ABOUT THIS REPORT

Fatal crash data from FARS and nonfatal crash data from GES and CRSS are presented in this report portal in five main chapters. Chapter 1, "Trends," presents data from all years of FARS (1975 to 2022), GES (1988 to *2015*), and CRSS (2016 to 2022). The remaining chapters present yearly data only from 2010 to 2022. Chapter 2, "Crashes," describes general characteristics of crashes, such as when and how often they occurred, where they occurred, and what happened during the crashes. 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.

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 people injured and are subject to sampling and non-sampling errors. (See "Additional Information" section for more information on these errors.) **The 2016 and later year estimates from CRSS are not comparable to 2015 and earlier year estimates from NASS GES 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](#).

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 (BAC) test results. When the alcohol test results are unknown, BAC values in grams per deciliter (g/dL) have been assigned to drivers and nonoccupants involved in fatal crashes, using a method of multiple imputation 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 808 816, [Multiple Imputation of Missing Blood Alcohol Concentration (BAC) Values in FARS](#).

Changes from the *Traffic Safety Facts 2021* Report Portal

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. Vehicle-related analysis for 2020 and later years are 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/.

Vehicle Type Revisions

The 2021 data definitions for vehicle type classifications were reviewed resulting in revisions. The revised vehicle type data definitions were applied to 2020 and later data. The motorcycle category was most effected, as some qualifying body classes were not previously included in this category, but instead were classified as "Other" vehicle type. Consequently, motorcycles were previously underreported.

2020 Imputed Alcohol Data Updates

Blood Alcohol Concentration (BAC) test results are not reported for many drivers and nonoccupants involved in fatal traffic crashes. BAC can be missing due to several reasons, the most frequent being that drivers and nonoccupants are not always tested for alcohol. To address the missing data issue, NHTSA uses a statistical model, multiple imputation, to estimate the missing BAC of these people. This statistical model is based on important characteristics of the crash including the type of vehicle driven. Though the 2020 FARS file was already final, due to the "Vehicle Type Revisions," the 2020 imputed alcohol files were regenerated. Consequently, there were minor changes to alcohol-related estimates for 2020 shown in the 2021 annual report. For example, Table 13 titled "People Killed, by Highest Driver BAC in the Crash, 1982-2021" showed 11,718 alcohol-impaired-driving fatalities in 2020. The updated estimate for alcohol-impaired-driving-fatalities in 2020 is 11,727.

Important Change for Motorized Bicycles

Prior to 2022, motorized bicycles were collected as motor vehicles and classified as motorcycles in FARS and CRSS, and their operators and passengers were captured as motorists. Beginning in 2022, FARS and CRSS are no longer collecting motorized bicycles as motor vehicles. Consequently, operators and passengers of motorized bicycles will be captured as pedalcyclists when involved in a motor vehicle traffic crash. Any traffic crash involving only motorized bicycle(s) will no longer be captured in FARS or CRSS.

Registered Vehicles and Vehicle Miles Traveled (VMT) by Vehicle Type

Vehicle registration data for passenger vehicles (passenger 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. (Polk data from S&P Global Mobility, Copyright © R.L. Polk & Co.) 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 then new NVPP, as shown in the table below. Consequently, the data in this report for vehicle registrations and vehicle miles traveled from 2011 to 2021 are not strictly comparable with the data for all prior years, which were based on Polk's old NVPP.

Starting with 2020 data, passenger car and light truck registrations were revised by NHTSA's NCSA to align with vPIC, which is manufacturer-based data. Prior year data were revised to align with NHTSA's NCSA body type, which is analyst-based data. Several vehicles previously classified as passenger cars are now classified as light trucks, with the vast majority as SUVs. Thus, 2020 and later year passenger car and light truck registration counts are not comparable to prior year data.

Registered Vehicles: NCSA Revised Using Polk and FHWA Data

Year	Passenger Cars (Polk)	Light Trucks (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	8,664,108	983,231	12,229,216	290,335,891
2018 (New NVPP)	132,837,515	141,312,896	8,659,741	992,152	13,233,910	297,036,214
2019 (New NVPP)	129,838,156	146,751,968	8,596,314	995,033	13,085,643	299,267,114
2020 (New NVPP)	110,612,958	164,230,764	8,347,435	1,010,304	12,899,372	297,100,833
2021 (New NVPP)	107,934,093	170,108,546	9,795,491	939,123	13,856,404	302,633,657
2022 (New NVPP)	104,645,629	174,027,343	9,567,664	954,119	14,333,821	303,528,576

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	2,945,194

Year	Passenger Cars (Revised FHWA Using Polk)	Light Trucks (Revised FHWA Using Polk)	Motorcycles (FHWA)	Buses (FHWA)	Large Trucks (FHWA)	Total (FHWA)
2012 (New NVPP)	1,377,486	1,286,574	21,385	14,781	269,207	2,963,497
2013 (New NVPP)	1,384,194	1,293,536	20,366	15,167	275,017	2,982,941
2014 (New NVPP)	1,396,098	1,314,458	19,970	15,999	279,132	3,020,377
2015 (New NVPP)	1,420,869	1,358,824	19,606	16,230	279,844	3,089,841
2016 (New NVPP)	1,439,678	1,410,040	20,445	16,350	287,895	3,173,815
2017 (New NVPP)	1,424,056	1,453,322	20,149	17,227	297,593	3,210,248
2018 (New NVPP)	1,403,760	1,493,323	20,076	18,303	304,864	3,240,327
2019 (New NVPP)	1,372,622	1,551,431	19,688	17,980	300,050	3,261,772
2020 (New NVPP)	1,035,519	1,537,469	17,947	15,037	297,649	2,903,622
2021 (New NVPP)	1,074,905	1,694,094	19,642	16,744	327,026	3,132,411
2022 (New NVPP)	1,059,950	1,762,714	23,765	18,490	331,272	3,196,191

Note: NHTSA's NCSA revises FHWA's Passenger Car and Light Truck vehicle miles traveled (VMT) using Polk's registration counts. Starting with 2020 data, Passenger Car and Light Truck revisions were based on vPIC vehicle classifications. As a result, the 2020 and later-year Passenger Car and Light Truck counts are not comparable to 2019 and earlier years.