

## Crashes by Number of Units Involved

While crashes involving a single vehicle occur less frequently than crashes involving multiple vehicles, the resulting injuries are often more severe. Single-vehicle crashes were 2.8 times as likely to result in a fatality as multiple-vehicle crashes were in 2016. Table 6 shows the number of crashes and injuries involving both single and multiple vehicles by the severity of the crash and injury. Multiple-vehicle crashes include crashes between more than one motorized vehicle and crashes between a motor vehicle and a pedestrian, bicyclist, train, or equestrian.

<b>Type of Crash</b>	<b>Single Vehicle</b>		<b>Multiple Vehicles</b>	
	<b>Crashes</b>	<b>Injuries</b>	<b>Crashes</b>	<b>Injuries</b>
Fatal	125	140	107	113
Serious Injury	372	450	690	882
Visible Injury	975	1,201	2,171	3,050
Possible Injury	1,214	1,650	3,905	6,431
Property Damage	4,827		10,942	
<b>Total</b>	<b>7,513</b>	<b>3,441</b>	<b>17,815</b>	<b>10,476</b>

In 2016, single-vehicle crashes represented only 30% of all crashes, yet accounted for 54% of all fatal crashes. Of the 125 fatal single-vehicle crashes, 107 (86%) occurred on rural roadways.

Of the 107 multiple-vehicle fatal crashes, 18 involved a pedestrian, 6 involved a bicycle, and the other 83 (87%) involved two or more motor vehicles. Of the 107 fatal multiple-vehicle crashes, 75 (or 70%) occurred on rural roadways.

Figures 2 and 3, on the following page, show the most prevalent contributing circumstances for single- and multiple-vehicle crashes. The “all other contributing circumstances” category combines the remaining contributing circumstances, i.e., contributing circumstances with percentages less than 2%. Contributing circumstances of none, not applicable and unknown were excluded from the total in the percentage calculation.

Speed played the biggest role in single-vehicle crashes, contributing to 22% of single-vehicle crashes. Failure to Maintain Lane was the second most prevalent contributing circumstance for single-vehicle crashes at 16% as well as contributing to 3% of multiple vehicle crashes. Animal(s) in Roadway contributed to 14% of single-vehicle crashes.

Fail to Yield was the most prevalent contributing circumstance for multiple vehicle crashes, with Inattention/Distraction and Follow Too Close with just slightly fewer occurrences. Each of the three was a contributing factor to 1 in 5 multiple vehicle crashes. Inattention/Distraction also contributed to 12% of single vehicle crashes.

Impaired driving contributed to 9% of single vehicle crashes and 3% of multiple vehicle crashes.

