



U.S. Department  
of Transportation  
National Highway  
Traffic Safety  
Administration



# Traffic Safety Facts

## 2021 Data



DOT HS 813 484

June 2023

## Bicyclists and Other Cyclists

In this fact sheet for 2021 the information is presented as follows.

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As defined for this fact sheet, pedalcyclists are bicyclists and other cyclists including riders of two-wheel, nonmotorized vehicles, tricycles, and unicycles powered solely by pedals. This fact sheet does not include pedalcyclist crashes that do not involve motor vehicles.

### Key Findings

- In 2021 there were 966 pedalcyclist fatalities, accounting for 2.2 percent of all traffic fatalities that year.
- In 2021 there was a 1.9-percent increase in pedalcyclists killed (966) from the 948 pedalcyclists killed in 2020.
- In 2021 an estimated 41,615 pedalcyclists were injured, a 7-percent increase from 38,886 pedalcyclists injured in 2020.
- In 2021 the pedalcyclist fatality rate per 100,000 people was 7 times higher for males than females. The injury rate for pedalcyclists per 100,000 people was 4 times higher for males than for females.
- Alcohol involvement (blood alcohol concentration [BAC] of .01 grams per deciliter [g/dL] or higher) – either for the motor vehicle driver involved in a fatal pedalcyclist crash and/or the killed pedalcyclist – was reported in 36 percent of all fatal pedalcyclist crashes in 2021.
- Twenty-one percent of the pedalcyclists who died in 2021 had BACs of .01 grams per deciliter (g/dL) or greater.
- Eighty-five percent of fatal pedalcyclist crashes in 2021 were in urban areas.

This fact sheet contains information on fatal motor vehicle traffic crashes based on data from the Fatality Analysis Reporting System (FARS) and non-fatal motor vehicle traffic crashes from the National Automotive Sampling System (NASS) General Estimates System (GES) and Crash Report Sampling System (CRSS). A change instituted with the release of 2020 data is rounding estimates to the nearest whole number instead of the nearest thousand for all police-reported crashes, including injury estimates. Refer to the end of this publication for more information on FARS, NASS GES, and CRSS.

**Due to a vehicle classification change, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. Refer to the end of this publication for more information on Product Information Catalog and Vehicle Listing (vPIC).**

A motor vehicle traffic crash is defined as an incident that involved one or more motor vehicles in-transport that originated on or had a harmful event (injury or damage) on a public trafficway, such as a road or highway. Crashes that occurred on private property not regularly used by the public for transport, including some parts of parking lots and driveways, are excluded. The terms “motor vehicle traffic crash” and “traffic crash” are used interchangeably in this document.

## Overview

In 2021 there were 966 pedalcyclists killed in traffic crashes in the United States, an increase of 1.9 percent from 948 in 2020. Pedalcyclist deaths accounted for 2.2 percent of all traffic fatalities (Table 1) in 2021.

Table 1 presents the distribution of pedalcyclist fatalities as percentages of total fatalities as well as pedalcyclists injured as percentages of total people injured in the 10-year period from 2012 to 2021. Pedalcyclist deaths have accounted from a high of 2.4 percent to a low of 2.2 percent in those 10 years.

In 2021 an estimated 41,615 pedalcyclists were injured, a 7-percent increase from 38,886 pedalcyclists injured in 2020. Pedalcyclists injured made up 1.7 percent of the total people injured in 2021.

**Table 1. Total Fatalities and Pedalcyclist Fatalities, and Total Injured and Pedalcyclists Injured in Traffic Crashes, 2012–2021**

Year	Total Fatalities	Pedalcyclist Fatalities		Year	Total Injured	Pedalcyclists Injured	
		Number	Percentage of Total Fatalities			Number	Percentage of Total Injured
2012	33,782	734	2.2%	2012	2,369,083	49,300	2.1%
2013	32,893	749	2.3%	2013	2,318,992	48,088	2.1%
2014	32,744	729	2.2%	2014	2,342,621	50,414	2.2%
2015	35,484	829	2.3%	2015	2,454,778	45,066	1.8%
2016	37,806	853	2.3%	2016	3,061,885	64,218	2.1%
2017	37,473	806	2.2%	2017	2,745,268	49,698	1.8%
2018	36,835	871	2.4%	2018	2,710,059	46,536	1.7%
2019	36,355	859	2.4%	2019	2,740,141	49,057	1.8%
2020	39,007	948	2.4%	2020	2,282,209	38,886	1.7%
2021	42,939	966	2.2%	2021	2,497,657	41,615	1.7%

Sources: FARS 2012–2020 Final File, 2021 Annual Report File (ARF); NASS GES 2012–2015 and CRSS 2016–2021

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

## Age and Sex

Over the 10-year period from 2012 to 2021, the average age of pedalcyclists killed in traffic crashes has steadily increased from 43 in 2012 to 49 in 2021.

Table 2 contains the number of pedalcyclists killed and injured in 2021 by age group and sex. For each sex and the total, fatality and injury rates per 100,000 population are calculated by age group. In 2021 the majority of pedalcyclists killed (86%) and pedalcyclists injured (81%) were males. The population-based pedalcyclist fatality rate was 7 times higher for males than for females. The pedalcyclist injury rate was 4 times higher for males than for females. The overall male pedalcyclist injury rate was 21 (per 100,000 people), compared with 5 for females.

The largest numbers of pedalcyclist fatalities were in the 60-to-64 and 55-to-59 age groups. Pedalcyclists in these age groups also had the highest fatality rates (0.60 and 0.59 deaths per 100,000 population, respectively). The highest pedalcyclist injury rates by age group were in the 15-to-20 age group followed by those in the 21-to-24 age group (23 and 19 people injured per 100,000 population, respectively).

In 2021 children 14 and younger accounted for 4 percent of all pedalcyclists killed and 12 percent of all pedalcyclists injured.

