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Item No. 13.1.2
Transportation Standing Committee
October 26, 2023

TO: Chair and Members of the Transportation Standing Committee

SUBMITTED BY: **Original Signed**

Cathie O'Toole, Chief Administrative Officer

DATE: September 11, 2023

SUBJECT: **Safe School Streets Pilot Program**

ORIGIN

Transportation Standing Committee, May 18, 2023 (Item 13.3)

MOVED by Councillor Mason, seconded by Councillor Mancini

THAT the Transportation Standing Committee request a staff report regarding establishing criteria for a pilot project to close school zones to vehicle traffic during pick up and drop off where the road configuration would allow it.

MOTION PUT AND PASSED.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter. R.S.N.S. 2008, c.39,

clauses 332 (b): The Engineer may temporarily close a street, or part thereof, for the protection of the public, to allow work to be done on the street or on lands and buildings adjacent to the street or for any other purpose beneficial to the public interest.

RECOMMENDATION

The Transportation Standing Committee recommends that Halifax Regional Council direct the Chief Administrative Officer to formalize the process for a Safe School Streets Pilot Program within HRM based on the principles outlined below in this report.

BACKGROUND

Safe School Streets road closures are strategies aimed at creating safer and more vibrant environments for students, pedestrians, and communities by temporarily limiting vehicle access to certain streets near schools. These initiatives prioritize the well-being and recreational needs of residents, especially children, by repurposing roads for activities such as walking, biking, playing, and socializing. A School Street is a car-free block beside a school open to walking, biking, and rolling during pick-up and drop-off (30 to 60 minutes depending on location). Typically, no motor vehicles are permitted to enter or exit the block when the Safe School Streets closure is in effect (unless a valid pass is provided), but parked vehicles may

remain.

Safe School Streets originated in Bolzano, Italy in the early 1990's when school communities were struggling to manage traffic during peak pick-up and drop-off hours. Community members, teaching staff and city officials all called for a solution. In response, several Safe School Streets were launched on select roads to pilot the program. Streets were transformed into temporary car-free zones and congestion in front of schools decreased substantially. The programs have appeared in other countries and cities since their initial inception and have shown several positive impacts including:

- Decreased levels of vehicular traffic (The City of Hamilton saw a reduction of 11% - Attachment A, p. 45).
- Improved road safety.
- Reduced traffic congestion in and around the schools.
- Opportunities for kids to be active.
- Encouraging active travel to school.
- Benefits to mental health and focus on school.
- Improved air quality at and around schools.
- Building community.

In 2018, Denmark included Safe School Streets as part of their road regulations and enforce Safe School Streets as part of their standard practice. The concept is simple in nature and is becoming more popular across the world. Some of the cities in Canada that have successfully implemented the concept include Vancouver, Victoria, Kingston, Winnipeg, Hamilton, and Markham, amongst others.



The Safe School Streets approach aligns with HRM's broader transportation policies and strategic priorities (Integrated Mobility Plan) to enhance public safety through active transportation and a focus on pedestrian access. The initiative typically requires strong support and leadership from the school community and surrounding neighbourhood. The City of Vancouver is operating one of the more robust programs in Canada and follow-up surveys about the Safe School Streets program have found:

- 21% of families reported driving less.
- 31% of families reported walking more.
- 25% of families reported biking more.
- 96% of students felt safer on the Safe School Street compared to when vehicles were present.
- 76% of parents want the Safe School Street to continue.¹

A Safe School Streets program also aligns with HRM's Road Safety and Vision Zero strategies.

¹ [School Streets Pilot Overview \(vancouver.ca\)](https://www.vancouver.ca/school-streets-pilot-overview)

DISCUSSION

Overall, Safe School Streets programs are quite popular across the country because they are simple to implement. However, as mentioned earlier the success of the program requires full support from the school and a group of dedicated volunteers to run the program.

Staff are proposing the following guidelines for a Safe School Streets Pilot Program in the HRM:

- The pilot program be open for a 2-year period.
- The pilot program be limited to two schools.
- Schools will apply to the HRM to implement a pilot program. The application will require a letter of support from the parent's group as well as a petition showing at least support from 50 members of the school community.
- Road closures be limited to 40 minutes (8:30 am – 9:10 am in the morning; 2:50 pm – 3:30 pm in the afternoon).
- HRM staff will provide the barriers and any signage required.
- HRM staff will prepare and distribute notification materials for the residential area only. The school will be responsible for notifying all parents and teachers.
- The volunteer group will be required to place the barriers at the beginning of the closure time and remove them immediately at the end of the closure time.
- HRM will provide an evaluation survey at the end of the school year for the school to distribute to parents and community members (including residential addresses adjacent to the closure) to measure the success of the program.
- A letter of support signed by all residents on the section of the street to be closed, to be collected by the applicant.
- The participating schools/parent committees must commit to operating the program for all regular school days. There can be no gaps when the closures are not in place.
- A minimum of 2 volunteers are required to be stationed at each barricade set up on the street. It is recommended another 2 volunteers are provided to patrol the area on the street within the barricades.

Once the program is approved by Staff, the school/parent group will follow the typical program for issuance of a temporary road closure permit.

Some of the considerations on whether a location for a Safe School Street would work include:

- Most suited to roads where there is little or no through-road access.
- The closure does not impact access for school buses.
- Main arterial/distributor roads and roads used by transit services cannot be included.
- Surrounding streets should be able to accommodate any displaced traffic/parking.
- Local infrastructure is in place to support alternative means of travel, especially walking and cycling (sidewalks, crosswalks, and other infrastructure).
- Consideration of any other traffic generators in the vicinity, (stores, hospitals, recreational centers) which could have an impact on vehicle traffic.

The next section summarizes some of the key questions that often arise during implementation.

If I live within a Safe School Street Road closure, will I be able to access my driveway?

Yes. The intent would be to provide any impacted residents with a pass that will allow them through the barricades during a closure. This is very typical of successful programs in other locations. Drivers will be asked to drive at walking speed within the closure zone. Residents within the closures will be notified of the road closure in advance with printed flyers and large signage displayed near the closure. Cars parked on the street in the week prior to the closure will receive flyers on their windshields.

How will picking up or dropping off my child be impacted?

The purpose of a Safe School Street is to create a safer, healthier, and more active environment for children travelling to and from school. As much as possible, the HRM encourages all students, parents, and caregivers to come to school by walking, cycling, or wheeling. For those who must travel by car to school, they can park slightly further away and walk the last few meters to school.

Won't the Safe School Pilot Program just increase congestion around the school?

It is important to recognize that it is difficult to predict how traffic will be affected. Traffic Management staff will observe the site during the pilot to provide information for future planning. The goal is also for more students to shift to an active mode of travel to/from school so that the number of vehicles to school would decrease over time. Studies out of the UK and some early results from projects in Canada have shown that traffic congestion around schools has decreased because of the Safe School Streets program.

How is the road closure done safely?

Road closure traffic signs, traffic barricades and traffic cones will be used to temporarily close off the street. As well, volunteers will be stationed at both ends of the closure where the barricades are placed. The expectation is that school staff and volunteers will monitor safety concerns throughout the duration of the pilot program and report any issues immediately to HRM staff.

How will the community and school parents be informed?

Once the schools are selected, HRM will set up an online meeting to discuss the project. The date and the time of that meeting will be shared with the impacted community. As well, all school parents and caregivers will receive at least two letters from the school/parent group about the pilot program at least two months before implementation and two weeks before the closure. Flyers will be dropped into mailboxes by HRM staff and placed on parked cars on two occasions – two months before the closure and again two weeks before the closure begins.

HRM staff will also place signage on the impacted roads, at/near the school, detailing the closure. The closure plans will be shared on social media and other outlets, and a webpage will be developed for publication on the HRM main page.

How will HRM collect feedback?

Surveys will be provided to the school for distribution and collection from the community at the end of the school year. HRM will use those surveys to determine the success of the program. As well, HRM staff will set up a specific 311 code to keep track of comments and complaints.

Will waste collection be impacted by the temporary road closures?

Waste collection will not be impacted by these closures as route schedules are already drawn to avoid school streets during opening and closing times.

Are there concerns about accessibility or emergency access?

There are no concerns regarding emergency access or accessibility. All emergency vehicles will be allowed into the road closure zone when necessary. Accessibility concerns will be addressed on a site-by-site basis but like residents, if necessary, passes could be provided so anyone with accessibility issues can access the school site safely.

How will snow clearing be impacted by the temporary road closures?

Typically, during a large snow event schools will be closed if access to the streets is considered unsafe.

Regular snow removal will not be impacted as typically it is not done during school drop off or pick up times.

In Ontario, the Ontario School Streets Program developed a summary report of various pilot programs within the province (see Attachment A). They highlight the following as key lessons learned in developing a successful Safe School Streets pilot program:

- Assemble a team with municipal staff, the city councilor(s), and the school.
- Incorporate the Safe School Street within existing Active Transportation programs.
- Animate the School Street space.
- Collaborate with like-minded groups to share learnings to support implementation.
- Tell compelling stories to support the growing international movement for safer, healthier, and more climate-friendly Safe School Streets.
- Link Safe School Streets efforts to broader policy changes that support sustainable and active travel, placemaking, and street safety improvements.

FINANCIAL IMPLICATIONS

The proposed pilot program does require contribution from HRM. New barriers and signage will be required for the sites, engagement staff, materials, and communications support (in coordination with Corporate Communications) are also required. As staff would be required to participate in the ongoing evaluation and safety of the program, new positions may have to be identified as current staffing capacity is not adequate to support the full-scale operation of this program.

Currently, staff are requesting an additional \$10,000 annually to operate the Safe School Streets Program. These costs would be required for the 2024-25 operating budget, with the pilot program beginning in September 2024. It is anticipated that based on how the program is intended to operate and rely on volunteers, existing staff will have the capacity to support the pilot program. However, there is a risk of additional staff time being required to assist schools with program implementation.

If the pilot program is deemed successful and becomes permanent and more widespread, additional funds and staff will be required.

RISK CONSIDERATION

No risk considerations were identified.

COMMUNITY ENGAGEMENT

Once the pilot sites are identified, community engagement will follow the outline provided in the report.

ENVIRONMENTAL IMPLICATIONS

The Safe School Streets program would support HRM's initiatives and goals around climate change by reducing vehicle usage and encouraging citizens to utilize other modes of transportation.

ALTERNATIVES

The Transportation Standing Committee may:

1. Not recommend that Halifax Regional Council approve the process for Safe School Streets Pilot Program.

ATTACHMENT

Attachment 1: Ontario School Streets Pilot Summary Report

A copy of this report can be obtained online at [halifax.ca](https://www.halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Lucas Pitts/Director of Traffic Management/Public Works



ONTARIO SCHOOL STREETS PILOT SUMMARY REPORT



880
cities

Project Partners



8 80 Cities is a non-profit organization based in Toronto, ON. 8 80 Cities exists to create safe and happy cities that prioritize people's well-being. They work to improve the quality of life for people in cities by bringing citizens together to enhance mobility and public space so that together we can create more vibrant, healthy, and equitable communities.



This project is made possible through financial support from Green Communities Canada and the Government of Ontario. Green Communities Canada (GCC), based in Peterborough, ON has been leading a community-based climate action movement since 1995, working together with their members from across the country to advance transformative, equitable, and lasting change.



York Region District School Board (YRDSB) in partnership with the City of Markham joined the project to implement a School Street within the City of Markham. YRDSB, with support from the City and York Region, lead multiple school-based programs that encourage active school travel.



The City of Mississauga, in partnership with the Peel District School Board (PDSB), Dufferin-Peel Catholic District School Board (DPCDSB), Region of Peel and Student Transportation of Peel Region (STOPR), joined the project to implement School Streets in two neighbourhoods across the city. This pilot built from and contributed to strengthening existing programming that promotes safe and active school travel.



The City of Hamilton joined the project to implement a School Street within the city to complement existing active school travel programs operated by the city. The City of Hamilton currently coordinates the Active and Sustainable certification program, which encourages schools to create School Travel Plans.



Kingston Coalition for Active Transportation (KCAT) is a non-profit organization based in Kingston, ON. They are a Research and Advocacy group, started in 2008 as a coalition of representatives from KFL&A Public Health, City of Kingston and Queen's University - all local organizations with an interest in promoting active transportation.

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EXECUTIVE SUMMARY

Active school travel is on decline in the Greater Toronto and Hamilton Area (GTHA) and across most Canadian cities. In the Greater Toronto Area (GTA), children's active school travel (AST) decreased by over 31% between 1986 to 2006, as travel for school shifted to a reliance on private automobiles. To address this decline in AST and improve safety for children, Green Communities Canada (GCC) and 8 80 Cities decided to investigate School Streets as a potential solution, based on the success of pilots in Europe and a few Canadian cities. School Streets create a car-free environment in front of schools at the start and/or the end of the school day to prioritize safe walking conditions for children, their caregivers and teachers.

GCC and 8 80 Cities partnered with teams in Markham, Mississauga, Hamilton and Kingston and oversaw the implementation of five School Streets pilots in the 2021-2022 school year. Each city had a unique approach to closing the street and ran for different periods of time. Results from the five School Streets across Ontario led to the development of 11 key findings and 12 recommendations.

Main Findings

School Streets:

1. Encourage walking and cycling.
2. Support community building and social connection.
3. Raise awareness of road safety issues.
4. Do not increase traffic on surrounding streets.
5. Reduce air pollution around the school during closure periods.

Planning School Streets:

1. Each School Street is site-specific.
2. A plan for project evaluation is critical for reassuring School Street critics.
3. There is no standardized municipal permit process for School Streets.
4. Municipal participation and support is a key factor for success.
5. Peer-to-peer support across School Street sites aids the planning process.

Recommendations For Future School Streets

1. Assemble a team with municipal staff, the city councilor(s), and the school.
2. Incorporate the School Street within existing AST programs.
3. Animate the School Street space.
4. Collaborate with like-minded groups to share learnings to support implementation.
5. Tell compelling stories to support the growing international movement for safer, healthier, and more climate friendly School Streets.
6. Link School Streets efforts to broader policy changes that support sustainable and active travel, placemaking, and street safety improvements.



INTRODUCTION

Green Communities Canada (GCC) and 8 80 Cities formed a partnership in September 2021 with the goal of encouraging active school travel through the implementation of three School Streets pilots in Markham, Mississauga and Hamilton. This project was entitled Ontario School Streets Pilot (OSSP) and has been developed with funding from the Government of Ontario as a part of the Ontario Active School Travel (OAST) Fund. GCC and 8 80 Cities created a working group for city and school board partners to meet and share successes and challenges in the planning process of School Streets. 8 80 Cities provided support, technical assistance, and facilitated peer-to-peer coaching and knowledge exchange for the three teams.

From September 2021 to June 2022, representatives from 8 80 Cities, Green Communities Canada, York Region District School Board (YRDSB), the City of Mississauga and the City of Hamilton met once a month to work collaboratively on launching School Streets in the three municipalities. The working group also met with city staff and non-profit workers from across Canada who had experience planning School Streets. This included representatives from a non-profit organization in Kingston, Kingston Coalition for Active Transportation (KCAT), who eventually became a permanent part of the working group.

Markham, Mississauga, Hamilton and Kingston were all able to successfully launch a School Street program in the 2021-2022 school year.

Report Purpose

This report summarizes the main findings from School Street programs across four Ontario cities in the 2021-2022 school year, and provides recommendations for the future of School Streets in Ontario.

Why Pilot School Streets?

Active school travel is on decline in the GTHA and across most Canadian cities. In the Greater Toronto Area (GTA), children’s active school travel (AST) decreased by over 31% between 1986 to 2006, as travel for school shifted to a reliance on private automobiles.¹ To address this decline in AST, GCC and 8 80 Cities decided to investigate School Streets as a potential solution, based on the success of pilots in Europe and few Canadian cities. Pilot projects are advantageous as they are shorter and scaled-down versions of the project that can help provide evidence to inform future decision-making.

What are School Streets?

School Streets are “programs that create a car-free environment in front of schools at the start and/or the end of the school day to prioritize safe walking conditions for children, their caregivers and teachers”. They involve the temporary closure of one or more streets adjacent to a school to allow a safer environment for children and parents to actively travel to and from school.

¹ [Built Environment and School Travel Mode Choice in Toronto, Canada.](#)

There are five key principles 8 80 Cities employs while implementing pilot projects. We call it the **TASTE Framework** - T stands for Temporary, A for Affordable, S for Strategic, T for Test in Real Time and E for Evidence.



TEMPORARY

Pilot projects are Temporary. The temporary nature of School Street pilots reduces the red tape and opposition and makes it easier to get buy in for the idea.



AFFORDABLE

They are Affordable. Pilot projects often use inexpensive materials to replicate the feel of the real thing, they are by nature, more affordable than permanent changes.



STRATEGIC

They should be Strategic. The goal of the School Street pilot project is to bring attention and raise awareness about active and safe school travel and lead to longer term changes in the built environment.



TEST IN REAL TIME

Pilot projects give you the opportunity to test a program or a piece of infrastructure in real time. As opposed to a rendering, people can see, feel, touch and experience the School Street Pilot in real time.



EVIDENCE

Collect Evidence. It is important to collect data during pilot projects so that you can make a strong case for further investment.

