



STAFF REPORT ACTION REQUIRED

School Zone Safety Strategy

Date:	April 30, 2014
To:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	All Wards
Reference Number:	P:\2014\Cluster B\TRA\TMC\ PW14001.tmc

SUMMARY

The purpose of this report is to respond to a motion by City Council, dated October 8, 2013, to review pedestrian safety in school zones and develop a strategy for improving and promoting pedestrian safety in those areas. Traffic data suggests that pedestrian safety and overall road safety in the City has stabilized over the last decade. However, opportunities for improvement still exist, especially when considering the safety of children and the current shift towards promoting walking to school as active and healthier alternatives for commuting. The City has programs and tools currently in place for addressing safety concerns around school areas which are discussed in this report, and Transportation Services proposes to pursue additional measures to expand the City's current compliment of measures.

This report discusses a strategy for improving safety around school zones that was developed based on an analysis of school zone related pedestrian collision data, detailed safety reviews conducted at high collision school clusters and current school safety programs and engineering tools. This report also discusses a literature review of school safety practices in other jurisdictions that was conducted, as well as the formation of a School Zone Safety Working Group.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. Public Works and Infrastructure Committee receive this report for information.

Financial Impact

The costs associated with the implementations scheduled for 2014 are estimated to be \$70,000. Funding is available in the 2014 Operating Budget (\$36,000) and 2014 Capital Budget and 2015-2023 Capital Plan (\$34,000) for Transportation Services.

The Deputy City Manager and Chief Financial Officer have reviewed this report and agree with the financial impact information.

DECISION HISTORY

City Council, at its meeting of October 8, 2013, adopted Member Motion MM 39.7 "School Zone Safety" put forth by Councillor Anthony Perruzza, Ward 8, and seconded by Councillor Gary Crawford, Ward 36, directing the General Manager, Transportation Services, to report to the Public Works and Infrastructure Committee on the development of a strategy for improving and promoting pedestrian safety in school zones and to undertake and report back on the results of pilot programs at Allenby Junior Public School and John Ross Robertson Junior Public School.

<http://www.toronto.ca/legdocs/mmis/2013/mm/bgrd/backgroundfile-62180.pdf>

Subsequent to that meeting, at the City Council meeting of December 16, 2013, the recommendation to report on the results of pilot programs at the two aforementioned schools was rescinded and amended to direct the General Manager, Transportation Services to report on the results in the final submission.

<http://www.toronto.ca/legdocs/mmis/2013/mm/bgrd/backgroundfile-65172.pdf>

ISSUE BACKGROUND

From 2000-2004, the frequency of traffic collisions in the City of Toronto declined steadily and has stabilized in the last 5 years, ranging from 52,000-56,000 events annually. During the last decade, the frequency of pedestrian collisions has been stable, ranging between 2,000-2,400 events annually. Table 1 below shows the total number of collision and fatalities, including pedestrians since 2000.

Table 1: Total and Fatal Collisions (2000-2012)

Year	Fatal Collisions	Total Collisions	Fatal Pedestrian Collision	Total Pedestrian Collisions
2000	61	72,632	26	2,386
2001	51	73,189	32	2,485
2002	91	72,085	50	2,431
2003	72	66,475	43	2,357
2004	60	56,288	27	2,126
2005	52	54,918	29	2,144
2006	57	52,997	30	2,216
2007	48	55,974	23	2,138
2008	51	55,732	27	1,935
2009	45	55,249	31	2,065
2010	43	55,585	20	2,051
2011	35	54,157	18	2,167
2012	44	52,414	24	2,035
2013*	50	44,787	31	1,601

* Period between 2013/01/01 and 2013/10/31

In terms of pedestrian fatalities, Toronto's fatality rate is 1.2 per 100,000 people and continues to be one of the lowest in North America. For example, other major cities, such as New York (1.82), Chicago (1.77), Los Angeles (2.35) and Dallas (2.69) all have higher rates. However, after a decade of general decline in the number of pedestrian fatalities, Toronto experienced 40 pedestrian fatalities in 2013 indicating there is still a need to improve pedestrian safety. Of the 40 pedestrian fatalities that occurred in 2013, two involved children and occurred at locations and during times and dates consistent with daily travel to and from school. The 2 fatalities in school areas involved collisions with heavy trucks.

Ensuring the safety of all road users is a primary objective for Transportation Services, however, children are among the most vulnerable of all road users and ensuring their safety as they commute daily to and from school is of paramount importance.

COMMENTS

School Zone Improvement Strategy

Improving pedestrian and road safety particularly around schools is a primary objective for Transportation Services which requires a comprehensive, multi-faceted strategy that combines a variety of components and the joint efforts and cooperation of multiple stakeholders. In the following discussion, Transportation Services outlines its proposed strategy for improving pedestrian safety in school areas, in terms of 6 major components:

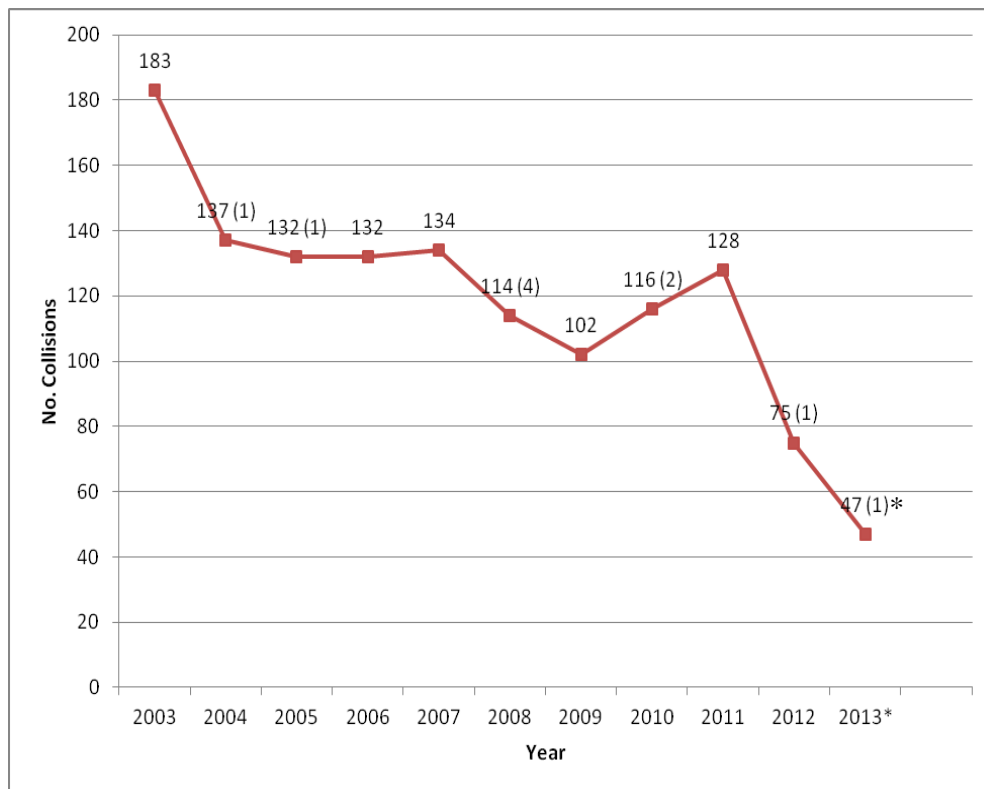
- 1) Data Analysis
- 2) Engineering
 - Safety Audit of High Collision Clusters
 - Current Traffic Measures for Addressing School Safety Concerns
 - School Speed Zones
 - Sidewalks
 - Pavement Markings
 - Construction Zone Guidelines
- 3) Programs and Advocacy
 - Current School Safety Programs and Initiatives
 - School Travel Plans
 - Charter for Active, Safe and Sustainable Transportation
 - School Zone Safety Working Group
- 4) Education
- 5) Enforcement
- 6) Research

Data Analysis

An analysis was conducted on pedestrian collisions that occurred around school areas over the last 10 years (2003-2012) to identify trends and patterns. In order to identify school aged pedestrian collisions, the data was filtered to include only events that involved pedestrians between 4 and 19 years of age, occurred between Monday and Friday; from September to June, and between the hours of 7:00 and 9:00 a.m. and 2:00 and 5:00 p.m. These parameters typically represent when a school would be in session.

In order to define a school zone, a 1 kilometre radius around each school was used, which is based on the current eligibility distance for school bus transportation adopted by both school boards in Toronto and the reasonable assumption that most students would be driven to school if they live beyond this distance. Chart 1 below summarizes school aged pedestrian collisions in school zones over the last 10 years.

Chart 1: School Aged Pedestrian Collisions (2003-2012)



() Denotes collisions involving trucks

* Period between 2013/01/01 and 2013/10/31

As shown in the above chart, school aged pedestrian collisions have declined noticeably over the last decade, from a peak of 183 in 2003, to a low of 75 in 2012. During the last decade, the total number of school aged pedestrian collisions was 1,253, which represents 6% of the total 21,234 pedestrian collisions which occurred in that period. Elementary school aged pedestrians (ages 4-14) were involved in 62% of these collisions, compared to 38% which involved high school aged pedestrians (ages 15-19). In addition, 10 of those events involved a truck, which represents less than 1% of the total. Although collisions involving school-aged pedestrians have generally declined in the past 10 years, the increase in total traffic and pedestrian fatalities in 2013 demonstrates that opportunities for improvements still exist.

A review of school aged pedestrian collisions over the last 5 years (2008-2012) by pedestrian collision type was also conducted. The 5 most common types are summarized in Table 2 below. Based on this data, greater attention should be given to pedestrian safety at intersections.

Table 2: Most Common School Aged Pedestrian Collision Types (2008-2012)

Pedestrian Collision Type	Number of School Aged Pedestrian Collisions
Pedestrian hit at mid-block	107 (2)
Vehicle goes straight while pedestrian crosses without right-of-way	100
Vehicle turns left while pedestrian crosses with right-of-way at intersection	81
Vehicle turns right while pedestrian crosses with right-of-way at intersection	62 (1)
Vehicle goes straight while pedestrian crosses with right-of-way at intersection	45 (1)

() Denotes collisions involving trucks

A geographical analysis of the collision data was also conducted to determine if there were any locations where school aged pedestrian collisions were more prevalent. A geographical plot of school aged pedestrian collisions for the last 5 years (2008-2012) shows concentrations of these collision events often occur in areas with a high density of schools. These concentrations of collision events were grouped into clusters of 1 kilometre radius

Carrying forward, as part of the overall school zone safety strategy, Transportation Services will continue to review pedestrian collision trends related to school zones and identify high collision frequency clusters, in order to provide insight into areas which require attention.

