

## **Part – 1: National Highway Traffic Safety Administration (NHTSA) data sources to Estimate Injuries**

The crash data used in this study was collected from the Fatality Analysis Reporting System (FARS) of the NHTSA. The data were extracted using the Fatality and Injury Reporting System Tool (FIRST) of the NHTSA database through a data query (NHTSA, 2019). These crash data were used to estimate the crash frequencies, fatalities, and injuries at intersections involving younger and elderly drivers. This study extracted and processed crash data from 2009-2018 for all states and the District of Columbia. The link to the NHTSA database, is provided below:

<https://www.nhtsa.gov/research-data/fatality-analysis-reporting-system-fars>

Instructions and data dictionary about the NHTSA database are hosted on the NHTSA website, and can be found here:

<https://crashstats.nhtsa.dot.gov/#!/DocumentTypeList/23>

## **Part – 2: SHRP 2 NDS Database**

The Naturalistic Driving Study (NDS) data of TRB’s second Strategic Highway Research Program (SHRP-2) was analyzed in this study. The SHRP 2 NDS data was collected from the Virginia Tech Transportation Institute through a data query (SHRP-2, 2020). The data contains the driving behavior data of approximately 3,400 drivers from the year 2010 to 2013 (Hankey et al., 2016). The data were recorded from Seattle, Washington; Tampa, Florida; Buffalo, New York; Durham, North Carolina; State College, Pennsylvania; and Bloomington, Indiana. This study used SHRP-2 data to describe the driver age distribution over fatal crashes and fatalities. Also, this database was compared with the crash data obtained from NHTSA FARS. The link to the SHRP-2 database (*note: registration is required to access the data*), is provided below:

<https://insight.shrp2nds.us/>

Instructions and data dictionary about the SHRP-2 database are hosted on the TRB contractor website, and can be found here:

<https://insight.shrp2nds.us/>