

State of Nebraska

2019

Annual Report

Traffic Crash Facts



Prepared By
Highway Safety/Accident Records Section
Nebraska Department of Transportation

Pete Ricketts
Governor

Kyle Scheweis, P.E.
Director

NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION



Pete Ricketts



Kyle Schneweis

The *Traffic Crash Facts* booklet provides statistics and information on traffic crash trends that occurred in Nebraska during 2019. The report is designed to heighten awareness about traffic safety issues while allowing interested individuals to identify areas where safety programs may be focused in an effort to reduce traffic-related injuries and deaths. Information is compiled from traffic crash reports submitted to the Nebraska Department of Transportation (NDOT) by state and local law enforcement agencies.

Safety is, and always will be, a top priority in how NDOT does business. The agency is committed to providing the safest possible driving environment for the residents and visitors who travel in our state each year. We are focused on utilizing partnerships with law enforcement, health and education agencies, as well as private advocacy groups and businesses, to improve driving behaviors and ultimately save lives. Traffic crashes are largely avoidable, including those that result in personal injury or loss of life.

Every life matters and Nebraska continues to aim “Toward Zero Deaths” with zero fatalities on all Nebraska roadways as our traffic safety goal. Although much progress in traffic safety has been made over the years, far too many Nebraskans—friends, neighbors, and loved ones—are still being killed or seriously injured in crashes. Improving the situation begins with setting a good example for youth by always buckling up, keeping our hands on the wheel and our eyes on the road, and putting away the cell phone while driving.

Pete Ricketts
Governor

Kyle Schneweis, P.E.
Director

Nebraska Strategic Highway Safety Plan

The Nebraska Interagency Safety Committee, comprised of leaders from the Department of Transportation, State Patrol, Department of Motor Vehicles, Health & Human Services System, Local Technical Assistance Program, League of Municipalities, and Association of County Officials, last updated the Nebraska Strategic Highway Safety Plan (SHSP) for 2017-2021. The objective of the plan is to significantly reduce traffic deaths and serious injuries in the state. To accomplish this objective, the Committee selected five Critical Emphasis Areas, based on the crash data, on which to concentrate their efforts. These five Critical Emphasis Areas were:

1. Increasing Seat Belt Usage

The use of seat belts is an effective way to prevent serious injuries and fatalities in traffic crashes. While surveys indicate that over 80% of Nebraskans wear their seat belts, about two-thirds of the vehicle occupants killed in crashes were not using belts. Reaching the remaining 20% of Nebraskans who avoid restraint use is a difficult problem. Overtime enforcement operations emphasizing safety belt compliance such as “Click It or Ticket” are one method used to fight the problem.

2. Reducing Roadway Departure Crashes

Many of our rural fatalities are the result of Roadway Departure crashes. The term “Roadway Departure” includes crashes where vehicles run-off-the-road and collide with fixed objects (trees, guardrail, poles, etc.) or where vehicles overturn. It also includes crashes where vehicles leave the portion of the road designed for them to drive on, such as head-on and cross-median crashes. The Department of Transportation has implemented the use of shoulder and centerline rumble strips as countermeasures for these types of crashes on state highways.

3. Reducing Impaired Driving Crashes

Crashes involving drinking and driving continue to significantly contribute to the state’s fatality total. Although Nebraska is among the nation’s leading states in effective public policy countermeasures, this factor remains a challenging one. While the long-term trend in alcohol-involved crashes is down, over 13% of the drivers involved in 2019 fatal crashes had been drinking. Increasing sobriety checkpoints, periodic impaired driver enforcement crackdowns, new prosecution strategies, and public information campaigns are among the countermeasures used to combat the problem.

4. Reducing Intersection Crashes

Since these are the places where vehicles cross paths, a large percentage of traffic crashes naturally occur at intersections. The Department of Transportation is constantly reviewing intersection operations to look for improvements that can be made. Adding turn lanes, adjusting signal timing, and improving marking and signing are just a few ways intersection operations can be improved. The Department is also committed to using newer types of intersections, such as roundabouts and restricted crossing U-turns, which have been proven to reduce crashes.

5. Reducing Young Driver Crashes

The continuing over-involvement of young, inexperienced drivers in crashes and especially fatal crashes is disturbing. Although they made up less than 8% of registered drivers in the state, in 2019 drivers aged 16 to 20 were involved in over 14% of the crashes. Effective programs aimed at reducing younger driver crashes are offered by several agencies, both public and private.

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(Note: Due to rounding, percentages on graphs may not equal 100%.)

The data contained in this booklet are based on Reportable Crashes Only. Reportable crashes involve death, injury, or property damage in excess of \$1,000.00 to the property of any one person. Various injury severity categories are defined below.

| Injury Severity | Definition |
|--|--|
| Fatal (K) | One or more persons are killed. |
| Serious Injury (A) Incapacitating | Suspected serious injury - cannot leave the scene without assistance (severe laceration; broken or distorted extremity (arm or leg); unconsciousness; paralysis, suspected skull, chest, or abdominal injury, etc. |
| Visible Injury (B) Non-incapacitating | Visible but not disabling (minor cuts, swelling, etc.) |
| Possible Injury (C) | Possible but not visible (complaint of pain, etc.) |
| Property Damage Only Crash (PDO) | No injury to any person, but only damage to a motor vehicle, or to other property, including injury to domestic animals. |

Part I
Overview

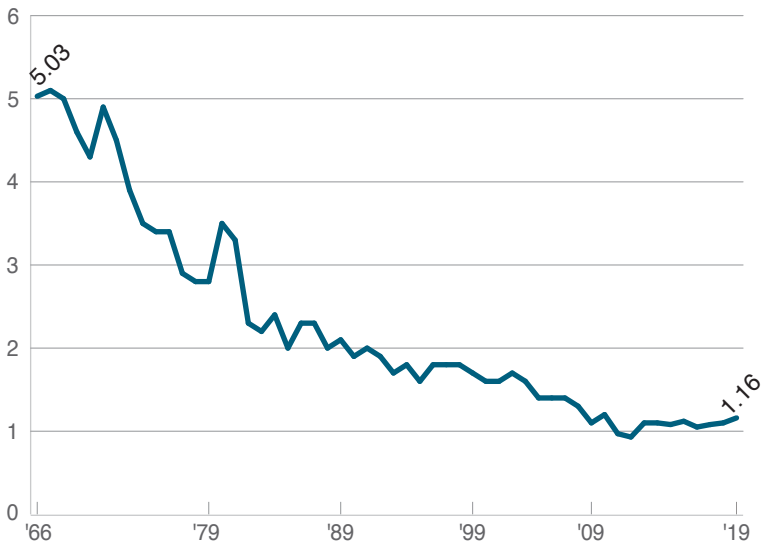
Fatality Rate

The fatality rate on Nebraska roadways for 2019 was 1.16 persons killed per 100 million vehicle miles traveled, up slightly from the 2018 rate of 1.10. Despite this increase, the long-term trend in fatality rate, shown in Figure 1, is significantly downward. Much of this reduction is the result of improvements in vehicle design, roadway engineering, emergency medical services, specific safety programs, enforcement, and improved driver awareness.

Figure 2 depicts the number of fatal crashes per year for the last 10 years. In 2019, there were 212 fatal crashes, an increase of 11 from 2018.

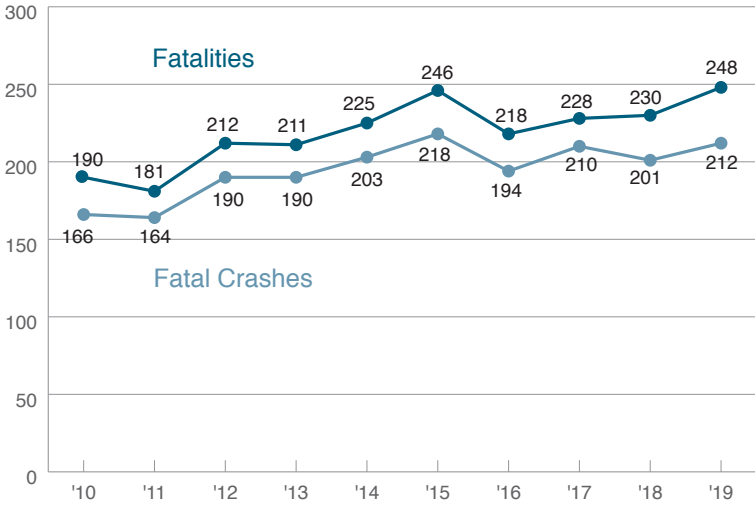
Fatal crashes make up only a small portion of the total crashes in Nebraska. Property damage only (PDO) crashes make up the majority. Figure 3 shows the percentage distribution of all crash types. In 2019, there were 212 fatal crashes, 1,154 serious injury crashes, 11,939 total injury crashes, and 24,555 property damage only crashes. Fatal crashes made up 0.6% of all crashes, serious injury crashes made up 3.1%, and total injury and PDO crashes made up 32.5% and 66.9%, respectively.