GOALS FOR THE ONTARIO SCHOOL STREETS PILOT



- Increase active school travel opportunities for children in Ontario



- Spark conversations about Vision Zero and safety
- Continue the conversation about School Streets



- Reduce traffic congestion around schools
- Provide a safe and fun place for children to start and end their day



- Encourage municipalities to provide more funding for School Streets and active school travel

PROJECT TIMELINE



MAY 2021 - MAY 2022 PHASE 1: PLANNING

- Project kick-off with 3 teams
- Scoping workshop with each team
- Assemble working groups
- Confirm participating schools
- Engage with the school communities
- Assemble local project committees
- Develop design, site plans and traffic management plan
- Prepare and submit permit applications
- Develop operations, monitoring and evaluation plans
- Acquire materials for the pilots
- Recruit and train operations team and volunteers
- Collect baseline school travel data



MAY - JUNE 2022 PHASE 2: IMPLEMENTATION AND ONGOING MONITORING

- Launch the School Streets
- Check-in with stakeholders and community members post implementation
- Collect school travel data while the pilot is ongoing



JUNE - OCTOBER 2022 PHASE 3: EVALUATION, REPORTING AND KNOWLEDGE SHARING

- Analyze data
- Prepare and share summary reports



Why are School Streets important?

Previous School Street pilots have discovered that the initiatives offer a multitude of benefits; including improved air quality, reduced traffic congestion, enhanced social cohesion, created opportunities for independent mobility, and increased safety. The onset of the COVID-19 pandemic also displayed that School Streets can be beneficial for schools as they create space for physical distancing. School Streets have gained recent popularity in Canada following the declining rates of children’s active travel to school and unsafe conditions surrounding schools. Currently, only 20% of Canadian students use active school travel to and from school.² Active school travel (AST) is an important source of physical activity for children and research has found that insufficient physical activity is linked to chronic diseases such as obesity,

cancer, diabetes, stroke as well as poor mental health.

In conjunction with the decline in active travel, school zones are becoming increasingly more car-dominated and thus less safe for children who walk and cycle. A recent study on dangerous student car drop-off behaviours and child pedestrian-motor vehicle collisions observed dangerous driver behaviour at 88% of the participating schools.³ In addition to this, when families use their private vehicles for school drop-off, it increases air pollution around the school. School Streets address all of these problems by limiting the traffic on the street in front of schools and prioritizing that space for people walking, cycling and rolling to school.

² [Are school-based measures of walkability and greenness associated with modes of commuting to school? Findings from student survey in Ontario, Canada.](#)

³ [Dangerous student car drop-off behaviors and child pedestrian-motor vehicle collisions: An observational study.](#)

Where have School Streets run?

School Streets originated in Italy in the 1990s to reduce traffic congestion appearing around schools. The concept was later adopted in the United Kingdom where School Streets were piloted in Camden and Hackney boroughs of London and in Edinburgh. The School Streets in the United Kingdom were widely successful with the School Street program expanding out to multiple schools in both London and Edinburgh. These pilots have run for various amounts of time, with some School Streets now acting as permanent fixtures around schools.

In Canada, a four-day School Street operated by 80 Cities was piloted in Toronto during the 2019-2020 school year. Subsequently, the City of Victoria and the City of Vancouver both pilot tested short-term School Streets,

lasting between one day and one month, respectively. The success of these pilots has led both cities to continue to plan and pilot additional School Streets across the cities. Green Action Centre in Winnipeg also piloted a School Street for 60 days from September 2020 to November 2020.

As of 2022, five additional cities have piloted School Streets during the 2021-2022 school year, including Montreal, QC, Kingston, ON, Hamilton, ON, Markham, ON and Mississauga, ON. This report will summarize the findings from the pilots across Ontario with a particular focus on the pilots in the GTHA.



Overview of School Streets Included in This Report

Site	Project Leadership	No. of School Streets	Size of School Street Closure	Duration	Frequency	Main Objectives	Programming
Hamilton	Small team of Municipal Staff	1	75m	30 minutes in the morning	Every Tuesday morning in June 2022	Increase attention and awareness of School Streets	Yes
Kingston	Non-profit made up of volunteers	1	200m	30 minutes in the morning and afternoon	Every school day in the 2021-2022 school year	Increase safety and AST	No
Markham	Team of School Board, Municipal Staff, a non-profit organization and volunteer citizen committees	1	200m	1 hour in the morning and afternoon	Every Wednesday in May 2022	Increase safety and raise awareness on the importance of AST	No
Mississauga	Team of Municipal, School Board, Regional staff and volunteer citizen committees	2	300m at each	Location 1 (Hillside): 35 minutes in the morning and 50 minutes in the afternoon Location 2 (St Alfred and Brain W Fleming): 70 minutes in the afternoon	Every school day for 3 weeks in May-June (Both sites)	Increase AST and provide public space for play	Yes



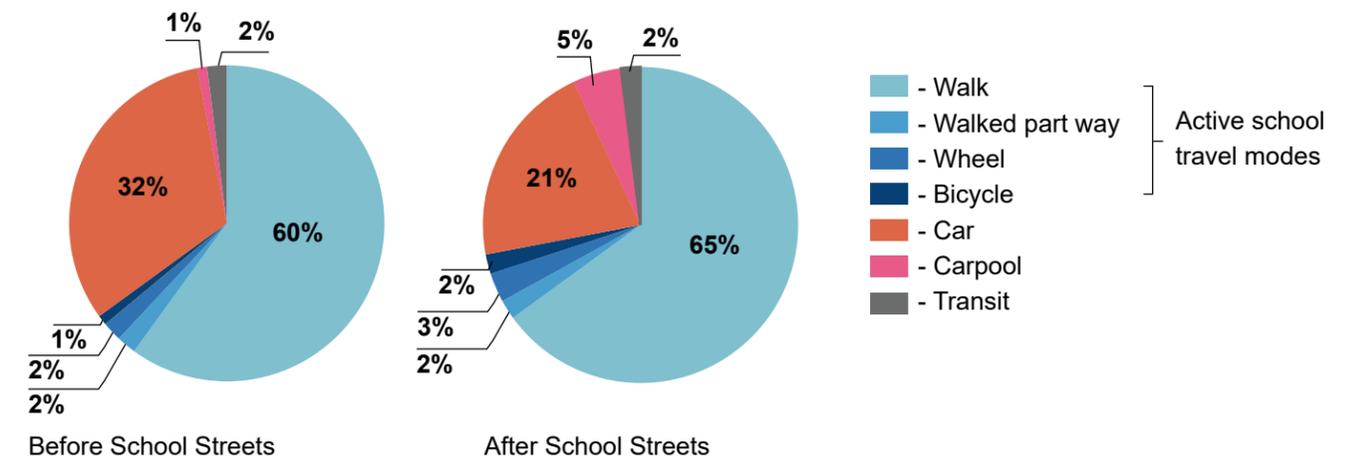


KEY FINDINGS ACROSS SITES

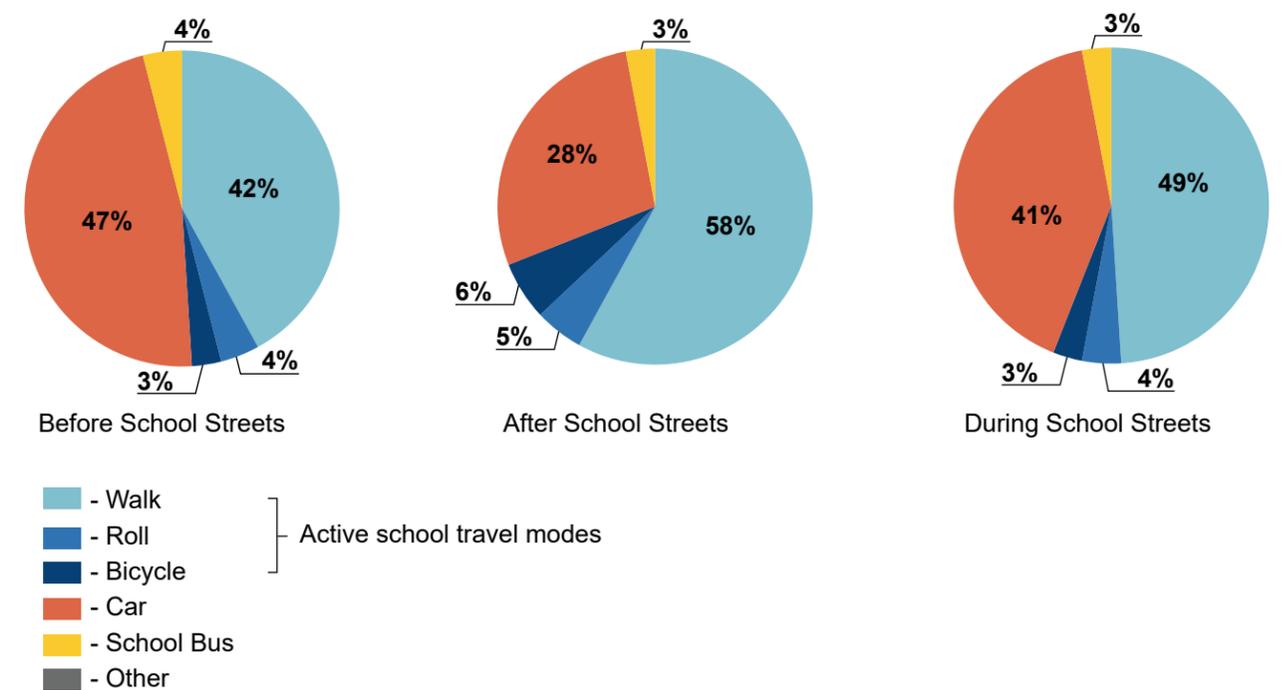


1. School Streets encourage walking and cycling

Markham, Mississauga, Hamilton and Kingston all saw an increase in active school travel during the School Street pilots. Although these increases in AST ranged from a +4% (St Alfred and Brian W. Fleming pilot in Mississauga) to over 20% (Hillside pilot in Mississauga), it is clear that School Streets do have an effect on children's travel to school. The results from Kingston also suggest that School Streets increase children's interest in cycling and walking to school and therefore could lead to even greater levels of AST in the future.



Change in active school travel rates at Hamilton School Streets



Change in active school travel rates at Mississauga School Streets (Location: Hillside Public School)



2. School Streets support community building and social connection

School Streets provide an opportunity for parents and children who may normally stay within their vehicles at school drop-off and pick-up times to meet and socialize with other community members. In Kingston, about half of parents surveyed said that the School Street allowed them to meet other parents for the first time. In Hamilton, parents and teachers expressed their enjoyment of the School Street as a space for the school community to connect and socialize. The Mississauga pilot also provided opportunity for community members to meet and work together in both the community engagement process and during the pilot.

“ One of the biggest successes of the project were the conversations that were had amongst different community stakeholders who either had worked together in the past but hadn’t for a while or were meeting for the first time. A high-level goal of the project for us was that we wanted to help build community capacity and I think we did actually achieve this. ”

– Mississauga School Streets Project Lead

“ Another positive impact is that this project brought the school community closer. ”

– Mississauga Parent

“ As a teacher, the School Street is a really nice way to connect with families outside, on the street, away from the classroom. We can step out of the teacher-parent roles and just talk person to person. ”

- Hamilton Teacher

3. School Streets raise community awareness of road safety issues



Based on the conversations with implementers across the pilot sites, it is clear that the cities are interested in continuing the conversation around active school travel and road safety after the completion of the School Street pilots. Communities and stakeholders seem to be more engaged in continuing work on pedestrian safety. In Kingston, the city created a Pedestrian Safety Working Group that is using the findings from the Kingston School Street to inform future initiatives to improve school safety. In Markham, the new relationships formed between the municipality and the School Board during the School Street pilot will likely last and together, they will continue to work on school safety and active school travel.

“ I think that the city is hungry to do more. ”

- YRDSB Staff member

The School Streets in Markham suggest an increased awareness of road safety from motorists, as there was a reduction in dangerous driving observations around the school zone during the program pilot.

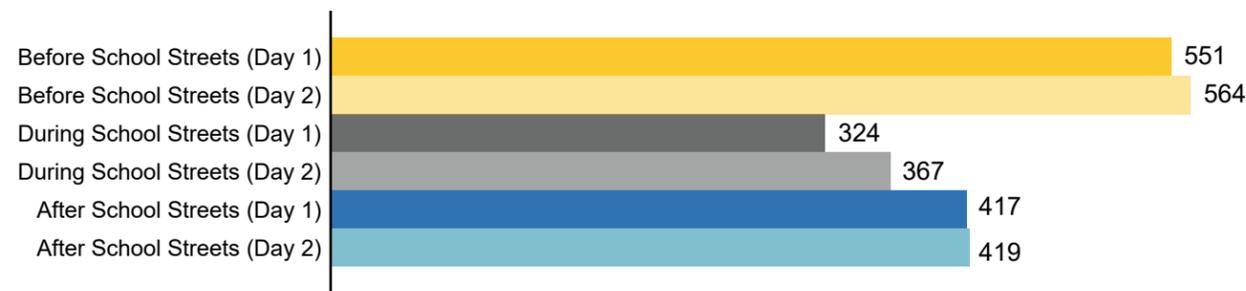
In Mississauga, the awareness around road safety and active school travel spread beyond the municipality and caught the attention of many media outlets as well as many social media users. Also, the School Streets community engagement process in Mississauga created opportunities for broader active school travel conversations and safety issues to be discussed between stakeholders. Safety issues mentioned during the community engagement process are now being investigated by the city to determine how they can make the school neighbourhoods safer in the long-term. The community engagement process also led to the donation of bikes to the participating schools to help encourage AST in populations where bicycles can be less accessible.



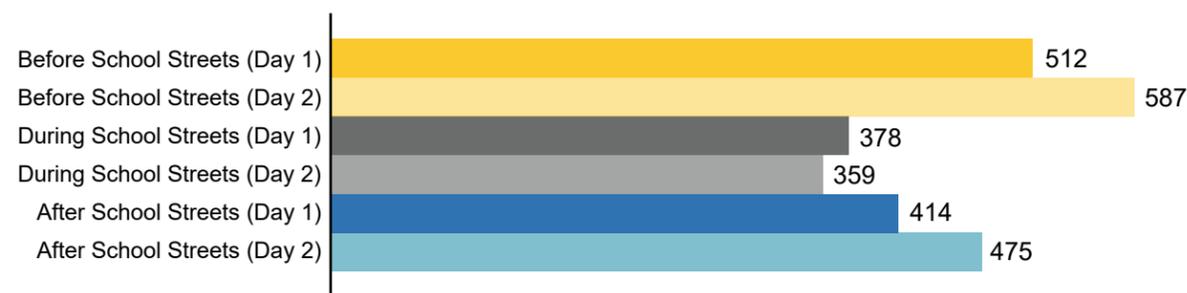
4. School Streets do not increase traffic on surrounding streets

When implementers were engaging with the target communities, a common concern raised by community members was: “Won’t this initiative simply push traffic onto streets surrounding the School Street?” Other reports of School Streets from Europe found that this did not happen as traffic was dispersed onto multiple streets and the number of vehicles in the school community were reduced as students shifted from car travel to active transportation.

This report confirmed that School Streets are able to reduce vehicular traffic in school communities. Both School Streets in Mississauga and the School Street in Markham found that overall traffic on the School Street and surrounding streets declined while the pilot was running. Further, at all three of these School Streets, the reduction in vehicular traffic remained low and traffic counts after the pilot were lower than pre-pilot counts. This suggests that School Streets may have lasting impacts on traffic congestion in the school community even after the pilots ended.



Vehicles on streets surrounding Hillside Public School, Mississauga (Morning)



Vehicles on streets surrounding Hillside Public School, Mississauga (Afternoon)

5. School Streets improve air quality in front of schools during the closure periods



Air quality data from both School Streets in Mississauga and the School Street in Markham found that air pollution was removed and moved away from the school during the pilot periods. Children are especially vulnerable to high concentrations of air pollution, so it is important to reduce levels of air pollution in areas that children frequent. However, air quality in front of the schools seemed to return to pre-pilot quality after the pilot concluded, indicating that air quality is only improved when the pilots are in-session.

In Mississauga, **65%** of pre-pilot air pollution was removed at Hillside Public School and **42%** at Brian W. Fleming Public School.

In Markham, **42%** of pre-pilot air pollution was removed at John McCrae Public School.



Vehicles on streets surrounding John McCrae Public School (AM)



Vehicles on streets surrounding John McCrae Public School (PM)



6. Each School Street is site-specific

The five School Streets varied in size and scope depending on the needs and interests of the local communities in which they took place. For example, in Mississauga, it was decided that police would not be involved in supervising the road closure barriers, as community members expressed trepidation with police involvement due to the lived experiences of many community members. This was an important aspect of the project that would not have been addressed if the community hadn't been thoroughly engaged in the planning process.

Also, the size of the School Street should be carefully considered and determined through input from the community. In Kingston, the School Street scope included 3 blocks and was determined by the implementers. After 6 weeks of the initiative running, KCAT decided to reduce the scope of the School Street to one block based on concerns raised in the community. Additionally, Kingston, Markham and both Mississauga pilots all included the school parking lots within their School Street zone. This meant that staff vehicles had to be given exemptions to drive through the School Street. All of the implementers at these sites mentioned that they wished the School Streets had fewer vehicles and were truly car-free, however, this is not very feasible when the School Street includes driveways of private residences and school parking lots.

In Hamilton, the size of the School Street was much smaller than the other four pilots, but it was designed purposefully to exclude the school parking lot and to limit the number of private driveways in the School Street zone. This created an almost truly car-free zone for the School Street periods and allowed for free play and outdoor activities. Nonetheless, the small scope of the School Street meant that less distance in children's journey to school was within the School Street. There does not seem to be a "one-size-fits-all" approach to School Streets and therefore the size and scope of the School Street should be determined on a case-by-case basis depending on the goals of the community.

