

# Active & Sustainable School Transportation



**Memorial**  
ELEMENTARY SCHOOL

## School Travel Plan

**Prepared**  
March 2016

**Updated**  
October 2017  
October 2018  
November 2019

## **Acknowledgements**

This School Travel Plan was prepared as part of the Active & Sustainable School Transportation Certification process, and in partnership with Memorial-Stoney Creek Elementary School, Hamilton-Wentworth District School Board, and the City of Hamilton.

## **Permission to Reproduce**

This School Travel Plan is a living document containing an array of school travel information gathered from students, families, school staff, and other community partners and stakeholders. While the document contains no personal or individual information, all parties involved wish to recognize the confidential and potentially sensitive nature of the information contained within and ask that the document be distributed with care by any who receive it.

### **For more information about this report**

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# School Travel Plan—Memorial Stoney Creek Elementary School

## 1. Introduction

Active & Sustainable School Travel (ASST) emphasizes the importance of walking, cycling, and public transit. More students using ASST means less cars on the road, less pollution, improved safety, and increased physical activity. School Travel Planning (STP) is a community-based approach that aims to increase the number of children choosing ASST to get to and from school.

Key community stakeholders work together to identify, and to solve their school travel problems. These stakeholders include school boards, municipalities, police, public health professionals, parents, educators and students.

### 1.1. School Travel Planning involves five steps:



## **1.2. Rationale for participating in the Active and Sustainable School Travel Certification process**

- Only 8% of Canadian children & youth meet the minimum physical activity requirements of 60 minutes per day of moderate-to-vigorous physical activity<sup>1</sup>
- Thirty-two percent of Canadian children & youth are overweight (20%) or obese (12%)<sup>2</sup>
- Health benefits of physical activity and reduced sedentary behaviour (decreased motorized transport) associated with walking or cycling to school include the following:<sup>3,4,5</sup>
  - ▶ Promotes healthy growth and development
  - ▶ Improves fitness
  - ▶ Improves academic performance
  - ▶ Provides social opportunities with friends and family
  - ▶ Improves self-confidence
  - ▶ Reduces stress and anxiety
  - ▶ Helps maintain a healthy body weight
  - ▶ Reduces greenhouse gas and air pollution
- Currently, only 28% of Canadian children & youth walk or cycle to and from school<sup>6</sup>
- Walking and cycling to school daily can add 15-20 minutes (about 1.6 kilometres) of physical activity<sup>3</sup>, which contributes to the 60 minutes of daily physical activity needed for overall health<sup>4</sup>

## **2. Step 1: School Travel Planning Set-up**

Memorial-Stoney Creek initiated ASST-STP Certification on September 2015. The School Council will manage the School Travel Plan (STP) with assistance from the Hamilton Active & Sustainable School Travel (ASST) Hub. The committee meets monthly and ASST-STP will be a standing item.

## **3. Step 2: Data Collection**

A complete picture of school travel is developed by using objectively measured (Geographic Information System [GIS] mapping, traffic counts, school transportation profile) and self-report (student surveys, family surveys, and walkabouts) data. The collection of travel data to and from Memorial-Stoney Creek Elementary School occurred through the following methods:

- School transportation profile
- In-class, hands-up student travel survey
- Take home family travel survey
- School site and school neighbourhood walkabout
- Traffic counting

### 3.1. School and School Neighbourhood Profile

Memorial-Stoney Creek E.S. is one of 89 Hamilton Wentworth District School Board schools. It is a junior-kindergarten to grade eight school. Bell times are at 8:25 a.m. and 2:45 p.m. According to 2016/2017 data from the Hamilton Wentworth Student Transportation Services approximately 37% of students are within walking distance to and from school ( $\leq 1.6\text{km}$ ) and the remaining 63% are bused.

Memorial-Stoney Creek Elementary School (E.S.) is located within Hamilton's South Meadow Neighbourhood in Ward 10. Ward 10 is considered a suburban area. The "L-shaped" boundary for Memorial-Stoney Creek E.S. Green Road (west), Fruitland Road/Regalview Drive (east), Ridge Road (south), and Highway 8/Barton St (north). See **Appendix A** for the school boundary. Listed below are findings from the Ward 10 community profile developed by the City of Hamilton:<sup>7</sup>

- Age group distribution below 50 years of age in Ward 10 is lower in comparison to the City of Hamilton; whereas above age 50 years is higher
- There is a lower proportion of lone parent families in Ward 10 compared to Hamilton; and a greater proportion of couples with children
- Education attainment is similar in Ward 10 and the City of Hamilton
- Ward 10 has a higher proportion of immigrants compared to the City of Hamilton (over one third)
- Proportion of employed labour force that use public transport or walking is lower in Ward 10 than in the City of Hamilton
- Home ownership is much higher in Ward 10 (89.6%) than in the City of Hamilton (68.4%)
- The average income in Ward 10 is higher than for the City of Hamilton

The South Meadow Neighbourhood has a few assets including Memorial Park (**Figure 1**), Stoney Creek Cenotaph Park (**Figure 2**), and Orchard Park Secondary School (**Figure 3**). Other significant features include Stoney Creek Arena, Brewster Pool, and the vista of the Niagara Escarpment.

**Figure 1: Memorial Park**



**Figure 2: Stoney Creek Cenotaph Park**



**Figure 3: Orchard Park Secondary School**



The majority of this neighbourhood was built after 1960.<sup>8</sup> Loops and lollipops are the characteristic street design for this era.<sup>9</sup> The longer winding street design and cul-de-sacs present a maze-like pattern with limited route choice.<sup>9,10</sup> The intention of this design was to limit through traffic, thereby increasing privacy and safety within the neighbourhood.<sup>9,10</sup>

The streets within the South Meadow neighbourhood and the school boundary are largely local roads except for Highway 8 (major arterial); King Street, Millen Road, and Fruitland Road (minor arterial); and Green Road and Dewitt Road (collector road).<sup>11</sup> See **Table 1** for road classification description. Additionally, there are informal pathways that provide shorter walking distances to the school that are devoid of vehicular traffic on the land where Memorial-Stoney Creek E.S. is located.

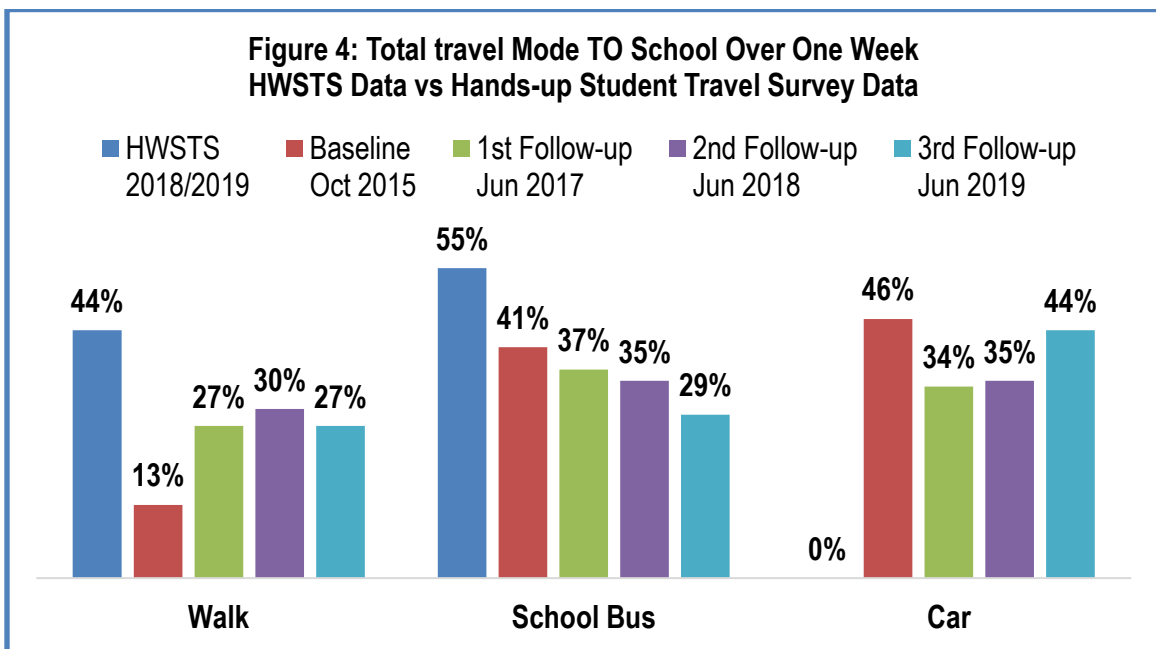
**Table 1: City of Hamilton Road Classification Basic Description<sup>12</sup>**

