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TO:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON MAY 20, 2015
FROM:	EDWARD SOLDI, P. ENG. DIRECTOR, ROADS & TRANSPORTATION
SUBJECT	SCHOOL ZONE SPEED LIMIT POLICY

RECOMMENDATION

That on the recommendation of the Director, Roads & Transportation, Civic Administration **BE DIRECTED** to finalize a School Zone Speed Limit Policy based on the Draft Guiding Principles identified and through consultation with stakeholders.

BACKGROUND

At its meeting held on March 31th 2015, Council resolved the following:

That the Civic Administration BE REQUESTED to report back at a future meeting of the Civic Works Committee with respect to reducing the speed limit in school zones in order to improve pedestrian safety.

The City recently adopted the London Road Safety Strategy (LRSS). The plan defines a system and a process for setting out the targets, policies, and action plans that will guide the City and its partners in creating safer roads by reducing the number and the severity of motor vehicle collisions. One of the targets is to improve safety for pedestrians around schools.

The following report lays out the next steps in developing a School Zone Speed Limit Policy.

DISCUSSION

In 2004, Municipal Council adopted the “*Guidelines for Establishing Appropriate Speed Limits on City Roads*” (Appendix “A”). These guidelines along with the Transportation Association of Canada’s Speed Limit Guidelines have been used to help staff determine the appropriate posted speed limit on City streets.

The Ontario Highway Traffic Act section 128(1) allows municipalities to use a default speed limit 50 km/h on local roads within urban areas and 80 km/h on rural roads in Ontario. Municipalities may create by-laws to regulate the speed of traffic on its streets outside of this default speed limit. All streets with a speed limit less than or greater than the default speed limit must be signed individually in accordance with the Ontario Traffic Manual specifications and regulations.

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The Province is currently reviewing the default speed limits in Ontario municipalities, including the option of lowering the default speed limit from 50 km/h, as a method to help improve safety for pedestrians, cyclists and motorists. This initiative was stimulated by a coroner's review into pedestrian deaths in 2010 which urged the Province to allow municipalities to lower the speed limit.

The following options are being considered by the Province:

- Maintaining the current 50 km/h default speed limit.
- Through a legislative change, reduce the default speed limit to 40 km/h.
- Allowing municipalities to set a default speed limit either of 50 km/h or 40 km/h within their boundaries and requiring the posting of signs at each entry point of the municipality.
- Permitting municipalities to set different default speed limits inside their boundaries or specific neighbourhoods and forcing them to the post signs at each entry point of the city or neighbourhood.

The Province's consultation includes workshops, questionnaires and webinars, Civic Administration has participated in the discussions.

The following are concerns with changing the default speed limit:

- Changing the speed limit without visible changes to the road environment may increase non-compliance. Improving road user compliance levels will require increased resources for enforcement.
- Achieving acceptance will require a public education campaign and public service announcements beyond installing signs to notify drivers of the change in the default speed limit to change driver behaviour.
- Increase in travel time impacting transit schedules and commuters.
- Increase in travel time impacting emergency responders.

Motorists are generally familiar with the local roads being 50 km/h no matter what municipality they are driving in. Changes in the current practice would create uncertainty for travellers between municipalities, create greater non-conformance and would require a considerable increase in enforcement budgets and resources.

Speed Limits

A common misconception about speed limits is that drivers will change their driving behaviour solely on the posted speed limit. Artificially reducing the speed limit can create an environment of reduced safety. Drivers operate their vehicles based on the environmental factors they perceive during the trip.

In order to reduce speeding, roads have to be designed in a 'Complete Streets' manner that puts an emphasis on the use of roadways for all modes. Complete Streets are a policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation. Complete Streets allow for safe travel by those walking, bicycling, driving automobiles, riding public transportation, or delivering goods.

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London’s road classification system is currently broken down into the following five groups based on their function:

1. Freeway/Expressway/Parkway
 - Priority for vehicles and the movement of freight.
 - Move large volumes of vehicular traffic.
 - No access to abutting lands.
 - No pedestrian usage.

2. Arterial
 - Primary function is to service all modes of through traffic.
 - Typically multiple lanes of traffic.
 - Limited access to abutting lands.

3. Primary/Secondary Collector
 - Provides for the collecting of traffic between Arterial and Local roads.
 - Allows access to land

4. Local
 - Main function is to provide access to lands.
 - Higher pedestrian use.

5. Window Street
 - Provides single loaded access to individual properties.

Reducing the speed limit gives some drivers and pedestrians a false sense of safety if they assume the traffic is moving at 40 km/h when it is actually travelling at 50 km/h. This may result in pedestrians putting themselves at risk by assuming the traffic is going slower.

Examples of how the above is ineffective can be found in municipalities that implemented Community Safety Zones (CSZ). CSZ’s included increased speeding fines; however, the municipalities saw little or no speed reduction unless there was continuous enforcement.

School Zone Speed Limits

In certain situations, there are times when reduced speed limits are appropriate and can be effective. School zones are areas where some municipalities have been successful in reducing the operating speed of vehicles. Blanket speed limit changes in school zones are not as effective as speed limit reductions that apply prior to school entry times and dismissal times.