The evidence from all 4 cities highlights the importance of engaging the community within the planning process to ensure that the School Street meets the needs of the students, school staff, caregivers and residents.

7. A plan for project evaluation is critical for reassuring School Street critics



For School Streets to continue within cities it is crucial that pilot projects evaluate the initiatives to demonstrate their success. Evaluation methods should be determined based on the goals and objective of the School Street pilot and will not be the same across pilots. However, pilots included in this report also found that having an evaluation plan for the project was reassuring for those who were either unsupportive or in opposition of the School Street. Common concerns around School Streets were that they would simply push traffic congestion onto neighbouring streets or would not be effective in changing school travel habits. To address these concerns, School Street implementers can remind the community that this pilot will be evaluated and if the concerns are actualized then they will be captured in the evaluation.

8. There is no standardized municipal permit process for School Streets



School Streets require closing roads to motorists for certain periods of the day, which requires approval and permits from the municipality. However, the type of permit needed for a School Street varies between municipalities, with some requiring a road occupancy permit, a special event permit or temporary road closure permits. At the time of these pilot projects, there was no standardized approach across jurisdictions or precedent for municipalities to follow due to the novelty of School Streets.

Additionally, the Mississauga and Hamilton pilots received the approval for the road closure directly from the transportation departments in the City. In comparison, Kingston and Markham both were required to have their city councils approve the road closure permit. This is likely because the Kingston and Markham pilots were both led by organizations outside of the city and therefore the process for non-city affiliated groups to receive the appropriate permits for School Streets may require additional steps than School Streets led by the City.



Kingston City Council votes to approve School Street Closure

“ We’re lucky we had the city on board. If we didn’t then I could imagine everything being a little bit more difficult.”
 - Reena Mistry, YRDSB staff member

In Kingston, the School Street was implemented by a non-profit organization and implementers also suggested that the implementation of the School Street may not have been possible without the support from the municipality.

“ We already have a good relationship with the Transportation Services Department... I think they wanted to help us and wanted to be supportive... That certainly made implementation easier.”

- Roger Healey, Chair of KCAT

In Hamilton, the municipal staff mentioned that support from the city councilor in the target ward also helped in the implementation process. Support and involvement of City Councilors in the planning process can help in determining the best school sites for the intervention and dealing with resident concerns.



9. Municipal participation and support is a key factor for success

All the School Street pilots reviewed in this report were either led by or had support from the municipality. As mentioned, closing streets to traffic requires specific permits from the municipality and therefore having municipal staff support is critical to navigating the permit process, especially as there is no standardized permit for these types of initiatives. In Markham, implementers from the School Board emphasized the importance of collaboration between the School Board and the municipality working on the project.





10. Peer-to-peer support across School Street sites aids the planning process

The four cities involved in this pilot not only shared experiences with each other but also learned from the experiences of other School Street implementers across Canada including the Montreal Urban Ecology Centre (MEUC), the City of Vancouver, the City of Victoria and Green Action Centre (Winnipeg). All of the team leads emphasized the importance of being able to connect with other implementers and share experiences to help advance the School Street planning process. The four Ontario teams also met monthly and were able to ask each other for support and advice. Piloting a novel initiative, especially one that counters existing car culture and road use, is not easy and it's important to connect with like-minded individuals who can relate to any issues faced in the planning process.

“ We have so much knowledge just from all the [School Street] groups. One amazing thing was actually being a part of this group. We learned so much from week to week and I just hope we can do more of this ”

- YRDSB Staff Member



11. Communities are eager for more opportunities to use the road as public space



The School Streets provided opportunities for community members to re-imagine road space as a public space that is for more than just cars. From post-pilot feedback, many of the sites had community members express an interest in continuing School Street activities or to start activities at the pilot sites without programming (i.e. Kingston and Markham). From this feedback it's clear that School Streets can inspire communities to see roads in a different way and increase interest in closing roads for pedestrian-oriented public spaces.

Some of the School Street pilots captured the opportunity to use the street space as a space for free play. Free play has been shown to be crucial to children's cognitive development as well as it provides opportunities for physical activity. It's also important for children to have the chances to engage in unorganized, unstructured and child-led play. The school site seems like an obvious target for promoting this type of play as children spend so much time there and are around their peers. From feedback, it seems that children feel the same!

“I hope this will lead to more streets closed for pedestrians and community activities”

- Markham Resident

“If/when COVID finishes, it would be nice to organize some street festival kinds of things in the controlled areas for special events (e.g., marking orange shirt day, celebrating pride month)”

- Kingston parent

“Events that bring the community together [would improve the School Street]”

- Markham community member

“It was fun. We liked being outside and walking on the road. We want to do it again in the fall and next spring.”

- Mississauga student

“MORE SIDEWALK GAMES”

- Markham student



RECOMMENDATIONS

FOR PLANNING A SCHOOL STREET



1. Assemble a team with involvement from Municipal Staff, the City Councillor and the School

Based on the findings in this report, it's clear that the City's support is instrumental to a successful School Street pilot. Those interested in School Streets are encouraged to engage with the Municipality early in the planning process so that the City is signed on as a key partner or as a leader in the School Street project. This report reveals that permit processes are simplified when the City is leading the project and that working within different City departments can bring new opportunities and ideas to the project.

It's also crucial to ensure that there aren't redundancies in the work being done by the School Board, the Municipality and the School Street team and this can be avoided when all groups are consulted and involved in the planning process. Some of the Municipalities and School Boards have decided to situate School Streets within their existing policy documents including Active Transportation Master Plans, Pedestrian Safety Strategies, Vision Zero Strategies or Transportation Master Plans. Teams should encourage the incorporation of School Streets into guiding documents to help set precedent across the city and/or region and to ensure there is accountability to implement School Streets.

2. Incorporate the School Street within existing Active School Travel programs



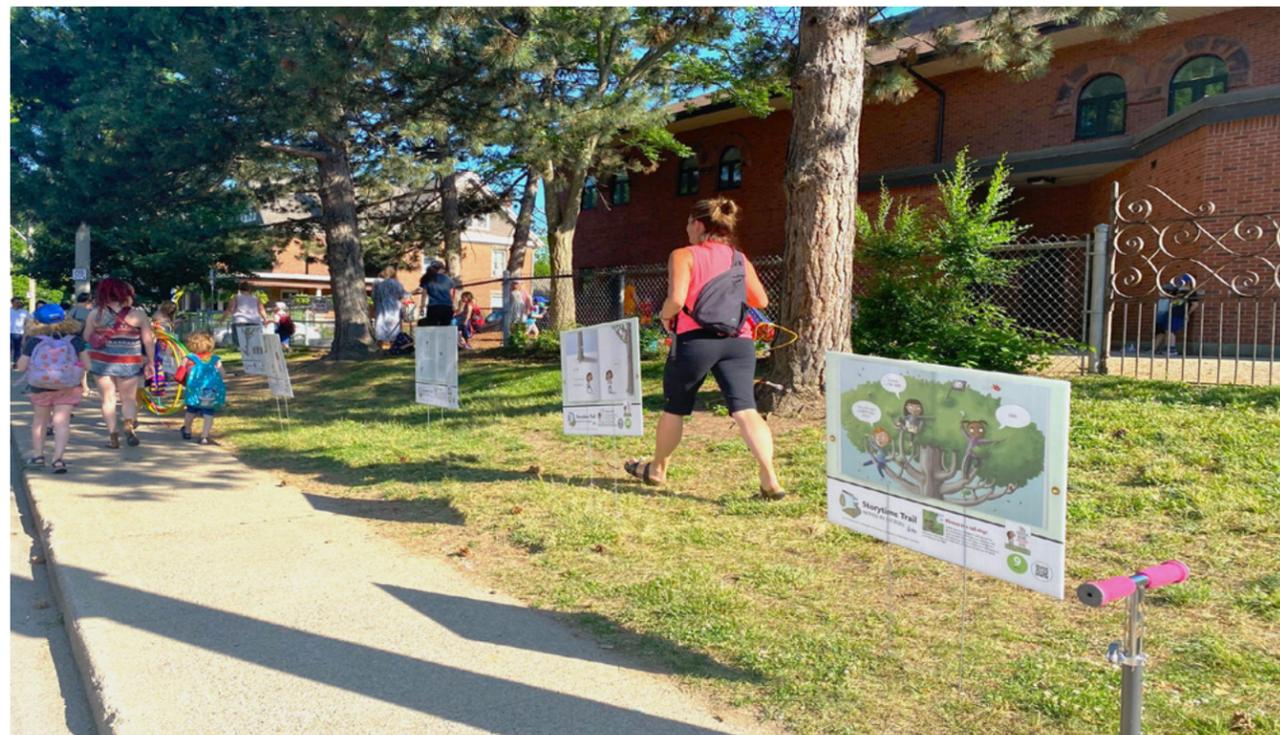
To ensure travel mode shifts are maintained and safety benefits are felt beyond the School Street zone, it is recommended that the program is situated among existing AST programming run by both the Municipality and School Board. Many of the pilots reviewed in this report strategically planned School Streets in School Safety Zones and/or at schools with existing AST programs. This was done to ensure that AST will continue to be encouraged after the pilot ends.

3. Animate the School Street space



Activities and programming within the School Streets were well received in both Hamilton and Mississauga. In Kingston and Markham, activities were suggested by parents and children after the pilot had been launched. Providing programming on the School Street can provide additional opportunities for children to engage in physical activity beyond active travel to school and educational opportunities on road safety and environmental protection. At the School Streets in Mississauga,

programming was often organized and run by older students which allowed for capacity building and leadership-building opportunities for students. Therefore, animating the space with programming and activities can provide greater opportunities for physical activity and community building and should be strongly considered for future School Streets.



4. Collaborate with like-minded groups across the country to share learnings to support implementation



The School Street pilots included in this report were all part of the Ontario School Streets Pilot (OSSP) project, coordinated by Green Communities Canada and 8 80 Cities. All implementers expressed the value of having this working group where teams could share experiences and learnings in the planning and implementation process. Future School Street implementers should seek out other like-minded organizations or institutions outside of their own communities who may be interested in collaborating and sharing learnings in implementing School Streets. It is also recommended that funding should be allocated towards the creation and maintenance of working groups and for acquiring technical assistance from those who have experience in School Streets.

FOR COMMUNITY ENGAGEMENT



1. Prioritize robust community engagement that is meaningful, equitable, accessible and begins as early in the planning phase as possible

Community engagement is an essential part of the School Street planning process. Not only is it our due diligence to the community, but it is an opportunity to mobilize support for the project and to build new community connections. Across the sites, community engagement provided opportunities for people to meet and build new working relationships. In Mississauga community engagement led to the incorporation of a snack program and a bicycle donation program into the School Street project, based on identified community needs and the creation of the new connections.

To ensure community engagement is meaningful, create sessions that put the decision-making power into the hands of community members.



In the early stages, try to avoid holding 'information sessions' where the community does not have the opportunity to provide input and feedback. When you are asking the community for their input make sure that there is a commitment that their feedback will actually shape the initiative. This way community members will feel more ownership of the School Street and that they will be designed based on the future user's needs and preferences. Additionally, to guarantee that the project does address the community's needs it's also important that the community is a part of the planning process as early as possible. Determining the size of the School Street and its scope (i.e. duration School Street closure and length of the pilot) can be the most challenging part of planning a School Street. If the community is not included in this process, there will likely be conflicts with the planned operations of the School Street that your team has not anticipated. Future implementers should determine the goals, size, and scope of their School Street with the community in order to meet the needs of the community they're serving and minimize conflicts with existing uses of the space.

School Streets also offer new opportunities and working relationships which may or that can develop through their planning and implementation. Implementers at all of the sites indicated that new working relationships between municipal departments, school boards and municipalities or non-profit groups and the municipality were a positive outcome of the School Street and allowed for the incorporation of more perspectives. Future School Streets should consider community organizations and local institutions in their community whose goals align with the School Street and seek their involvement and/or input. Multi-disciplinary teams provide great value to the planning process, can increase the impact and potential reach of the project and provide lasting partnerships across sectors and/or departments.



FOR VOLUNTEER MANAGEMENT



1. Recruit a diverse volunteer team

Many School Streets, including both School Streets in Mississauga and the School Streets in Kingston and Markham, relied on the support of volunteers to operate. At all three of these pilot sites volunteer pools were made up of retirees, parents, university and college students, high school students and local community activists. The diversity in these volunteer pools meant that volunteers had varying availabilities and were able to cover different School Street shifts. It also created opportunities for community members who may never have interacted to meet for the first time, strengthening community cohesion.



2. Provide funding for honorariums or pay for School Street volunteer coordinators

When School Street volunteer pools consist of 30+ volunteers, it requires a lot of coordination from a central person to schedule shifts and find replacements when volunteers inevitably cannot make some of their shifts. Therefore, it is imperative that future School Streets, especially longer pilots, have a volunteer coordinator who can manage all scheduling and coordination. In Kingston and Mississauga, this role was done by a paid staff person based on the sheer quantity of work. If School Street pilots are planned to be longer than a few scheduled dates, it is recommended that funding is allocated for this role.

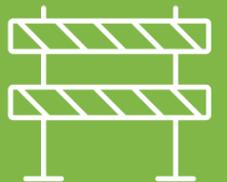
FOR MUNICIPALITIES

1. Simplify the permit process for temporary road closures



Across Canadian cities, there is growing interest in School Streets, however, this report highlighted that non-city led projects had additional requirements and more challenges obtaining road closure permits. The results of this report also indicated that School Streets inspire communities to start thinking about other ways to use the street, which may result in communities wanting to apply for additional temporary road closure permits. As streets are a public space, we recommend that municipalities simplify the process for granting temporary road closures so that School Streets and other street-rebalancing projects can be implemented more easily.

2. Standardize Road Closure Equipment for all types of road closures



All the pilots in this report used different types of equipment to close the roads to traffic based on guidance from municipalities and best practices from other School Streets. A couple of the implementers mentioned that road closure materials required for the School Streets were different from standard materials used in general road closures for events. For example, in Hamilton, vehicles were required as road closure materials for the School Street closure. Using large vehicles to close the road to cars is more costly and less inviting for children than plastic A-frame barricades used in Mississauga and Kingston. For School Streets to be more sustainable and easier to implement, municipalities need to reduce monetary barriers for equipment and ensure that School Streets are not subject to additional requirements that are not standard for traditional road closures.



3. Scale-up to longer-term pilots

To create longer-term travel behaviour change in children, it is recommended that School Street pilots run for longer durations (i.e. 6 month to 1 full school year). Brief School Street pilots are important first steps in communities to dispel fears and mobilize community support. If short pilots are well-received, then it is recommended that implementers consider long-term pilots as a next step. We also encourage municipalities and School Boards to start considering how School Streets can be implemented as a more permanent fixture around schools.



4. Incorporate School Streets into Planning Policies and/or Strategies

Expanding on the previous recommendation, it is recommended that Municipalities and School Boards begin incorporating School Streets into their strategic plans, planning policies and planning strategies such as Pedestrian Master Plans or Active Transportation Master Plans. Embedding School Streets into policy creates more accountability for implementation and provides greater legitimacy for the School Street in the eyes of the community. It is also recommended that within policy documents long-term funding be set aside for implementing School Streets and similar street rebalancing initiatives. It is difficult for implementers to plan long-term when they are constantly searching for funding opportunities to support their work.





If we continue to sit by and let the car dominate our streets and school zones, we are accepting a fate where school zones are polluted, full of traffic and where children are at risk of injury or fatality simply by travelling to and from school.

In 2020, Canada saw 47 child pedestrian fatalities and another 297 hospitalizations from incidents involving motorists. In 2022, traffic fatalities have reached a 10-year high in Ontario and bicycle fatalities are up by 300% since 2021. This year child fatalities devastated communities in Kingston, Hamilton and other municipalities across Canada, emphasizing the urgent need to intervene in the way school zones and streets are designed and operate.

Now is the time to prioritize children's right to move safely in their communities, in a way that not only supports their individual health and well being, but the health and well being of their community and planet.

Piloting school street is a great starting point for communities to take action on health, climate, air quality, and spatial equity. School Streets remind us that the streets are a public space and we have the power to collectively re-imagine them as spaces for social connection, physical activity, play, and joy!

CONCLUSION

This report reviewed the findings from 5 School Street pilots across Ontario as well as the planning and operations for each initiative. Based on this report, it is clear that in some contexts School Streets can increase active school travel, improve air quality and increase social connections. Often less documented, School Streets also proved to provide an opportunity for engaging with schools around road safety and reimagining our streets. The COVID-19 pandemic already brought about a shift in how we see and use our roads, however, this is just the beginning in reconceiving streets for children.

This report also made clear that School Streets, similar to other street rebalancing programs, are a lot of work to plan and are not without their critics. Yet, the fact that some were not satisfied or supportive of School Streets is not necessarily a suggestion that School Streets shouldn't continue. It is instead an expected response in our car-dominated society whenever the car is inconvenienced. We need to continue to push back against the prioritization of the car on our roads and use School Streets as a tool to pursue this mission.

CASE STUDIES

HAMILTON

The City of Hamilton experienced 192 pedestrian collisions and 131 cyclist collisions in 2020.¹ Based on average collision data over the past five years, it is estimated that a pedestrian is involved in a collision every 1.5 days.¹ Pedestrians and cyclists are disproportionately vulnerable to injury, with 90.7% of pedestrian collisions resulting in injury and 78.7% of cyclist collisions resulting in injury.¹ In 2021, there were 9 pedestrian fatalities in the City of Hamilton. In July of 2022, there have already been 6 pedestrian fatalities and 1 cyclist fatality.²

The City is currently working to reduce collisions involving these vulnerable road users with the goal of eliminating all collision injuries and fatalities using a Vision Zero approach. The City is working towards this goal through the implementation of community safety zones, speed reduction neighborhoods, red-light cameras and various other road safety improvement strategies. The Vision Zero approach taken by the City emphasizes that a systems-wide approach is needed to prevent traffic injuries and fatalities.

