# Terms & Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>5 Es</strong></td>
<td>The five categories of measures commonly used by ASST programs (e.g., School Travel Planning): Engineering, Education, Encouragement, Enforcement, Evaluation.</td>
</tr>
<tr>
<td><strong>ASST</strong></td>
<td>Active and sustainable school transportation or active and sustainable school travel: These terms include human-powered modes of travel such as walking, cycling and rolling, as well as other sustainable choices that are not active such as riding the school bus or taking public transit. Metrolinx promotes these sustainable travel modes as part of their School Travel Planning approach because doing so can help improve safety and air quality in the school zone.</td>
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<tr>
<td><strong>AST</strong></td>
<td>Active school transportation or active school travel: These terms refers to transportation using human-powered modes such as walking, cycling and rolling.</td>
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<tr>
<td><strong>ASRTS</strong></td>
<td>Active and safe routes to school: a program of activities and educational resources that promote the use of ASST</td>
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<tr>
<td><strong>DSB</strong></td>
<td>District school board</td>
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<tr>
<td><strong>GTHA</strong></td>
<td>Greater Toronto &amp; Hamilton Area</td>
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<tr>
<td><strong>KPI</strong></td>
<td>Key performance indicator</td>
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<tr>
<td><strong>STP</strong></td>
<td>School travel planning: a collaborative process through which community stakeholders create an action plan to address a school’s transportation problems and increase ASST</td>
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<tr>
<td><strong>TDM</strong></td>
<td>Transportation demand management</td>
</tr>
<tr>
<td><strong>Wheeling</strong></td>
<td>Human-powered transportation with wheels, e.g., bike, skateboard, scooter, human-powered wheelchair. Also referred to as “rolling.”</td>
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</table>
Acknowledgements

Regional Planning for School Travel Project Team

Metrolinx Staff
  • Jessica Stronghill, Program Coordinator, Smart Commute
  • Becky Upfold, Manager, Smart Commute

Green Communities Canada
  • Jacky Kennedy, Director, Canada Walks
  • Kate Berry, Senior Program Manager – Active & Safe Routes to School
  • Stephanie Hahn, Writer & Graphic Designer

Public Space Workshop
  • Paul Young, Principal
  • Vivien Leong, Active Transportation Analysis, Communications & Outreach

Ryerson University
  • Raktim Mitra, Assistant Professor, School of Urban and Regional Planning
  • Cate Flanagan, Research Assistant

WSP|MMM Group
  • Claire Basinski, Project Manager
  • Roxane Maclnnis, Senior Project Planner

TranSafe Consulting Ltd
  • Raheem Dilgir, President

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17. Appendix 4: Data Collection in Each Region
Over the past couple of decades, the percentage of children walking and cycling to/from school in the Greater Toronto and Hamilton Area (GTHA) has declined, while the number of children being driven to school has more than doubled. Given the numerous health and environmental benefits of active and sustainable school transportation (ASST), a wide range of stakeholders are highly motivated to take the necessary steps to help reverse these trends and get more children walking, wheeling, or taking the school bus or public transit to/from school.

The regions (single and upper-tier municipalities) throughout the GTHA—Region of Durham, Halton Region, City of Hamilton, Region of Peel, City of Toronto and Region of York—are undertaking different activities and programs to help change these trends. As the Regional Transportation Authority for the GTHA, Metrolinx supports these regions as a coordinator and key partner. Metrolinx’s Regional Transportation Plan, The Big Move, calls for 60 percent of children in the GTHA to be walking or cycling to school by 2031. To achieve this goal, Metrolinx provides ongoing support and coordination of ASST initiatives across the GTHA and has funded several ASST projects.

This report summarizes ASST work to date and outlines actions to improve active school travel across the combined regions of the GTHA. It draws from the results of six region-specific consultations conducted as part of this project. The contents of this report are intended to be used by Metrolinx and stakeholders throughout the GTHA, as a source of information that may guide the development and implementation of regional strategies and action plans.
Project Overview

In 2013, Metrolinx and the Ministry of Transportation funded the development of the ASST Strategy Roadmap. The ASST Strategy Roadmap process brought together over 30 stakeholders from across Ontario to collectively determine what was needed to support the goal of “more children walking, biking or rolling to school.” A key next step from that work was to support and facilitate the strategic planning of ASST initiatives within each of the six regions in the GTHA. This project was undertaken to fulfill that next step. Green Communities Canada was retained to lead the work, with assistance from Ryerson University, Public Space Workshop and WSP|IMM Group.

The consultant team engaged the six regions individually, seeking to establish a baseline for school travel work, highlight opportunities and challenges and identify future priority actions to advance ASST. Specifically, this work culminated in four project outcomes, or deliverables:
1. Emerging ASST Priorities Table
2. GTHA-wide Strengths & Challenges
3. Stakeholder Map
4. Measures for Success
These four outcomes were informed by current plans and strategies, research and extensive stakeholder consultation within each region.

As described further in the remainder of this section, this project involved three major work components:
1. Case study research by Ryerson University on International Best Practices in Regional Planning for School Travel
2. Review and simplification of the 2013 Strategy Roadmap logic model
3. Online research and input from regional stakeholders through interview, as well as a comprehensive workshop and smaller stakeholder meetings (described further in the subsequent pages of this section).

This report summarizes the consultation and findings from all six regions within the GTHA. It captures the overarching themes, actions and potential indicators of success across the region as a whole. In addition to this summary report, individual reports were created for each of the six regions within the GTHA, summarizing the involvement and findings specific to each. Ownership of the individual reports lies with the respective region, to use as that region sees fit. The diagram on the next page illustrates at-a-glance the project process and the key documents used to inform the project at the GTHA-level.

Stakeholders engaged in discussion at one of the regional planning for school travel workshops (City of Hamilton)
Project at-a-Glance

**Project Process in Each Region**
- Consultation meetings with regional ASST stakeholders
- Stakeholder interviews*
- Literature review & online research
- Stakeholder Workshop
- Stakeholder feedback

**GTHA Report Content**

**Background**
- GTHA Context
- ASST Work to Date in the GTHA

**Project Findings**
- Emerging ASST Priorities
- Strengths & Challenges
- Stakeholder Mapping
- Measures of Success

**Next Steps**
- Actions for GTHA-wide Consideration

**Key Documents Informing the Project**
- Metrolinx School Travel Trends Reports
- Metrolinx’s ASST Strategy Roadmap Report
- International Best Practices in Regional Planning for School Travel
- Regional Planning for School Travel Project Regional Reports (6 total)
- Various regional reports and documents

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**2031 VISION:**
60% of children in the GTHA will walk or bike for school trips

*Halton Region opted not to participate in interviews.
Summary of Best Practices Research

One of the first steps in this project was undertaking research about best practices for regional school travel planning nationally and internationally. Cate Flanagan and Dr. Raktim Mitra from Ryerson University conducted the research and wrote a report to summarize their findings titled International Best Practices in Regional Planning for School Travel (http://transformlab.ryerson.ca/wp-content/uploads/2016/11/Best-Practices-Report-Final-June14-16.pdf). In the report, they include four case studies from around the world:

1. England, United Kingdom
2. Bay Area, United States of America
3. Auckland Region, New Zealand
4. Metro Vancouver, BC, Canada

The research revealed that there are many similarities in how ASST planning, policy and programming is coordinated at the regional level. However, there are also distinct differences. The research findings provided key learnings that can inform future ASST strategy for the GTHA.

Key Learnings

1. **Ownership of ASST work by a major stakeholder** is needed to ensure program sustainability, and in particular, to provide a reliable source of ongoing funding. The case studies showed that ownership can be undertaken successfully by a range of different organizations, e.g., not-for-profit organizations, regional transportation authorities, or the national government. In all of the case study areas, the lead organization received support for ASST through both funding and comprehensive policy documents from multiple government departments.

