

School Speed Limit Warrant Guidelines

Warrant Criteria Descriptions

School Type - Elementary school age children are considered to be the most vulnerable to traffic given their limited ability to understand and anticipate vehicular traffic movements and their tendency to accidentally enter the roadway. High school age children are typically better able to understand and interact with traffic.

Road Classification - Arterial roads typically carry high volumes of traffic including trucks and have posted speed limits of 50 km/h or greater. Collector roads are usually narrower, have lower traffic volumes and provide direct frontage to developments including schools. Local roads are usually narrow and designed for low speeds. It is assumed that children will have a greater tendency to enter onto local roads given the speed and volume of traffic on these roads.

Fencing - Fencing can significantly reduce the interaction between children and vehicles by acting as a physical barrier preventing children from entering onto the road. Fully traversable describes fencing that is absent or easily crossed. Partially traversable fencing is low or has several openings. Non traversable fencing is high with limited openings at defined points. The distance of the school from the road can also be used in the evaluation of this criteria.

Property Line Separation - A road that is separated from the school grounds by only a sidewalk or fence is said to abut the road. A school that is separated from the nearest intersecting road may or may not be within 50 metres. If it is located within 50 metres there is a greater likelihood that children may enter the intersecting road. This criteria is a determining factor for roads that children use getting to/from the school but may not be directly connected such as at a close intersection.

School Entrance - A school entrance can be a driveway to the school, the closest point along the road to the school's main door or a designated on-street pick-up and drop-off area. The main entrance is typically where the highest amount of vehicle/child interactions occur. Where a school has multiple access points from the road the main entrance is determined by where activity is highest. Secondary entrances typically have far less activity than the main entrance.

Location of Sidewalks - If sidewalks are provided between the school and the road children are less likely to walk in the road. In rural areas where sidewalks are rarely provided wide shoulders or unpaved pathways or walkways are assumed to serve the same function as sidewalks in urban areas.

School Area and Zone Worksheet

Location:	
Traffic Analyst:	Date:

Evaluation Criteria	Point Value	Description		Weighting Factor	Score
School Type 40	Elementary		1.0		
	40	Middle / Junior High		0.4	
	40	High School		0.2	
		Post Secondary / College / University		0.0	
Fencing 20		Fully Traversable		1.0	
	20	Partially Traversable		0.5	
		Non-Traversable		0.1	
		Urban Land Use	Rural Land Use		
		Local		1.0	
Road Classification	20	Minor Collector	Local	0.75	
		Collector	Collector	0.5	
		Arterial	Arterial	0.25	
		Highway	Highway	0.0	
Property Line Separation 10		Abuts Roadway		1.0	
	10	Within 50 metres		0.5	
		Further than 50 metres		0.0	
School Entrance 5		Main Entrance / Secondary Entrances		1.0	
	5	Secondary Entrance		0.6	
		None		0.0	
Sidewalks		None or non-school side		1.0	
	5	School side		0.6	
		Both sides		0.0	
				Total Score	

School Speed Limit Warrant Results

Total Score	Designation	Recommended Action
0 - 40	None	None
41 - 64	School Area	School Area Sign
65 - 80	School Area/School Zone	Reduced Speed Limit
81 - 100	School Zone	Reduced Speed Limit or School Zone Maximum Speed When Flashing Signs

Guidelines for Application of Recommended Action

Borderline cases should be carefully reviewed and the feasibility of providing new facilities or improving existing ones that would reduce the score should be explored. The review should consider engineering judgment, local conditions and/or community input and the reasons for the final decision should always be documented.

It is recommended that for urban schools the reduced speed limit be set at 40 km/h and for rural schools be set at 60 km/h as this aligns with drivers' expectations for lower speeds near schools in the two roadside environments.

School Zone Maximum Speed When Flashing Signs should only be implemented where there is a clearly identified need for the flashing signs such as high collision rates or specific requests based on identifiable factors.

References:

Transportation Association of Canada. (2006). School and Playground Areas and Zones: Guidelines for Application and Implementation. Ottawa, Ontario.