

National Highway Traffic Safety Administration

# TRAFFIC SAFETY FACTS

NHTSA

Research Note

DOT HS 813 060 December 2020

# **Overview of Motor Vehicle Crashes in 2019**

Earlier this year the National Highway Traffic Safety Administration released early estimates of motor vehicle traffic fatalities in 2019. More recently, NHTSA had a limited release of 2019 data in October 2020 through a research note, Preview of Motor Vehicle Traffic Fatalities in 2019, using the 2019 Fatality Analysis Reporting System (FARS) Annual Report File (ARF). This research note provides more data from the FARS 2019 ARF and includes estimates from the 2019 Crash Report Sampling System (CRSS) on all police-reported crashes and people injured. Refer to the end of this publication for more information on FARS and CRSS.

There were 36,096 people killed in motor vehicle traffic crashes on U.S. roadways during 2019. This represents a 2.0-percent decrease from 36,835 fatalities in 2018, or 739 fewer fatalities. The estimated number of people injured on our roadways increased in 2019 to 2.74 million, rising from 2.71 million in 2018, an increase of 1.1 percent. The estimated number of police-reported crashes increased from 6.74 million in 2018 to 6.76 million in 2019, a 0.3-percent increase.

- There were fewer fatalities in 2019 than 2018 in the following categories.
  - Passenger vehicle occupant fatalities (630 fewer fatalities, 2.8% decrease)
  - Passenger car occupant fatalities (649 fewer fatalities, 5.0% decrease)
  - Pickup occupant fatalities (73 fewer fatalities, 1.7% decrease)
  - Van occupant fatalities (64 fewer fatalities, 5.9% decrease)
  - Motorcyclist fatalities (24 fewer fatalities, 0.5% decrease)

- Pedestrian fatalities (169 fewer fatalities, 2.7% decrease)
- Pedalcyclist fatalities (25 fewer fatalities, 2.9% decrease)
- Passenger vehicle occupant fatalities in rollover crashes (275 fewer fatalities, 4.2% decrease)
- ◆ Fatalities in single-vehicle crashes (400 fewer fatalities, 2.0% decrease)
- ◆ Fatalities in multiple-vehicle crashes (339 fewer fatalities, 2.0% decrease)
- ◆ Urban fatalities (813 fewer fatalities, 4.0% decrease)
- ◆ Speeding-related fatalities (101 fewer fatalities, 1.1% decrease)
- ◆ Alcohol-impaired-driving fatalities (568 fewer fatalities, 5.3% decrease)
- Drowsy-driving crash fatalities (88 fewer fatalities, 11.2% decrease)
- Fatalities increased in 2019 compared to 2018 in the following categories.
  - Light-truck occupant fatalities (19 more fatalities, 0.2% increase)
  - ◆ SUV occupant fatalities (155 more fatalities, 3.4% increase)
  - ◆ Large-truck² occupant fatalities (2 more fatalities, 0.2% increase)
  - ◆ Rural fatalities (17 more fatalities, 0.1% increase)
  - ◆ Fatalities in distraction-affected crashes (284 more fatalities, 9.9% increase)

<sup>&</sup>lt;sup>1</sup> National Center for Statistics and Analysis. (2020, October). Preview of motor vehicle traffic fatalities in 2019 (Research Note. Report No. DOT HS 813 021). National Highway Traffic Safety Administration. Available at <a href="https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813021">https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/813021</a>

<sup>&</sup>lt;sup>2</sup> Large trucks include commercial and non-commercial trucks over 10,000 pounds.

- The estimated number of occupants and nonoccupants injured increased in most person-type categories from 2018 to 2019, except for passenger car occupants injured.
- Vehicle miles traveled (VMT) for 2019, reported through Federal Highway Administration (FHWA)
- September 2020 Traffic Volume Trends (TVT), increased by 0.8 percent from 2018.
- The fatality rate per 100 million VMT decreased to 1.10 in 2019, a 3.5-percent decrease from 1.14 in 2018.

Information in this research note is presented in the following sections.

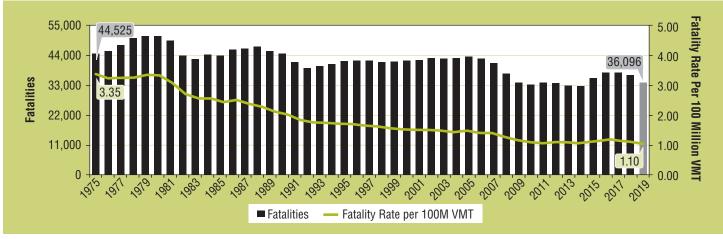
- Overall Trends
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#### **Overall Trends**

There were 36,096 motor vehicle traffic fatalities in the United States in 2019—739 fewer fatalities than the 36,835 fatalities in 2018, as shown in Figure 1. This is the

third consecutive year in which traffic fatalities have declined after reaching a recent high of 37,806 in 2016.

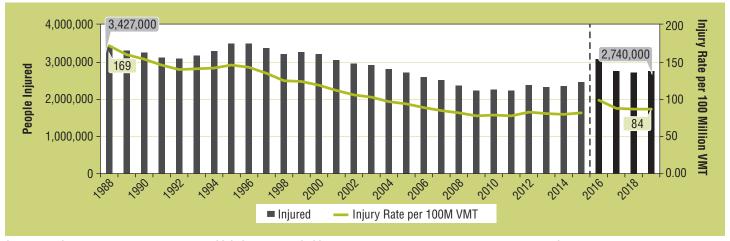
Figure 1 Fatalities and Fatality Rate per 100 Million VMT, 1975-2019



Sources: FARS 1975-2018 Final File, 2019 ARF; 1975-2018 VMT - FHWA's Annual Highway Statistics; 2019 VMT - FHWA's September 2020 TVT

In 2019 an estimated 2.74 million people were injured in motor vehicle traffic crashes, compared to 2.71 million in 2018 as shown in Figure 2, an increase of 1.1 percent. This figure contains data from the National Automotive Sampling System (NASS) General Estimates System (GES) for the years 1988 to 2015. The estimates from CRSS 2016-2019 and NASS GES 1988-2015 are not comparable as they are based on different sample designs.

