



2010 FARS/NASS GES Standardization

The purpose of this document is to inform users of NHTSA's Fatality Analysis Reporting System (FARS) and National Automotive Sampling System General Estimates System (NASS GES) data about some of the more significant changes to the 2010 data as a result of the standardization of the data elements between the two systems. In addition to the changes outlined below, a listing of all specific data element changes can be found in the following:

FARS

GES

The FARS/NASS GES Standardization began in 2006, with the second phase being implemented in the 2010 data collection year. The definition and element attribute changes introduced in 2010 are the most substantive and most numerous changes in one year in the reconciliation of the FARS and NASS GES data systems. In the 2011 data collection year—the third and final planned phase of the FARS/NASS GES standardization—nearly all remaining data element attribute and file structure differences will be addressed. As a single, unified data entry system, FARS/NASS GES will be compatible with the Model Minimum Uniform Crash Criteria (MMUCC), the guideline used by nearly all States to develop and revise their crash forms and databases. Once complete, the FARS/NASS GES standardization will simplify crash data coding and analysis as well as reduce costs and errors.

Probably the most notable changes were the introduction of precrash information in FARS (already collected in NASS GES) and a change to case structure or how the groups of related data elements are organized. For example, in 2009 a FARS case consisted of Crash, Vehicle, Driver, and Person coding forms. In 2010, the Person level form was split into Motor Vehicle Occupant and Non-Motor Vehicle Occupant forms, and the Precrash form was added (new to FARS, though not to NASS GES).

These structure changes also include changes to how the data are now stored and made available. For example, for FARS, there are now 16 data tables rather than 4. This results from the changes in the number of coding forms and from changes in specific data elements. Several data elements that used to allow only a specified number of responses now have a “select-all-that-apply” format. There is a separate data table for each of these data elements.

At the Crash level, a Crash Events Table was added to FARS and modified in NASS GES. In NASS GES, Non-Harmful Events were added to the Crash Events Table.

The precrash information represents not only a new coding form, but more important, a largely new concept for FARS, attempting to collect data about the conditions, events, and driver actions that preceded and may have contributed to the crash. Precrash data is intended to improve crash avoidance research and has been included in NASS GES since 1992.

The new FARS Precrash form information consists of 23 data elements, 9 of which were previously coded at the Crash level, 3 each at the Vehicle and Driver levels, and 8 new elements. Nine trafficway descriptor data elements were moved from the crash level to the new precrash level. These elements provide details about the characteristics of the trafficway selected for each vehicle.

A Pedestrian/Bicycle crash typing software application was added to the Non-Motor Vehicle Occupant form for both systems to help identify the precrash actions for parties involved in certain non-motorist-related crashes.

Type of Intersection was added to both systems. Bus Use and Vehicle Configuration were two Vehicle level elements that are new to NASS GES in 2010 and modified for FARS (element attributes were consolidated and redefined). Condition at Time of Crash was added at the Driver and the Non-Motor Vehicle Occupant levels for both systems. For motor vehicle occupants, there is now an Indication of Misuse of Restraint System or Helmet Use in both systems.

Some of the information that had been collected under FARS Related Factors was redistributed to new data elements. For example, some Person-Related Factors have been removed and are now captured in two new Non-Motor Vehicle Occupant elements; Non-Motorist Action/Circumstances Prior to Crash and Non-Motorist Action/Circumstances at Time of Crash. Some Vehicle-Related Factors are now captured under the new Precrash elements, Contributing Circumstances, Motor Vehicle and Driver Distracted By. The Driver Level element, Violations Charged, is now a "Select-all-That-Apply" element

Multiple data elements that are part of the Model Minimum Uniform Crash Criteria (MMUCC) had the attribute "Not Reported" added in 2010 to account for information missing from the case source materials.

To ensure that data quality was not compromised as a result of the standardization, NHTSA refined and enhanced its quality control processes. These enhancements enable the identification of coding discrepancies and development of training tailored to eliminate or reduce these discrepancies.

The final phase of the FARS/NASS GES standardization will occur during the 2011 data collection year, at which point FARS and NASS GES, while remaining separate data systems, will share a single data entry system and uniform set of data elements.