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Active and Sustainable School Transportation in Ontario

Barriers and Enablers

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Active and Sustainable School Transportation in Ontario: Barriers and Enablers
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Cover photo: St. Martin of Tours Catholic Elementary School, Hamilton, ON

Active and Sustainable School Transportation in Ontario:
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Introduction

Metrolinx, the regional transportation authority for the Greater Toronto and Hamilton Area (GTHA), is working with stakeholders to support active and sustainable school transportation (ASST) in Ontario. To support this initiative, this document has been prepared to identify key ASST barriers and enablers.

This review summarizes twelve key issues identified from literature that represent both ASST barriers and enablers, with a focus on travel as it relates to school children and grade schools (i.e. from kindergarten to Grade 8). As shown in FIGURE 1, these issues are categorized into four groups—those related to ASST in general, to students and families, to communities where schools are located, and to schools themselves.

The rest of this document addresses these twelve issues in turn. Each section begins with an overview of the issue's scope and importance and a qualitative summary of key barriers and enablers, followed by specific pieces of supporting evidence found in Canadian or international literature. Readers who wish to develop a more detailed understanding will find a list of cited references at the end of this document. (Note that the literature review on which this report is based was not exhaustive, and is considered to be representative rather than definitive.)

> ### About active and sustainable school transportation (ASST)
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> Transportation to and from schools is a major traffic generator, and has real impacts on the environment, the economy, our health and our communities. Automobiles use fossil fuels, emit greenhouse gases, contribute to smog, and create congestion, delays and safety hazards around schools. Public transit vehicles and school buses, which move people more efficiently, are safer than cars and promote physical activity, are more sustainable. Active transportation is even more desirable—kids who walk or bike to school use their own energy, and they minimize wear and tear on public infrastructure, while getting physical activity that helps them develop and stay healthy. **Active and Safe Routes to School (ASRTS)** and **School Travel Planning (STP)** are increasingly common ASST initiatives in Ontario.
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> School celebration of ASST culture during an organized Walk or Bike to School Day at St. Marguerite d'Youville Catholic Elementary School in Hamilton, ON

FIGURE 1: Issues addressed in this review	
General issues	**Student and family issues**
▪ Mandate, leadership and cooperation	▪ Safety and security concerns ▪ Family capacity and lifestyle
Community issues	**School issues**
▪ Community planning ▪ Neighbourhood infrastructure ▪ Road safety ▪ Community resources ▪ Geography and climate	▪ School planning and siting ▪ School facilities, design and operations ▪ Curriculum ▪ School resources

General issues

Mandate, leadership and cooperation

ASST encompasses a broad range of issues and involves a list of stakeholders extending both vertically (e.g. provincial and municipal governments, school boards, schools, teachers, parents and children) as well as horizontally (e.g. various provincial ministries, government departments and individual professionals in diverse sectors such as urban planning, infrastructure design, traffic operations, safety promotion, public health and environmental management). ASST success depends on collective will and effort, and as a result efforts can struggle without a clear mandate, strong leadership, and effective mechanisms for cooperation. Paradoxically, the sheer number of stakeholders heightens the need for leadership, while it also creates difficulty in finding leaders because the issue is not clearly "owned" by any one group.

Lessons learned in Ontario and other jurisdictions show that the STP model provides an effective framework for supporting ASST. STP processes increase local ownership by engaging stakeholders (e.g. school boards, municipal transportation planners and engineers, public health, police, parents, students, school staff), researching and assessing the barriers to ASST, and then developing and implementing action plans. A provincial requirement for schools and school boards to conduct STP in partnership with municipalities can accelerate the allocation of resources, the implementation of on-the-ground programs, and their integration into other aspects of schools such as curriculum and greening efforts.