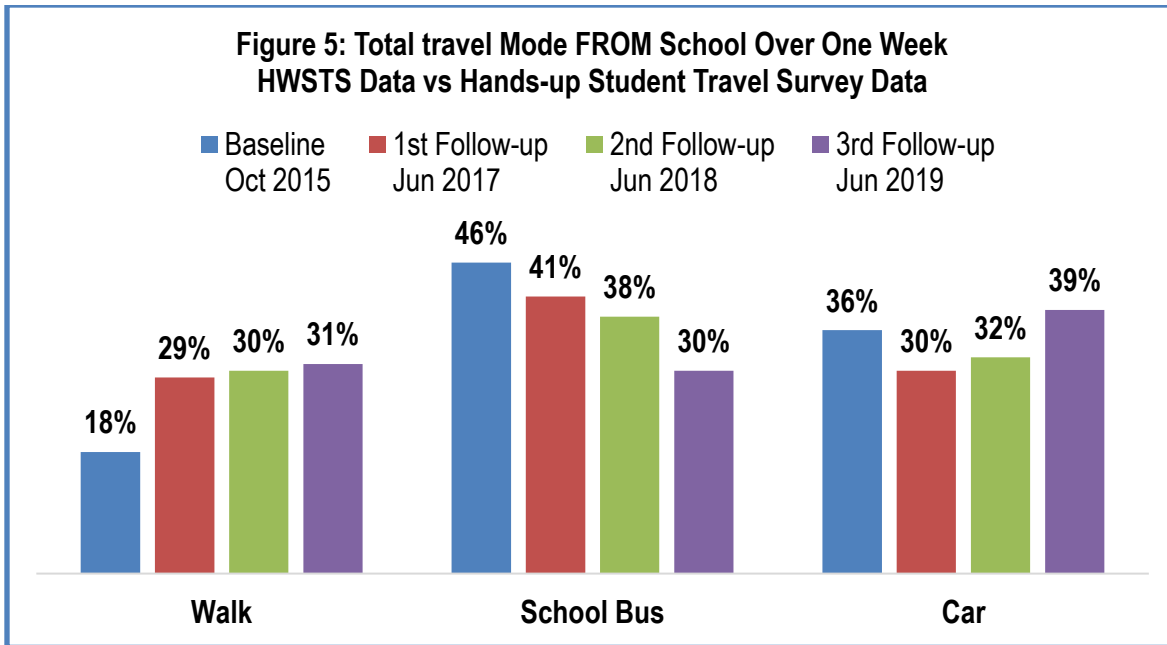
Road Type	Traffic Volume	Vehicles/Day	Speed Limit
Major Arterial Road	High	> 10,000	60-80 km/hr
Minor Arterial Road	Moderate	5,000-20,000	50-60 km/hr

Road Type	Traffic Volume	Vehicles/Day	Speed Limit
Collector Road	Moderate	< 8,000	50-60 km/hr
Local Road	Low	< 1,000	40-50 km/hr

### 3.2. Student Travel Survey

The in-class hands-up student travel survey (STS) was administered for one full week to collect information about how students travel to and from school. Travel survey data collection dates included October 19, 2015 (baseline), June 12, 2017 (first follow-up), June 11, 2018 (second follow-up), and June 10, 2019 (third follow-up). The results of the student travel survey are shown in **Figure 4** and **Figure 5**.





The hands-up STS combined to and from school results showed

- Increases in walking/walking part-way between baseline 13% (2015) and the three follow-up results 27% (2017), 26% (2018) and 25% (2019); however; a slight decrease from first follow-up to third follow-up during the morning commute
- Increases in cycling between baseline 0% (2015), and the three follow-ups 2% (2017), 4% (2018), and 2% (2019)
- Decreases in school bus/public transit use – 43.5% (2015), 39% (2017), 36.5% (2018), and 29% (2019).
- Decreases in car travel between baseline and the two follow-ups 40% (2015), and 31.5% (2017) and 32.5% (2018); however, an increase in car travel at the third follow-up 44% (2019)

Cycling to and from school is on the rise for Memorial Stoney Creek ES. However, school bus ridership is decreasing, possibly owing to some of the concerns raised by parents/guardians. This may account for the slight increase in car travel between 2017 and 2018, and a more substantial increase in 2019. Overall, car travel was decreasing, and active school travel is increasing from baseline to the second follow-up. It appears that car travel may be increasing with the large drop in school bus use. It is important to address this change, as the number of cars at the school site may exhibit a negative influence on air quality, pedestrian/cyclist safety, and students' physical activity through less active travel.



There is more work to be done. In comparison to 2018/2019 data from the HWSTS (44%), the 2019 hands-up STS (27% - average TO and FROM) shows daily active travel is lower; however, the gap is closing. Additionally, the 2019 results show that car travel continues to be the predominate mode, with about 148 vehicles at the school site for arrival and for dismissal. Finally, the school bus data shows that about 26.5% of students that should be travelling by school bus are also choosing another mode.