Since 2019, the City has seen a reduction in pedestrian injuries, however, children who walk and cycle are especially vulnerable to severe injuries and fatalities when they're involved in collisions, hence the City's recent focus on programs that specifically target children's safety. This focus on children's safety became an even bigger priority when an 11-year-old boy was killed in December of 2020 in Hamilton while crossing the street on his way home from school. Several strategies are being implemented and monitored across the city including the Hamilton Active and Sustainable School Transportation Charter which signifies the commitment to safe and sustainable school zones from the Hamilton-Wentworth District School Board (HWDSB), and the Hamilton-Wentworth Catholic District School Board (HWCDSD).

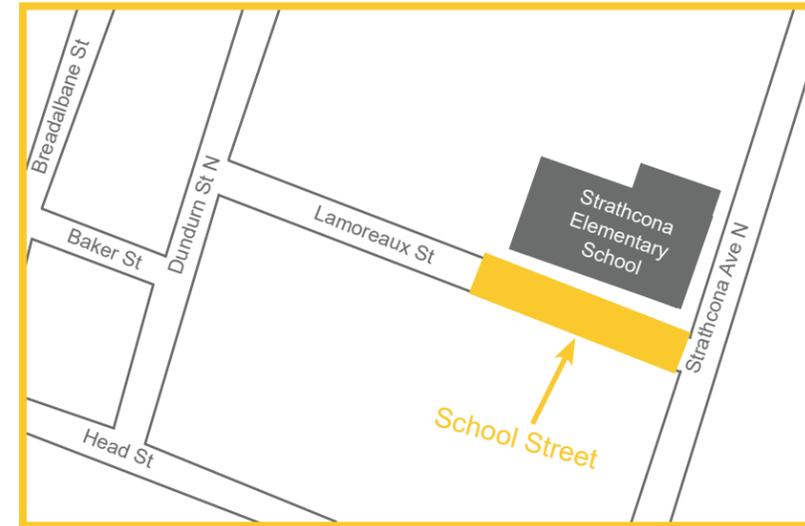
Site-specific Objectives

1. Increase active travel and reduce car travel during the pilot
2. Create more accessible public space for active transportation and play.
3. Connect pilot to other initiatives at schools and the City of Hamilton.
4. Increase awareness of School Streets.
5. Make the pilot scalable and adaptable to other schools.

¹ City of Hamilton Annual Collision Report 2020.

² City of Hamilton Vision Zero Dashboard 2022.

PILOT SITE



The School Street took place at Strathcona Elementary School on a portion of Lamoreaux Street. The School Street was 70 m long with closure barricades placed at Strathcona Avenue North and on Lamoreaux Street immediately before the school parking lot.

WHY STRATHCONA ELEMENTARY SCHOOL?

The team selected Strathcona Elementary School as the site for the School Street using the following criteria:

1. Readiness, Leadership & Capacity

- Supportive parent council
- Supportive local councillor
- Supportive school community including students, teachers, principal and staff
- Champions in the school community
- Engaged community groups
- On-the-ground capacity of the community
- Schools who are involved in active school travel programs
- Support from the City's Transportation Operations team

2. Equity

- Ensure socioeconomic equity by targeting schools that were part of HWDSB's Equal Opportunities Initiative.
- Ensure geographic equity by considering schools in both the "lower city" and "the Mountain" areas of Hamilton.

3. Mode share

- Low percent of students receiving bussing

4. School & Neighbourhood Characteristics

- High percent of students within walking distance
- Not a school with major traffic issues
- Not on a public transit bus route
- Not too many residences on the street
- Alternate routes for traffic are available
- The school building should be adjacent to the street

PROJECT TIMELINE



COMMUNITY ENGAGEMENT

The Hamilton School Streets program had five key audiences that the team actively worked to engage and include in the project:

1. School Leadership (Principal and School Council)
2. Larger School Community
3. Local Community
4. City Staff
5. Elected Officials (Council, Ward Councilors and School Trustees)

Community engagement occurred from October 2021 to March 2022 and took the form of key stakeholder meetings, pop-up engagement, focus groups, public meetings and open houses, and online and print surveys. Engagement focused on reaching residents of all ages, abilities, and backgrounds in the School Streets pilot project. Special attention and targeted approaches were used to reach harder to reach groups that are less likely to engage in traditional consultation approaches and equity-deserving communities. The goals of the engagement process were to:

- Spark a community-wide conversation about the benefits of safe and active streets for children, caregivers and residents.
- Engage a diverse range of perspectives and lived experiences.
- Prioritize the engagement of children and students and make engagement a leadership opportunity for people of all ages.
- Increase community capacity and leadership on active transportation.
- Capture the feedback of the community on the successes and pain points of the pilot project to inform improvements and potential replication.
- Document and measure the success of the pilot program to help build a community of practice around School Streets implementation in Canada and abroad.
- Be playful, and imaginative and fun.

OPERATIONS

Leadership

The Hamilton School Street was led by the School Travel Planning team at the City of Hamilton. This team worked collaboratively with other departments at the City as well as the Hamilton Police. Based on community engagement with key stakeholders, the team planned to close the street to cars every Tuesday morning in June from 8:30 - 9:00 am.

Road Closure Equipment

To create the School Street zone, the City used a combination of traffic pylons, road closed signs and large vehicles as well as volunteers stationed throughout the space. The City of Hamilton took the precaution of using a vehicle at closure locations due to heightened concerns about safety following recent security threats to local schools. The use of vehicles for the street closure ensured that no vehicles were able to enter the space during the School Street period.



Vehicle Exemptions

During School Street sessions, no vehicles were permitted to enter the space. The barricades were strategically placed adjacent to the school parking lot to ensure that staff vehicles did not need to enter the School Street zone to access the parking lot.

Launch Event and Activities

On the day of the launch, families came with hula hoops, and skipping ropes to use on the closed street. The team encouraged the school community to play before the school day and provided programming around air quality and pollution. The Hamilton School Street was also joined by Storytime Trail who installed a 'Book Walk' within the School Street zone so children could engage with story books while walking through the School Street.



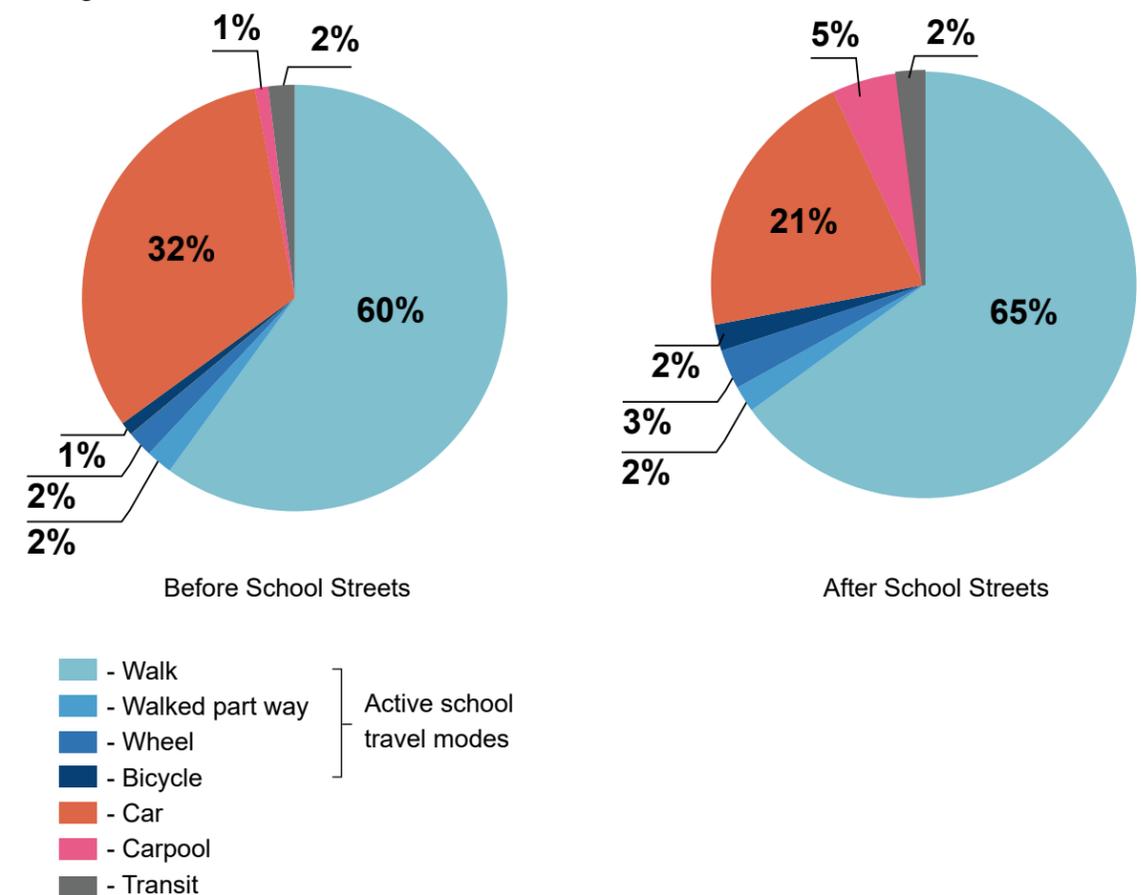
RESULTS

1. Change in Active School Travel

Strathcona E.S. participated in a student travel survey for a week in May, before the event launch, and in June during the event. The data taken from May showed around 62% of students walked, 33% of students rode in a car, and around 5% of students used other active modes such as biking, scootering, or skating.

During the event week, there was an increase in active school travel of around +7%.

There was also a decrease in vehicle use of around 9%. They plan to do a follow-up survey later in the year to determine any lasting change in active travel modes. A point worth noting is that the data was collected over a full week to keep within the standard of our School Travel Planning program. If the pilot was implemented over the whole week instead of one school day per week, there would've been, potentially, more significant changes.



Change in active school travel rates at Hamilton School Streets

2. Awareness and Attitudes about Active School Travel and School Streets

Before the pilot launch, there was already a buzz going around Hamilton about School Streets. When the Sustainable Mobility team approached Strathcona E.S. with the idea of closing the street, the principal pointed out that parents have been talking about wanting to close Lamoreaux Street for a while. They may have not been aware that School Streets is a growing global initiative, but they certainly already understood the benefits of closing the street and the need for less vehicle congestion at their school. As far as feedback goes, the principal stated that he heard overwhelmingly positive comments and only one parent said something negative. If we compared general awareness of Active School Travel amongst school communities in Hamilton, Strathcona E.S. would be much higher than average. The parent community embraced this pilot and are looking to bring more initiatives to their school in the new year.

3. Community Response

The City of Hamilton collected qualitative feedback from parents and students to determine if Hamilton communities would be receptive to School Streets and if there is a potential for longer-term School Streets in the future. The team did not anticipate major changes in mode shift after only three School Street sessions and therefore the evaluation of the pilot focused on determining how the community felt about the program rather than how their behaviour changed. The following quotes from key stakeholders provide an insight into how the project was received:

“School Streets allows our students and their families to use the street in front of our school to gather and enjoy time together on the way to school. It has given us a glimpse into what it would be like to have fewer cars on the road and an opportunity to discuss environmental impacts from vehicles. It has been wonderful to feel the energy of students having fun while being active before they start their school day. We hope to be able to expand this initiative in the future.”

- Dale Hill, Principal at Strathcona Elementary School

We think it's great! It's a good excuse to bring the scooter out and come early.

- Parent of kindergarten student

“Active school travel makes a difference in the lives our children, resulting in healthier children, less traffic and pollution, safer school streets, and better academic performance. The School Streets pilot at Strathcona Elementary School and closure of Lamoreaux St. show us what's possible.”

- Maureen Wilson, Hamilton City Councillor (Ward 1)

“The School Streets pilot at Strathcona has been a huge success so far! It's been amazing to see the overwhelming support and energy that the Strathcona school community brings to the event each week. The best moment to watch is when the last barrier is placed on the street and the students and parents instantly but almost naturally move out onto the street. It's really cool to see a space that is always reserved for vehicles, be taken over for children to play.”

- Callaway Johnson, School Travel Planning Coordinator at the City of Hamilton

“As a teacher, the School Street is a really nice way to connect with families outside, on the street, away from the classroom. We can step out of the teacher-parent roles and just talk person to person. It's a nice, relaxed way for everyone to start the day.”

- Corinna Grohmann, Teacher at Strathcona Elementary School

The kids were really excited to be on the road. We brought just a few tennis balls and skipping ropes as activities – simple things, it doesn't need to be complicated! It's usually crazy nuts outside the school with cars lining the street, even though it's supposed to be no parking. This is a nice break from the fumes! Normally it's difficult for families with strollers to get along the sidewalk from all the car doors opening and closing. We'd definitely like to see this repeated as much as we could in the future. Perhaps it could be seasonal for spring and summer. – Julia Lillicrop, Parent & President of the Home & School Association for Strathcona Elementary School

The School Street pilot clearly generated interest and support from the community for the program. This suggests that longer-term and more critically evaluated School Streets could be piloted in Hamilton communities in the future.

MARKHAM

The Markham Team of York Regional District School Board (YRDSB) staff and City of Markham staff came together to pilot School Streets as a solution to issues with road safety and declines in AST.

Markham is located within York Region directly North of the City of Toronto. In York Region, pedestrian collisions have decreased by 42% in 2020, however, pedestrian fatalities remain steady at around 1 pedestrian fatality per year.¹ The York Region Traveller Safety Report found that 94% of collisions that involve pedestrians result in pedestrian injury or fatality, highlighting the vulnerability of pedestrians in the Region.¹ Further, child pedestrians suffer more severe injuries when involved in collisions. Markham, specifically, has two of the top five intersections with the highest number of pedestrian injuries in York Region.

Cyclist collisions have also been decreasing in York Region, yet young cyclists have the highest injury and fatality rates of all age groups. Cyclists in York Region are also 3.5 times more likely to suffer injuries or fatality from a collision than motorists in motor-vehicle only collisions.¹

The City of Markham and York Region have implemented a number of programs that aim to increase the safety of pedestrians and cyclists including reducing speeds in school zones, adding bike lanes across the Region and piloting intersection improvements that aim to change driver behaviour. Despite the efforts in York Region to improve safety, there is still no Vision Zero Strategy in place and in June 2021 an 11-year old boy riding his bike in Markham was struck and killed. The tragic death of a young boy crossing the road reinforces the need to prioritize children’s safety in the City.

In conjunction with the road safety issues, York Region’s transportation emissions are the highest per capita in the GTHA.² This has a negative impact on the air quality in the Region and poor air quality can be especially damaging to children with developing lungs. As children’s active school travel in the GTHA decreases, more children are travelling to school by car, creating congested zones around schools that expose children to poor air quality and pollution.

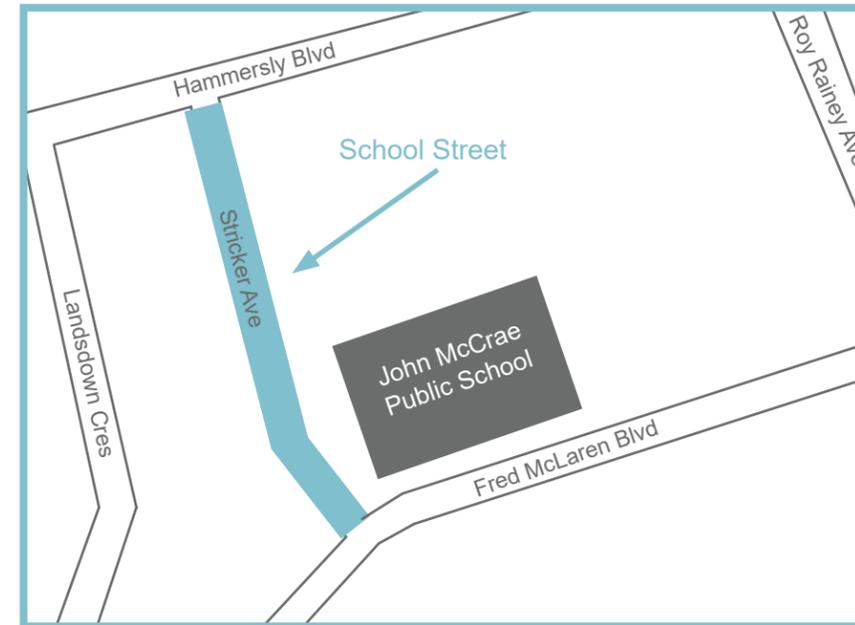
Site-specific Objectives

1. Be inclusive and accessible to users of all ages
2. Increase overall community safety
3. Be sustainable as an ongoing program
4. Educate the community on the benefits of active transportation
5. Be fun for the whole community
6. Be accepted and embraced by the whole community

¹ York Region 2021 Traveler Safety Report

² 2019-2020 Carbon emissions inventory for the Greater Toronto and Hamilton Area. The Atmospheric Fund.