From the ASST literature

- STP initiatives generally are more effective when involving collaboration and partnership between key stakeholders such as schools, local government, local community, parents and children. (GCC-2)

- Internal champions, including the principal, teachers, parents and students, are needed at each school. Schools cannot rely solely on a single STP facilitator to create momentum, success and sustainability. (Metrolinx-3)

- Parents who become ASST champions can make an enormous positive difference in the success of active school travel projects. (Vic-1)

- It is estimated that schools in the Stepping It Up STP pilot project decreased school car trips by an average of 7% in the morning period and 3% in the afternoon period, with an equivalent increase in pedestrian trips. (Metrolinx-1)

- Studies have found that student involvement in decision-making was a key factor in more successful STP work. (GCC-2)

- Children are more likely to support initiatives that they have helped to create. (Vic-2)

- "The entire school community benefits from an authentic participatory process engaging student leaders in walking and cycling promotion. Very often, students are the experts on the local conditions relating to their needs—especially as they relate to the daily commute to school. These unique and necessary perspectives can remain unnoticed to adults working on school travel projects without the patient and age-appropriate engagement of children and youths." (Orsini)

- 81% of schools in England had a school travel plan in place by 2009, with a goal of 100% by 2010. (UKDfE)

- In Auckland, NZ the goal is for every school to have a school travel plan by 2014. The region follows a structured STP development process with bronze (development), silver (implementation) and gold phases. (GCC-2)

- Student transportation (i.e. busing) consortia are well positioned to achieve savings and efficiencies from active school travel. (GCC-1)

Student and family issues

Safety and security concerns

The safety and security of children is a valid, overriding concern of parents, schools and communities as a whole. However, it is important that worries about children's safety and security remain in balance with the actual risks, for there is also risk in overprotecting children and denying them opportunities to be independent and physically active, and to learn practical transportation skills. A common barrier to children walking or cycling to school is their parents' denial of permission due to concerns for their safety (e.g. fears of bullying, assault or abduction, as well as threats from motor vehicles), which may be grounded more in perception than in reality.

Informative education and practical training for parents and children can help overcome these barriers and improve everyone's comfort with walking or cycling to school as

an everyday activity. It is not only important to build children's understanding of how to avoid risks, but also to build parents' understanding of the physical, emotional and psychological benefits that children gain from active mobility. A further benefit of increasing the number of pedestrians and cyclists is enhanced feelings of security by adding "eyes on the street" and motivating drivers to be more attentive and respectful.

From the ASST literature

- Parents spend more time supervising their children than in previous generations (Vic-2) and independent childhood mobility has decreased in the past thirty years. (C&K)

- The age at which children are allowed to travel without adult supervision has risen. (Lodge)

- Restrictions on children's independent mobility are linked to decreased environmental knowledge, confidence and competence, and slower emotional development. (C&K)

- Where disapproval from other parents was strong, parents were reluctant to allow their children the freedom to explore their neighbourhood. (Vic-2)

- In Australia, "stranger danger" has not increased in the last 30 to 40 years but perceptions of it have, mainly due to extensive global media. A survey found that about 75% of parents indicated their children's mobility was hindered to moderate or major extent by perceived "stranger danger." (Vic-1) In fact, statistics show children are more likely to die in a car crash than at the hands of a stranger. (Vic-2)

- Children tend to have extensive knowledge of their local areas, including safe and unsafe places. (Vic-2)

- Regular walking and road safety education at early ages could reduce the fear of stranger danger and traffic risks by letting children learn about their communities. (Living Streets)

- Greater volumes of active pedestrians and cyclists can normalize those activities and improve perceptions of safety. (C&K)

Family capacity and lifestyle

The degree to which parents are engaged in their children's education, health and schedule planning can have a strong impact on school travel. Parents' understanding of the impacts of travel choices on health and development, and the compatibility of their lifestyle with the additional time and organizational demands (whether real or perceived) of walking or cycling to school, are both critical. Parents also need to be aware of resources that can help them identify and make optimal choices (e.g. choosing the best walking or cycling routes to school).

Children have a natural affinity for walking and cycling and frequently prefer active choices to busing or car travel. However, in communities where school bus, public transit service or active transportation networks are poor, driving children to school (even for very short distances) may be perceived as the easiest or safest solution and thus the default behaviour. If parents do not walk or cycle to work or for other purposes, children lack role models and knowledgeable advisors on how to deal with circumstances like traffic or weather. The need to carry heavy knapsacks, athletic equipment or musical instruments can also be a barrier to walking and cycling to school.

Opportunities to overcome barriers arise from measures that build awareness of, and lower resistance to, trying different methods of travel, as well as by supportive services including walking school buses (i.e. a supervised group of children who walk a common route to school) or carpool matching programs, and school supports such as supervision before and after school.