Figure 2 **People Injured and Injury Rate per 100 Million VMT, 1988-2019** 



Sources: FARS 1988-2018 Final File, 2019 ARF; NASS GES 1988-2015; CRSS 2016-2019; 1988-2018 VMT – FHWA's Annual Highway Statistics; 2019 VMT – FHWA's September 2020 TVT

Note: CRSS estimates and NASS GES estimates are not comparable due to different sample designs. Refer to end of document for more information about CRSS.

#### Fatality and Injury Rates

The fatality rate per 100 million VMT decreased by 3.5 percent from 1.14 in 2018 to 1.10 in 2019, as shown in Table 1. The injury rate per 100 million VMT for 2019 remained unchanged at 84. The 2019 rate is based on the VMT estimate from the FHWA's September 2020 TVT. Overall, VMT during 2019 increased by 0.8 percent<sup>3</sup> as compared to the VMT in 2018—from 3,240 billion to 3,267 billion. The 2019 VMT estimate will be updated when the FHWA releases the 2019 Annual Highway Statistics report later this year. Figures 1 and 2 depict the fatality and injury rate trends over time.

#### Police-Reported Crashes

The estimated number of police-reported motor vehicle crashes in 2018 and 2019, by crash severity, is presented in Table 2. The total estimated number of police-reported traffic crashes increased by 0.3 percent from 2018 to 2019. This increase is driven by the 1.2-percent increase in non-fatal injury crashes. Property-damage-only crashes, crashes in which there were no injuries to occupants or nonoccupants involved, remained roughly the same between the two years. As previously discussed, the fatal crashes decreased by 2.0 percent.

Table 1
Fatality and Injury Rates per 100 Million VMT, 2018 and 2019

|               | 2018 | 2019 | Change | % Change |  |
|---------------|------|------|--------|----------|--|
| Fatality Rate | 1.14 | 1.10 | -0.04  | -3.5%    |  |
| Injury Rate   | 84   | 84   | 0      | 0.0%     |  |

Sources: FARS 2018 Final File, 2019 ARF; CRSS 2018-2019; 2018 VMT – FHWA'S Annual Highway Statistics; 2019 VMT – FHWA'S September 2020 TVT

Table 2 **Police-Reported Crashes in 2018 and 2019, by Crash Severity** 

| Crash Severity                    | everity 2018 |           | Change  | % Change |  |
|-----------------------------------|--------------|-----------|---------|----------|--|
| Total Crashes*                    | 6,735,000    | 6,756,000 | +21,000 | +0.3%    |  |
| Fatal Crashes                     | 33,919       | 33,244    | -675    | -2.0%    |  |
| Non-Fatal Crashes*                | 6,701,000    | 6,723,000 | +22,000 | +0.3%    |  |
| Injury Crashes*                   | 1,894,000    | 1,916,000 | +22,000 | +1.2%    |  |
| Property-Damage-<br>Only Crashes* | 4,807,000    | 4,806,000 | -1,000  | -0.0%    |  |

Sources: FARS 2018 Final File, 2019 ARF; CRSS 2018-2019

Notes: None of the estimates have statistically significant year-to-year difference at the  $\alpha$ =.05 level. Components may not add to totals due to independent rounding.

<sup>\*</sup>Percentage changes are based on rounded numbers.

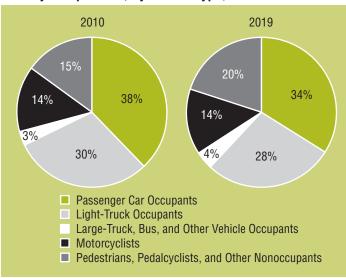
<sup>&</sup>lt;sup>3</sup> Due to 2019 VMT estimate changes from June 2020 TVT to September 2020 TVT, the percentage dropped from 0.9 percent as reported in the <u>Preview of Motor Vehicle Traffic Fatalities in 2019</u> document to 0.8 percent.

# People Killed and Injured, by Person Type

The comparison of fatality composition between 2010 and 2019 are shown in Figure 3. The biggest change is in nonoccupant fatalities, as a proportion of overall traffic fatalities, increasing from 15 percent in 2010 to 20 percent in 2019. Considering the same comparison between 2010 and 2019, the percentage of passenger car occupant fatalities decreased from 38 percent of all fatalities to 34

percent. The percentage of light-truck occupant fatalities decreased from 30 percent in 2010 to 28 percent in 2019. The proportion of motorcyclist fatalities remained at 14 percent in both years, and the proportion of large truck, bus, and other vehicle occupant fatalities increased from 3 percent to 4 percent.

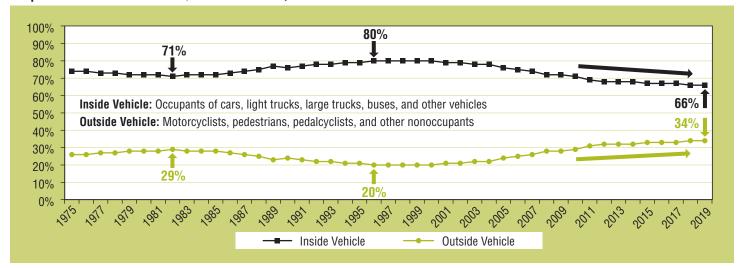
Figure 3
Fatality Composition, by Person Type, 2010 and 2019



The proportion of people killed "inside the vehicle" (occupants of passenger cars, light trucks, large trucks, buses, and other vehicles) has declined from a high of 80 percent in 1996 to 66 percent in 2019, as seen in Figure 4. Correspondingly, the proportion of people killed "outside the vehicle" (motorcyclists, pedestrians, pedalcyclists, and other nonoccupants) has increased from a low of 20 percent in 1996 to a high of 34 percent in 2019.

Source: FARS 2010 Final File, 2019 ARF

Figure 4
Proportion of Fatalities Inside/Outside Vehicle, 1975-2019



Source: FARS 1975-2018 Final File, 2019 ARF

Table 3 presents the change between 2018 and 2019 in the number of occupant and nonoccupant fatalities as well as the estimated number of occupants and nonoccupants injured. Overall, most categories of occupant and nonoccupant fatalities decreased from 2018 to 2019 except for light-truck occupant fatalities, SUV occupant fatalities, and large-truck occupant fatalities.

