

# ABOUT THIS REPORT

Fatal crash data from FARS and nonfatal crash data from GES and CRSS are presented in this report in five chapters. Chapter 1, “Trends,” presents data from all years of FARS (1975 to 2018), GES (1988 to **2015**), and CRSS (2016 to 2018). The remaining chapters present data only from 2018. Chapter 2, “Crashes,” describes general characteristics of crashes, such as when and how often they occurred, where they occurred, and what happened during the crash. Chapter 3, “Vehicles,” concentrates on the types of vehicles involved in crashes and the damage to the vehicles. Chapter 4, “People,” is the largest chapter of this report, with statistics about drivers, passengers, pedestrians, and pedalcyclists. The last chapter of the report, “States,” contains information about crashes for each State, the District of Columbia, and Puerto Rico. Terms used throughout the report are defined in the Glossary.

Statistics describing fatal crashes or fatalities have been derived from FARS. Statistics describing injury crashes or property-damage-only crashes have been derived from GES (or CRSS) and statistics describing nonfatal injuries have been derived from both FARS and GES (or CRSS). The reader should be aware that FARS numbers are actual counts of fatalities or fatal crashes, whereas GES and CRSS numbers are estimates of counts of crashes and injuries and are subject to sampling and non-sampling errors. To emphasize this difference, FARS numbers are not rounded, while GES and CRSS estimates have been rounded to the nearest thousand. As a result of the rounding, for some tables, the sum of the row or column entries may not equal the row or column total. In addition, percentages have been calculated prior to rounding.

The reader may also notice that many tables have rows or footnotes for “unknowns” for FARS data, but not for GES or CRSS data. The reason for this difference is that almost all the GES or CRSS unknown data have been assigned values through complex statistical procedures. FARS unknown data, on the other hand, are not assigned values, with the exception of blood alcohol concentration test results. When the alcohol test results are unknown, BAC values have been assigned to drivers and nonoccupants involved in fatal crashes, using a method of multiple imputation that was revised in 2001. More information on the multiple imputation method, including detailed tabulations of alcohol involvement in various categories (age, sex, time of day, etc.), is available in NHTSA Technical Report DOT HS 809 403, *Transitioning to Multiple Imputation: A New Method to Estimate Missing Blood Alcohol Concentration (BAC) Values in FARS*.

## Changes from the *Traffic Safety Facts 2017* Report

### **Crash Report Sampling System (CRSS) Replaces the National Automotive Sampling System (NASS) General Estimates System (GES)**

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 US. The new system, CRSS, replaced NASS GES in 2016. However, the 2016 and later CRSS estimates are not comparable to 2015 and earlier NASS GES estimates because

of different sampling designs. For more information on CRSS, refer to [Crash Report Sampling System: Sample Design and Weighting](#) or [Crash Report Sampling System: Design Overview, Analytic Guidance, and FAQs](#).

### **Methodology Change for Estimating People Injured**

NCSA has changed the methodology of estimating people nonfatally injured in motor vehicle traffic crashes. The new approach is to combine 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 nonfatal injury crashes from NASS GES/CRSS. The old approach was to extract people injured from only NASS GES/CRSS by selecting people nonfatally injured in all crashes, regardless of crash severity. This change in methodology caused some estimates of people injured to change for some prior years.

### **2016 FARS Final File Revision**

Due to amendments made to the 2016 FARS Final file, the number of alcohol-impaired-driving fatalities for 2016 changed from 10,996 to 10,967. Also, the number of fatalities involving large trucks changed from 4,369 to 4,678 because of the light pickup truck classification revision. NCSA reviewed vehicles coded as a light pickup truck body type in the 2016 data collection year in FARS and, as applicable, reclassified them as an appropriate large truck body type. In all, 329 vehicles that were classified as light pickup trucks were reclassified as large trucks. These changes are reflected in the FARS 2016 Amended Final file. In addition, the coding of light and large pickup trucks on the FARS 2017 Final file and 2018 Annual Report File (ARF) was reviewed and where applicable, revised in accordance with the FARS 2016 Amended Final file guidelines. Any issues existing in 2015 and earlier year files were not addressed due to a lack of source materials needed to revise the original data.

### **Revisions to Table 28. Crashes by Crash Type, Relation to Roadway, and Crash Severity**

Table 28 was revised to clearly delineate *On Roadway* and *Off Roadway*. In addition, *On Roadway* now includes "in parking lane/zone," which was previously included in the column labeled *Other/Unknown*. In previous years, the column labeled *Off Roadway* included on roadside, outside trafficway, and off roadway - location unknown; and the column labeled *Other/Unknown* included not only other off roadway locations, but unknown whether on or off roadway. The columns labeled *Off Roadway* and *Other/Unknown* were revised accordingly.

