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 2.4 times as likely to result in a fatality as multiple-vehicle crashes were in 2018. 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.

Table 6
Crashes and Injuries by Number of Vehicles Involved: 2018

	Single Vehicle		Multiple Vehicles	
Type of Crash	Crashes	Injuries	Crashes	Injuries
Fatal	101	108	114	126
Suspected Serious Injury	364	412	651	838
Suspected Minor Injury	825	1,013	2,144	2,971
Possible Injury	1,149	1,499	3,950	6,568
Property Damage	4,054		10,678	
Total	**6,493**	**3,032**	**17,537**	**10,503**

In 2018, single-vehicle crashes represented only 27% of all crashes, yet accounted for 47% of all fatal crashes. Of the 111 fatal single-vehicle crashes, 88 (87%) occurred on rural roadways.

Of the 114 multiple-vehicle fatal crashes, 21 involved a pedestrian, 2 involved a bicycle, and 2 involved a train. The other 89 (78%) involved two or more motor vehicles. Of the 114 fatal multiple-vehicle crashes, 68 (or 60%) 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 19% of single-vehicle crashes. Animal(s) in the Roadway was the second most prevalent contributing circumstance for single-vehicle crashes at 16%. Fail to Maintain Lane was the third most prevalent contributing circumstance for single-vehicle crashes at 15% as well as contributing to 3% of multiple vehicle crashes.

Follow Too Close was the most prevalent contributing circumstance for multiple vehicle crashes, with Fail to Yield and Inattention/Distraction 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 11% of single vehicle crashes.

Impaired driving contributed to 10% of single vehicle crashes and 3% of multiple vehicle crashes.

