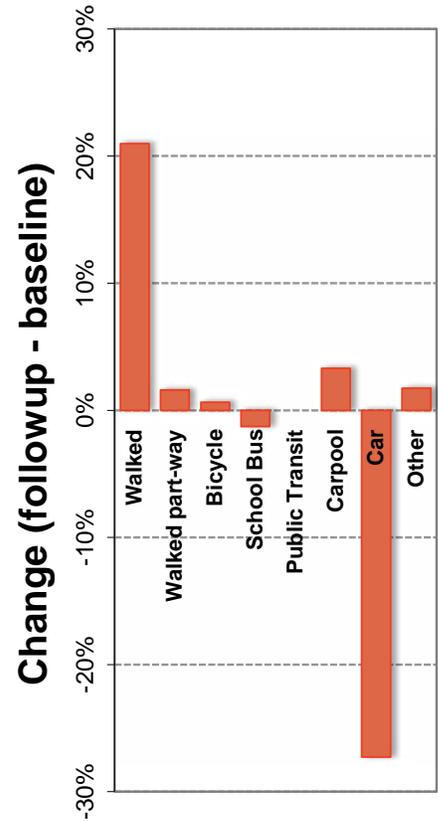
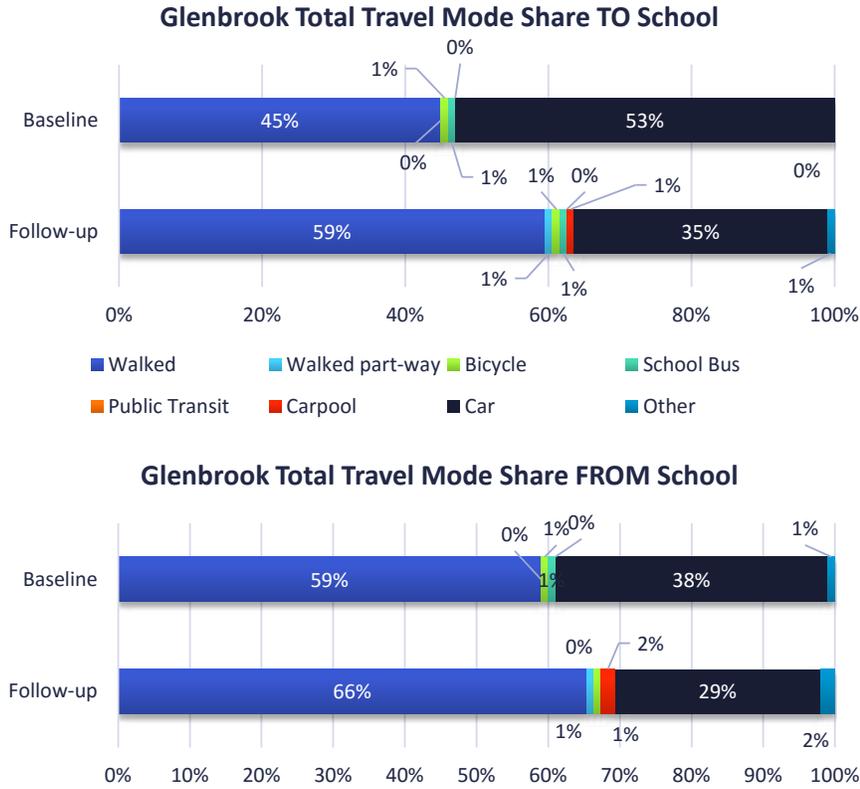
Next Steps

Many of the families who walk their children to the school also have toddlers and use strollers making pedestrian access and safety very important. The School STP Committee aims to improve pedestrian access and traffic management around the school site, including implementing new traffic signs to control vehicle access and designating a kiss'n'ride drop-off area.

STP actions planned for 2016 include:

- Start using the 'iSchool Travel Calculator' to monitor travel activity
- Establish a Walking School Bus
- Produce a 'Routes to School' map
- Run the 'Greening Tree' activity in Spring 2016 to encourage walking
- Improve sidewalk curb drops and footpaths
- Complete the follow-up travel survey

Travel Mode Survey Results



		Weather				
Period	Survey Date	Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	8-Dec-14	Sunny	Rainy			
Follow-up	19-Oct-14	Sunny cold	Sunny Cold	Cloudy	Sunny cold	Sunny cold





J.D. Hogarth PS has a relatively high proportion of students who walk to school. Despite this, the school experiences significant problems with vehicle congestion due to the compact nature of the school site and its location beside a busy County Road on the edge of Fergus in the Township of Centre Wellington in County of Wellington.

Year 1 of STP

The first year of STP work at J.D.Hogarth has largely focused on assessing the vehicle traffic concerns at the school site and identifying potential improvements to make the site safer and easier for pedestrian access.

Travel Mode Surveys

The bus transportation service was expanded for J.D.Hogarth in September 2015, which is reflected in the travel survey results, with school bus journeys increasing from 15% to 21% for the journey to school. The survey results also show that this increase in bus journeys generated a modal shift away from car journeys. Walking rates were slightly lower than the previous year, but it appears the majority of the shift was to either walking part-way or cycling. Overall, the rate of active journeys was very similar.

Next Steps

The STP process has identified opportunities to alleviate vehicle congestion on site by implementing new traffic signs, dispersing car traffic to drop-off locations in nearby streets, promoting 'walk-a-block-or-two' and improving pedestrian paths into the rear of the school site.

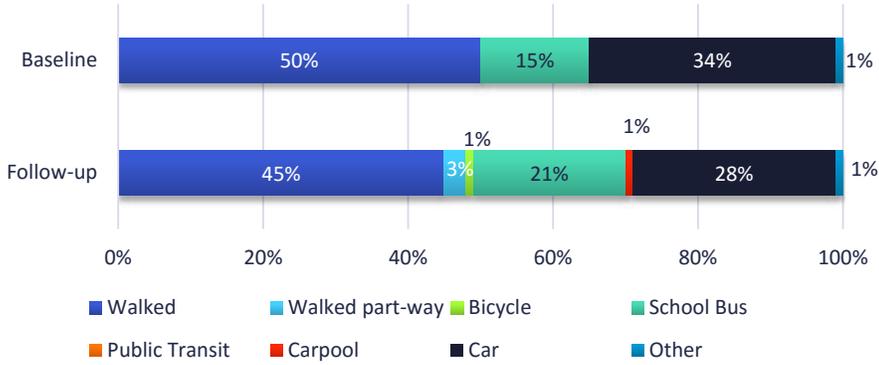
STP actions planned for 2016 include:

- New signage to improve traffic flow through site
- Education campaign to promote traffic safety for students and parents
- Produce a 'Routes to School' map
- Promote 'Walk-a-block-or-two' parking locations in nearby streets
- Improve the footpaths leading into the site to make them useable year-round
- Complete the follow-up travel survey

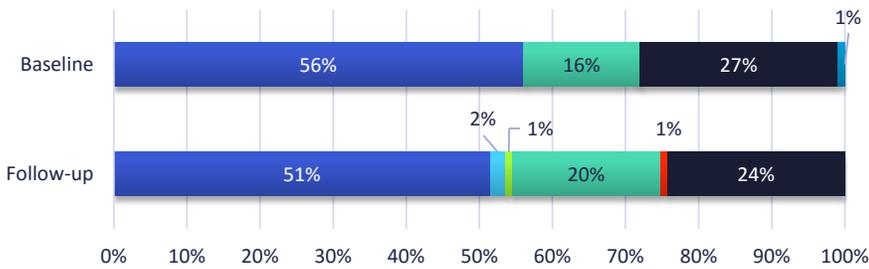


Travel Mode Survey Results

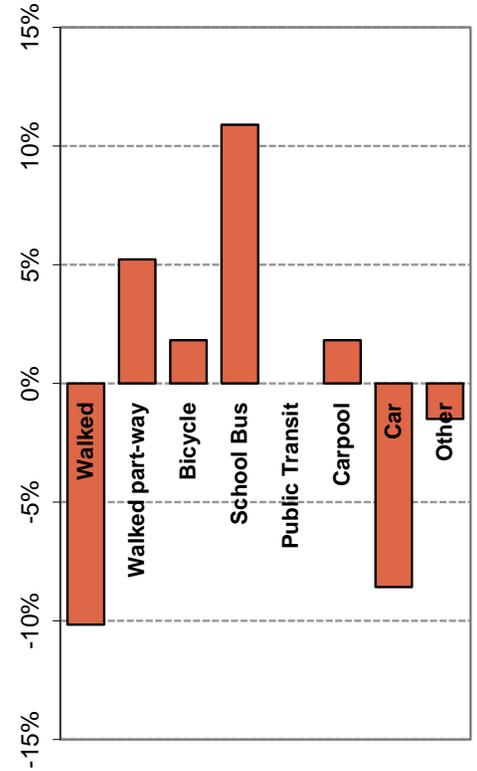
JD Hogarth Travel Mode Share TO School



JD Hogarth Total Travel Mode Share FROM School



Change (followup - baseline)



		Weather				
Period	Survey Date	Monday	Tuesday	Thursday	Friday	
Baseline	12-Dec-14	F		O	S	
Follow-up	4-Nov-15			Sunny cold	Rain cold	

J.D. Hogarth Public School Benefit-Cost Ratio



Minto-Clifford Central Public School

Minto-Clifford PS is a well-established school in Harriston in the Town of Minto in the northwest region of the County of Wellington. As a rural school, the school bus is the dominant mode of transport for Minto-Clifford, with almost half of the students using it regularly.



Year 1 of STP

The Healthy Schools Committee at Minto-Clifford School has been working on initiatives to communicate information about physical activity and promote active school journeys to the students and parents. They have established a Healthy Schools Bulletin Board and the Principal includes messages in every newsletter to parents.

Travel Mode Surveys

The bus transportation service was expanded for Minto-Clifford in September 2015, which is reflected in the travel survey results, with school bus journeys increasing from 37% to 49% for the journey home. The survey results also show that this increase in bus journeys generated a modal shift away from car journeys, with walking rates similar to the previous year.

The family survey in 2014 found that more parents would allow their children to walk to school if they were not alone, which suggested that a walking buddy scheme might encourage more students to walk to school more often. This was investigated further with an extra question into the classroom travel surveys in 2015, to find out whether students who already walk to school do so alone or with friends. The results showed that only 25% of walking students walk on their own, with the majority walking with friends and or family. These findings indicate a good community of walkers; therefore, the school can focus on encouraging more children to join their walking friends.