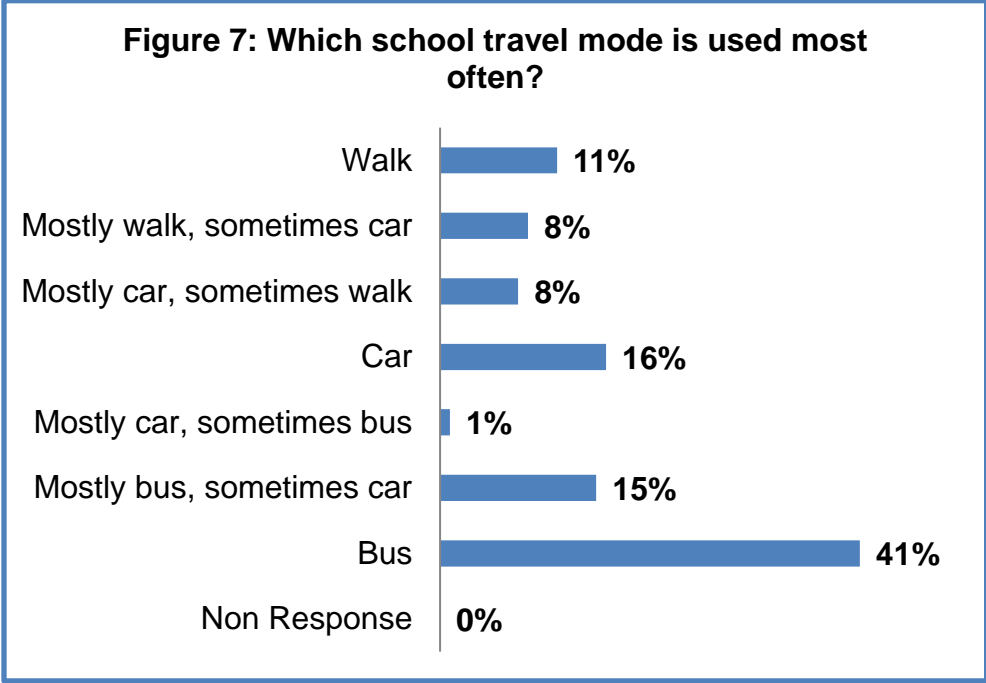
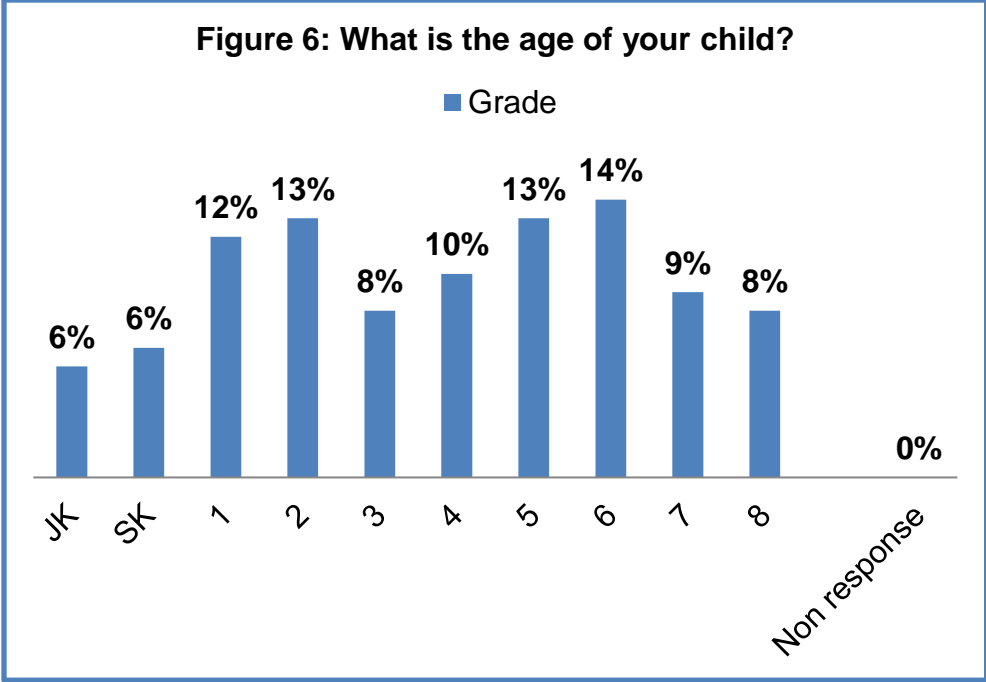
### 3.3. Family Travel Survey

A family travel survey provided information on travel habits of children and their families to and from school. The family travel survey was completed over a two week period in October 2015. Of the 228 families surveyed 106 families (46.5%) returned surveys. This represents a very good response rate.

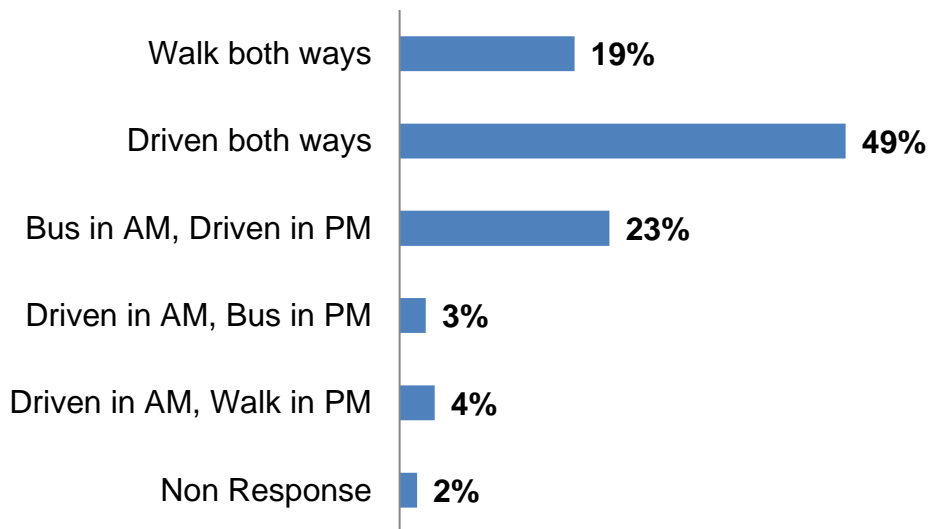
Based on the 106 families who responded to the family travel survey, notable findings include

- Travel mode to and from school most often used
  - ▶ 19% walk
  - ▶ 25% travel by car
  - ▶ 56% travel by school bus
- Most families have a positive experience travelling to and from school, whether by walking or by school bus; however, some families noted the following concerns:
  - ▶ Drivers speeding around the school neighbourhood
  - ▶ Unsafe parking habits by the school site
  - ▶ School bus deficiencies such as poor winter maintenance at school bus loading areas, scheduling that is too early, bullying on the school bus, distance to reach school bus stop, and eligibility criteria

Below, **Figures 6 to 18** depict graphically the responses from the family travel survey, and **Table 3** summarizes comments from survey respondents.