#### In summary, for 2019:

- The number of passenger vehicle occupant fatalities decreased by 630, a 2.8-percent decrease from 2018. Passenger vehicles include passenger cars and light trucks.
  - Passenger car occupant fatalities decreased by 649, a 5.0-percent decrease from 2018.
  - ◆ Light-truck occupant fatalities increased by 19, a 0.2-percent increase from 2018.
    - Of the light-truck categories (SUVs, pickups, and vans), SUV occupant fatalities increased by 155, a 3.4-percent increase from 2018.
    - Pickup and van occupant fatalities decreased by 73 and 64 from 2018, respectively.
- Large-truck occupant fatalities increased by 2, a 0.2-percent increase from 2018.
- Motorcyclist fatalities decreased by 24, a 0.5-percent decrease from 2018.
- Pedestrian fatalities decreased by 169, a 2.7-percent decrease from 2018.
- Pedalcyclist fatalities decreased by 25, a 2.9-percent decrease from 2018.

The estimated number of people injured in 2019 increased by 30,000 to 2.74 million, a 1.1-percent increase from the 2.71 million people injured in 2018. Most categories of occupants and nonoccupants injured increased from 2018 to 2019, except for the estimated number of passenger car occupants injured. In summary in 2019:

- Passenger vehicle occupants injured increased by 16,000, a 0.7-percent increase from 2018.
  - ◆ Passenger car occupants injured decreased by 13,000, a 0.9-percent decrease from 2018.
  - Light-truck occupants injured increased by 29,000, a 3.1-percent increase from 2018. Of the light-truck categories, SUV occupants injured increased the most by 26,000, a 4.9-percent increase from 2018.
- Large-truck occupants injured increased by 7,000, an 18-percent increase from 2018.
- Motorcyclists injured increased by 2,000, a 2.4-percent increase from 2018.
- Pedestrians injured increased by 1,000, a 1.3-percent increase from 2018.
- Pedalcyclists injured increased by 2,000, a 4.3-percent increase from 2018.

Table 3
Occupants and Nonoccupants Killed and Injured in Traffic Crashes, 2018 and 2019

|   |        | Kil    | led    |             | Injured**** |           |         |          |  |  |  |
|---|--------|--------|--------|-------------|-------------|-----------|---------|----------|--|--|--|
| Description   | 2018   | 2019   | Change | % Change    | 2018        | 2019      | Change  | % Change |  |  |  |
| Total   | 36,835 | 36,096 | -739   | -2.0%       | 2,710,000   | 2,740,000 | +30,000 | +1.1%    |  |  |  |
| Occupants   |        |        |        |             |             |           |         |          |  |  |  |
| Total Occupants* 24,332 23,744 -588 -2.4% 2,492,000 2,516,000 +24,000 +1.0% |        |        |        |             |             |           |         |          |  |  |  |
| Passenger Vehicles  | 22,845 | 22,215 | -630   | -2.8%       | 2,432,000   | 2,448,000 | +16,000 | +0.7%    |  |  |  |
| Passenger Cars  | 12,888 | 12,239 | -649   | -5.0%       | 1,511,000   | 1,498,000 | -13,000 | -0.9%    |  |  |  |
| Light Trucks**  | 9,957  | 9,976  | +19    | +0.2%       | 921,000     | 950,000   | +29,000 | +3.1%    |  |  |  |
| SUVs  | 4,554  | 4,709  | +155   | +3.4%       | 530,000     | 556,000   | +26,000 | +4.9%    |  |  |  |
| Pickups   | 4,267  | 4,194  | -73    | -1.7%       | 265,000     | 267,000   | +2,000  | +0.8%    |  |  |  |
| Vans  | 1,081  | 1,017  | -64    | -5.9%       | 122,000     | 123,000   | +1,000  | +0.8%    |  |  |  |
| Large Trucks  | 890    | 892    | +2     | +0.2%       | 39,000      | 46,000    | +7,000  | +18%     |  |  |  |
|   |        |        | Mo     | torcyclists |             |           |         |          |  |  |  |
| Motorcyclists   | 5,038  | 5,014  | -24    | -0.5%       | 82,000      | 84,000    | +2,000  | +2.4%    |  |  |  |
| Nonoccupants  |        |        |        |             |             |           |         |          |  |  |  |
| Total Nonoccupants***   | 7,465  | 7,338  | -127   | -1.7%       | 137,000     | 140,000   | +3,000  | +2.2%    |  |  |  |
| Pedestrians   | 6,374  | 6,205  | -169   | -2.7%       | 75,000      | 76,000    | +1,000  | +1.3%    |  |  |  |
| Pedalcyclists   | 871    | 846    | -25    | -2.9%       | 47,000      | 49,000    | +2,000  | +4.3%    |  |  |  |

Sources: FARS 2018 Final File, 2019 ARF; CRSS 2018-2019

Notes: None of the injured estimates have statistically significant year-to-year difference at the  $\alpha$ =.05 level. Components may not add to totals due to independent rounding.

<sup>\*</sup>Includes occupants of buses and other/unknown vehicle types.

<sup>\*\*</sup>Includes occupants of other/unknown light-truck vehicle types.

<sup>\*\*\*</sup>Includes other/unknown nonoccupants.

<sup>\*\*\*\*</sup>Percentage changes are based on rounded numbers.

# People Killed and Injured in Crashes Involving Large Trucks

Table 4 displays the number of people killed and the estimated number of people injured in crashes involving large trucks from 2018 to 2019. Large trucks include commercial and non-commercial trucks with GVWR (gross vehicle weight rating) of over 10,000 pounds.

People killed in crashes involving large trucks was similar from 2018 to 2019. Among fatalities in crashes involving large trucks in 2019:

- Large-truck occupant fatalities in multiple-vehicle crashes increased by 45, a 13-percent increase from 2018.
- Nonoccupants killed increased by 16, a 2.9-percent increase from 2018.
- Occupants of other vehicles killed decreased by 19, a 0.5-percent decrease from 2018.

■ Large-truck occupant fatalities in single-vehicle crashes decreased by 43, an 8.0-percent decrease from 2018.

The estimated number of people injured in crashes involving large trucks increased by 5.3 percent from 2018 to 2019. Among the estimated number of people injured in crashes involving large trucks in 2019:

- Nonoccupants injured increased by 33 percent from 2018.
- Large-truck occupants injured in single-vehicle crashes increased by 15 percent from 2018.
- Large-truck occupants injured in multiple-vehicle crashes increased by 15 percent from 2018.
- Occupants of other vehicles who were injured increased by 1.9 percent from 2018.