Engineering

Safety Audit of High Collision Clusters

For each of the 9 high collision clusters, Transportation Services staff conducted detailed in-service road safety audits to identify any safety concerns and deficiencies which could be immediately addressed, as well as other improvements which may require further discussion and planning. The safety reviews included an examination of the roadways along school frontages and of each collision event in the last 5 years. Detailed audit reports can be found in Attachment 2. Table 3 below summarizes the findings and immediate actions.

Table 3: Actions From Road Safety Audits of High Collision Clusters

Cluster ID	Schools*	Ward(s)	Immediate Actions
A	Fairbank M.S. St. Thomas Aquinas C.S.	15	<ul style="list-style-type: none"> Replace damaged, faded or missing signs (school area, parking restriction, all-way

Cluster ID	Schools*	Ward(s)	Immediate Actions
			stop tabs, etc.)
B	Blessed John XXIII C.S. Gateway P.S. Grenoble P.S. Marc Garneau C.I. Valley Park M.S. Thorncliffe Park P.S.	26	<ul style="list-style-type: none"> • Install zebra markings at pedestrian crossovers and signalized intersections
C	St. Augustine C.S. Shoreham P.S. Gosford P.S. Brookview M.S. Driftwood P.S. St. Charles Garnier C.S. Topcliffe P.S. St. Francis De Sales C.S.	7 & 8	<ul style="list-style-type: none"> • Remove school crossing guard sign at location where guard does not exist
D	Carlton Village North P.S. Pope Paul VI C.S. Beatrice House/Hughes P.S. F. H. Miller Junior P.S. St. Nicholas of Bari C.S. General Mercer Junior P.S.	17	<ul style="list-style-type: none"> • Replace damaged, faded or missing signs (school area, parking restriction, all-way stop tabs, etc.) • Refresh faded pavement markings at intersections (stop bars, crosswalks, zebra markings)
E	St. Maurice C.S. Kingsview Village P.S. Don Bosco C.S. School of Experimental Education Westway Junior P.S.	2 & 4	<ul style="list-style-type: none"> • Replace damaged, faded or missing signs (school area, parking restriction, all-way stop tabs, etc.) • Refresh faded pavement markings at intersections (stop bars, crosswalks, zebra markings)
F	King George P.S. James Culnan C. S.	13	<ul style="list-style-type: none"> • Replace damaged, faded or missing signs (school area, parking restriction, all-way stop tabs, etc.)
G	Warden Jr. P.S. Samuel Hearne Sr. P.S. Oakridge Jr. P.S. St. Dunstan C.S.	35	<ul style="list-style-type: none"> • Review the feasibility of installing barriers or streetscaping to redirect pedestrians to designated crossing locations • Review traffic signal timing and implement any necessary changes
H	York Mills C.I. Etienne Brule S.S. Winfields Jr. H.S. Harrison P.S.	25	<ul style="list-style-type: none"> • Install zebra markings at pedestrian crossovers and signalized intersections

Cluster ID	Schools*	Ward(s)	Immediate Actions
	Dunlace P.S.		
I	Roywood P.S. St. Isaac Jogues C.S. Fenside P.S. St. Madeleine C.S. Brookbanks P.S. Donview M.S.	34	<ul style="list-style-type: none"> • Review need for additional street lighting in front of school

* Schools located within a cluster but not shown are assigned to a neighbouring, overlapping cluster.

The estimated cost of the signage and pavement markings identified in Table 3 above is \$36,000 and the funding is available within the approved Transportation Services 2014 Operating Budget.

In addition to conducting safety audits at the high collision clusters, Transportation Services staff also reviewed the two locations where the two school aged traffic fatalities occurred in 2013. The results of the audits didn't reveal any concerns that need immediate attention.

As part of the overall improvement strategy, Transportation Services will conduct bi-annual road safety audits of the clusters with the highest collision frequency and implement the appropriate improvements that can be addressed immediately. Any medium or long-term interventions requiring additional budget, planning and discussions with other units will also be identified.

Current Traffic Measures for Addressing School Safety Concerns

Transportation Services investigates and responds to school traffic and road safety concerns and complaints on an on-going basis, often working in partnership with schools, local communities, Toronto Police Service and other community and special interest groups. Transportation Services currently employs a number of measures as identified in Table 4 below to address typical school traffic safety concerns.

Table 4: Traffic Measures

Measures	Description
Parking regulations	<ul style="list-style-type: none"> • Time of day "No parking" or restricted short-term parking on school side • Time of day "No stopping" on opposite side of school • "No stopping" within 9m of school crossing • Time of day "No stopping" School Bus Loading Zone
Warning signs	<ul style="list-style-type: none"> • School zone • School crossing • Playground • School crossing guard
Regulatory signs	<ul style="list-style-type: none"> • 40 km/h reduced speed limit • 40 km/h school zone maximum speed when flashing • 30 km/h speed limits on traffic calmed streets
Pavement markings	<ul style="list-style-type: none"> • Stop bars • Pedestrian crosswalk • Zebra markings
Traffic calming	<ul style="list-style-type: none"> • Speed humps • Chicanes • Corner bump-outs

School Speed Zones

Transportation Services also reviewed the City's two existing 40 km/h School Speed Zones on Avenue Road, between 10 metres north of Willowbank Boulevard and 10 metres north of Briar Hill Avenue, and on Keele Street, between 245 metres south of Glenlake Avenue and 122 metres north of Glenlake Avenue. During the hours of 8:00a.m.-5:00 p.m., from Monday to Friday, the speed limits on these sections of roads in front of schools are reduced from 50 km/h to 40 km/h and motorists are alerted by flashing beacons placed upstream in both directions. An analysis of vehicle speeds at these two locations, when the reduced speed limit was in effect, showed that vehicles were travelling 12-14 km/h above the 40km/h speed limit. It is believed that motorists are ignoring the reduced speed zones due to the age of the installations and the absence of regular speed enforcement. To evaluate this notion, it is recommended that the school zone safety strategy include the installation of a new flashing 40 km/h School Speed Zone on Bloor Street West, in front of St. Clement Catholic School, to assess the effectiveness of new installations with and without police enforcement. The estimated cost of this installation is \$34,000 and the funding is available in the approved Transportation Services 2014 Capital Budget. Transportation Services will submit a report to Etobicoke York Community Council recommending this new installation.

Transportation Services has also received requests for 30 km/h speed limits. Normally, 30 km/h speed limits are implemented on streets that have traffic calming in place or in

conjunction with the installation of traffic calming devices. A policy and warrant for a 30 km/h speed limit without traffic calming measures is currently being considered by Transportation Services and will be reported to the Public Works and Infrastructure Committee in early 2015.

Sidewalks

Toronto Public Health's analysis of current data indicates that driving has increasingly become the preferred mode of travel for parents transporting students to and from school. One possible reason for parents driving their children to school is the lack of sidewalks. Sidewalks are one means of providing safe access and are associated with increased safety for pedestrians. Sidewalks and walkways are proven pedestrian safety measures according to the Federal Highway Administration (FHWA).

In order to better facilitate the installation of missing sidewalks on local roads in school zones, City staff will review the Essential Links program (annual sidewalk capital program) and consider potential changes to the program to help improve school zone safety and sidewalk connectivity. Transportation Services also endorses the installation of sidewalks on both sides of the road, depending on road class and site conditions. Transportation Services will work with Engineering and Construction Services Division to identify locations in school areas in upcoming Capital Works Program years for opportunities to install missing sidewalks and sidewalk links.

Pavement Markings

One of the results of the road safety audits conducted on the high collision clusters was the recommendation from staff to study the effectiveness of painted yellow centrelines on all roadways within school zones for improving safety. Yellow centrelines would provide visual delineation between opposing traffic flows and guidance on horizontal curves. Transportation Services is also currently reviewing the potential safety benefits of school zone pavement marking stencils. The stencil could supplement the school zone sign in alerting motorists to the presence of a nearby school and additional pedestrian activity downstream. As part of the school zone safety strategy, both treatments will be explored and, should they be deemed feasible and beneficial for improving safety in school zones, Transportation Services will develop criteria for their use.

Construction Zone Guidelines

Staff have also reviewed and revised our current City guidelines regarding the installation and maintenance of construction zones for road work in school areas, which can be found in Attachment 1. The revisions include additional conditions that Transportation Service staff may apply when issuing a road occupancy permit. The conditions will be based on site specific requirements and may include the requirement for Toronto Police to assist with pedestrian and vehicular movement in the area of the work zone. Also, when conducting work zone meetings, Transportation Services staff will emphasize to contractors the importance of school zone safety and discuss alternate methods of construction to reduce the potential risk to students. For example, the hours of work will be reviewed and adjusted when possible, truck routes are to avoid school zones where possible and delivery schedules will be established to occur when students are not

travelling to or from school when feasible. Transportation Services will be implementing these guidelines immediately and will be advising both internal and external agencies, accordingly.

Programs and Advocacy

Current School Safety Programs and Initiatives

There are currently a number of programs and initiatives within the City aimed at improving or ensuring the safety of young students commuting to and from school provided by the school boards, Toronto Public Health, Transportation Services and special interest groups, often in conjunction with each other. These are summarized below in Table 5.

Table 5: Current School Safety Programs

Agency	Program	Description
Toronto Public Health Transportation Services Toronto School Boards	Active and Safe Routes to Schools (ASRTS)	Volunteer based project which encourages walking to school on designated, safe routes
Toronto Public Health	Pedestrian & Bike Safety	School walking program which includes presentation, lesson plan and training resources for teachers
Toronto Public Health	Active City Principles & Audit Tool	Report and audit tool outlining infrastructure design principles which encourages physically active lifestyles. Audit tool has been piloted in 10 schools.
Toronto Public Health	Active Transportation Demonstration Project	Pilot program to test feasibility, sustainability and impacts of active transportation interventions, to be conducted in various neighbourhoods
Toronto School Boards	TDSB Charter for Active, Safe and Sustainable Transportation	TDSB passed Charter and is working on implementation plan
Toronto Public Health Green Communities Canada	School Travel Planning	Pilot program to implement Active and Safe Routes to School at schools using a comprehensive and collaborative planning model which involves travel surveys and risk assessments
Toronto Transportation Toronto School Boards	Parent Safety Program	Volunteer based Kiss 'n Ride program aimed at alleviating traffic and safety concerns around schools during arrival and departure periods

Toronto Police Service	Back-To-School Campaign	Annual traffic and parking enforcement initiative conducted at beginning of school year around school zones
Toronto Police Service	School Crossing Guard Program	Provision of adult school crossing guard service at designated locations throughout the City
Toronto Police Service	Elmer the Safety Elephant	In-school demonstration of basic rules of the road, aimed at Kindergarten to Grade 2 students
Toronto Police Service	Bus/Foot Safety Patroller Program	Volunteer-based program to encourage safe behaviour and provide direction or assistance to students on school buses or crossing streets
Toronto Police Service	Safe Traffic and Walking Distracted Presentations	In-school presentation about pedestrian safety aimed at Grades 4-8 students

Transportation Services will continue to be involved with and provide support for the various school safety programs and initiatives within the City.