**Table 2. Pedalcyclists Killed and Injured in Traffic Crashes, and Fatality and Injury Rates per 100,000 Population, by Age Group and Sex, 2021**

Age Group	Male			Female			Total <sup>1</sup>		
	Killed	Population	Fatality Rate	Killed	Population	Fatality Rate	Killed	Population	Fatality Rate
<5	1	9,624,352	0.01	2	9,202,986	0.02	4	18,827,338	0.02
5-9	7	10,376,158	0.07	2	9,915,390	0.02	9	20,291,548	0.04
10-14	22	10,988,223	0.20	3	10,459,561	0.03	25	21,447,784	0.12
<i>Children (≤14)</i>	<i>30</i>	<i>30,988,733</i>	<i>0.10</i>	<i>7</i>	<i>29,577,937</i>	<i>0.02</i>	<i>38</i>	<i>60,566,670</i>	<i>0.06</i>
15-20	36	13,242,042	0.27	14	12,669,303	0.11	50	25,911,345	0.19
21-24	29	8,754,172	0.33	3	8,423,146	0.04	32	17,177,318	0.19
25-29	47	11,379,058	0.41	6	11,013,419	0.05	53	22,392,477	0.24
30-34	41	11,674,304	0.35	7	11,428,324	0.06	48	23,102,628	0.21
35-39	59	11,263,833	0.52	9	11,035,485	0.08	69	22,299,318	0.31
40-44	67	10,593,780	0.63	6	10,510,756	0.06	74	21,104,536	0.35
45-49	46	9,875,757	0.47	9	9,905,753	0.09	55	19,781,510	0.28
50-54	71	10,436,202	0.68	11	10,470,724	0.11	83	20,906,926	0.40
55-59	114	10,630,059	1.07	13	10,937,255	0.12	127	21,567,314	0.59
60-64	110	10,333,259	1.06	14	10,902,491	0.13	127	21,235,750	0.60
65-69	64	8,748,213	0.73	6	9,646,107	0.06	72	18,394,320	0.39
70-74	45	7,120,873	0.63	4	8,150,929	0.05	49	15,271,802	0.32
75-79	40	4,472,410	0.89	7	5,432,359	0.13	48	9,904,769	0.48
80+	21	4,872,047	0.43	2	7,405,015	0.03	23	12,277,062	0.19
<i>Ages 65+</i>	<i>170</i>	<i>25,213,543</i>	<i>0.67</i>	<i>19</i>	<i>30,634,410</i>	<i>0.06</i>	<i>192</i>	<i>55,847,953</i>	<i>0.34</i>
<b>Total<sup>2</sup></b>	<b>829</b>	<b>164,384,742</b>	<b>0.50</b>	<b>121</b>	<b>167,509,003</b>	<b>0.07</b>	<b>966</b>	<b>331,893,745</b>	<b>0.29</b>

Age Group	Male			Female			Total <sup>3</sup>		
	Injured	Population	Injury Rate	Injured	Population	Injury Rate	Injured	Population	Injury Rate
0-4	109	9,624,352	1	0	9,202,986	0	109	18,827,338	1
5-9	973	10,376,158	9	310	9,915,390	3	1,283	20,291,548	6
10-14	2,865	10,988,223	26	880	10,459,561	8	3,745	21,447,784	17
<i>Children (≤14)</i>	<i>3,947</i>	<i>30,988,733</i>	<i>13</i>	<i>1,190</i>	<i>29,577,937</i>	<i>4</i>	<i>5,137</i>	<i>60,566,670</i>	<i>8</i>
15-20	4,669	13,242,042	35	1,366	12,669,303	11	6,034	25,911,345	23
21-24	2,467	8,754,172	28	737	8,423,146	9	3,204	17,177,318	19
25-29	2,566	11,379,058	23	722	11,013,419	7	3,289	22,392,477	15
30-34	2,240	11,674,304	19	638	11,428,324	6	2,878	23,102,628	12
35-39	2,863	11,263,833	25	644	11,035,485	6	3,507	22,299,318	16
40-44	2,130	10,593,780	20	598	10,510,756	6	2,728	21,104,536	13
45-49	2,396	9,875,757	24	401	9,905,753	4	2,797	19,781,510	14
50-54	2,075	10,436,202	20	359	10,470,724	3	2,434	20,906,926	12
55-59	2,910	10,630,059	27	585	10,937,255	5	3,495	21,567,314	16
60-64	2,325	10,333,259	23	215	10,902,491	2	2,540	21,235,750	12
65-69	1,512	8,748,213	17	202	9,646,107	2	1,714	18,394,320	9
70-74	960	7,120,873	13	80	8,150,929	1	1,040	15,271,802	7
75-79	474	4,472,410	11	15	5,432,359	0	489	9,904,769	5
80+	294	4,872,047	6	32	7,405,015	0	326	12,277,062	3
<i>Ages 65+</i>	<i>3,240</i>	<i>25,213,543</i>	<i>13</i>	<i>329</i>	<i>30,634,410</i>	<i>1</i>	<i>3,569</i>	<i>55,847,953</i>	<i>6</i>
<b>Total<sup>4</sup></b>	<b>33,830</b>	<b>164,384,742</b>	<b>21</b>	<b>7,784</b>	<b>167,509,003</b>	<b>5</b>	<b>41,615</b>	<b>331,893,745</b>	<b>13</b>

Sources: FARS 2021 ARF; CRSS 2021; Population – Census Bureau

<sup>1</sup>Includes unknown sex for pedalcyclists killed.

<sup>2</sup>Includes unknown age for pedalcyclists killed.

<sup>3</sup>Includes unknown sex for pedalcyclists injured in fatal crashes.

<sup>4</sup>Includes unknown age for pedalcyclists injured in fatal crashes.

Note: Totals may not equal sum of components due to independent rounding.

## Alcohol

Alcohol involvement (BAC of .01+ g/dL) — either for a motor vehicle driver involved in a fatal pedalcyclist crash and/or the killed pedalcyclist — was reported in 36 percent of the traffic crashes that resulted in pedalcyclist fatalities in 2021. Alcohol involvement is defined as whether alcohol was consumed by the driver and/or the pedalcyclist prior to the crash; the presence of alcohol may or may not be a contributing factor in the crash. “No alcohol” refers to a blood alcohol concentration (BAC) of .00 grams per deciliter (g/dL).

A total of 965 traffic crashes each had one or more pedalcyclist fatalities. Table 3 charts the estimated alcohol involvement for the pedalcyclist killed, by the alcohol involvement of all drivers involved in those 965 crashes, whether the drivers were killed or not. If more than one pedalcyclist was killed in a crash, the pedalcyclist with the highest BAC was used. If more than one driver was involved in a crash, the driver with the highest BAC was used.