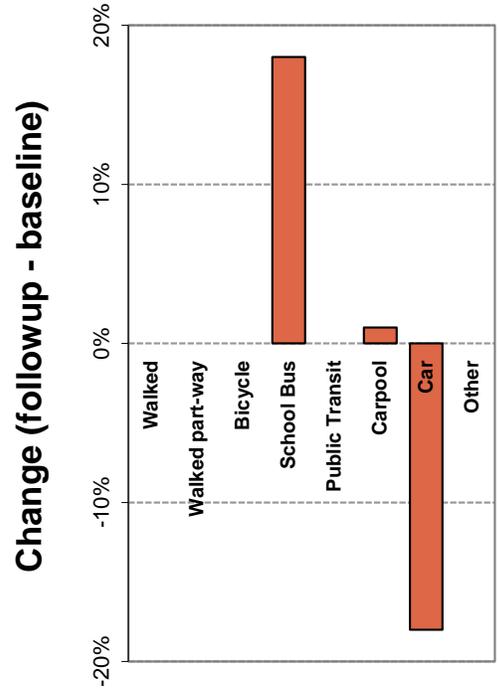
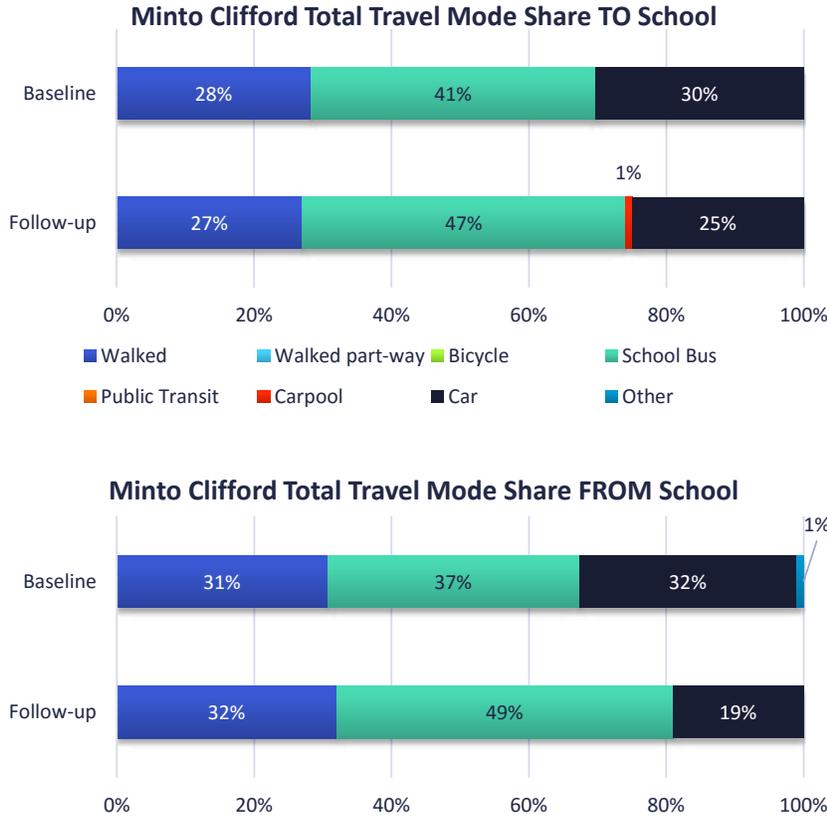


Next Steps

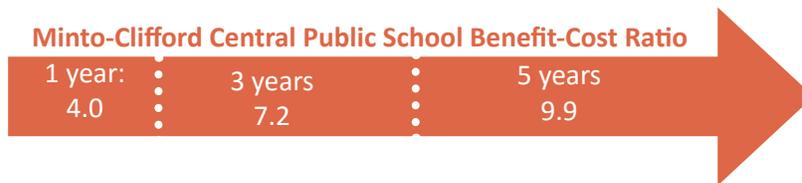
STP actions planned for 2016 include:

- Populate the Healthy Schools Bulletin Board with lots of information on walking to school
- Organize a walking club with regular break-time events, including a walking challenge
- Promote a Buddy Scheme for walking to school
- Produce a 'Routes to School' map
- Run the 'Greening Tree' activity in Spring to encourage walking
- Improve the quality of sidewalks, footpaths and crossings in the neighbourhood
- Complete the follow-up travel survey

Travel Mode Survey Results



		Weather				
Period	Survey Date	Monday	Tuesday	Thursday	Friday	
Baseline	17-Nov-14	Snow		Snow		
Follow-up	23-Nov-15	Overcast cold 0	Overcast cold 0	Sunny 5	Overcast 8	



Montgomery Village Public School

Montgomery Village PS is located in a suburban residential area on the southern edge of Orangeville in the County of Dufferin. Whilst only 6% of students are registered for bus service, the school site is an interchange for school buses in the county region. Travelling to school by scooter is currently very popular at this school compared to average rates across the region.



Year 1 of STP

Physical activity and health was already well-promoted at this school due to its participation in the Healthy Schools and ECO-Schools programs. Vehicle traffic flow and pedestrian safety around the school site have been improved by re-painting crosswalks, traffic lanes and parking lots in summer 2015.

Travel Mode Surveys

The bus transportation service was expanded for Montgomery Village in September 2015, which is reflected in the travel survey results, with school bus journeys increasing from 0% to 3%. The survey results also show that this increase in bus journeys generated a modal shift away from 'Other' journeys, such as taxis. Walking rates dropped by around 5% overall, with more students walking part-way or cycling compared to the previous year. Typically 5% of students travelled to school by scooter, making it the third most popular form of transport at this school.

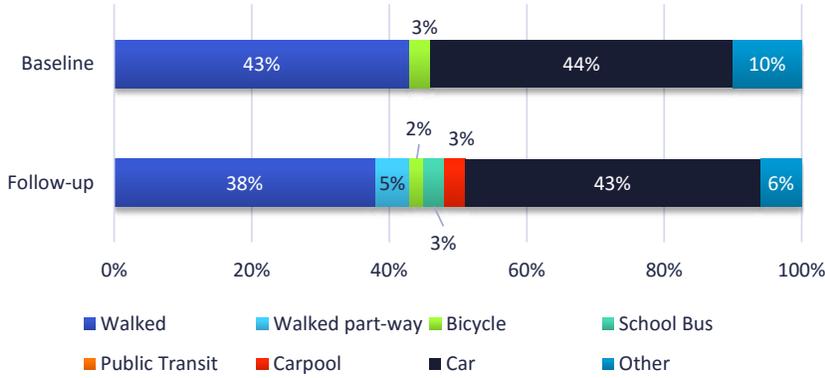
Next Steps

STP actions planned for 2016 include:

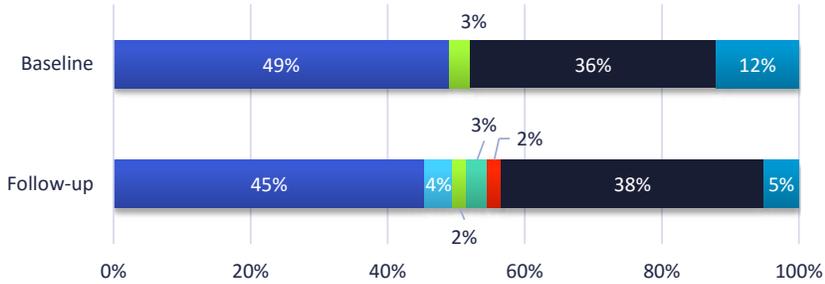
- New signage and paint markings to improve traffic flow through parking lots
- Produce a 'Routes to School' map
- Investigate options for establishing a formal kiss'n'ride area on the adjacent street
- Organize walking encouragement events in Spring
- Education campaign to promote active travel for students and parents

Travel Mode Survey Results

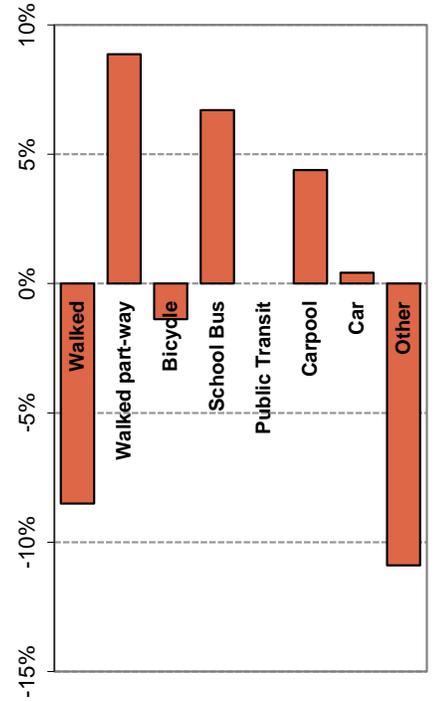
Montgomery Village Total Travel Mode Share TO School



Montgomery Village Total Travel Mode Share FROM School



Change (followup - baseline)



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	3-Nov-14	Sunny (15°C)	Overcast (14°C)		Rain/	
Follow-up	10-Nov-15	Sunny Cold	Cloudy cold			Rainy cold

Montgomery Village Public School Benefit-Cost Ratio



Rickson Ridge Public School



Rickson Ridge PS is located in a suburban residential area on the southern edge of the City of Guelph. The main travel modes of students at the school are evenly divided between walking, taking the school bus and private car journeys.

Year 1 of STP

It has been very useful and productive to have the City of Guelph's Transportation Department fully engaged in the STP process. Their staff members participated in the site walkover and traffic observation surveys. The school has seen an overall improvement in vehicle traffic congestion and pedestrian safety on site as the use of the kiss-n-ride zone on the street beside the school has become established over the course of the year. This demonstrates how travel and traffic behavior change is not instantaneous, taking time to occur and become 'normal'.

Travel Mode Surveys

There were more students travelling actively for school journeys (up from 28% to 37% for the journey home) which is due in part to the slightly warmer weather conditions at the time of the follow-up survey. There was a notable drop in school bus journeys whilst car travel rate remained the same at around 30%.