School Travel Plan

One program of particular interest is School Travel Planning which has been evaluated in various jurisdictions throughout Ontario in recent years. The objective of a School Travel Plan is to develop a comprehensive plan and strategy that provide students with safe routes and active transportation options through collaboration between schools and their student bussing services, public health agencies and City Transportation and Planning Divisions. The plan includes conducting student travel surveys and risk assessments at each school. Efforts to promote the movement in Toronto, lead by Toronto Public Health and Green Communities Canada, has resulted in two pilot projects currently under development for Our Lady of Lourdes Catholic School and King Edward Public School. School Travel Planning could prove to be a valuable tool and Transportation Services will provide support and contribute to the current pilot projects as required and will monitor the effectiveness and results as part of the school zone safety strategy.

Charter for Active, Safe and Sustainable Transportation

The involvement of both Toronto school boards is a key component of the school safety improvement strategy. The Toronto District School Board (TDSB) has recently adopted a Charter for Active, Safe and Sustainable Transportation and the Toronto District Catholic School Board is preparing to follow. The Charter commits the Board and their schools to promoting, supporting and investing in safe, active and sustainable transportation to and from school. The Charter also discusses collaborative efforts with external stakeholders to identify and remove barriers to active modes of transportation and implement school travel plans and road safety education. The next step for the TDSB is to develop implementation plans.

As part of the improvement strategy, Transportation Services will provide any support necessary to assist the school boards in developing plans and recommends that City Council request the school boards to prioritizing schools in the 9 clusters with the highest school aged pedestrian collisions. Furthermore, in order to ensure that school facilitators work co-operatively and share responsibility with the City in addressing day-to-day traffic and safety concerns at schools, Transportation Services recommends that every school be directed to endorse the Charter in writing.

School Zone Safety Working Group

The safety of students commuting to school is a common interest to many stakeholders in addition to Transportation Services. Any improvement strategy to address safety concerns around schools will be more effective when planned and implemented in consultation and collaboration with these other stakeholders and can benefit from the sharing and pooling of resources, knowledge bases, experience and funding towards achieving a common goal. To facilitate discussions and the planning of collaborative efforts, a School Zone Safety Working Group was formed which is comprised of representatives from Transportation Services, Toronto Public Health, Toronto Police Service, Toronto District School Board, Toronto Police Service – Parking Enforcement Unit and Green Communities Canada (Active and Safe Routes to School). The primary goals of this group is to review and discuss concerns related to school zones, such as heavy truck traffic, school drop-off zones, parking regulations, school bus routes, crossing guards and enforcement of traffic laws, and to plan co-operative initiatives or programs. The School Zone Safety Working Group will continue to meet quarterly to review and develop strategies to improve safety for all road users in school zones.

Education

Road safety is a shared responsibility that extends beyond government agencies and police authorities. Drivers, cyclists and pedestrians alike must share in the responsibility of making our roads safer. Recent attention given to collisions related to road user error, such as distracted driving and pedestrian crossing behaviour, indicates the need for:

- 1) Additional public education of safe road practices for motorists, cyclists and pedestrians;
- 2) Increase awareness of safety hazards and risks;
- 3) Building and promoting mutual respect between drivers and vulnerable road users.

The School Zone Safety Working Group will develop enhanced education and awareness initiatives to address these topics and aimed at both parents and students which will be available to schools and the general public. Consideration will be given to using modern mediums of delivering the messages that are more effective at targeting the intended audience, such as sharing information through social media to school boards and young teenagers and the production of animated YouTube videos for children. In addition to promoting and educating audiences about road safety practices and behaviour, the

messaging should also encourage and promote active transportation options, such as walking and cycling. By doing so, these initiatives would also support and align with the City's mandate and efforts to promote and facilitate a healthier and active lifestyle.

Enforcement

Toronto Police Service routinely collaborates with Transportation Services in resolving school traffic concerns which often entails enforcement of the traffic and parking regulations in front of schools. Ensuring road user safety and the safe and efficient flow of traffic are among their highest priorities and modifying road user behaviour through enforcement and education is a key strategy to meeting that goal.

Toronto Police Service will provide speed enforcement support for this strategy at the proposed flashing 40 km/h school speed zone pilot study on Bloor Street. In addition, Toronto Police Service will provide traffic and parking enforcement in the vicinity of schools within the 9 clusters with the highest frequency of school aged pedestrian collisions, during school arrival and departure periods. Toronto Police Service is also an active participant in the School Zone Safety Working Group and is committed to providing support and assistance to any of the programs and initiatives that are developed.

Research

Staff conducted a literature review of improvements and initiatives directed at improving safety around schools from other jurisdictions in North America and around the world. The review highlighted a variety of solutions ranging from education and awareness oriented initiatives to physical and traffic calming type improvements. However, despite the differences in presentation and design, the basic underlying principles and messages are reflected in the inventory of programs and engineering interventions currently available in Toronto, such as Active and Safe Routes to School, Walking School Bus, school zone kiss and ride, flashing 40 km/h school speed zones, pedestrian crosswalks, etc. Furthermore, many aspects of these programs and interventions are contained within this school zone safety strategy. Staff will continue to keep abreast of current research and best practices related to school traffic concerns and road safety.

Evaluation

Transportation Services staff will review the school zone safety strategy and its various individual components on an annual basis through the School Zone Safety Working Group.

Action Plan

This report identifies a series of measures to be acted upon to improve safety within school zones. A summary of these actions and proposed schedule are outlined in the table in Attachment 3.

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SIGNATURE

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ATTACHMENTS

Attachment 1 – Guidelines for Work on Streets in the Areas of Schools
Attachment 2 – Detailed In-Service Road Safety Audits of School Collision Clusters
Attachment 3 – School Zone Safety Strategy Next Actions

Guidelines for Construction Zones in School Areas

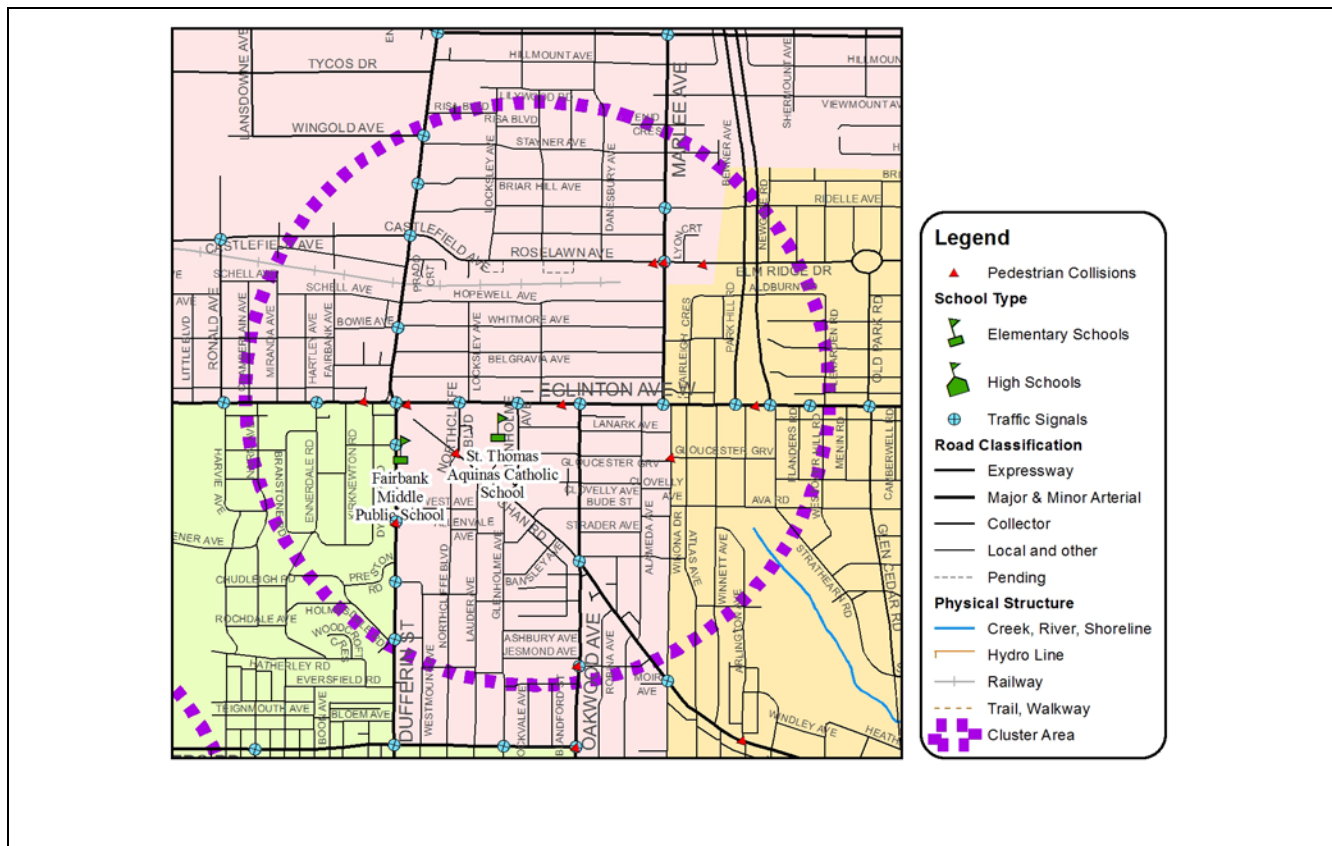
In order to obtain a Road Occupancy Permit for the installation of a work zone in the areas of schools, the applicant must contact the Work Zone Coordinator and comply with the following conditions:

1. Work hours are generally 9:00 a.m. to 3:00 p.m., as these hours would not disrupt pick-up/drop-off times. Weekend work may also be considered. (Following communication with the Work Zone Coordinator, the RoDARS notice must reflect these work hours).
2. The contractor must notify the school principal of the work and how long they need to complete the work.
3. Depending on the scope of work, additional pedestrian control measures may be required (e.g. barricades, sidewalk protection, etc.). Refer to Transportation Services', "Guidelines for Covered Walkways".
4. If there is a possibility that the work could interfere with any loading zones around the school, the Work Zone Coordinator, at his/her discretion, will require that the contractor arrange for a police officer to assist with vehicular and pedestrian traffic. No substitution for a police officer, such as traffic control persons, crossing guards or school safety patrollers, will be accepted.
5. If Capital Works projects are planned around schools, we ask that this work be done in July and August, wherever possible.
6. The need for heightened attention to school children must be highlighted in communication between the Work Zone Coordinator and the contractor.
7. Contractors must make all efforts possible to plan road closures and delivery routes away from the main school access routes.
8. Construction site protection standards must be followed.