Figure 3  
**Single-Vehicle Crashes - Contributing Circumstances: 2016**

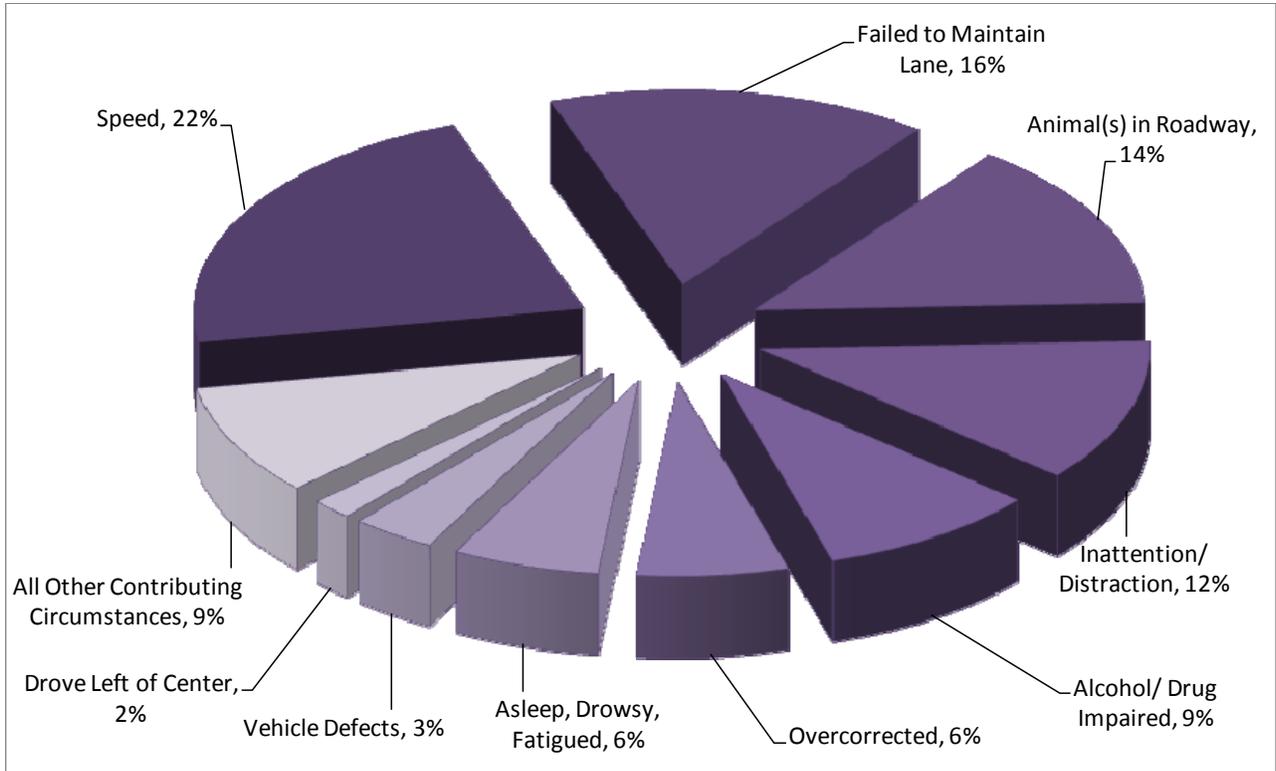


Figure 4  
**Multiple-Vehicle Crashes - Contributing Circumstances: 2016**

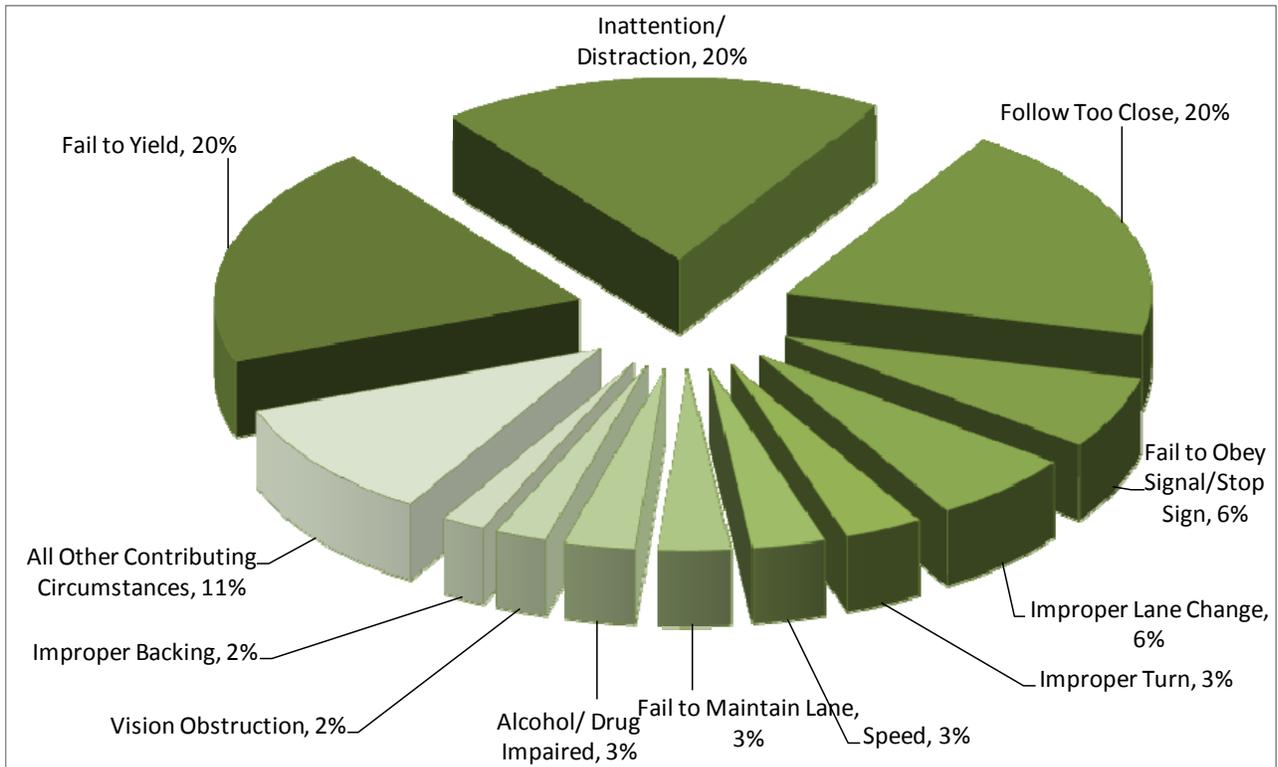


Table 7 shows the most harmful events for fatal single- and multiple-vehicle crashes.

<b>Table 7</b>	
<b>Most Harmful Events for Fatal Crashes Involving Single and Multiple Vehicles: 2016</b>	
<b>Single-Vehicle Crashes</b>	<b>Multiple-Vehicle Crashes*</b>
Overturn (68.8%)	Angle (18.8%)
Tree (12.0%)	Head On (18.3%)
Immersion (4.8%)	Pedestrian (15.4%)
Embankment (4.0%)	Rear-End (13.3%)
Fire / Explosion (2.4%)	Overturn (6.3%)
Other Fixed Object (2.4%)	Angle - Turning (5.8%)
Other Post, Pole or Support (1.6%)	Pedalcycle (5.4%)
Bridge Rail (0.8%)	Head On - Turning (4.6%)
Bridge/Pier Abutment (0.8%)	Side Swiped Opposite (4.6%)
Culvert (0.8%)	Non-Contact Unit (2.1%)
Curb (0.8%)	Parked Car (1.7%)
Overpass (0.8%)	Rear-End Turning (0.8%)
	Side Swiped - Same Direction (0.8%)
	Building / Wall (0.4%)
	Curb (0.4%)
	Fell / Pushed / Jumped (0.4%)
	Fence (0.4%)
	Fire / Explosion (0.4%)

\*The percentages represent the number of vehicles the most harmful event was attributed to. Multiple units involved in a single crash may not have the same most harmful event. In 2016, there were 240 units involved in the 107 fatal multiple vehicle crashes.

Overturn was the leading most harmful event for fatal single-vehicle crashes. Single-vehicle rollovers accounted for 66% of the single vehicle fatalities and 37% of all fatalities in 2016.

Of the 80 passenger motor vehicle occupants killed in single-vehicle rollovers, 13 (or 16%) were wearing seat belts or were in a child safety seat. Of the 64 passenger motor vehicle occupants who were killed in single-vehicle rollovers and not wearing a seat belt, 58 (or 91%) were totally or partially ejected from their vehicle.

Seat belts are estimated to be more effective in preventing fatalities in rollover crashes. Seat belt use reduces fatalities by 74% in rollover crashes involving passenger cars and by 80% in rollover crashes involving light trucks<sup>3</sup>. By these estimates, 50 of the 64 unbelted passenger motor vehicle occupants killed in rollover crashes may have survived if they had been wearing their seat belt.