Fatality Rate Per 100 Million Vehicle Miles
(1966 - 2019)



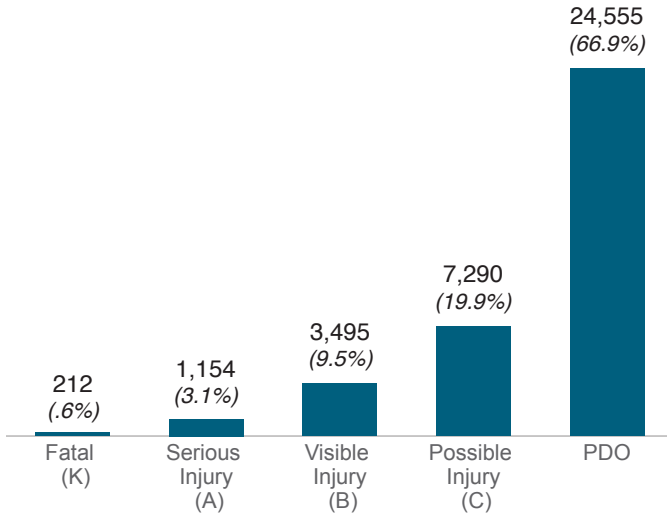
(Figure 1)

Ten-Year Trend in Fatal Crashes and Fatalities (2010 - 2019)



(Figure 2)

All Crashes in Nebraska



(Figure 3)

2019 Crash Data by County

| County | Crashes | | | | Persons Killed and Injured | |
|-----------|---------|-------|--------|------|----------------------------|---------|
| | Total | Fatal | Injury | PDO | Killed | Injured |
| Adams | 534 | 3 | 125 | 406 | 3 | 193 |
| Antelope | 71 | 0 | 25 | 46 | 0 | 41 |
| Arthur | 11 | 0 | 4 | 7 | 0 | 6 |
| Banner | 26 | 0 | 7 | 19 | 0 | 12 |
| Blaine | 6 | 0 | 2 | 4 | 0 | 5 |
| Boone | 77 | 1 | 18 | 58 | 1 | 29 |
| Box Butte | 148 | 3 | 48 | 97 | 3 | 77 |
| Boyd | 11 | 0 | 4 | 7 | 0 | 6 |
| Brown | 55 | 0 | 9 | 46 | 0 | 18 |
| Buffalo | 1021 | 3 | 325 | 693 | 5 | 460 |
| Burt | 92 | 2 | 29 | 61 | 2 | 45 |
| Butler | 134 | 1 | 41 | 92 | 1 | 76 |
| Cass | 341 | 7 | 116 | 218 | 14 | 171 |
| Cedar | 111 | 5 | 40 | 66 | 5 | 58 |
| Chase | 29 | 1 | 12 | 16 | 1 | 16 |
| Cherry | 116 | 2 | 23 | 91 | 2 | 36 |
| Cheyenne | 186 | 2 | 32 | 152 | 2 | 46 |
| Clay | 79 | 2 | 27 | 50 | 2 | 43 |
| Colfax | 135 | 2 | 42 | 91 | 2 | 62 |
| Cuming | 131 | 1 | 36 | 94 | 1 | 53 |
| Custer | 156 | 2 | 44 | 110 | 2 | 65 |
| Dakota | 280 | 1 | 93 | 186 | 1 | 137 |
| Dawes | 151 | 1 | 35 | 115 | 1 | 51 |
| Dawson | 473 | 5 | 102 | 366 | 5 | 152 |
| Deuel | 48 | 1 | 12 | 35 | 1 | 17 |
| Dixon | 67 | 0 | 17 | 50 | 0 | 24 |
| Dodge | 709 | 5 | 258 | 446 | 9 | 382 |
| Douglas | 13339 | 36 | 4357 | 8946 | 37 | 6073 |
| Dundy | 9 | 0 | 3 | 6 | 0 | 3 |
| Fillmore | 55 | 1 | 28 | 26 | 1 | 39 |
| Franklin | 46 | 1 | 12 | 33 | 1 | 15 |
| Frontier | 65 | 1 | 15 | 49 | 1 | 19 |
| Furnas | 83 | 0 | 24 | 59 | 0 | 33 |
| Gage | 369 | 2 | 105 | 262 | 2 | 154 |
| Garden | 35 | 1 | 5 | 29 | 1 | 6 |
| Garfield | 17 | 1 | 6 | 10 | 1 | 7 |
| Gosper | 45 | 0 | 13 | 32 | 0 | 14 |
| Grant | 5 | 0 | 2 | 3 | 0 | 2 |
| Greeley | 26 | 0 | 8 | 18 | 0 | 14 |
| Hall | 1326 | 8 | 411 | 907 | 8 | 581 |
| Hamilton | 214 | 2 | 50 | 162 | 2 | 79 |
| Harlan | 62 | 0 | 16 | 46 | 0 | 22 |
| Hayes | 17 | 0 | 5 | 12 | 0 | 5 |
| Hitchcock | 44 | 0 | 18 | 26 | 0 | 34 |
| Holt | 106 | 0 | 31 | 75 | 0 | 52 |
| Hooker | 12 | 0 | 2 | 10 | 0 | 2 |

| County | Crashes | | | | Persons Killed and Injured | |
|--------------|---------|-------|--------|-------|----------------------------|---------|
| | Total | Fatal | Injury | PDO | Killed | Injured |
| Howard | 92 | 1 | 14 | 77 | 3 | 17 |
| Jefferson | 148 | 3 | 33 | 112 | 3 | 48 |
| Johnson | 53 | 1 | 9 | 43 | 1 | 11 |
| Kearney | 102 | 4 | 30 | 68 | 4 | 39 |
| Keith | 196 | 2 | 45 | 149 | 2 | 65 |
| Keya Paha | 15 | 1 | 3 | 11 | 1 | 3 |
| Kimball | 93 | 3 | 23 | 67 | 3 | 31 |
| Knox | 58 | 0 | 20 | 38 | 0 | 28 |
| Lancaster | 6253 | 24 | 2500 | 3729 | 24 | 3673 |
| Lincoln | 793 | 7 | 243 | 543 | 7 | 360 |
| Logan | 6 | 0 | 2 | 4 | 0 | 2 |
| Loup | 8 | 0 | 5 | 3 | 0 | 6 |
| Madison | 606 | 6 | 195 | 405 | 7 | 274 |
| McPherson | 6 | 0 | 2 | 4 | 0 | 2 |
| Merrick | 114 | 2 | 30 | 82 | 2 | 40 |
| Morrill | 83 | 2 | 19 | 62 | 7 | 25 |
| Nance | 22 | 1 | 6 | 15 | 1 | 13 |
| Nemaha | 107 | 1 | 24 | 82 | 1 | 41 |
| Nuckolls | 29 | 0 | 5 | 24 | 0 | 7 |
| Otoe | 271 | 2 | 83 | 186 | 2 | 158 |
| Pawnee | 72 | 1 | 18 | 53 | 1 | 28 |
| Perkins | 39 | 2 | 15 | 22 | 2 | 19 |
| Phelps | 124 | 1 | 42 | 81 | 1 | 64 |
| Pierce | 95 | 1 | 26 | 68 | 1 | 38 |
| Platte | 763 | 5 | 186 | 572 | 7 | 261 |
| Polk | 82 | 1 | 18 | 63 | 2 | 28 |
| Red Willow | 180 | 1 | 43 | 136 | 1 | 63 |
| Richardson | 114 | 1 | 31 | 82 | 1 | 48 |
| Rock | 10 | 0 | 2 | 8 | 0 | 6 |
| Saline | 234 | 3 | 49 | 182 | 6 | 68 |
| Sarpy | 2514 | 15 | 838 | 1661 | 22 | 1235 |
| Saunders | 227 | 4 | 75 | 148 | 4 | 106 |
| Scotts Bluff | 617 | 3 | 226 | 388 | 3 | 315 |
| Seward | 345 | 4 | 103 | 238 | 5 | 147 |
| Sheridan | 65 | 0 | 15 | 50 | 0 | 27 |
| Sherman | 33 | 0 | 13 | 20 | 0 | 16 |
| Sioux | 11 | 0 | 2 | 9 | 0 | 2 |
| Stanton | 46 | 2 | 25 | 19 | 2 | 37 |
| Thayer | 79 | 0 | 18 | 61 | 0 | 31 |
| Thomas | 8 | 0 | 2 | 6 | 0 | 7 |
| Thurston | 47 | 0 | 22 | 25 | 0 | 30 |
| Valley | 61 | 1 | 13 | 47 | 1 | 19 |
| Washington | 304 | 2 | 85 | 217 | 2 | 123 |
| Wayne | 116 | 1 | 36 | 79 | 1 | 50 |
| Webster | 62 | 0 | 13 | 49 | 0 | 22 |
| Wheeler | 17 | 0 | 0 | 17 | 0 | 0 |
| York | 313 | 1 | 95 | 217 | 1 | 130 |
| Totals | 36706 | 212 | 11939 | 24555 | 248 | 17198 |

Part II
2019 Data

Summary Number of Traffic Crashes

| | |
|---|-----------|
| All Crashes | 36,706 |
| Property Damage Only (PDO)..... | 24,555 |
| Injury Crashes | 11,939 |
| <i>Persons Injured</i> | 17,198 |
| Fatal Crashes | 212 |
| <i>Fatalities</i> | 248 |
| Number of Registered Vehicles in Nebraska | 2,399,518 |
| Number of Licensed Drivers in Nebraska | 1,470,810 |
| Number of Vehicles in Crashes* | 67,321 |
| Number of Drivers in Crashes* | 60,622 |

*There may be more than one vehicle or driver involved in a single crash. Parked and driverless vehicles are included.

During 2019:

One crash occurred every 14 minutes.
Forty-seven persons were injured each day.
One person was killed every 35 hours.