Next Steps

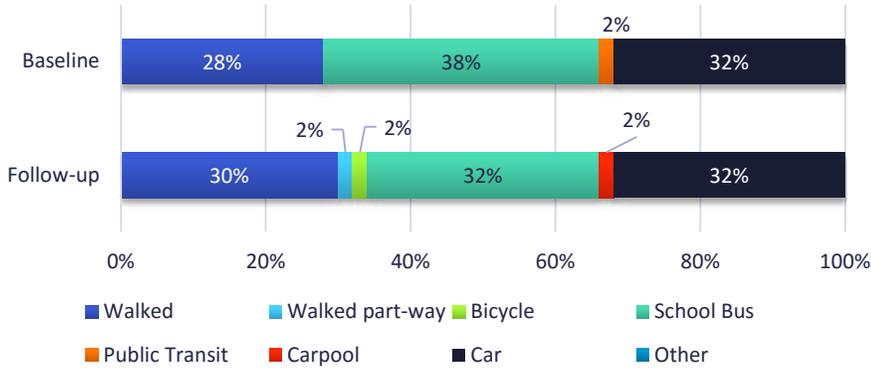
The school is keen to encourage walking and STP actions planned for 2016 include:

- New paint markings to highlight pedestrian crossings and traffic flow through parking lots
- Work with City of Guelph to improve visibility at the school crossing on Rickson Avenue
- Improve bicycle storage facilities for staff and students
- Produce a 'Routes to School' map
- Promote 'walk-a-block-or-two'
- Organize 'Walking Wednesdays' and other encouragement events in Spring
- Education campaign to promote active travel for students and parents

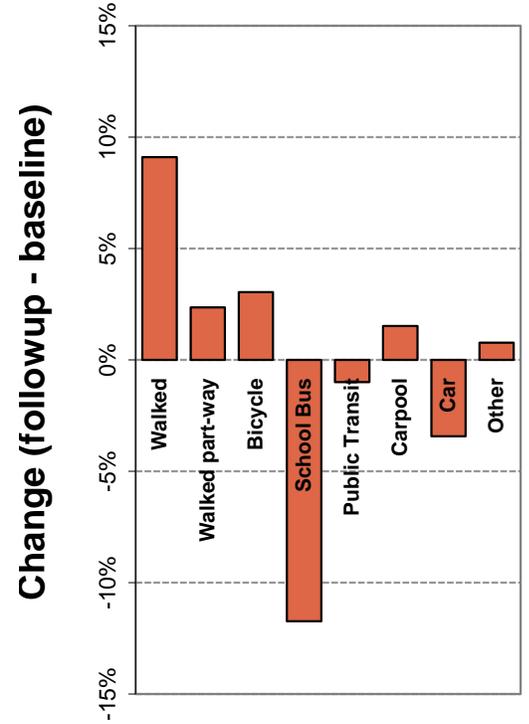
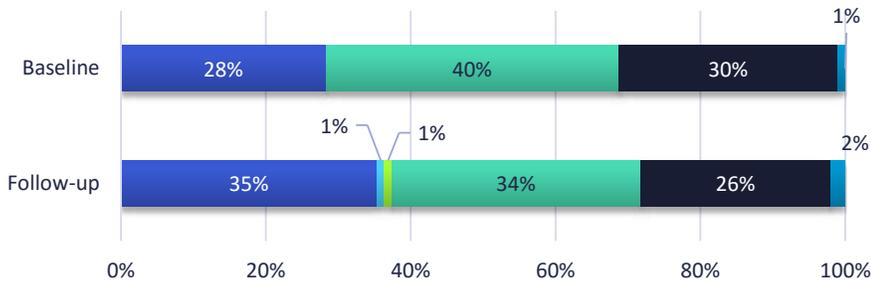


Travel Mode Survey Results

Rickson Ridge Total Travel Mode Share TO School



Rickson Ridge Total Travel Mode Share FROM School



		Weather				
Period	Survey Date	Monday	Tuesday	Thursday	Friday	
Baseline	19-Jan-15	Sun&cloud -6°C	Sun&cloud -11°C	Sun&cloud -12°C	Sun&cloud -6°C	
Follow-up	26-Oct-14	Sunny 5°C	Sun & Cloud 8°C	Heavy Rain 10°C		



Rolph Road Public School Results



Despite successfully achieving a high percentage of students walking to school from their IWALK Wednesdays program and golden shoe award, Rolph Road still experienced heavy traffic in front of the school from 8:15-8:45. Rolph Road PS's IWALK committee, run by volunteer parents who often collaborate with the Eco-Club, rewarded those families who walk by welcoming the Mums and Dads with coffee on a chilly spring morning. IWALK celebrations throughout the year include the awarding of incentives and prestigious Gold and Silver Shoe trophies. IWALK has helped the school achieve Eco-Schools Platinum Certification. A stop sign has been installed at a busy intersection close to the school - an Action Plan success.

After nearly one year after STP, students are on a roll as more of them are getting to/from school by bicycle or scooter. In the follow-up data collection period, the percentage of students walking to school decreased because it was redistributed to cycling and other forms of wheeling. Scootering is a popular mode of transportation that is more frequently used in the spring and fall months. Fewer students are getting to school by vehicle while more students are walking at least part-way to/from school.

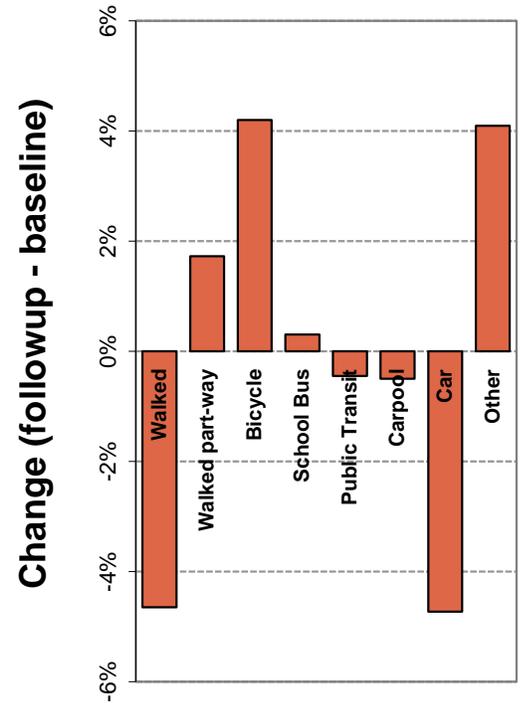
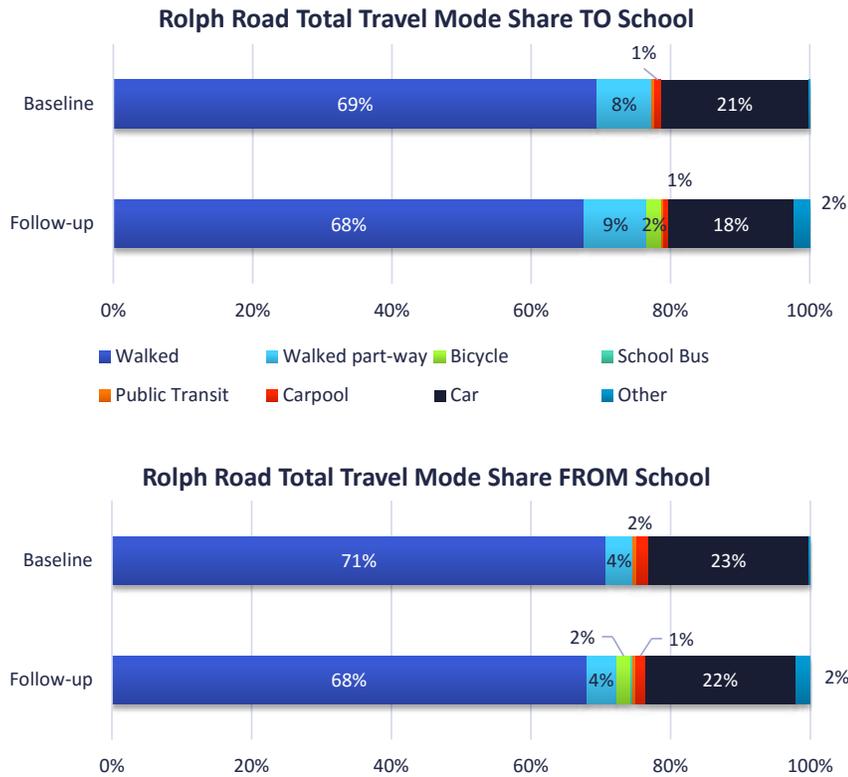
Next Steps

The IWALK Committee and the Eco-Club will continue organizing parent appreciation socials, walk/wheel events with police enforcement, and seeking options for minimizing vehicle traffic and speeds on Rolph Road. STP actions planned for 2016 include:

- Organize a Winter Walk Day Hot Chocolate Social
- Host more parent appreciation events with mapping activities to recruit walking school bus volunteers
- Explore options for decreasing speeds on Rolph Road
- Host the 2016 Golden and Silver Shoe Awards in the Spring
- Produce a map with alternative drop-off/parking locations
- Conducting a traffic observation survey



Travel Mode Survey Results



		Weather				
Period	Survey Date	Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	January 26-30, 2015	Partly Cloudy, -13.5°C (-23°C with windchill)	Partly Cloudy, -6°C	Sunny, -12.5°C (-18°C with windchill)	Cloudy, -8°C (-18°C with windchill)	Drifting snow, -9.1°C (-23°C with winchill)
Follow-up	November 16-20, 2015	12°, no precipitation	9°, no precipitation	15°C, no precipitation	15°C, rainy	Sunny, 3°C, low of -4°C



Northlea Public School Results

Northlea PS already had quite a high percentage of students walking to school despite their close proximity to Eglinton Avenue and the LRT Crosstown construction. To reduce conflicts between pedestrians and drivers at the north entrance of Northlea PS, the school and the in-house daycare decided to close the parking area at the front of the school during peak traffic hours. This year, Northlea brought back IWALK where more parents parked further away from the school and walked their children to the school.

After almost one year, the percentage of students cycling to school jumped from 0% to 3% while those cycling from school increased from 0% to 4%. This increase was made possible thanks to the Youth Cycling Development Program, along with a TDSB indoor cycling demo (which took place before STP).

Despite the storm on the Wednesday of the follow-up period, over 200 students walked to/from school and more students are walking at least part-way. The walkabout and IWALK event revealed areas located a block away from the school where parents would drop their children or park and walk them. Rain, snow or shine, a high number of Northlea students continue to walk to school.