PILOT SITE

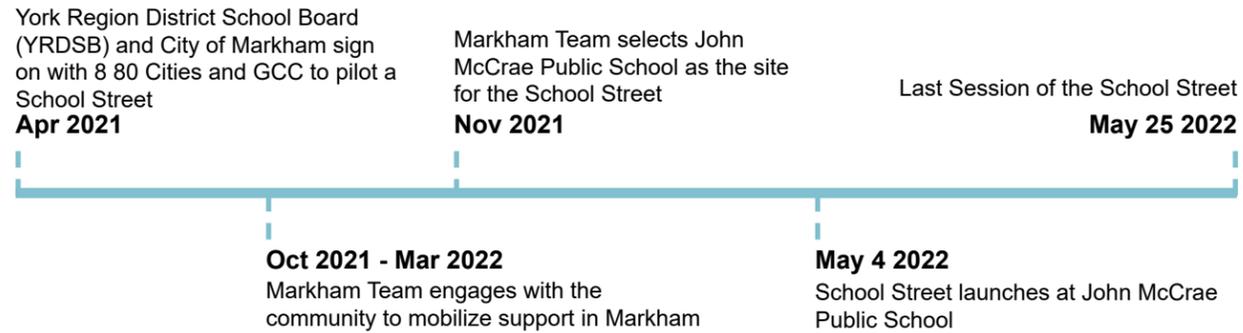


The School Street was launched at John McCrae Public School (John McCrae PS) on Stricker Avenue. Every Wednesday morning from 8:15 - 9:15 am and again in the afternoon from between 3:00 - 4:00 pm, Stricker Avenue was closed to cars to make way for pedestrians and cyclists to use the road space. The School Street zone ran from Hammersly Boulevard to Fred McLaren Boulevard, creating a 200 metre School Street zone.

WHY JOHN MCCRAE PUBLIC SCHOOL?

John McCrae PS was selected because the school had existing active transportation programs that could easily complement the School Street program. Prior to the School Street, John McCrae PS was running “Walking Wednesdays” which was extremely successful at generating mode shifts from driving to active forms of travel, however, the design of the school, specifically the kiss-and-ride zone, creates hazardous traffic conditions outside of the school. The School Street was implemented at this site to ensure that children switching to active forms of travel could arrive safely and to increase awareness around the importance of AST.

PROJECT TIMELINE



COMMUNITY ENGAGEMENT

The Markham School Streets program had three key audiences that the team actively worked to engage and include in the project:

1. School Community
2. City of Markham Council and Ward Councillors
3. Local community

Community engagement methods included key stakeholder meetings, public meetings, and online and print surveys. Engagement focused on reaching residents of all ages, abilities and backgrounds in the School Streets pilot project. Special attention and targeted approaches were used to reach harder to reach groups that are less likely to engage in traditional consultation approaches and equity-deserving communities. The communication goals of the engagement process were to:

- Educate the school community on the purpose and benefits of School Streets.
- Make active school transportation a priority for the City Council.
- Gain long-term support for School Streets.
- Demonstrate that School Streets are a practical solution to community safety challenges.
- Demonstrate that School Streets have measurable benefits and positive outcomes.
- Create a benchmark to highlight how communities like Markham (i.e. with a suburban built environment) have made School Streets work.
- Educate residents on the expected impacts and benefits to their neighbourhood.
- Help residents understand that this is a temporary closure and a pilot project.
- Help residents understand that the City will be gathering feedback on the pilot project to see what works and what does not.
- Assure residents of the impacts of the closure and how and it will operate.

OPERATIONS

Leadership

The Markham School Street was led by a cross-disciplinary team made up of staff from both the YRDSB and the City of Markham. The team worked with the school and the community to establish the closure periods for the School Street.

Road Closure Equipment

To close the street to traffic, the team used a combination of lightweight barricades, road closed signs, and orange pylons. The York Region Police also brought one of their vehicles onsite and used it to block any cars from entering Stricker Avenue from Hammersly Boulevard.





Vehicle Exemptions

Vehicles needing to enter the road space, including residents of Stricker Avenue, school staff and school buses, were able to enter the street from Fred McLaren Boulevard. These exempt vehicles were permitted to enter Stricker Avenue while the School Street was in operation, however, they were required to drive at a walking pace and be escorted by a School Street volunteer.



Launch Event and Activities

On the day of the School Street launch, the school community was joined by local School Trustee, the Mayor of Markham and city councillors to celebrate York Region's first School Street. The team hosted a launch party that included providing students with free swag and exciting speeches. The street space was designed to be used primarily for active travel and therefore the School Street pilot did not involve any programming or activities on the street.

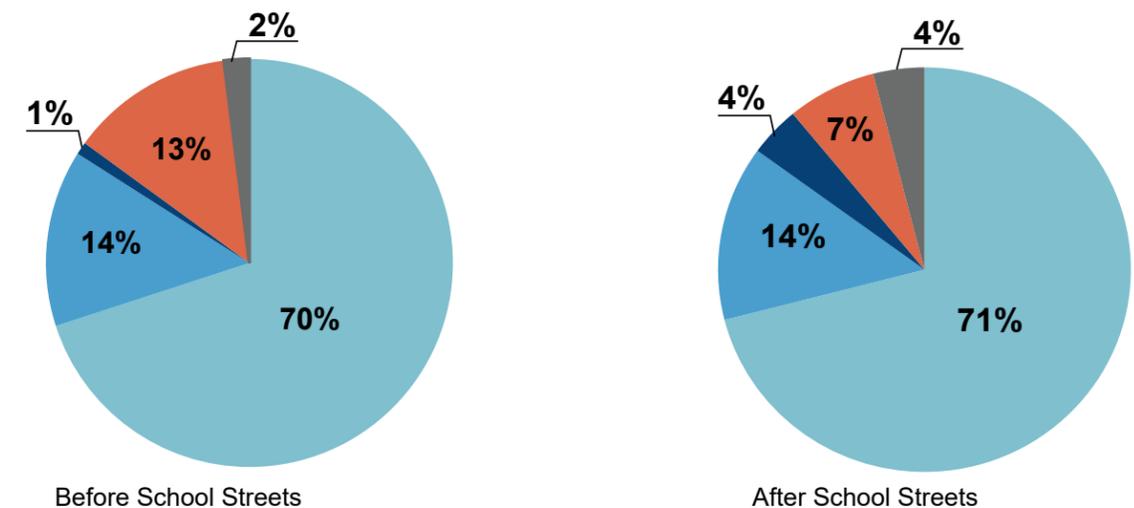
RESULTS

1. Change in Active School Travel

Surveys were conducted with students who were attending John McCrae PS pre-pilot (n=216) and post-pilot (n=220) to determine how the School Street impacted their travel behaviour.

The surveys revealed that during the pilot active school travel increased by +4.5%.

While the pilot was in-session, over 89% of students surveyed indicated that they used active school travel for at least a portion of their trip to school.



- - Walk
 - - Walked part way
 - - Wheel (Bicycle or roll)
 - - Car
 - - Other
- } Active school travel modes

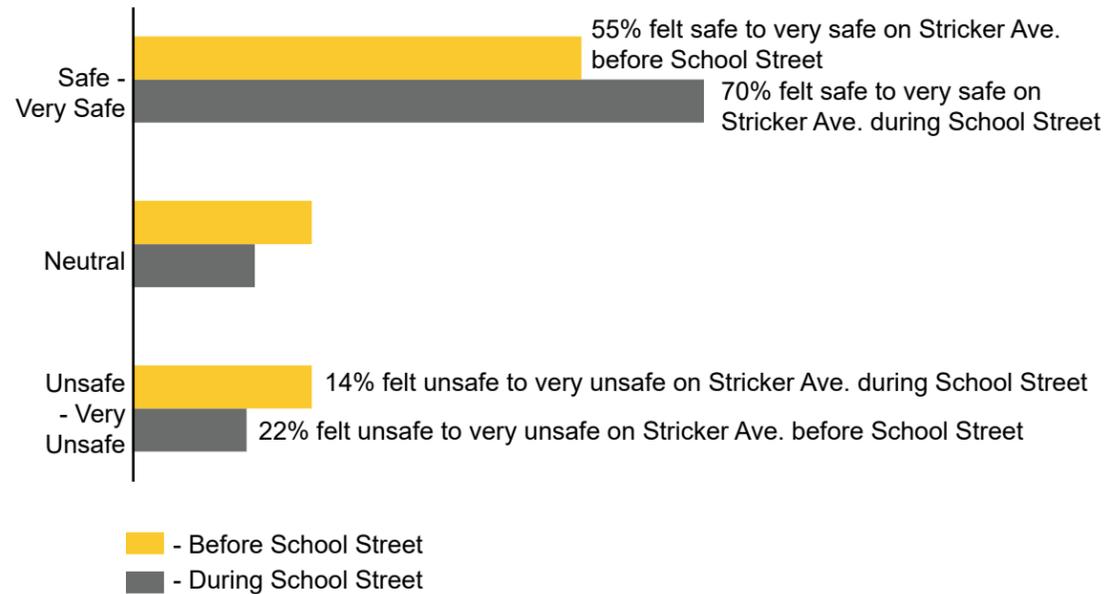
Change in active school travel rates at Markham School Streets

2. Change in perceived safety

Surveys also asked students and parents about safety during the School Street. Based on their responses, over 66% of students felt safe or very safe when travelling on Stricker Avenue during the pilot.

The pre- and post-pilot surveys also indicated that parents/guardians' perception of safety increased during the pilot, with a few parents/guardians (2 responses) stating that the School Street made them feel less safe taking their child to and from school. One of the respondents who indicated that they felt 'very unsafe' during the pilot further elaborated and said "[The School Street] caused a traffic disaster in the area."

Overall, the School Street did result in a 15% increase in parents and guardians who felt that Stricker Avenue was 'Safe' to 'Very Safe'.



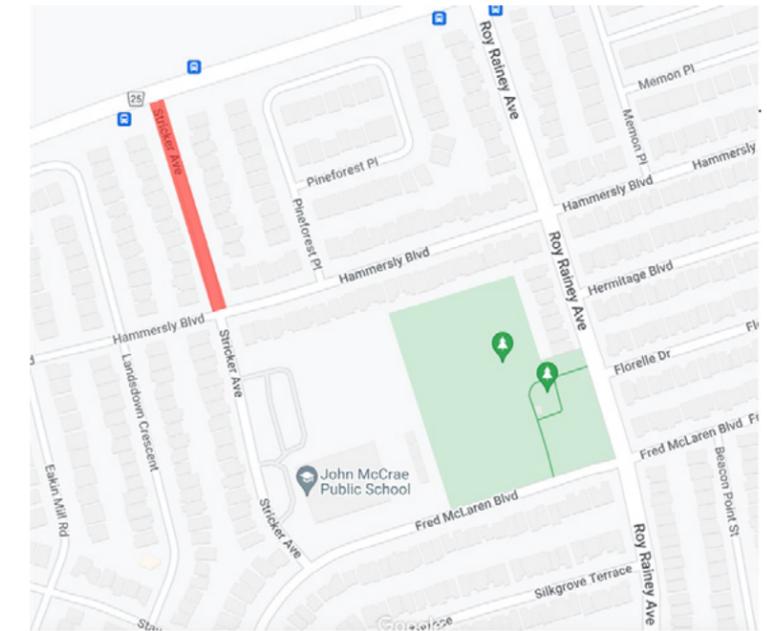
Perception of safety at Markham School Streets

3. Reduced illegal behaviour of stopping, illegal parking, U-turns and speeding

Members of the Markham School Street team took observations of traffic and driver behaviour at one site outside of the School Street zone on Fred McLaren Blvd, where parents are known to commonly drop-off children by car. Observations took place on two school morning drop-off periods (8:30-9:00 am) prior to the School Street and recorded an average of 25 vehicles stopping to drop-off children on Fred McLaren Blvd. On mornings in May, after the launch of the pilot, there were on average 12 vehicles observed stopping and dropping off children in front of the school. Therefore, the implementation of the School Street saw a reduction in around 13 cars per morning on the street adjacent to the School Street.

Illegal driver behaviour also seemed to decrease while the School Street was in operation. On school mornings in April, 3-4 U-turns were observed per morning outside of the school on Fred McLaren Blvd. In contrast, on school mornings in May, an average of 1-2 U-turns were observed per morning.

The Markham team also measured the number of vehicles speeding on streets surrounding the School Street through automated devices. Vehicle speeds were captured at five different locations outside of the School Street on Wednesday mornings and afternoons during the School Street times. The speed of vehicles driving in both directions was recorded. The location with the highest frequency of speeding vehicles during school drop-off (8:15-9:15 am) and pick-up (3:00-4:00 pm) times across all 5 weeks of observations was on Stricker Avenue between Major Mackenzie Drive and Hammersley Boulevard with an average of 39 speeding vehicles (over 40km/hr) in an hour period.



Site with the highest frequency of speeding vehicles

On the Wednesday prior to the School Street launching, there were a total of 155 vehicles speeding over the course of the morning (8:15-9:15 am) and afternoon (3:00-4:00 pm) school arrival and dismissal times. While the School Street was operating, speeding declined around the school zone on all four Wednesdays that the School Street ran. In the last week of the pilot, 119 vehicles were observed speeding during the School Street times. Therefore, **the School Street saw a reduction in 36 speeding vehicles!**

It is possible that the School Street decreased the number of drivers in the school area and/or made drivers more conscious of illegal and dangerous driving behaviour. Additionally, since the pilot only ran once a week, the impact on travel and driving behaviour may be lower than pilots that run on consecutive days.

4. Air Quality

During the pilot, 42% of air pollution on a normal school day was removed from the school zone and 58% of pollution was moved away from the school zone. By removing vehicular traffic from the street adjacent to the school, the air quality in and around the entrance to the school and the school yard improved dramatically. After the pilot concluded, the number of vehicles on Stricker Ave and surrounding streets remained lower than before the pilot numbers, indicating air pollution did not return to the same levels as before the pilot.



Vehicles on streets surrounding John McCrae Public School (AM)



Vehicles on streets surrounding John McCrae Public School (PM)

5. Increase in acceptance and awareness of AST and School Streets

The John McCrae school community was surveyed both before and after the pilot to evaluate their response to the School Street. Prior to the pilot, 51% of students at John McCrae indicated that they were supportive of the School Street, with another 43% indicating that they were unsure or neutral. After the pilot ran, students' responses changed slightly with only 45% of students saying they enjoyed the School Street and 44% saying they were unsure or neutral about the School Street. When asked if students would want the School Street to continue, 44% of students said YES leaving 47% as neutral or unsure and only 9% saying no. The large percentages of students indicating they are unsure about the School Street both before and after the pilot suggests that their understanding and awareness of School Streets may not have improved from the pilot, or that they did not use the School Street on their journey to school and therefore had no opinion. Students' enjoyment of the School Street may also be related to the lack of play or programming in the School Street road space.

When looking at the responses from the entire school community (n=325), including staff, parents, students and residents, similar trends are seen, where around 47% of the community members surveyed liked the School Streets and 41% felt neutral or unsure.

However, looking at residents of Markham (n=20), specifically, 55% of those surveyed enjoyed the School Street program and 60% wanted the School Street to continue.

The School Street brought city-wide attention to the promotion of active school travel demonstrated by the representation of the mayor of Markham, school board trustees and city councillors at the School Street launch day. The planning of the School Street also created a collaborative working group between the School Board and the City of Markham with the shared vision of creating safer school zones and increasing active school travel. This working group plans to continue to collaborate in the future on active school travel projects after the creation of the strong partnership from the School Street.



MISSISSAUGA

Mississauga is located within Peel Region, the largest regional municipality in Ontario. Peel Region has a very complex road network with 7 different major 400 series highways and Toronto's major airport within its borders. In Peel Region, there are on average 1000 injuries and 9 fatalities from traffic collisions annually.¹

Within the City of Mississauga, residents rely heavily on private vehicles for transportation. Out of all the trips Mississauga residents take, both in and out of the City, 85% are by car, creating busy road conditions.² The majority of the total collisions within the City are on major arterial roads and highways, however, intersections are the main sites for collisions involving pedestrians and cyclists. Many Mississauga residents have expressed that safety is a major barrier to using active modes of transportation, resulting in the high number of car trips. Specifically, 61% of respondents in the City's Cycling Master Plan survey indicated that they would like to start cycling in the City but they have concerns.²

Mississauga's Transportation Master Plan lays out 6 goals to improve the City's transportation system by 2041.² These goals work to improve the transportation network's safety, inclusivity, integration, connectivity, health and resilience. The City of Mississauga also adopted a Vision Zero Action Plan in 2018 that aims to eliminate all collision injuries and fatalities in the City.³ The Action Plan presents actions for city staff to utilize in their projects to contribute to the Vision Zero goal. The Vision Zero actions are organized into 5 categories: Evaluation, Engineering, Enforcement, Empathy, and Education.

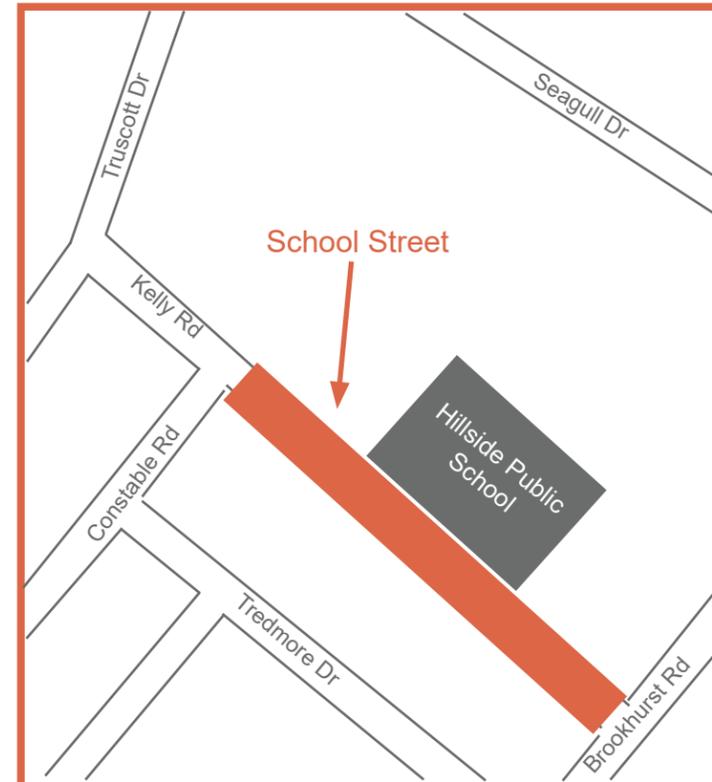
The City of Mississauga has also created ambitious goals for their climate footprint. The City aims to reduce emissions by 40% by the year 2030.⁴ A major component of emissions from the City are from travel and therefore, the efforts to protect pedestrians and cyclists may encourage greater active travel which can reduce carbon emissions and play a part in helping Mississauga reach its climate goals. Therefore, the adoption of School Streets can potentially help the City achieve goals in their Vision Zero Plan and Climate Change Action Plan.