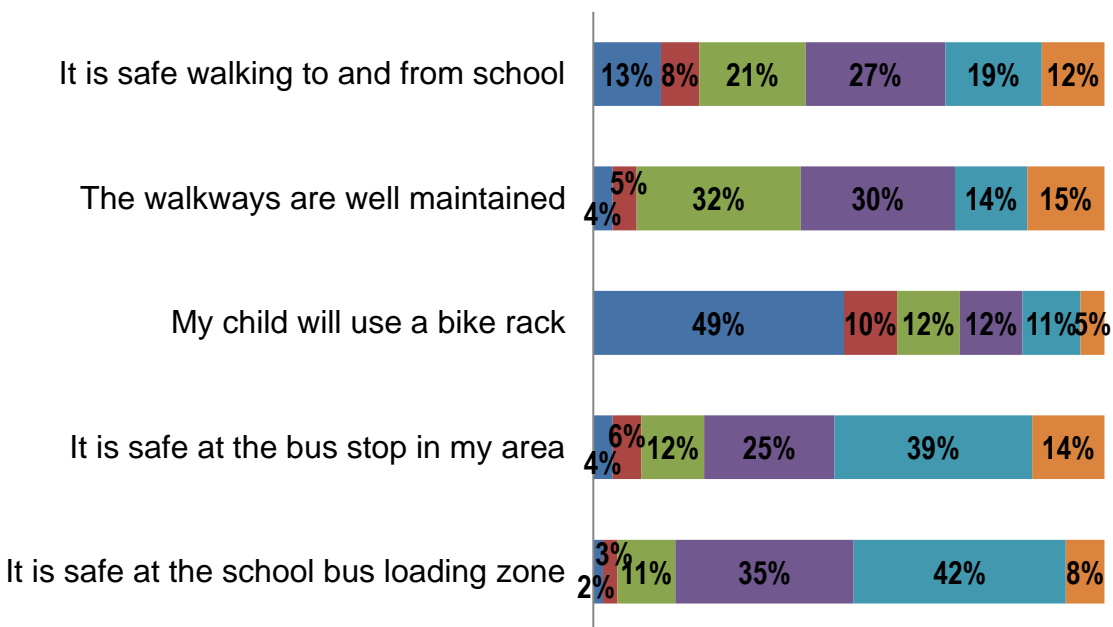


**Figure 8: Which school travel mode is use to get to and from school?**

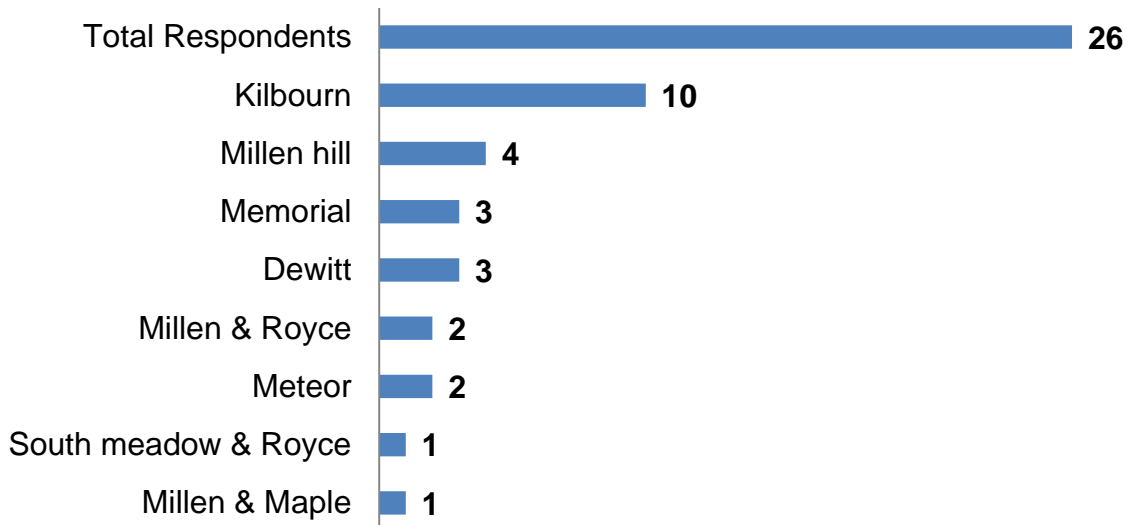


**Figure 9: On a scale of 1 to 5, how strongly do you agree with the following statements?**

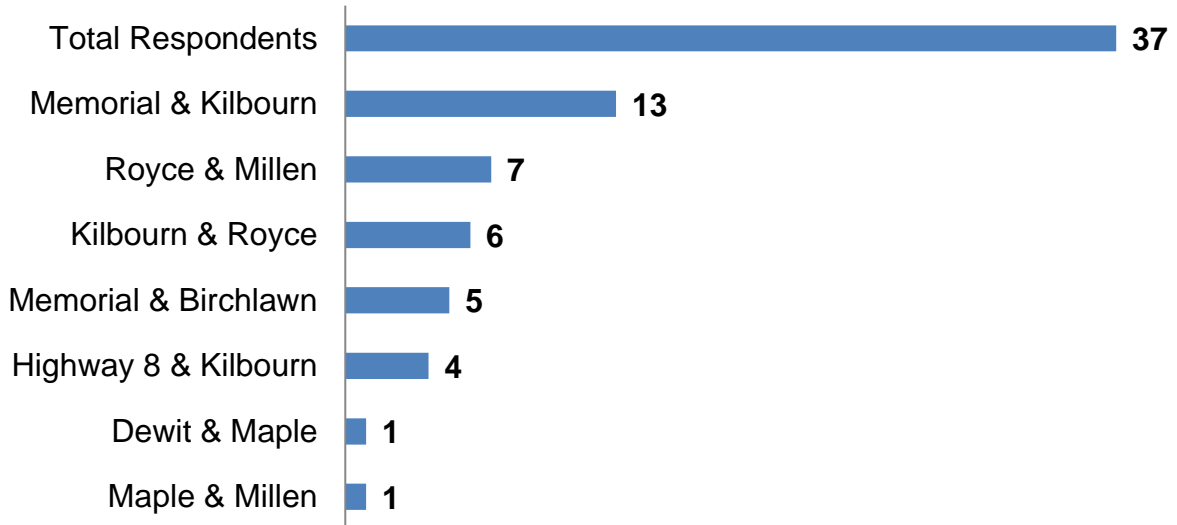
■ Strongly Disagree     
 ■ Somewhat Disagree     
 ■ Neither Agree/Nor Disagree  
■ Somewhat Agree     
 ■ Strongly Agree     
 ■ Non Response



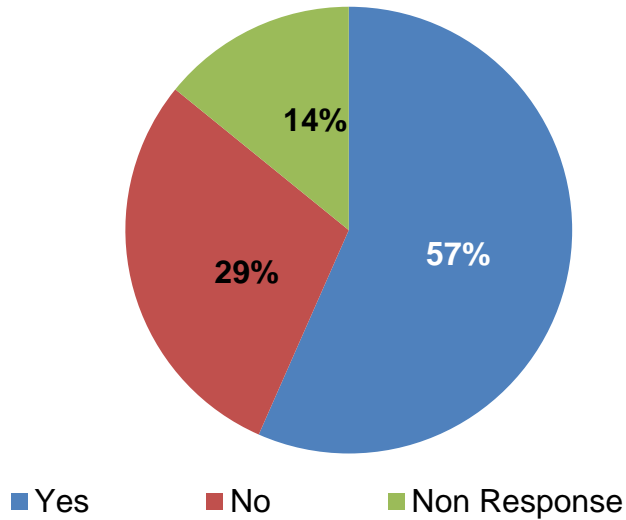
**Figure 10: Places where students and families walk that feel unsafe**



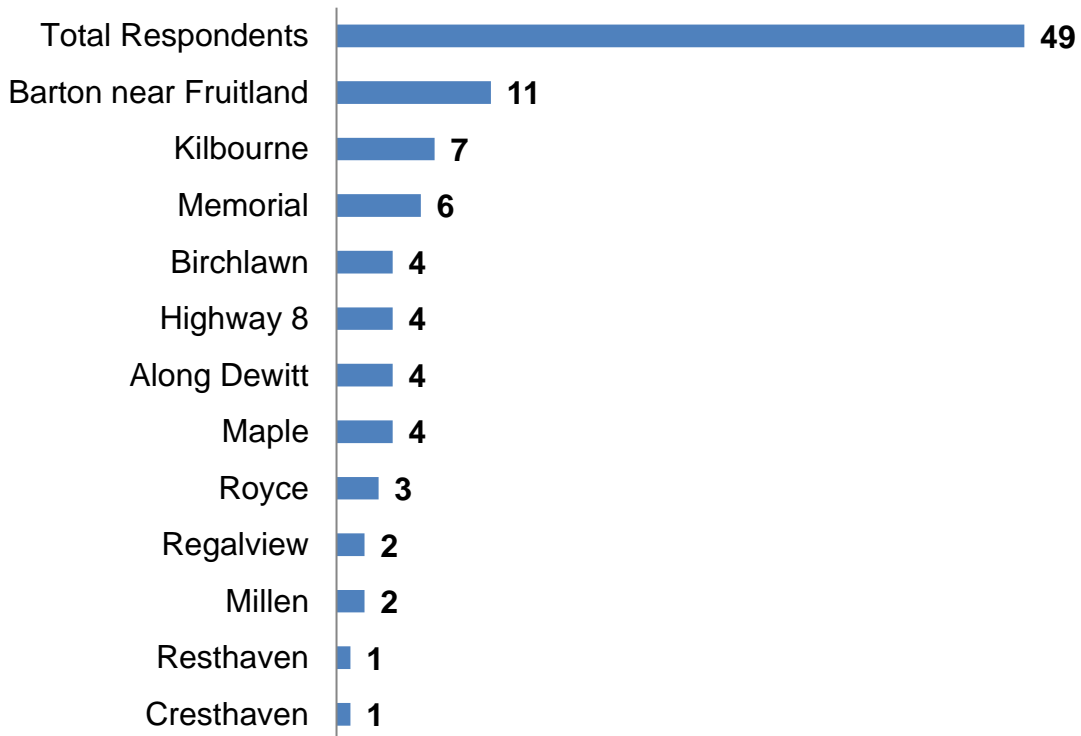
**Figure 11: Areas that could benefit from crosswalk markings and/or crossing guards**