Table 4
People Killed and Injured in Crashes Involving Large Trucks, by Person Type, 2018 and 2019

|                             | Killed |       |        |          | Injured* |         |        |          |  |
|-----------------------------|--------|-------|--------|----------|----------|---------|--------|----------|--|
| Person Type                 | 2018   | 2019  | Change | % Change | 2018     | 2019    | Change | % Change |  |
| Total                       | 5,006  | 5,005 | -1     | -0.0%    | 151,000  | 159,000 | +8,000 | +5.3%    |  |
| Large-Truck Occupants       | 890    | 892   | +2     | +0.2%    | 39,000   | 46,000  | +7,000 | +18%     |  |
| In Single-Vehicle Crashes   | 538    | 495   | -43    | -8.0%    | 13,000   | 15,000  | +2,000 | +15%     |  |
| In Multiple-vehicle Crashes | 352    | 397   | +45    | +13%     | 26,000   | 30,000  | +4,000 | +15%     |  |
| Other People                | 4,116  | 4,113 | -3     | -0.1%    | 112,000  | 114,000 | +2,000 | +1.8%    |  |
| Other Vehicle Occupants     | 3,563  | 3,544 | -19    | -0.5%    | 108,000  | 110,000 | +2,000 | +1.9%    |  |
| Nonoccupants                | 553    | 569   | +16    | +2.9%    | 3,000    | 4,000   | +1,000 | +33%     |  |

Sources: FARS 2018 Final File, 2019 ARF; CRSS 2018-2019

\*Percentage changes are based on rounded numbers.

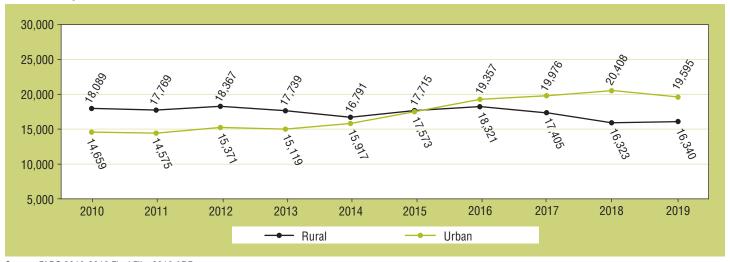
Notes: None of the injured estimates have statistically significant year-to-year difference at the  $\alpha$ =.05 level. Components may not add to totals due to independent rounding.

# **Fatalities by Land Use**

As shown in Figure 5, the number of urban fatalities has been larger than the number of rural fatalities since

2016. From 2018 to 2019, urban fatalities decreased by 4.0 percent and rural fatalities increased by 0.1 percent.

Figure 5 Fatalities by Land Use, 2010-2019



Source: FARS 2010-2018 Final File, 2019 ARF Note: Excludes unknown land use.

Table 5 compares rural and urban characteristics from 2010 to 2019. In summary:

- According to the Census Bureau, urban population increased by 13 percent from 2009 to 2018 (2019 rural/ urban population estimates are not yet available); rural population decreased by 13 percent.
- Urban VMT increased by 15 percent since 2010; rural VMT increased by 0.5 percent.
- Urban fatalities increased by 34 percent since 2010; rural fatalities declined by 9.7 percent.
- Urban fatality rate per 100 million VMT increased by 16 percent from 0.74 in 2010 to 0.86 in 2019; rural fatality rate decreased by 10 percent from 1.84 in 2010 to 1.65 in 2019.

- Passenger vehicle occupant fatalities in urban areas increased by 20 percent since 2010; they decreased by 12 percent in rural areas.
- Motorcyclist fatalities in urban areas increased by 36 percent since 2010; they decreased by 14 percent in rural areas.
- Pedestrian fatalities in urban areas increased by 62 percent since 2010; they decreased by 4.8 percent in rural areas.
- Pedalcyclist fatalities in urban areas increased by 49 percent since 2010; they increased by 4.6 percent in rural areas.

Table 5 **Ten-Year Comparison of Land Use Characteristics** 

| Category                              | Urban Percentage Change (2010-2019) | Rural Percentage Change (2010-2019) |  |  |
|---------------------------------------|-------------------------------------|-------------------------------------|--|--|
| Population*                           | +13%                                | -13%                                |  |  |
| VMT                                   | +15%                                | +0.5%                               |  |  |
| Total Fatalities                      | +34%                                | -9.7%                               |  |  |
| Passenger Vehicle Occupant Fatalities | +20%                                | -12%                                |  |  |
| Motorcyclist Fatalities               | +36%                                | -14%                                |  |  |
| Pedestrian Fatalities                 | +62%                                | -4.8%                               |  |  |
| Pedalcyclist Fatalities               | +49%                                | +4.6%                               |  |  |

Sources: Population – Census Bureau; VMT – FHWA; FARS 2010 Final File, 2019 ARF

<sup>\*</sup>Population percentage change from 2009 to 2018 as 2019 rural/urban population estimates are not yet available.

# **Restraint Use and Time of Day**

According to NHTSA's National Occupant Protection Use Survey (NOPUS),<sup>4</sup> the estimated passenger vehicle front-seat belt use for adults increased from 89.6 percent in 2018 to 90.7 percent in 2019, but the change was not statistically significant at the .05 level.

The percentages reported in this section are all based on known restraint use (restraint use was unknown for 8.7 percent of passenger vehicle occupant fatalities in 2019). Among passenger vehicle occupants killed in 2019, almost half (47%) were unrestrained (Table 6). Thirty-nine percent of those killed during the daytime in 2019 were unrestrained as compared to 61 percent

who were restrained. Fifty-five percent of those killed during the nighttime in 2019 were unrestrained compared to 45 percent who were restrained.

For those passenger vehicle occupants who survived fatal crashes in 2019, only 14 percent were unrestrained compared to 47 percent of those who died. During the daytime, 12 percent of passenger vehicle occupants who survived fatal crashes were unrestrained, thus 88 percent of the survivors were restrained. Restraint use among the survivors of fatal nighttime crashes differed slightly compared to daytime: 16 percent were unrestrained and 84 percent were restrained.