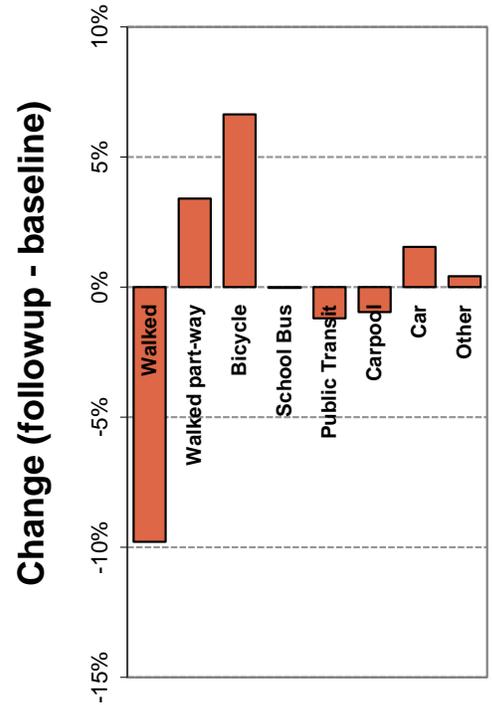
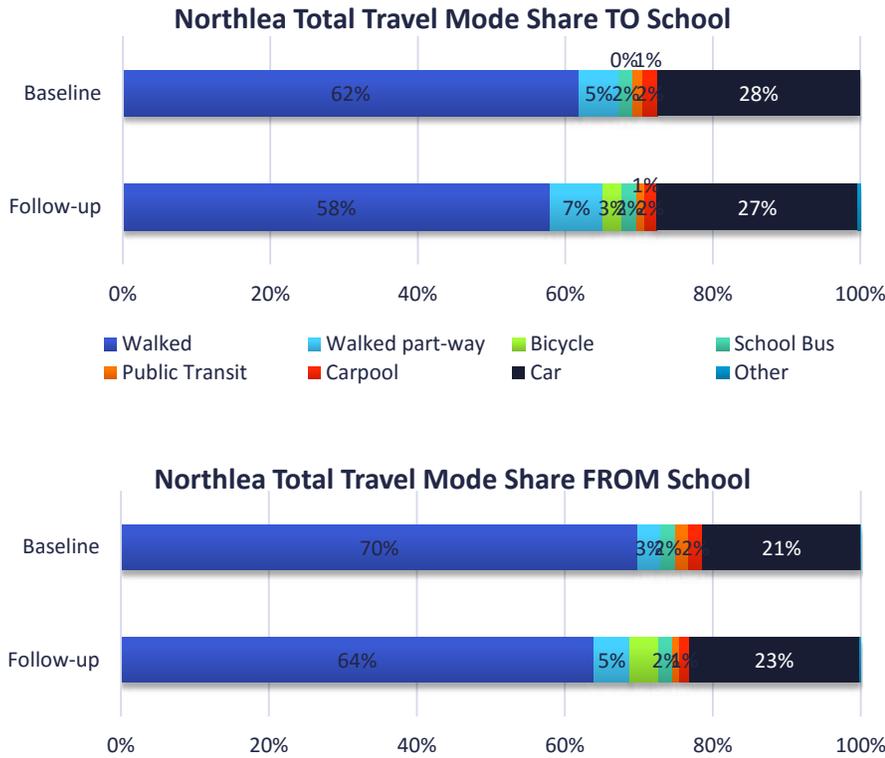
Next Steps

The Home and School Association and School Council will continue towards improving the environment for active school travel by engaging with Toronto Police Services and parents. STP actions planned for 2016 include:

- Liaise with other Leaside schools to organize a meeting with the police to bring up key traffic issues
- Produce a map with alternative drop-off/parking locations
- Create Walking Groups
- Organize additional walk/wheel days with police enforcement



Travel Mode Survey Results



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	February 2-6, 2015	12.8cm snow, TDSB buses not running, school open, TTC delays	Morning -12°C scattered clouds, isoflakes, windy; afternoon -6°C more snowfall	Morning -4°C light snow, humidity 93%, later -6°C, low of -8°C	sunny, Morning -13°C (-18°C with windchill) partly cloudy, humidity 62%, Afternoon -10°C	Morning -10°C sunny, partly cloudy, light snow; afternoon -5°C
Follow-up	October 26-30, 2015	4°C, no precipitation	6°C, no precipitation	10°C, severe rain storm	10°C, no precipitation	6°C, no precipitation



Annunciation Catholic School Results



Annunciation CS initiated a student club, Walking with Friends, made up of several keen grade 6 and 7 students under the supervision of a teacher. This group plans and executes student ideas that support more walking and wheeling!

We have seen a 2% increase in cycling and a 1% increase in TTC. Walking appears to have decreased, and driving appears to have increased, but the week of the follow up surveys included the severe storm that hit Toronto at the tail end of Hurricane Patricia – few students walked that day, almost everyone drove, skewing the averages. We will revisit the classroom survey again in the spring of 2016.

Next Steps

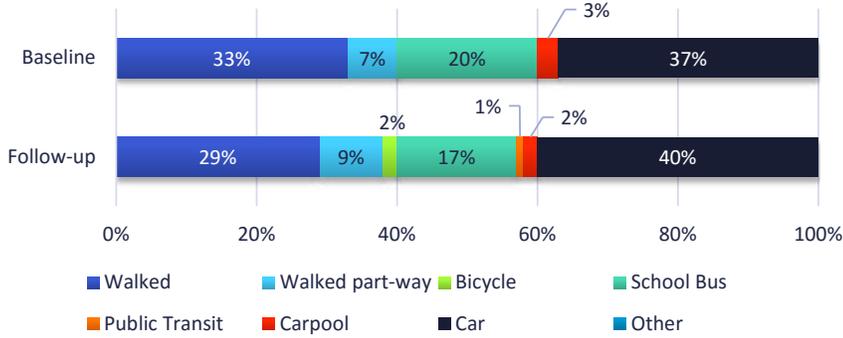
The student involvement at Annunciation Catholic School led to a number of successful activities in 2015, and ideas for many more in the coming year. Situated in a neighbourhood that is quite conducive to walking, the focus of Annunciation’s STP work is more on education and encouragement.

STP actions planned for 2016 include:

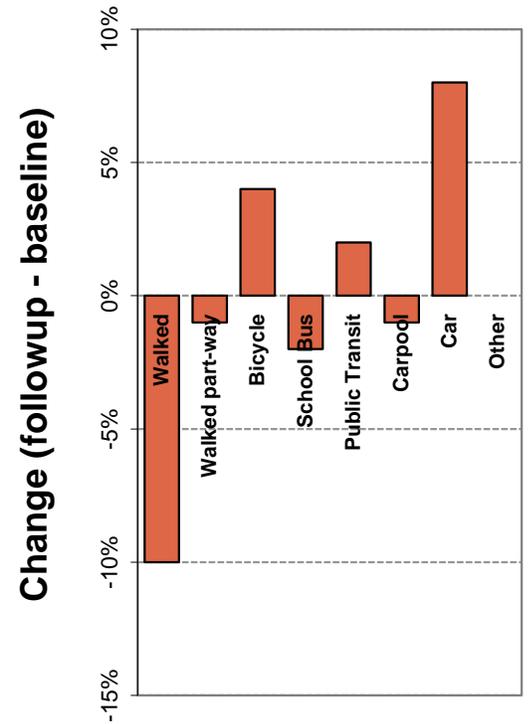
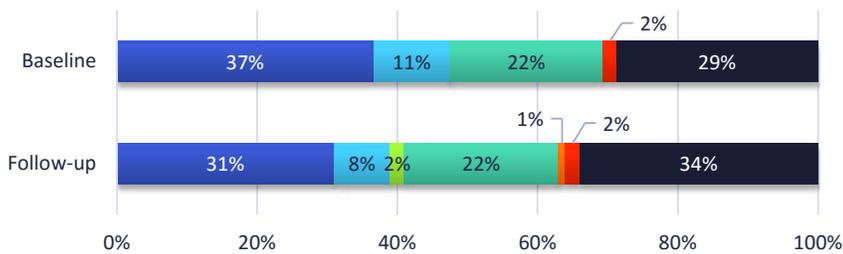
- Complete and distribute “Popular Routes & Walk a Block” Map
- Celebrate Winter Walk Day
- Continue Walking with Friends student club
- Follow up with City of Toronto staff re: transportation study of intersection at Welsford Gardens and Cassandra Blvd
- Public health cycling presentation (early spring)
- Spring bike rodeo
- Celebrate Bike to School Week

Travel Mode Survey Results

Annunciation Total Travel Mode Share TO School



Annunciation Total Travel Mode Share FROM School



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	November 17th – 23rd 2014)	0°C, light snow	-5°C no precipitation	-5°C snow	-3°C no precipitation	-2°C no precipitation
Follow-up	October 26th – 30rd 2015	4°C, no precipitation	6°C, no precipitation	10°C, severe rain storm	10°C, no precipitation	6°C, no precipitation



Cassandra Public School Results



Cassandra PS held a series of Walking Wednesdays in the Spring, beginning with Walk and Roll to School Day and culminating with Bike to School Week in May.

We have seen a substantial increase in cycling (some of which may be attributed to warmer weather, but also the school's bike rodeo and cycling promotion), a slight increase in walking, and a notable decrease in driving to school. Due to data collection constraints during the teacher's work to rule, only the TO school mode share was collected at follow up. We will revisit the classroom survey again in the spring of 2016.

Next Steps

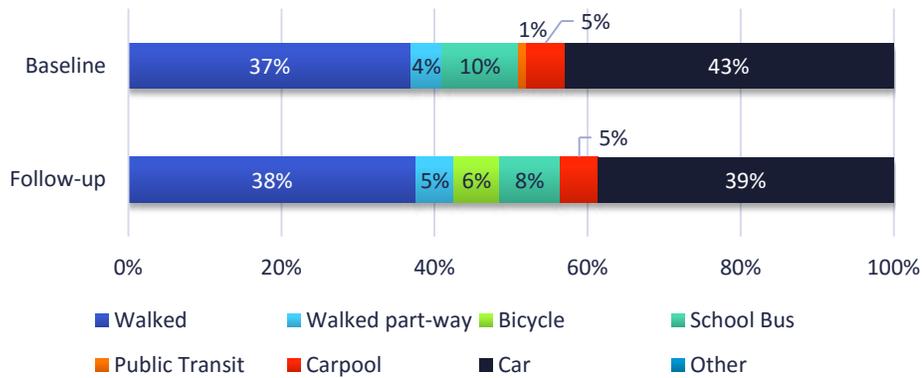
Cassandra Public School has had an active Eco Club for many years and experience in organizing walking and cycling events. They have grown their active transportation-related activities through the STP project, and are looking forward to expanding their range of initiatives moving forward. STP actions planned for 2016 include:

- Host Fundamental Movement Skills workshop
- Celebrate Winter Walk Day
- Spring Walking Wednesdays
- Follow up with City of Toronto staff re: Underhill Drive bike lane or edge lines
- Celebrate Bike to School Week
- Continue Eco Club activities

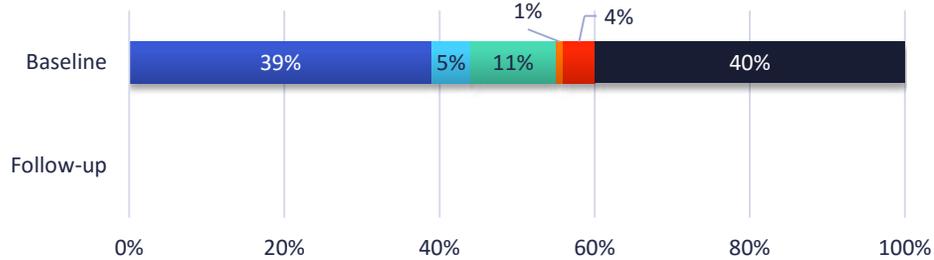


Travel Mode Survey Results

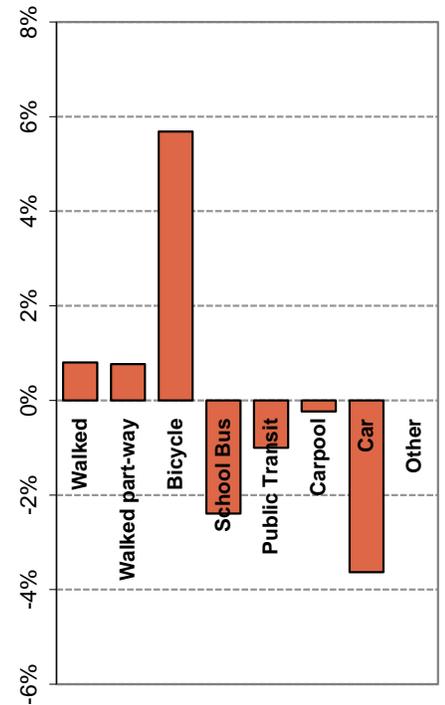
Cassandra Total Travel Mode Share TO School



Cassandra Total Travel Mode Share FROM School



Change (followup - baseline)



		Weather				
Period	Survey Date	Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	February 2nd – 6th 2015	-16°C snow	-13°C no precipitation	-12°C snow	-14°C no precipitation	-10°C no precipitation
Follow-up	October 5th – 9th 2015	13°C, no precipitation	14°C, no precipitation	15°C, no precipitation	12°C, rain	12°C, rain



Pierre Laporte Middle School Results



Pierre Laporte PS participated in Bike to School Week with welcome treats and balloons each morning, including one day where Toronto Police provided support and a mapping activity was undertaken.