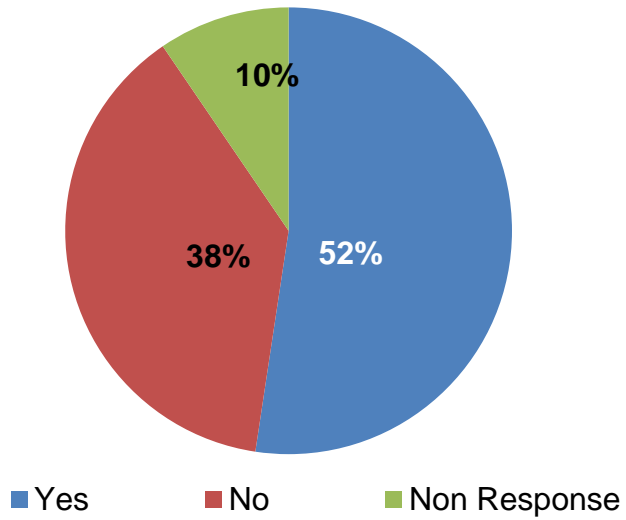
**Figure 12: Are there places where people drive too fast?**



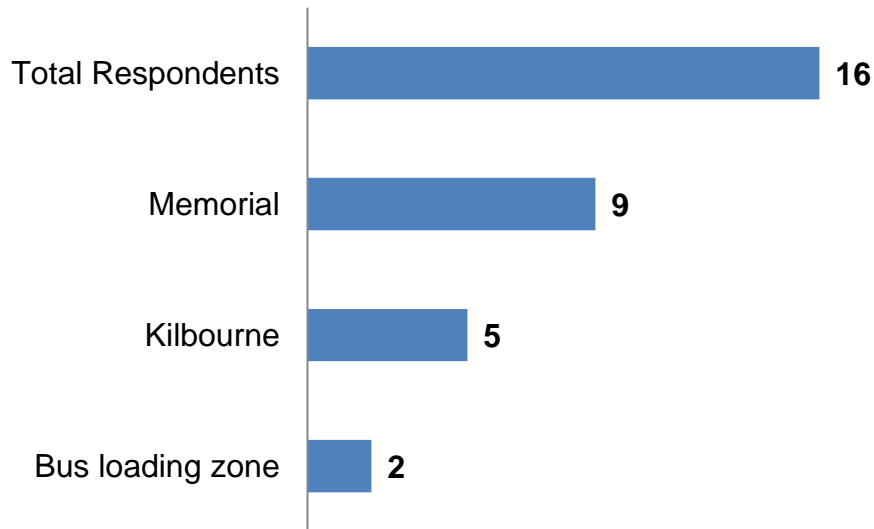
**Figure 13: Places where people drive too fast**



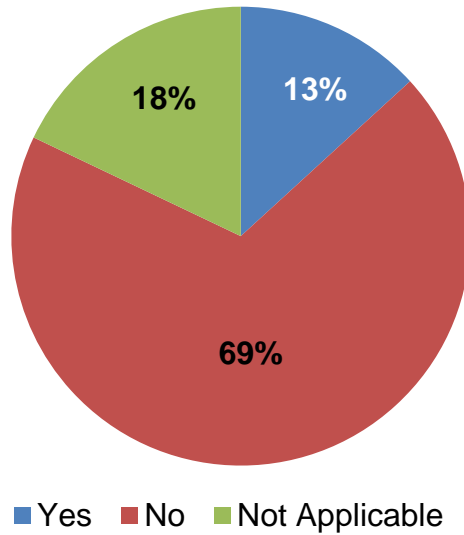
**Figure 14: Are people parked in unsafe places around the school?**



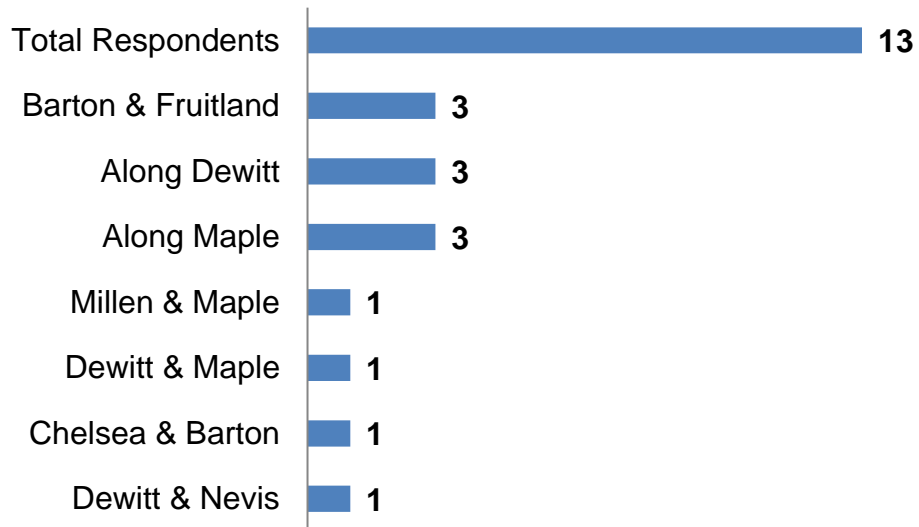
**Figure 15: Location of unsafe parking around the school**