The economic loss in terms of dollars was \$5,058,849,940**

***Federal Highway Administration Research Report Number, FHWA-SA-17-071, Crash Costs for Highway Safety Analysis, January 2018, Nebraska Department of Transportation Crash Data 2013-2017.*

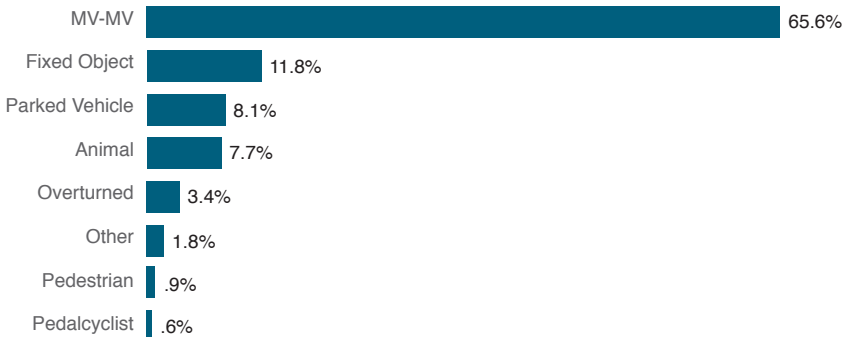
First Harmful Event

First harmful event (FHE) is the initial incident that causes injury or damage. It is sometimes referred to as “type of crash” and implies a collision with each of the objects listed in the following charts. “Overturned” and “other” crashes refer to crashes where no collision is involved (e.g., a car loses control and overturns, a car catches on fire).

First harmful events for all crashes and for fatal crashes are shown in Figures 5 and 6. In both instances, collisions between two or more motor vehicles (MV-MV) make up the majority of crashes. Crashes involving fixed objects, vehicles overturning, pedestrians and trains tend to be more severe, as indicated by their over-representation in fatal crashes as compared to all crashes.

All Crashes

(Figure 5)



Fatal Crashes

(Figure 6)

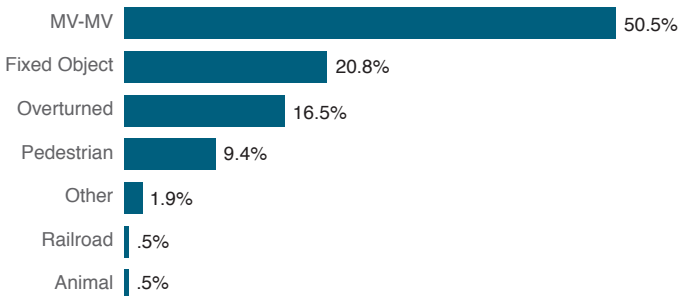


Table 1 provides the number of crashes in each category listed in Figures 5 and 6 on the previous page.

| FIRST HARMFUL EVENT (Current Year) | | 2019 | | | | | | | | |
|---------------------------------------|----------------------------|---------|-------|--------|-------|---------------------------|--------------------|------|------|-------|
| | | CRASHES | | | | PERSONS KILLED OR INJURED | | | | |
| | | TOTAL | FATAL | INJURY | PDO | KILLED | NON-FATAL INJURIES | | | |
| | | | | | | | TOTAL | A★ | B★ | C★ |
| COLLISION INVOLVING | Pedestrian | 342 | 20 | 322 | 0 | 20 | 342 | 72 | 137 | 133 |
| | Motor vehicle in transport | 24049 | 107 | 8819 | 15123 | 138 | 13459 | 783 | 2912 | 9764 |
| | Parked motor vehicle | 2963 | 0 | 220 | 2743 | 0 | 249 | 26 | 99 | 124 |
| | Railroad train | 24 | 1 | 11 | 12 | 1 | 19 | 8 | 6 | 5 |
| | Pedalcyclist | 238 | 1 | 234 | 3 | 1 | 239 | 27 | 133 | 79 |
| | Animal | 2836 | 1 | 240 | 2595 | 1 | 297 | 26 | 104 | 167 |
| | Fixed object | 4319 | 44 | 1238 | 3037 | 49 | 1493 | 240 | 561 | 692 |
| | Other object | 310 | 2 | 39 | 269 | 2 | 44 | 8 | 17 | 19 |
| Noncollision overturned | | 1245 | 35 | 737 | 473 | 35 | 961 | 193 | 391 | 377 |
| Other noncollision | | 340 | 1 | 69 | 270 | 1 | 84 | 16 | 34 | 34 |
| Unknown | | 40 | 0 | 10 | 30 | 0 | 11 | 1 | 6 | 4 |
| — TOTALS — | | 36706 | 212 | 11939 | 24555 | 248 | 17198 | 1400 | 4400 | 11398 |

(Table 1)

- ★ = Injury severity codes
- A = Suspected Serious Injury
- B = Visible Injury (not disabling)
- C = Possible Injury (not visible)
- PDO = Property Damage Only

| FIRST HARMFUL EVENT | | 2018 | | | | | | | | |
|-------------------------|----------------------------|---------|-------|--------|-------|---------------------------|--------------------|------|------|-------|
| | | CRASHES | | | | PERSONS KILLED OR INJURED | | | | |
| | | TOTAL | FATAL | INJURY | PDO | KILLED | NON-FATAL INJURIES | | | |
| | | | | | | | TOTAL | A★ | B★ | C★ |
| COLLISION INVOLVING | Pedestrian | 357 | 23 | 333 | 1 | 24 | 350 | 74 | 132 | 144 |
| | Motor vehicle in transport | 23610 | 103 | 9085 | 14422 | 125 | 13915 | 803 | 3081 | 10031 |
| | Parked motor vehicle | 2940 | 1 | 252 | 2687 | 1 | 312 | 27 | 131 | 154 |
| | Railroad train | 36 | 6 | 16 | 14 | 6 | 19 | 6 | 7 | 6 |
| | Pedalcyclist | 238 | 0 | 233 | 5 | 0 | 236 | 15 | 134 | 87 |
| | Animal | 2543 | 2 | 203 | 2338 | 2 | 236 | 19 | 75 | 142 |
| | Fixed object | 4634 | 27 | 1314 | 3293 | 30 | 1593 | 225 | 617 | 751 |
| | Other object | 230 | 1 | 31 | 198 | 1 | 41 | 5 | 10 | 26 |
| Noncollision overturned | | 1233 | 36 | 738 | 459 | 39 | 963 | 205 | 383 | 375 |
| Other noncollision | | 271 | 2 | 50 | 219 | 2 | 57 | 14 | 21 | 22 |
| Unknown | | 25 | 0 | 4 | 21 | 0 | 4 | 1 | 2 | 1 |
| — TOTALS — | | 36117 | 201 | 12259 | 23657 | 230 | 17726 | 1394 | 4593 | 11739 |

(Table 2)

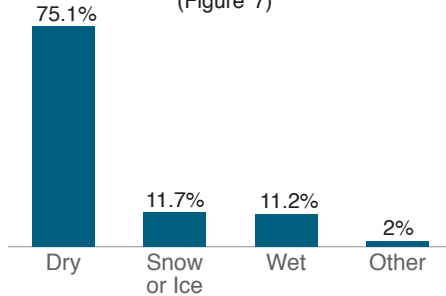
Table 2 provides 2018 data for comparison to 2019. The number of fatal crashes increased by 11 and the number of fatalities increased by 18, indicating that there were more multi-fatality crashes in 2019. The number of injury crashes declined by 320 and the number of injuries decreased by 528. The largest increase was in property damage only crashes, which rose by 898.

Surface Condition

The condition of the road surface plays an important role in motor vehicle crashes. Slick road conditions are generally more hazardous than dry conditions, but drivers tend to compensate for this by being more cautious. Fewer fatal crashes occur under slick road surface conditions than under dry road conditions, since there are many more dry days than wet days. Crashes on wet roads decreased by 13% during 2019.

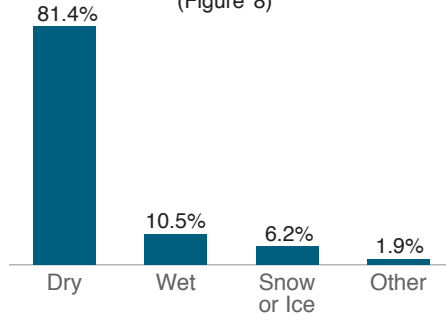
All Crashes

(Figure 7)



Fatal Crashes

(Figure 8)



The following table provides the number of crashes in each category.

| ROAD SURFACE CONDITION | TOTAL | FATAL | INJURY | PDO |
|------------------------|-------|-------|--------|--------|
| Dry | 26996 | 171 | 9034 | 17791 |
| Wet | 4031 | 22 | 1424 | 2585 |
| Snowy or icy | 4206 | 13 | 1106 | 3087 |
| Other | 734 | 4 | 258 | 472 |
| Not stated | 739 | 2 | 117 | 620 |
| — TOTALS — | 36706 | 212 | 11939 | 24,555 |

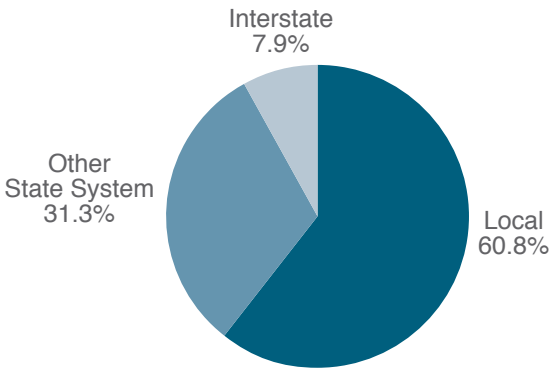
(Table 3)

Type of Roadway

The distributions of all crashes and fatal crashes, by roadway type, are shown in Figures 9 and 10. Table 4 (page 13) shows the actual number of crashes and casualties by roadway type. The percent of fatal crashes that occur on the interstate and other state highways is larger than the percent of all crashes that occur on the interstate and other state highways. Crashes on interstate and other state highways tend to occur at higher speeds, accounting for their increased severity.