2. **Having a central steering committee** was a key success factor identified in all four case studies. This committee should include broad multi-disciplinary representation.

3. **Centralized communications are important.** All of the regions profiled maintain a clear, interactive, centralized website that serves as a hub for ASST resources.

4. Progress is made when the stakeholders are accountable to a **strategic vision and clear objectives**.

5. To know if objectives are being accomplished, **data collection is critical**. The places profiled in the case studies all collected baseline and follow-up data using a variety of tools. The data collection tools that work best are engaging and fun, and providing incentives is an effective way to encourage their use.

Cate Flanagan presented the key learnings from this research at each regional workshop to inform discussions and planning.
Building on the ASST Strategy Roadmap

As a basis for this work, it is important to tie the outcomes of this project back to the 2013 ASST Strategy Roadmap. The consultant team, with input from Metrolinx, consolidated the logic and actions within the ASST Strategy Roadmap into six key elements plus desired outcomes. The diagram below shows those six elements overlaid onto the ASST Strategy Roadmap. A more detailed description of each of the elements is provided on the following page.

The simplified model presented here is not intended to amend or replace the ASST Strategy Roadmap diagram or logic model. It has been developed only for the purposes of this report and the Regional Planning for School Travel project as a way to organize the information gathered.
Public & Political Support
Actions that directly aim to build public and political support for ASST work, such as advocacy/government relations and charters.

Resources
Cash and/or in-kind resources needed to accomplish the priorities identified.

Policies, Plans & Standards
Specific policies, procedures, plans, etc. that need to be written or changed, and the steps necessary to get those policies or changes in place. This section could also include the actions required to see existing policies implemented/enforced.

Regional Coordination*
Activities that are most efficient and effective when executed at a regional level such as: recommended model & tools/templates, communications/media, evaluation, knowledge exchange, and risk management.

Community Capacity
Regional/municipal delivery agents and local facilitators. In other words, all of the human resources required to execute regional/municipal/school-level ASST activities, whether through paid positions, secondments, or in-kind time from stakeholders or volunteers.

Local ASST Actions
These are actions that would be undertaken at a school or municipal level, that can be categorized into one of the five Es:
• Evaluation—measurements of progress and results.
• Engineering—physical infrastructure to support active and sustainable travel to/from school.
• Education—programs and campaigns that give all road users the knowledge, skills and confidence to share the road and school property safely.
• Enforcement—laws and programs to ensure motorists, pedestrians and cyclists behave in ways that are safe and considerate for other road users.
• Encouragement—incentives, promotions and opportunities that inspire and enable people to use ASST for the school journey.

* “Regional” as used here refers to single- and upper-tier municipalities, not the GTHA Region.
Summary of Consultation Process

The consultation process involved working with the six GTHA regions separately to gather input from their stakeholders through consultation meetings, interviews and one comprehensive workshop session per region. Below are descriptions of the interview and workshop processes at the regional level.

Stakeholder Interviews

After initial consultation meetings, Cate Flanagan, a Research Assistant from the School of Urban and Regional Planning at Ryerson University, conducted in-depth phone interviews with stakeholders in five of the regions* (number of interviewees noted in brackets below):

- Durham (4)
- Hamilton (3)
- Peel (5)
- Toronto (3)
- York (5)

The interviews were designed to obtain factual information as well as each person’s professional views and opinions about ASST planning in their region. Questions were organized into three main categories:

1. roles and responsibilities;
2. current ASST planning practice and processes; and
3. stakeholders and relationships.

The interviews enabled the project team to establish a baseline for the work to date in each region and develop draft stakeholder maps, which were finalized following a detailed review by each region’s ASST committee or lead stakeholders.

Workshop Process Highlights

Each region hosted a Regional Planning for School Travel Workshop. The workshops were planned and organized by each region’s ASST committee or by lead stakeholders, with support and facilitation from the project team. The workshops took place between June 2016 and January 2017. Attendance ranged from 25 to 70 people per workshop.

The agenda for each workshop varied, but all featured presentations and group discussion activities. The presentations covered context about the project, Ryerson University’s research, recent ASST initiatives in the region and inspiration from other regions with similar challenges. All of the workshops engaged attendees in discussion about:

- What actions are needed to accelerate the work on ASST?
- How can we know we are succeeding—what measures can be used to indicate success?

Other region-specific topics covered through these workshops included:

- Who is present?
- What work has been done to date on ASST?
- What are the challenges?
- What are our assets?
- What can be done to progress or build on our current ASST strategy?

The responses to these discussion questions were documented in detail in each of the regional reports and have been used to identify the emerging priorities, current means of measuring success and future evaluation targets for ASST for each region and the GTHA as a whole.

*Halton Region opted not to participate in interviews.
GTHA Context

The Greater Toronto and Hamilton Area (GTHA) is Canada’s largest urban region and its population is expanding rapidly. As of 2015, over 7.2 million people were living in the GTHA and that number is expected to grow to 8.6 million by 2031. Population statistics for the six regions are presented in Appendix 1. The GTHA includes six regions: two single-tier municipalities (Hamilton and Toronto), and four upper-tier municipalities (Durham, Halton, Peel and York) within which there are 24 lower-tier municipalities. The GTHA covers 8,242 km² of geographic area, consisting of large urban areas as well as small urban and rural communities.

There are 26 school boards and 2,069 schools in the GTHA. Like all jurisdictions in Canada, the GTHA has seen a decreasing trend in the percentage of children and youth using active and sustainable transportation for the school journey. The diagram below illustrates the increase in auto use and the corresponding decreases in use of active and sustainable modes of transportation for the school journey.

GTHA School Travel Trends
Shifts in Mode over Time (%) Students 11-17 Years

![Diagram showing shifts in school travel modes from 1986 to 2011.]
ASST Work to Date in the GTHA

The GTHA has a long history of working to get more children walking and wheeling for the school journey. Green Communities Canada first introduced the Active and Safe Routes to School (ASRTS) program in Toronto in the mid-1990s, and expanded to the other five GTHA regions in the late-1990s. Since then, each region has made consistent progress towards advancing ASST initiatives, often working independently and within the specific context of their region.

GTHA-Wide Highlights

As highlighted on the following page, Metrolinx began actively championing ASST in 2009, pilot testing School Travel Planning (STP) through the Stepping It Up project. That project used the Canadian STP model, created by Green Communities Canada, to promote active and sustainable modes of school travel for students, families and staff (See Appendix 2 for further details about School Travel Planning.). It was delivered at 30 elementary schools in the cities of Hamilton, Brampton and Mississauga.

Following the Stepping It Up pilot, Metrolinx continued to regularly invest in initiatives to support ASST across the GTHA. As noted in the project rationale section of this report, Metrolinx and MTO funded the creation of an Ontario-wide Strategy Roadmap in 2013, setting a strategic course to improve the number of children walking, biking or rolling to school. In 2013, Metrolinx also launched an infographics campaign to provide tools and tips for parents and others to work with their school and community on School Travel Planning.

In January 2015, Metrolinx spearheaded the creation of the GTHA ASST Regional Hub, a key outcome from the 2013 Strategy Roadmap process. The Hub currently includes more than 100 participants from key positions in transportation, planning and recreation departments, public health, school boards, police, non-profits and academia across the GTHA.

The Hub meets quarterly and is the centre of action for GTHA-wide ASST initiatives, allowing participants to collaborate, share best practices and amplify their individual work. The Hub is the largest cross-functional group focused on ASST in the province, with an ever-expanding range of collaborators.