Site-specific Objectives

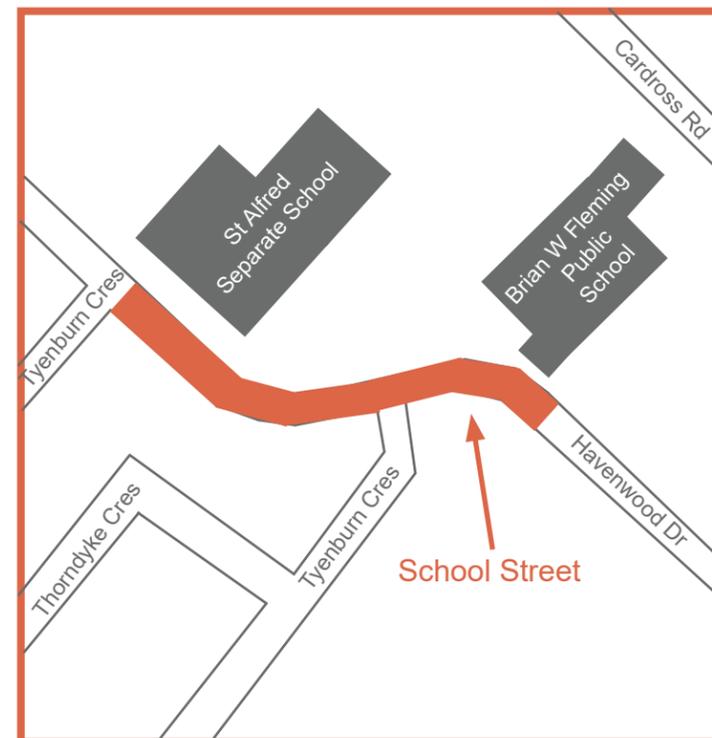
1. Increase active travel and reduce car travel during the pilot
2. Create more accessible public space for active transportation and play.
3. Connect pilot to other initiatives at schools and the City of Hamilton.
4. Increase awareness of School Streets.
5. Make the pilot scalable and adaptable to other schools.

¹ Peel Region Vision Zero Road Safety Strategic Plan 2018-2022.
² Mississauga Transportation Master Plan 2019.
³ City of Mississauga Vision Zero Mississauga: Action Plan 2021.
⁴ City of Mississauga Climate Change Action Plan 2019.

PILOT SITES



The City of Mississauga ran two pilots during May and June at two sites across the city. The first pilot to launch was at Hillside Public School starting on May 9th and operating on Kelly Road. The School Street ran every school day for 3 weeks and lasted 35 minutes in the morning and 50 minutes in the afternoon. The School Street area included almost 300 metres of Kelly Road from Brookhurst Road to Constable Road. The morning School Street period allowed for children to use the road space to safely and actively travel to school and the longer afternoon School Street period held activities and programming to promote outdoor free play.



The second School Street in Mississauga launched May 16th on Havenwood Drive, creating a car-free environment in front of St. Alfred Separate School and Brian W. Fleming Public School. Because of the proximity of the two schools, a single closure was planned between the two schools. This community indicated early in the planning process that they did not feel comfortable with a morning closure, so it was agreed that the closure would be in the afternoon only. The School Street ran for 70 minutes in the afternoons for 3 weeks, and included around 300 metres of road space, operating from the north arm of Tyneburn Crescent to the south end of the Brian W. Fleming school property.

WHY CHOOSE THESE SITES?

The City of Mississauga used the following criteria to select the two School Street sites:

Selection Criteria	Hillside Public School	St. Alfred Separate School and Brian W. Fleming PS
Low percentage of students receiving bussing	Criterion Met	Criteria Met
High percentage of students living within walking distance/low percentage of students out of boundary	Criterion Met	Criteria Met for Brian W Fleming, Criteria Partially Met for St Alfred
High percentage of students who currently walk to school	Criterion Met	Criteria Met
High percentage of students who currently bike to school	Criterion Met	Criteria Not Met
Not a collector or arterial road	Criterion Met	Criteria Not Met
Not too many residences on the street	Criterion Not Met	Criterion Not Met
Not on a public transit bus route	Criterion Met	Criterion Met
Neighbourhood characteristics that support active transportation	Criterion Met	Criterion Met
Alternate routes available for vehicle traffic	Criterion Met	Criteria Partially Met
Local City Councillor support	Criterion Met	Criterion Met
Principal Support	Criterion Met	Criterion Partially Met for Brian W. Fleming, Criterion Met for St. Alfred
Champions in the school community	Criterion Met	Criterion Met
History of school involvement in AST-supportive programs	Criterion Met	Criterion Met
Equity (i.e. high Socioeconomic Vulnerability Index score)	Criterion Met (Score 5 out of 6)	Criterion Met (Score 6 out of 6)

PROJECT TIMELINE

The City of Mississauga sign on with 8 80 Cities and GCC to pilot a School Street
Apr 2021

Mississauga Project Advisory Group completes data-driven site selection process.
Jun - Aug 2021

Invitations to schools to participate in the pilot, and final sites selected.
Oct - Dec 2021

May 2021

The City of Mississauga assembles a local Project Advisory Group to collaborate on the planning and implementation of its pilot project.

Jun - Nov 2021

Project Lead engages with key stakeholders to mobilize support for the project.

School Street implementation at Hillside Public School
May 9 - 27 2022

May 16 - Jun 3 2022

School Street implementation at Brian W Fleming PS and St Alfred Separate School

Jan - May 2022

Community Engagement

COMMUNITY ENGAGEMENT

The Mississauga School Streets program had six key streams of stakeholders that the team actively worked to engage and include in the project. (Note: Although there is some overlap between stakeholder streams, the modes of engagement were tailored based on the stream.)



Stream of Engagement	Engagement Tactic
1. Key Decision-makers (i.e., principals and vice principals, school board trustees, superintendents, city councillors, municipal upper management)	<ul style="list-style-type: none"> • One-on-one conversations • Email communication • Small group planning meetings
2. Local Project Planning Teams (i.e., principals and vice principals, teachers and staff, parents, local residents, students, representatives from local community organizations)	<ul style="list-style-type: none"> • Large group project planning meetings (3 per community) • Email communication, group planning meetings
3. Students (i.e., elementary students attending participating schools, as well as student volunteers from local high schools)	<ul style="list-style-type: none"> • Involvement in large group project planning meetings (x3 per community) • Small group planning meetings • Projects done during class time
4. General Public	<ul style="list-style-type: none"> • Community Pop-ups, community meetings (1 per community), updates in newsletters, household mailers, social media, digital sign boards at City facilities
5. Formal Committees (e.g. Mississauga Traffic Safety Council, Mississauga City Council, School Boards)	<ul style="list-style-type: none"> • Formal announcements • Presentations at meetings • Stories posted to internal municipal news channels
6. Other Internal and External Stakeholders (e.g. 311, municipal fire and emergency services, regional waste services, school bus operators)	<ul style="list-style-type: none"> • One-on-one conversations • Email communications

The primary message of the community engagement work was that the Mississauga School Streets Pilot Program is a collaborative project by the City of Mississauga and its community partners to create temporary car-free zones in front of schools to improve road safety in school zones. The communication goals for the engagement process include:

- Educate the general public on the purpose and benefits of School Streets;
- Get support from within the City and Region for School Streets;
- Demonstrate that School Streets can help achieve various goals of the City and the Region such as Vision Zero, reducing carbon emissions and reducing diabetes;
- Make active school transportation a priority for the City Council;
- Demonstrate that School Streets can help build community;
- Educate residents on the expected impacts and benefits to their neighbourhood;
- Help residents understand that it is a temporary closure and a pilot project;
- Help residents understand that the City will be gathering feedback on the pilot project to see what works and what does not; and
- Assure residents of the impacts of the closure and how and when they can get out and in.

OPERATIONS

Leadership

The School Street was led by staff at the City of Mississauga in partnership with the selected communities. Planning and implementation were heavily supported by a Project Advisory Group, with members from the Region of Peel, both local school boards (i.e., Peel District School Board and Dufferin-Peel Catholic District School Board), Mississauga’s Traffic Safety Council and the local student transportation consortium (i.e., Student Transportation of Peel Region). This Advisory Group was integral for identifying key contacts and channels of communication within members’ respective organizations, as well as for identifying potential issues and their solutions before issues arose.

Road Closure Periods

The Hillside PS School Street on Kelly Road ran every school day from May 9 – 27, 2022, creating temporary road closures for the week-day morning drop-off (8:15 – 8:50 am) and afternoon pick-up (2:30 – 3:20 pm).

The School Street on Havenwood Drive ran every school day from May 16 – June 3 2022, closing streets for the afternoon pick-up time (2:30 – 3:40 pm).

Road Closure Equipment

Both School Streets used lightweight plastic barricades and “road closed” signs to close the street to traffic. All of the closure areas had volunteers stationed at the barricades and were equipped with promotional signs. Volunteers were also stationed throughout the School Street zone wearing orange T-shirts and carrying walkie-talkies to communicate with each other.





Vehicle Exemptions

At both locations, residents of the closed street, caregivers with an identified accessibility need and special education school buses were permitted to drive through the street during the School Street operations. These vehicles had special exemption cards for their vehicles so that they were easily recognizable to volunteers at the barricades. When entering the School Street, vehicles were escorted by the volunteers at a walking pace. At the Hillside location, the drop-off and pick-up location for the single non-special education school bus was temporarily moved to a location outside of the School Street area to minimize traffic and ensure that children on the bus were still engaging in active school travel for a portion of their journey.

Volunteers

Mississauga recruited a team of over 80 volunteers to support their School Street initiatives. Volunteers included local high school students, university and college students, parents, local residents and members of Mississauga's Traffic Safety Council. City staff from various departments and staff from other partnering organizations also volunteered time outside of their regular role to support the pilot project.

All volunteers received training from the Mississauga team. Honorariums were offered to non-staff volunteers who worked over six School Street shifts, and the honorarium increased depending on the number of shifts worked. The volunteers were divided into two main roles: Activity Leaders who were responsible for programming held in the School Street space, and Event Supporters who supervised the barricades, acted as vehicle chaperones and warned vehicles of upcoming closures just outside of the barricades. This final duty was only required at the Brian W. Fleming and St. Alfred site due to the design of the road closure that created a dead end for drivers at two points.



Launch Event and Activities

Both School Streets offered programming in the afternoon School Street sessions that corresponded with weekly themes. The three themes for School Street activities included; road safety, health and wellness, and the environment. At the School Street at St. Alfred and Brian W. Fleming, the School Street team also provided daily healthy snacks for students as they left school. The provision of daily snacks was incorporated into the School Street programming based on suggestions from the community as a way to address local food insecurity.



RESULTS

1. Increase in Active School Travel

One of the main objectives of the School Street was to increase active school travel and reduce car travel during the pilot. Implementers were also interested to measure whether increases in active school travel were sustained after the pilot concluded. To measure this, a variety of methods were used: hands-up travel surveys conducted in student classrooms; automated vehicle traffic counts conducted on the streets; manual vehicle traffic counts conducted at the school drop-off/pick-up areas; and manual active transportation counts conducted at the various pedestrian access points to the schools.

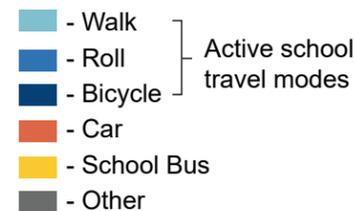
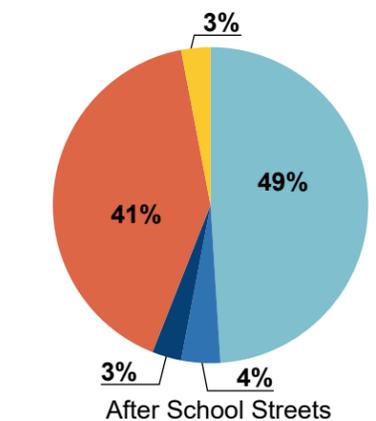
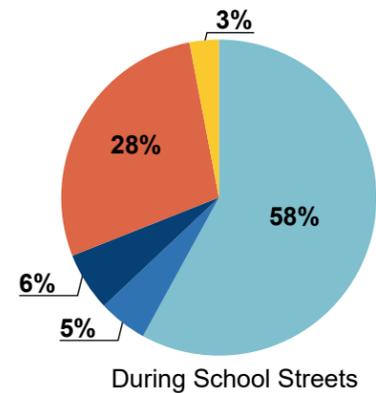
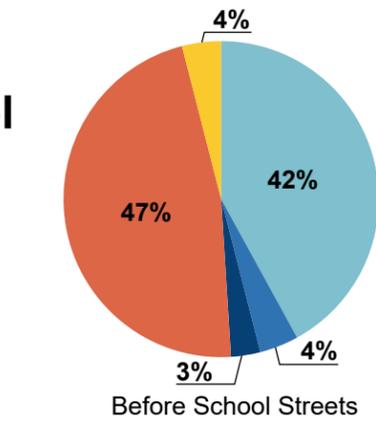
Data from the Hands-Up Survey conducted at Hillside PS asking about their travel modes before, during and after the pilot reveal that the School Street did increase active travel.

Hillside Public School

Prior to the School Street at Hillside PS, 49% of students used active modes of travel to school in the morning and 57% in the afternoon travel home. During the School Street pilot, 69% of students used active modes of travel to school in the morning, **resulting in a 20% increase in active school travel!** Two weeks after the School Street ended, 56% of students were still using active modes of travel to school in the mornings (+7% increase from pre-pilot levels).

Afternoon School Street periods also saw an increase in AST! Prior to the School Street 57% of students used active modes of travel to get home from school, whereas during the pilot 69% of students used active modes of travel.

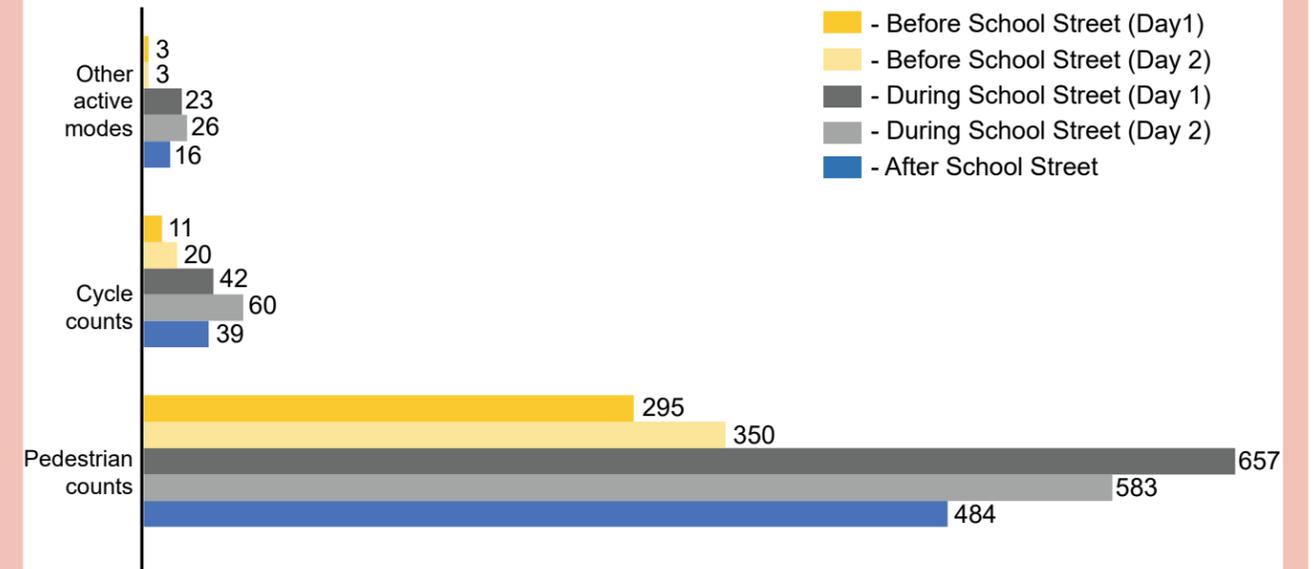
Therefore, AST increased by +12% in the afternoons when the pilot was running. Two weeks after the pilot, 67% of students used AST to travel home from school (+10% increase from pre-



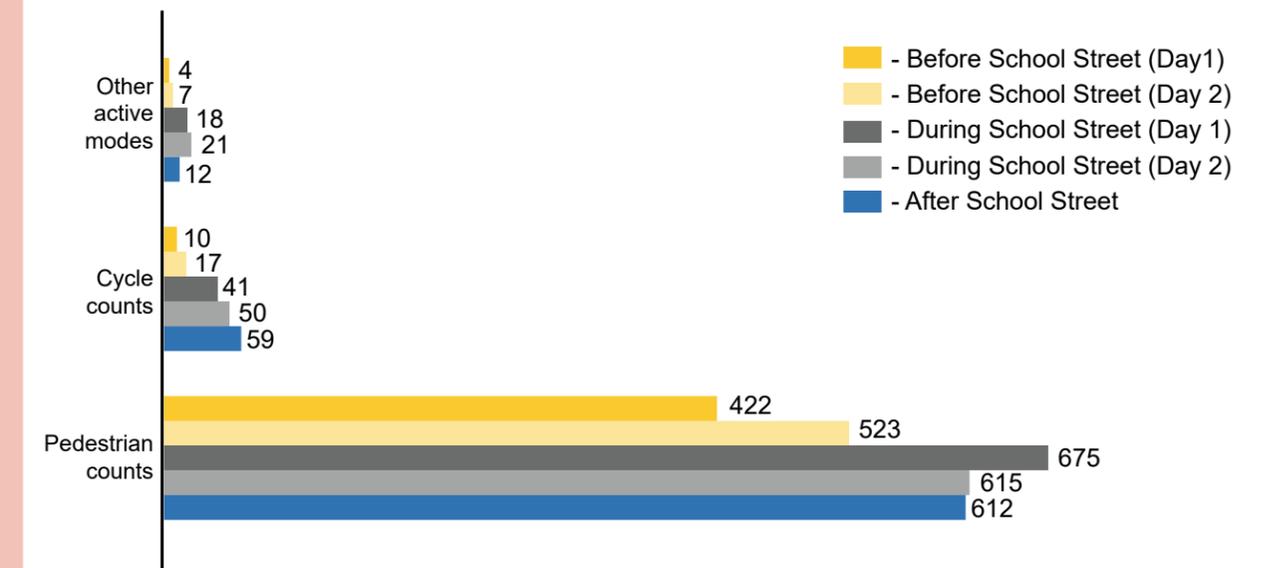
Change in active school travel rates at Hillside Public School

pilot levels). Data from manual active transportation counts confirmed the findings from the Hands-Up Survey and found that AST increased during the pilot. During the pilot, on average 3.3 times more cyclists were seen in the morning travelling to school.