Students and parents take part in a walking school bus at Sam Sheratt Public School in Milton, ON

From the ASST literature

- There is a correlation between the mode of travel used by parents and their children. For example, an Australian study found five- and six-year-old girls were 70% less likely to walk or cycle if their parents own more than one car. (Lodge) Another study found that 55% of surveyed GTHA parents who said they were driven to elementary school when they were young, now drive their own children; similarly, 42% of GTHA parents who walked or cycled to their elementary school now have children who walk or cycle. (Metrolinx-4)

- Only 11% of surveyed parents in the GTHA were aware of an ASST program in their area, and many were unclear of what they had heard. (Metrolinx-1)

- 39% of surveyed parents in the GTHA said that before- and after-school supervision would greatly increase the likelihood of their child walking or biking to school. (Metrolinx-2)

- 31% of GTHA parents surveyed who live close to school but drive their children stated they would be extremely likely to use a walking school bus if available. (Metrolinx-2)

- Fit and active parents are more likely to be conscious of their child's health and well-being. (Vic-2)

- Children who travel mostly by car are more likely to have an aversion to travel by other modes. (Vic-2)

- Evidence suggests that children are less likely to travel actively when their parents work, and when it would interfere with parents' work schedules and children's after-school commitments. (DW&L)

Community issues

Community planning

The best way for walking and cycling to be attractive for school travel is to build supportive neighbourhoods. Community planning is a long-term, multi-sectoral process that can create many different outcomes–from neighbourhoods that are sprawling, low-density and car-oriented to those that are compact, mixed-use and walkable. Conventional suburban development leads to longer average distances between homes and schools that make walking and cycling less feasible, and lower densities that make transportation more time-consuming for kids and more costly for school boards.

Municipalities rely on community plans to establish visions, planning principles, future targets, policies to guide decision-making, and priorities to guide investment strategies. Plans also identify specific projects and programs, required funding, key stakeholder roles, monitoring strategies, and design approaches. In Ontario, official plans are mandatory and provide high-level direction for the development of communities. Municipalities may develop other plans, notably for transportation in general or for more specific subjects like walking and cycling networks. Major plans tend to be revisited every five to ten years, and examining existing plans through an ASST lens can help identify planning gaps and opportunities to rectify them. The active involvement of children in plan development is one way to ensure that their unique perspectives are heard and integrated.

From the ASST literature
▪ Separating residential, retail and commercial land uses leads to longer trips and discourages active transportation. Studies show that shorter trip distances and attractive mixed-use environments increase the odds that residents will choose active transportation. (PBIC)
▪ The distance from home to school has the most significant correlation with the mode of school travel, with more students able to reasonably walk and cycle shorter distances. (Metrolinx-1)
▪ Of surveyed parents in the GTHA, 52% said a school closer to home would greatly increase the likelihood that their child would walk or bike to school. (Metrolinx-2) Of parents surveyed in an American study, 62% said distance was a barrier that prevents them from allowing their child to walk or bike to school. (NCSRTS-1)
▪ Between 1969 and 2009 in the United States, the proportion of elementary-aged children who lived within one mile of school decreased from 41% to 31%. Of those who lived within one mile of school, the proportion walking or cycling to school decreased from 89% to 35%. (NCSRTS-1)
▪ Auckland Regional Transport Authority's Sustainable Transport Plan identified targets to implement a travel plan in every school, and to achieve a 9% reduction in school car trips. (GCC-2)

- Clark County Public Health (Washington) did a Rapid Health Impact Assessment of the Clark County Bicycle and Pedestrian Plan, analyzing disparities in access to physical activity by school areas. Adopting Safe Routes to School (SRTS) programming was a key recommendation of the assessment, and has led to prioritizing pedestrian improvements and grant funding. (NCSRTS-2)

- Improving physical amenities and public spaces in a neighbourhood, and involving children in that process, is found to increase active transport and independent mobility among children. (Vic-2)

Neighbourhood infrastructure

Many neighbourhoods today do not have quality sidewalks, frequent protected road crossings, safe on-road bike facilities, secure and well maintained trails, and traffic calming measures to control vehicle speeds. As a result, many school administrators, parents and children view walking and cycling to school as unattractive, unsafe or simply infeasible.