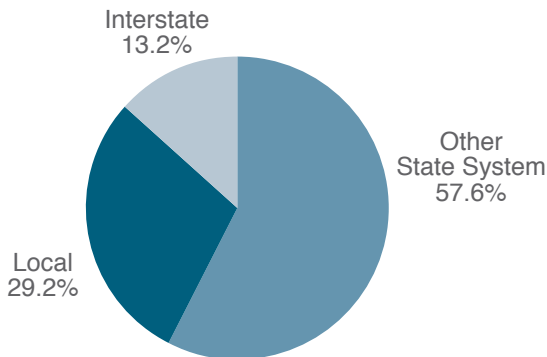
All Crashes

(Figure 9)



Fatal Crashes

(Figure 10)



| ROADWAY | | CRASHES | | | | PERSONS | |
|------------|-----------------------------|---------|-------|--------|-------|---------|---------|
| | | TOTAL | FATAL | INJURY | PDO | KILLED | INJURED |
| URBAN | Interstate | 1637 | 5 | 499 | 1133 | 5 | 679 |
| | Other State System Highways | 6377 | 27 | 2386 | 3964 | 29 | 3510 |
| | Local Roads and Streets | 19403 | 38 | 6269 | 13096 | 40 | 8768 |
| | URBAN SUBTOTAL | 27417 | 70 | 9154 | 18193 | 74 | 12957 |
| RURAL | Interstate | 1249 | 23 | 287 | 939 | 29 | 451 |
| | Other State System Highways | 5100 | 95 | 1476 | 3529 | 116 | 2328 |
| | Local Roads and Streets | 2940 | 24 | 1022 | 1894 | 29 | 1462 |
| | RURAL SUBTOTAL | 9289 | 142 | 2785 | 6362 | 174 | 4241 |
| — TOTALS — | | 36706 | 212 | 11939 | 24555 | 248 | 17198 |

(Table 4)

Rather than referring to numbers of crashes, the relative safety of different roadway classifications can be compared by using crash rates. Table 5 provides crash rates for 2019. These rates are based on crashes per 100 million vehicle miles driven.

Crashes Per 100 Million Vehicle Miles Traveled

| | CRASH SEVERITY | | | |
|-------------------------|----------------|--------|-------|-------|
| | FATAL | INJURY | PDO | TOTAL |
| Interstate | 0.6 | 17.0 | 44.7 | 62.3 |
| Other State Highways | 1.4 | 43.4 | 84.2 | 129.0 |
| Local Roads and Streets | 0.8 | 94.3 | 194.0 | 289.1 |

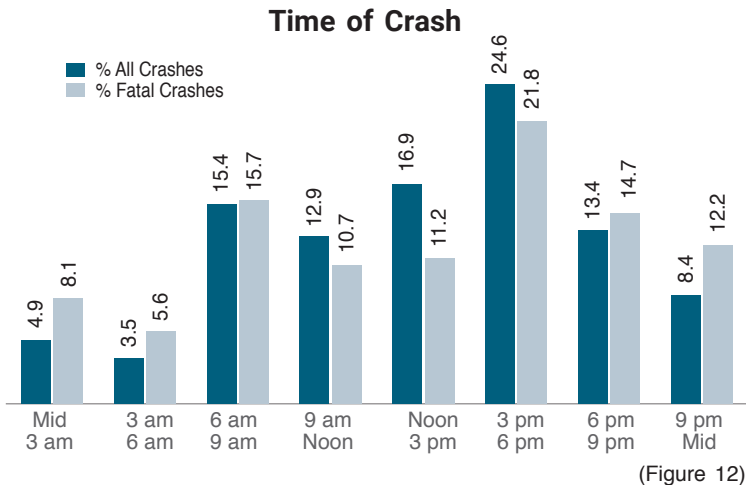
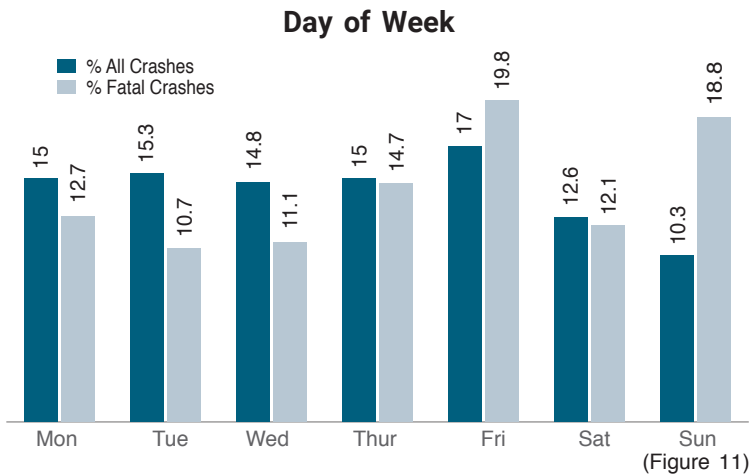
(Table 5)

The interstate actually has the lowest crash rate for all roadway categories, followed by other state highways and local roads.

Day and Time

Crashes can occur at any time, but they tend to be more frequent during certain times of the day. Crash frequency follows the daily activity cycle, increasing from a low in the early morning hours to a peak in the late afternoon. The highest three-hour time period for crashes in 2019 was from 3:00 - 6:00 p.m., when 24.6% of all crashes occurred. Fatal crashes were most prevalent in the afternoon or early evening, as 47.7% of them took place between noon and 9:00 p.m.

Friday was the highest day for both crashes (6,198) and fatal crashes (41) during 2019 Sunday had the fewest crashes, but was second in fatal crashes (37). Traditionally, more fatal crashes occur on the weekends when more recreational driving takes place.

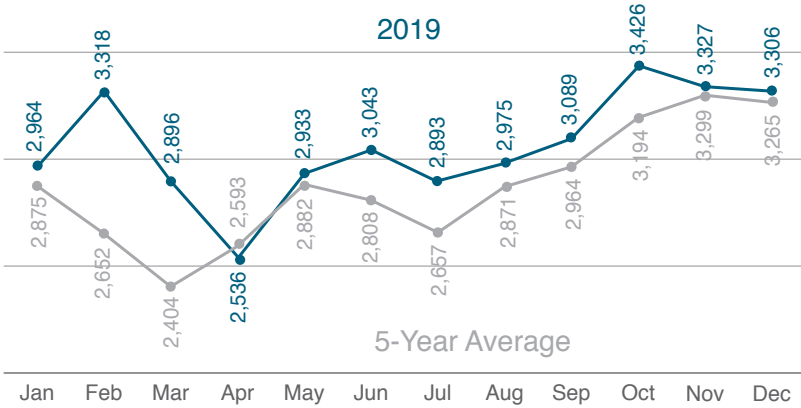


Month

The seasonal cycles of all crashes and fatal crashes are illustrated in Figures 13 and 14. Crashes tend to increase during the late fall and winter as weather conditions worsen. Fatal crashes usually decrease during bad weather conditions, once motorists adjust to less than perfect driving conditions.

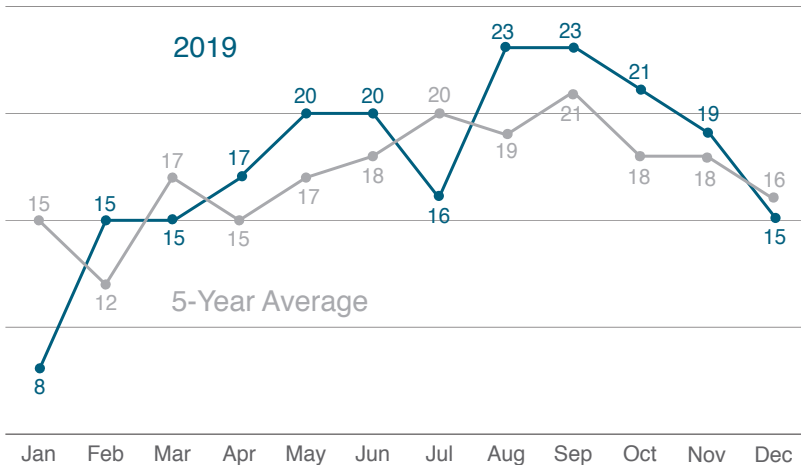
All Crashes by Month

(Figure 13)



Fatal Crashes by Month

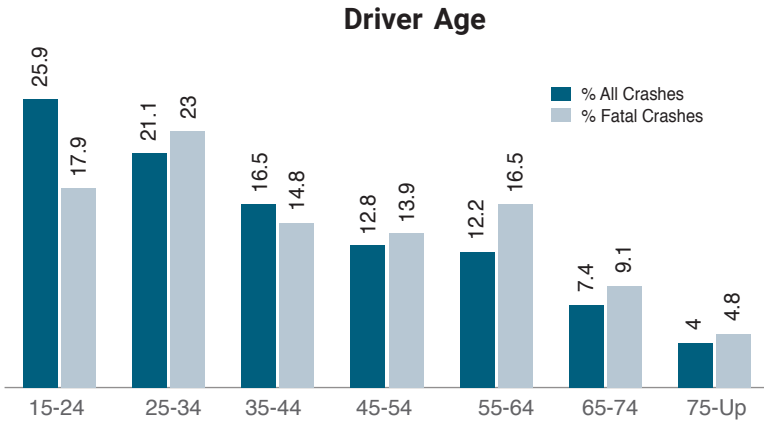
(Figure 14)



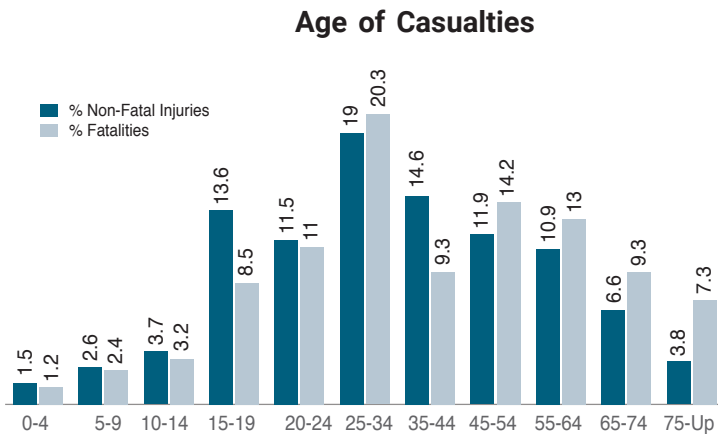
Age of Driver

Younger drivers are involved in a disproportionate number of crashes. In 2019, 52.1% of the drivers involved in crashes were age 34 or younger. Drivers in the youngest age bracket, ages 15 to 24, which included 25.1% of all drivers, had the highest percentage involvement of all age groups in all crashes, 25.9%. In 2019, these drivers were also involved in 17.9% of fatal crashes.