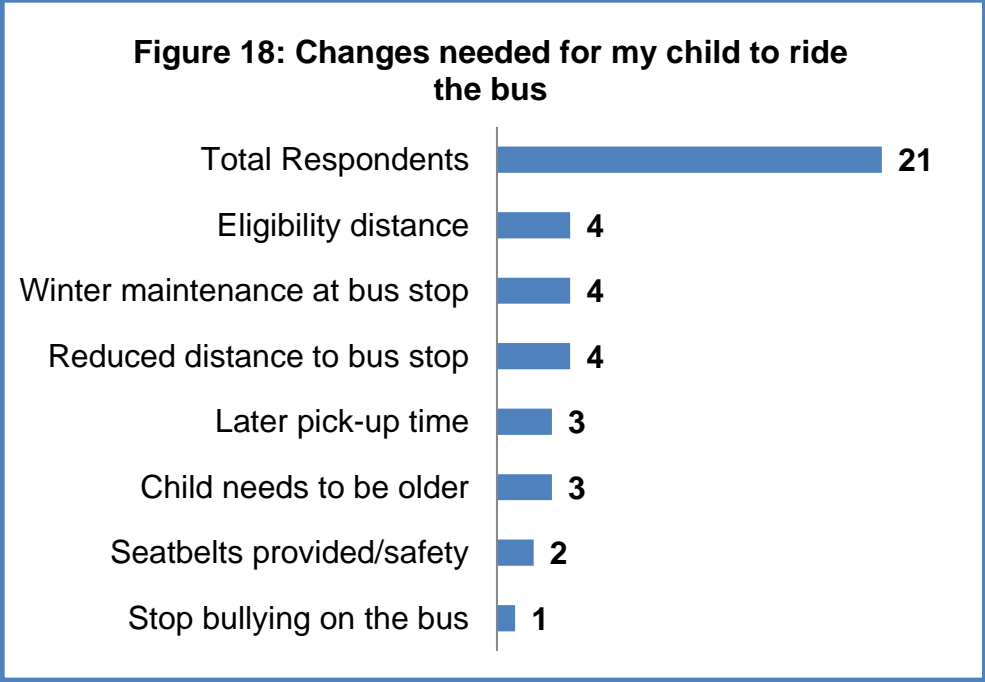


**Figure 16: Eligible for the bus but do not ride it**



**Figure 17: Bus stop intersections seen as problems**





**Table 3:** Highlights of additional comments provided by family travel survey respondents

Concern	Comments
Driver behaviour	<ul style="list-style-type: none"> <li>▪ Parking anywhere, chaos and no enforcement in place</li> <li>▪ Visibility impacted by amount of vehicles</li> <li>▪ Dangerous for walkers because of volume of cars</li> <li>▪ Drivers on Meteor Blvd often do not stop for children crossing the street</li> <li>▪ Drivers rarely stop on Southmeadow</li> <li>▪ Cars are constantly speeding along Dewitt and no enforcement occurs</li> <li>▪ Parking around the school – 12 comments</li> </ul>
School bus & school bus loading areas	<ul style="list-style-type: none"> <li>▪ Misbehaving on school bus such as older children swearing</li> <li>▪ Dangerous for students to walk up Millen Road in poor weather</li> <li>▪ Speed of traffic by pick-up/drop-off areas</li> <li>▪ Poor lighting around pick-up/drop-off areas</li> <li>▪ No shelter from the elements</li> <li>▪ No buffer between sidewalk and road</li> <li>▪ Too much traffic from drivers – 7 comments</li> </ul>



Concern	Comments
	<ul style="list-style-type: none"> <li>▪ Poor design – 2 respondents</li> <li>▪ Confusing with busers and walkers dismissing at the same time</li> </ul>
Street Design	<ul style="list-style-type: none"> <li>▪ Millen hill is very steep, and it impacts visibility</li> </ul>
Walkway Maintenance	<ul style="list-style-type: none"> <li>▪ Sideways around the school are not cleared well in winter – 12 respondents</li> <li>▪ Snow piles on the side of the road – 2 comments</li> </ul>

### 3.4. School Site and School Neighbourhood Walkabout

On **November 10, 2015**, the Memorial E.S. STP Committee and community stakeholders met at 8:00 a.m. to observe the school’s travel challenges. First, the group watched arrival time at the school site noting pedestrian, cyclist, and driver behaviour and interaction. Then the group walked a short distance into the school neighbourhood observing common walking routes to and from school.

Key highlights found on the walkabout include

- Driver behaviour at arrival and dismissal time — including speed and dangerous driving
- Amount of vehicle traffic at arrival and dismissal
- Lack of traffic calming along Kilbourn Avenue

On **October 23, 2019**, the Memorial-Stoney Creek E.S. STP Committee and community stakeholders met at 8:00am to reassess the school’s travel challenges. The group’s focus was along Kilbourn Avenue and Royce Avenue.

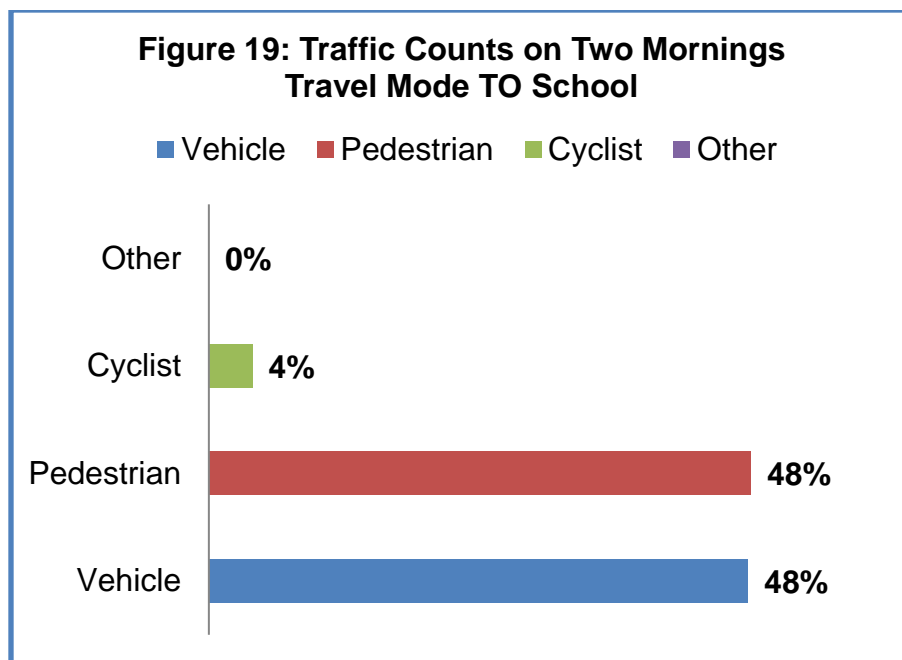
Highlights noted:

- New school build – concerned that all modes are going to be entering the school at the same entrance (pedestrians, bicyclists, cars, busses)
- Lack of shade not addressed as noted on 2015 action plan
- Traffic congestion at arrival and dismissal time
- Drivers not following posted no parking/no stopping signage — includes using school bus zone

#### 4.4 Traffic Counting

Pedestrian/cyclist/traffic counts occurred at the school on April 18<sup>th</sup>, 2018 and June 7<sup>th</sup>, 2018 to collect baseline data about traffic concerns identified during the walkabout. The City of Hamilton Healthy Environments and Transportation Planning staff, along with McMaster University Masters Candidates, conducted the count while students were arriving at school (8:00 a.m. to 8:35 a.m.).

Counters were stationed at three different entrance points to the school site (see **Appendix B**). Counters kept track of the number of students traveling by walking, wheeling, or car; and whether they were accompanied by an adult. Where applicable, traffic infractions (such as stopping in a no-stop zone) and unsafe driving practices (such as U-turns or three-point turns) were recorded (for reporting purposes only). The **Figure 19** show school travel mode.



#### 4. Step 3: Action Planning & Goal Setting

The STP Committee designed an action plan to address challenges identified and to achieve goals stated as shown below.

##### 4.1. Action Plan

Through the baseline data collection, and the school walkabout, the 2015 action plan for Memorial-Stoney Creek E.S. is outlined in **Table 4** below.

**Table 4: Memorial-Stoney Creek Elementary School Action Plan – November 2015**

Issue	Location	Plan for Follow-up
Signage in school zone	Walkable school boundary	<b>Public Works – Traffic Engineering</b> will review street signage to ensure 40 km/hr signs posted along with school zone signage <input checked="" type="checkbox"/> Complete — signage installed on Kilbourne
Crosswalks	Walkable school boundary	<b>Public Works – Traffic Engineering</b> will review crosswalks along common school routes to enhance visibility (ladder striping) <input checked="" type="checkbox"/> Complete — crosswalks enhanced as part of urbanization through Ward Councillor’s office
No Crossing Guards	TBD by principal	<b>Principal</b> to contact the City of Hamilton via <a href="https://www.hamilton.ca/streets-transportation/walking-pedestrians/school-crossing-guards">https://www.hamilton.ca/streets-transportation/walking-pedestrians/school-crossing-guards</a> to request a traffic survey for a school crossing guard <input checked="" type="checkbox"/> Complete — new crossing guard at Kilbourn Ave & Royce Ave
No Crossing Guards		<b>By-Law Enforcement &amp; School Safety</b> to respond to crossing guard request <input checked="" type="checkbox"/> Complete — as above
Drivers creating unsafe conditions via illegal parking & stopping to pick-up & drop-off children	Memorial Avenue Kilbourne Avenue	<b>By-Law Enforcement &amp; School Safety</b> to work with Police services to enforce parking violations (NOTE: enforcement is on a rotational schedule to ensure all schools receive support) <input checked="" type="checkbox"/> Completed April 12, 2018
		<b>By-Law Enforcement</b> parking near schools resources <a href="https://www.hamilton.ca/streets-transportation/tickets-parking/parking-near-schools">https://www.hamilton.ca/streets-transportation/tickets-parking/parking-near-schools</a> <input checked="" type="checkbox"/> Complete — information shared through school newsletters
Pedestrian, cyclist, driver behaviour	School zone	<b>Public Health – Injury Prevention</b> to provide educational resources <input checked="" type="checkbox"/> Completed
Lack of shade protection	4 locations: • School bus loading zone • Kindergarten play area	<b>Public Health – Cancer Prevention &amp; Screening</b> to provide educational resources. <input checked="" type="checkbox"/> Completed