In 2021:

- An estimated 18 percent of fatal pedalcyclist crashes had a pedalcyclist involved with a BAC of .08 g/dL or higher.
- An estimated 16 percent of fatal pedalcyclist crashes had a driver involved with a BAC of .08 g/dL or higher. (Note: It is illegal in every State to drive with a BAC of .08 g/dL or higher. However, Utah set a lower threshold of .05 g/dL or higher that went into effect on December 30, 2018.)
- An estimated 4 percent of fatal pedalcyclist crashes had both a pedalcyclist and a driver involved with BACs of .08 g/dL or higher.

**Table 3. Traffic Crashes Resulting in Pedalcyclist Fatalities, by Alcohol Involvement of Drivers and Pedalcyclists, 2021**

	Driver, No Alcohol, BAC=.00 g/dL		Driver, BAC=.01–.07 g/dL		Alcohol-Impaired Driver, BAC=.08+ g/dL		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Pedalcyclist, No Alcohol	618	64%	30	3%	118	12%	766	79%
Pedalcyclist, BAC=.01–.07 g/dL	18	2%	1	0%	5	0%	24	2%
Pedalcyclist, BAC=.08+ g/dL	132	14%	9	1%	34	4%	175	18%
<b>Total Crashes</b>	<b>769</b>	<b>80%</b>	<b>40</b>	<b>4%</b>	<b>157</b>	<b>16%</b>	<b>965</b>	<b>100%</b>

Source: FARS 2021 ARF

Notes: The alcohol levels in this table were determined using the alcohol levels of the pedalcyclists killed and the involved drivers (killed or survived). NHTSA estimates BACs when alcohol test results are unknown.

As shown in Table 4, an estimated 21 percent of pedalcyclists killed had BACs of .01 g/dL or higher in 2021, compared to 30 percent in 2012. In 2012 pedalcyclists killed in the 45-to-54 age group had highest percentages with both BACs of .01 g/dL or higher (47%) and BACs of .08 g/dL or higher (41%). In 2021 pedalcyclists in the age group 25-to-34 had both the highest alcohol involvement (28%) at .01+ g/dL and the highest alcohol impairment (25%) at .08+ g/dL.

**Table 4. Pedalcyclists Killed in Traffic Crashes, by Age Group and Their BACs, 2012 and 2021**

Age Group	2012					2021				
	Number of Fatalities	Percentage With No Alcohol (BAC=.00 g/dL)	Percentage With BAC=.01+ g/dL	Percentage With BAC=.01–.07 g/dL	Percentage With BAC=.08+ g/dL	Number of Fatalities	Percentage With No Alcohol (BAC=.00 g/dL)	Percentage With BAC=.01+ g/dL	Percentage With BAC=.01–.07 g/dL	Percentage With BAC=.08+ g/dL
15-20	76	86%	14%	5%	9%	50	91%	9%	1%	8%
21-24	29	82%	18%	3%	14%	32	87%	13%	1%	12%
25-34	82	63%	37%	9%	28%	101	72%	28%	3%	25%
35-44	91	66%	34%	4%	30%	143	77%	23%	4%	20%

Age Group	2012					2021				
	Number of Fatalities	Percentage With No Alcohol (BAC=.00 g/dL)	Percentage With BAC=.01+ g/dL	Percentage With BAC=.01-.07 g/dL	Percentage With BAC=.08+ g/dL	Number of Fatalities	Percentage With No Alcohol (BAC=.00 g/dL)	Percentage With BAC=.01+ g/dL	Percentage With BAC=.01-.07 g/dL	Percentage With BAC=.08+ g/dL
45-54	178	53%	47%	5%	41%	138	79%	21%	1%	20%
55-64	134	71%	29%	5%	23%	254	75%	25%	3%	22%
65-74	53	89%	11%	2%	9%	121	82%	18%	2%	16%
75-84	24	98%	2%	1%	1%	64	88%	13%	2%	10%
85+	5	96%	4%	0%	4%	7	94%	6%	1%	4%
<b>Total Killed*</b>	<b>672</b>	<b>70%</b>	<b>30%</b>	<b>5%</b>	<b>26%</b>	<b>910</b>	<b>79%</b>	<b>21%</b>	<b>3%</b>	<b>19%</b>

Source: FARS 2012 Final File, 2021 ARF

Note: NHTSA estimates BACs when alcohol test results are unknown.