### **Registered Vehicles and Vehicle Miles Traveled by Vehicle Type**

Vehicle registration data for passenger vehicles (cars and light trucks) were obtained from R.L. Polk's National Vehicle Population Profile (NVPP), which is a compilation of all passenger vehicles that have been registered in compliance with State requirements. (R.L. Polk is a foundation of IHS Markit automotive solutions.) Subsequently, overall registrations and passenger car and light truck vehicle miles traveled were revised by NHTSA, using a combination of Polk and Federal Highway Administration (FHWA) exposure data.

Polk enhanced the data quality of its NVPP, which resulted in a complete rewrite of the data, as a result of: (1) enhanced business rules for vehicles on the road, (2) more consistent reporting/processing across States, and (3) upgraded basis for vehicle coding. A comparison of Polk's "old" NVPP and "new" NVPP for 2011 shows that the enhancements resulted in an increase of more than 3 percent in NHTSA's passenger vehicle registration counts, consisting of a 5.6 percent decrease in the 2011 passenger car count and a 14.6 percent increase in the 2011 light truck count from the old NVPP to the new NVPP, as shown in the table below. Consequently, the data in this report for vehicle registrations and vehicle miles traveled from 2011 to 2018 are not strictly comparable with the data for all prior years, which were based on Polk's old NVPP.

#### Registered Vehicles: NCSA Revised Using Polk and FHWA Data

Year	Passenger Cars (Polk)	Light Truck (Polk)	Motorcycles (FHWA)	Buses (FHWA)	Large Trucks (FHWA)	NCSA Revised Total
2009 (Old NVPP)	137,203,972	102,008,600	7,929,724	841,993	10,973,214	258,957,503
2010 (Old NVPP)	135,310,480	102,376,147	8,009,503	846,051	10,770,054	257,312,235
2011 (Old NVPP)	134,543,655	103,594,529	8,437,502	666,064	10,270,693	257,512,443
2011 (New NVPP)	126,966,714	118,702,389	8,437,502	666,064	10,270,693	265,043,362
2012 (New NVPP)	127,077,676	118,690,690	8,454,939	764,509	10,659,380	265,647,194
2013 (New NVPP)	128,936,225	120,491,485	8,404,687	864,549	10,597,356	269,294,302
2014 (New NVPP)	131,138,925	123,470,278	8,417,718	872,027	10,905,956	274,804,904
2015 (New NVPP)	133,218,366	127,401,053	8,600,936	888,907	11,203,184	281,312,446
2016 (New NVPP)	134,827,696	132,052,102	8,679,380	976,161	11,498,561	288,033,900
2017 (New NVPP)	132,864,363	135,594,973	8,715,204	983,231	12,229,216	290,386,987
2018 (New NVPP)	132,908,249	141,242,162	8,666,185	992,152	13,233,910	297,042,658

#### Vehicle Miles Traveled: Polk and FHWA

Year	Passenger Cars (Revised FHWA Using Polk)	Light Trucks (Revised FHWA Using Polk)	Motorcycles (FHWA)	Buses (FHWA)	Large Trucks (FHWA)	Total (FHWA)
2009 (Old NVPP)	1,510,339	1,122,909	20,822	14,387	288,306	2,956,764
2010 (Old NVPP)	1,507,716	1,140,740	18,513	13,770	286,527	2,967,266
2011 (Old NVPP)	1,497,460	1,152,998	18,542	13,807	267,594	2,950,402
2011 (New NVPP)	1,369,810	1,280,648	18,542	13,807	267,594	2,950,402
2012 (New NVPP)	1,377,486	1,286,574	21,385	14,781	269,207	2,969,433
2013 (New NVPP)	1,384,194	1,293,536	20,366	15,167	275,017	2,988,280
2014 (New NVPP)	1,396,098	1,314,458	19,970	15,999	279,132	3,025,656
2015 (New NVPP)	1,420,869	1,358,824	19,606	16,230	279,844	3,095,373
2016 (New NVPP)	1,439,678	1,410,040	20,445	16,350	287,895	3,174,408
2017 (New NVPP)	1,424,056	1,453,322	20,149	17,227	297,593	3,212,347
2018 (New NVPP)	1,404,507	1,492,576	20,076	18,303	304,864	3,240,327

Note: NHTSA NCSA revises FHWA's Passenger Car and Light Truck vehicle miles traveled using Polk's registration counts.