Some communities are rectifying these situations through approaches such as "complete streets" that can lead to quality walking and cycling facilities along new roads and retrofits for existing roads. Traffic calming projects, road diets and "street unpaving" projects improve the walking environment and reduce both actual and perceived risks to pedestrians and cyclists.

ASST initiatives such as ASRTS and school travel plans use walkabouts and surveys of students and parents to identify infrastructure deficiencies. Identifying the nature of gaps allows solutions to be developed and prioritized, and the required

resources to be sought. Municipalities often have, or can collect, data to support ASST initiatives such as traffic volumes and collisions (for all modes, not just cars) as well as motor vehicle speeds. Non-transportation infrastructure can also play a key role, because challenges can be presented by graffiti, abandoned buildings and an absence of green spaces along the routes that children take to school.

Students use photovoice techniques to capture what they experience while walking to school in Hamilton, ON

From the ASST literature

- 56% of GTHA parents surveyed who live close enough so their child could reasonably walk or bike to school agreed that enough safe routes exist in their neighbourhood, and that people drive safely enough. (Metrolinx-1)

- 44% of GTHA parents surveyed said better walking and/or traffic calming infrastructure would greatly increase the likelihood of their child walking or biking to school. (Metrolinx-2)

- Children in neighbourhoods that lack sidewalks, parks, playgrounds and recreation centres have a 20% to 45% greater risk of becoming obese and overweight. (NCSRTS-2)

- A community walkabout and surveys of parents and students are key components of the Canadian STP model. (Metrolinx-1)

- The Stepping It Up STP project allowed Hamilton students in grades 4 to 8 to photograph and document their walk to school, identify negative influences such as garbage, graffiti, neglected buildings and speeding traffic, and work with community stakeholders on solutions. (Metrolinx-1)

- In the Netherlands, the injury risks posed by increasing traffic volumes during the 20th century led to comprehensive measures curbing motor vehicle use in urban areas, improving pedestrian conditions and adding extensive, high-quality cycling infrastructure. (Garrard)

- Denver, Colorado's Complete Streets policy requires all construction, reconstruction and maintenance projects involving the city's transportation system to provide safe and convenient access for all users. (NCSRTS-2)

- Santa Clarita, California prioritized 26 elementary schools for SRTS work based on research into pedestrian collision history, proximity to arterials, population density, and percent of area households without cars. They then conducted walkability audits and developed engineering improvement plans. (NCSRTS-2)

Road safety

The safety of children walking or cycling to school is a frequent concern of parents, schools, teachers, and children themselves. High traffic volumes, speeding cars, inattentive or dangerous driving, and unprotected or insufficient road crossings are common barriers.

There are numerous approaches to improving road safety, such as education for drivers and children, reduced speed limits, more visible signage in school zones, more frequent enforcement with tougher penalties, automated speed display boards, installation of narrowings, crosswalks or signals at road crossings, and implementation of crossing guard programs. Evidence from Ontario and other jurisdictions also suggests that simply increasing the number of pedestrians and cyclists in a community can increase safety for them by motivating drivers to be more attentive.

School walking route signage in Brampton, ON

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From the ASST literature

- The odds of a pedestrian dying are about 5% if they are struck at about 30 km/h, versus 85% if they are struck at about 65 km/h. (NCSRTS-2)

- 30% of parents in a US study identified road safety concerns as a barrier to allowing their child to walk or bike to school. (NCSRTS-1)

- Two-thirds of drivers in an American study were observed to exceed the posted speed limit in school zones in the 30-minute periods before and after school. (NCSRTS-1)

- 40% of GTHA parents surveyed said improved road crossings, crossing guards or school zone signage would greatly increase the likelihood of their child walking or biking to school. (Metrolinx-2) "School Walking Route" street signs were installed along common pedestrian routes as part of the Stepping It Up STP project in Peel Region, and were cited as a contributing factor in travel behaviour changes. (Metrolinx-1, Metrolinx-3)

- Washington State's school zone safety legislation doubles speeding fines in school crosswalk and playground zones, with half of revenue (more than $3 million in 2009) supporting school zone improvements. (NCSRTS-2)

- Active transport programs in Europe have led to an 85% reduction in traffic-related injuries to children. (GCC-1)

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Community resources

ASST initiatives face numerous competing priorities for financial resources. Funds for municipal programs and services are usually drawn from property taxes and can be very limited. The capital costs of ASST-supportive infrastructure, which can be funded from more diverse sources, can be very high—especially for retrofit projects

around existing schools that cannot be paid for by new developments or through larger roadworks.