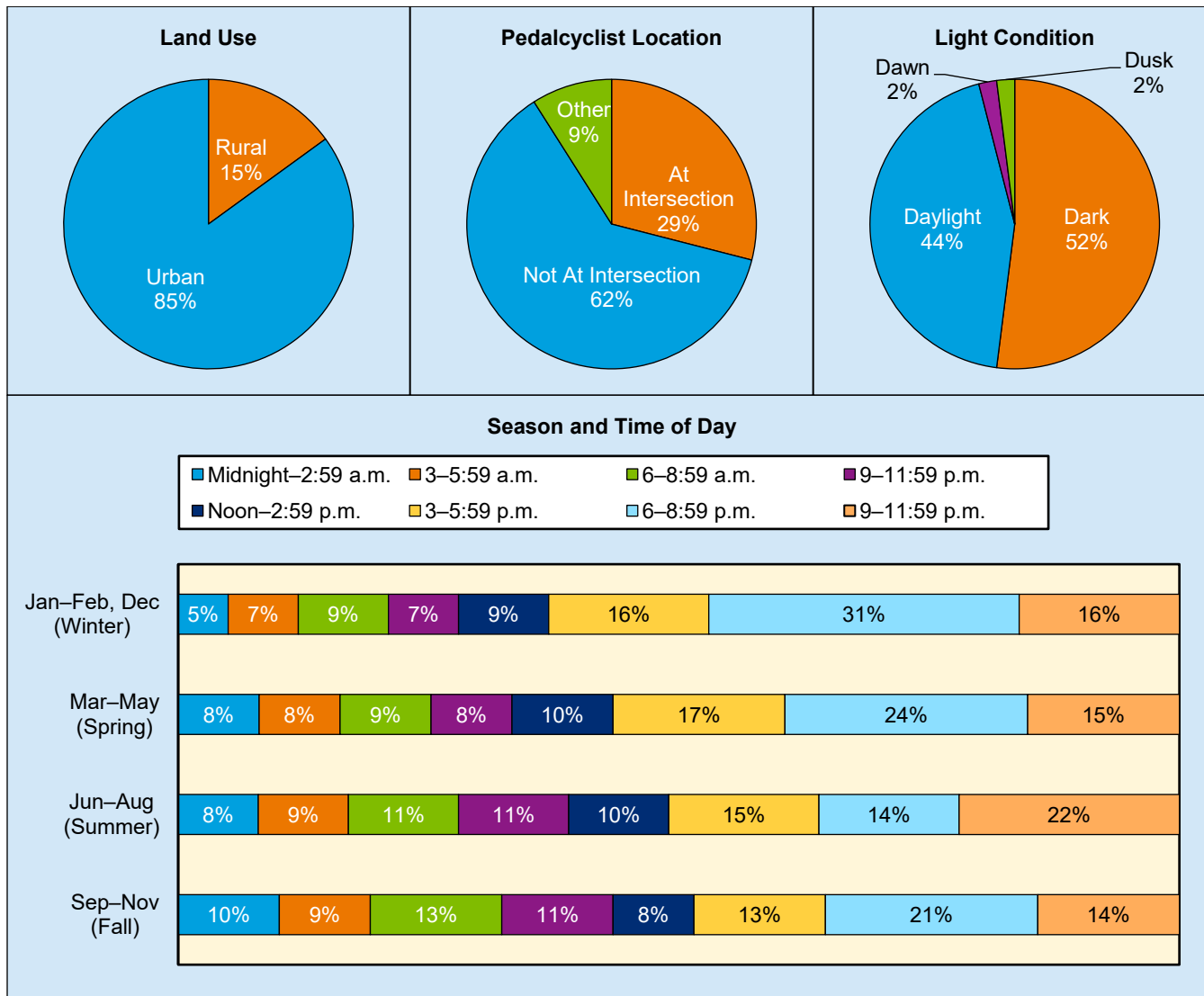
\*Excludes pedalcyclists younger than 15 and pedalcyclists of unknown age.

## Crash Characteristics

Figure 1 shows information about the crash characteristics describing pedalcyclist fatalities in traffic crashes in 2021: land use, pedalcyclist location, light condition, and season and time of day.

- About 6 in 7 pedalcyclist fatalities (85%) occurred in urban areas as opposed to rural areas (15%).
- Sixty-two percent of pedalcyclist fatalities occurred at locations that were not intersections, 29 percent occurred at intersections, and the remaining 9 percent occurred at other locations including shoulders/roadsides, bicycle lanes, sidewalks, shared-use paths, driveway accesses, and other sites.
- More pedalcyclist fatalities occurred in the dark (52%) than in daylight (44%), dusk (2%), or dawn (2%).
- Pedalcyclist fatalities by season (defined by months) and the time of day (divided into eight 3-hour intervals starting at midnight), are presented below.
  - Thirty percent of pedalcyclist fatalities occurred during the fall months (September to November), 27 percent occurred during the summer months (June to August), 23 percent occurred during the spring months (March to May), and 20 percent occurred during the winter months (January, February, and the following December).
  - During the winter months, the largest group (31%) of pedalcyclist fatalities occurred from 6 to 8:59 p.m., followed by 16 percent from both 3 to 5:59 p.m. and from 9 to 11:59 p.m.
  - During the spring months, the 6 to 8:59 p.m. time period had the highest percentage (24%) of pedalcyclist fatalities, followed by 17 percent from 3 to 5:59 p.m., and 15 percent from 9 to 11:59 p.m.
  - During the summer months, more pedalcyclist fatalities occurred from 9 to 11:59 p.m. (22%) than any other time, followed by 15 percent from 3 to 5:59 a.m.
  - During the fall months, 21 percent of the pedalcyclist fatalities occurred from 6 to 8:59 p.m., followed by 14 percent from 9 to 11:59 p.m.

**Figure 1. Percentages of Pedalcyclist Fatalities in Traffic Crashes in Relation to Land Use, Pedalcyclist Location, Light Condition, and Season and Time of Day, 2021**



Source: FARS 2021 ARF

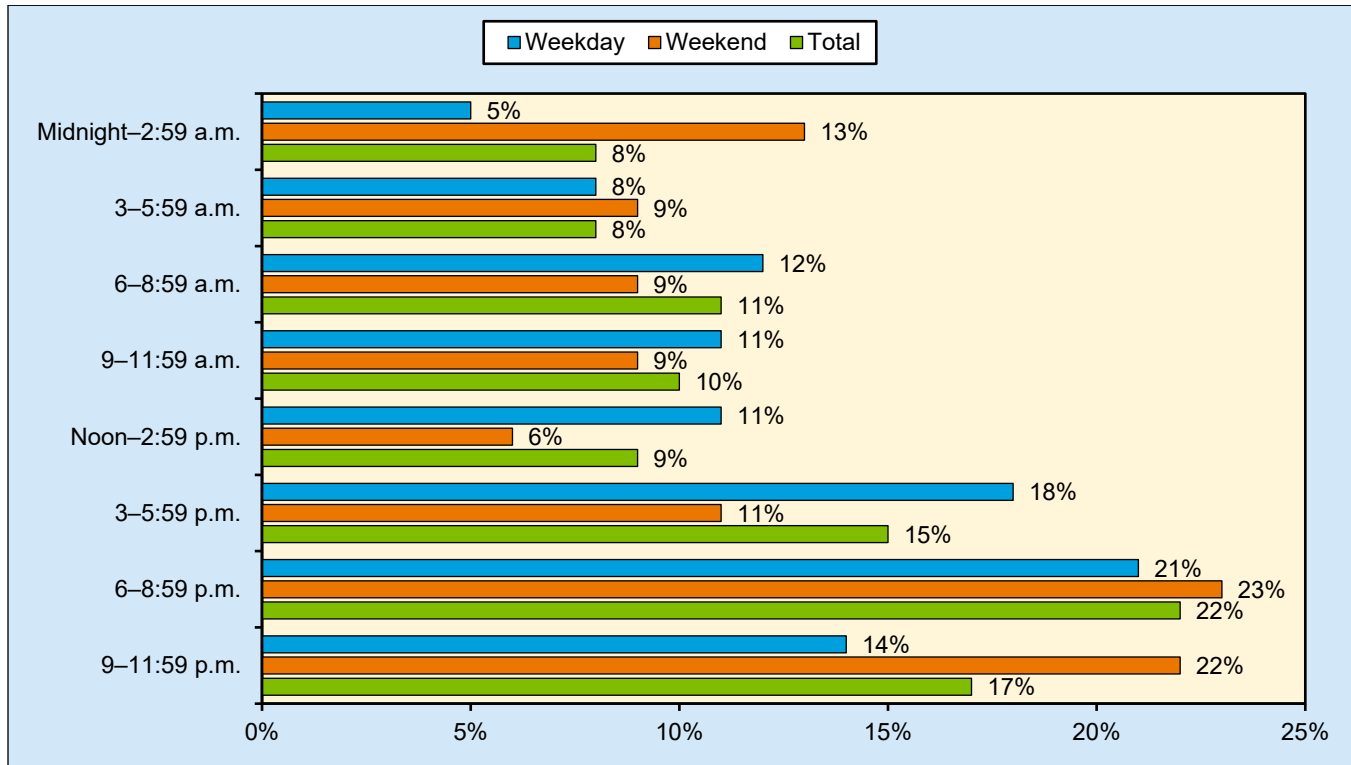
\* Based on location of pedalcyclist struck at the time of the crash. “Other” includes sidewalk, bicycle lane, median/crossing island, parking lane/zone, shoulder/roadside, driveway access, shared-use path, and non-traffic area, which may or may not have been at intersection, but were not distinguished by collected data. Thus, “At Intersection” and “Not At Intersection” do not include those in the “Other” category that were at intersection or not at intersection.

