



Report to: Development Services Committee

Meeting Date: May 2, 2023

SUBJECT: Active School Travel Pilot Results & Next Steps
PREPARED BY: Fion Ho, TDM Coordinator, Transportation, Ext. 2160
David Porretta, Manager, Traffic Engineering, Ext. 2040

RECOMMENDATION:

- 1) That the staff report titled “Active School Travel Pilot - Results & Next Steps” be received; and,
- 2) That Active School Travel measures be implemented at three Markham elementary schools in 2023 in partnership with the York Region school boards, with Markham’s contribution of \$10,000 to be funded from the 2023 Cycling & Pedestrian Advisory Committee Budget (#23094); and further,
- 3) That Staff be authorized and directed to do all things necessary to give effect to this resolution.

PURPOSE:

This report provides the results of the Active School Travel pilot program, and recommends next steps to support active school travel and enhance school zone safety.

BACKGROUND:

Growing public health concerns and the development of Active School Travel

In April 2022, staff presented the report “Active School Travel & School Street Test Programs” which highlighted that the rates of elementary school students being driven to school has more than doubled between 1986 and 2016, from 14.7% to 33.9%. Based on findings in the Metrolinx report “School Travel in York Region” (2018), York Region has the highest driving rates in the Greater Toronto and Hamilton Area.

As such, an Active School Travel (AST) program was introduced by the York Region District School Board to encourage more students to walk, bike and scooter to and from school, and address issues of increasing driving rates noted above.

In 2018, York Region District School Board (YRDSB) received grants from the Ontario Active School Travel Funds (OAST) – Green Communities in Canada to develop and implement an “Active School Travel” pilot in York Region. Given Markham’s advocacy and prior actions taken toward promoting active school travel and safety, Markham was selected for the pilot. Along with other partners, including York Catholic District School Board (YCDSB), York Region and City of Markham, the AST pilot was launched in May 2019 and ended in June 2021.

Markham AST Pilot adopted a tiered system that included school outreach, community awareness and traffic enhancement.

A total of seven (7) Public and two (2) Catholic elementary schools across Markham participated in the AST pilot. In consultation with YRDSB and YCDSB, the schools were selected based on multiple factors, including the existing built environment of the community, traffic conditions/safety, the number of students living within the defined walking distance to the school, the level of support from school staff and parents, and overall feasibility to implement and sustain an AST program. Appendix “A” provides a map of the pilot school locations.

The goal of the Markham AST pilot was to evaluate the effectiveness of different measures in increasing AST participation at schools and to improve the overall sustainability of AST programming. As such, a tiered approach was applied at the pilot schools as shown in the table below.

Table 1: Active School Travel Tiers and Associated Schools

Level	AST Measures	Pilot Schools
Tier 1: Education & Encouragement	<ul style="list-style-type: none"> • Parent council meetings, student assembly presentations, kick-off events and year-end fairs, on-going communications, seasonal mobile signs • Classroom Competition • Family Connection (Group Walking) • Interactive sidewalk markings (such as hopscotch) and wayfinding signage 	All Saints CES (Ward 6) St. Francis Xavier CES (Ward 7) David Suzuki PS (Ward 7)
Tier 2: Engineering	<ul style="list-style-type: none"> • All Tier 1 measures • “No stopping” signage, red curb-side “no stopping” pavement markings, “School Zone” pavement markings, ladder crosswalks. 	Castlemore PS (Ward 6) Randall PS (Ward 8) Coppard Glen PS (Ward 7)
Tier 3: Intervention	<ul style="list-style-type: none"> • All Tier 2 measures • Closure of the school pick-up and drop-off facility • “Walking Wednesday” Program 	Legacy PS (Ward 7) Stonebridge PS (Ward 6)
Tier 3+	<ul style="list-style-type: none"> • All Tier 3 measures • “School Streets” implementation 	John McCrae PS (Ward 6)

Please refer to Appendix “B” for more information on these AST measures.

“School Streets” was a new initiative introduced in 2022, as part of the AST Pilot.

With additional funding provided by Green Communities Canada (Innovative Funds), a School Streets program was approved by Council in April 2022 and subsequently implemented at John McCrae Public School on four consecutive Wednesdays in May 2022. As an extension of the AST pilot, the School Streets program involved temporarily closing Stricker Avenue, directly in front of John McCrae Public School, to create a car-

free zone that facilitates a safer environment for active school travel. The closure occurred every Wednesday for approximately one hour during the times surrounding the AM and PM school bell time. The program was well-received by the school community, with 62% of parents, school staff and the impacted residents/households supporting it and 64% indicated support for a future School Streets program. It increased active school travel to John McCrae PS, and was successful in raising overall awareness among the community, students and parents, about the importance of AST.

The Green Communities Canada Innovative Funds received also supported three of the pilot schools to receive “upgraded” AST measures in the Tier 2 category that included the traffic engineering enhancements on streets within the school zone. This also included additional funding for marketing such as an Active Safety Week campaign at all pilot schools.