The Hub launched the first GTHA-wide Bike to School Week initiative in May 2015. Bike to School Week is an annual campaign which focuses attention on cycling as a potential travel mode by encouraging schools, parents and children to get involved in fun, safe and engaging programs. Participation more than doubled in 2016, with 301 schools registering and 21,742 students participating, compared to 144 schools and 16,225 students in 2015. Metrolinx recognized this achievement—as well as other regional ASST accomplishments—at the 2016 Smart Commute Awards, the first awards ceremony to recognize significant achievements in ASST across the GTHA. With excitement around Bike to School Week continuing to grow, the Hub hopes to reach even more schools and students this year.

Metrolinx also supports ASST in the region through research and best practice sharing. In addition to the best practice research highlighted in this report, Metrolinx and the University of Toronto recently released a series of reports on active travel trends in the GTHA. As referenced on the previous page, the research confirms the declining trend in active school travel, showing that the number of children and youth walking or biking to school over the past 25 years has declined, while the number being driven or driving more than doubled. Building on this report, Metrolinx is continuing work with the University of Toronto, supporting research on factors influencing active school travel.
Timeline: Highlights of ASST Work in the GTHA

1996
ASRTS introduced to Durham, Peel, York, Hamilton and Halton.

1997-2003
Stepping it Up Pilot^9 delivered at 30 elementary schools. Led by Metrolinx in partnership with Region of Peel, City of Hamilton, Green Communities Canada and University of Toronto.

2009 & 2011
Built key background research: Successes, Policy Context, Barriers & Enablers

2009-2012
Strategy Roadmap for Ontario-Wide ASST Coordination^2 and Implementation Plan completed.

2012-2013
Metrolinx launched parent infographics campaign.\(^{10}\)

2013-2014
University of Toronto Cost/Benefit Analysis Report completed

2014
GTHA ASST Hub established and work began on implementation plan.

2015
Metrolinx and Cycle Toronto launched 1st Bike to School Week.

2016
Series of School Travel Trends reports\(^{11}\) published by Smart Commute and University of Toronto.

Regional Planning for School Travel project began.
Key Highlights from Each Region

**Durham Region** began working on Active & Safe Routes to School (ASRTS) programming in 1998 with Durham Region Health Services taking the lead at the regional level. Over the years, Durham Region has maintained steady involvement with ASST work, trying out a number of different initiatives including introducing a walking school bus, promoting ASRTS events, participating in a School Travel Planning pilot project, and creating an ASRTS manual in Ajax.

**Southwood Park Public School Bike Club trip to library**

**Halton Region** has been working to get more children walking and wheeling for the school journey since the late 1990s. For many years, Halton Region Public Health promoted ASRTS events at several schools from both school boards. In 2007, the Halton ASRTS Committee was formed, which was later renamed the Halton Region ASST Hub. In 2008, they initiated a comprehensive one-year ASRTS pilot involving eight schools. That was later expanded to 25 schools, with facilitation provided by a Health Promoter who was seconded to the Halton District School Board. The Hub began working with a consultant to develop an ASST Communications Plan in 2016.

**King’s Road Public School students proudly display their T-shirts celebrating walking**

**The City of Hamilton** also has a long history of engaging in ASST work. They began the work in 1999 as a participant in a Green Communities Canada project to expand Active and Safe Routes to School programming across Ontario. Since then, Hamilton has expanded the type of work being done beyond encouragement and education to include an emphasis on planning and engineering for safe and inviting walking and cycling routes. Over time, the number of stakeholders involved in the work has grown substantially, demonstrating the wide-spread commitment in the community to increase active transportation rates among children and youth. Hamilton established an ASRTS Committee in 2003 which was renamed the Hamilton ASST Hub in 2015.

**Hamilton students learn about bicycle maintenance**
Peel Region also began working with Green Communities Canada in the late 1990s to introduce ASRTS programming at its schools. The work was undertaken initially by traffic safety committees in Mississauga and Brampton, and by 2002 the ASRTS activities had expanded to be regional in scope and a regional committee was established—the Peel Safe & Active Routes to School Committee. The committee has overseen an impressive amount of work in the region, including the creation of an assessment tool for new school infrastructure, the development of a Walk to School Start-Up Kit, participation in Metrolinx’s Stepping It Up project, and a regional School Travel Planning program.

The City of Toronto has the longest history of involvement with ASST work in all of Ontario; that is where the ASRTS program was first introduced in the mid-1990s, based on the Safe Routes to School initiative in the UK. Since then, Toronto has remained active in ASST work, participating in the pilot testing of almost all ASRTS activities and strategies led by Green Communities Canada. Toronto was also the site of the University of Toronto-led Build Environment and Active Transport (BEAT) research project.

York Region began working with Green Communities Canada on ASRTS programming in the late 1990s and soon after formed an ASRTS stakeholder committee (in 1999). Since 2008, the region has been an innovator in the province, having a full-time staff position dedicated to working on ASST initiatives. The combination of having a strong stakeholder committee and a full-time person dedicated to working on ASST has helped York Region accomplish much in its two decades of school travel work. School Travel Planning (STP) efforts in York Region began with two Markham schools participating in a national STP project. The work has expanded significantly and as of July 2014, 42 schools were engaged in the STP process.
The purpose of this project was to engage with each of the six regions of the GTHA to identify priority actions that they may use to inform ASST action plans within their jurisdiction. In addition to this, the project team was tasked with identifying common strengths and challenges across all regions, establishing a baseline for stakeholder involvement, and identifying potential measures of success.

This section of the report presents each of these key outcomes in turn, describing the project findings for each:
1. Emerging ASST Priorities Table
2. GTHA-wide Strengths & Challenges
3. Stakeholder Mapping
4. Measures of Success

Emerging ASST Priorities

The table on the next page presents the most common emerging ASST priorities identified by stakeholders in the six regions of the GTHA, organized into the six key elements described on page 6.

The table was compiled by reviewing each of the regional reports and identifying common, emerging ASST priorities. Within each report, priorities were identified through consultation and research. The key sources of information included:
- Consultation meetings;
- Stakeholder interviews;
- Regional workshop; and
- Online research and literature review.

Only those priorities common to two or more of the six regions were chosen for inclusion in this GTHA-wide report.
## Emerging ASST Priorities across the GTHA

### Public & Political Support
- **Raise the profile of ASST city-wide - Identify ASST ambassadors/ Celebrate successes/ Develop online presence**
- **Presentation of project findings to Regional decision makers**

### Resources
- **Secure funding for dedicated ASST Coordinator role**
- **Secure $ funding to develop tools/resources/programs identified under Regional Coordination (below)**
- **Secure in-kind resources (staff participation and support) from specific stakeholder**
- **Secure $ funding to develop tools/resources needed for implementation or expansion of existing plan/program**
- **Explore sustainable, long-term funding options and private sponsorship opportunities**
- **Document existing programs, resources, policy work and staff time available for supporting ASST**

### Policies, Plans & Standards
- **Develop policy and design standards that are supportive, building ASST into existing and emerging policy**
- **Encourage ASST-informed decisions at development planning stage (infrastructure/ school sites)**
- **Undertake policy review to identify gaps for ASST-supportive policy**
- **Establish an ASST Charter to make a public declaration of commitment to ASST**

### Regional Coordination*
- **Develop/Implement an ASST Communication Plan**
- **Develop/Implement Strategic Action Plan for regional ASST**
- **Develop/maintain a Stakeholder Inventory**
- **Coordinate, monitor and develop existing School Travel Planning program/pilot projects**
- **Continue existing committee/hub - clearly define roles and responsibilities of members**
- **Promote knowledge sharing by organising workshops, participating in events, developing online resources**
- **Establish a committee/hub to coordinate ASST initiatives across the region**
- **Create a Working Group/Sub-committee with a specific purpose**