School Cluster A – Centred near Eglinton Ave. E. at Oakwood Ave.

Schools in Cluster/streets included in review:

- Fairbank Middle School (No. 2335 Dufferin Street) & Lycée Français de Toronto (No. 2327 Dufferin Street)
 - Dufferin Street (major arterial, four lanes, 13 metres, 50 km/h, 29,000 vehicles/day, 29 DUFFERIN bus)
 - Vaughan Road (local/collector, two lanes, 11 metres, 40 km/h, 3,800 vehicles/day, no TTC service)
- St. Thomas Aquinas Catholic School (No. 636 Glenholme Avenue).
 - Glenholme Avenue (collector, two lanes, 7.3 metres, 40 km/h, 5,600 vehicles/day, no TTC service)
 - Vaughan Road (collector, two lanes, 11 metres, 40 km/h, 3,800 vehicles/day, 90 VAUGHAN bus)



Discussion of Issues/Findings

- The road safety audits at the schools in the cluster noted the following signs are missing:
 - a school area sign (Wc-1) should be installed for northbound motorists on Winnett Avenue, approaching J.R. Wilcox Community School;
 - the existing advisory "Watch for Children" sign for northbound motorists on Glenholme Avenue, north of Gloucester Grove, can be replaced with a school area sign (Wc-1); and
 - a school area sign (Wc-1) should be installed for northbound motorists on Dufferin Street, north of Keywest Avenue.
- Ten collisions occurred in the cluster. No two collisions occurred at the same location.
- In five of the ten collisions, the pedestrian was crossing without the right-of-way. Of these five collisions, three occurred at traffic control signs, one occurred at an all-way "Stop" sign controlled intersection and one occurred mid-block. In four of the collisions, the pedestrian was described as "inattentive".

- Three of the collisions occurred before school and seven occurred after school.
- None of the ten collisions involved excessive speed.

Proposed Actions

- Install supplementary school area signage where noted as missing.
- Advise enhanced education to be undertaken by schools.

School Cluster B – Centred near Don Mills Rd. at Gateway Blvd.

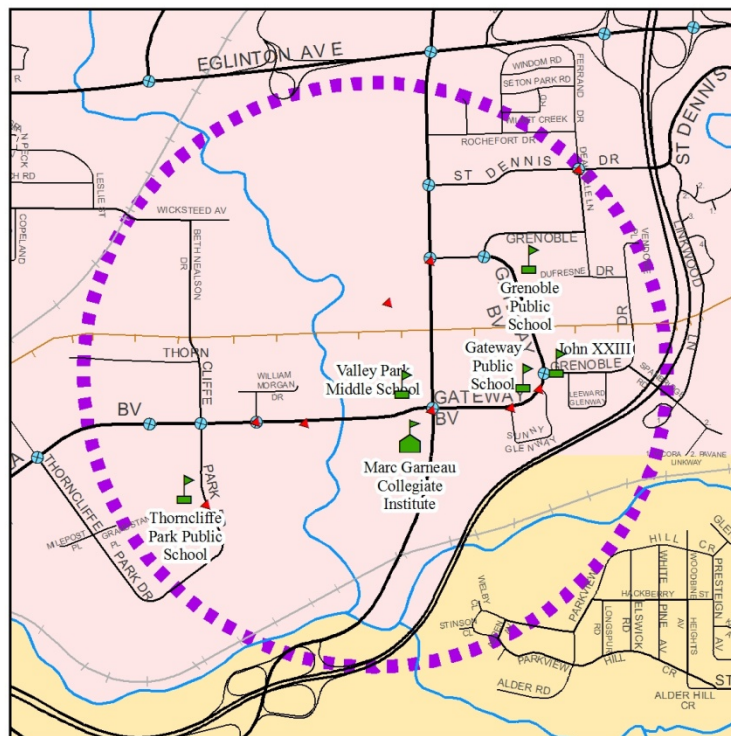
Schools in Cluster/streets included in review:

- Blessed John XXIII Catholic School (No. 175 Grenoble Drive) & Gateway Public School (No. 55 Gateway Boulevard);
 - Gateway Boulevard, east of Don Mills Road - south (minor arterial, two lanes, 13.4 metres, 40 km/h, 9,100 vehicles/day, 100 FLEMINGDON PARK bus)
 - Grenoble Drive, east of Gateway Boulevard-south (collector, two lanes, 8.6 metres, 40 km/h, no counts, 100 FLEMINGDON PARK bus)

- Grenoble Public School (No. 9 Grenoble Drive)
 - Gateway Boulevard, east of Don Mills Road – north (collector, two lanes, 13.4 metres, 40 km/h, 8,500 vehicles/day, no TTC service)
 - Grenoble Drive, east of Gateway Boulevard-north (collector, two lanes, 8.5 metres, 40 km/h, no counts, no TTC service)

- Marc Garneau Collegiate Institute (No. 135 Overlea Boulevard) & Valley Park Middle School (No. 130 Overlea Boulevard)
 - Don Mills Road (major arterial, six lanes, 19.7 metres, 60 km/h, 36,000 vehicles/day, 25 DON MILLS & 100 FLEMINGDON PARK buses)
 - Overlea Boulevard (major arterial, four lanes, 14.8 metres, 50 km/h, 30,500 vehicles/day, 25 DON MILLS & 100 FLEMINGDON PARK buses)

- Thorncliffe Park Public School (No. 80 Thorncliffe Park Drive)
 - Thorncliffe Park Drive (collector, two lanes + centre left-turn, 9.1 metres, 40 km/h, 12,800 vehicles/day, 81 THORNCLIFFE PARK & 88 LEASIDE buses)



Legend

- ▲ Pedestrian Collisions
- School Type**
 - 🏫 Elementary Schools
 - 🎓 High Schools
- ⊕ Traffic Signals
- Road Classification**
 - Expressway
 - Major & Minor Arterial
 - Collector
 - Local and other
 - - - Pending
- Physical Structure**
 - Creek, River, Shoreline
 - Hydro Line
 - Railway
 - - - Trail, Walkway
 - Cluster Area

Discussion of Issues/Findings

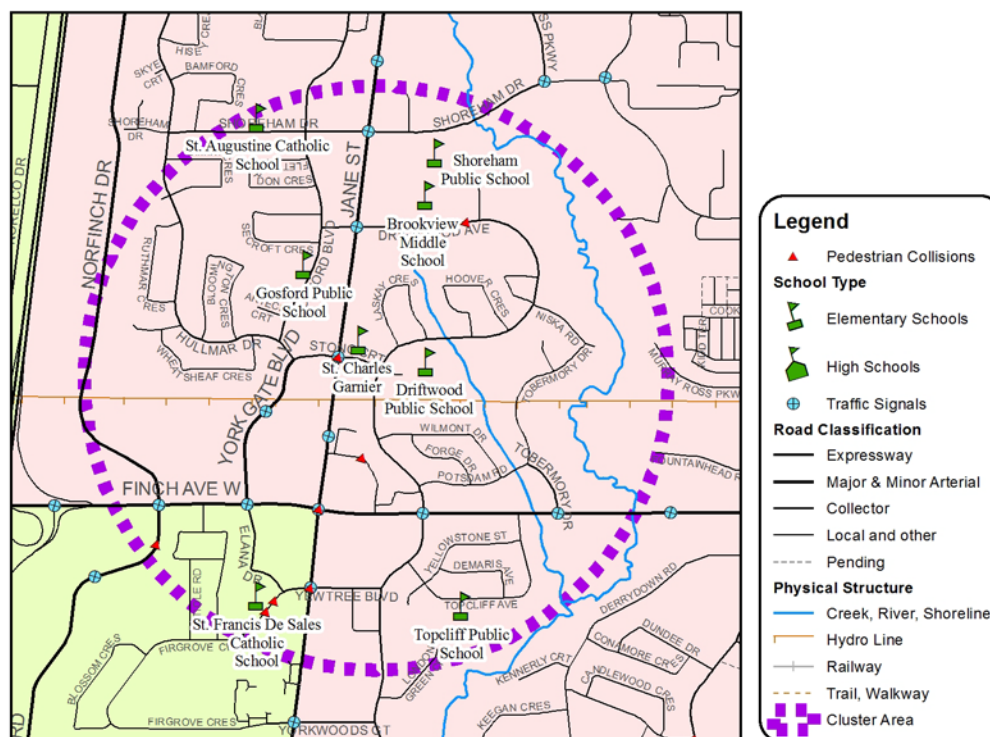
- The road safety audits at the schools in the cluster noted the signage is generally satisfactory. However, the following crossing locations should be upgraded with zebra markings:
 - pedestrian crossover on Grenoble Drive, east of Gateway Boulevard (north);
 - traffic control signals at Gateway Boulevard and Grenoble Drive (south);
 - traffic control signals at Gateway Boulevard and Grenoble Drive (north);
 - pedestrian crossover on Grenoble Drive, north of Spanbridge Road (midblock); and
 - pedestrian crossover on Thorncliffe Park Boulevard (east), south of Overlea Boulevard.
- Ten collisions occurred in the cluster. Two collisions occurred at the same location in one instance – at the pedestrian crossover on Gateway Boulevard, east of Don Mills Road ('Sunny Glenway').
- In six of the ten collisions, the pedestrian was crossing without the right-of-way. Of these six collisions, three occurred mid-block, two occurred at traffic control signs, one at traffic control signals that were inoperative. In three of the collisions, the pedestrian was described as "inattentive".
- One of the collisions occurred before school and nine occurred after school.
- None of the ten collisions involved excessive speed.
- Three of the ten collisions occurred directly adjacent to a school, within a pedestrian crossover with a school crossing guard present. In all three, the pedestrian was crossing with the right-of-way. Two of these were at Gateway Public School and the other was at Thorncliffe Park Public School.

Proposed Actions

- Install supplementary zebra pavement markings where noted as missing.
- Advise enhanced education to be undertaken by schools.
- Advise Toronto Police Service of collisions at locations where crossing guards present.

School Cluster C – Centred near Finch Ave. at Jane St.

