



## **STAFF REPORT**

**To:** Honorable Mayor and Members of Town Council

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

**Title:** Discussion: 2017 Town of Castle Rock Motor Vehicle Crash Facts

---

### **Notification and Outreach Efforts**

The Public Works Department compiles this information using individual crash reports that occur on Town owned roads 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's website: [www.crgov.com](http://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 consistently passed along to 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 as well as changes in traffic control (i.e. two-way stop to all-way stop) for unsignalized intersections.

On August 6, 2018, the 2017 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.

<b>Intersections</b>	<b>Expected Crash History (Crashes / Year)</b>	<b>Observed Crash History (Crashes / Year)</b>	<b>Level of Service of Safety</b>	<b>Safety Performance</b>
SH 86 @ Allen Wy	18.7	38.0	4	High potential for reduction
US 85 @ Factory Shops Blvd/ Castleton Dr.	27.6	36.0	4	High potential for reduction
US 85 @ Meadows Pkwy	16.5	22.6	4	High potential for reduction
SB I-25 & US 85	18.6	25.0	4	High potential for reduction
SH 86 @ Front St.	15.7	21.6	4	High potential for reduction
NB I-25 @ Wilcox St.	5.0	9.8	4	High potential for reduction
Fifth @ Wilcox St.	5.7	8.6	4	High potential for reduction
Meadows Pkwy @ Meadows Blvd/ Prairie Hawk Dr.	11.4	14.0	3	Worse than expected
Plum Creek Pkwy @ Perry St.	11.9	13.6	3	Worse than expected
Factory Shops Blvd @ New Memphis	7.3	8.4	3	Worse than expected
SH 86 @ Trail Boss Dr.	10.5	12.0	3	Worse than expected
Fifth @ Perry St.	6.5	7.4	3	Worse than expected
Front St. @ Blackfeather	8.2	8.2	2	Average performance
Meadows Pkwy @ Limelight Ave.	9.8	9.8	2	Average performance
SH 86 @ Fifth / Ridge	10.2	9.2	2	Better than expected
NB I-25 @ Plum Creek Pkwy	7.7	7.0	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, pavement markings or any other geometric characteristic of the existing roadway. A set of recommendations are provided in the Annual Crash Report on pages 11 and 12.