Typically, human and financial resources (either new or reallocated) are required to establish an effective, centralized ASST program with staff, tools and services—whether that program is hosted by a provincial government, a regional or local municipality, a non-governmental organization, or a school board. Identifying funding sources is vital to accelerating implementation; possibilities include provincial grants, lottery grants, and reallocation of funds within road safety budgets (which tend to already deal with infrastructure retrofits, education and promotion).

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From the ASST literature

- Over a ten-year period, California's Department of Transportation has provided more than $240 million for SRTS. (GCC-2)

- Some American states dedicate SRTS funding from transportation safety budgets, while some cities and counties provide SRTS funding through dedicated sales taxes (e.g. about $5 million annually for walking and cycling improvements in Marin County, California). (GCC-2)

- In the United Kingdom, infrastructure funding for STP comes through the Local Transport Plan Process. (GCC-2)

- In New Zealand, funds for STP and other community activities flow through land transport programs to better integrate education and engineering activities, and to ensure that organizations address safety as well as sustainability. From 2009 through 2012, the central government allocated $51 million for walking and cycling programs, including STP. (GCC-2)

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Geography and climate

Rain, cold, snow and wind are facts of life across Canada, and they can make walking and cycling uncomfortable or inconvenient for children who do not have the correct outerwear or equipment. Darkness (especially during rush hours) and hilly topography can also be significant barriers for some children, especially would-be cyclists.

As many adult commuter cyclists have found, combatting darkness and inclement weather (other than heavy snow, icy conditions or extreme winds which can discourage even the most intrepid cyclists) can be largely a question of having the right clothing and bicycle accessories. Educational materials and programs can help children and their parents learn effective approaches.

Community members participate in a wintertime school walkabout to identify ASST issues in Brampton, ON

From the ASST literature

- Research suggests that children are more likely to walk or cycle to school when the route is direct and steep hills are minimal. (DW&L)

- 19% of parents in an American study identified adverse weather as a barrier preventing them from allowing their child to walk or bike to school. (NCSRTS-1)

- Weather conditions were cited as the second-most important issue affecting the mode of travel of secondary students in Ireland. (Lodge)

- English STP case studies note that better surfacing for informal footpaths may make them a more attractive option when it rains. Some English authorities have funded wet weather shelters at primary schools that offer parents a place to wait when collecting children on foot. Shelters have been incorporated into primary school buildings to provide additional space to hang coats and store scooters. (Newson)

School issues

School planning and siting

Schools that are not centrally located in the area where students live, or that have open enrolment or large catchment areas, lead to longer trips. This outcome then increases the need for expensive student transportation services or parental chauffeuring, and makes it less likely that children will walk or cycle regularly.

For new schools, limited budgets and/or standards requiring large blocks of land make it more likely that they will be located on the periphery of developed areas where land is plentiful and less expensive. Cost pressures can lead school boards to favour consolidation of smaller schools into a lesser number of larger facilities that may be farther from where students live. In Ontario, school boards have the authority to close schools even if local municipalities and residents are opposed. Funding formulas can favour the construction of new schools in suburban areas over the renovation of older schools in more central locations. Specialized programs and open enrolment can also lead to more children going to a school outside their own neighbourhood, and farther from their home.

School site planning processes can favour ASST by giving greater weight or priority to criteria related to average trip distances, the school's proximity to quality walking, cycling and public transit routes, and minimal need for students to travel along or across major roads with high traffic volumes and speeds. Policies and processes that govern school consolidations and closings can emphasize the need for community input, and promote consideration of the holistic value of preserving existing neighbourhood schools.