Figure 16 represents percentages of nonfatal and fatal injuries by age groups. Persons aged 75 and over are overrepresented in fatal injuries as compared to nonfatal injuries. Persons between the ages of 15 and 44 suffered 58.8% of all injuries.



(Figure 15)



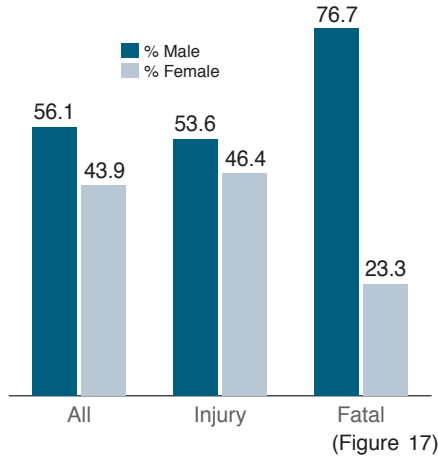
(Figure 16)

Sex of Driver

Figure 17 shows the difference between male and female drivers' involvement in motor vehicle traffic crashes. Males represented 56.1% of the drivers in all crashes in Nebraska in 2019, and were involved in 76.7% of all fatal crashes. At least a part of this difference can be attributed to the fact that males may drive more miles than females and, thus, have greater exposure to crashes.

More females than males, however, are victims of motor vehicle crashes. Females made up 53.8% of the persons injured or killed in motor vehicle crashes in 2019. (See Table 7).

Sex of Driver in Crashes



| SEX OF DRIVER | TOTAL | FATAL | INJURY | PDO |
|---------------|-------|-------|--------|-------|
| Male | 33699 | 270 | 11620 | 21809 |
| Female | 26351 | 82 | 10047 | 16222 |
| Not stated | 572 | 0 | 195 | 377 |
| – TOTALS – | 60622 | 352 | 21862 | 38408 |

(Table 6)

| AGE AND SEX | ALL CRASHES | | | | | | ALCOHOL-RELATED CRASHES | | | | | |
|----------------|-------------|-----|----|---------|------|------|-------------------------|----|---|---------|-----|-----|
| | KILLED | | | INJURED | | | KILLED | | | INJURED | | |
| | TOTAL | M | F | TOTAL | M | F | TOTAL | M | F | TOTAL | M | F |
| 0-4 years | 3 | 2 | 1 | 257 | 127 | 130 | 0 | 0 | 0 | 8 | 4 | 4 |
| 5-9 years | 6 | 3 | 3 | 447 | 220 | 227 | 0 | 0 | 0 | 23 | 13 | 10 |
| 10-14 years | 8 | 3 | 5 | 626 | 284 | 342 | 0 | 0 | 0 | 26 | 12 | 14 |
| 15-19 years | 21 | 11 | 10 | 2282 | 978 | 1304 | 6 | 2 | 4 | 93 | 52 | 41 |
| 20-24 years | 27 | 24 | 3 | 1927 | 870 | 1057 | 8 | 7 | 1 | 159 | 101 | 58 |
| 25-34 years | 50 | 36 | 14 | 3189 | 1443 | 1746 | 24 | 22 | 2 | 239 | 154 | 85 |
| 35-44 years | 23 | 17 | 6 | 2452 | 1088 | 1364 | 6 | 6 | 0 | 135 | 88 | 47 |
| 45-54 years | 35 | 27 | 8 | 1999 | 946 | 1053 | 4 | 4 | 0 | 96 | 61 | 35 |
| 55-64 years | 32 | 26 | 6 | 1830 | 911 | 919 | 5 | 5 | 0 | 86 | 61 | 25 |
| 65-74 years | 23 | 14 | 9 | 1101 | 505 | 596 | 3 | 3 | 0 | 32 | 18 | 14 |
| 75 and older | 18 | 12 | 6 | 634 | 307 | 327 | 1 | 1 | 0 | 20 | 13 | 7 |
| Age not stated | 2 | 1 | 1 | 171 | 78 | 93 | 1 | 0 | 1 | 8 | 1 | 7 |
| – TOTALS – | 248 | 176 | 72 | 16915 | 7757 | 9158 | 58 | 50 | 8 | 925 | 578 | 347 |

(Table 7)

Restraint Use

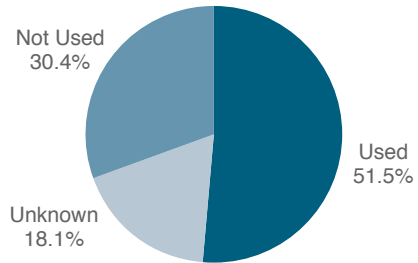
Restraint usage is the best available means of preventing fatalities and injuries in motor vehicle crashes. Passive restraints, such as air bags, which require no occupant action to be put in use, are standard equipment for drivers and front seat passengers in newer vehicles. For these passive systems to provide effective protection, however, seat belts must still be used.

Effective January 1, 1993, Nebraska passed a mandatory seat belt law. This law calls for secondary enforcement, meaning that a citation for not wearing a seat belt can only be issued if the driver is first charged with another violation. Although not as effective as a primary enforcement law, the law has been successful in promoting seat belt use.

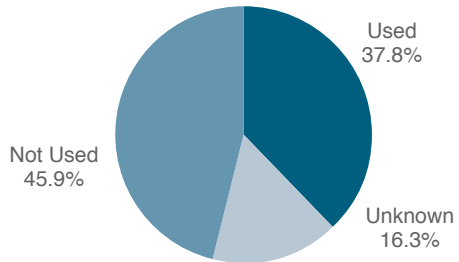
The most accurate measure of safety belt usage in Nebraska comes from the results of surveys conducted by the NDOT Highway Safety Office and approved by the National Highway Traffic Safety Administration (NHTSA). In 2019, the observed statewide safety belt usage rate was 80%.

Usage rates have risen in recent years primarily due to increased law enforcement efforts and media campaigns, however, there is still room for improvement. Belt use is particularly low in crashes which result in the most severe injuries. Only 37.8% of those vehicle occupants who died and 51.5% of those who suffered suspected serious injuries in 2019 crashes were belted.

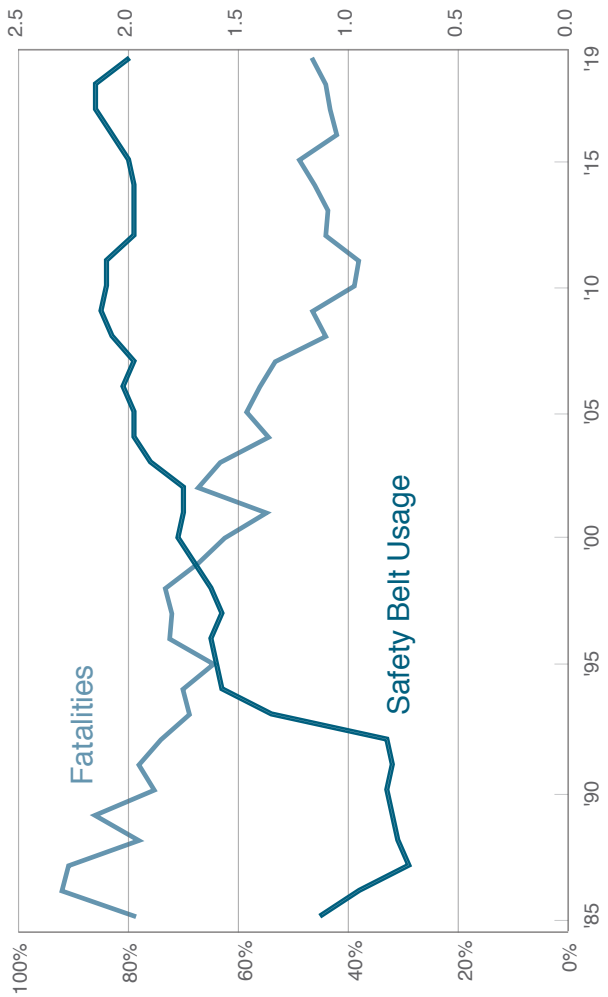
Restraint Use for Suspected Serious Injuries
(Figure 18)



Restraint Use for Fatal Injuries
(Figure 19)



Nebraska Safety Belt Usage Rate vs. Fatality Rate Per 100 Million Miles Traveled



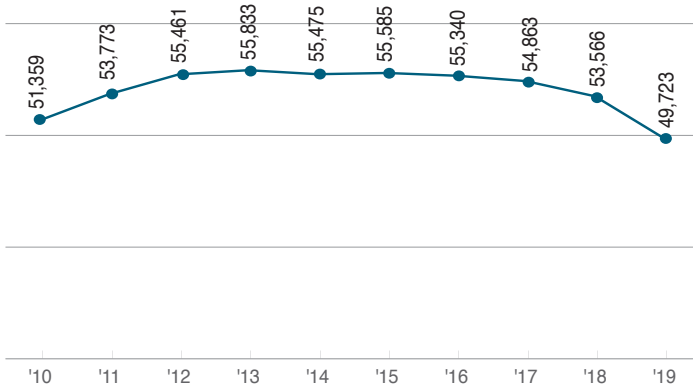
(Figure 20)

Motorcycle Crashes

After trending sharply upwards earlier in the decade, motorcycle registrations plateaued during the last few years. Total motorcycle crashes decreased to 426 in 2019, while fatal crashes increased to 24.