- Describe boundary streets
 - This area is located in the northwest quadrant of the District (North York) and is comprised of two major arterial roadways (Jane Street and Finch Avenue West), three minor arterial roadways (Norfinch Drive, Oakdale Road and York Gate Boulevard) and six collector roadways.
- There is a total of nine schools within this School Cluster Review
 - St. Augustine Catholic School – elementary grades
 - Shoreham Public School – elementary grades
 - Gosford Public School – elementary grades
 - Brookview Middle School – elementary grades
 - St. Charles Garnier Catholic School – elementary grades
 - Topcliffe Public School- elementary grades
 - St. Francis De Sales Catholic School
 - Driftwood Public School
- Describe streets and intersections reviewed (e.g. road class, volumes, no. of lanes, speed limits, traffic controls, etc.)
 - Major Arterial Roadways – Five lanes or greater, Minor Arterial Roadway – Two to Four lanes (9.0 metres to 12 metres in width), Collector Roadways – Two Lanes(8.5 metres in width)
- The types of traffic controls in this area vary from Traffic Control Signal, Pedestrian Crossovers, All Way Stop Controls
- Assisted Crossings are also present – Adult Crossing Guards and School Patroller Programs



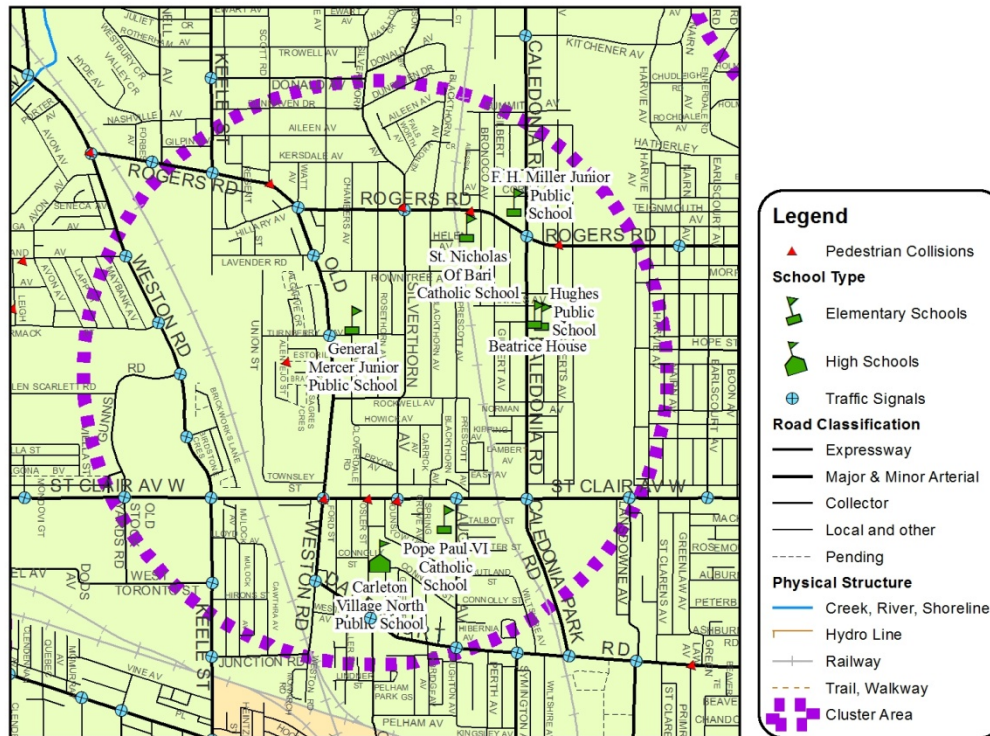
Discussion of Issues/Findings

- Safety issues/deficiencies identified from road safety audit sheets
 - No deficiencies were identified
- Safety issues/deficiencies identified from collision analysis
 - The incident that occurred mid-block on Firgrove Crescent revealed that the Adult Crossing Guard (AXG)/School Patroller I(SP) Signage was not removed when the AXG/SP was removed.
 - Increased awareness of the parking/stopping regulations – drop off and pick up occurring in prohibited zones

Proposed Actions

- **Removal of School Crossing Signs on Firgrove Crescent from a point 92 metres south of Elana Drive**
- **Determine the feasibility and appropriateness of installing a yellow centre line on all roadways, regardless of the classification, for the limits of the school zone**
- **Conduct School Zone Review of the Parking and Stopping Regulations in accordance with the School Zone Guidelines (Proactive vs Reactive – currently we only review a school if requested**
- **Ensure that the appropriate sidewalk connections and accessibility ramps.**

School Cluster D – Centred near St. Clair Ave. W. at Weston Rd.



Schools within the cluster

- Carlton Village North Public School – 315 Osler St

Streets bounded by school:

Osler St – Local Road, 2 lanes - 7.32 metres, 40 km/h speed limit, 1573 veh/day

Connolly St – Local Road, 2 lanes, 8.53 m , 40 km/h speed limit, 786 veh/day

Intersections reviewed: Osler St at Connolly St – All-Way Stop

- Pope Paul VI Catholic School – 270 Laughton Avenue

Streets bounded by school:

St Clair Ave W – Major Arterial, 4 lanes - 16.42 metres, 50 km/h speed limit, 18179 veh/day

Laughton Ave – Local Road, 2 lanes, 7.34 m , 40 km/h speed limit, 2944 veh/day

Hounslow Heath Rd – Local Road, 2 lanes, 8.56 m , 30 km/h speed limit, 690 veh/day

Intersections reviewed: Laughton Ave at Hounslow Heath Rd – All-Way Stop

St. Clair Ave W at Laughton Ave- TCS

- Beatrice House \ Hughes Public School – 177 Caledonia Road \ 10 Innes Avenue

Streets bounded by school:

Caledonia Road – Minor Arterial, 2 lanes -8.65 metres, 40 km/h speed limit, 15830 veh/day

Innes Ave – Local Road, 2 lanes, 7.33 m , 40 km/h speed limit, 428 veh/day

McRoberts Ave – Local Road, 2 lanes, 7.92 m , 30 km/h speed limit

Intersections reviewed: Caledonia Rd at Innes Ave – P.X.O.

Innes Ave W at McRoberts Ave- All-Way Stop

- F.H. Miller Junior Public School – 300 Caledonia Road

Streets bounded by school:

Caledonia Road – Minor Arterial, 2 lanes -8.65 metres, 40 km/h speed limit, 15830 veh/day

Corby Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit, 744 veh/day

Rogers Road – Minor Arterial, 2 lanes plus bike lanes, 12.8 m , 50 km/h speed limit, 17000 veh/day

Gilbert Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Intersections reviewed: Caledonia Rd at Corby Ave – P.X.O.

Corby Ave at Gilbert Ave- Stop Sign

Roger Rd at Caledonia Rd - TCS

- St. Nicholas of Bari Catholic School – 363 Rogers Road

Streets bounded by school:

Rogers Road – Minor Arterial, 2 lanes plus bike lanes, 12.8 m , 50 km/h speed limit, 17000 veh/day

Gilbert Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Bronoco Ave – Local Road, 2 lanes, 8.4 m , 40 km/h speed limit

Laneway – 5.0

Intersections reviewed: Roger Rd at Bronoco Ave – P.X.O.

- General Mercer Junior Public School – 30 Turnberry Avenue

Streets bounded by school:

Turnberry Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit, 1050 veh/day

Rowntree Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit, 1012 veh/day

Rosethorn Ave – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit, 1345 veh/day

Chambers Ave – Local; Road, 2 lanes, 8.5 metres, 40 km/h speed limit

Intersections reviewed: Turnberry Ave at Chambers Ave – All-Way Stop

Turnberry Ave at Rosethorn Ave – All-Way Stop

Rowntree Ave at Rosethorn Ave – All-Way Stop

Discussion of Issues/Findings

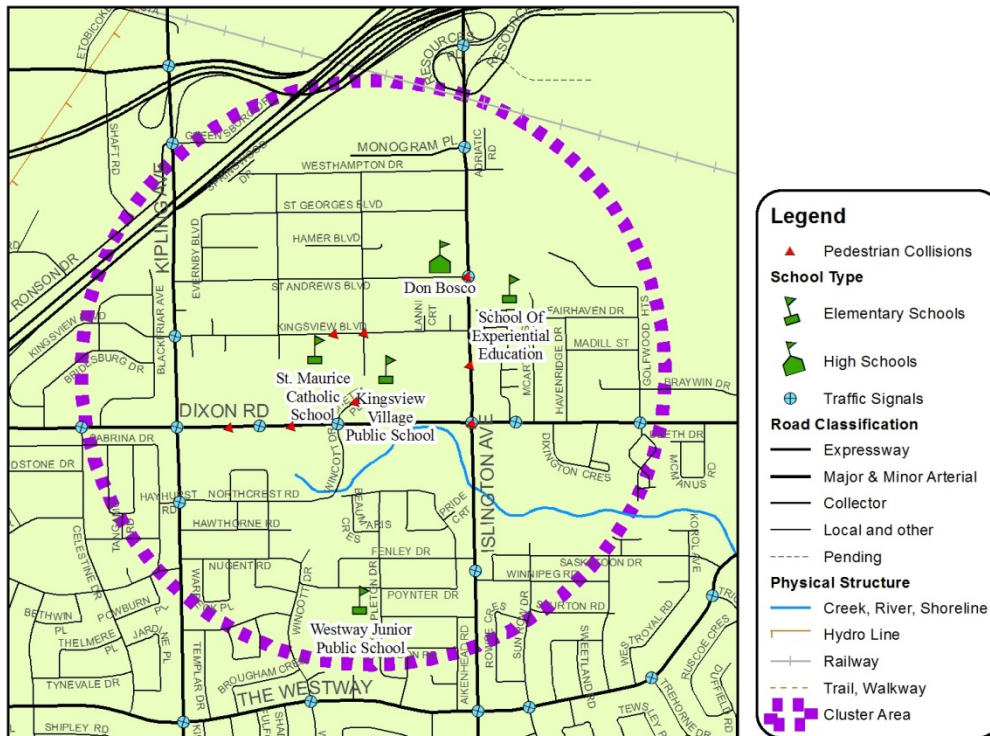
- Safety issues/deficiencies identified from road safety audit sheets
 - Carlton Village North Public School – 315 Osler St
Missing "School Area" Sign for E/B on Connolly St west of Osler St.
Some missing / damaged NO PARKING signs on the north side of Connolly St
Pavement STOP bars and crosswalk lines need refreshing at Osler St at Connolly St – All-Way Stop
 - Pope Paul VI Catholic School – 270 Laughton Avenue
Pavement STOP bars and crosswalk lines need refreshing at Laughton Ave at Hounslow Heath Rd
All-Way Stop
 - Beatrice House \ Hughes Public School – 177 Caledonia Road \ 10 Innes Avenue
Pavement STOP bars and crosswalk lines need refreshing at Innes Ave at McRoberts Ave- All-Way Stop
 - F.H. Miller Junior Public School – 300 Caledonia Road
Zebra pavement markings at P.X.O need refreshing at Caledonia Rd at Corby Ave
 - St. Nicholas of Bari Catholic School – 363 Rogers Road
Missing "School Area" Sign for N/B in laneway south of Rogers Rd
 - General Mercer Junior Public School – 30 Turnberry Avenue
Pavement STOP bars and crosswalk lines need refreshing at Turnberry Ave at Rosethorn Ave
and All-Way Tabs are badly faded.