Issue	Location	Plan for Follow-up
	<ul style="list-style-type: none"> <li>• School yard play area</li> <li>• Side walk area on Kilbourne Avenue</li> </ul>	<p><b>School</b> will investigate options for providing more shade at school site e.g., shade structures, trees</p> <input type="checkbox"/> On hold until new school is built

The 2015 action plan was reviewed at the walkabout and action planning meeting on October 23, 2019

**Table 5: Memorial-Stoney Creek Elementary School Action Plan – October 2019**

Location	Issue	Action Plan Item
School Community	Want to raise awareness about ASST	Focus on event days, ASST participation, and prizes — WYDs, BTSDs, and June Walking Wednesdays <input type="checkbox"/>
School Community	Increase ASST awareness and ownership	Create an ASST position on School Council to support ASST — Home and School President will be a strong voice for ASST at Memorial school. The president will help to create more engagement from councils, parents, and staff. <input type="checkbox"/>
School Community	Increase ASST capacity of parents and School Council	Develop a handbook of events, initiatives, and general information for future volunteers to run the program <input type="checkbox"/>
City-wide School Community	Increase ASST capacity of parents and School Council	Continue to be a voice on the Parent Involvement Committee(PIC) to promote the ASST <input type="checkbox"/>
New School Site	New school construction & opening	Renew the school’s STP with a focus on the new school — scheduled to open January 2021. This will help address the added construction vehicles around the school site, as well as the increase in student population <input type="checkbox"/>
New School Site	New school construction	Continue to promote walk a block to offset the construction delays <input type="checkbox"/>

#### 4.2. Goals

According to the vision of the future for the GTHA, by 2041, 60% of students will walk or cycle to school<sup>13</sup>. Memorial Stoney Creek E.S. currently has 60% of students within 1.6km of school (88 of 147 eligible students) walking or cycling to school. Since the school meets the GTHA target, Memorial Stoney Creek's new target is **<%> by <year>**.

**The goal for Memorial Stoney Creek E.S. is to increase in <>% the number of students walking and cycling to and from school.**

To increase the chances of a successful school travel plan, a secondary goal consists of completing at least 100% of the action items listed by the end of the next implementation cycle (step 4).

## **5. Implementation – Action Plan Progress**

Over the past two years (**2015-2017**), Memorial Stoney Creek E.S.'s school council and administration have implemented the following actions to increase active travel to and from school:

- Participated in Wear Yellow Day walking and wheeling events to support the long-term goals of active and sustainable school transportation
- Promoted and participated in walking and wheeling Wednesdays for the month of June
- Identifying preferred routes to school for students, such as Royce Avenue
- Carrying out school neighbourhood asset mapping to encourage more outside physical activity — such as parks, trails, and bike paths
- Investigating opportunity to participate in the Fresh Air for Kids program
- Working on busing issues with School Trustee
- Created a map for parents/caregivers indicating legal places to park if travel by motor vehicle is used

During the **2017-2018** school year, Memorial Stoney Creek E.S.'s School Council and administration have implemented the following actions to increase active school travel and to reduce car travel:

- In September, the school council distributed parking maps and a letter to parents
- Participated in fall and spring Wear Yellow Day walking and wheeling events
- In March, held an ASST meeting with the school council to discuss the status of the school travel plan

- In April, a school council member attended the Hamilton ASST Hub meeting and the GTHA Regional ASST Hub meeting
- In May, had a display at an open house event – distributed parking maps and letter to new JK registrants, spoke about school travel at the kindergarten orientation, participated in an active school travel webinar. Also participated in Bike to School Week (**Figure 20**).
- In June, promoted and participated in walking and wheeling Wednesdays – Ward Councillor, Trustee, and other partners volunteered to distribute raffle tickets used to encourage students and their families to participate. Additionally, parents and students that parked and walk-a-block were also entered the draw for prizes. Note that on the third Wednesday, students wore yellow as per the additional Wear Yellow Day posted on Smart Commute Hamilton’s website
- In June, participated in a second active school travel webinar, school council member accompanied Trustee Jeff Beattie to the PIC meeting about the new school – this provided an opportunity to promote ASST initiative
- Throughout the school year, targeted parents through newsletters and other communication channels with messages about reducing traffic congestion at school; for example, encouraged a walk-a-block program as an alternative
- Order another bike rack (**Figure 21**) since the current bike rack was overflowing with bikes
- Received anti-idling signage from Healthy Environments – Public Health Services in spring 2018

During the **2018-2019** school year, Memorial Stoney Creek E.S.’s School Council and administration have implemented the following actions to increase active school travel and to reduce car travel:

- Sent a parent representative to be part of the Active School Travel – Parent Engagement Strategy development
- Participated in walking and wheeling events — Wear Yellow Day and Bike to School
- Promoted and participated in walking and wheeling Wednesdays for the month of June
- Designate a Walker of the Year with a certificate and prize
- Created a Walker of the Year Award to be nominated by students and presented with a certificate. The winner is posted on the school’s information board in the school.

During the **2019-2020** school year, Memorial Stoney Creek E.S.’s School Council and administration have implemented the following actions to increase active school travel and to reduce car travel: (to be reported June 2020).

