

Appendix 2 Executive Summary of Crash  
Analysis (Unincorporated  
Deschutes County)



MAY 2019

# TRANSPORTATION SAFETY ACTION PLAN

## **EXISTING CONDITIONS SUMMARY**

DESCHUTES COUNTY, OR





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# FACTS AT A GLANCE

This memorandum summarizes existing crash data and patterns for the Deschutes County Transportation Safety Action Plan (TSAP). The evaluation findings will be used to identify emphasis areas for Deschutes County and inform recommendations.

## Overall crash analysis (2012-2016)

Total Reported Crashes in Unincorporated Deschutes County :



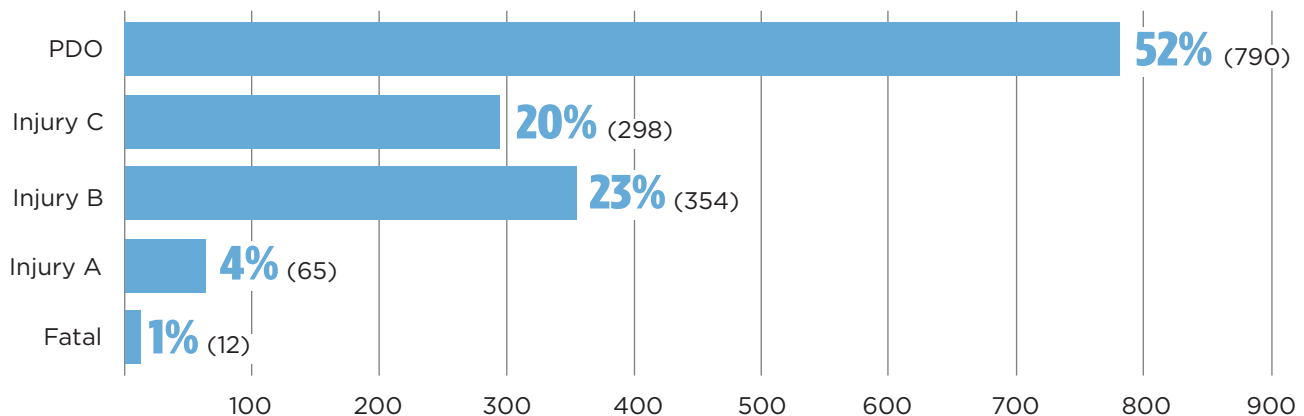
**47%** of crashes resulted in injury or fatality

**Injury crashes: 1,401 Non-injury crashes: 1,608**

### County Roads vs. State Highways

	Total	Fatal/Incapacitating
County Roads	<b>1,519</b>	<b>77</b>
State Highways	<b>1,490</b>	<b>97</b>

### County Facility Crashes by Severity, Deschutes County (Unincorporated) 2012 - 2016



**PDO:** Property damage only  
**Injury C:** Minor injury/complaint of pain  
**Injury B:** Moderate injury  
**Injury A:** Incapacitating (severe) injury  
**Fatal:** Fatal

# Crashes influenced by roadway characteristics

## INTERSECTIONS

- » For county roads, 52% (788) of reported crashes occurred at intersections.
- » Of the 77 reported fatal/incapacitating crashes, 38% (29) occurred within 250 feet of an intersection.

## LIGHT CONDITIONS

- » 64% (966) of crashes on county roads occurred in daylight conditions, and 6% (56) of those were fatal/incapacitating crashes.
- » Approximately 36% (548) of all crashes occurred in dark, dawn, or dusk conditions.
- » Approximately 27% (21) of fatal/incapacitating crashes occurred in dark, dawn, or dusk conditions.

## ROAD SURFACE CONDITIONS

- » 23% (356) of reported crashes on county roads occurred on snow or ice, and 7% (100) occurred on wet roads.

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## Crash Characteristics: County Roads

**5 to 6%**

of reported crashes each year were fatal/incapacitating crashes.

**June - August**

were the months with the highest number of fatal/incapacitating crashes.



**Saturday-Sunday**

were the days with the highest number of fatal/incapacitating crashes.

**3:00-6:00 p.m.**

were the hours with the highest number of fatal/incapacitating crashes.

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# Crash Characteristics

## COLLISION TYPE

- » On county roadways, shown in the table below, *fixed-object* crashes were the most common, followed by *turning movement*, *rear-end*, *non-collision (overturn)*, *angle*, and *miscellaneous (animal crashes)*.
- » The more detailed crash type field indicated that 98% (145) of *non-collision* crashes on county roads were *overturn* crashes and 96% (99) of *miscellaneous* crashes involved *animals*.
- » When considering the total count of only **fatal and incapacitating crashes**, the most common collision types are *fixed-object*, *non-collision (overturn)*, *angle*, and *miscellaneous (animal)*.