- Safety issues/deficiencies identified from collision analysis

No deficiencies directly related to pedestrian collisions. 4 collisions involved a pedestrian running onto the roadway or crossing without-right-of-way. 5 collisions occurred where the driver involved failed to yield right-of-way to the pedestrian.

One of the nine collisions reviewed occurred along the frontage of a school (St. Nicholas of Bari Catholic School). It involved a parent driving away from the curb before their child was in the vehicle.

School Cluster E – Centred near Dixon Rd. at Islington Ave.



Schools within the cluster

- St. Maurice Catholic School – 45 Kingsview Blvd

Streets bounded by school:

Kingsview Blvd – Local Road, 2 lanes - 9.7 m, 40 km/h speed limit, 2692 veh/day
 York Road – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit
 Windsor Road – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Intersections reviewed: York Road at Kingsview Blvd – All-Way Stop
 Kingsview Blvd at Windsor Road – All-Way Stop

- Kingsview Village Public School – 1 York Road

Streets bounded by school:

Kingsview Blvd – Local Road, 2 lanes - 9.7 m, 40 km/h speed limit, 2692 veh/day
 York Road – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit
 Chetta Place – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Intersections reviewed: York Road at Kingsview Blvd – All-Way Stop

- Don Bosco Catholic School – 2 St. Andrews Blvd

Streets bounded by school:

Islington Avenue – Major Arterial, 4 lanes - 16.3 m, 60 km/h speed limit, 35496 veh/day
 York Road – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit
 St. Andrews Blvd – Local Road, 2 lanes, 7.3 m , 40 km/h speed limit, 2688 veh/day
 St. Georges Blvd – Local Road, 2 lanes, 7.3 m , 50 km/h speed limit, 962 veh/day

Intersections reviewed: Islington Ave at St. Andrews Blvd – TCS
 St. Andrews Blvd at York Road - All-Way Stop

- School of Experimental Education – 42 McArthur St

Streets bounded by school:

McArthur St – Local Road, 2 lanes - 7.3 m, 40 km/h speed limit, 2132 veh/day

Fairhaven Drive – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Intersections reviewed: McArthur St at Dixon Road – Stop Sign

- Westway Junior Public School – 25 Poynter Dr

Streets bounded by school:

Poynter Dr – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Stapleton Dr – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Stapleton Dr – Local Road, 2 lanes, 8.5 m , 40 km/h speed limit

Intersections reviewed: Poynter Dr at Stapleton Dr – All-Way Stop

Fletcher Pl at Stapleton Dr – Stop Sign

Discussion of Issues/Findings

▪ Safety issues/deficiencies identified from road safety audit sheets

- St. Maurice Catholic School – 45 Kingsview Blvd
Pavement STOP bars and crosswalk lines need refreshing at York Rd at Kingsview Blvd and at Kingsview Blvd at Windsor Rd - All-Way Stops
- Kingsview Village Public School – 1 York Road
Missing "No Parking 8 a.m. to 5p.m. Mon- Fri" Sign on the west side of York Rd at # 2 opposite the school
- Don Bosco Catholic School – 2 St. Andrews Blvd
**STOP Sign for Northbound York Road at St. Andrews Blvd is faded and defaced
" NO PARKING ANYTIME" signs on both sides of St. Georges Blvd between Islington Ave and York Road are faded**
- School of Experiential Education – 42 McArthur St
Missing "No Stopping 8 a.m. to 5p.m. Mon- Fri" Sign on the east side of McArthur St north of Fairhaven Dr
- Westway Junior Public School – 25 Poynter Dr
**Pavement STOP bars and crosswalk lines need refreshing at Poynter Dr at Stapleton Dr- All-Way Stop
"No Passing Here to Crossing" Sign located on the north side of Poynter Dr at # 24 should be re-located closer to the P.X.O. near # 26 and the 40 Km/h speed limit sign at # 26 should be moved to # 24
STOP Sign for Eastbound Paragon Road at Stapleton Dr is missing**

▪ Safety issues/deficiencies identified from collision analysis

No deficiencies directly related to pedestrian collisions. 5 collisions involved a pedestrian running onto the roadway or crossing without-right-of-way. 3 collisions occurred where the driver involved failed to yield right-of-way to the pedestrian.

One of the collisions reviewed occurred in front of a school (St. Maurice Catholic School) where a group of children ran onto the street from behind parked cars along the south curb during dismissal time. This area presently has a NO PARKING 8 am – 5 pm Mon to Fri restriction.

Proposed Actions

- Immediate improvements/mitigative action and potential benefits

For increased visibility and stop compliance:

- 1) Refresh stop bars and crosswalks lines at these All-Way Stops

**York Rd at Kingsview Blvd
Kingsview Blvd at Windsor Rd
Poynter Dr at Stapleton Dr**

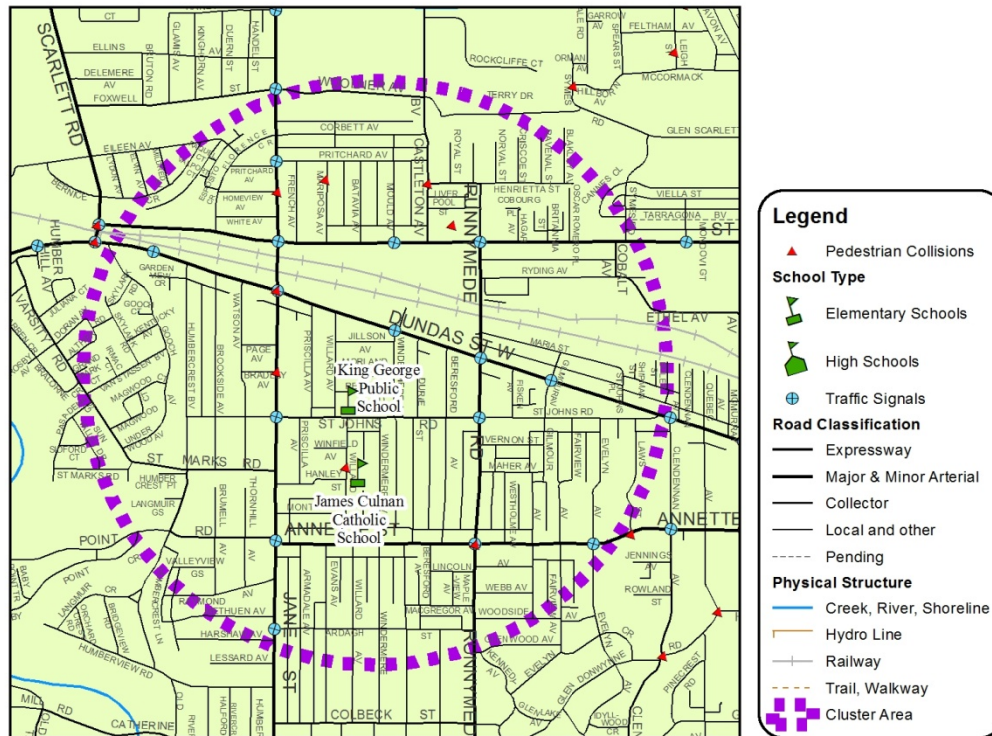
- 2) Replace damaged, faded or missing signs at

**Missing "No Parking 8 a.m. to 5p.m. Mon- Fri" Sign on the west side of York Rd at # 2 opposite Kingsview Village Public School – 1 York Road
STOP Sign for Northbound York Road at St. Andrews Blvd
" NO PARKING ANYTIME" signs on both sides of St. Georges Blvd between Islington Ave and York Road
Missing "No Stopping 8 a.m. to 5p.m. Mon- Fri" Sign on the east side of McArthur St north of Fairhaven Dr
"No Passing Here to Crossing" Sign located on the north side of Poynter Dr at # 24 should be re-located closer to the P.X.O. near # 26 and the 40 Km/h speed limit sign at # 26 should be moved to # 24
STOP Sign for Eastbound Paragon Road at Stapleton Dr**

- Long-term improvements/mitigative action and potential benefits

- 1) Conduct more in-depth traffic operational studies at these schools to observe traffic and pedestrian activity during the morning and afternoon drop-off and dismissal times.

School Cluster F – Centred near Dundas St. W. at Runnymede Rd.

**Schools within the cluster**

- King George Public School – 25 Rexford Road

Streets bounded by school:

St Johns Road – Collector Road, 2 lanes -8.5 m, 30 km/h speed limit, 2709 veh/day

Willard Ave – Local Road, 2 lanes, 8.5 m, 30 km/h speed limit, 1194 veh/day

Rexford Road – Local Road, 2 lanes, 8.5 m, 40 km/h speed limit

Intersections reviewed: St. Johns Road at Willard Ave – P.X.O.

- James Culnan Catholic School – 605 Willard Ave

Streets bounded by school:

St Johns Road – Collector Road, 2 lanes -8.5 m, 30 km/h speed limit, 2709 veh/day

Willard Ave – Local Road, 2 lanes, 8.5 m, 30 km/h speed limit, 1194 veh/day

Hanley St – Local Road, 2 lanes, 8.5 m, 40 km/h speed limit

Intersections reviewed: Willard Ave at Hanley St – Stop Sign

Discussion of Issues/Findings

- Safety issues/deficiencies identified from road safety audit sheets
 - King George Public School – 25 Rexford Rd
Missing "School Area" signs on Rexford Rd for eastbound and westbound approaches
" NO PARKING ANYTIME" signs on north side of St Johns Rd between Priscilla Ave and Windermere Ave are damaged or faded
- Safety issues/deficiencies identified from collision analysis

6 collisions involved a pedestrian running onto the roadway or crossing without-right-of-way. 2 collisions occurred where the driver involved failed to yield right-of-way to the pedestrian.
- Two of the collisions reviewed occurred in front of a school, where a pedestrian ran onto the street from behind a parked car or school bus during the afternoon dismissal time.