Notes: Percentages may not add up to 100 percent due to independent rounding. Unknowns were removed before calculating percentages.

### Time of Day and Day of Week

In 2021 there were 583 (61%) pedalcyclist fatalities during weekdays and 380 (39%) pedalcyclist fatalities during weekends. In Figure 2 the time of day is divided into eight 3-hour time intervals starting at midnight, and day of week is defined as weekday (Monday 6 a.m. to Friday 5:59 p.m.) and weekend (Friday 6 p.m. to Monday 5:59 a.m.). The following summarizes information about 2021 pedalcyclist fatalities in traffic crashes.

- The period 6 p.m. to 8:59 p.m. had the highest frequency of pedalcyclist fatalities during both weekdays (21%) and weekends (23%).
- The next highest percentage of pedalcyclist fatalities occurred from 9 p.m. to 11:59 p.m. on weekends (22%), followed by 3 to 5:59 p.m. on weekdays (18%).

**Figure 2. Percentages of Pedalcyclist Fatalities in Traffic Crashes, by Time of Day and Day of Week, 2021**

Source: FARS 2021 ARF

Weekday—Monday 6 a.m. to Friday 5:59 p.m. (4.5 days)

Weekend—Friday 6 p.m. to Monday 5:59 a.m. (2.5 days)

Note: Unknowns were removed before calculating percentages.

## Vehicle Type and Impact Point

Ninety-five percent (914) of the pedalcyclists killed were in single-vehicle traffic crashes in 2021; 5 percent (52) were killed in multiple-vehicle crashes. Of the 914 pedalcyclists killed in single-vehicle crashes, 99.8 percent (912) were killed in crashes where the first harmful event was collision with a pedalcyclist. Table 5 presents the 912 pedalcyclists killed in these crashes by vehicle type and location of the initial point of impact on the striking vehicle.

In 2021:

- Pedalcyclists who died in single-vehicle crashes were most likely to be struck by the front of the vehicles.
- Pedalcyclists who died in single-vehicle crashes involving passenger vehicles (passenger cars and light trucks including SUVs, pickups, and vans) were more likely to be hit by the front of these vehicles as compared to crashes involving large trucks.
- Light trucks were the most frequently involved vehicle in single-vehicle traffic crashes in which a pedalcyclist was killed (421 of the 912). In 86 percent (364) of these crashes, the pedalcyclist was struck by the front of the light truck.
- Buses and large trucks had the highest percentages of right-side impacts, accounting for 33.3 and 21.5 percent of pedalcyclist fatalities respectively, whereas for passenger vehicles this percentage was 4.5 percent.
- Large trucks had the highest percentage of rear-impact pedalcyclist fatalities (4.6%).

**Table 5. Pedalcyclists Killed in Single-Vehicle Traffic Crashes Where the First Harmful Event Was Collision With a Pedalcyclist, by Vehicle Type and Initial Point of Impact on Vehicle, 2021**

Vehicle Type	Initial Point of Impact on Vehicle										Total	
	Front		Right Side		Left Side		Rear		Other/Unknown			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Passenger Car	293	92.7%	10	3.2%	3	0.9%	2	0.6%	8	2.5%	316	100%
Light Truck	364	86.5%	23	5.5%	12	2.9%	5	1.2%	17	4.0%	421	100%
— SUV	175	85.8%	14	6.9%	5	2.5%	3	1.5%	7	3.4%	204	100%
— Pickup	155	86.1%	8	4.4%	6	3.3%	2	1.1%	9	5.0%	180	100%
— Van	34	91.9%	1	2.7%	1	2.7%	0	0.0%	1	2.7%	37	100%
Large Truck	37	56.9%	14	21.5%	3	4.6%	3	4.6%	8	12.3%	65	100%
Bus	2	33.3%	2	33.3%	1	16.7%	0	0.0%	1	16.7%	6	100%
Other/Unknown Vehicle	60	57.7%	3	2.9%	0	0.0%	1	1.0%	40	38.5%	104	100%
<b>Total</b>	<b>756</b>	<b>82.9%</b>	<b>52</b>	<b>5.7%</b>	<b>19</b>	<b>2.1%</b>	<b>11</b>	<b>1.2%</b>	<b>74</b>	<b>8.1%</b>	<b>912</b>	<b>100%</b>