Pierre Laporte has seen a slight increase in cycling, a significant increase in public transit, and a significant decrease in driving. Free public transit for children 12 years of age and under has greatly influenced travel mode. The numbers show a decrease in walking, but similar to Annunciation CS, their data was collected the week of a major storm.

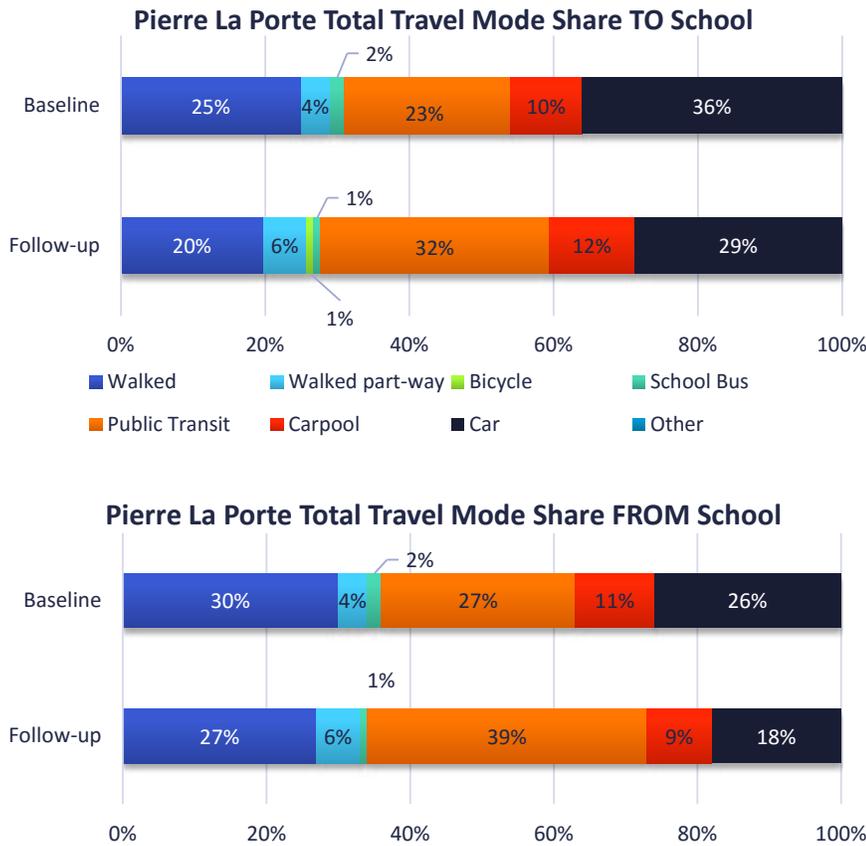
Next Steps

At Pierre Laporte Middle School, the Eco Club students are expected to plan and implement the initiatives of their choosing. Staff members support them, but leave much of the decision-making to the youth. Last semester was a busy time for the school, but at the next meeting, students will likely be ready to take on a new term's worth of active transportation activities.

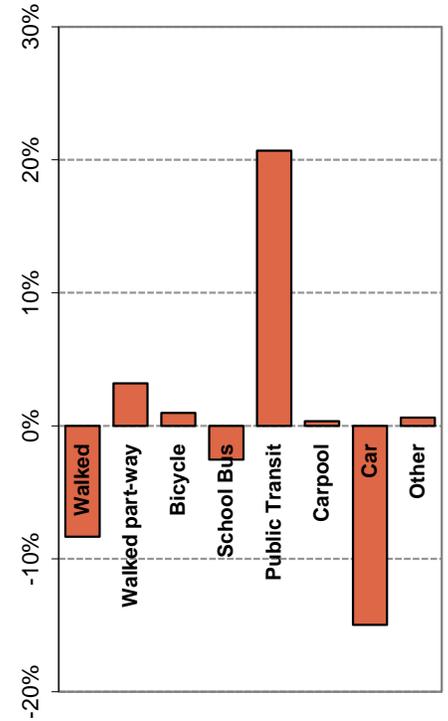
STP actions planned for 2016 include:

- Public health cycling presentation
- Work with Board and Trustee on safer pedestrian routes through parking lot
- Bring an active transportation-related guest speaker to school assembly
- Celebrate Bike to School Week

Travel Mode Survey Results



Change (followup - baseline)



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	January 12th – 16th 2014	-6°C snow	-21°C no precipitation	-12°C no precipitation	-12°C no precipitation	-5°C no precipitation
Follow-up	October 26th – 30rd 2015	4°C, no precipitation	6°C, no precipitation	10°C, severe rain storm	10°C, no precipitation	6°C, no precipitation



St. Raphael Catholic School Results

St. Raphael CS held a successful first Winter Walk Day in February 2015, as well as IWalk in October 2015, and the City has responded to requests for pedestrian markings on roadways around the school.

The very similar weather from baseline to follow up allows us to more confidently attribute the positive changes to the school travel planning process St. Raphael has been actively participating in. The walking mode share has risen by several percentages while single family driving has decreased. These changes are significant for such a short time period of school travel planning.

Next Steps

At St. Raphael Catholic School, much of the STP focus has been on safety. The neighbourhood has experienced a few incidences of real ‘stranger danger’, thus parents’ fears have been at the forefront of our work. The school has been making great progress in areas of promotion and education, and demonstrating the value of active transportation as a way to bring the community together and have more eyes on the streets.

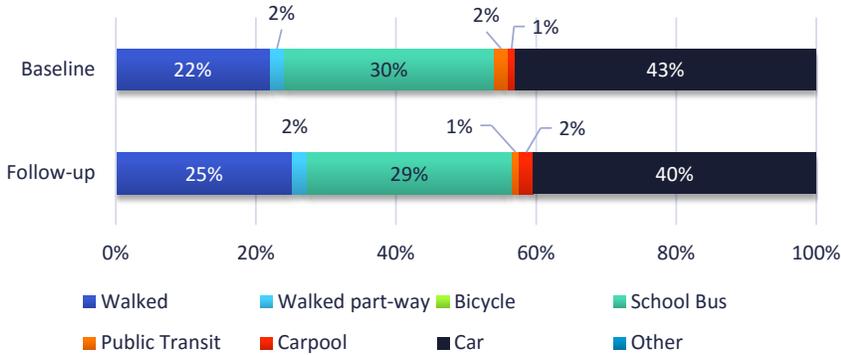
STP actions planned for 2016 include:

- Use iSchool Travel Calculator
- Finalize and distribute “Popular Routes & Walk a Block” Map
- Celebrate Winter Walk Day
- Design active transportation-related banner or mural
- Organize a Spring walking school bus (to Roding Community Centre)
- Use the Cross Canada Map (potentially with class competition)
- Host a Spring bike rodeo
- Celebrate Bike to School Week
- Request crossing guard at Roding and Nash

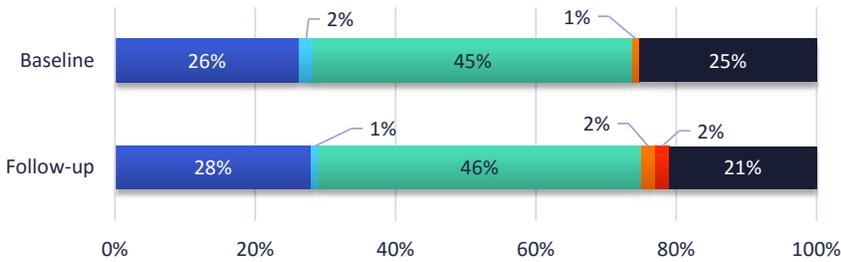


Travel Mode Survey Results

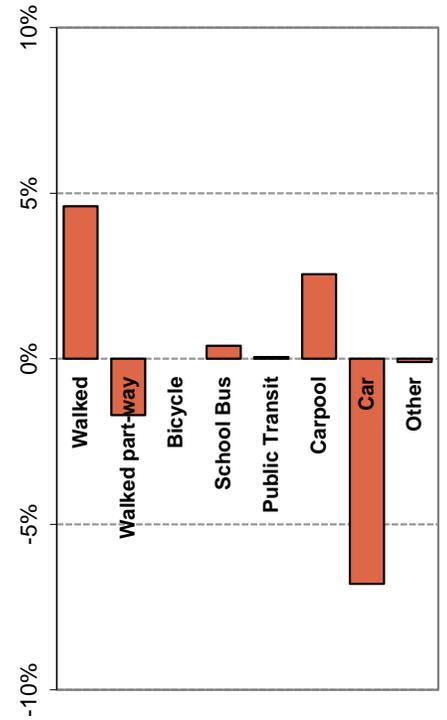
St. Raphael Total Travel Mode Share TO School



St. Raphael Total Travel Mode Share FROM School



Change (followup - baseline)



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	November 3rd – 7th 2014	12°C, no precipitation	10°C light rain	10°C no precipitation	10°C no precipitation	3°C no precipitation
Follow-up	October 19th – 23rd 2015	5°C, no precipitation	10°C, no precipitation	12°C, no precipitation	9°C, no precipitation	5°C, no precipitation



Gateway Public School Results



The dedicated work of Gateway PS's school travel planning committee has led to an adult Crossing Guard at Don Mills Road/Overlea Blvd, which is shared by walking and wheeling students from Valley Park PS. As well, terrific parent enthusiasm and support for the May bike rodeo resulted in 100 students bringing bikes that day to participate!

Walking has slightly increased, and car trips have substantially decreased! It appears the free TTC for students has helped alleviate a notable percentage of students arriving by car, and more are walking or cycling.