Proposed Actions

- Immediate improvements/mitigative action and potential benefits

For increased visibility and awareness:

 - 1) Replace damaged, faded or missing signs at

Missing "School Area" signs on Rexford Rd for eastbound and westbound approaches
" NO PARKING ANYTIME" signs on north side of St Johns Rd between Priscilla Ave and Windermere Ave
- Long-term improvements/mitigative action and potential benefits
 - 1) Conduct more in-depth traffic operational studies at these schools to observe traffic and pedestrian activity during the morning and afternoon drop-off and dismissal times.

School Cluster G – Centred near Danforth Ave. at Pharmacy Ave.

- Describe boundary streets
 - This study area is located east side of Victoria Park Avenue of the Scarborough District and is comprised of one major arterial roadway (Danforth Avenue), three minor arterial roadways (Danforth Road, Pharmacy Avenue, Clonmore Avenue), two collector roads (Denton Avenue, Crescent Town Road) and one local roadway (Byng Avenue).
- List of schools within the cluster
 - Warden Junior Public School
 - Samuel Hearne Senior Public School
 - Oakridge Junior Public School
 - St. Dunstan Catholic School
- Describe streets and intersections reviewed (e.g. road class, volumes, no. of lanes, speed limits, traffic controls, etc.)

Danforth Avenue and Danforth Road - Danforth Avenue is a major arterial road with an unposted speed limit of 50 km/h, Danforth Road is a minor arterial road with an unposted speed limit of 60 km/h. Currently, this location is a Traffic Control Signal intersection and operates with a "Fixed" type of control. Traffic volume is 25,458 vehicles per day. Collision occurred approximately 500 metres away from Warden Junior Public School.

Pharmacy Avenue and Denton Avenue - Pharmacy Avenue is a minor arterial road with an unposted speed limit of 50 km/h. Currently, this location is a Traffic Control Signal intersection and operates with a "semi-actuated 2" type of control. Collision occurred approximately 100 metres away from Oakridge Junior Public School.

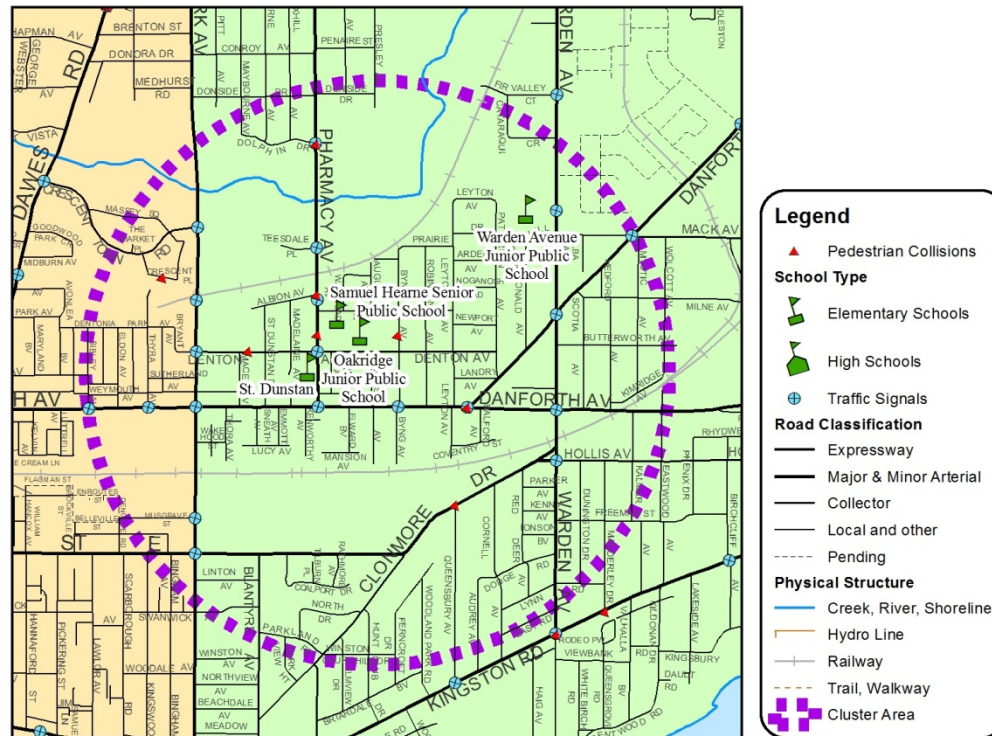
Clonmore Avenue and Queensbury Avenue - Clonmore Avenue is a minor arterial road with a posted speed limit of 40 km/h. Currently, this location is a Pedestrian Crossover intersection with cross line. Collision occurred approximately 100 metres away from St Dunstan Catholic School.

Crescent Town Road - Crescent Town Road is a collector road with an unposted speed limit of 50 km/h. Collision occurred midblock near #7 Crescent Place and approximately over 1 km away from St. Dunstan Catholic School.

30 Denton Avenue - Denton Avenue is a collector road with an unposted speed limit of 50 km/h. Collision occurred midblock near #30 Denton Avenue and approximately over 1 km away from St. Dunstan Catholic School

110 Byng Avenue – Byng Avenue is a local road with a posted speed limit of 40 km/h. Collision occurred midblock in front of Oakridge Junior Public School.

- The type of traffic controls in this area varies from Pedestrian Crossover, Traffic Control Signals and All Way Stop Control.
 - Adult Crossing Guards assisted crossing at Pedestrian Crossover and Traffic Control Signals.



Discussion of Issues/Findings

- Safety issues/deficiencies identified from road safety audit sheets

The geometry of those review roadways has no horizontal curve or bends. Six locations pedestrian crossing within traffic control devices and pedestrian crossing without right-of-way. No major safety identified from road safety audit sheets.

- Safety issues/deficiencies identified from collision analysis

Pharmacy Avenue and Newport Avenue - At this location, the vehicle was travelling northbound on Pharmacy Avenue. The pedestrian was crossing Pharmacy Avenue from the east-side to the west-side and ran into the vehicle. Pedestrian did not use the Pedestrian Signal Control. Pedestrian received minimal injuries. Driver was not charged.

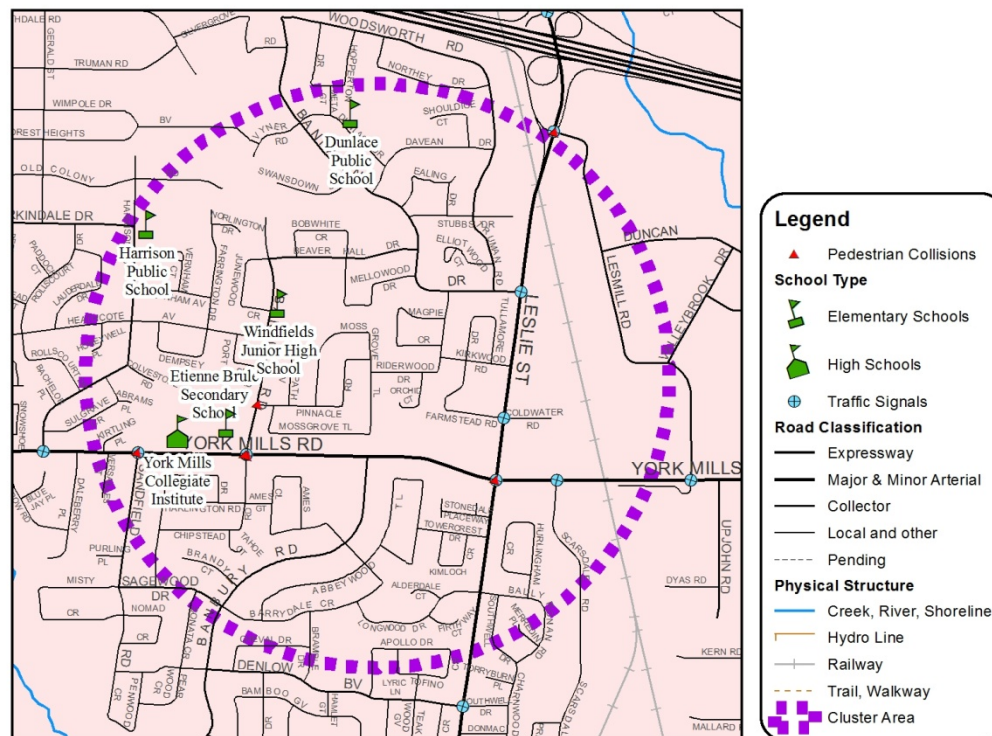
Pharmacy Avenue and Denton Avenue - At this location, the vehicle was travelling northbound on Pharmacy Avenue. Pedestrian was crossing just north of the Traffic Control Signal (mid-block) without the benefit of the signals. Traffic Control Signal at time of investigation was operational and a crossing guard is on duty. Pedestrian received minor injuries. Driver was not charged.

Proposed Actions

- Immediate improvements/mitigative action and potential benefits
 - **Increase awareness/education of pedestrian to use the traffic control device.**
 - **Review the split change timing for those Traffic Control Signals.**
 - **Increase education by addressing parents and staff at all school.**
 - **Possible install barrier or streetscaping to prevent random pedestrian crossing.**

School Cluster H – Centred near York Mills Rd. at Leslie St.

- Describe boundary streets
 - This area is located in the southeast quadrant of the District (North York) and is comprised of two major arterial roadways (Leslie Street and York Mills Road), five collector roadways.
 - Highway 401 prevents any access to this community from the north
- List of schools within the cluster. There is a total of five schools within this School Cluster Review
 - York Mills Collegiate – Secondary grades
 - Etienne Brule Secondary School – French Secondary School
 - Winfields Junior High School – Middle grades
 - Harrison Public School – elementary grades
 - Dunlace Public School – elementary grades
- Describe streets and intersections reviewed (e.g. road class, volumes, no. of lanes, speed limits, traffic controls, etc.)
 - Major Arterial Roadways – Five lanes or greater, Collector Roadways – Two Lanes (8.5 metres in width)
- The types of traffic controls in this area vary from Traffic Control Signal, Pedestrian Crossovers, All Way Stop Controls
- Assisted Crossings are also present – Adult Crossing Guards and School Patroller Programs



Discussion of Issues/Findings

- Safety issues/deficiencies identified from road safety audit sheets
 - Inconsistent pavement markings (The intersection of York Mills Road and Banbury Road/Chipstead Road – Etienne Brule has zebra markings the intersection of York Mills Road and Sandfield Road – York Mills Collegiate does not)
 - Noted that three hour parking is permitted on Dunlace Avenue opposite Dunlace Public School
 - Harrison Avenue is partially unimproved which results in missing infrastructure
 - Banbury Road (Winfields Junior Public School), missing school bus loading zone signage
- Safety issues/deficiencies identified from collision analysis
 - At Banbury Road and York Mills Road the predominant incident pattern was southbound left turns with north/south crossing on the east side of intersection (Zebra markings are present)
- Increased awareness of the pedestrian crossings

Proposed Actions

- Installation of Zebra pavement markings to identify the pedestrian crossing area at the intersection of York Mills Road and Sandfield Road
- Installation of Pedestrian Ahead sign on the north side of York Mills Road for westbound traffic west of Banbury Road/Chipstead Road (Etienne Brule and York Mills Collegiate)
- Conduct School Zone Review of the Parking and Stopping Regulations in accordance with the School Zone Guidelines (Proactive vs Reactive – currently we only review a school if requested)
- Particularly, the installation of appropriate stopping prohibitions on the east side of Dunlace Drive between Meta Gate and Davean Drive in order to improve the flow of two-way traffic and to discourage mid-block crossings. In addition, installation of temporal parking prohibition to accommodate drop-off/pick-up activity fronting Dunlace Public School (consultation with Dunlace Public School, Local Councillor and area residents is required)
- Determine the feasibility and appropriateness of installing a yellow centre line on all roadways, regardless of the classification, for the limits of the school zone
- Ensure that the appropriate sidewalk connections and accessibility ramps are located on Harrison Road
- Installation of school bus loading zone missing signage at a point 45 metres north of Junewoods Crescent (south intersection) (Winfields Junior Public School),

School Cluster I – Centred near York Mills Rd. at Parkwoods Village Dr.