On average, the number of pedestrians travelling within the school neighbourhood on School Street pilot mornings DOUBLED.



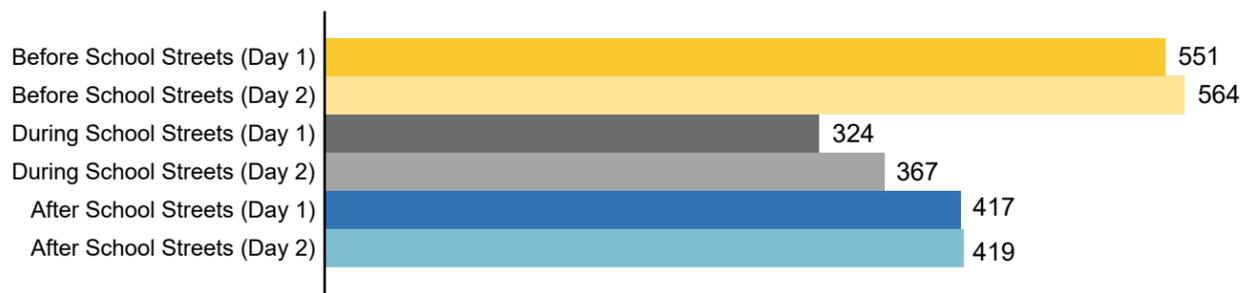
Active school travel modes at Hillside Public School, Mississauga (Morning)



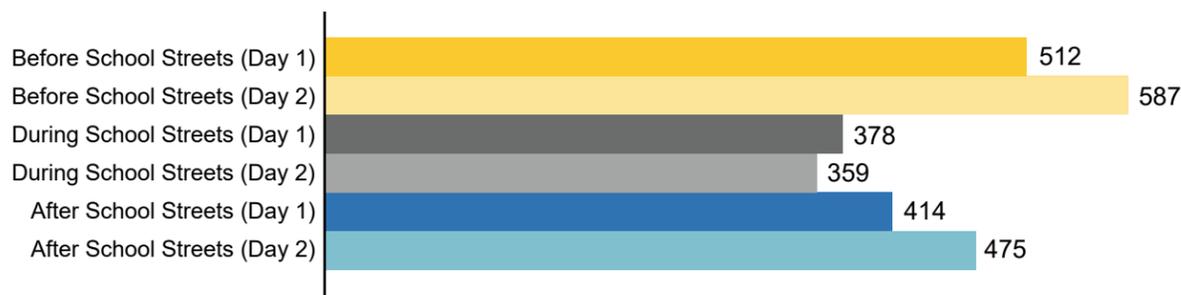
Active school travel modes at Hillside Public School, Mississauga (Afternoon)



The increase in active school travel at Hillside also corresponded with a reduction in car traffic on the streets surrounding the school. Traffic counts were taken in 4 locations surrounding Hillside PS and found that during the pilot there were on average 212 fewer vehicles in the morning drop-off period (8:15 - 9:00 am) and 181 fewer vehicles in the afternoon pick-up period (2:30 - 3:30 pm) compared to school days before the pilot. Two weeks after the pilot, traffic was still reduced in the school community. On average, during the School Street dates, traffic was reduced by 40% in the mornings and 33% in the afternoons.



Vehicles on streets surrounding Hillside Public School, Mississauga (Morning)



Vehicles on streets surrounding Hillside Public School, Mississauga (Afternoon)

St. Alfred and Brian W. Fleming School Street

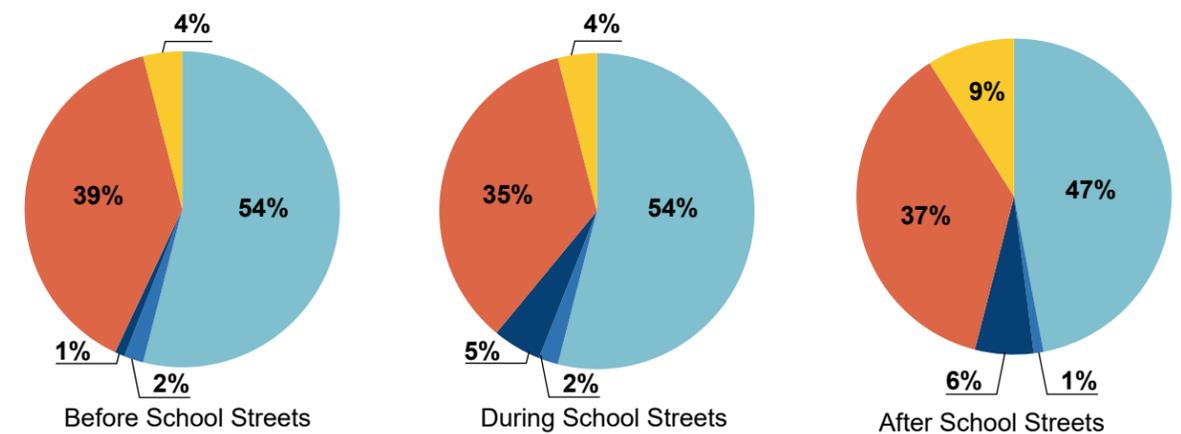
At the second School Street site, active school travel also increased during the pilot. A Hands-up Survey conducted with students at St. Alfred Separate School indicated that 52% of students used active modes of travel to get to school and 56% used active modes of travel to get home two weeks prior to the School Street.

During the School Street pilot, 60% of St. Alfred students used active modes of travel in the afternoon, **resulting in a 4% increase in active school travel and 4% decrease in car travel.**

After the pilot, students' travel modes returned to similar levels as they were pre-pilot.

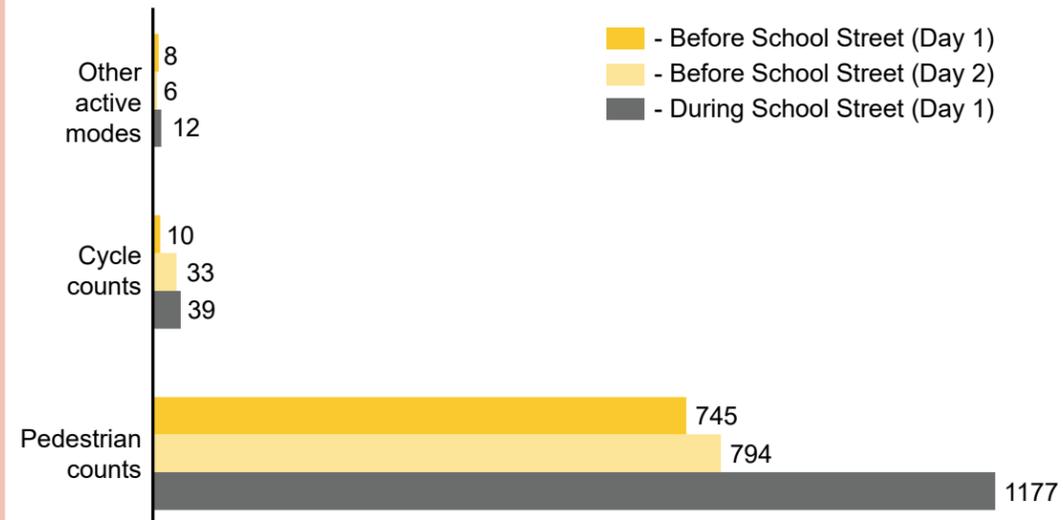
Brian W. Fleming PS did not conduct Hands-Up Surveys and therefore it is unclear how exactly their students' travel habits changed. However, traffic counts and travel observations before and after the School Street pilot revealed that the School Street led to:

- **1.5 times more pedestrians seen walking in the school zone** during the afternoon pilot (from an average of 770 to 1177 pedestrians)
- **Almost two times more cyclists** observed cycling during the afternoon pilot (from 13 to 27)



- Walk
 - Roll
 - Bicycle } Active school travel modes
 - Car
 - School Bus
 - Other

Change in active school travel rates at St. Alfred Separate School



Active school travel modes at Brian W. Fleming School



Traffic counts in the afternoon on streets surrounding St. Alfred and Brian W. Fleming schools

The modal shifts from driving to walking or cycling to school also corresponded with a decrease in traffic around the school zone. Observations were taken at 5 locations around the School Street on 6 different dates, two before the pilot, two during the pilot and two after the pilot ended. Traffic observations found that:

- **54 fewer vehicles were seen on surrounding streets** during the pilot period (2:30 – 3:45 pm)
- Two weeks after the pilot, traffic on surrounding streets remained lower than pre-pilot numbers!
- On average, the number of cars observed during afternoon pick-up period (2:30 -3:45 pm) decreased by 85 cars from pre-pilot to post pilot.



2. Increase accessible public space for active travel and play

Another goal of the Mississauga School Street was to create a public space for children and the community to play and move freely. The area of the Hillside PS School Street was approximately 2400m² of road space. The School Street at Brian W. Fleming PS and St. Alfred SS was approximately 2800m² in area.

Thus, the two School Street pilots were able to create a total of 5200m² of car-free public space for outdoor play and safe active travel!



3. Awareness and Acceptance of School Streets

The Mississauga team used a number of data collection tools to measure the community's response to the School Street including public engagement boards, community surveys and collecting social media engagement data. Community members also had the opportunity to provide feedback directly to City staff, at a public meeting, at community pop-up events, and by contacting the project lead directly. At Hillside school, teachers also collected additional feedback from students.

Community Surveys

Post-pilot community surveys that included residents, parents and volunteers in both school communities (n=366) indicated that 95% of those in affected communities were aware of the School Street program.

Prior to the School Street, a community survey was conducted and 78% of community members surveyed in the two school communities (n=70) indicated they did not want a School Street in their community. After the pilot, this dropped by 40%! Post-pilot, 47% of community members would want a School in their community, demonstrating that the School Street pilot increased acceptance of the program.

Prior to the pilot, only 44% of respondents were able to identify some potential positive impacts of a School Street, compared to after-implementation where 63% of respondents were able to identify positive impacts that the School Street had on their community, suggesting that there is an increase in awareness of the benefits of School Streets from the pilots.

In-person Engagement Boards

At Hillside PS, 100% of students who responded to in-person engagement boards said they feel happy that the School Street is happening in their community. In another engagement board after the pilot, 100% of students indicated they would feel happy if a School Street happened again in their community!

When students and the community were asked about the positive impacts of the School Street the following responses were provided:

“Encouraging physical activity and family time”

“Less traffic in front of the school”

“Less noise in the neighbourhood”

“Increases physical activity especially after being inside during the pandemic”

There were no comments provided about the negative impacts of the School Street.

In the St. Alfred and Brian W. Fleming community, 82% of students who responded to engagement boards felt happy about the School Street pilot. After the pilot, 78% of respondents said they would like the pilot to continue in the community and 89% said that they feel safe walking or biking to school.

When asked about the positive impacts of the School Street, the community mentioned the following:

“It’s a good idea because more people can cross the streets”

“I will walk more”

“There will be less chance of being killed”

“You get more exercise”

“There will be more fresh air”

Social Media Engagement

The increased awareness of School Streets from the Mississauga School Streets spread beyond the target communities as the initiatives were seen widely across different media outlets. Four different news articles were posted about the School Streets, achieving a total reach of over 676,000 readers. The City of Mississauga also shared postings on Twitter and Facebook about the School Streets, reaching over 48,000 Twitter users and over 211,000 Facebook users. The posts garnered mixed reactions from users with some expressing their adamant support and others remaining unclear about the purpose of the project.

School Involvement in the School Streets Pilots

Students across the spectrum of elementary, high school and post-secondary expressed interest in participating in this pilot. Across the two sites, there were a large number of students involved in varying capacities in the planning and implementation of the project. In total:

- 17 high school students sat on their local Project Planning Team (comprised of elected officials, local residents, parents, school staff and community organizations)
- >70 elementary students were involved in planning and implementation of activities during the School Street road closures and/or involved in data collection
- 30 high school and post-secondary students volunteered during the road closures

These students also benefited from this opportunity by receiving community service hours toward their graduation and earning a cash honorarium if they worked a minimum number of volunteer shifts (high school and post-secondary students only). All students also received a letter of reference from City staff to use toward future applications for work or study.

School Interest in Active School Travel Promotion

Prior to the pilot launch, none of the participating schools had been actively engaged in active school travel promotion that school year. The pilot itself led to all schools participating in a variety of promotional activities leading into and during the pilot, including:

- Walk to school “Launch” event in advance of pilot (all schools)
- Bike repair and helmet fitting event (all schools)
- Bike and helmet giveaway (donated bikes and purchased helmets; all schools)
- Announcements to promote walking and cycling to school (all schools)
- “Walk Across Canada” initiative based on pedometer counts (St. Alfred and Brian W. Fleming only)
- Classroom travel surveys conducted by students (St. Alfred and Hillside only)

After the pilot had concluded, all schools expressed interest and intention to continue promoting active school travel into the coming school year. Hillside applied for an additional bike rack to accommodate the increased number of students choosing to bike to and from school.

Requests for Additional School Streets

In response to news of the School Streets pilot, three City Councillors who did not already have participating schools in the pilot requested that they have schools participate in the future, and both of the City Councillors with pilot sites in their ward were supportive of the pilot. In addition, a resident attending one of the community meetings asked how they could get a School Street in their neighbourhood, and a resident living near one of the participating schools followed up with City staff after the pilot to express their support for the pilot becoming permanent.

4. Air Quality

At Hillside PS, during the morning School Street periods, 65% of pre-pilot air pollution was removed and 35% was moved away from the school. In the afternoon, 44% of air pollution was removed and 56% was moved away from the school. After the pilot ended, air pollution levels returned to similar to pre-pilot levels.

At Brian W. Fleming, during the afternoon pilot, 42% of pre-pilot air pollution was removed and 58% was moved away from the school entrance. Prior to the pilot, air quality measurements indicated that the highest concentration of particulate matter (i.e. air pollution from cars) was directly in front of the school entrance. Similar to Hillside, after the pilot had concluded, air pollution levels returned to pre-pilot levels.

KINGSTON

Between the years 2012-2016, the City of Kingston saw an average of 56 pedestrian collisions per year and 38 cyclist collisions per year. Based on the relatively high number of collisions and low population, these numbers are concerning for the city and its residents. For perspective, Kingston experiences about 40 pedestrian collisions per 100,000 people compared to York Region which experiences 9 pedestrian collisions per 100,000 people. The City of Kingston also has an average of 3 fatal collisions each year.¹

In response to the alarming rates of collisions and fatalities, the City of Kingston approved a Vision Zero policy in September 2019.¹ This policy was informed by collision data as well as a public survey that sought to better understand residents' concerns about road safety. From the analysis of these datasets, the City identified seven emphasis areas that the Vision Zero policy will seek to address. The emphasis areas include: intersections, aggressive driving, distracted driving, impaired driving, pedestrian collisions, cyclist collisions and young demographics. The public survey and community engagement efforts revealed that school zones were identified by the public as areas of high concern in respect to road safety, despite collision data revealing that they were not within the high priority in terms of collision occurrences. Collision data did reveal that between the years 2012-2016, 19 child pedestrians (aged 0-15) and 13 child cyclists were involved in a collision.¹ According to Vision Zero principles, even one injury or fatality is too many and therefore work needs to be done to improve children's safety within the City.