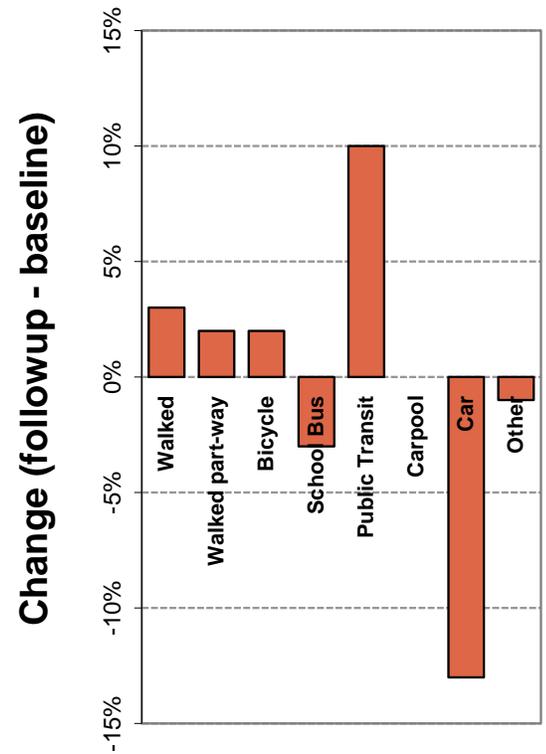
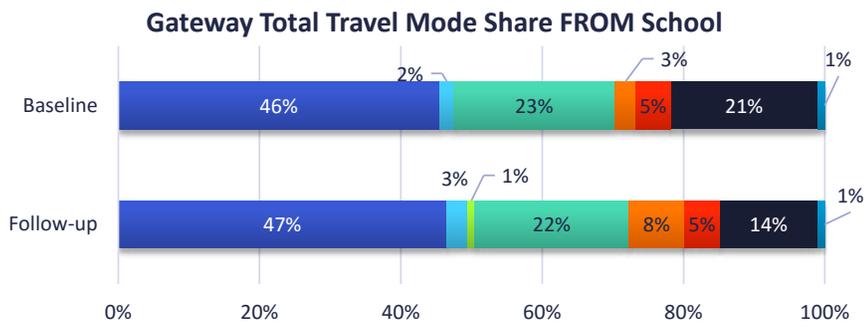
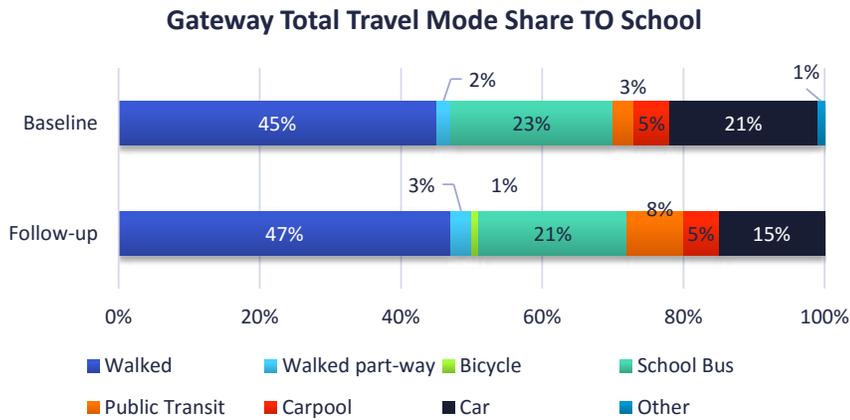
Next Steps

The administration at Gateway Public school has been enthusiastically involved in the STP project and building on past experience in related initiatives. The school council is very active and has played a large role in the planning and implementation of STP work. Their activities have balanced safety concerns with health and environmental promotion.

STP actions planned for 2016 include:

- Pilot the "Guide to Safer Streets near Schools" , with focus on lowering the speed limit on Gateway Blvd
- Celebrate Winter Walk Day
- Paint bike racks (art club)
- Organize a Spring walking school bus (led by teachers)
- Host a Spring bike rodeo
- Celebrate Bike to School Week
- Coordinate a faux ticket day (with police)
- Organize a fun family safety day (on a weekend), in collaboration with Valley Park MS

Travel Mode Survey Results



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	February 2nd – 6th 2014	-13°C, snow	-5°C no precipitation	-1°C flurries	-13°C no precipitation	-10°C no precipitation
Follow-up	October 5th – 9th 2015	13°C, no precipitation	14°C, no precipitation	15°C, no precipitation	12°C, rain	12°C, rain



Valley Park Middle School Results



Valley Park PS held their first ever bike rodeo in May. Students really enjoyed the chance to try out their cycling skills and actively learn about rules of the road.

At Valley Park, we have seen an average 3 to 4% decrease in single family driving to and from school. Walking part-way has increased an average 5 to 7% to and from school, while walking the whole way has decreased. Some walkers and drivers have switched to transit, where we see a significant increase in mode share, largely due to the new TTC policy of youth 12 and under riding for free.

Next Steps

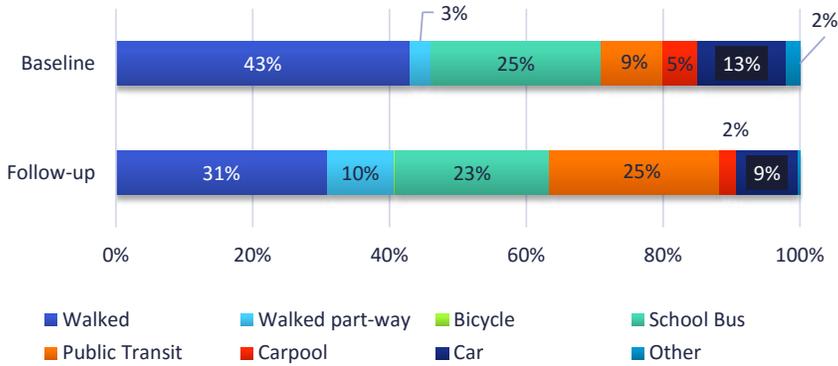
Valley Park Middle School participated in several educational and promotional activities in 2015, but the primary focus of the administration for this coming year is safety. A very high percentage of students are taking transit and walking, despite a very unfriendly environment for pedestrians and cyclists. The school wants to improve road safety.

STP actions planned for 2016 include:

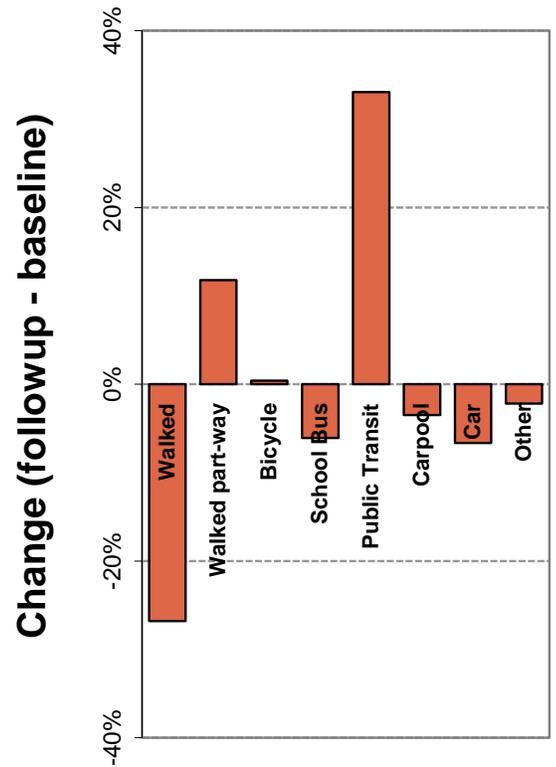
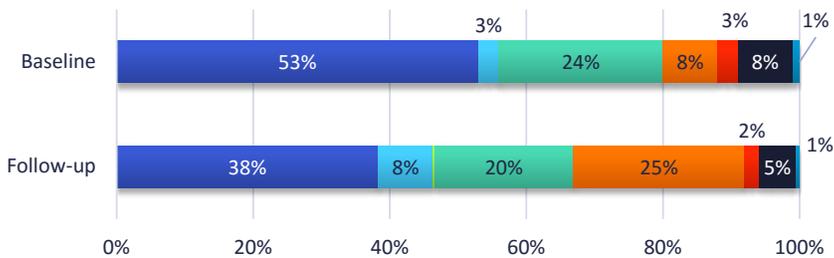
- Follow up with City staff regarding:
 - ◇ Jaywalking barriers at Don Mills and Overlea
 - ◇ Bigger, better signage alerting drivers to school zone, encouraging (or, if possible, requiring) lower speeds
 - ◇ Second crossing guard at Don Mills & Overlea
 - ◇ Safe access to the Don Valley trail (can we formalize the informal, unsafe passage right beside the school, and/or the dirt path behind the cricket field)
 - ◇ No right turn on red during school travel times (at least a Transportation Services' study to determine if feasible and helpful) – specifically at Don Mills & Overlea
- Host a Spring bike rodeo
- Organize a fun family safety day (on a weekend)

Travel Mode Survey Results

Valley Park Total Travel Mode Share TO School



Valley Park Total Travel Mode Share FROM School



Period	Survey Date	Weather				
		Monday	Tuesday	Wednesday	Thursday	Friday
Baseline	February 2nd – 6th 2014	-13°C, snow	-5°C no precipitation	-1°C flurries	-13°C no precipitation	-10°C no precipitation
Follow-up	November 16th – 20th 2015	12°, no precipitation	9°, no precipitation	15C, no precipitation	15°C, rainy	Sunny, 3°C, low of -4°C



Appendix 2: Sample Classroom Survey



School Travel Planning Classroom Survey - TO School

Please complete this survey, with students standing up or raising hands, for the week of: _____ to _____

Grade: _____ Room/Class #: _____ # Students: _____

Teacher: _____ Dates: Mon. _____ to Fri. _____

Ask students: "How did you travel TO school this morning? Did you..." ask each column separately.

	Weather ¹ Example: No Precip / 6C	Walked	Walked part-way ²	Bicycle	School Bus	Public Transit	Carpool (2 or more families)	Car (just my family)	Other ³ ?	Total
Mon										
Tues										
Wed										
Thurs										
Fri										
Total										
Daily Avg=Total/5										

Note: ¹Weather indicates precipitation and temperature (degrees C).

²Walked at least one entire block.

³Can include skateboard, rollerblade, scooter

Instructions:

- Please ensure the weather is captured. Mark down 'Precipitation' or 'no precipitation' and record the temperature.
- Please ensure the number of hands raised equals the number of students present on that specific day.
- After asking students 'how did you travel TO school this morning,' please ask 'how will you travel FROM school today' and record the number of 'hands-up' on the following table





School Travel Planning Classroom Survey - FROM school

Please complete this survey, with students standing up or raising hands, for the week of: _____ to _____

Grade: _____ Room/Class #: _____ # Students: _____

Teacher: _____ Dates: Mon. _____ to Fri. _____

Ask students: "How will you travel **FROM** school today? Did you..." ask each column separately.

