

Council Policy No.:	CP2018-010
Council Policy Name:	Streetlight Warrant Policy
Date Approved by Council:	October 14, 2003
Date revision approved by Council:	July 17, 2018
Related SOP, Management Directive, Council Policy, Forms	

Policy Statement and Rationale:

It is the purpose of this policy to establish the warrant requirements for full street lighting throughout the City of Kawartha Lakes.

Scope:

This policy shall apply to all requests for full street lighting.

Definitions:

In reading and interpreting the Streetlight Warrant policy, the following definitions apply:

- a) "City" means The Corporation of the City of Kawartha Lakes.
- b) "Director" means the Director of Engineering & Corporate Assets.

Policy:

1. Request for Street Lights

- 1.01 Staff of the Engineering & Corporate Assets Department shall review the request for streetlights and apply the warrants of the Transportation Association of Canada (TAC).

2. TAC Warrants

- 2.01 Staff will evaluate the location requested and fill in the appropriate warrant form.
- 2.02 Factors that will be considered are geometrics, operational, environmental and accidents.
- 2.03 Staff will report on their findings to the Director for consideration.
- 2.04 An example of a warrant for a non-controlled access roadway is attached.

3. Warrants Met

- 3.01 If the warrants have been met, the Director is authorized to make the necessary arrangements for the installation of the streetlights if funds are budgeted or with the approval of the CAO.

Sample of Streetlight Warrant

WARRANTS FOR LIGHTING ARTERIAL, COLLECTOR AND LOCAL ROADS									
LOCATION CHARACTERISTICS		This spreadsheet, to be used in conjunction with Transportation Association of Canada 2006 "Guide for the Design of Roadways", Ch. 9 "Roadways and Interchanges". (This Spreadsheet is derived from Figure 9 - 9)							
City/Twp:		Please enter information in the cells with yellow background							
(A) If at an Intersection		(B) If Along a Roadway (Segment)			Site Details				
Main Road:		From:			Posted Speed (km/hr):				
Minor Road:		To:			Date (dd/mm/yyyy):				
Item No.	Classification	Rating Factor (R)					Weight (W)	Rating (R)	Score (R x W)
GEOMETRIC FACTORS ^{*(see note 5)}									
		1	2	3	4	5			
1	Number of Lanes	≤ 4	5	6	7	≥ 8	0.15		0.00
2	Lane Width (m)	> 3.6	3.4 - 3.6	3.2 - 3.4	3.0 - 3.2	< 3.0	0.35		0.00
3	Median Openings (#/km) ^{*(see note 10)}	< 2.5 or 1-way	2.5 - 5.0	5.0 - 7.2	7.2 - 9.0	> 9.0 or No Medians	1.40		0.00
4	Driveways and Entrances (#/km)	< 20	20 - 40	40 - 60	60 - 80	> 80	1.40		0.00
5	Horizontal Curve Radius (m)	> 600	450 - 600	225 - 450	175 to 225	< 175	5.90		0.00
6	Vertical Grades (%)	< 3	3 - 4	4 - 5	5 - 7	> 7	0.35		0.00
7	Sight Distance (m)	> 210	150 - 210	90 - 150	60 - 90	< 60	0.15		0.00
8	Parking	Prohibited	Loading	Off Peak	One Side	Both Sides	0.10		0.00
Geometric Factors Subtotal:							0.00		
OPERATIONAL FACTORS									
9	Signalized Intersections (%)	80 - 100	70 - 80	60 - 70	50 - 60	0 - 50	0.15		0.00
10	Left Turn Lane ^{*(see note 10)}	All Major Intersections or 1-Way	Substantial number of Intersections	Most Major Intersections	Half of Major Intersections	Infrequent # of TWTL ^{*(see note 1 & 3)}	0.70		0.00
11	Median Width (m)	> 10 or no median	6 - 10	3 - 6	1.2 - 3	0 - 1.2	0.35		0.00
12	Operating/Posted Speed (km/hr) ^{*(see note 7)}	≤ 40	50	60	70	≥ 80	0.60		0.00
13	Pedestrian Activity Level ^(see note 2)			Low	Medium	High	3.15		0.00
Operational Factors Subtotal:							0.00		
ENVIRONMENTAL FACTORS									
14	Percentage of Development Adjacent to Road (%)	nil	nil - 30	30 - 60	60 - 90	> 90	0.15		0.00
15	Area Classification	Rural	Industrial	Residential	Commercial	Downtown	0.15		0.00
16	Distance from Development to Roadway (m) ^{*(see note 4)}	>60	45 - 60	30 - 45	15 - 30	<15	0.15		0.00
17	Ambient (off roadway) Lighting	Nil	Sparse	Moderate	Distacting	Intense	1.38		0.00
18	Raised Curb Median	None	Continuous	100% (All) Intersections	51-99% (Most) Intersections	≤ 50% (Few) Intersections ^{*(see note 6)}	0.35		0.00
Environmental Factors Subtotal:							0.00		
COLLISION FACTORS									
19	Night to Day Collision Ratio (over last three years)	< 1.0	1.0 - 1.2	1.2 - 1.5	1.5 - 2.0	> 2.0 ^{*(see note 1 & 6)}	5.55		0.00
1 Lighting Warranted 2 Pedestrian Activity Level (ref. 9.1.3) 3 Two-Way Left Turn Lane 4 Development defined as Commercial, Ind. or Res. 5 Apply worst case factors for road segment 6 Collision Factors (ref. 9.4.5)		7 Use 85th Percentile night speed (if available), otherwise use Posted Speed 8 Includes Isolated medians between intersections 9 Warranted if Total Warrant Points ≥ 60 10 This Factor is for Urban or heavy traffic areas only. All other scenarios enter zero (0)				Collision Factors Subtotal:		0.00	
Total Warrant Pts (all factors): ^{*(see note 9)}							0.00		

Revision History:

Proposed Date of Review:

Revision	Date	Description of Changes	Requested By
0.0	01/20/2021	Updated Policy Template	