



STAFF REPORT

To: Honorable Mayor and Members of Town Council

From: Ryan Germeroth, P.E., Transportation Planning and Traffic Engineering Manager

Title: Update: 2016 Town of Castle Rock Motor Vehicle Crash Facts

Notification and Outreach Efforts

The Public Works Department compiles this information using individual crash reports from the Police Department. This report will be shared with the Police and Fire Departments in order to provide each with data that may be useful to improving their operations. This report will be available to the public through posting on the Town website: www.crgov.com.

History of Past Town Council, Boards & Commissions, or Other Discussions

Public Works uses statistical modeling to identify the locations where corrections to the roadway environment may improve safety. This helps direct limited resources to the locations where the most benefit can be obtained and avoids directing these resources to where problems may not exist. The Town's findings are always passed along the Colorado Department of Transportation (CDOT) and CDOT will often use our information in scheduling more in-depth studies and in planning improvements.

In previous years our data helped us identify crash patterns that we were able to address through the use of traffic signal timing or phasing modifications.

On November 6, 2017, the 2016 Motor Vehicle Crash report was brought before the Public Works Commission as an informational item. No content changes are expected to be made to the report as a result of that meeting.

Discussion

Unfortunately, even on the best designed streets and under the best conditions, traffic crashes happen. Driver behavior, vehicle condition, and the roadway environment all contribute to this. The studies that we conduct are designed to identify trends and the intersections where crashes are occurring at an unexpectedly high rate.

Through staff's statistical review of the signalized intersections having the highest crash rates, there are a few locations with a higher than expected number of crashes as shown in the following table.

Intersections	Expected Crash History (Crashes / Year)	Observed Crash History (Crashes / Year)	Level of Service of Safety	Safety Performance
SH 86 @ Allen Way	17.9	38.2	4	High potential for reduction
US 85 @ Factory Shops / Castleton Dr.	27.1	37.6	4	High potential for reduction
NB I-25 @ Wilcox St.	5.0	10.4	4	High potential for reduction
US 85 @ Meadows Pkwy	17.4	22.0	3	Worse than expected
SH 86 @ Front St.	15.8	20.2	3	Worse than expected
SH 86 @ Allen St./ Woodlands Blvd.	7.5	8.2	3	Worse than expected
Factory Shops Blvd @ New Memphis	7.2	9.0	3	Worse than expected
Fifth @ Wilcox St.	5.4	7.0	3	Worse than expected
Meadows Pkwy @ Meadows Blvd/ Prairie Hawk Dr.	13.2	13.8	2	Average performance
Front St. @ Blackfeather	8.2	8.0	2	Average performance
Fifth @ Perry St.	7.2	7.0	2	Average performance
SH 86 @ Fifth / Ridge	10.3	10.4	2	Average performance
SB I-25 @ US 85	26.4	22.4	2	Better than expected
Plum Creek Pkwy @ Perry St.	12.4	11.4	2	Better than expected
Plum Creek Pkwy @ Wilcox St.	14.1	10.2	2	Better than expected

We have reviewed crash diagrams for each intersection to determine if any reoccurring operational problems can be identified that may be contributing to the crashes. Specifically we looked to see if any of these issues could be related to signal timing and phasing, traffic signing or pavement markings. A set of recommendations are provided in the Annual Crash Report on pages 10 and 11.