### Community Capacity
- **Identify/designate a staff person to lead, oversee and coordinate ASST initiatives & stakeholders**
- **Organise School Travel Planning training**

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* "Regional" as used here refers to single- and upper-tier municipalities, not the GTHA Region.
### Emerging ASST Priorities across the GTHA (continued)

<table>
<thead>
<tr>
<th>Local ASST Actions</th>
<th>Number of regions that identified as a priority</th>
</tr>
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<tbody>
<tr>
<td><strong>Evaluation</strong></td>
<td></td>
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<tr>
<td>Improve data collection tools to evaluate ASST outcomes – particularly travel modes and attitudes</td>
<td>5</td>
</tr>
<tr>
<td>Improve data collection to support evaluation of STP Process (individual STP Action Plans and program overall)</td>
<td>4</td>
</tr>
<tr>
<td><strong>Engineering</strong></td>
<td></td>
</tr>
<tr>
<td>Improve Active Transportation infrastructure and connectivity around school sites</td>
<td>5</td>
</tr>
<tr>
<td>Coordinate on infrastructure development between STP program findings and municipal decision making</td>
<td>3</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
</tr>
<tr>
<td>Implement Active Transportation Lesson Plan resources (under development by Metrolinx)</td>
<td>4</td>
</tr>
<tr>
<td>Develop educational materials targeting parents to raise awareness of benefits and address barriers</td>
<td>3</td>
</tr>
<tr>
<td>Teach active transportation skills to students (Road safety, cycling and pedestrian skills workshops)</td>
<td>3</td>
</tr>
<tr>
<td>Increase parent’s direct involvement in ASST initiatives e.g. walkabout surveys</td>
<td>2</td>
</tr>
<tr>
<td>Create a School Welcome Pack containing ASST promotion materials for newcomers, JK/SK, new enrollments</td>
<td>2</td>
</tr>
<tr>
<td>Align STP program with Ontario ECO schools program, Environmental Stewardship section</td>
<td>2</td>
</tr>
<tr>
<td><strong>Encouragement</strong></td>
<td></td>
</tr>
<tr>
<td>Organise and promote regular region-wide events that encourage walking and wheeling for school travel</td>
<td>4</td>
</tr>
<tr>
<td>Create template/tools for school communities to map and promote walking routes</td>
<td>3</td>
</tr>
<tr>
<td>Explore opportunities for Walking School Bus/ Cycle Train programs</td>
<td>2</td>
</tr>
<tr>
<td><strong>Enforcement</strong></td>
<td></td>
</tr>
<tr>
<td>Increase frequency of bylaw enforcement attendance around school sites</td>
<td>3</td>
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</tbody>
</table>
GTHA-Wide Strengths & Challenges

The consultation process for this project revealed that while each region has unique strengths and challenges related to ASST work, there are some commonalities across the regions -these are summarized below. These commonalities show that there is a strong foundation for ASST programs and initiatives to be successful in the GTHA, but the lack of committed resources is a key barrier to progress.

GTHA-Wide Strengths

Below is a list of 5 strengths that apply GTHA-wide.

1. **Stakeholder involvement and commitment** is one area of consistent strength in all six regions. That commitment is demonstrated through the existence of an ASST steering committee or the intention to create one, and broad participation by varied stakeholders in that committee. Some of the regional stakeholders have demonstrated their commitment by signing an ASST Charter, contributing cash and in-kind resources to this work, and creating committees that advise council, e.g., active transportation advisory committees.

2. **Plans that are supportive of active transportation** in general are in place in all of the regions, e.g., pedestrian and/or cycling master plans.

3. Some level of **community capacity** to do ASST work exists in all of the regions. (“Community capacity” refers to the regional and/or municipal delivery agents and local facilitators working on ASST activities, whether through paid positions, secondments, or in-kind time from stakeholders or volunteers.)

4. Some ASST-related **data collection** is being done in each region, although the type of data and consistency of performance measurement vary across regions.

5. All regions have implemented ASST actions of some sort for more than two decades, although the exact actions vary by region.

*Gateway Public School students participating in Bike to School Week*
GTHA-Wide Challenges

There are many common challenges faced by all or many of the six GTHA regions:

1. While stakeholder support and commitment is included in the list of strengths above, there are also several challenges related to stakeholder engagement.
   a. There remains a need—to varying degrees—for engagement of some stakeholder groups or **deeper engagement** by stakeholders that are already involved. In many regions, this is true for the school boards and/or student transportation services.
   b. There is widespread need for **leadership** of ASST work, i.e., one or two organizations to “own” the work and provide direction to the other stakeholders.
   c. Multiple regions noted the need to clarify the **roles and responsibilities** of stakeholders.
   d. Stakeholder engagement is particularly challenging in the two-tier municipalities because of the **complexity of the two-tier governance structure** and the resulting large number of ASST stakeholders.

2. Lack of sufficient **resources** was universally noted as a challenge.

3. While four of the six GTHA regions have articulated goals for ASST, **measurable targets** are needed.

4. While all of the regions do have some level of community capacity, there is universal need for more. School boards, teachers and principals have many other important priorities and thus lack time to work on ASST. There is clear need for **dedicated ASST staff** to provide intensive support to schools.

5. Three of the regions mentioned concerns about **liability** as a challenge.

6. **School siting** and/or design are common challenges, e.g., closure of walkable schools and opening super schools with large catchment areas, quality of active transportation infrastructure and maintenance.

7. **Parental attitudes** were universally mentioned as a challenge, and related to that is the challenge of trying to change those attitudes. Parents are a challenging audience to reach and engage with, and they have many “concerns” that must be overcome, i.e., safety (real or perceived), and convenience. Language barriers can also add to the challenge of engaging parents.

---

*Stakeholders engaged in discussion at the Region of Durham’s regional planning for school travel workshop*
Stakeholder Mapping

ASST is a shared societal issue, with impacts across numerous disciplines. It is not “owned” by a single organization or government department, but instead requires the active participation of a broad range of stakeholders. The ‘Stakeholder Map’ diagram on the following page shows the key stakeholders typically involved in the planning coordination, and implementation of ASST in the GTHA regions. These key stakeholders have been engaged in each of the six regions of the GTHA to varying degrees.

Through the consultation process, stakeholder engagement was mapped and a ‘Stakeholder Map’ diagram was created for each region. The stakeholders were organized into the categories of roles defined below. The Stakeholder Map diagrams depict, at-a-glance, the current status of stakeholder engagement in each region. The Stakeholder Maps provide a basis for planning communications, and can be used to identify targets for future engagement.

The project team reviewed all six regional stakeholder maps and were able to draw out commonalities amongst them. While the specific stakeholders involved within each region varied, the general stakeholder groups present and their means of participation in ASST were similar. The following stakeholder group definitions below and stakeholder map on the following page capture the key players and structure common to the majority of the six regions.

Overall, this exercise identified that each region contains a large and varied number of stakeholders working on ASST, particularly two-tier municipalities. It also depicts the important role both municipalities and school boards play as decision makers and partners in leading ASST.

Definitions of Terms Used on Stakeholder Map

**Advisory Groups**
Groups that have an interest in ASST work and typically become involved to contribute to specific deliverables and provide a valued external perspective. Includes technical committees and relevant working groups.

**Decision Makers**
High level organizations that have decision-making authority—at all levels of government. Responsible for strategic planning, funding decisions, coordinating the regional committee, providing final sign-off and maintaining program sustainability.

**Community Representatives**
Interested groups that represent the general public and community advocacy initiatives. Provide residents’ perspectives as well as support for programming and outreach.

**Staff Contributors**
Regional/municipal staff members who are involved with the day-to-day operations, coordination, implementation and evaluation of ASST initiatives.