From the ASST literature

- 52% of Vancouver School Board students attend schools outside their catchment area. In the York Region District School Board fewer than 19% of elementary students travel to schools outside their catchment area, and the board has eliminated specialty programs in order to protect neighbourhood schools. (Globe)

- A policy of Ontario's Dufferin-Peel Catholic District School Board specifies minimum sizes in hectares for elementary and secondary schools. (Dufferin-Peel)

- An evaluation of New Zealand's STP experience found that the biggest opportunities to influence school travel choices are related to school planning and construction. (GCC-2)

School facilities, design and operations

The way that schools are designed, their built features, and the way they are run can all have a substantial influence on students' travel choices. Conventional school designs from recent decades tend to feature large parking lots and on-site stopping zones that offer easy access for cars and buses, and that make it convenient for parents to drop off and pick up their children by car; at the same time, those parking areas, driveways and turning circles can pose a barrier to other parents and children who are approaching or leaving the school on foot or by bike. Bicycle parking at schools is

sometimes an afterthought, and may not be visible, secure or sufficient to meet demand at peak times. Some schools even discourage or prohibit cycling to school, usually due to a lack of infrastructure or perceptions that cycling in a given community is not safe for children.

Schools can discourage parents from driving their children to school, and encourage public transit usage and active travel, by diminishing or eliminating car drop-off zones and by working with the local municipality to increase controls on and enforcement of parking, stopping and idling on adjacent streets. These measures can have the added benefit of reducing congestion, illegal stopping and obstructive turning manoeuvres adjacent to the school (which can impinge on pedestrian crossings and sidewalks, as well as neighbouring residences). Better and more central bicycle parking can raise the profile of cycling and help prevent bicycle theft and vandalism.

School showcase of ASST initiatives
at a school in Brampton, ON

From the ASST literature

- Planning and designing accessible schools with low traffic exposure, sidewalks and drop-off zones away from the school could increase the potential for walking and cycling to school, and decrease the need for children to be chauffeured. (Giles-Corti)

- In Halton Region, "Design Guidelines for School Site and Adjacent Lands Planning" were developed to encourage and support children and families who choose active transportation to and from school. (Halton)

- Ontario's *Foundations for a Healthy School* report recommends purchasing bicycle racks to promote an active lifestyle, and establishing parking areas as no-idling zones to address personal safety and injury prevention. (OntMoE)

- School bicycle parking policies should promote visibility, access, security, lighting and weather protection. (NCSRTS-2)

- The relocation of school bike racks to increase visibility is credited as one reason behind the 22% decrease in morning car trips at Ridgewood Public School in Peel Region. (Metrolinx-1)

- In London, England, surveys after the installation of 5,000 bike racks at more than 200 schools found that 61% of existing cyclists rode their bikes more often, and that 22% of cyclists used to be driven to school. (NCSRTS-2)

- Remote drop-off policies reduce dangers caused by the convergence of students and parents arriving by all modes, and also improve air quality near schools. (NCSRTS-2)

Curriculum

School curriculum is less likely to present a barrier to ASST efforts than it is to represent a lost opportunity for supporting them. In-class learning activities can help raise awareness and understanding of ASST among students, transfer skills needed for safe travel, and leverage students' experience with ASST to magnify learning in a range of disciplines.

Ontario education guidelines require 20 minutes of daily physical activity for each student, but do not currently recognize active travel to and from school as one of the ways to fulfill this requirement. In countries such as Denmark, cycling skills education and testing are mandatory elements of school curriculum from kindergarten. However, most Canadian children do not receive training to safely cycle to school, or even walk in some cases; this gap can be overcome by teaching walking, cycling and public transit usage skills within the curriculum (e.g. as part of physical education), a role that could be played either by full-time teachers or by contracted experts. More advanced skills would be appropriate for older age groups; for students in their mid-teens who are approaching driving age, increased comfort with cycling or taking transit can improve their travel options and encourage them to not simply default to regular car usage. Health and environmental curriculum programs (e.g. Ontario's EcoSchools) often emphasize the importance of integrating real-life, action-based learning opportunities, and ASST provides a genuine opportunity for that.

