Twinning of Township Road 522

Please provide any information available from Government of Alberta Ministry of Transportation on the status of the twinning of Township Road 522 and the level of priority of the project in light of the recent fatalities on that road.

Collision History

Highway 628 from Highway 216 to Highway 21

Upon reviewing collision history for the section of Highway 628 from Highway 2016 to Highway 21 for the 10 period from January 2012 to August 2022, this report has been prepared for information. Collisions at Hwy 628/Hwy 216 and Hwy 628/Hwy 21 are not included. There were five major injury collisions, 125 minor injury collisions, and 301 property damage collision. Out of 5 major injury collision, 4 were at Hwy 628/Rge Rd 231 intersection. There has been one fatal collision, that occurred on Sunday August 14, 2022, when a motorcyclist collided head-on with another vehicle unrelated to the intersections.

Severity Type	Collisions	Injuries
Fatal	1	2
Major Injury	5	6
Minor Injury	125	172
Property Damage Only	301	0
Total	432	180

Table 1: Collisions by severity

Out of total 432 collisions, 196 collisions (45%) were rear end collisions with an additional 104 (24%) collisions being struck object. struck object collisions are typically related to wildlife, such as deer and moose. Frontal impact collisions, including left turn across path collisions and right-angle collisions accounted for 51 (12%) of the collisions. Approximately 60 percent of all collisions were intersection related.



Collision Type	Collisions
Rear End	196
Struck Object	104
Other	40
Right Angle	27
Left Turn Across Path	24
Sideswipe Same Direction	13
Off Road Right	10
Sideswipe Opposite Direction	6
Off Road Left	5
Head On	4
Passing - Left Turn	1
Passing - Right Turn	1
Backing	1
Total	432

Table 2: Collisions by type

Overall collision frequency for this section of road has trended downward trended year over year.

Year	Collisions	Fatal	Major Injury	Minor Injury	PDO
2012	34	0	0	6	28
2013	53	0	0	13	40
2014	67	0	1	25	41
2015	76	0	2	20	54
2016	64	0	0	20	44
2017	37	0	1	10	26
2018	25	0	1	10	14
2019	26	0	0	9	17
2020	15	0	0	4	11
2021	25	0	0	7	18
Jan 2022 - Aug 2022	10	1	0	1	8
Total	432	1*	5	125	301

^{*}One crash resulting in two fatalities

Table 3: Collisions by severity/year

During the last 10 years, there was an increase in collision frequency from 2012 to 2015 and since then there is a significant decrease in collisions.

Intersection Collisions

Collision history was reviewed for the major grid road intersections along Hwy 628 at Range Road 233, Range Road 232, and Range Road 231. Collisions within 50m of the intersection are included in the summaries.



Highway 628 and Range Road 233

Collisions for the period of January 2009 to July 2022 were evaluated. There were 142 collisions including 53 minor injury collisions and 89 property damage only collision. The average collision frequency per year is 10.4 based on the 13.6 years of available reported data. There were no reported major or fatal injury collisions during the 13-year period. Please note there was a significant increase in collisions in 2013, this increase may be due to the traffic control changes from two-way stop control to traffic signal in late 2012 in addition to additional re-routing traffic due to Anthony Henday Construction.

From 2013 to 2015, collision frequency remained high and then declines as traffic volumes normalized and familiarity with the new traffic controls occurred. In 2020, there were no reported collision.

Year	Collisions	Minor Injury	PDO
2009	8	1	7
2010	9	3	6
2011	4	0	4
2012	6	2	4
2013	22	6	16
2014	25	11	14
2015	25	11	14
2016	17	7	10
2017	11	4	7
2018	4	3	1
2019	5	2	3
2020	0	0	0
2021	4	3	1
Jan 2022 - Jul 2022	2	0	2
Total	142	53	89

Table 4: Collisions by severity/year

Table 5 shows that out of 142 collisions, 102 were rear-end.

Collision Type	Collisions
Rear End	102
Left Turn Across Path	13
Struck Object	8
Right Angle	7
Sideswipe Same Direction	5
Other	4
Off Road Right	1
Passing - Left Turn	1
Backing	1
Total	142

Table 5: Collisions by type



Highway 628 and Range Road 232

Collision history was reviewed between January 2012 to July 2022, where 72 collisions were reported, including 23 minor injury collisions. The average collision frequency per year is 6.7 based on the 10.6 years of collision data. Table 6 illustrates an increase in collision frequency from 2014 to 2016. Traffic signals were installed at this intersection in late 2019 with no measurable impact on collision frequency. The last 6 years shows below average collision frequency and improved safety performance. Table 6 shows collisions by severity, with no reported minor injury collisions since 2019.

Year	Collisions	Minor Injury	PDO
2012	6	1	5
2013	7	2	5
2014	18	6	12
2015	14	5	9
2016	12	3	9
2017	3	2	1
2018	5	2	3
2019	2	2	0
2020	3	0	3
2021	1	0	1
Jan 2022 - Jul 2022	1	0	1
Total	72	23	49

Table 6: Collisions by severity/year

Highway 628 and Range Road 231

Collision history from January 2012 to July 2022 shows 48 reported collisions, including four major injury and 15 minor injury collisions. The average collision frequency per year is 4.5 based on the 10.6 years of collision data. Major injury collisions occurred when north-south drivers failed to yield to east-west vehicles, resulting in right angle collisions prior to traffic signals being installed.

Traffic signals were installed in late 2019, since then, collision frequency has dropped significantly. There have been no reported collisions over the last two years, with no injury collisions since 2019, as illustrated in table 7 below.



Year	Collisions	Major Injury	Minor Injury	PDO
2012	7	0	1	6
2013	6	0	2	4
2014	5	1	2	2
2015	4	1	1	2
2016	9	0	5	4
2017	6	1	1	4
2018	5	1	2	2
2019	4	0	1	3
2020	0	0	0	0
2021	0	0	0	0
Jan 2022 - Jul 2022	2	0	0	2
Total	48	4	15	29

Table 7: Collisions by severity/year

Based upon the results of this evaluation, no additional traffic improvements are recommended at this time.