OPTIONS/ DISCUSSION:

A hands-up survey was conducted to evaluate AST changes

Data was collected from students and school staff to evaluate the effectiveness of the Markham AST Pilot. A student hands-up survey was conducted to understand how students commuted between home and school. The survey was conducted on a monthly-basis, for one entire week, during the pilot program. The table below shows the results of the survey, from the 9 pilot schools.

Table 2: Survey Results of Students Who Walked, Biked, Took the School Bus or Parked and Walked a Block to School

AST Pilot Schools	Tier	Baseline Data ¹	School Year Average				Change in overall AST%
			2018/2019 ²	2019/2020 ³	2020/2021 ⁴	2021/2022 ⁵	
St. Francis Xavier CES	1	53.0%	56.3%	56.3%	53.3%	N/A	N/A
All Saints CES	1	68.0%	58.7%	75.2%	N/A	N/A	N/A
David Suzuki PS	1	71.0%	74.9%	66.2%	63.8%	68.2%	-2.8%
Castlemore PS	2	57.0%	73.8%	63.1%	64.8%	68.2%	11.0%
Randall PS	2	62.0%	81.2%	77.0%	70.2%	74.8%	12.8%
Coppard Glen PS	2	59.0%	61.3%	63.7%	68.7%	61.2%	2.2%
Stonebridge PS	3	62.0%	70.9%	68.9%	62.6%	74%	12%
Legacy PS	3	59.0%	61.2%	66.3%	51.6%	84.5%	25.5%
John McCrae PS	3+	76.0%	75.3%	77.3%	93.8%	90.0%	14.0%
Total Average:		63.0%	68.2%	68.2%	61.0%	69.4%	10.7%

1. Baseline data was conducted in April 2019.

2. Survey data collected for May and June 2019, end of school year.

3. Survey data collected for September and October 2019 only, due to labour disruption and COVID-19 school closures.

4. Survey data collected between September and March. No data for January due to COVID-19 school closures.

5. Survey data collected between September and June. No data for January due to COVID-19 school closures.

The data collection was impacted by a labour disruption in 2019, followed by repeated school closures due to the COVID-19 pandemic. The latter in particular presented challenges in the program implementation. This is especially evident for All Saints Catholic Elementary School, which has a large school bus student population, compared to other schools in the pilot. Due to health concerns associated with COVID-19, students that normally took a school bus were driven to school instead, hence the significant reduction in AST at the school.

More students are walking, biking or taking school bus to school

Despite the unforeseen challenges during the AST pilot, there was an upward trend in a majority of the pilot schools. Within the first year of the pilot launch, AST activity at the schools averaged a 5% increase, from 63% to 68%. Unfortunately, the pilot was impacted between 2019 and 2021, due to the pandemic. The pilot was re-launched in September 2021, and by June 2022, the average AST activity for all pilot schools was 69%, although some schools measured much higher rates of AST activity.

When comparing the baseline year (2019) to the final year (2022) of the pilot, 7 of the 8 pilot schools experienced an overall average increase in AST activity of 10.7%. St. Francis Xavier CES and All Saints CES was not included in the average increase calculation, due to the absence of data available for up to two school years. Most notably, Legacy, Castlemore, John McCrae and Randall Public Schools all saw double-digit increases.

Tier 3 Schools experienced the highest growth in AST

A key observation from the hands-up survey was that at the two schools where only the Tier 1 measures were implemented, there was no increase in AST activity. In fact, AST activity decreased. Although the cause is not clear, the pandemic may have had an outsized effect on the level of participation and engagement from the school community where the AST measures deployed involved person-to-person interactions. Nonetheless, more data and information is required to better analyze whether the correlation between tier level and AST participation exists.

However, schools that applied Tier 3 initiatives experienced the highest increase in AST activities with on-school campaigns and enhanced traffic safety measures. The schools with only Tier 2 initiatives received more modest AST improvements in comparison.

AST Pilot demonstrated enhanced traffic safety awareness in school zones

The Markham AST pilot demonstrated improvements in traffic safety. A survey was conducted amongst school staff of the participating schools regarding traffic safety. 84% of respondents noticed improved behavior of road users in their respective school zones. Stop sign compliance, vehicle speeds, traffic congestion and safe vehicle maneuvers all improved during the pilot, when compared to pre-pilot conditions.

At John McCrae Public School, following the 2022 School Streets initiative, 66.4% of students surveyed felt safe walking on or near the street. Parents and guardians also expressed feeling much safer having their kids walk or bike to school during the period when the School Streets initiative was in effect.

Increased school community awareness of AST and support for continuing the program

Families of the AST pilot were surveyed after the pilot, with 436 respondents. It was noted that over 75% of the respondents were aware of at least one of the AST measures and associated campaigns. And about 85% indicated support for continuing the active school travel program and school zone safety measures. This is consistent with a school staff survey where 100% responded in support for continuing the pilot program into the future.