**Local Delivery Agents**
Stakeholders who provide on-the-ground capacity and resources for ASST intervention work; implement the five Es at the local level within schools.
This diagram shows the key stakeholders typically involved in the planning, coordination, and implementation of Active & Sustainable School Travel (ASST) in the Greater Toronto and Hamilton Area (GTHA) regions.
Measures of Success

The adoption of Key Performance Indicators (KPIs) and the regular collection of data is important for sustaining and growing ASST in the GTHA by building an evidence base from which to:

- measure the performance of ASST initiatives (against goals/targets/objectives);
- demonstrate the benefits of ASST;
- encourage further investment in ASST; and
- continuously evaluate and improve the processes being used.

There is no current standard or best practice for measures of success for ASST across the GTHA, hence this project has sought to identify what ASST-related data is currently being collected in each region, as a baseline from which KPIs could be developed in the future.

Data Collection

Measuring the performance of ASST initiatives requires consistent data collection at both the community and school level, and at the regional/city level. The data collected helps to measure the performance of both the ASST processes being used and the success in achieving the desired outcomes for ASST as defined in the diagram below.

The first step to strengthening program monitoring and data collection is to take stock of what is currently being collected and by whom. The information in the next four pages provides a summary of the data that is being currently being collected in the GTHA and additional data sources that could be useful to collect in the future. The information was compiled by reviewing each of the regional reports and identifying data sources that were common to two or more of the six regions.

Vision, Goals and Objectives for ASST

Metrolinx 2031 Vision for the GTHA:
60% of children in the GTHA will walk or cycle for school trips

Regional goals for ASST have been developed by four of the six regions of the GTHA:
- Hamilton ASST Hub Goals
- Halton Region ASST Hub Goals
- Peel Active Transportation in Schools Strategy Framework Goals
- York Region ASRTS Program Goals

ASST Processes

The activities, programs, systems and organizational structures that are expected to produce desired outcomes. Examples include:
- Region-wide ASST events, e.g., Bike to School Week
- School Travel Planning programs
- Funding and human resources dedicated to ASST
- Stakeholder committees

Desired Outcomes for ASST

The positive changes to human behaviours, health and the environment that we seek to achieve. Some of the desired outcomes are expected to occur as direct effects of the ASST processes, while others are longer term benefits that may occur as a result of improved ASST. Examples include:
- More students walking and cycling to school
- Improved student wellbeing
- Reduced traffic congestion
- Better air quality
Data Collection for Measuring ASST Processes—Key Themes

1. Assessing potential for ASST
   • The School Boards (via their Student Transportation consortia) hold rich data that is relevant to planning and evaluating ASST processes, e.g., number of students who live in the walk zone and have a walking route available, and percentage of bussed students using courtesy bussing.
   • School Boards may hold data about EcoSchools program participation levels, which can be a good indicator of interest in promoting sustainable transportation. These types of data can help to focus ASST efforts on school communities where there is a high proportion of students living within walking distance of the school and/or where staff and students are keen to promote ASST.

   **OPPORTUNITY:** The bussing data, in particular, is useful for identifying school bus ridership levels and encouraging students who live in the bus zone to use the school bus rather than travelling by private car.

2. Developing ASST-supportive policy and infrastructure
   School boards and municipalities (area and regional) collect data—to varying degrees—related to the built environment such as: number of new bike racks installed at/near school sites, and number and location of pedestrian crossings. These types of data are useful for informing the development of ASST-supportive policy and infrastructure plans and for tracking progress on policy and plan implementation.

   **OPPORTUNITY:** By working together and sharing data, school boards and municipalities can produce high quality ‘routes to school’ maps tailored to each school community. These maps highlight ASST information—school crossing guards, crosswalks, trails, walking times, etc.—and help families plan an active school journey. The most sophisticated example of this is Peel’s online School Trip Planner.

3. Assessing School Travel Planning
   A significant amount of data is collected as part of the School Travel Planning programs in Hamilton, Peel and York. This data is used to evaluate the performance of the STP programs, each led by Public Health staff. Hamilton and Peel have both developed tracking tools for their STP programs. Peel has also developed Key Performance Indicators (KPIs) for their STP program and Hamilton has an ASST certification scheme for participating schools. Examples of the type of data collected: number of schools engaged in STP program and number of school champions.

   **INSPIRATION:** Regions interested in developing a process for tracking and evaluation of their STP programs could look to Hamilton and Peel for inspiration and knowledge sharing.

4. Regional coordination of events and stakeholder participation
   The majority of the regions in the GTHA use some form of online event registration to track participation of students and schools in ASST events. Regions currently either operate their own online registration tool, or direct schools to use online event registration surveys provided by other organizations:
   • Bike to School Week (May/June)—CultureLink & Metrolinx
   • Walk to School Month (Oct) & Winter Walk Day (Feb/Mar)—Green Communities Canada

   **OPPORTUNITY:** There is opportunity to increase coordination between the different registration surveys being used and potentially work towards operating a single GTHA-wide online event registration tool, in order to standardize the data collected and develop a detailed picture of participation levels across GTHA.

See Appendix 3 for tables listing the key data collection activities in the GTHA as a whole. See Appendix 4 for a table showing details of data collection for each of the six regions, including the collection tools being used.
Data Collection for Measuring Desired Outcomes for ASST—Key Themes

1. Measuring travel behaviour and travel mode
A significant amount of data on travel behaviour and travel mode outcomes is collected as part of the STP process. The key tools currently used are the classroom travel survey and the family survey.

While the majority of surveys being used in the GTHA are based upon the templates in the Canadian School Travel Planning model, each region has, over time, adapted and developed their own version of these surveys and methods of collection. Hence the format, frequency and consistency of data collected is variable across the regions, and overall there are currently no standard data collection tools in use consistently across the GTHA.

**OPPORTUNITY:** Several regions in the GTHA are interested in creating an online trip-tracking tool to collect travel mode data in the future and determine the level of active school travel (e.g., distance travelled or duration of physical activity on the school journey).

2. Measuring traffic conditions, safety and accessibility
Municipalities (area and regional) generally collect data relevant to traffic conditions, safety and accessibility such as the number of vehicles using kiss ‘n ride on a public street, and the number and location of parking and traffic violations.

School boards may be able to supplement this data with records of incidents that occur on school sites and traffic-related complaints received from schools, parents and community members.

**OPPORTUNITY:** Managing traffic and supervising students on school sites at peak traffic times can be time-consuming for school staff and some regions of the GTHA are interested in measuring this in the future.

3. Assessing physical and mental health benefits
While all of the public health agencies in the GTHA collect data related to the physical and mental health of students, the majority of the data is limited to specific age groups and there is currently only very limited data that links health outcomes with ASST.

**CHALLENGE:** While there is a desire to collect data that links health outcomes with ASST more extensively in the future, it was acknowledged by most regions that collecting this type of information would be very difficult or unfeasible.

4. Measuring environmental benefits
Monitoring of air quality near schools was considered important by almost all regions and air quality data is currently being collected in Hamilton, Peel and Toronto.

**INSPIRATION:** In Hamilton the ‘Fresh Air Kids’ program for schools has used mobile air monitoring to create ‘School Neighbourhood Air Quality Maps.’

See Appendix 3 for tables listing the key data collection activities in the GTHA as a whole. See Appendix 4 for a table showing details of data collection for each of the six regions, including the collection tools being used.
The Regional Planning for School Travel project engaged the six regions of the GTHA in a year-long consultation process to identify, for each region, a baseline for school travel work, highlight opportunities and challenges, identify future priority actions and catalog metrics currently used to track success. To achieve these outcomes, the project team conducted case study research with Ryerson University, reviewed the 2013 ASST Strategy Roadmap and other regional ASST materials, and conducted extensive stakeholder consultation including interviews, workshops and smaller stakeholder meetings.

