

Intersection treatment is warranted if the total number of points is:

Four lane highway	Two lane highway		Four/Two lane highway
Left Turn lane	Channelization	Bypass lane	Right Turn lane
≥ 45	≥ 65	≥ 50	≥ 45

1) Collision Record

Maximum Points
Assigned

For each preventable collision, based on the average number of collisions per year

Channelization and Bypass lane 20 points

Left and Right Turn lanes 40 points40

Example: 3 collisions in 5 years = $3/5$ or 0.6

Points Assigned = $0.6 \times 40 = 24$

2) Average Annual Daily Traffic

Number of points (4 lane) = $AADT \times 0.006$

(2 lane) = $AADT \times 0.015$ 35

3) Intersecting Road

Provincial Highway15 points

Industrial Access Road 12 points

Access to urban centres

with a population of: ≥ 400 10 points

300 8 points

200 6 points

100 4 points

< 100 2 points

Access to Provincial campsites, Provincial and Regional parks, Provincial picnic sites 8 points

Grid road, AADT 150 or greater 2 points 15

4) Sight Distance (SD)

Number of points = $0.04 (400 - SD)$ 10

NOTES:

- Only sideswipes and rear end collisions are to be considered.
- Average number of collisions per year should be based on at least a 5 year period.
- Both the required number of points and the warrants for normal construction must be met for intersections with less than the following number of collisions per year:

Intersection Treatment	No of Collisions/Year
Channelization	1.5
Bypass Lane	1.0
Left and Right Turn Lane	0.5
- Sight distance is based on a height of eye of 1.05 m to the road surface, distance measured in metres.
- For 2 lane highways, if channelization or a bypass lane is not warranted, check flared intersection on sheet 2.
- For additional information please refer to SKS 4.2-B, SKS 9.3-A, SKS 9.3-D, SKS 9.13-C, SKS 9.13-D, SKS 9.14-A, SKS 9.17-A, SKS 9.17-B & SKS 9.17-C.



WARRANTS FOR INTERSECTION TREATMENT SPOT IMPROVMENTS

RECOMMENDED BY		DIRECTOR DESIGN STANDARDS	DATE		STANDARD PLAN NO	20615
APPROVED BY		EXECUTIVE DIRECTOR DESIGN BRANCH	DATE		SHEET	1 OF 2

A flared intersection treatment is warranted if the total number of points is:
Spot Improvement ≥ 40

	Maximum Points Assigned
1) <u>Road Classification</u>	
Major Arterial	5 points
Minor Arterial	3 points
Collector	2 points
Local	1 point
	5
2) <u>Collision Record</u>	
For each preventable collision, based on the average number of collisions per year	40 points
Example: 3 collisions in 5 years = $3/5$ or 0.6	
Points Assigned = $0.6 \times 40 = 24$	
3) <u>Average Annual Daily Traffic</u>	
Number of points = $0.01 \times \text{AADT}$	25
4) <u>Intersecting Road</u>	
Highway	10 points
Industrial access road	7 points
Access to urban centres with a population of 500 or greater	6 points
Access to Provincial campsites, Provincial and Regional parks, Provincial picnic sites	6 points
Access to urban centres with a population less than 500	4 points
Grid road	2 points
	10
5) <u>Shoulder Width</u>	
Number of points = $3.2 (3.7 - W)$	10
6) <u>Sight Distance (SD)</u>	
Number of points = $0.04 (400 - \text{SD})$	10

NOTES:

- Only sideswipes and rear end collisions are to be considered.
- Average number of collisions per year should be based on at least a 5 year period.
- Sight distance is based on a height of eye of 1.05 m to the road surface, distance measured in metres.
- In the case of an intersection with less than 0.50 accidents per year, both the following criteria must be met:
 - the required number of points;
 - the warrants of normal construction.
- W = Shoulder width to the nearest 0.1 m.
- For additional information please refer to SKS 4.2-B, SKS 9.3-A, SKS 9.3-D, SKS 9.13-C, SKS 9.13-D, SKS 9.14-A, SKS 9.17-A, SKS 9.17-B & SKS 9.17-C.



WARRANTS FOR INTERSECTION TREATMENT SPOT IMPROVMENTS

RECOMMENDED BY		DIRECTOR DESIGN STANDARDS	DATE		STANDARD PLAN NO	20615
APPROVED BY		EXECUTIVE DIRECTOR DESIGN BRANCH	DATE		SHEET	2 OF 2