Source: FARS 2021 ARF

## State

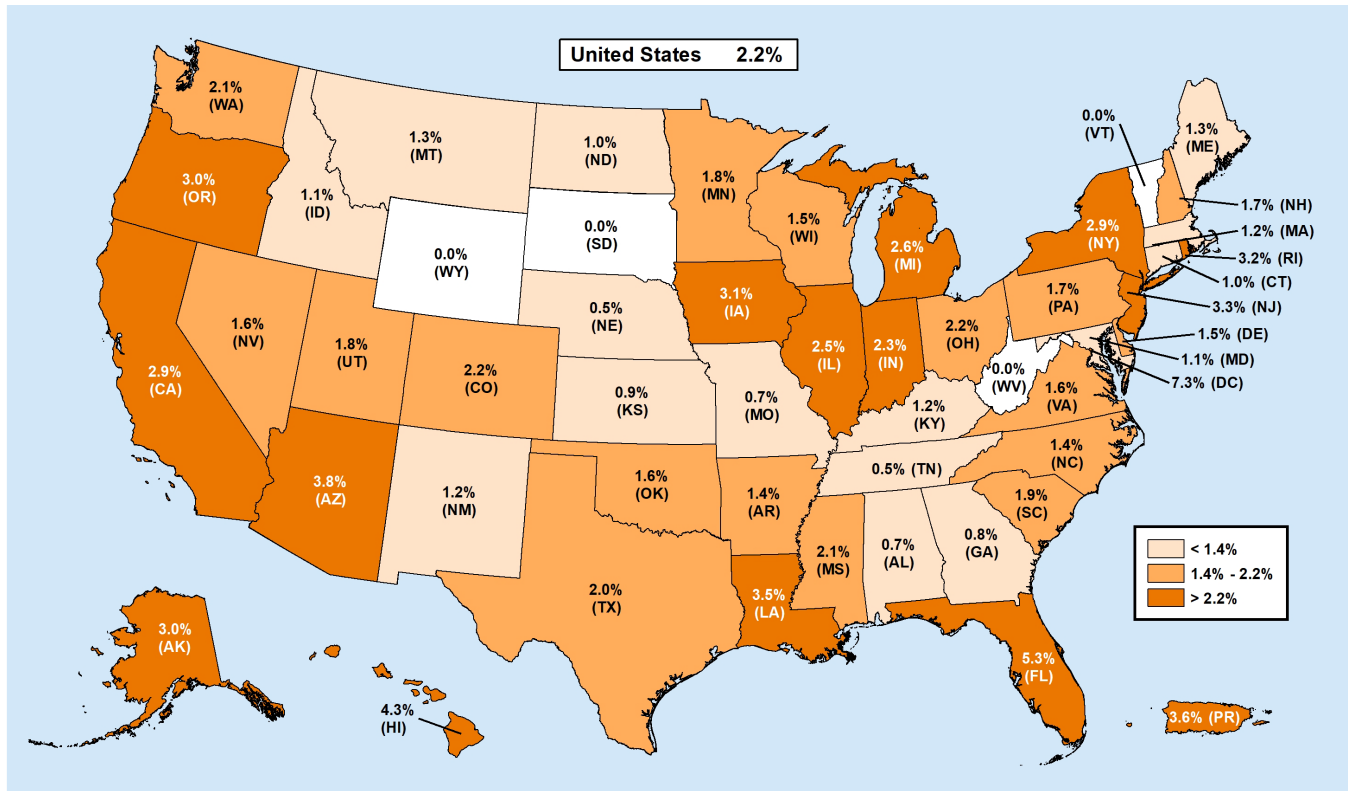
Figure 3 contains a map of the percentages of total traffic fatalities who were pedalcyclists by State in 2021. Table 6 shows the population, the number of total and pedalcyclist fatalities, the percentages of total fatalities who were pedalcyclists, and the population-based pedalcyclist fatality rates by State for 2021. Note that in this section, as well as the following section on fatalities by city, the populations of States and cities can vary from the recorded population. States with substantial seasonal tourism, such as Florida, and cities with a large influx of daily commuters, such as Washington, DC, have at times a substantially larger population than is reflected in their numbers of residents. More important, the population may not reflect the number of pedalcyclists. Some States may have higher proportions of the population biking than others. Also included in Table 6 is Puerto Rico, which is not included in the overall U.S. total.

In 2021:

- Pedalcyclist fatalities were highest in Florida (197), followed by California (125) and Texas (91).
- There were no pedalcyclist fatalities in South Dakota, Vermont, West Virginia, or Wyoming.
- The percentages of pedalcyclist fatalities among total fatalities in States ranged from a high of 7.3 percent (Washington, DC) to a low of 0.5 percent (Nebraska and Tennessee) for those States with pedalcyclist fatalities, compared to the national percentage of 2.2 percent.
- The highest fatality rate per 100,000 population was in Florida (0.90 fatalities per 100,000 people) followed by Louisiana (0.74 fatalities per 100,000 people), compared to the national rate of 0.29. Of those States with pedalcyclist fatalities, Nebraska had the lowest fatality rate per 100,000 population (0.05) followed by Massachusetts (0.07).