The culmination of this project is captured in six region-specific reports and this summary report. This report draws from the results of all six regions, summarizing the key findings and identifying areas of commonality. Ownership of the six individual reports lies with the respective region, to use towards their ASST strategy and action plans as they see fit. Complementing each region’s individual work, the content of this report is intended to be used by Metrolinx and the GTHA Hub to advance ASST across the region as a whole.

Metrolinx and the six regions have the opportunity to take collective action on the common strengths, challenges and emerging priorities identified by this project, by leveraging the GTHA ASST Hub to connect, make decisions and coordinate action. The key opportunities for the GTHA ASST Hub and Metrolinx to work together to support ASST in all six regions of the GTHA are identified in the table below.

<table>
<thead>
<tr>
<th>Public &amp; Political Support</th>
<th>Resources</th>
<th>Policies, Plans &amp; Standards</th>
<th>Regional Coordination*</th>
<th>Community Capacity</th>
<th>Local ASST Action Items</th>
</tr>
</thead>
</table>
| • Continue to raise the profile of ASST within the GTHA, through the development of key research and reports and the coordination of GTHA-wide activities like Bike to School Week | • Facilitate the collection and standardization of ASST data across the GTHA, and use this data to build the business case for additional resources and community capacity | • Facilitate subcommittees and working groups, as needed, to jointly progress policies, plans and standards that are supportive of ASST | • Continue to facilitate the GTHA ASST Hub, to share local activities and best practices, coordinate and amplify common initiatives  
• Work collaboratively to deliver a communications strategy focused on educating parents and changing their attitudes and behaviours toward ASST | • The five actions above will support and elevate ASST actions at the local level, and help to optimize current resources for ASST and make the case for additional resources to build community capacity |
References


9. Information about the Stepping It Up project can be found at: http://www.metrolinx.com/en/projectsandprograms/steppingitup/stepping_it_up.aspx

10. Information about Metrolinx’s parent infographics campaign can be found at: http://www.metrolinx.com/en/projectsandprograms/schooltravel/asst.aspx

## Appendix 1: Regional Statistics

<table>
<thead>
<tr>
<th>Durham</th>
<th>Halton</th>
<th>Hamilton</th>
<th>Peel</th>
<th>Toronto</th>
<th>York</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>645,862&lt;sup&gt;8&lt;/sup&gt;</td>
<td>548,435&lt;sup&gt;8&lt;/sup&gt;</td>
<td>536,917&lt;sup&gt;8&lt;/sup&gt;</td>
<td>1,381,739&lt;sup&gt;8&lt;/sup&gt;</td>
<td>2,731,571&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
<tr>
<td>Area Municipalities Population</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N/A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Area</td>
<td>2,524 km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>964 km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,117 km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,247 km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>630 km&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Population Density</td>
<td>256 persons per km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>569 persons per km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>481 persons per km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>1,108 persons per km&lt;sup&gt;2&lt;/sup&gt;</td>
<td>4,334 persons per km&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>number of School Boards</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• English Public</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• English Catholic</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• French Public</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>• French Catholic</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total number of Schools (JK-Gr. 12)</td>
<td>216</td>
<td>169</td>
<td>165</td>
<td>413</td>
<td>779</td>
</tr>
</tbody>
</table>
School Travel Planning is a process that involves diverse stakeholders in the development and implementation of a school travel plan—one plan per school. The action plan portion of a school travel plan includes a wide range of activities, commonly organized under the “5 Es.” The School Travel Planning process involves five broad stages as shown in the black circles in the diagram below. While the STP model is standardized, practitioners are provided flexibility with respect to how they carry out each stage.

A process like “School Travel Planning”—even if it called something else—is recommended as the ideal model for ASST work because it is comprehensive, yet flexible. With sufficient resources, it makes sense that all communities would bring stakeholders together (set-up) and collect baseline data before deciding what actions to take. Once an action plan is formed, the actions within it are implemented, followed by data collection, evaluation, and refinement of the plan as necessary.

Some communities engage in ASST work under the “Active & Safe Routes to School” (ASRTS) banner, in part because ASRTS was introduced in Ontario before the concept of School Travel Planning was developed. Although the full ASRTS approach did recommend doing some data collection and involving diverse stakeholders, in practice, ASRTS typically focuses on a limited number of education and encouragement activities, and the work is often handled at the local level by public health staff working in isolation.

* ASRTS work commonly jumps right to the implementation of a standard set of activities—i.e., the same activities at all schools being worked with—without tying into an STP process.
This table lists the key **ASST processes** data currently being collected—to some degree—by the majority of the six regions in the GTHA. Each metric included in the table is being collected by two or more of the six regions.

The table also identifies potential additional data sources related to “ASST processes” not currently collected, but identified by local stakeholders as targets for future collection. See Appendix 4 for a table showing summary details of data collection for each region, including the data collection tools being used.

<table>
<thead>
<tr>
<th>ASST Process</th>
<th>Current Data Collection</th>
<th>Targets for Future Measurement</th>
</tr>
</thead>
</table>
| Assessing potential for ASST                                                | • number of students who live in walk zone & have walking route available<br>• Inventory or assessment of existing Active Transportation infrastructure<br>  
  • on school site<br>  
  • around school<br>  
  • number and certification levels of EcoSchools | • number of bike racks at school site (relative to student population)<br>• number of schools that ran an AT campaign as part of EcoSchools Environmental Stewardship |
| Developing ASST-supportive policy and infrastructure                        | • number of new bike racks installed at/near school sites<br>• number of schools with a walking routes map<br>  
  • number and location of pedestrian crossings<br>  
  • number and location of school crossing guards<br>  
  • % of planned AT Infrastructure that has been implemented<br>  
  • Frequency and type of traffic calming features near school | • Integrating ASST into policy—number of gaps/ opportunities addressed<br>• number of development applications that regional ASST committee has commented on |
| School Travel Planning                                                       | • number or % of schools ready for STP<br>• number of schools engaged in STP program<br>  
  • number of years participating in STP process<br>  
  • number of school champions<br>  
  • number of schools with STP Action Plan<br>  
  • % of STP Actions completed (and category of action)<br>  
  • % of surveys completed and returned (travel surveys and family surveys)<br>  
  • number of schools that have completed walkability audits/walkabout surveys | • number of parents engaged in STP |
| Regional coordination, events and stakeholder participation                 | • number of schools & number of people participating in regional ASST events and initiatives<br>  
  • Walk to school days<br>  
  • Bike to school week<br>  
  • % of regional ASST Action plan completed<br>  
  • Participation of stakeholders (number of stakeholders engaged, attendance at meetings, resource contribution)<br>  
  • % of area municipalities participating in ASST programs/initiatives | • Integrating ASST into curriculum—number of examples of ASST-related lessons<br>• number of students participating in walking/bike club<br>• Staff resources dedicated to ASST ($ & time) now and for future<br>• ASST work being done by each stakeholder |
This table lists the key “desired outcomes for ASST” data currently being collected—to some degree—by the majority of the six regions in the GTHA. Each metric included in the table is being collected by two or more of the six regions.

The table also identifies potential additional data sources related to ASST outcomes not currently collected, but identified by local stakeholders as targets for future collection. See Appendix 4 for a table showing summary details of data collection for each region, including the data collection tools being used.