Table 6
Passenger Vehicle Occupants Involved in Fatal Crashes, by Restraint Use, Survival Status, and Time of Day, 2018 and 2019

|              |        |                 | Passenger Ve       | hicle Occupants Kill | ed                                       |      |  |
|--------------|--------|-----------------|--------------------|----------------------|--|------|--|
|              |        |                 |                    |                      | Restraint Use Percent Based on Known Use |      |  |
|              | 2018   | 2019            | Change             | % Change             | 2018                                     | 2019 |  |
|              |        | Passe           | nger Vehicle Occup | ants Killed          | <u> </u>                                 |      |  |
| Total        | 22,845 | 22,215          | -630               | -2.8%                |  |      |  |
| Restrained   | 11,055 | 10,815          | -240               | -2.2%                | 53%                                      | 53%  |  |
| Unrestrained | 9,845  | 9,466           | -379               | -3.8%                | 47%                                      | 47%  |  |
| Unknown      | 1,945  | 1,934           | -11                | -0.6%                |  |      |  |
|              |        |                 | Time of Day        | •                    |  |      |  |
| Daytime      | 12,004 | 11,751          | -253               | -2.1%                |  |      |  |
| Restrained   | 6,788  | 6,629           | -159               | -2.3%                | 61%                                      | 61%  |  |
| Unrestrained | 4,412  | 4,288           | -124               | -2.8%                | 39%                                      | 39%  |  |
| Unknown      | 804    | 834             | +30                | +3.7%                |  |      |  |
| Nighttime    | 10,698 | 10,277          | -421               | -3.9%                |  |      |  |
| Restrained   | 4,227  | 4,124           | -103               | -2.4%                | 44%                                      | 45%  |  |
| Unrestrained | 5,347  | 5,083           | -264               | -4.9%                | 56%                                      | 55%  |  |
| Unknown      | 1,124  | 1,070           | -54                | -4.8%                |  |      |  |
|              |        | Passenger Vehic | le Occupants Who S | urvived Fatal Crash  | es                                       |      |  |
| Total        | 38,912 | 37,792          | -1,120             | -2.9%                |  |      |  |
| Restrained   | 30,697 | 29,517          | -1,180             | -3.8%                | 87%                                      | 86%  |  |
| Unrestrained | 4,668  | 4,784           | +116               | +2.5%                | 13%                                      | 14%  |  |
| Unknown      | 3,547  | 3,491           | -56                | -1.6%                |  |      |  |
|              |        |                 | Time of Day        |                      |  |      |  |
| Daytime      | 19,523 | 19,133          | -390               | -2.0%                |  |      |  |
| Restrained   | 16,127 | 15,626          | -501               | -3.1%                | 88%                                      | 88%  |  |
| Unrestrained | 2,114  | 2,123           | +9                 | +0.4%                | 12%                                      | 12%  |  |
| Unknown      | 1,282  | 1,384           | +102               | +8.0%                |  |      |  |
| Nighttime    | 19,333 | 18,597          | -736               | -3.8%                |  |      |  |
| Restrained   | 14,547 | 13,858          | -689               | -4.7%                | 85%                                      | 84%  |  |
| Unrestrained | 2,544  | 2,654           | +110               | +4.3%                | 15%                                      | 16%  |  |
| Unknown      | 2,242  | 2,085           | -157               | -7.0%                |  |      |  |

Source: FARS 2018 Final File, 2019 ARF

Note: Daytime and nighttime totals do not add up to total killed or total survived. Total includes unknown time of day.

<sup>&</sup>lt;sup>4</sup> National Center for Statistics and Analysis. (2019, December). Seat belt use in 2019—Overall results (Traffic Safety Facts Research Note. Report No. DOT HS 812 875). National Highway Traffic Safety Administration. Available at <a href="https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812875">https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812875</a>

#### **Additional Facts**

The number of fatalities in distraction-affected crashes, i.e., crashes involving at least one driver who was distracted, was 3,142 or 8.7 percent of all fatalities in 2019. This represents a 9.9-percent increase from 2,858 in 2018.

The number of fatalities involving a drowsy driver was 697 or 1.9 percent of total fatalities in 2019. This represents a 11.2-percent decrease from 785 in 2018.

Table 7 below shows the 1-year and 10-year trends of more older drivers being involved in fatal crashes than younger drivers in general. The 10-year trend is similar when compared with population estimates from the Census Bureau and licensed driver data from the FHWA. The 65+ age group has the largest percent increases compared to the other age groups.

Table 7

Comparison of 1-Year and 10-Year Percentage Change of Drivers Involved in Fatal Crashes With 10-Year Percentage Change of Population Estimate and 10-Year Percentage Change of Licensed Driver Data, by Age Group

|           | Percentage Change of Drive   | ers Involved in Fatal Crashes | 10-Year Percentage Change              | 10-Year Percentage Change of                            |  |
|-----------|--|-------------------------------|--|---|--|
| Age Group | 1-Year Comparison 10-Year Comparison Age Group (2018-2019) (2010-2019) |                               | of Population Estimates<br>(2010-2019) | Licensed Driver Data<br>(2009-2018, 2019 not available) |  |
| 16–24     | -5.0%  | -6.9%                         | -2.4%                                  | -2.7%   |  |
| 25–44     | -1.2%  | +18.3%                        | +6.6%                                  | +4.5%   |  |
| 45–64     | -3.7%  | +12.2%                        | +1.9%                                  | +4.5%   |  |
| 65+       | +3.6%  | +36.5%                        | +33.5%                                 | +37.4%  |  |
| Total*    | -1.9%  | +14.2%                        | +6.1%                                  | +8.6%   |  |

Sources: FARS 2010 and 2018 Final File, 2019 ARF; Population - Census Bureau; and Licensed Drivers - FHWA

# Alcohol-Impaired Driving

Estimates of alcohol-impaired driving are generated using blood alcohol concentration (BAC) values reported to FARS and BAC values imputed when they are not reported. An alcohol-impaired-driving fatality is defined as a fatality in a crash involving a driver or motorcycle rider (operator) with a BAC of .08 grams per deciliter (g/dL) or greater.

Alcohol-impaired-driving fatalities decreased by 5.3 percent from 2018 to 2019 (Table 8), accounting for 28 percent of 2019 overall fatalities. This 28 percent of overall fatalities is the lowest percentage since 1982, when NHTSA started reporting alcohol data.

Table 8
Total and Alcohol-Impaired-Driving\* Fatalities, 2018 and 2019

|   | 2018   | 2019   | Change | % Change |
|---|--------|--------|--------|----------|
| Total Fatalities                        | 36,835 | 36,096 | -739   | -2.0%    |
| Alcohol-Impaired-<br>Driving Fatalities | 10,710 | 10,142 | -568   | -5.3%    |

Source: FARS 2018 Final File, 2019 ARF

As shown in Table 9, drivers of all vehicle types saw declines in the number of alcohol-impaired drivers involved in fatal crashes from 2018 to 2019, except for motorcycle riders which increased by 15 percent. Large-truck drivers had the largest percent decrease in alcohol-impaired drivers involved in fatal crashes from 2018 to 2019, dropping 28 percent. Passenger car drivers had the second largest percent decrease (-11%).