Motorcycle Registrations

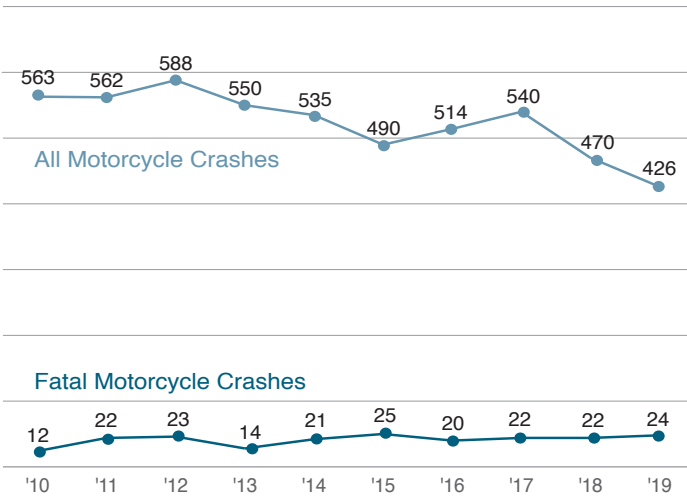
(2010- 2019)



(Figure 21)

All Motorcycle Crashes and Fatal Crashes

(2010 - 2019)



(Figure 22)

Vehicle Body Style

The major vehicle body styles involved in all crashes and fatal crashes are displayed in Figures 23 and 24. Compared to their involvement in all crashes, motorcycles and heavy trucks are overrepresented in fatal crashes. Motorcycles offer little protection to riders involved in crashes, and heavy trucks tend to be involved in more severe crashes due to their large size. The number of vehicles in each body style group which were involved in crashes is provided in Table 8.

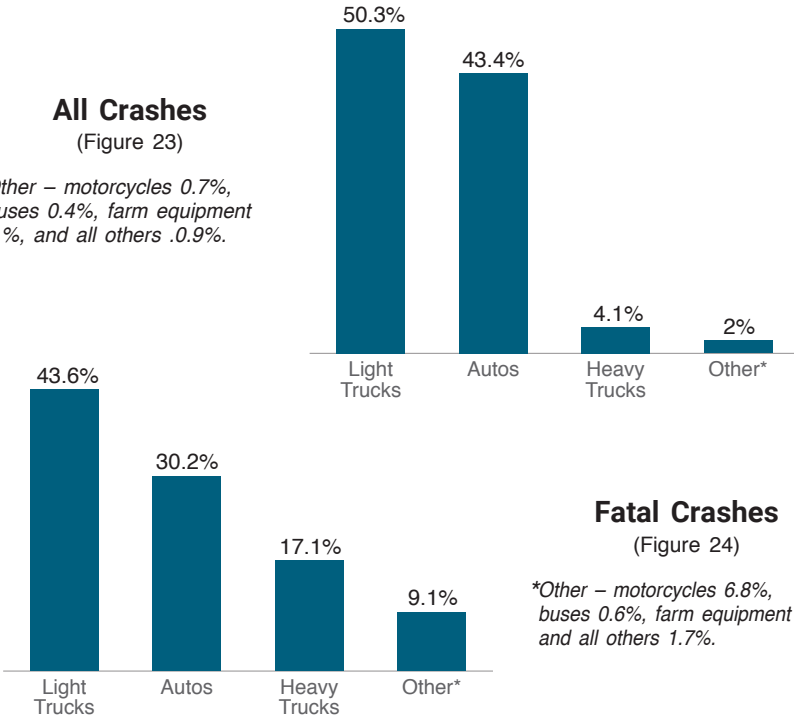
| BODY STYLE OF CRASH VEHICLES | TOTAL | FATAL | INJURY | PDO |
|------------------------------|-------|-------|--------|-------|
| Bus | 247 | 2 | 69 | 176 |
| Semi-trailer truck | 1506 | 34 | 411 | 1061 |
| Other heavy truck | 1192 | 26 | 331 | 835 |
| Automobile | 28489 | 106 | 9945 | 18438 |
| Van | 3482 | 13 | 1190 | 2276 |
| Utility vehicle | 18368 | 81 | 6464 | 11823 |
| Pickup truck | 11019 | 59 | 3482 | 7478 |
| Motorcycle | 441 | 24 | 359 | 58 |
| Motorhome | 27 | 1 | 5 | 21 |
| Farm equipment | 67 | 3 | 26 | 38 |
| Other | 493 | 2 | 174 | 317 |
| Unknown | 1990 | 2 | 328 | 1660 |
| — TOTALS — | 67321 | 353 | 22784 | 44184 |

(Table 8)

All Crashes

(Figure 23)

*Other – motorcycles 0.7%, buses 0.4%, farm equipment .1%, and all others .0.9%.



Fatal Crashes

(Figure 24)


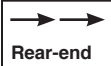





*Other – motorcycles 6.8%, buses 0.6%, farm equipment 0.9%, and all others 1.7%.

Intersection Crashes

2019

Type of Multi-Vehicle Collisions at Intersections*

Total Crashes: 18,166

| | NUMBER OF CRASHES | % OF TOTAL INTERSECTION CRASHES | % RESULTING IN INJURY |
|---|----------------------|---------------------------------------|--------------------------|
|  Angle | 7,443 | 41.0 | 40.4 |
|  Rear-end | 5,844 | 32.2 | 39.8 |
|  Sideswipe | 1,741 | 9.6 | 20.3 |
|  Sideswipe | 163 | 0.9 | 32.5 |
|  Left Turn Leaving | 2,463 | 13.5 | 48.8 |
|  Head-on | 64 | 0.4 | 50.0 |
|  Backing | 444 | 2.4 | 11.3 |
| Unknown | 4 | 0 | 50.0 |
| Total | 18,166 | 100% | |

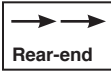

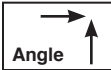


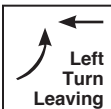

* Multi-vehicle crashes at intersections comprise 49.5% of all crashes.

Non-Intersection Crashes

2019

Type of Multi-Vehicle Collisions Not at Intersections*

Total Crashes: 5,884

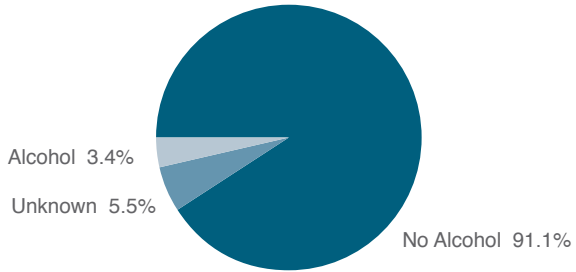
| | NUMBER OF CRASHES | % OF TOTAL NON-INTERSECTION CRASHES | % RESULTING IN INJURY |
|--|----------------------|---|--------------------------|
|  Rear-end | 3,169 | 53.9 | 38.8 |
|  Head-on | 107 | 1.8 | 58.9 |
|  Angle | 174 | 3.0 | 37.4 |
|  Sideswipe | 1,643 | 27.9 | 17.4 |
|  Sideswipe | 447 | 7.6 | 47.9 |
|  Left Turn Leaving | 36 | 0.6 | 38.9 |
|  Backing | 302 | 5.1 | 8.9 |
| Unknown | 6 | 0.1 | 16.7 |
| Total | 5,884 | 100% | |

*Multi-vehicle crashes not at intersections comprise 16% of all crashes.

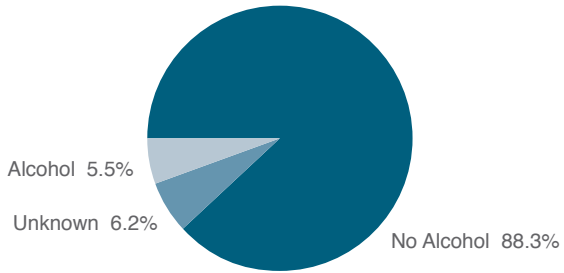
Alcohol Involvement

Figures 25, 26 and 27 show the relationship between alcohol involvement and crash severity. As crash severity increased, so did alcohol involvement. In 2019, 24% of Nebraska’s fatal crashes were alcohol-involved, a decrease from the 32.8% recorded in 2018. Since alcohol testing is only required in fatal crashes, the alcohol involvement listed for injury and PDO crashes is probably understated.