<table>
<thead>
<tr>
<th>Desired Outcome</th>
<th>Current Data Collection</th>
<th>Targets for Future Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metric</strong></td>
<td><strong>Tool</strong></td>
<td><strong>Metric</strong></td>
</tr>
<tr>
<td><strong>Travel Behaviours, Decisions, Influences, and Travel Modes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Factors influencing school travel behaviours and choices</td>
<td>• Survey (Family/Smart Commute/Opinion)</td>
<td>• No additional</td>
</tr>
<tr>
<td>• Awareness of and attitudes towards ASST</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• % of parents who are comfortable allowing child to walk/bike to school, or willing to walk/bike with them</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Level of Active Sustainable School Travel % of travel modes</td>
<td>• Classroom Travel Survey • Traffic counts</td>
<td>• Level of Active School Travel (number km travelled by walking and cycling)</td>
</tr>
<tr>
<td>• number of bikes in bike racks at school % bike rack usage at school</td>
<td>• Bike counts</td>
<td></td>
</tr>
<tr>
<td>• Level of cycling activity on trails and bike lanes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Level of school bus ridership (% of eligible students who regularly use the school bus)</td>
<td>• Bussing database • School bus passenger counts</td>
<td></td>
</tr>
<tr>
<td>• Average distance travelled to school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• % of bussed students using courtesy bussing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Traffic conditions, safety and accessibility</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• number of vehicles using kiss ‘n ride</td>
<td>• Traffic counts • Municipal data (bylaw) • Smart Commute &amp; Family Surveys • Site audit/survey • Collision reporting • Municipal Asset Database</td>
<td>• number of vehicles at key intersections near school site</td>
</tr>
<tr>
<td>• on school site • on public street • number and location of parking violations • number and location of traffic violations • number and location of traffic complaints • Proportion of school journeys connected to parent’s work commute • School site safety • Pedestrian-Motor Vehicle Collisions</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benefits: Health &amp; Well-Being &amp; Academic Performance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physical health of children/youth • Occurrence of chronic preventable disease in children/youth</td>
<td>• Public Health statistics/surveys</td>
<td>• Student experience and Social Health • number of minutes of physical activity associated with school journey • Academic results • Teacher experience</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Benefits: Environmental</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Air quality near schools – pollution levels</td>
<td>• Air quality monitoring &amp; modelling</td>
<td>• number of vehicles observed idling</td>
</tr>
</tbody>
</table>

The metrics and tools cited above represent ASST-related data sources known at the time of this report. The lists provide a basis from which GTHA ASST stakeholders may evaluate which measurements would be most valuable as Key Performance Indicators (KPIs) for the GTHA as a whole. See Appendix 4 for a table showing summary details of data collection for each region, including the data collection tools being used.
Appendix 4: Data Collection in Each Region

The two tables below list the key ASST-related data that is currently being collected—to some degree—by each of the six regions in the GTHA. The tables also identify potential additional data sources not currently collected, but identified by stakeholders as targets for future collection. The information was compiled through research and consultation with ASST stakeholders in each region. The notes within the tables indicate the type of tools that are, or could be, used to collect the data items listed. The tables provide a detailed list of potential metrics for measuring the success of ASST processes and outcomes, and provide an overall indication of the current level of data collection. The tables do not provide an exhaustive list of all current data collection that is happening, nor any evaluation of the quality of that data collection.

### Key to Tables:

- Blue cells contain data items that a region has indicated they are currently collecting to some degree.
- Green cells contain data items that a region has indicated that they are interested in collecting or planning to collect in the future.

### Data Collection—ASST Processes

#### Measurement at School Level

<table>
<thead>
<tr>
<th>Metric</th>
<th>Hamilton</th>
<th>Halton</th>
<th>Peel</th>
<th>Toronto</th>
<th>York</th>
<th>Durham</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of years participating in STP process</td>
<td><strong>STP program reporting</strong></td>
<td><strong>STP program reporting</strong></td>
<td><strong>PHN tracking tool</strong></td>
<td><strong>STP process records</strong></td>
<td><strong>STP process records</strong>*</td>
<td><strong>STP process records</strong>*</td>
</tr>
<tr>
<td>Number of school champions</td>
<td><strong>STP program reporting</strong></td>
<td></td>
<td><strong>PHN tracking tool</strong></td>
<td><strong>STP process records</strong></td>
<td><strong>STP process records</strong>*</td>
<td><strong>STP process records</strong>*</td>
</tr>
<tr>
<td>Number of parents engaged in STP</td>
<td></td>
<td><strong>PHN tracking tool</strong></td>
<td></td>
<td><strong>STP process records</strong></td>
<td><strong>STP process records</strong>*</td>
<td><strong>STP process records</strong>*</td>
</tr>
<tr>
<td>% of STP Actions completed</td>
<td><strong>STP program reporting</strong></td>
<td><strong>STP program reporting</strong></td>
<td><strong>PHN tracking tool</strong></td>
<td><strong>STP process records</strong></td>
<td><strong>STP process records</strong>*</td>
<td><strong>STP process records</strong>*</td>
</tr>
<tr>
<td>% of surveys completed and returned (travel surveys/family surveys)</td>
<td><strong>STP program reporting</strong></td>
<td><strong>STP program reporting</strong></td>
<td><strong>PHN tracking tool</strong></td>
<td><strong>STP process records</strong></td>
<td><strong>STP process records</strong>*</td>
<td><strong>STP process records</strong>*</td>
</tr>
<tr>
<td>Inventory or assessment of existing AT infrastructure on and surrounding school site</td>
<td>Site audit + GIS survey (sidewalks)</td>
<td>Site audit/survey</td>
<td>Site audit</td>
<td>Walkabout survey (STP process)</td>
<td>Walkabout survey (STP process)</td>
<td>Walkabout survey (STP process)</td>
</tr>
<tr>
<td>Potential for AT—number of students who live in walk zone &amp; have walking route available</td>
<td>Student transportation data</td>
<td>Bussing database</td>
<td>Bussing database</td>
<td>School profiles database (TSTG)</td>
<td>School Board database</td>
<td>School Board database</td>
</tr>
<tr>
<td>Number and % of students living in the bussing zone</td>
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### Acronyms & Symbol Used:

- AT—Active Transportation
- PHN—Public Health Nurse
- SCG—School Crossing Guard
- STP—School Travel Planning
- TSTG—Toronto Student Transportation Group
- UofT—University of Toronto
- YU—York University

* denotes currently-collected data that a region has indicated that they would like to improve the quality of the data collection process.
### Measurement at School Level

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<thead>
<tr>
<th>Metric</th>
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<tbody>
<tr>
<td>Number of students participating in walking/bike club</td>
<td>Club attendance record</td>
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<tr>
<td>Bike rack storage capacity at school site</td>
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<td>Bike rack count + student enrolment</td>
<td>Bike rack program monitoring</td>
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<tr>
<td>Number of crossing guards within school catchment area</td>
<td>Crossing guard program reporting</td>
<td>Crossing guard program reporting</td>
<td>School profiles database (TSTG)</td>
<td>School profiles database (TSTG)</td>
<td>SCG program reporting</td>
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<tr>
<td>Walkability of school neighbourhood</td>
<td>Walkabout survey (STP program)</td>
<td>Walking hazards assessment</td>
<td>Walkabout survey (STP process)</td>
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### Measurement at City-wide/Region-wide Level

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<tbody>
<tr>
<td>Number of students and schools participating in regional/seasonal ASST events</td>
<td>Online event registration survey</td>
<td>Participation survey</td>
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<td>Number of people participating in ASST programs</td>
<td>AT program reporting</td>
<td>Municipal AT program reporting</td>
<td>Bike to School program</td>
<td>Municipal AT program reporting</td>
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<td>Number and certification levels of schools participating in EcoSchools program</td>
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<td>Number of EcoSchools that ran an AT campaign as part of EcoSchools Environmental Stewardship</td>
<td>EcoSchools program</td>
<td>EcoSchools program</td>
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<tr>
<td>Number or % of schools ready for STP</td>
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<td>Number of schools engaged in STP program</td>
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<td>STP program reporting</td>
<td>STP program reporting</td>
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<td>STP program tracking tool</td>
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<tr>
<td>Number of schools that have completed STP data collection surveys (classroom travel, family, walkabout)</td>
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<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program tracking tool</td>
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<tr>
<td>Number of schools with STP Action Plan</td>
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<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program tracking tool</td>
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<tr>
<td>% of STP Actions completed (and category of action)</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program tracking tool</td>
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<tr>
<td>Integrating ASST into curriculum—number of examples of ASST-related lessons</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
<td>STP program reporting</td>
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<td>ASRTS Committee Monitoring</td>
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*STP program tracking tool
## Measurement at City-wide/Region-wide Level