Table 9 **Alcohol-Impaired\* Drivers Involved in Fatal Crashes, by Vehicle Type, 2018 and 2019** 

| Vehicle Type          | 2018  | 2019  | Change | % Change |
|-----------------------|-------|-------|--------|----------|
| Passenger Cars        | 4,479 | 3,975 | -504   | -11%     |
| Light Truck – SUVs    | 1,680 | 1,637 | -43    | -2.6%    |
| Light Truck – Pickups | 1,831 | 1,828 | -3     | -0.2%    |
| Light Truck – Vans    | 252   | 238   | -14    | -5.6%    |
| Motorcycles           | 1,278 | 1,466 | +188   | +15%     |
| Large Trucks          | 136   | 98    | -38    | -28%     |

Source: FARS 2018 Final File, 2019 ARF

<sup>\*</sup>Includes those who were under 16 years old.

<sup>\*</sup>See definition in text.

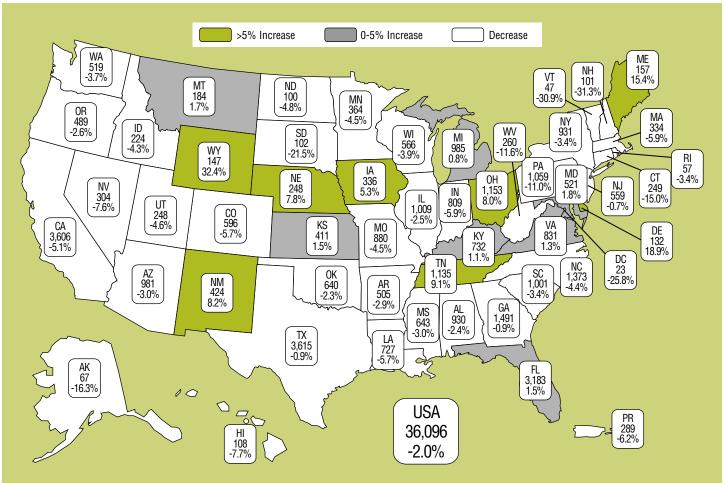
<sup>\*</sup> See definition in text.

#### **State Data**

Figure 6 displays a map of 2019 traffic fatalities by State and the percentage changes from 2018. Figure 7 con-

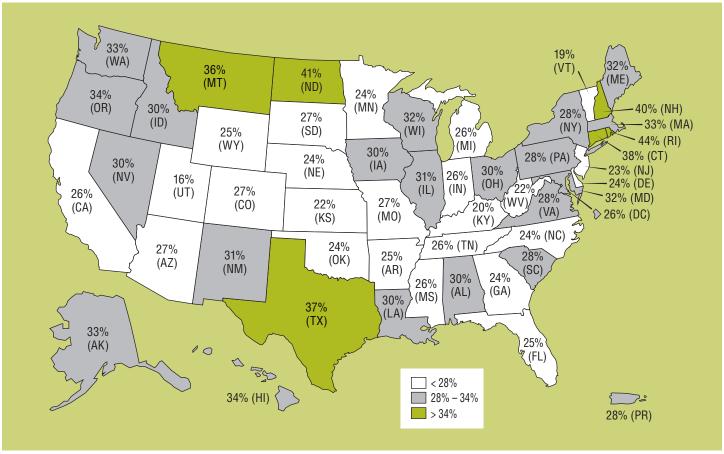
tains a color-coded map of the percentage of alcoholimpaired-driving fatalities by State in 2019.

Figure 6 **2019 Traffic Fatalities and Percentage Changes From 2018, by State** 



Source: FARS 2018 Final File, 2019 ARF Note: Puerto Rico is not included in the USA total.

Figure 7 **Alcohol-Impaired-Driving Fatalities as a Percentage of Total Fatalities, by State, 2019** 

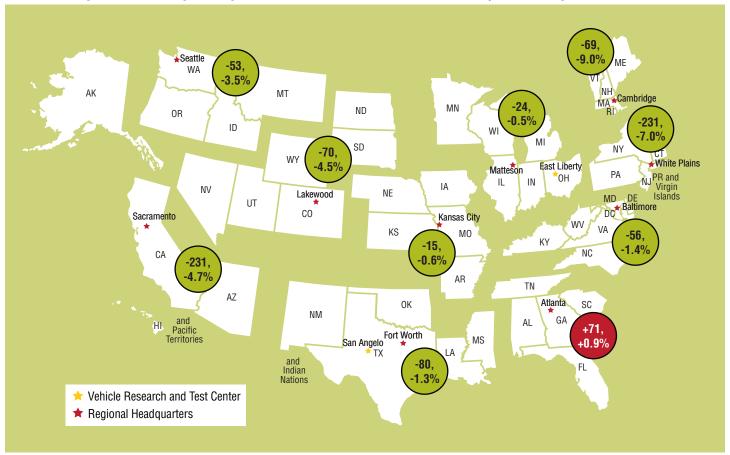


Source: FARS 2019 ARF

Figure 8 shows 10 different NHTSA Regions along with the number change in traffic fatalities and the percentage change from 2018 to 2019 for each Region. Each NHTSA Region has a regional headquarter with a red star of its location. Only the Southeast Region (Alabama, Florida, Georgia, Tennessee, and South Carolina) increased by 71 more fatalities in 2019 from 2018; all other NHTSA Regions had decreases in fatalities.

Figure 8

Number Change and Percentage Change in Traffic Fatalities From 2018 to 2019, by NHTSA Region



Source: FARS 2018 Final File, 2019 ARF

Table 10 presents the total number of motor vehicle traffic crash fatalities and the number of alcohol-impaired-driving fatalities for 2018 and 2019, the change in the number of fatalities, and the percentage change for each State, the District of Columbia, and Puerto Rico. Thirty-five States, the District of Columbia, and Puerto Rico had reductions in the number of fatalities. In 2019 the largest reduction was in California, with 192 fewer fatalities. Fifteen States had more fatalities in 2019 than in 2018. Tennessee had the largest increase with 95 additional fatalities.