	Weather ¹ Example: No Precip./ 6C	Walked	Walked part-way ²	Bicycle	School Bus	Public Transit	Carpool (2 or more families)	Car (just my family)	Other ^{3?}	Total
Mon										
Tues										
Wed										
Thurs										
Fri										
	Total									
	Daily Avg=Total/5									

Note: ¹Weather indicates precipitation and temperature (degrees C).

²Walked at least one entire block.

³Can include skateboard, rollerblade, scooter.

Instructions:

- Please ensure the weather is captured. Mark down 'Precipitation' or 'no precipitation' and record the temperature
- Please ensure the number of hands raised equals the number of students present on that specific day

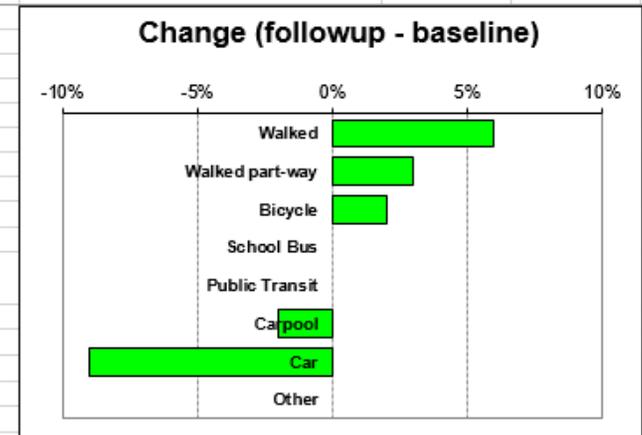


Appendix 3: Benefit-Cost Analysis – Full Report

The full report detailing the Benefit-Cost Analysis conducted for this feasibility study will be available soon.

Appendix 3a: Benefit-Cost Excel Spreadsheet Template

Cost-benefit analysis for		ABC Elementary school								One year	11 Years	
School size (number of students)		200								Benefits from increased walking	\$1,454	\$13,449
		Walked	Walked part-way	Bicycle	School Bus	Public Transit	Carpool	Car	Other	Benefits from increased cycling	\$438	\$4,050
Baseline - TO school		15%	10%	10%	20%	10%	5%	25%	5%	Benefits from less driving	\$5,404	\$49,997
Baseline - FROM school		12%	9%	10%	20%	12%	6%	26%	5%	Total Benefits	\$7,295	\$67,497
Followup - TO school		18%	12%	11%	20%	10%	4%	20%	5%	Cost of people	\$196	\$190
Followup - FROM school		15%	10%	11%	20%	12%	5%	22%	5%	Cost of materials	\$100	\$0
Change (followup - baseline)		6%	3%	2%	0%	0%	-2%	-9%	0%	Total Costs	\$296	\$190
										Benefit-Cost Ratio		354.70
TOTAL TIME, hours		Planning	Implementation	Monitoring (overall)								
Facilitator		0	0	0								
Police Official		0	0	0								
School Staff Representative	Principal	3	1	0								
	Vice Principal	0	0	0								
	Teacher	0	0	0								
	Office staff	0	0	0								
	Custodial staff	0	0	0								
School District/Board Representative	School board trustee	0	0	0								
	Facilities, Curriculum, Environment, etc.	0	0	0								
Public Health Officials	Public Health Nurse	0	0	0								
	Other Public Health officials (other staff that are not nurses, e.g., project managers)	0	0	0								
Other municipal	Parks & Recreation	0	0	0								
City/Town Representatives	Councillor	0	0	0								
	Other	0	0	0								
Non Government Organization	Environmental groups	0	0	0								
	Transportation groups	0	0	0								
Municipal Transportation	Transportation Engineer	0	0	0								
	Municipal planner	0	0	0								
By-law officer	Those enforce 'stationary' violation (i.e., parking and stopping issues)	0	0	0								
Volunteers	Parents association	0	0	0								
	Other	0	0	0								
	(specific professional title)	0	0	0								
Other	(specific professional title)	0	0	0								
		0	0	0								
Total monetary value		\$147.00	\$49.00	\$0.00								



TOTAL TIME, hours	Details	Details																			
		Planning (add or delete columns if necessary)			Implementation 1st year (add or delete columns if necessary)					Monitoring Year 1		Implementation 2nd year (add or delete columns if necessary)					Monitoring Year 2		Implementation 3rd year (add or delete columns if necessary)		
	Date-->	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy	dd-month-yy		
	Purpose (Can edit)-->	1st meeting with school	Walkabout	Action Plan	Winter Walk Day 2014	Meeting	Meeting	Bike Rodeo	STP Wrap-up meeting	Follow-up Surveys-Data collection	Follow-up Surveys-Data analysis and representation	Follow-up meeting	Action Plan Item	Action Plan Item	Action Plan Item	Meeting	Follow-up Surveys-Data collection	Follow-up Surveys-Data analysis and representation	Follow-up meeting	Action Plan Item	
Facilitator																					
Police Official																					
	Principal	1	1	1	1																
	Vice Principal																				
	Teacher																				
	Office staff																				
School Staff Representative	Custodial staff																				
School District/Board Representative	School board trustee																				
	Facilities, Curriculum, Environment, etc.																				
	Public Health Nurse																				
Public Health Officials	Other Public Health officials (other staff that are not nurses, e.g., project managers)																				
Other municipal departments	Parks & Recreation																				
	Councillor																				
City/Town Representatives	Other																				
Non Government Organization Representatives	Environmental groups																				
	Transportation groups																				
Municipal Transportation Planning Department	Transportation Engineer																				
	Municipal planner																				
By-law officer	Those enforce 'stationary' violation (i.e., parking and stopping issues)																				
	Parents																				
	Local resident groups, community association																				
Volunteers	Other																				
	(specific professional title)																				
	(specific professional title)																				
Other																					



Appendix 4: Stakeholder Questionnaire and Summary Responses



School Travel Planning: Transportation Consortia Roll-Out
A Feasibility Study to Assess, Measure and Document Experience
Two Communities: Wellington Dufferin Guelph and Toronto

Questions for Stakeholders

1. What are your overall impressions of the School Travel Planning (STP) process?
2. Has it increased your knowledge of active school travel and the complex nature of this work?
3. Approximately what percentage of your time has been spent on the STP project? Or how many hours per month would you estimate?
4. Overall, how would you rate the level of support provided by Green Communities Canada (GCC)?
5. How essential do you feel the STP Facilitator position is – on a scale of 1 to 10?
6. Do you feel that we have the right organizations and city departments represented on your STP stakeholder committee? Are there any other groups you'd like to see at the table?
7. Were the communications between stakeholders and GCC sufficient? What type of communications worked best? Were the communications too much or too little?
8. How would you describe your organization's role in the STP project?
9. Has your involvement increased your organization's understanding of their role in STP?
10. Has the STP project met your overall expectations?
11. How has your involvement in the STP project influenced your support for STP?
12. Do you feel that the STP project at the pilot schools is worth continuing for a second school year in order to better assess its impact?
13. How do you think STP should be supported in the longer-term?
14. Which stakeholder organization do you see as the most logical place to house STP?
15. Would you consider or recommend funding a STP Facilitator within your organization?
16. Would your organization consider financially supporting the STP project for a second school year?
17. Are there other comments you can share that would help us to improve the STP process and tools?

STP TO Stakeholder Interview Summary - Toronto

Stakeholders agree that the school boards should have ownership of school travel planning and that STP is worth continuing. They found that their involvement was useful and not too time consuming although the public health nurses spent the most amount of time on the project. Stakeholders highly ranked the role of the school travel planning facilitator and were satisfied with the amount of support from GCC and the types of communications used.



Funding

Some stakeholders said they would need to see the follow-up results before they could consider providing additional funding to continue the STP process. One of the school boards was willing to consider funding a less –intensive model where schools implement the school travel planning process independently with resource support available (from the board or from the STP facilitator?) while schools with difficult barriers are given as much attention from STP facilitators as the current model. Other stakeholders that should be involved

- Toronto Police
- CAA or CAA SCO safety patroller
- City of Toronto Public Realm
- City of Toronto Transportation Planning (instead of Special Projects)
- Suggestions for Improvement
- Traffic observation studies at all STP TO schools
- School Travel Planning Guide (a lighter version of the current STP Facilitator Guide) for schools or parents
- Video providing an overview of the STP process for schools
- Additional tools to help schools past their first year build momentum

WDG Summary of Interviews - Wellington-Dufferin Guelph

Context

- Part-time STP facilitator
- Health promoter represented WDG Public Health in the WDG Committee and acted as co-chair; however, the position changed part way through the project and was vacant for a few months.
- Rural schools (high use of school buses due to distances).
- PHNs very active in STP process; WDG Public Health may have fewer projects compared to Toronto?
- Difficult to get local stakeholders from the smaller municipalities to attend walkabouts (Guelph).
- Guelph police budget cuts during the project and the community officer retired.

Summary of Findings

- Time contributed to project: 2-5 hours if not more; Health promoter contributes most time: 1/2-1 day/week
- Mixed reviews on the STP process: Action plan implementation was difficult due to the delay and short amount of time, STP process is beneficial for physical literacy among students but its success depends on the facilitator role and stakeholder involvement
- Positive feedback on resources available on the website
- Facilitator role is highly rated (lowest rating was 9) but the facilitator needs sensitivity to/ understanding of the roles of other stakeholders, school culture, and how to approach them
- All stakeholders thought STP was worth continuing in order to implement the action plan
- Communications and continuity were difficult with a part-time facilitator; respondents prefer having the same STP facilitator throughout the process
- Two of the respondents see Public Health as the best entity to house STP; another respondent suggested a spoke and wheel model consisting of a centralized hub of agencies who make the high-level decisions then more local/municipal teams
- Problem with communications with Public Health because health promoter was in the WDG stakeholder committee but not the PHN's (lack of a health promoter at beginning of STP process)



Funding

- WDG public health can provide in-kind contributions as they do with the PHNs and the lead health promoter; they may be able to provide funds for incentives or events
- Guelph stakeholders can contribute to Guelph schools; needs follow-up data to determine Guelph's interest in funding a 2nd year of STP
- UGDSB would recommend funding a STP facilitator depending on the available funds but feels that Public Health should fund it. UGDSB is willing to provide support, resources, and contribute a person between September and end-November to collect the follow-up data.

Recommendations

- Mentor stakeholders on their role in the STP process; mentor the STP facilitator on working with the various stakeholders
- If there is only enough funding for a part-time facilitator, involve PHNs more and create a more defined schedule
- Rural-focused STP model would be very beneficial



Appendix 5: Provincial Active School Travel Policy Connections

The support and promotion of ASRTS aligns with many Ontario Government policies, initiatives, and priorities, including **CycleON** (MTO), **The Healthy Kids Strategy** (MOHLTC), Achieving Excellence (EDU), Provincial Policy Statement 2014 (MAH), Places to Grow (MAH and EDEI), Ontario's Clean Air Action Plan (MOECC), Stepping Up (MCYS), and Building Together: Municipal Infrastructure Strategy (EDEI). ASRTS programming also aligns with the recommendations of the Chief Coroner's Reports on Pedestrian and Cycling fatalities and the Canadian Physical Activity Guidelines.