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<tr>
<td>Number of schools with a walking routes map</td>
<td>STP program reporting</td>
<td>Audit/checklist</td>
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<td>Number and location of traffic-related bylaw enforcement patrols in school zone</td>
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<td>Bylaw reporting</td>
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<td>Number and location of pedestrian crossings</td>
<td>Public Works database</td>
<td>Municipal databases</td>
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<td>% of school crossing guard positions filled</td>
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<td>SCG program reporting</td>
<td>SCG program reporting</td>
<td>SCG program reporting</td>
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<tr>
<td>% of planned AT Infrastructure that has been implemented in school catchment</td>
<td>AT program reporting</td>
<td>Municipal AT program reporting</td>
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<td>Durham Regional Cycling Plan monitoring (Primary Cycle Network)</td>
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<tr>
<td>% of AT infrastructure maintained in winter in school catchment</td>
<td>Municipal AT program reporting</td>
<td>AT program reporting</td>
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<tr>
<td>Frequency and type of traffic calming features near school</td>
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<td>Surveys at school sites</td>
<td>Municipal asset database</td>
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<td>Overall standard of service for AT infrastructure in school catchment – index</td>
<td>Municipal databases</td>
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<td>City Transportation Services—Essential Links program (Sidewalks only)</td>
<td>Site surveys + GIS database = Index</td>
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<tr>
<td>Social media impact (number views, tweets, likes, shares)</td>
<td>Municipal AT program reporting</td>
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<td>Regional analysis (on request)</td>
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<tr>
<td>Number of ASST news items/media coverage</td>
<td>Municipal AT program reporting</td>
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<td>Regional analysis (on request)</td>
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<td>Participation of Stakeholders (number of stakeholders engaged, attendance at meetings, resource contribution)</td>
<td>ASST Hub committee records</td>
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<td>STP program tracking</td>
<td>YR-ASRTS Committee records</td>
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<tr>
<td>Staff resources dedicated to ASST ($ &amp; time) now and for future</td>
<td>Municipal AT program reporting</td>
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<tr>
<td>ASST work being done by each stakeholder</td>
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<td>Stakeholder survey</td>
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<td>Integrating ASST into policy—number of gaps/opportunities addressed</td>
<td>ASST Hub</td>
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<td>Policy review and monitoring</td>
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<td>% of regional ASST action plan items completed</td>
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<td>Municipal AT program reporting</td>
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<td>Traffic speeds in school zones—speed limits and observed speeds</td>
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<td>Transportation Services—School Zone Road Safety Analysis (Observed speeds)</td>
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<td>% of area municipalities participating in ASST programs/initiatives</td>
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<td>Municipal AT program reporting</td>
<td>AT program reporting</td>
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<td>YR-ASRTS Committee records</td>
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<td>Average distance travelled to school (‘home to school’ distance)</td>
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<td>Bussing database</td>
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<td>Performance of bussing services—punctuality and journey times of school bus routes</td>
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<td>Student transportation records (TSTG)</td>
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<td>Level of cycling activity on trails and bike lanes</td>
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<td>Traffic counts/ surveys</td>
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<tr>
<td>Level of active transportation and frequency of walking in neighbourhoods</td>
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<td>Rapid Risk Factor Surveillance System (RRFSS) Survey for Durham Region</td>
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<tr>
<td>Type of Outcome</td>
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<td>Travel Behaviours, Decisions, Influences</td>
<td>Factors influencing school travel behaviours and choices</td>
<td>Family survey</td>
<td>Family/opinion survey</td>
<td>Smart Commute &amp; family surveys</td>
<td>Family surveys (STP program records)</td>
<td>Family survey + AT to School and Physical Activity Survey *</td>
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<td>Awareness of and attitudes towards ASST</td>
<td>Family survey</td>
<td>Family/opinion survey</td>
<td>Smart Commute &amp; family surveys</td>
<td>Family surveys (STP program records)</td>
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<td></td>
<td>% of parents who are comfortable allowing child to walk/bike to school, or willing to walk/bike with them</td>
<td>Family survey</td>
<td>Family/opinion survey</td>
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<td>Family surveys (STP program records)</td>
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<tr>
<td>Travel Modes</td>
<td>Level of Active Sustainable School Travel % of travel modes</td>
<td>Hands-up classroom travel survey* (baseline only)</td>
<td>Classroom travel survey + traffic counts at school sites/corden counts</td>
<td>Traffic counts at school sites + classroom hands up/family survey</td>
<td>Toronto Public Health student survey + traffic counts at school sites—YU/ SickKids research + classroom hands up survey (STP program records)*</td>
<td>Traffic counts at school sites + classroom hands up/family survey</td>
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<td>Level of Active School Travel (number km travelled by walking and cycling)</td>
<td>Trip tracking tool</td>
<td>Trip tracking tool</td>
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<td>Number of bikes in bike racks at school/ % of bike rack usage at school</td>
<td>Bike counts</td>
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<td>BIke counts*</td>
<td>Bike counts (Ajax)</td>
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<td>Level of school bus ridership (number or % of eligible students who regularly use the school bus)</td>
<td>Classroom travel survey + bussing data</td>
<td>Classroom travel survey + bussing data + school bus passenger counts</td>
<td>Classroom travel survey + bussing data + school bus passenger counts</td>
<td>Classroom hands up + bussing data</td>
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<td>% of bussed students using courtesy bussing</td>
<td>Bussing database</td>
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<tr>
<td>Traffic conditions and travel demand management (TDM)</td>
<td>Number of vehicles using kiss ‘n ride</td>
<td>Traffic count</td>
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<td>Number of vehicles using public street kiss ‘n ride</td>
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<td>Number and location of traffic and parking violations in school zone</td>
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<td>Number and location of traffic complaints</td>
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<td>Number vehicles at key intersections near school site</td>
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<td>Volume/capacity from traffic counts</td>
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<td>Number of school traffic-related complaints to school staff/board</td>
<td>School profiles database (TSTG)</td>
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<td>ASRTS Coordinator records</td>
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<tr>
<td>Benefits: Health &amp; Well-Being &amp; Academic Performance</td>
<td>Amount of school staff time spent on traffic management and traffic complaints</td>
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<td>Student experience and mental/social health</td>
<td>Toronto Public Health Student Survey (Gr7-12)</td>
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<td>Benefits: Accessible and Safe Place</td>
<td>Proportion of school journeys connected to parent’s work commute</td>
<td>Smart Commute &amp; family surveys</td>
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<td>Family surveys (STP program records)</td>
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<td>Pedestrian-motor vehicle collisions</td>
<td>Collision reporting</td>
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<td>Transportation Services—School Zone Road Safety Analysis</td>
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<td>Frequency of unsafe traffic behaviours in and around school site (driver and pedestrian behaviours)</td>
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<td>Transportation Services—School Zone Road Safety Analysis (observed speeds) + surveys at school sites (UofT/YU/SickKids research)</td>
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<td>Benefits: Environmental</td>
<td>Air quality near schools—pollution levels</td>
<td>Air quality monitoring and modelling</td>
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<td>Number of vehicles observed idling</td>
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