From the ASST literature

- GTHA schools that took part in the Stepping It Up project found that STP goals and initiatives aligned well with the Healthy Schools Model endorsed by the Ontario Ministry of Education, and the Ontario EcoSchools program. (Metrolinx-1)

- Green Venture's Totally Transit education program, in partnership with the Hamilton Street Railway, introduces elementary school students to the public transit system in Hamilton, ON. (Green Venture)

- The Wheeling to School project, piloted as a collaboration between Green Communities Canada and Ontario's Share the Road organization, resulted in more cycling at all participating schools, with mode shifts as high as 9%. (GCC-3)

- In some American states, laws require that bicycle and pedestrian safety be taught in schools. (NCSRTS-2)

- Since 2001, the WalkSafe pedestrian curriculum in Miami-Dade County, FL has contributed to a 52% reduction in pedestrians less than 15 years old age being hit by cars. (NCSRTS-2)

- The UK Bikeability cycling education and training program was to be delivered to 500,000 children by the end of 2012. (UKDfT)

- In Australia, a school travel program connected to STP is included in TravelSmart curriculum for Grades 5 and 6. (GCC-2)

- In Europe, most of the top-performing countries implemented a comprehensive package of child cyclist safety measures including the often-compulsory promotion of child cyclist road safety education and training. (Garrard)

School resources

Schools have multiple priorities that compete for their limited funds and the finite time and energy of school staff. New directions for curriculum and programs emerge regularly, as do new internal or external causes. ASST is just one area of endeavour for a school community, and it may receive either higher or lower priority depending on the local context.

STP takes time to generate results—a year is typically required to build relationships and develop plans, followed by an implementation period that could span multiple years, especially if major infrastructure improvements are involved. Even then, new behaviours and an ASST-supportive school culture take time to foster. Until they become permanent, ASST resources need to be sustained because the regular turnover of some school staff and students is inevitable.

Centralized ASST resources within a community can help schools minimize resource demands and sustain their activities. These resources could be in the form of dedicated experts (e.g. trained facilitators offered by school boards, municipalities or non-governmental organizations), community committees, process guides (e.g. the *Canadian School Travel Planning Facilitator's Guide*), survey templates, educational materials, and toolkits (e.g. the Toronto District School Board's *EcoSchools Toolkit* that provides a list of sustainable transportation links and resources). Information sharing among participating schools can help to transfer knowledge from those with more experience to those just starting out.

School boards typically have student transportation budgets to support school bus operations. A provincial mandate giving school boards the option of drawing ASST resources from those budgets would accelerate needed support.

From the ASST literature

- Opinions vary about the time required for STP to take effect, but a change in travel behaviour can require as little as three months or as much as several years. The installation of engineering treatments takes up to one and a half years to coordinate funding and capital works. (GCC-2)

- An STP pilot project in Australia underestimated the necessary duration of the process, and later recommended that implementation strategies be staged over three years. (GCC-2)

- South Australia's Way2Go STP initiative uses a five-year timeframe for each plan, including annual revisions. (GCC-2)

- In Ontario, STP stakeholders agree that it is critical to have one or more facilitators in a given community who are dedicated to coordinating the process. In Ottawa, two facilitators in a non-profit organization are funded from sources including contributions from the local municipality and a school board. York Region has a full-time Safe Routes to School facilitator funded by the York Region District School Board and the York Catholic District School Board. Elsewhere, a facilitator role is adopted by existing municipal or public health unit staff, typically an active transportation coordinator or public health professional. (Metrolinx-3)

- Most student transportation departments currently focus on the busing and driving needs of their communities; however, investing time and resources in supporting walking and bicycling can help schools save money, decrease traffic congestion, increase community safety and improve the health of children. (NCSRTS-3)

- In the UK, many schools would not be able to implement and maintain STP without the existence of shared School Travel Advisors. More than 90% of survey respondents said they may or would need future support from an advisor. (UKDfE)

- UK experience found that long-term funding is vital to permit strategic planning of STP. (GCC-2)

- One international review noted the importance of keeping STP simple for schools, and that some guidebooks and online materials are so comprehensive they overwhelm local working groups. (GCC-2)

Toronto students plan actions to improve cycling to their school

Photo credits

Cover: St. Martin of Tours Catholic Elementary School, Hamilton, ON, 2012

Page 1: St. Marguerite d'Youville Catholic Elementary School, Hamilton, ON, 2013

Page 5: Sam Sheratt Public School, Milton, ON, 2010

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