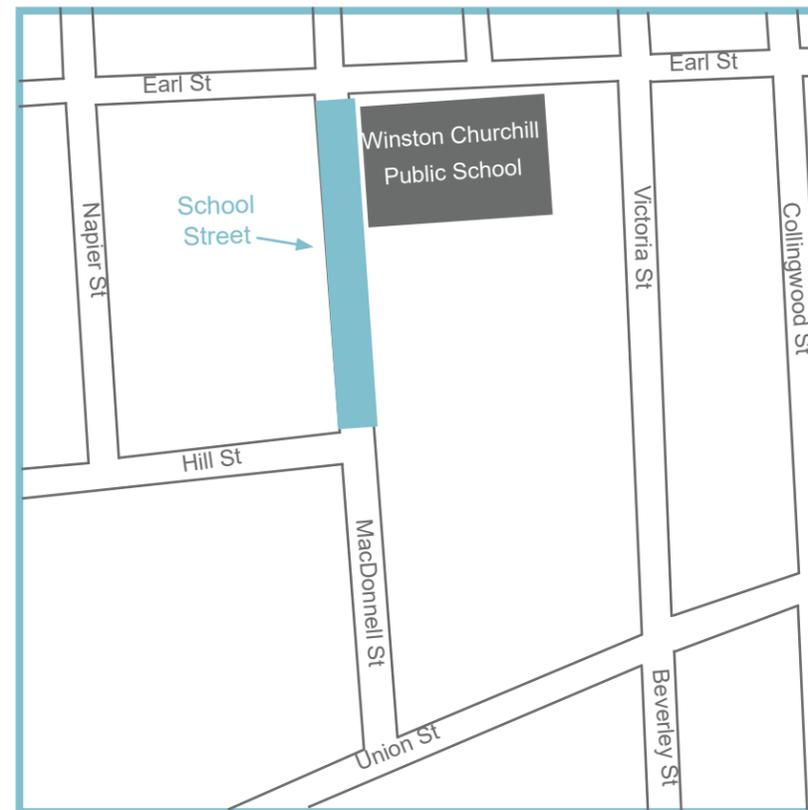
Many road safety advocates in the City of Kingston, including Dr. Patricia Collins of Queen's University and Roger Healey of KCAT were concerned about the safety of school zones. Dr. Patricia Collins and Dr. Kate Frohlich of University of Montreal initiated a large-scale research project in 2019, entitled Levelling the Playing Fields, that was seeking to evaluate School Streets and Play Streets in Kingston and Montreal. Dr. Patricia Collins approached Roger Healey and Kingston Coalition for Active Transportation (KCAT) with the concept of School Streets and Play Streets to see if they would be interested in leading the implementation of the two interventions. KCAT quickly signed on to the project as both interventions fit KCAT's mission of creating safer and more inviting spaces in Kingston for active transportation users. Around this time, they had also led a successful Quiet Streets program in Kingston and were interested in investigating future work in street rebalancing. The City of Kingston was consulted early-on and was supportive of the Play Streets and School Streets and incorporated the two interventions into the new Active Transportation Master Plan.

Site-specific Objectives

1. Increase active transportation to and from school
2. Improve safety in and around the school zone
3. Provide opportunities for children to build capacity in independent mobility
4. Raise awareness on the benefits of active school travel

¹ [Vision Zero](#); Kingston's road safety plan.

PILOT SITE



Kingston Coalition for Active Transportation (KCAT) ran their School Street the entire 2021-2022 school year, launching on September 7th, 2021 and ending on June 29th, 2022. The pilot ran at Winston Churchill Public School on MacDonnell Street from Earl Street to Hill Street. The School Street ran every school day for 25 minutes in the morning (8:40 - 9:05 am) and 25 minutes in the afternoon (3:20 - 3:45 pm). The School Street area includes almost 200 metres of MacDonnell Street, creating a traffic calmed environment where pedestrians and cyclists can move freely through the space.

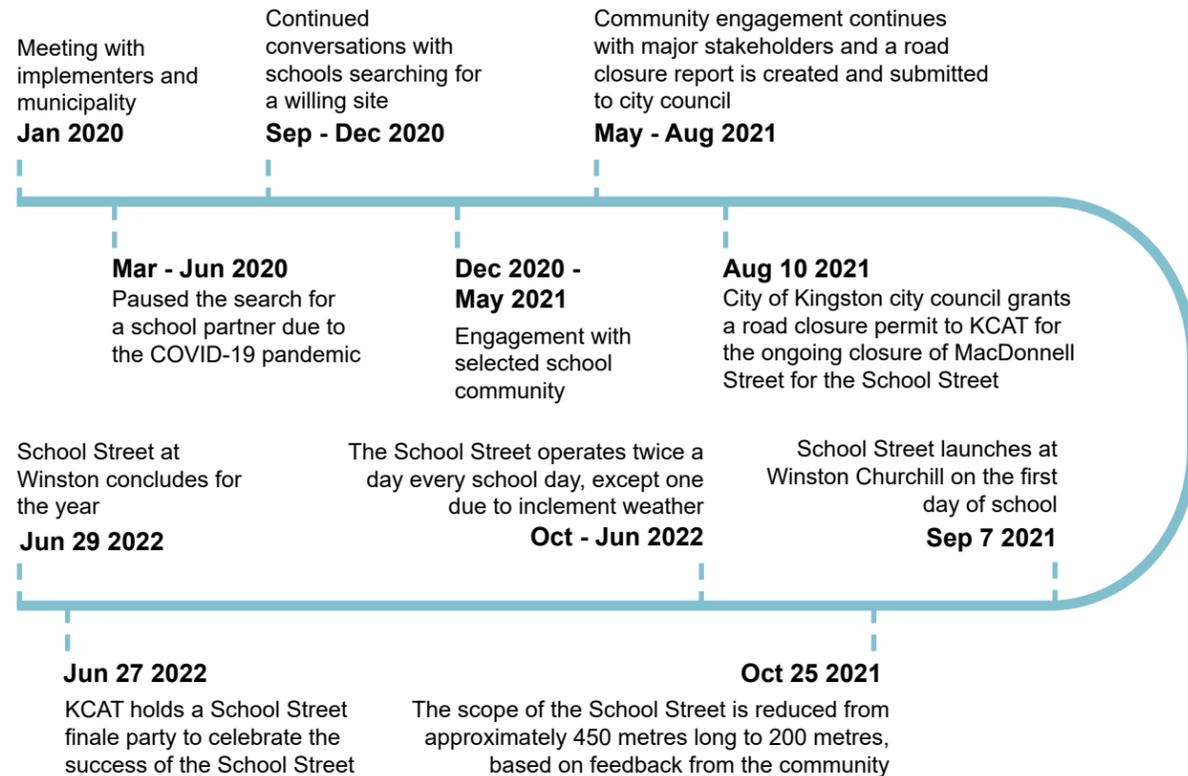
WHY WINSTON CHURCHILL PUBLIC SCHOOL?

The Kingston School Street is a part of a larger research project entitled "Levelling the Playing Fields" that involves researchers at Queen's University and the University of Montreal who are interested in evaluating School Streets and Play Streets. Multiple school sites across Kingston were approached as they met the following criteria:

1. School is not situated on a major public transit route or arterial road
2. High proportion of children within active transportation range
3. Principal and school community are supportive

Of the 6 schools that were approached, only 1 was willing and able to sign on to participate for September 2021.

PROJECT TIMELINE



COMMUNITY ENGAGEMENT

The Kingston School Streets program had four key audiences that the team actively worked to engage and include in the project:

1. School Staff
2. School Parents
3. Local Residents
4. City Staff

Community engagement occurred from January 2021 to August 2021 and took the form of virtual community meetings, informational letters, door-to-door meetings and online surveys. Engagement focused on informing the public on the School Street program and its potential benefit. The goals of the engagement process were to:

- Mobilize support from key stakeholders including residents and parents
- Bring attention to the importance of safe active school travel in Kingston
- Capture the feedback of the community on the successes and challenges of the pilot project to inform improvements and potential replication
- Document and measure the success of the pilot program to help build a community of practice around School Streets implementation in Canada and abroad.

OPERATIONS

Leadership

Kingston's School Street was led by the non-profit Kingston Coalition for Active Transportation (KCAT) with support from the City of Kingston Transportation Services Department. Specifically, KCAT was responsible for all operational aspects of the initiative, including securing liability insurance and closure equipment, coordinating and scheduling volunteers, and communicating with residents and other stakeholders. The School Street was evaluated by researchers from Queen's University led by Dr. Patricia Collins, in collaboration with Dr. Kate Frohlich from the University of Montreal, as part of a project called Levelling the Playing Fields. The research project, which is funded by the Canadian Institutes of Health Research, seeks to better understand the implementation of, and outcomes associated with, School Street and Play Street initiatives.

Road Closure Equipment

Kingston's School Street initiative used lightweight plastic barricades, road closed signs, and promotional signs to close the street to traffic. Volunteers were stationed at each barricade as well as within the closed School Street zone. All volunteers wore high-visibility vests and were equipped with whistles to alert pedestrians and cyclists if a motorist was entering the road space.



Vehicle Exemptions

Prior to the launch of the School Street, all residents living within the School Street zone and school staff were provided with rearview mirror tags that designated their vehicle as 'exempt'. This exemption granted these motorists special permission to enter the School Street zone when it was in session. All exempted motorists were required to drive at a walking pace and to be chaperoned by a volunteer while travelling through the School Street zone. The mirror tags were designed so that exempted motorists could be easily identified by the School Street volunteers.

Activities

Based on feedback from stakeholders, it was determined that the School Street would only be used for travel to and from school and would not involve the coordination of any activities or programming in the street space. In the last week of the School Street, KCAT organized a finale party for the community which involved music, activities and visits from city officials.



Volunteers

KCAT was able to recruit over 50 volunteers to support the School Street over the course of the school year. Volunteers included Queen's University students, parents, high school students and retirees. All volunteers received training from KCAT and were required to obtain vulnerable sector checks from the Kingston Police. Volunteers were responsible for setting up and taking down closure equipment, chaperoning exempted motorists through the School Street and monitoring the barricades. Each School Street shift required 3-4 volunteers.

RESULTS

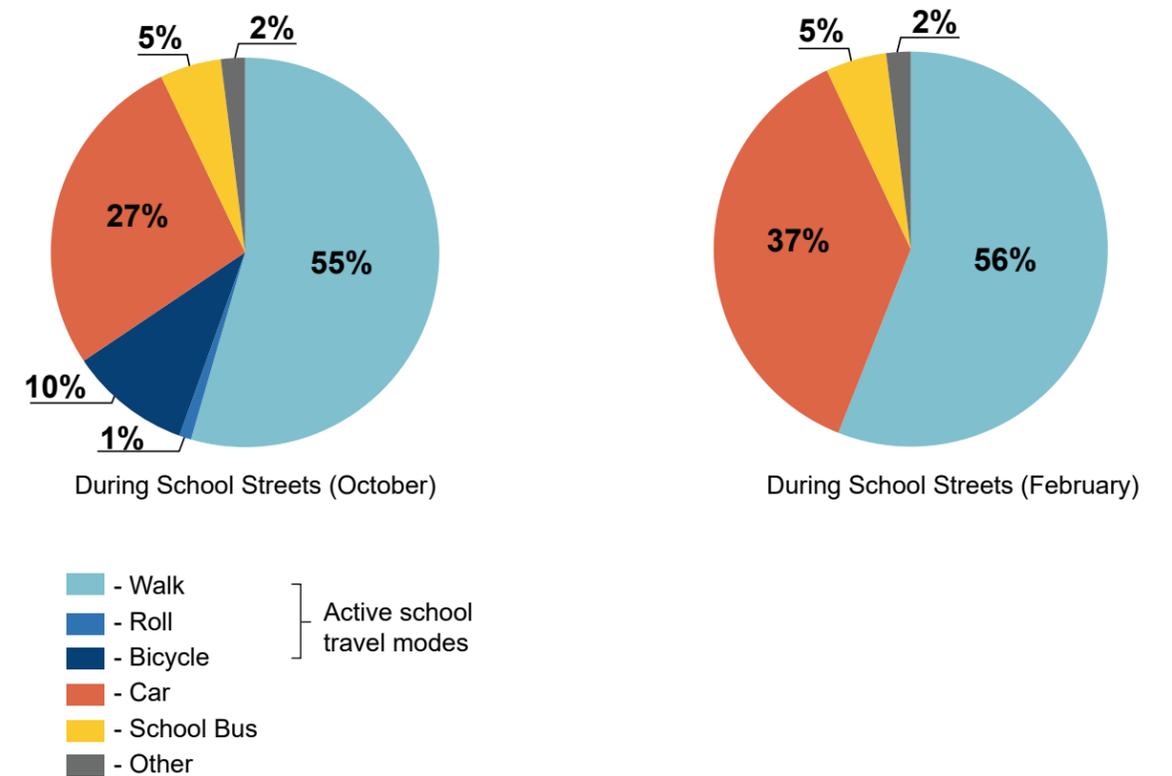
1. Change in Active School Travel

According to surveys with parents (n=46), active school travel of participating children increased by 11% from before the School Street pilot to during the pilot.

Hands-Up Surveys were also conducted in the classrooms to measure the levels of AST during the pilot; however, due to the COVID-19 pandemic and the consequent online learning in the 2020-2021 school year, the Kingston team was unable to collect baseline levels of AST.

During October of the School Street pilot, 54% of children walked to school, 10% cycled and 1% rolled to school. Therefore, 65% of children at the school use active modes of travel to get to school.

By February, only 56% of children were using active modes of travel to school, with no children using cycling/rolling as a mode of travel.



Change in active school rates at Kingston School Streets

2. Engagement with the School Street

As mentioned, the Kingston School Street was used primarily for active transportation to school and was not used as a space for play. However, results suggest that the School Street also became a place for socialization and community building. 49% of parents surveyed (n=46) indicated that the School Street allowed them to meet other parents for the first time. As well, 51% of parents said that they often take time to socialize with other parents on the School Street.

Survey responses from parents also indicated that there would be interest in using the School Street space for activities if the School Street were to continue. One parent included the following suggestion in their comments: “If/when COVID finishes, it would be nice to organize some street festival kinds of things in the controlled areas for special events (e.g., marking orange shirt day, celebrating pride month).”

Key informant interviews conducted in Kingston also suggested that at the start of the School Street children tended to stay on the sidewalk despite the closed road, but as the program proceeded children started to use the road space more throughout the year. Specifically, the road space seemed especially valuable in winter months when sidewalks were not always cleared.

The School Street also provided benefits during the pandemic, with 63% of parents indicating that they used the road space for maintaining physical distance.



Finally, some vehicles were permitted to enter and exit the School Street including residents on the street, emergency vehicles, and school staff. Volunteers recorded the number of vehicles admitted in and out of the space and found that very few vehicles needed to drive through the School Street. In the mornings, an average of 1.3 vehicles entered the School Street and less than 1 exited the space. In afternoons, an average of less than 1 vehicle entered the School Street and 3 exited, consisting mostly of school staff.

3. Perceptions of School Streets

Residents

Residents in the neighbourhood seemed to be the least supportive of the School Street project. 48% of residents surveyed (n=30) felt that their experience with the School Street project was either unpleasant or very unpleasant. Many of the residents surveyed further explained their experience and stated that the School Street inconvenienced them and made accessing their homes on the street a more frustrating experience. In the survey, some residents also expressed a lack of understanding of the School Street and what the program aimed to achieve. However, around 19% of respondents did suggest that the School Street project strengthened the sense of community in the neighbourhood.

Parents and Students

School parents were generally supportive of the School Street once it began. In the survey of parents after the pilot, **76% of parents (n=46) said they would support the School Street continuing at Winston Churchill PS in the future.**

Additionally, 44% of parents surveyed said that the School Street increased their sense of safety while travelling on MacDonnell Street, and 46% revealed that the School Street increased their child’s interest in using active school travel. When speaking to children directly in a focus group, almost all children said that the School Street either made them feel safer when travelling to school and/or less worried about traffic.



Volunteers

KCAT had a strong group of volunteers who supported the School Street throughout the entire school year. The volunteers offered important insights into the School Street as they were at the site on a weekly basis. In a survey, all of the volunteers (n=30) expressed satisfaction, on some level, with their experience volunteering for the School Street. Additionally, 80% of volunteers said that volunteering for the School Street made them feel more like part of a community.

4. City-wide impacts

In February of 2022, a 10-year-old girl tragically died outside of her school in Kingston, ON after being hit by a truck. This tragedy filled the Kingston community with grief and frustration around the state of school zones across the City. In response to the child's death, the City of Kingston created a city-wide School Pedestrian Safety Working Group that included representatives from the City of Kingston (two elected Councillors and Department of Transportation Services), four school boards, parent councils, Tri-Board Transportation, Kingston Police and KFL&A Public Health. KCAT was able to share preliminary findings on the School Street at Winston and offer the School Street model as a solution for safer school zones.

The School Pedestrian Safety Working Group presented a series of recommendations to City Council on June 21st, 2022 including the expansion of the School Streets program to an additional school in the 2022-2023 school year and potentially more in the future. City Council unanimously approved the expansion of the School Streets program and the continuation of the School Street at Winston for the upcoming year. This approval also means that future School Streets and Play Streets in Kingston do not need to receive full Council approval and can be approved by the Department of Transportation Services. Roger Healey, the Chair of KCAT, says he has been approached by many interested parents and schools looking to implement a School Street, however, KCAT does not have funding nor the staff to take on additional School Streets at this time. There is hope that other stakeholders can help contribute and coordinate the expansion of the School Street program to additional schools across Kingston in upcoming years.