Nationwide, more than one-quarter (28%) of the total fatalities were in alcohol-impaired-driving crashes.

Thirty States, the District of Columbia, and Puerto Rico saw declines in the number of alcohol-impaired-driving fatalities from 2018 to 2019. California had the largest decrease, with 167 fewer lives lost in alcohol-impaired-driving crashes in 2019. Wyoming was the only State with no change in the number of alcohol-impaired-driving fatalities from 2018 to 2019. Nineteen States saw increases in the number of alcohol-impaired-driving fatalities from 2018 to 2019, with the largest increase of 54 fatalities in Ohio followed by 47 in Tennessee.

Additional State-level data is available at NCSA's State Traffic Safety Information (STSI) website at <a href="https://cdan.nhtsa.gov/stsi.htm">https://cdan.nhtsa.gov/stsi.htm</a>.

Table 10 **Total and Alcohol-Impaired-Driving Fatalities, by State, 2018 and 2019** 

| 2018                      |            |              |              |            | 2019        |            | 2018 to 2019 Change |                  |                      |                                     |  |
|---------------------------|------------|--------------|--------------|------------|-------------|------------|---------------------|------------------|----------------------|-------------------------------------|--|
|                           |            | Alcohol-Impa |              |            | Alcohol-Imp |            |                     |                  |                      | ohol-Impaired-Driving<br>Fatalities |  |
|                           | Total      | Fatal        |              | Total      |             | lities     |                     | atalities        |                      | i e                                 |  |
| State                     | Fatalities | Number       | Percent      | Fatalities | Number      | Percent    | Change              | % Change         | Change               | % Change                            |  |
| Alabama                   | 953        | 249          | 26%          | 930        | 277         | 30%        | -23                 | -2.4%            | +28                  | +11.2%                              |  |
| Alaska                    | 80         | 27           | 34%          | 67         | 22          | 33%        | -13                 | -16.3%           | -5                   | -18.5%                              |  |
| Arizona                   | 1,011      | 298          | 29%          | 981        | 260         | 27%        | -30                 | -3.0%            | -38                  | -12.8%                              |  |
| Arkansas                  | 520        | 135          | 26%          | 505        | 128         | 25%        | -15                 | -2.9%            | -7                   | -5.2%                               |  |
| California                | 3,798      | 1,116        | 29%          | 3,606      | 949         | 26%        | -192                | -5.1%            | -167                 | -15.0%                              |  |
| Colorado                  | 632        | 192          | 30%          | 596        | 164         | 27%        | -36                 | -5.7%            | -28                  | -14.6%                              |  |
| Connecticut               | 293<br>111 | 120          | 41%<br>25%   | 249<br>132 | 94          | 38%        | -44<br>+21          | -15.0%           | -26<br>+3            | -21.7%                              |  |
| Delaware Dist of Columbia | 31         | 28<br>8      | 26%          | 23         | 6           | 24%<br>26% | <u>+21</u><br>-8    | +18.9%<br>-25.8% | -2                   | +10.7%<br>-25.0%                    |  |
| Florida                   | 3,135      | 822          | 26%          | 3,183      | 790         | 25%        | -o<br>+48           | +1.5%            | -32                  | -3.9%                               |  |
| Georgia                   | 1,505      | 379          | 25%          | 1,491      | 353         | 24%        | +40<br>-14          | -0.9%            | -32                  | -6.9%                               |  |
| Hawaii                    | 117        | 38           | 32%          | 1,491      | 36          | 34%        | -14<br>-9           | -7.7%            | -20                  | -5.3%                               |  |
| Idaho                     | 234        | 56           | 24%          | 224        | 68          | 30%        | -10                 | -4.3%            | +12                  | +21.4%                              |  |
| Illinois                  | 1,035      | 325          | 31%          | 1,009      | 314         | 31%        | -26                 | -2.5%            | -11                  | -3.4%                               |  |
| Indiana                   | 860        | 214          | 25%          | 809        | 210         | 26%        | - <u>5</u> 1        | -5.9%            | -4                   | -1.9%                               |  |
| Iowa                      | 319        | 90           | 28%          | 336        | 100         | 30%        | +17                 | +5.3%            | +10                  | +11.1%                              |  |
| Kansas                    | 405        | 81           | 20%          | 411        | 91          | 22%        | +6                  | +1.5%            | +10                  | +12.3%                              |  |
| Kentucky                  | 724        | 136          | 19%          | 732        | 150         | 20%        | +8                  | +1.1%            | +14                  | +10.3%                              |  |
| Louisiana                 | 771        | 221          | 29%          | 727        | 220         | 30%        | -44                 | -5.7%            | -1                   | -0.5%                               |  |
| Maine                     | 136        | 39           | 28%          | 157        | 50          | 32%        | +21                 | +15.4%           | +11                  | +28.2%                              |  |
| Maryland                  | 512        | 129          | 25%          | 521        | 167         | 32%        | +9                  | +1.8%            | +38                  | +29.5%                              |  |
| Massachusetts             | 355        | 122          | 34%          | 334        | 110         | 33%        | -21                 | -5.9%            | -12                  | -9.8%                               |  |
| Michigan                  | 977        | 283          | 29%          | 985        | 261         | 26%        | +8                  | +0.8%            | -22                  | -7.8%                               |  |
| Minnesota                 | 381        | 104          | 27%          | 364        | 86          | 24%        | -17                 | -4.5%            | -18                  | -17.3%                              |  |
| Mississippi               | 663        | 166          | 25%          | 643        | 170         | 26%        | -20                 | -3.0%            | +4                   | +2.4%                               |  |
| Missouri                  | 921        | 245          | 27%          | 880        | 235         | 27%        | -41                 | -4.5%            | -10                  | -4.1%                               |  |
| Montana                   | 181        | 80           | 44%          | 184        | 66          | 36%        | +3                  | +1.7%            | -14                  | -17.5%                              |  |
| Nebraska                  | 230        | 68           | 30%          | 248        | 58          | 24%        | +18                 | +7.8%            | -10                  | -14.7%                              |  |
| Nevada                    | 329        | 88           | 27%          | 304        | 92          | 30%        | -25                 | -7.6%            | +4                   | +4.5%                               |  |
| New Hampshire             | 147        | 46           | 31%          | 101        | 40          | 40%        | -46                 | -31.3%           | -6                   | -13.0%                              |  |
| New Jersey                | 563        | 127          | 23%          | 559        | 129         | 23%        | -4                  | -0.7%            | +2                   | +1.6%                               |  |
| New Mexico                | 392        | 113          | 29%          | 424        | 129         | 31%        | +32                 | +8.2%            | +16                  | +14.2%                              |  |
| New York                  | 964        | 325          | 34%          | 931        | 262         | 28%        | -33                 | -3.4%            | -63                  | -19.4%                              |  |
| North Carolina            | 1,436      | 419          | 29%          | 1,373      | 323         | 24%        | -63                 | -4.4%            | -96                  | -22.9%                              |  |
| North Dakota              | 105        | 28           | 26%          | 100        | 41          | 41%        | -5                  | -4.8%            | +13                  | +46.4%                              |  |
| Ohio                      | 1,068      | 297          | 28%          | 1,153      | 351         | 30%        | +85                 | +8.0%            | +54                  | +18.2%                              |  |
| Oklahoma                  | 655        | 147          | 22%          | 640        | 154         | 24%        | -15                 | -2.3%            | +7                   | +4.8%                               |  |
| Oregon                    | 502        | 157          | 31%          | 489        | 167         | 34%        | -13                 | -2.6%            | +10                  | +6.4%                               |  |
| Pennsylvania              | 1,190      | 339          | 28%          | 1,059      | 298         | 28%        | -131                | -11.0%           | -41                  | -12.1%                              |  |
| Rhode Island              | 59         | 22           | 38%          | 57         | 25          | 44%        | -2                  | -3.4%            | +3                   | +13.6%                              |  |
| South Carolina            | 1,036      | 290          | 28%          | 1,001      | 285         | 28%        | -35                 | -3.4%            | -5                   | -1.7%                               |  |
| South Dakota              | 130        | 46           | 35%          | 102        | 28          | 27%        | -28                 | -21.5%           | -18                  | -39.1%                              |  |
| Tennessee                 | 1,040      | 243          | 23%          | 1,135      | 290         | 26%        | +95                 | +9.1%            | +47                  | +19.3%                              |  |
| Texas                     | 3,648      | 1,471        | 40%          | 3,615      | 1,332       | 37%        | -33                 | -0.9%            | -139                 | -9.4%                               |  |
| Utah                      | 260        | 62           | 24%          | 248        | 39          | 16%        | -12<br>21           | -4.6%            | -23                  | -37.1%                              |  |
| Virginia Virginia         | 68<br>820  | 15<br>245    | 22%<br>30%   | 47<br>831  | 236         | 19%<br>28% | <u>-21</u>          | -30.9%<br>+1.3%  | -6<br>-9             | -40.0%                              |  |
| Virginia                  | 539        | 165          | 31%          | 519        | 172         | 33%        | +11<br>-20          | -3.7%            | - <del>9</del><br>+7 | -3.7%<br>+4.2%                      |  |
| Washington West Virginia  | 294        | 58           | 20%          | 260        | 56          | 22%        | -20<br>-34          | -3.7%            | -2                   | -3.4%                               |  |
| Wisconsin                 | 589        | 206          | 35%          | 566        | 183         | 32%        | -34<br>-23          | -3.9%            | -23                  | -3.4%                               |  |
| Wyoming                   | 111        | 36           | 32%          | 147        | 36          | 25%        | +36                 | +32.4%           | 0                    | 0.0%                                |  |
| National                  | 36,835     | 10,710       | 29%          | 36,096     | 10,142      | 28%        | - <b>739</b>        | <b>-2.0%</b>     | -568                 | - <b>5.3</b> %                      |  |
| HULIVIIAI                 | 00,000     | 10,710       | <b>LJ</b> /0 | 00,030     | 10,142      | 28%        | -103                | -6.2%            | 000                  | U.U /0                              |  |