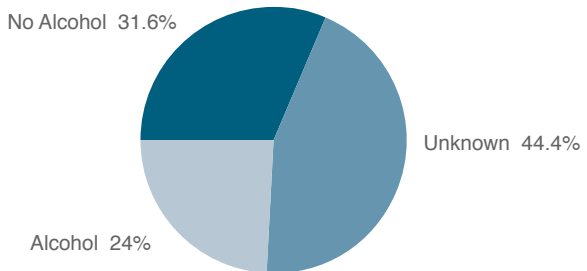
PDO Crashes
(Figure 25)



Injury Crashes
(Figure 26)

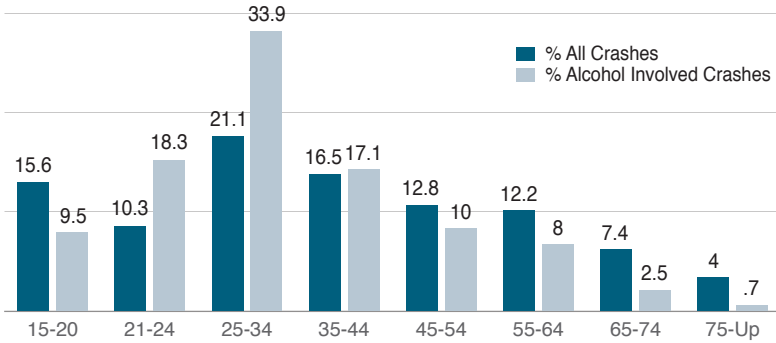


Fatal Crashes
(Figure 27)



Driver Age and Alcohol Involvement

The relationship between driver age and alcohol involvement in motor vehicle crashes is illustrated in Figure 28. Compared to their involvement in all crashes, drivers aged 21-34 are overrepresented in alcohol related crashes. In fact, these drivers are in 52.2% of alcohol involved crashes. By comparison, these drivers are only involved in 31.4% of total crashes. Note that drivers between the ages of 15 and 20 are in 9.5% of alcohol-related crashes, despite the fact that the legal drinking age in Nebraska is 21.



(Figure 28)

| AGE OF DRIVER | TOTAL | | FATAL | | INJURY | |
|----------------|-------------|------------------|-------------|------------------|-------------|------------------|
| | ALL CRASHES | ALCOHOL INVOLVED | ALL CRASHES | ALCOHOL INVOLVED | ALL CRASHES | ALCOHOL INVOLVED |
| 15 and younger | 469 | 2 | 2 | 0 | 182 | 1 |
| 16 | 1757 | 14 | 7 | 1 | 680 | 9 |
| 17 | 1842 | 20 | 1 | 0 | 661 | 8 |
| 18 | 1816 | 16 | 4 | 0 | 673 | 9 |
| 19 | 1819 | 41 | 11 | 2 | 687 | 19 |
| 20 | 1713 | 48 | 7 | 0 | 627 | 16 |
| 21 | 1650 | 67 | 8 | 1 | 604 | 21 |
| 22 | 1610 | 67 | 9 | 2 | 561 | 20 |
| 23 | 1508 | 74 | 6 | 1 | 538 | 29 |
| 24 | 1421 | 65 | 8 | 2 | 510 | 26 |
| 25 to 34 | 12734 | 506 | 81 | 22 | 4696 | 224 |
| 35 to 44 | 9957 | 255 | 52 | 6 | 3633 | 102 |
| 45 to 54 | 7721 | 149 | 49 | 3 | 2781 | 77 |
| 55 to 64 | 7382 | 119 | 58 | 6 | 2588 | 50 |
| 65 to 74 | 4460 | 38 | 32 | 1 | 1529 | 20 |
| 75 and older | 2425 | 11 | 17 | 1 | 844 | 6 |
| Not stated | 338 | 3 | 0 | 0 | 68 | 0 |
| — TOTALS — | 60622 | 1495 | 352 | 48 | 21862 | 637 |

(Table 9)

Driver Contributing Circumstances

In 2019, there were 36,706 reportable motor vehicle traffic crashes in Nebraska involving 60,622 drivers. The table below lists the driver contributing circumstances and the number of drivers involved in fatal, injury and property damage only crashes.

| DRIVER CONTRIBUTING CIRCUMSTANCES | TOTAL | FATAL | INJURY | PDO |
|--|--------------|--------------|---------------|------------|
| No improper driving | 29532 | 130 | 10676 | 18726 |
| Failed to yield right-of-way | 5844 | 24 | 2421 | 3399 |
| Disregarded traffic controls | 2003 | 9 | 985 | 1009 |
| Exceeded speed limit | 113 | 9 | 56 | 48 |
| Speed too fast for conditions | 1954 | 21 | 601 | 1332 |
| Made an improper turn | 667 | 1 | 148 | 518 |
| Followed too closely | 4644 | 4 | 1687 | 2953 |
| Leave lane/run off road | 2148 | 38 | 676 | 1434 |
| Operating in erratic manner | 2275 | 24 | 993 | 1258 |
| Swerving or avoiding | 548 | 3 | 174 | 371 |
| Visibility obstructed | 403 | 0 | 122 | 281 |
| Inattention | 3763 | 5 | 1191 | 2567 |
| Mobile phone distraction | 134 | 0 | 54 | 80 |
| Distracted - other | 669 | 6 | 250 | 413 |
| Fatigued/asleep | 289 | 3 | 121 | 165 |
| Defective equipment | 226 | 0 | 69 | 157 |
| Other improper action | 1395 | 12 | 425 | 958 |
| Unknown | 4015 | 63 | 1213 | 2739 |
| — TOTALS — | 60622 | 352 | 21862 | 38408 |

(Table 10)

While “Failed to yield right-of-way” was the most common contributing circumstance in all crashes, in fatal crashes “Leave lane/run off road” was the most frequent.

Part III
Crash Trends

Motor Vehicle Traffic Crash Data

The crash rate on Nebraska roads has remained fairly steady over the last few years. Although, the state’s fatality rate increased 5.5% from 1.10 in 2018 to 1.16 in 2019.

| Year | Total Crashes | Persons Injured | Persons Killed | Crash Rate (per MVM) | Fatality Rate (per HMVM) | National Fatality Rate (per HMVM) |
|------|---------------|-----------------|----------------|----------------------|--------------------------|-----------------------------------|
| '01 | 47,894 | 26,751 | 246 | 2.67 | 1.37 | 1.51 |
| '02 | 46,238 | 23,379 | 307 | 2.51 | 1.67 | 1.51 |
| '03 | 46,602 | 21,984 | 293 | 2.51 | 1.58 | 1.48 |
| '04 | 37,227 | 21,315 | 254 | 1.98 | 1.35 | 1.44 |
| '05 | 35,739 | 19,827 | 276 | 1.89 | 1.46 | 1.46 |
| '06 | 32,780 | 18,424 | 269 | 1.71 | 1.40 | 1.42 |
| '07 | 35,875 | 18,983 | 256 | 1.87 | 1.33 | 1.36 |
| '08 | 34,604 | 17,799 | 208 | 1.83 | 1.10 | 1.26 |
| '09 | 34,665 | 17,775 | 223 | 1.81 | 1.17 | 1.15 |
| '10 | 33,212 | 16,712 | 190 | 1.70 | 0.97 | 1.11 |
| '11 | 32,302 | 16,108 | 181 | 1.69 | 0.95 | 1.10 |
| '12 | 30,443 | 15,872 | 212 | 1.58 | 1.10 | 1.14 |
| '13 | 31,377 | 16,083 | 211 | 1.62 | 1.09 | 1.10 |
| '14 | 32,318 | 15,871 | 225 | 1.65 | 1.15 | 1.08 |
| '15 | 33,988 | 16,806 | 246 | 1.68 | 1.22 | 1.15 |
| '16 | 34,890 | 17,962 | 218 | 1.68 | 1.05 | 1.18 |
| '17 | 34,999 | 17,691 | 228 | 1.67 | 1.09 | 1.17 |
| '18 | 36,117 | 17,726 | 230 | 1.72 | 1.10 | 1.13 |
| '19 | 36,706 | 17,198 | 248 | 1.72 | 1.16 | 1.10* |

Million Vehicle Miles (MVM)
Hundred Million Vehicle Miles (HMVM)

*NHTSA estimate

(Table 11)

Body Style

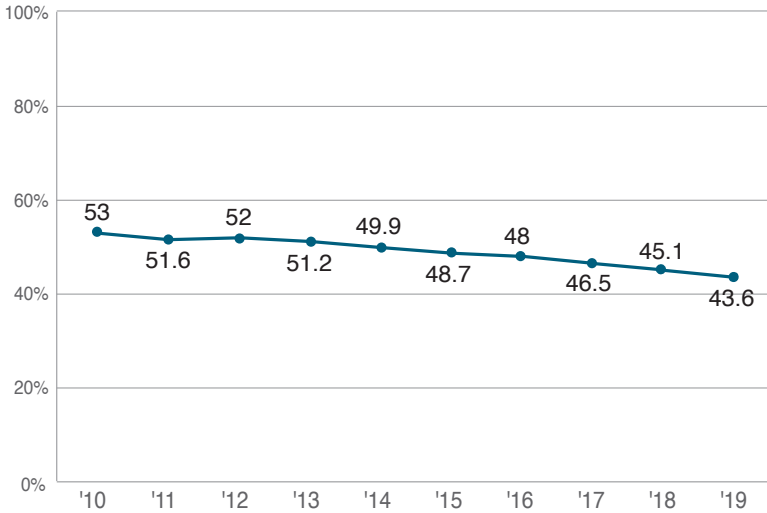
More passenger cars are involved in crashes than any other body style of vehicle. The percentage of automobiles in the total mix of vehicles in crashes, however, has been generally declining over the last decade. Figure 30 displays this trend.

Utility vehicles have been the fastest growing segment of the vehicle mix, surpassing pickup trucks and vans. The percentage of heavy trucks involved in crashes, on the other hand, has remained relatively steady. Figure 31 shows the trends in the percentage of various truck types involved in crashes during the last decade.