Figure 20: Memorial Stoney Creek Bike to School Week 2018

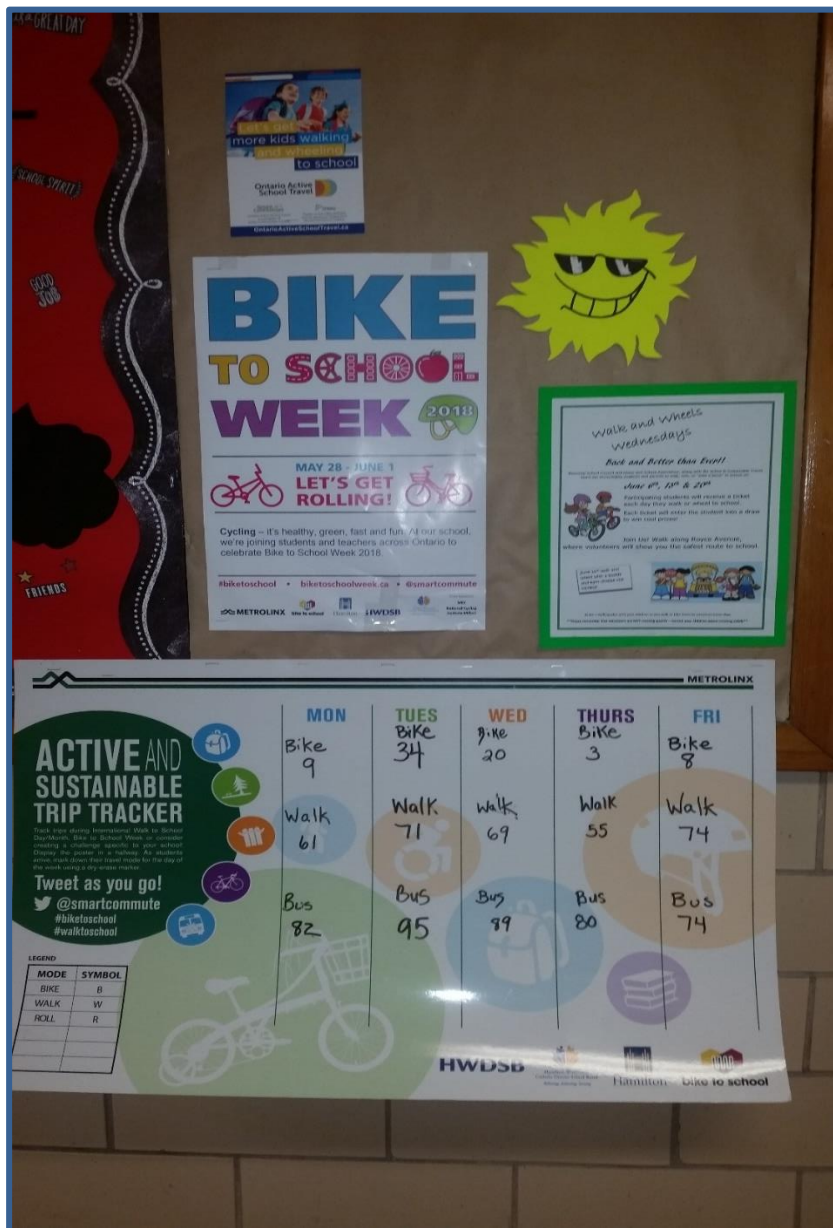


Figure 21: Memorial-Stoney Creek E.S. Bike Racks – September 2018



## 6. Step 5: Monitoring and Evaluation – Next Steps

This is the third school year for STP implementation and on-going monitoring at Memorial-Stoney Creek E.S. Through monitoring and re-evaluating travel trends and action item implementation, Memorial-Stoney Creek E.S. identified new and some recurring issues:

- On-going concern about traffic congestion on Kilbourn Street – the school requested another enforcement blitz by By-Law Enforcement (April 2018)
- Some parents/guardians continue to use the staff parking lot for drop-off and pick-up, which is creating safety concerns – school council with administration will send more reminders home
- Bullying on the school bus – students were reminded that the school bus is an extension of the classroom; therefore, school rules about bullying apply (e.g., suspension, bus privilege stopped)
- Snow maintenance issues, particularly on key sidewalks as well as high snow banks
- Parents are concerned about school travel during construction of the new school on the south end of the property
- A school council member will be presenting the school's progress/involvement about STP at further meetings, and at home and school association meeting; and will be attending another GTHA Regional ASST Hub meeting



The school council was successful in maintaining ASST momentum as evidenced through the changes in travel mode to more walking and cycling, and less vehicle travel. The STP committee should continue to track progress through monitoring the completion of action plan items and by repeating the student travel survey every two years. Additionally, Memorial Stoney Creek E.S. should consider conducting another walkabout before the new school opens in January 2021. This will help the school council and administration assess and address any potential school travel challenges at the new site.

The shift from motorized vehicles helps to address important issues of sustainability, safety, and health associated with the school run. Memorial-Stoney Creek is making great strides towards this goal.

## 7. Consensus

This school travel plan has been reviewed and approved by

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Sue Dunn, Principal, Memorial Stoney Creek Elementary School

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Signature

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Date signed

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Kelly Scott, Hamilton ASST Hub representative

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Signature

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Date signed

## Annual STP Update

Jun 2017

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Year

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<name>, Principal

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Kelly Scott, Hamilton ASST Hub representative

Jun 2018

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Year

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Sue Dunn, Principal

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Kelly Scott, Hamilton ASST Hub representative

Oct 2019

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Year

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<name>, Principal

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<name>, Hamilton ASST Hub representative

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Year

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<name>, Principal

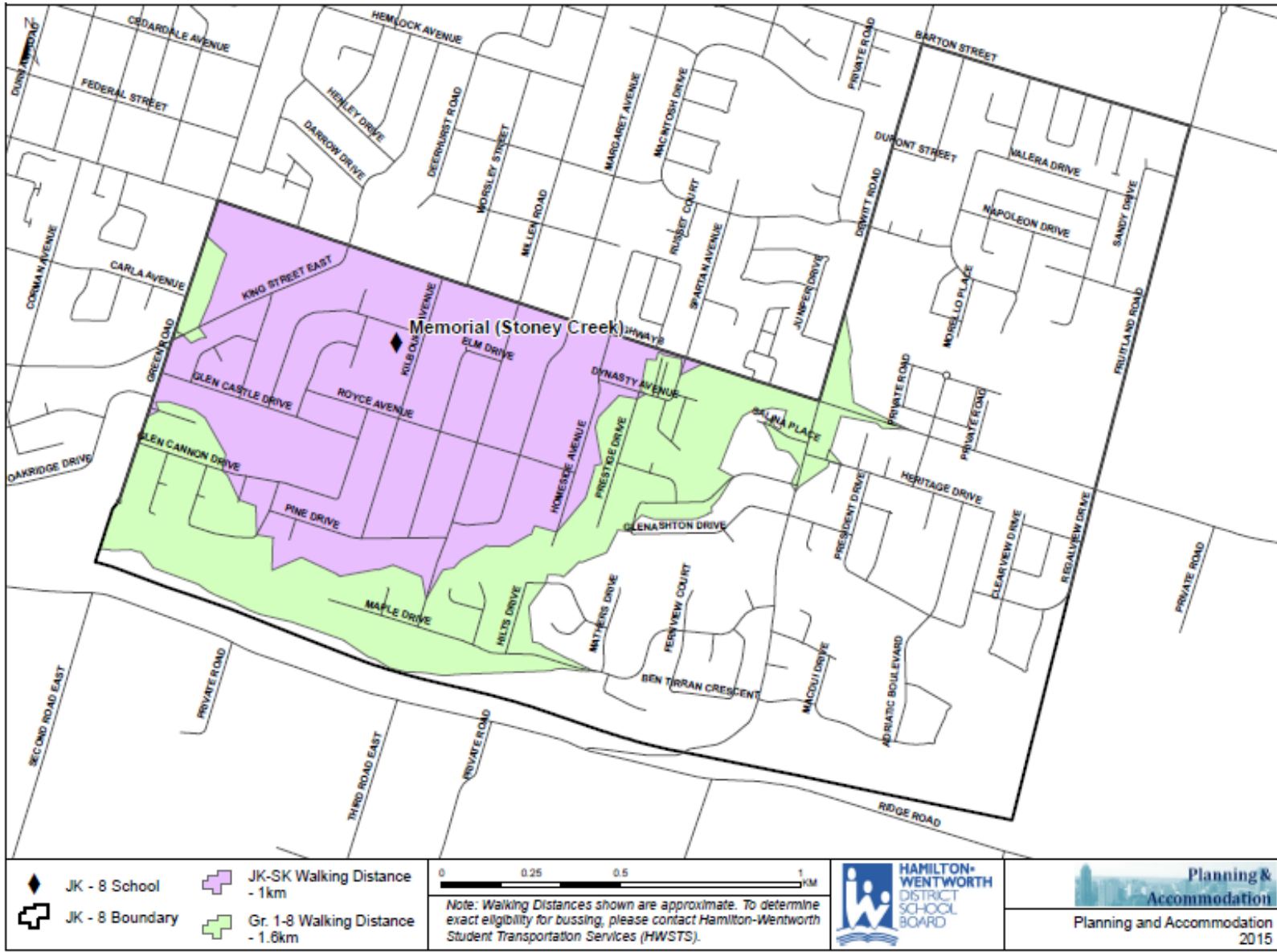
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<name>, Hamilton ASST Hub representative

## References

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# Appendix A: Memorial-Stoney Creek Elementary School Walking Boundaries 2015<sup>13</sup>



**Appendix B: Traffic Counter Locations for Memorial – SC Elementary School**