**Figure 3. Percentages of Total Traffic Fatalities Who Were Pedalcyclists, by State, 2021**



Source: FARS 2021 ARF

**Table 6. Total and Pedalcyclist Fatalities in Traffic Crashes, and Pedalcyclist Fatality Rates, by State, 2021**

State	Total Fatalities	Pedalcyclist Fatalities		Population	Pedalcyclist Fatality Rate per 100,000 Population
		Number	Percentage of Total Fatalities		
Alabama	983	7	0.7%	5,039,877	0.14
Alaska	67	2	3.0%	732,673	0.27
Arizona	1,180	45	3.8%	7,276,316	0.62
Arkansas	693	10	1.4%	3,025,891	0.33
California	4,285	125	2.9%	39,237,836	0.32
Colorado	691	15	2.2%	5,812,069	0.26
Connecticut	298	3	1.0%	3,605,597	0.08
Delaware	136	2	1.5%	1,003,384	0.20
District of Columbia	41	3	7.3%	670,050	0.45
Florida	3,738	197	5.3%	21,781,128	0.90
Georgia	1,797	15	0.8%	10,799,566	0.14
Hawaii	94	4	4.3%	1,441,553	0.28
Idaho	271	3	1.1%	1,900,923	0.16
Illinois	1,334	34	2.5%	12,671,469	0.27
Indiana	932	21	2.3%	6,805,985	0.31
Iowa	356	11	3.1%	3,193,079	0.34
Kansas	424	4	0.9%	2,934,582	0.14
Kentucky	806	10	1.2%	4,509,394	0.22
Louisiana	972	34	3.5%	4,624,047	0.74
Maine	153	2	1.3%	1,372,247	0.15
Maryland	561	6	1.1%	6,165,129	0.10
Massachusetts	417	5	1.2%	6,984,723	0.07
Michigan	1,136	29	2.6%	10,050,811	0.29
Minnesota	488	9	1.8%	5,707,390	0.16
Mississippi	772	16	2.1%	2,949,965	0.54
Missouri	1,016	7	0.7%	6,168,187	0.11
Montana	239	3	1.3%	1,104,271	0.27
Nebraska	221	1	0.5%	1,963,692	0.05
Nevada	385	6	1.6%	3,143,991	0.19
New Hampshire	118	2	1.7%	1,388,992	0.14
New Jersey	699	23	3.3%	9,267,130	0.25
New Mexico	481	6	1.2%	2,115,877	0.28
New York	1,157	33	2.9%	19,835,913	0.17
North Carolina	1,663	23	1.4%	10,551,162	0.22
North Dakota	101	1	1.0%	774,948	0.13
Ohio	1,354	30	2.2%	11,780,017	0.25
Oklahoma	762	12	1.6%	3,986,639	0.30
Oregon	599	18	3.0%	4,246,155	0.42
Pennsylvania	1,230	21	1.7%	12,964,056	0.16
Rhode Island	63	2	3.2%	1,095,610	0.18
South Carolina	1,198	23	1.9%	5,190,705	0.44
South Dakota	148	0	0.0%	895,376	0.00
Tennessee	1,327	7	0.5%	6,975,218	0.10
Texas	4,498	91	2.0%	29,527,941	0.31
Utah	328	6	1.8%	3,337,975	0.18
Vermont	74	0	0.0%	645,570	0.00
Virginia	973	16	1.6%	8,642,274	0.19
Washington	670	14	2.1%	7,738,692	0.18
West Virginia	280	0	0.0%	1,782,959	0.00
Wisconsin	620	9	1.5%	5,895,908	0.15
Wyoming	110	0	0.0%	578,803	0.00
<b>U.S. Total</b>	<b>42,939</b>	<b>966</b>	<b>2.2%</b>	<b>331,893,745</b>	<b>0.29</b>
Puerto Rico	337	12	3.6%	3,263,584	0.37

Sources: FARS 2021 ARF; Population – Census Bureau

## City

For each U.S. city with a population of over 500,000, Table 7 shows the population, number of total fatalities and pedalcyclist fatalities, the percentages of total fatalities who were pedalcyclists, and the population-based fatality rates for all traffic fatalities and pedalcyclist fatalities in 2021. Of the 37 cities listed, 16 had lower pedalcyclist fatality rates than the national average of 0.29 per 100,000 population.

- Among large cities, the city with the highest pedalcyclist fatality rate was in Tucson (1.29 pedalcyclist fatalities per 100,000 people), followed by Indianapolis (0.68 pedalcyclist fatalities per 100,000 people).
- Of those major cities that had pedalcyclist fatalities, the lowest fatality rates were in New York (0.09 pedalcyclist fatalities per 100,000 people) followed by Denver (0.14 pedalcyclist fatalities per 100,000 people), and Detroit (0.16 pedalcyclist fatalities per 100,000 people).
- Seven major cities reported zero pedalcyclist fatalities in traffic crashes in 2021: San Francisco, Nashville, El Paso, Boston, Las Vegas, Portland, and Kansas City.
- Pedalcyclist fatalities in traffic crashes in these major cities account for about 14 percent of all pedalcyclist fatalities in traffic crashes nationwide.

**Table 7. Total and Pedalcyclist Fatalities in Traffic Crashes in Cities With Populations of 500,000 or Greater, and Fatality Rates, 2021**

City	Total Fatalities	Pedalcyclist Fatalities		Population	Fatality Rate per 100,000 Population	
		Number	Percentage of Total Fatalities		Total	Pedalcyclist
New York, NY	252	8	3.2%	8,467,513	2.98	0.09
Los Angeles, CA	332	12	3.6%	3,849,297	8.62	0.31
Chicago, IL	233	11	4.7%	2,696,555	8.64	0.41
Houston, TX	337	12	3.6%	2,288,250	14.73	0.52
Phoenix, AZ	291	10	3.4%	1,624,569	17.91	0.62
Philadelphia, PA	133	7	5.3%	1,576,251	8.44	0.44
San Antonio, TX	200	6	3.0%	1,451,853	13.78	0.41
San Diego, CA	118	5	4.2%	1,381,611	8.54	0.36
Dallas, TX	228	3	1.3%	1,288,457	17.70	0.23
San Jose, CA	76	5	6.6%	983,489	7.73	0.51
Austin, TX	118	4	3.4%	964,177	12.24	0.41
Jacksonville, FL	180	6	3.3%	954,614	18.86	0.63
Fort Worth, TX	128	2	1.6%	935,508	13.68	0.21
Columbus, OH	97	3	3.1%	906,528	10.70	0.33
Indianapolis, IN	144	6	4.2%	882,039	16.33	0.68
Charlotte, NC	109	2	1.8%	879,709	12.39	0.23
San Francisco, CA	31	0	0.0%	815,201	3.80	0.00
Seattle, WA	45	3	6.7%	733,919	6.13	0.41
Denver, CO	68	1	1.5%	711,463	9.56	0.14
Oklahoma City, OK	100	2	2.0%	687,725	14.54	0.29
Nashville, TN	118	0	0.0%	678,851	17.38	0.00
El Paso, TX	82	0	0.0%	678,415	12.09	0.00
Washington, DC	41	3	7.3%	670,050	6.12	0.45
Boston, MA	32	0	0.0%	654,776	4.89	0.00
Las Vegas, NV	34	0	0.0%	646,790	5.26	0.00
Portland, OR	63	0	0.0%	641,162	9.83	0.00
Detroit, MI	150	1	0.7%	632,464	23.72	0.16
Louisville, KY	106	3	2.8%	628,594	16.86	0.48
Memphis, TN	238	3	1.3%	628,127	37.89	0.48
Baltimore, MD	48	1	2.1%	576,498	8.33	0.17
Milwaukee, WI	71	1	1.4%	569,330	12.47	0.18
Albuquerque, NM	133	3	2.3%	562,599	23.64	0.53
Fresno, CA	81	3	3.7%	544,510	14.88	0.55
Tucson, AZ	114	7	6.1%	543,242	20.99	1.29
Sacramento, CA	70	1	1.4%	525,041	13.33	0.19
Mesa, AZ	56	2	3.6%	509,475	10.99	0.39
Kansas City, MO	81	0	0.0%	508,394	15.93	0.00

Sources: FARS 2021 ARF; Population – Census Bureau

Note: Sorted by highest to lowest population.