Source: FARS 2018 Final File, 2019 ARF

Notes: Percentages of alcohol-impaired-driving fatalities are computed based on unrounded estimates. Year-to-year percentage changes in alcohol-impaired-driving fatalities are based on rounded estimates.

# **Fatality Analysis Reporting System**

The FARS contains data on every fatal motor vehicle traffic crash within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a traffic crash must involve a motor vehicle traveling on a public trafficway that results in the death of a vehicle occupant or a nonoccupant within 30 days of the crash. The Annual Report File (ARF) is the FARS data file associated with the most recent available year, which is subject to change when it is finalized the following year to the final version known as the Final File. The additional time between the ARF and the Final File provides the opportunity for submission of important variable data requiring outside sources, which may lead to changes in the final counts. More information on FARS can

be found at <a href="https://www.nhtsa.gov/crash-data-systems/gatality-analysis-reporting-system">www.nhtsa.gov/crash-data-systems/gatality-analysis-reporting-system</a>.

The updated final counts for the previous data year will be reflected with the release of the recent year's ARF. For example, along with the release of the 2019 ARF, the 2018 Final File was released to replace the 2018 ARF. The final fatality count in motor vehicle traffic crashes for 2018 was 36,835, which was updated from 36,560 in the 2018 ARF.

The 2016 and 2017 Final Files have been amended. However, this amendment did not change the overall number of fatal crashes or fatalities.

#### **Crash Report Sampling System**

NHTSA's National Center for Statistics and Analysis (NCSA) redesigned the nationally representative sample of police-reported traffic crashes, which estimates the number of police-reported injury and property-damage-only crashes in the United States. The new system, called CRSS, replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at <a href="https://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss">www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss</a>.

#### Methodology Change for Estimating People Injured

NCSA changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach combines people nonfatally injured from both FARS and NASS GES/CRSS. This is done by extracting people nonfatally injured in fatal crashes from FARS with people nonfatally injured in policereported injury crashes from NASS GES/CRSS. The old approach extracted people nonfatally injured from only NASS GES/CRSS, regardless of crash severity. This change in methodology caused some estimates of people injured to change for prior years.



National Center for Statistics and Analysis. (2020, December). *Overview of motor vehicle crashes in 2019*. (Traffic Safety Facts Research Note. Report No. DOT HS 813 060). National Highway Traffic Safety Administration.

For questions regarding the information presented in this report, please contact NCSARequests@dot.gov. Access this Crash•Stats and other general information on traffic safety at <a href="https://crashstats.nhtsa.dot.gov/">https://crashstats.nhtsa.dot.gov/</a>.