The presence of the School Speed Zone with flashing 40km/h Student Speed Zone signs at either end of the school limits will enhance motorists awareness to the fact that they are operating their vehicles in the presence of a school.

In London the three school boards have 103 elementary schools and 22 secondary schools. In addition to this there are 6 private schools. The majority of schools are located on streets with a posted speed limit of 50 km/h. The following table highlights the breakdown of existing posted speed limits at London’s schools:

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	Posted Speed Limit			
	50 km/h	60 km/h	70 km/h	80km/h
Elementary Schools	96	6		1
Secondary Schools	15	6	1	
Private Schools	5	1		

Draft Guiding Principles

Research has shown that blanket speed limit reductions are not effective as a standalone measure and this would not be consistent with the Council approved Traffic Calming Program. Additional consultation and research is needed before establishing a School Zone Speed Limit Policy. The following are draft Guiding Principles of a School Zone Speed Limit Policy:

1. Effective use of Engineering, Education and Enforcement (3Es) to reduce the operating speed of vehicles in the vicinity of schools to improve safety for pedestrians;
 - The use of reduced speed limits without taking into consideration other engineering factors, an education campaign and enforcement will not result in a reduction of the operating speed;
 - A best practices review will used to develop a 3E program.

2. The application of the appropriate speed limit that takes into consideration:
 - i) School arrival and dismissal times;
 - Research has shown that reducing the speed limit during specific times is more effective than a blanket speed reduction.

 - ii) School holidays;
 - An effective program should adapt to match school holidays.

 - iii) Roadway classification;
 - Reduced speed limits should only be considered for Local, Secondary Collector and Primary Collector road classifications; it being noted that drivers a less likely to modify their speed on major roads.

 - iv) Access points to the school
 - Reduced speed limits are typically applied to the frontage of the school and extend 150 m beyond the boundary of the school; it being noted that the limits may be extended on a case by case basis if the zone is deemed too short for enforcement.

 - v) Roadway design;
 - Road design features such as roadway narrowing, parking bays, etc to reduce vehicle speeds.

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vi) Existing speed limit.

- Speed reductions in school zones should not apply to 60 km/h or higher roads; it being noted that currently two schools are located on these higher speed roads which are also arterial roads.

3. The use of technology to ensure/enhance compliance while at the same time being financially sustainable;

- Reduced speed signs by themselves will have a minimal impact on driver's speeds;
- Adding flashing amber lights beside the reduced speed signs improve compliance; however, there is a cost to operate and maintain these systems;

Consultation

Consultation with the Road Safety Committee, London Police Service, Thames Valley District School Board, London District Catholic School Board, Community Safety and Crime Prevention Committee will be undertaken. This input along with a review of Municipal Best Practices will be used to amend and enhance the above draft Guiding Principles of a School Zone Speed Limit Policy.

Financial Implications

The cost associated with implementing a School Zone Speed Limit Policy includes the societal costs of improved safety which can be difficult to quantify. There are also the more tangible cost of delivering the program such as sign installation and maintenance. These costs will vary depending on the extent of the program implementation and the technology used. The cost to install static signs is approximately \$2,000.00 per zone and the cost of flashing signs range from \$12,000.00 to \$15,000.00 per zone. A better estimate of implementing the School Zone Speed Limit Policy will be known once the Guiding Principles are finalized.

SUMMARY

The current "Guidelines for Establishing Appropriate Speed Limits on City Roads" are still appropriate and should continue to be used. It being noted that the guidelines are based on the application of industry accepted practices that takes in to consideration the road characteristics and roadside environment.

Reduced speed limits near schools can be an effective tool to reduce the operating speed when used strategically and with appropriate enforcement and driver education. Civic Administration is recommending the development of a School Zone Speed Limit Policy based on the above Guiding Principal. Over the next few months, Civic Administration will continue researching this issue, gather stakeholder input and develop a draft School Zone Speed Limit Policy which will be brought to Municipal Council for consideration.

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PREPARED BY:	RECOMMENDED BY:
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16 April 2015/sm

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Attach: Appendix "A" - Guidelines for Establishing Appropriate Speed Limits on City Roads* (km/h)

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APPENDIX 'A'

**Guidelines for Establishing Appropriate Speed Limits on City Roads*
(km/h)**

ROAD TYPE LAND USE	LOW VEHICLE VOLUME		HIGH VEHICLE VOLUME	
	Substandard Lane Width	Standard Lane Width	Substandard Lane Width	Standard Lane Width
Rural • minimal access (farm)	80	90	70	80
Residential • Minimal access	60	70	60	70
Residential • Numerous individual accesses	50	60	50	60
Commercial / Industrial • minimal accesses	70	80	70	80
Commercial / Industrial • numerous individual accesses	60	70	50	60

*** Further considerations include:**

1. Geometric Design Guidelines must also be met with respect to vertical and horizontal curves.
2. Continuity of speed limits through corridors.
3. Uniformity with like roads across the City.
4. Signal spacing.
5. Reductions in speed limits and corresponding hazard warning signs (eg. curve ahead) may be used where design conditions are not met at isolated locations.