## Important Safety Reminders

- All bicyclists should wear properly fitted bicycle helmets every time they ride. A helmet is the single most effective way to prevent head injury resulting from a bicycle crash.  
[www.youtube.com/watch?time\\_continue=22&v=hLIXswx0VvQ&feature=emb\\_logo](https://www.youtube.com/watch?time_continue=22&v=hLIXswx0VvQ&feature=emb_logo)
- Bicyclists are considered vehicle operators; they are required to obey the same rules of the road as other vehicle operators, including obeying traffic signs, signals, and lane markings. When cycling in the street, cyclists must ride in the same direction as traffic.
- Drivers of motor vehicles need to share the road with bicyclists. Be courteous – allow at least 3 feet of clearance when passing a bicyclist on the road, look for cyclists before opening a car door or pulling from a parking space, and yield to cyclists at intersections and as directed by signs and signals. Be especially watchful for cyclists when making turns, either left or right.
- Bicyclists should increase their visibility to drivers by wearing fluorescent or brightly colored clothing during the day, and at dawn and dusk. To be noticed when riding at night, use a front light and a red reflector or flashing rear light, and use retro-reflective tape or markings on equipment or clothing.
- Consult State and local laws for safety reminders as they may differ from the ones above.
- For more information on Bicycle Safety visit [www.nhtsa.gov/Driving-Safety/Bicycles](https://www.nhtsa.gov/Driving-Safety/Bicycles)

— NHTSA's Research and Program Development

## Fatality Analysis Reporting System

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 trafficway customarily open to the public, and must result 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 [www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system](http://www.nhtsa.gov/crash-data-systems/fatality-analysis-reporting-system).

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 2021 ARF, the 2020 Final File was released to replace the 2020 ARF. The final fatality count in motor vehicle traffic crashes for 2020 was 39,007, which was updated from 38,824 in the 2020 ARF. The number of pedalcyclist fatalities from the 2020 Final File was 948, which was updated from 938 from the 2020 ARF.

## 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. CRSS replaced the National Automotive Sampling System (NASS) General Estimates System (GES) in 2016. More information on CRSS can be found at [www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss](http://www.nhtsa.gov/crash-data-systems/crash-report-sampling-system-crss).

## Product Information Catalog and Vehicle Listing (vPIC) Vehicle Classification

Historically, vehicle type classifications (e.g., passenger cars, light trucks, large trucks, motorcycles, buses) from FARS, NASS GES, and CRSS used for analysis and data reporting were based on analyst-coded vehicle body type. NHTSA did not have manufacturer authoritative data to assist in vehicle body type coding. NCSA has developed a Product Information Catalog and Vehicle Listing (vPIC) dataset that is being used to decode VINs (Vehicle Identification Numbers) and extract vehicle information. Details of vehicles (make, model, body class, etc.) involved in crashes are obtained from vPIC via VIN-linkage. The VIN-derived information from vPIC uses the manufacturer's classification of body class, which allows for more accurate vehicle type analysis.

The vPIC-based analysis data are available beginning with 2020 FARS and CRSS data files. Starting with the release of 2021 FARS and CRSS data, all vehicle-related analysis for 2020 and later years will be based on vPIC vehicle classification. As a result, the 2020 and later-year vehicle type classifications are not comparable to 2019 and earlier-year vehicle type classifications. This change affects any analysis with a vehicle component to it. More information on vPIC can be found at <https://vpic.nhtsa.dot.gov/>.

The suggested APA format citation for this document is:

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## For More Information:

Motor vehicle traffic crash data are available from the National Center for Statistics and Analysis (NCSA), NSA-230. NCSA can be contacted at [NCSARequests@dot.gov](mailto:NCSARequests@dot.gov) or 800-934-8517. NCSA programs can be found at [www.nhtsa.gov/data](http://www.nhtsa.gov/data). To report a motor vehicle safety-related problem or to inquire about safety information, contact the Vehicle Safety Hotline at 888-327-4236 or [www.nhtsa.gov/report-a-safety-problem](http://www.nhtsa.gov/report-a-safety-problem).

The following data tools and resources can be found at <https://cdan.nhtsa.gov/>.

- Fatal Motor Vehicle Traffic Crash Data Visualizations
- Motor Vehicle Traffic Crash Databook
- Fatality and Injury Reporting System Tool (FIRST)
- State Traffic Safety Information (STSI)
- Traffic Safety Facts Annual Report Tables
- FARS Data Tables (FARS Encyclopedia)
- Crash Viewer
- Product Information Catalog and Vehicle Listing (vPIC)
- FARS, NASS GES, CRSS, NASS Crashworthiness Data System (CDS), and Crash Investigation Sampling System (CISS) data can be downloaded for further analysis.

Other fact sheets available from NCSA:

- Alcohol-Impaired Driving
- Children
- Large Trucks
- Motorcycles
- Occupant Protection in Passenger Vehicles
- Older Population
- Passenger Vehicles
- Pedestrians
- Rural/Urban Comparison of Motor Vehicle Traffic Fatalities
- School-Transportation-Related Crashes
- Speeding
- State Alcohol-Impaired-Driving Estimates
- State Traffic Data
- Summary of Motor Vehicle Traffic Crashes
- Young Drivers

Detailed data on motor vehicle traffic crashes are published annually in *Traffic Safety Facts: A Compilation of Motor Vehicle Traffic Crash Data*. The fact sheets and Traffic Safety Facts annual report can be found at <https://crashstats.nhtsa.dot.gov/>.



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