Figure 3
Single-Vehicle Crashes – Contributing Circumstances: 2018

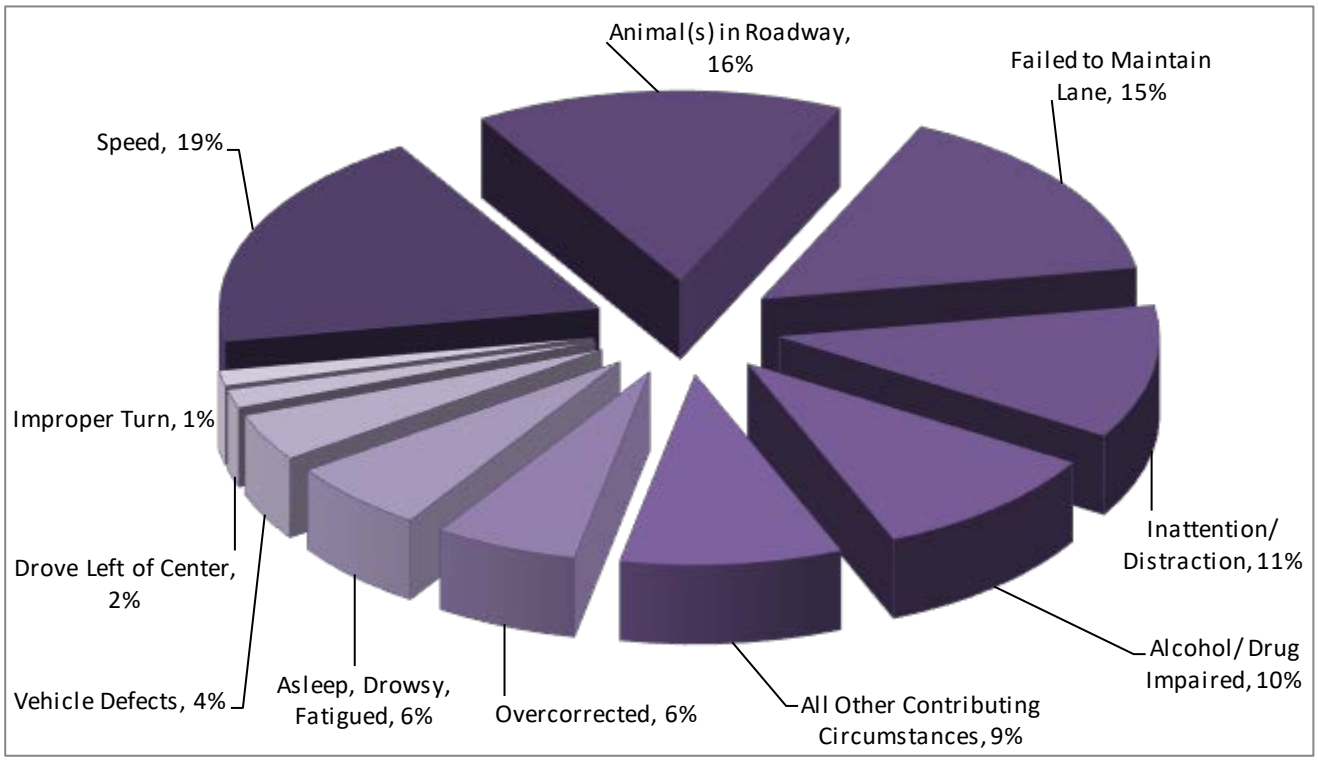

Figure 4
Multiple-Vehicle Crashes – Contributing Circumstances: 2018

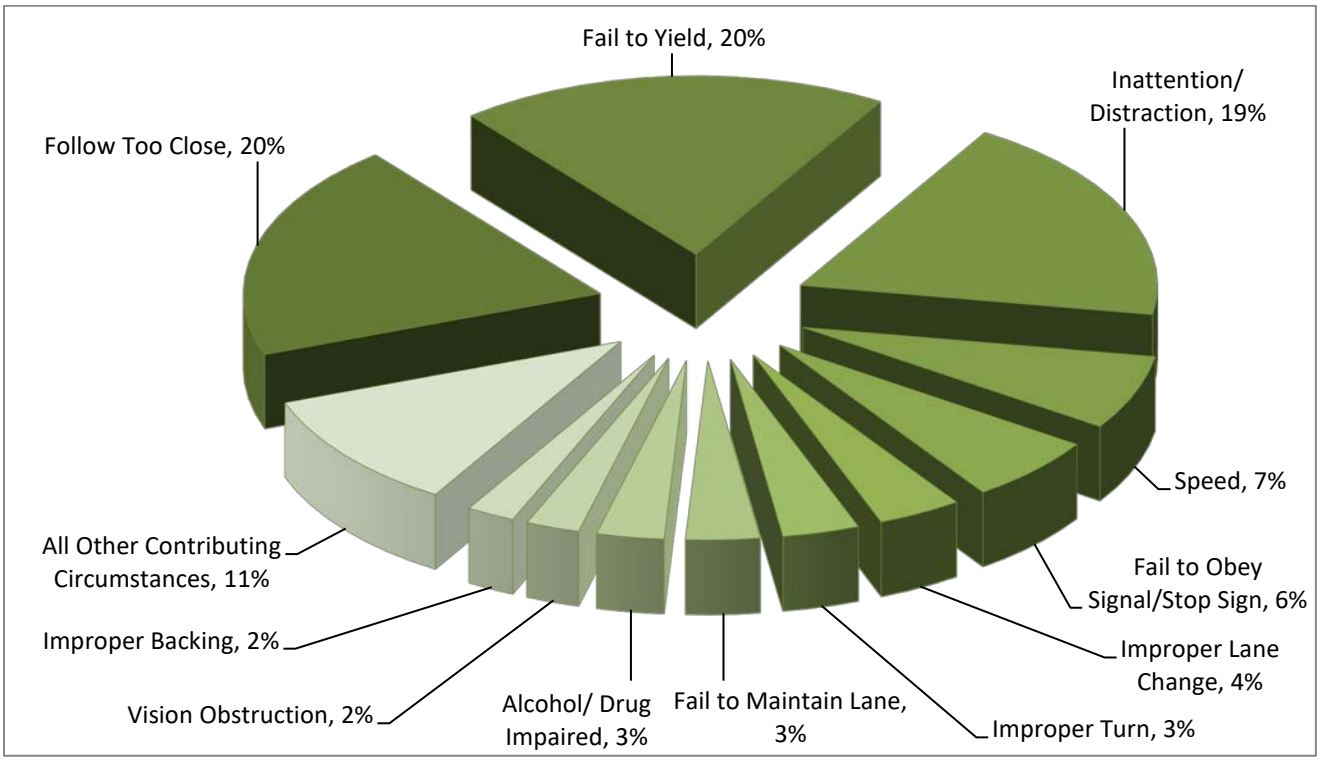

Table 7 shows the most harmful events for fatal single- and multiple-vehicle crashes.

Table 7
Most Harmful Events for Fatal Crashes Involving Single and Multiple Vehicles: 2018

Single-Vehicle Crashes	Multiple-Vehicle Crashes*
Overturn (65.3%)	Angle (19.8%)
Immersion (6.9%)	Head On (19.8%)
Tree (6.9%)	Pedestrian (15.4%)
Embankment (5.0%)	Rear-End (14.2%)
Bridge/Pier/Abutment (2.0%)	Angle - Turning (5.5%)
Thrown or Falling Object (2.0%)	Head On - Turning (5.5%)
Traffic Signal Support (2.0%)	Parked Car (3.6%)
Building Wall (1.0%)	Side Swiped Opposite (2.8%)
Concrete Traffic Barrier (1.0%)	Fire / Explosion (2.4%)
Ditch (1.0%)	Overturn (2.0%)
Fell/Pushed/Jumped (1.0%)	Pedalcycle (1.6%)
Guardrail End (1.0%)	Struck by Falling/Shifting Cargo (1.6%)
Guardrail Face (1.0%)	Railroad Train (1.2%)
Non-Collision Injury (1.0%)	Same Direction Turning (1.2%)
Other (1.0%)	Side Swiped - Same Direction (1.2%)
Other Fixed Object (1.0%)	Non-Contact Unit (0.8%)
Other Post, Pole, or Support (1.0%)	Fell/Pushed/Jumped (0.4%)
	Guardrail End (0.4%)
	Other Post, Pole, or Support (0.4%)
	Traffic Sign Support (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 2018, there were 253 units involved in the 114 fatal multiple vehicle crashes.

Overturn was the leading most harmful event for fatal single-vehicle crashes. Single-vehicle rollovers accounted for 64% of the single vehicle fatalities and 29% of all fatalities in 2018.

Of the 46 passenger motor vehicle occupants killed in single-vehicle rollovers, 10 (or 22%) were wearing seat belts or were in a child safety seat. Of the 36 passenger motor vehicle occupants who were killed in single-vehicle rollovers and not wearing a seat belt, 32 (or 89%) 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[3]. By these estimates, 27 of the 36 unbelted passenger motor vehicle occupants killed in rollover crashes may have survived if they had been wearing their seat belt.