Note: In any one year, the combined percentages of passenger cars, light trucks, heavy trucks and motorcycles will not total 100%. The percentage of “other” body styles, like buses, is not shown.

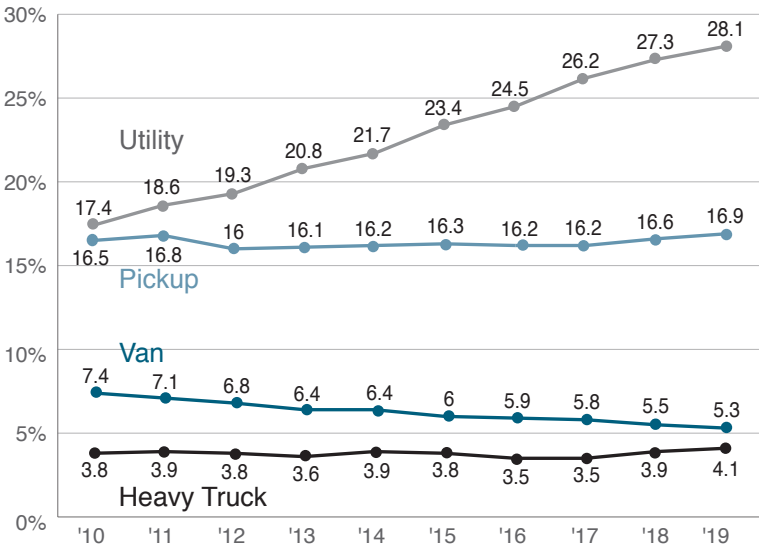
Passenger Cars in All Crashes

(Figure 29)



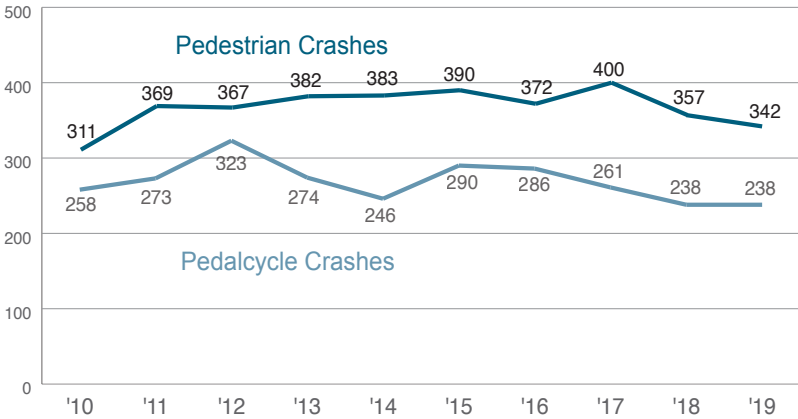
Truck Types in All Crashes

(Figure 30)

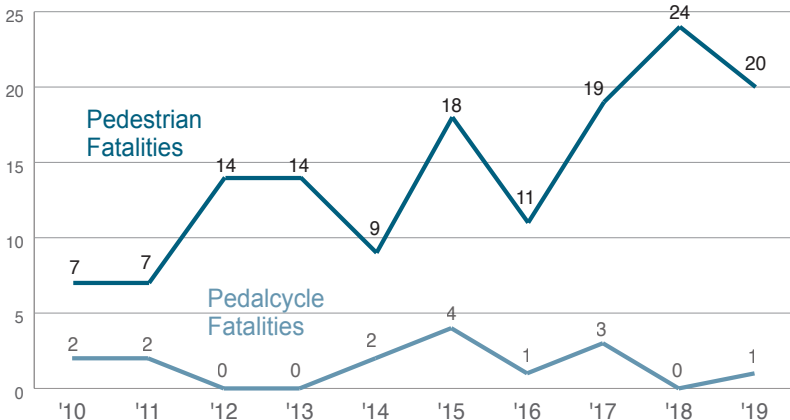


Pedestrian and Pedalcycle Crashes

Both pedestrian and pedalcyclist crashes remained steady from 2018 to 2019. Pedestrian crashes fell from 357 to 342 and pedalcyclist crashes stayed the same at 238. Pedestrian fatalities dropped to 20 in 2019, a decline from 23 in 2018 which was the highest number of fatalities in the past decade. There was one pedalcyclist fatality in 2019.



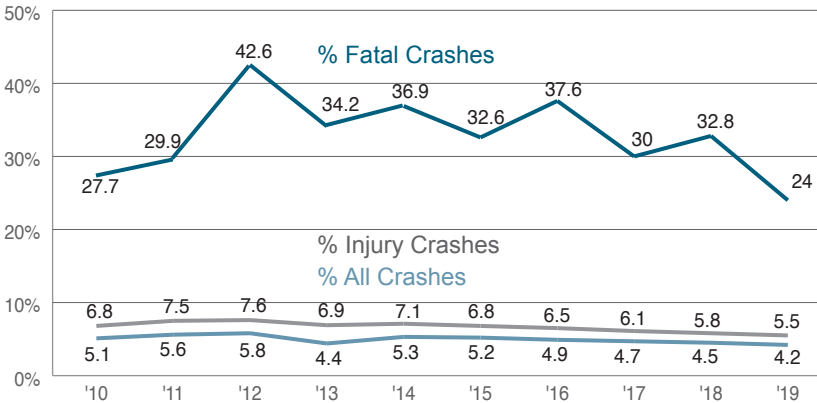
(Figure 31)



(Figure 32)

Alcohol Involvement in Crashes

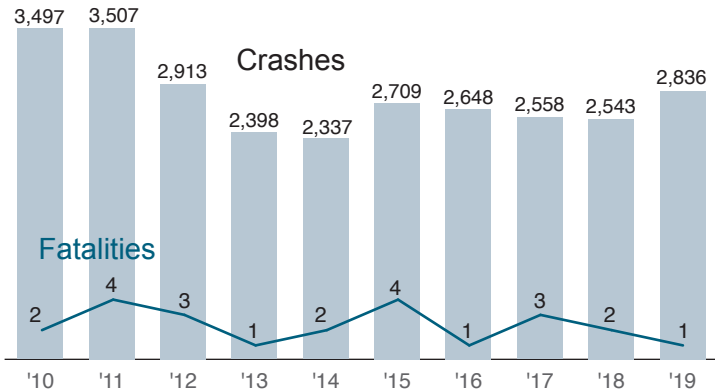
Figure 33 shows the percentage of alcohol involvement by crash severity type. Alcohol testing is mandatory in fatal crashes, but optional for injury and property damage only crashes. Thus the extent of alcohol's role in non-fatal crashes is likely understated. Alcohol involvement in fatal crashes decreased from 32.8% in 2018 to 24% in 2019.



(Figure 33)

Animal Crashes

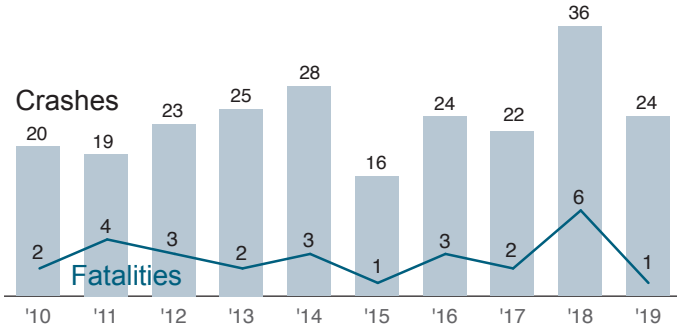
The number of crashes involving animals, over the last 10 years, is depicted in Figure 34. In 2019, animal crashes increased from 2,543 to 2,836. Deer are the most frequently involved animals in motor vehicle/animal crashes. Animal crashes resulted in one fatality during 2019.



(Figure 34)

Railroad Crashes

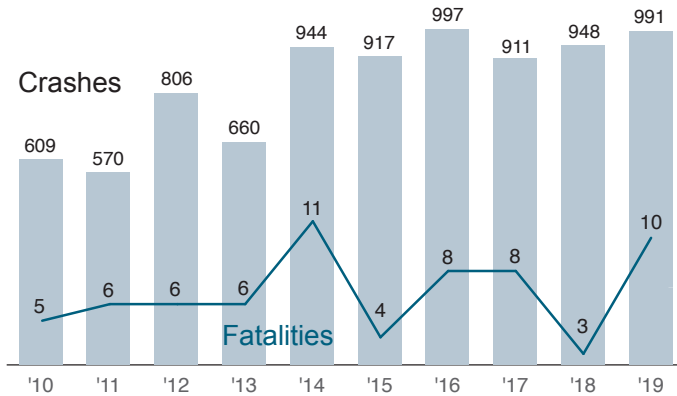
The number of motor vehicle/railroad crashes decreased in 2019, from 37 to 24. Railroad fatalities also decreased, from six to one.



(Figure 35)

Work Zone Crashes

Drivers need to be particularly alert when going through highway work zones. When a road is not in its usual condition due to construction, it is a good idea to slow down. Fines for speeding are double in work zones when workers are present. Work zone crashes are dangerous to both highway workers and motorists. Most work zone crashes are rear-end collisions, resulting from speeding or inattentive driving. Work zone crashes increased in 2019, from 948 to 991. In addition to the usual factors, the annual number of work zone crashes is also highly dependent on the amount and location of construction.



(Figure 36)



Additional information about the material contained in this publication may be obtained from:

Nebraska Department of Transportation
Traffic Engineering Division
Highway Safety/Accident Records Section
PO BOX 94759
LINCOLN NE 68509-4759
402-479-4645

This report is also available on the NDOT website
dot.nebraska.gov

**Nebraska Department of Transportation
Highway Safety/Accident Records Section
PO Box 94759
Lincoln NE 68509-4759
27-6900**