

Objective: Select the most cost-effective intersection safety improvements that will increase the level of safety at 3 of Saskatchewan intersections. A Cost-Benefit Analysis (CBA) for treatments of each location was then developed to determine which combination of solutions for each of the 3 intersections is the most economical while improving safety. A high-level design is completed, and the findings are presented to the Ministry of Highways for potential consideration.

Tuxford

- Collision History : 5 years (2014 – 2018)
 - Property Damage Only - 4
 - Injuries - 3
 - Fatal - 0
- Location Deficiencies
- Missing Signage
 - Sight Obstructions
 - Improper Lighting

Fort Qu'Appelle

- Collision History : 5 years (2014 – 2018)
 - Property Damage Only - 3
 - Injuries - 4
 - Fatal - 0
- Location Deficiencies
- Missing Signage
 - Improper Road Condition
 - Improper Lighting

Wakaw

- Collision History : 5 years (2014 – 2018)
 - Property Damage Only - 5
 - Injuries - 13
 - Fatal - 0
- Location Deficiencies
- Missing Signage
 - Improper Lighting

Results (Benefit Cost Analysis)

	Treatment	Preventative Collision Cost	Treatment Cost	B/C
Major Leg	Delineation light	\$103,800	\$20,000	3.68
	Clearing Sight Triangle	\$277,400	\$100,000	0.47
	Blowing Snow Sign	\$95,300	\$600	1.03
Minor Leg	STOP AHEAD Pavement Markings	\$8,500	\$5,300	1.11
Total		\$294,400	\$125,900	2.17

	Treatment	Preventative Collision Cost	Treatment Cost	B/C
Major Leg	Delineation light	\$277,400	\$2,500	78.78
	Deer Crossing Sign	\$182,100	\$600	1.00
	Blowing Snow Sign	\$190,600	\$600	1.00
Minor Leg	STOP AHEAD Pavement Markings	\$8,500	\$2,650	2.21
	Rumble Strips	\$8,500	\$102,750	0.05
Total		\$294,400	\$109,100	2.60

	Treatment	Preventative Collision Cost	Treatment Cost	B/C
Major Leg, Minor Leg	Roundabout	\$1,170,900	\$2,500,000	0.33

Proposed Treatments