The school board has approached the City to support AST initiatives at three new schools

The Markham AST pilot has come to an end as the OAST funding has been depleted. However, three public schools have expressed an interest to YRDSB in having Tier 2 measures from the AST pilot applied to their respective schools. This will also include bicycle pop-up events offered by Markham Cycles to provide cycling education and awareness. Further consultations will be conducted with the interested school principals, school community and Ward Councillors.

A modified school street pilot is also being considered at John McCrae PS to be implemented in Spring 2024. Learning from the limited pilot in 2022, the modified school street pilot will be an extension of the AST program. This proposed expanded school street pilot is still under discussion with the YRDSB, and will be subject to budget review, staff resource availability and Council approval.

Staff recommend that School Zone Safety Guidelines be developed

One of the components of AST is the inclusion of various traffic control measures, including enhanced pavement markings, signage and parking and stopping restrictions. These measures, in addition to other existing safety initiatives currently employed at various schools, including school crossing guards, pedestrian cross-overs (PXOs), in-road flexible signs and bollards, and speed radar display boards. Collectively, there is a suite of existing and other possible measures that the City could consider in an effort to promote AST and improve travel safety within school zones. At this time, both AST and our existing school zone safety measures are reactive and conducted on a case-by-case basis. This has led to inconsistent application of measures between school zones. A coordinated and standardized program is necessary to ensure that each school is treated equitably and consistently, and is more likely to produce improved community participation rates and safety outcomes for each school community and across the City.

In order to effectively evaluate such options and develop standard policies and procedures in conjunction with an annual AST program, staff will be requesting a capital budget for 2024 for the development of School Zone Safety Guidelines through the annual budget approval process. Staff will also be developing an annual multi-year program to apply recommended measures, including an AST program, in a strategic and uniform fashion, ultimately leading to full coverage of all elementary schools in the City.

FINANCIAL CONSIDERATIONS

In 2018, the York Region District School Board application to the Ontario Active School Travel (OAST) fund was successful, receiving \$60,000 to promote active school travel in Markham. The OAST funds largely supported the Markham AST Pilot with financial contributions from the YRDSB, York Region and City of Markham. The breakdown is shown in table below.

Table 3: Overall Active School Travel Pilot Funding Contribution

ACTIVE SCHOOL TRAVEL PILOT	2018	2019	2020	Total
Green Communities Canada				
Ontario Active School Travel Funds	\$ 60,000			\$ 60,000
Matching Funds				
City of Markham	\$ 5,000	\$ 3,000	\$ 3,000	\$ 11,000
York Region District School Board	\$ 3,000	\$ 3,000	\$ 3,000	\$ 9,000
York Region	\$ 3,000	\$ 3,000	\$ 3,000	\$ 9,000
Active School Travel Pilot Subtotal:				\$ 89,000
INNOVATIVE FUND - SCHOOL STREETS	2021			
Green Communities Canada				
Ontario Active School Travel Funds	\$ 27,500			\$ 27,500.00
Matching Funds				
City of Markham	\$ 3,500			\$ 3,500
INNOVATIVE FUND - TIER 2 UPGRADES & MARKETING				
Green Communities Canada				
Ontario Active School Travel Funds	\$ 8,000			\$ 8,000
Matching Funds				
City of Markham	\$ 12,500			\$ 12,500
Innovative Fund Subtotal:				\$ 51,500
TOTAL AST BUDGET:				\$ 140,500

City of Markham has contributed a total of \$27,000 to the AST program, not including over 200 hours of in-kind staff time to support the program. The financial contribution is funded through the annual Active Transportation Awareness Program (Cycling & Pedestrian Advisory Committee portion) between 2018 and 2020, and 2022, respectively from accounts: #18042, #19030, #20032 and #22039.

The implementation of AST initiatives at three new schools in 2023 that is currently in discussion with the YRDSB is estimated to be \$19,000. This will be jointly funded by YRDSB, York Region and City of Markham. City of Markham contribution of \$10,000 will come from account #23094 (Cycling and Pedestrian Advisory Committee), if the initiatives move forward.

HUMAN RESOURCES CONSIDERATIONS

Not applicable.

ALIGNMENT WITH STRATEGIC PRIORITIES:

In the Building Markham's Future Together Strategic Plan, the Active School Travel Program and the School Street Test Program aligns with the strategic focus for a Safe & Sustainable Community by improving and making active transportation an attractive and sustainable mobility option.

BUSINESS UNITS CONSULTED AND AFFECTED:

Not applicable.

RECOMMENDED BY:

Frank Clarizio, P.Eng
Director of Engineering
Services

Arvin Prasad, MPA, RPP, MCIP
Commissioner of Development

ATTACHMENTS:

Appendix A – Active School Travel Pilot School Locations
Appendix B – Active School Travel Measures