Transportation – CycleON Action Plan 1.0 (MTO)

1.3 Implementing the active transportation elements of The Big Move

4.2 Promoting cycling to school...through the Active and Sustainable School Transportation program

Health-No Time to Wait: The Healthy Kids Strategy

Ontario has set an ambitious target for child health: to reduce childhood obesity by 20 per cent in five years

3.1 Develop a comprehensive healthy kids social marketing program that focuses on healthy eating, active living – including active transportation – mental health and adequate sleep.

3.3 Make schools hubs for child health and community engagement; Encourage active school transportation initiatives

Education- Achieving Excellence: A Renewed Vision for Education in Ontario

Goal 3: Promoting Well-Being; Work with partners inside and outside the education sector to increase interest among children and youth in being physically active, and to increase their motivation to live healthy, active lives

Municipal Affairs and Housing-Provincial Policy Statement, 2014 on Land Use Planning

-Promote the use of active transportation, transit and transit-supportive development, and provide for connectivity among transportation modes | Policies 1.1.3.2, 1.2.1, 1.5.1, 1.6.7

-Promote coordination between municipalities and other levels of government, agencies and boards (e.g., planning for trails, transit and infrastructure) | Policy 1.2

-Encourage coordination and co-location of public facilities (e.g., schools, libraries and recreational facilities) accessible by active transportation and transit | Policy 1.6.5

-Recognize additional elements of healthy communities, such as community design and planning for all ages | Policy 1.1.1

-Recognize institutional uses (i.e., cemeteries, places of worship, and long-term care homes) as important elements of communities | Policy 1.1.1

Environment and Climate Change – Clean Air Action Plan

Ministry of Environment's action plan on clean air includes education and outreach, noting schools are important partners

Children and Youth Services – Stepping Up; A strategic framework to help Ontario's Youth Succeed



MCYS strategic framework supports all young people to become healthy, safe, hopeful, engaged, educated and contributing members – how students get to school and other places is an important area of opportunity

Tourism, Culture and Sport

MTCS supports people of all age in communities across the province to get active, stay fit and live healthier lives – how kids travel to school is an important area of opportunity

Economic Development, Employment and Infrastructure-Places to Grow and Building Together: Municipal Infrastructure Strategy

MAH and MEDEI support complete communities with a balance of transportation choices, such as walking and cycling, and multi-modal access to places such as schools – exploring built environment that support active school travel is an important area of opportunity



Appendix 6: Facilitator Training

The Facilitators hired for this project were all relatively new to the STP process so GCC undertook a series of three STP training sessions, based on the STP process. The trainings were conducted virtually using webinar technology so we were able to include STP Facilitators from across Canada.

As an initial first step, all participants were required to first read the GCC Canadian STP Facilitator Guide, and view the GCC [video](#) Reigniting the Culture of Walking and Wheeling to School, an introduction to the Canadian School Travel Planning model.

All webinar training sessions were archived and can be found [here](#).

STP Training Part 1: Getting Started and Data Collection. September 30 and October 8, 2014						
Topics covered: Stakeholder and School Committees, Surveys, Walkabout, Traffic Count, School Travel Plan, Costs – Benefits.						
	MOE Project Toronto and W-D-G	Ontario	BC	NB	MB	Total
# of registrants	9	2	2			13
STP Training Part 2: Planning For Action and Moving Forward. January 29, 2015						
Topics covered: Action Plan Process and Resources including Education, Mapping, Events. Implementation.						
# of registrants	4	4	4	1		13
STP Training Part 3: Sharing to Assist a Tools Update – Inspiration For All. July 14, 2015						
Topics covered: Updated Tools for Survey and Data Evaluation, Communication and Education. Community Case Studies and Samples						
# of registrants	5	2	4		3	14
Sample training session comments:						
<ul style="list-style-type: none"> - - This is phenomenal. Everything's sourced, too! - - I love the updated new resources and that they are available on the website to download with ease - - It brought to light the process, and also supports my own best practices I wanted to incorporate this year with getting more parents involved - - Great session, thank you. I liked the comment box it kept input direct and to the point 						



Appendix 7: Case Studies – Our Lady of Lourdes Catholic School & King Edward Public School

The following pages provide a short case study of the STP process at Our Lady of Lourdes CS and King Edward PS in Toronto. Both schools started work on their travel plans in the 2013-14 school year and have two years of assessing barriers, identifying and implementing actions. Funding for these schools was provided through the Heart and Stroke Foundation, through a donation from RioCan (put in full). These two schools were not included in the Benefit-Cost Analysis portion of this project.

Our Lady of Lourdes Catholic School (OLOL) Results



Throughout the two years of participating in the STP process, Our Lady of Lourdes Catholic School (OLOL) gradually decreased the percentage of students getting to/from school by vehicle and diversified the types of active transportation used. A year one priority was to encourage families who were being bussed a very short distance to try walking. Concerns with driver behaviour, stranger danger, and crime deterred many parents from letting their children walk to school.

OLOL organized multiple walking events in the baseline year, which increased the number of students walking to school and is reflected in their follow-up surveys. The encouragement and opportunity to socialize at walking events throughout the process gave families the incentive to walk together to school. Parents expressed that walking enabled them to spend more quality time with their children in a healthy way .

There was a change of Principal at the start of year two so some STP coaching needed to be completed, likely resulting in fewer walking events. There was also an increase in the percentage of students using transit in year two which we believe is attributed to the Toronto Transit Commission offering free public transit for children 12 years of age and under, as of March 1, 2015.

Despite the decrease in the percentage of students walking between the follow-up surveys and year two surveys, OLOL successfully increased the overall percentage of students walking to school by 12.9% and from school by 9.1%. Year two saw an emergence of skateboarding and scootering to school as well as an increase in students walking to school part-way (part driving or TCC and part walking).

Conducting student neighbourhood walkabouts during both year one and two, empowered students

and incorporated their input into the school’s travel plan. The student perspective provided greater insight on multiple neighbourhood factors affecting the walking experience, such as garbage, graffiti, and scary people. The school’s health action team is continuing to organize walking events to build momentum for using active transportation among families. On a community level, efforts to improve the conditions for cycling and pedestrian safety are being discussed by City staff, after sharing barriers and actions with the local municipal Councillor. It is hoped that the school’s concerns will be incorporated into the St. James Town Community Improvement Plan.

PROJECT PROFILE:	<p>Community: City of Toronto Our Lady of Lourdes Catholic School</p> <ul style="list-style-type: none"> • Student Population: 642 • Project Timeline: December 2013-June 2016 	
PHASE 1: PLANNING	<ul style="list-style-type: none"> • Stakeholder Committee: Toronto Committee • School Work Group: 1 STP facilitator, 1 Public Health Nurse, 1 Principal, 1 Vice-Principal, 2 teachers, 2 councillors, 1 school board representative, 2 police officers, 1 parent council representative, 1 representative from Transportation Services, 1 representative from Metrolinx, 1 academic from University of Toronto, 1 representative from the Heart and Stroke Foundation <p>2 meetings</p> <ul style="list-style-type: none"> • Walkabout • Parent Survey • Classroom Travel Survey 	
PHASE 2: IMPLEMENTATION	<p>School Work Group – 6 meetings total</p> <p>Education: School assembly with a presentation by police; morning announcements and posters by the Health Action Team</p> <p>Encouragement: stickers, greeting students at the entrances with pom poms and signs, hot chocolate, meet and mingle for parents</p> <p>Engineering: Increased walking time at main traffic lights, clean-up at Nike Park</p> <p>Enforcement: Police participation at IWALK 2015</p>	
PHASE 3: MONITORING	<ul style="list-style-type: none"> • Student classroom survey • Benefit-cost analysis 	
MODE SHIFT:	<p>To School: Baseline to Year 2</p> <ul style="list-style-type: none"> • Car: -2.8% • Walk: +12.9% • Bicycle: +0.2% 	<p>From School: Baseline to Year 2</p> <ul style="list-style-type: none"> • Car: -1.6% • Walk: +9.1% • Bicycle: +0.4%



King Edward Public School Results

King Edward PS attracts students from across the City, with many students travelling longer distances to get to school. For this reason, King Edward's school travel plan placed a high priority on promoting cycling as well as encouraging multi-modal transportation that incorporates active transportation. The school faculty and the Eco-Club organized walk/wheel events rewarding students that used active transportation at least a block away from school property. Initiatives include a walking group from Bathurst Station where students received incentives for choosing active transportation for the rest of the trip to school instead of taking the streetcar.

King Edward held two bike rodeos, one each in year one and two, likely influencing the 2% increase in cycling to school. Year two travel survey results also highlighted a slight increase in other types of wheeling (scooter/skateboard) which led to a slight decrease in the overall percentage of students travelling by motor vehicle. The percentage of students taking transit to/from school increased in year 2 as a result of free public transit for children 12 years of age and under. However, the percentage of students using transit for trips to/from school is still between 1-2% lower than at baseline.

King Edward received a higher response rate in year 2 with an average of 125 students walking to school and an average of 148 students walking from school. These surveys were collected at the end of the day to include students who arrived late which may explain the ~4% increase in response rate compared to baseline.

During years two and three a group of King Edward students got involved in the STP project through a student focus group and the creation of a bike club who participated in a cycle-about of the school neighbourhood.



PROJECT PROFILE:	<p>Community: City of Toronto King Edward Junior and Senior Public School</p> <ul style="list-style-type: none"> • Student Population: 436 • Project Timeline: December 2013-December 2015
PHASE 1: PLANNING	<ul style="list-style-type: none"> • Stakeholder Committee: Toronto Committee • School Work Group: 1 STP facilitator, 1 Public Health Nurse, 1 Principal, 1 Vice-Principal, 2 teachers, 1 councillor, 2 police officers, 1 parent council member, 1 school board representative, 1 representative from Transportation Services, 1 representative from Metrolinx, 1 academic from University of Toronto, 1 representative from the Heart and Stroke Foundation <p>1 meeting</p> <ul style="list-style-type: none"> • Walkabout • Parent Survey • Classroom Travel Survey
PHASE 2: IMPLEMENTATION	<p>School Work Group – 13 meetings</p> <p>Education: School assembly with a presentation by police; morning announcements and posters by the Eco-Club, parent newsletter and parent council meeting announcements, 2 bike rodeos,</p> <p>Encouragement: stickers, hot chocolate and other snacks, raffle tickets for t-shirts, movie passes, and other prizes</p> <p>Engineering: Installation of Bicycle Racks, Stop Sign replacement</p> <p>Enforcement: Police participation at Bike Rodeos</p>
PHASE 3: MONITORING	<ul style="list-style-type: none"> • Student classroom survey • Benefit-cost analysis



Appendix 8: Sample HEAT Map