**County Facility Crashes by Collision Type and Severity, Deschutes County (Unincorporated), 2012-2016**

Collision Type	Total	Fatal/Incapacitating
Fixed Object/Other	<b>704</b>	<b>36</b>
Turning Movement	<b>178</b>	<b>4</b>
Non-Collision (Overturn)	<b>148</b>	<b>13</b>
Rear-End	<b>143</b>	<b>2</b>
Angle	<b>117</b>	<b>8</b>
Miscellaneous (Animal)	<b>103</b>	<b>6</b>
Sideswipe-Meeting	<b>45</b>	<b>3</b>
Head-On	<b>24</b>	<b>3</b>
Sideswipe-Overtaking	<b>24</b>	<b>2</b>
Backing	<b>23</b>	<b>0</b>
Parking Maneuver	<b>6</b>	<b>0</b>
Pedestrian	<b>4</b>	<b>0</b>

## CONTRIBUTING FACTORS

- » On both state and county roads, the most common contributing factors included *driving too fast for conditions*, *other (not improper driving)*, and *not yielding right of way*. (*Other (not improper driving)* is used when improper driving was not a factor in the crash, and no other crash level cause applies.)
- » On state highways, *following too closely* and *driving left of center on a two-way road* were also common reported contributing factors.

# Behaviors that influence crashes

## ALCOHOL AND DRUG INVOLVED CRASHES

- » 12% (175) of reported crashes on county roads involved alcohol or drugs.
- » 26% (20) of fatal/incapacitating crashes on county roads involved alcohol or drugs.

## SPEEDING

- » Excessive speeds were flagged in 38% (572) of reported crashes on state roads and 42% (631) of reported crashes on county roads.



# Vulnerable road users



## MOTORCYCLE CRASHES

Motorcycle-involved crashes accounted for 4% (60) of unincorporated county crashes between 2012 and 2016 and 26% (20) of fatal/incapacitating crashes.



# SUMMARY

Based on the crash data analysis, the following were identified as potential emphasis areas for unincorporated Deschutes County.

Topic	State Highways	County Roads
Roadway Characteristics	<p><b>FATAL OR INCAPACITATING CRASHES</b></p> <ul style="list-style-type: none"> <li>» <b>33%</b> were roadway departure (fixed object and non-collision/rollover)</li> <li>» <b>34%</b> were head-on or sideswipe</li> <li>» <b>22%</b> occurred on snow or ice</li> <li>» <b>27%</b> occurred at an intersection</li> </ul> 	<p><b>FATAL OR INCAPACITATING CRASHES</b></p> <ul style="list-style-type: none"> <li>» <b>64%</b> were roadway departure (fixed object and non-collision/rollover)</li> <li>» <b>8%</b> were head-on or sideswipe</li> <li>» <b>7%</b> occurred on snow or ice</li> <li>» <b>38%</b> occurred at an intersection</li> </ul> <p><b>OTHER NOTABLE STATISTICS</b></p> <ul style="list-style-type: none"> <li>» Highest share of overall reported crashes (<b>38%</b>) occurred on arterials</li> <li>» Highest share of fatal or incapacitating injury crashes (<b>40%</b>) occurred on collectors</li> </ul>
Light Conditions	<ul style="list-style-type: none"> <li>» <b>40%</b> of fatal/incapacitating crashes occurred in dark, dawn, or dusk conditions.</li> </ul>	<ul style="list-style-type: none"> <li>» <b>27%</b> of fatal/incapacitating crashes occurred in dark, dawn, or dusk conditions.</li> </ul>
Behavioral Characteristics	<p><b>FATAL OR INCAPACITATING CRASHES</b></p> <ul style="list-style-type: none"> <li>» <b>22%</b> involved alcohol or drugs</li> <li>» <b>43%</b> involved excessive speed</li> <li>» <b>20%</b> involved at least one participant not using safety equipment</li> </ul>	<p><b>FATAL OR INCAPACITATING CRASHES</b></p> <ul style="list-style-type: none"> <li>» <b>26%</b> involved alcohol or drugs</li> <li>» <b>42%</b> involved excessive speed</li> <li>» <b>18%</b> involved at least one participant not using safety equipment</li> </ul>
Road Users	<ul style="list-style-type: none"> <li>» <b>6</b> reported pedestrian crashes including one fatal, one incapacitating, three moderate, and one minor injury crashes.</li> <li>» <b>5</b> reported bicycle crashes, including one incapacitating, three moderate, and one minor injury crashes.</li> <li>» <b>21%</b> of crashes involved drivers more than 25 miles from home.</li> </ul> 	<ul style="list-style-type: none"> <li>» <b>4</b> moderate injury pedestrian crashes.</li> <li>» <b>15</b> reported bicycle crashes, including four incapacitating, nine moderate, and two minor injury crashes.</li> <li>» <b>8%</b> of crashes involved drivers more than 25 miles from home.</li> </ul> <p>» <b>94%</b> of motorcycle crashes resulted in some level of injury</p> <p>» <b>34%</b> of motorcycle crashes resulted in fatal/incapacitating injury.</p>