- Describe boundary streets
 - This study area is located west side of Victoria Park Avenue of the North York District and is comprised of three major arterial roadways (Victoria Park Avenue, York Mills Road and Parkwoods Village Drive), one collector road (Fenside Drive) and three local roadways (Brookbanks Drive, Lynedock Crescent and Roywood Drive).
- List of schools within the cluster. There are a total of six schools within this School Cluster Review.
 - Roywood Public School
 - St. Isaac Jogues Catholic School
 - Fenside Public School
 - St. Madeleine Catholic School
 - Brookbanks Public School
 - Donview Middle School

- Describe streets and intersections reviewed (e.g. road class, volumes, no. of lanes, speed limits, traffic controls, etc.)

Parkwoods Village Drive is a Major Arterial road with an unposted speed limit of 50 km/h, Closest school is located approximately 800 metres west of Parkwoods Village Drive on Brookbanks Drive (Brookbanks Public School).

York Mills Road is a Major Arterial Road with an unposted speed limit of 50 km/h, Closest school is located approximately 200 metres east of Ness Drive on York Mills Road (St. Isaac Jogues Catholic School).

Victoria Park Ave is a Major Arterial road with an unposted speed limit of 60 km/h, Closest school is located approximately 600 metres west-side of Victoria Park Avenue (Roywood Public School).

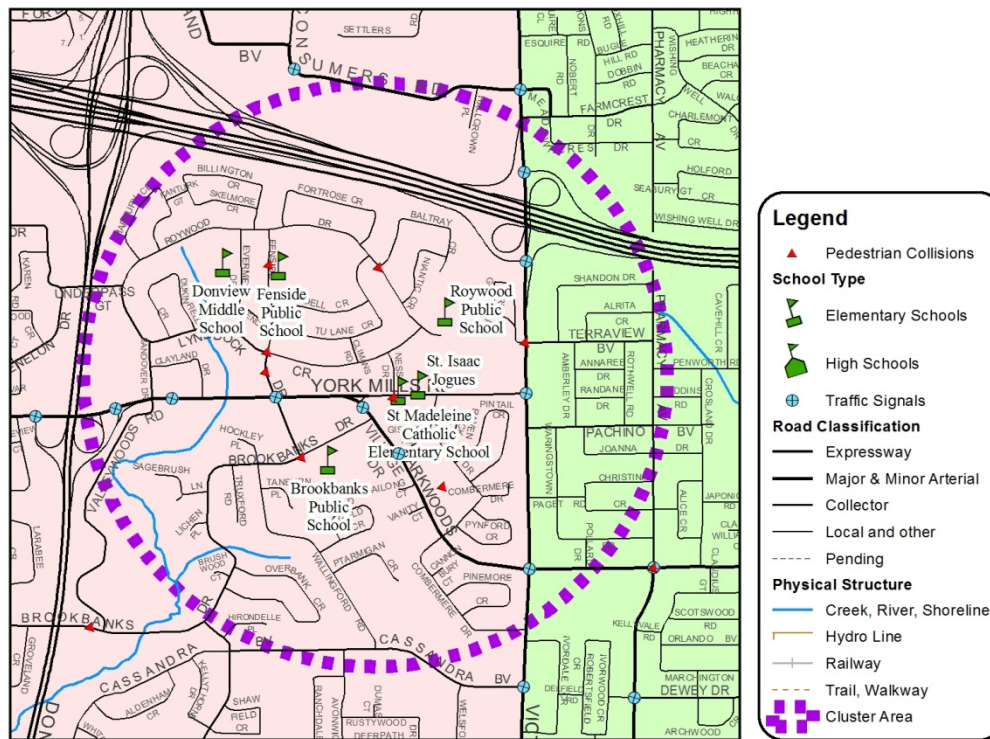
Fenside Drive is a collector road with an unposted speed limit of 50 km/h, Closest school is located approximately 800 metres north of Lynedock Crescent on Fenside Drive (Fenside Public School).

Roywood Drive is a local road with an unposted speed limit of 50 km/h. Closest school is located approximately 800 metres east of Baltray Crescent on Roywood Drive (Roywood Public School).

Brookbanks Drive east of Fenside Drive is a local road with a posted speed limit of 40 km/h. Collision occurred in front of 217 Brookbanks Drive (Brookbanks Public School).

Fenside Drive is a collector road and Lynedock Crescent is a local road both with an unposted speed limit of 50 km/h (40 km/h begin at north of Slidell Crescent). Closest school is located approximately 800 metres north of Lynedock Crescent on Fenside Drive (Fenside Public School).

- The type of traffic controls in this area varies from Pedestrian Crossover, Refuge Island and All Way Stop Control.
 - Adult Crossing Guards assisted crossing at Pedestrian Crossover and All Way Stop Control.



Discussion of Issues/Findings

- Safety issues/deficiencies identified from road safety audit sheets
 - Fenside Public School – 131 Fenside Drive
During the site checked at this location revealed the street light was only at the west-side of Fenside Drive. No street lights were in front of the school.
 - Fenside Public School - Fenside Drive and Lynedock Crescent (All Way Stop Control)
During the site checked at this location revealed the street light was only at the south/west corner. No Street lights at the east side of the intersection.
 - Brookbanks Public School -Brookbanks Drive and Fenside Drive
During site checked at this location revealed street lights were only at the south-side of Brookbanks Drive. No street lights on the north-side of Brookbanks Drive.
 - Currently, those schools have posted school side parking/opposite side no stopping regulation. For the most part, the existing combination of off-street parking and school side on-street parking operated well at those locations.
- Safety issues/deficiencies identified from collision analysis
 - Two of the collisions reviewed occurred in front of a school.
Fenside Public School - At this location, the vehicle was travelling northbound on Fenside Drive. Pedestrian walk off curb into the side of the vehicle. The driver stopped and got out of the vehicle to check the pedestrian, left the scene and failed to report to the collision centre. Pedestrian received minimal injuries.

Brookbanks Public School - At this location, the vehicle was travelling eastbound on Brookbanks Drive. Pedestrian was dropped off on the north-side of the road and the pedestrian ran out from behind the stopped vehicle and ran in front of the vehicle. Pedestrian received minimal injuries. Driver was not charged.

Proposed Actions

- Immediate improvements/mitigative action and potential benefits
 - **Fenside Public School – 131 Fenside Drive**
Install Street Lights in front of the school on the east-side of Fenside Drive. Install a yellow centre line on the roadway for the school zone limit.
 - **Fenside Public School - Fenside Drive and Lynedock Crescent (All Way Stop Control)**
Install additional Street Lights on the east-side will benefit pedestrians crossing at night at this intersection.
 - **Brookbanks Public School -Brookbanks Drive and Fenside Drive**
Install Street Lights on the north-side of Brookbanks Drive. This will benefit pedestrians crossing at night.

School Zone Safety Strategy – Action Plan

COMPONENT	ACTION	SCHEDULE
Data Analysis	Bi-annual review of school-zone related vulnerable road user collision data and identification of areas and trends for further analysis and review	On-going
Engineering – Safety Audits of School Collision clusters	Bi-annual safety audit of high collision clusters and implementation of immediate actions	On-going
Engineering – Current Traffic Measures for Addressing School Traffic Issues	Implementation of actions identified through bi-annual road safety audits	Spring/Summer 2014
Engineering – School Speed Zones	Installation and assessment of flashing 40 km/h School Speed Zone pilot study on Bloor Street West, in front of St. Clement Catholic School	Spring/Summer 2014
Engineering – School Speed Zones	Report to Public Works and Infrastructure Committee on policy and warrant for 30 km/h speed limits without traffic calming	Early 2015
Engineering – Sidewalks	Review Essential Links program for potential changes to improve safety and sidewalk connectivity in school zones	On-going
Engineering – Sidewalks	Discussions with Engineering and Construction Services to identify road reconstruction projects in school zones suitable for sidewalk installation	On-going
Engineering – Pavement Markings	Study effectiveness of yellow centrelines in school zones	End of 2014
Engineering – Pavement Markings	Study effectiveness of school zone stencils	End of 2014
Engineering – Construction	Inclusion of guidelines for	Immediate

Zone Guidelines	construction zones in school areas in road occupancy permit conditions	
Programs and Advocacy – Current School Safety Programs and Initiatives	Support current City school safety programs and initiatives	On-going
Programs and Advocacy – School Travel Plan	Monitor and provide support for School Travel Plans pilot projects at Our Lady of Lourdes Catholic School and King Edward Public School.	Summer of 2015
Programs and Advocacy – Charter for Active, Safe and Sustainable Transportation	Provide support for the school boards' Charter for Active, Safe and Sustainable Transportation implementation plans	On-going
Programs and Advocacy – Charter for Active, Safe and Sustainable Transportation	Encourage school boards to prioritize Charter implementation plans in high collision clusters	Immediate
Programs and Advocacy – Charter for Active, Safe and Sustainable Transportation	Request written endorsement of Charter by every school	Immediate
Programs and Advocacy – School Zone Safety Working Group	School Zone Safety Working Group meetings	On-going
Education	Develop enhanced road safety and active transportation education and awareness initiatives	Early 2015
Enforcement	Provide traffic and parking enforcement efforts in the vicinity of schools within the 9 high collision clusters	On-going
Research	Update research and best practices on school traffic and safety	On-going