1200 New Jersey Avenue SE. Washington, DC 20590



October 16, 2020

The Honorable Robert L. Sumwalt, III Chairman National Transportation Safety Board 490 L'Enfant Plaza East, SW Washington, DC 20594

#### Dear Chairman Sumwalt:

This letter follows a meeting between staff members of the National Transportation Safety Board (NTSB) and the National Highway Traffic Safety Administration (NHTSA) on February 6, 2020. At that meeting, eight safety recommendations related to truck conspicuity and underride protection systems were discussed: H-13-18; H-14-05 to 07; H-17-21; and H-18-44 to 46. We appreciate the willingness of NTSB staff to meet with NHTSA staff to have thoughtful and productive discussion of these topics.

Below are NHTSA's current actions and requested classifications for each recommendation.

# **NTSB Recommendations and Requested Designations:**

**H-13-18:** Develop and implement a plan for using vehicle identification numbers and other variables, such as cargo type or trailers, to improve the coding and classification of large commercial vehicle in the Fatality Analysis Reporting System (FARS) and the National Automotive Sampling System (NASS).

## **NHTSA Action:**

NHTSA requests that safety recommendation H-13-18 be classified as "Closed – Acceptable Action" for the following reasons:

NHTSA has already implemented a plan to leverage its Product Information Catalog and Vehicle Listing (vPIC) system to prepopulate a variety of data fields in both FARS and the Crash Report Sampling System (CRSS) – the successor system to NASS – in cases where a valid vehicle identification number (VIN) is present.<sup>1</sup> This has resulted in the improved coding and classification

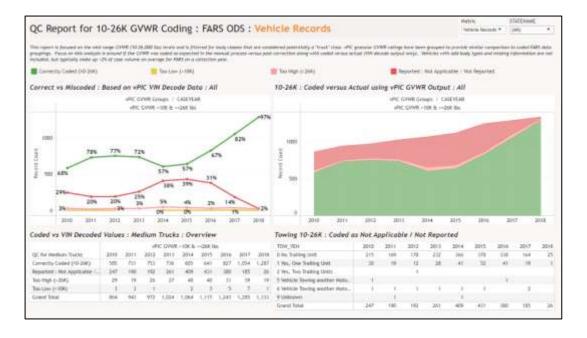
<sup>1</sup> Fatality Analysis Reporting System (FARS) Analytical User's Manual, 1975-2018, at p. 13 (September 2019; <u>DOT HS 812 827</u>).

of vehicles that cross over from passenger vehicle classification (<10,000 lbs. GVWR) to medium duty vehicles (>10,000 lbs. GVWR), which are typically commercial vehicles, in FARS and CRSS (the NASS successor), as recommended by NTSB.

While VIN-derived data was used to improve manual coding between 2017 and 2019, beginning with the 2020 data collection year, vPIC data has been integrated into the new Records Based Information Solution (RBIS) data collection system. This provides seamless pre-coding of the following data elements:

- vPIC Make
- vPIC Model
- vPIC Body Class
- Model Year
- NCSA Make (Formally Make (FARS))
- NCSA Model (Formally Model (FARS))
- NCSA Body Type (Formally Body Type (FARS))
- GVWR From
- GVWR To

These changes have resulted in significant improvement to data quality as evidenced by the quality control report below. For example, the report demonstrates that vehicles were properly identified as medium duty trucks at a substantially higher rate when vPIC is used versus using manual coding of registration data or sources outside of 49 CFR Part 565.



**H-14-05:** Add trailer VIN and trailer model year to the FARS database for trailers with GVWR over 10,000 pounds.

## **NHTSA Action:**

NHTSA requests that safety recommendation H-14-05 be classified as "Closed – Acceptable Action" for the following reasons:

- 1. The element "V15 Trailer VIN" was added to FARS in the 2016 data collection year. This data element is collected whenever possible, regardless of gross vehicle weight.
- 2. With the addition of element "V15 Trailer VIN" in the 2016 data collection year, trailer model year has been included in FARS and made available via post-processing. In the 2020 data collection year, NHTSA has released a discrete trailer model year element in the new FARS RBIS data collection system. This element is now being populated using VIN data decoded with vPIC.

**H-14-06:** Work with the Model Minimum Uniform Crash Criteria (MMUCC) expert panel to modify the data element titled "Motor Vehicle License Number" to include the trailer license plate number in the next edition of the (MMUCC) Guideline.

#### **NHTSA Action:**

NHTSA requests that safety recommendations H-14-06 be classified as "Closed – Acceptable Action" for the following reason:

The element "LV2. Trailer License Plate Number" was included in the MMUCC 5<sup>th</sup> Edition, published in 2017.

**H-14-07:** Work with the MMUCC expert panel to modify the data element titled "Vehicle Identification Number" to include the trailer VIN in the next edition of the MMUCC Guideline.

## **NHTSA Action:**

NHTSA requests that safety recommendations H-14-07 be classified as "Closed – Acceptable Action" for the following reason:

The element "LV3. Trailer VIN(s)" was included in the MMUCC 5<sup>th</sup> Edition, published in 2017.

**H-17-21:** Work with highway safety and law enforcement associations to develop and implement a program to increase the adoption of speeding-related MMUCC Guideline data elements and improve consistency in reporting of speeding-related crashes.

## **NHTSA Action:**

NHTSA requests that safety recommendation H-17-21 be classified as "**Open – Acceptable Action**" for the following reasons:

NHTSA is working with the Governors Highway Safety Association (GHSA), the National Sheriffs' Association (NSA), and the International Association of Chiefs of Police (IACP) to support increased use of the MMUCC speeding-related data elements.

Beginning with a meeting in 2017, NHTSA has worked with these national-level agencies to develop strategies to engage State, city, local, and tribal law enforcement agencies toward this goal. Working through State Highway Safety Offices, these efforts will increase the collection of MMUCC-compliant speed-related data in jurisdictions across the country. In addition, States have Traffic Records Coordinating Committees that work towards standardizing and linking data systems. GHSA also works with the Association of Transportation Safety Information Professionals, which develops and shares traffic records system procedures and tools.

The strategies used by these entities to promote accurate reporting of speed-related crash variables include: developing resolutions and guidance, writing newsletters, and webinars on accurate reporting. GHSA and the Insurance Institute for Highway Safety (IIHS) recently convened a Speed Forum that included IACP, NSA, and NHTSA to discuss strategies to leverage expertise of more than 100 highway safety officials and advocates. That discussion prompted the commitment on the part of GHSA, IIHS, and others to fund a speed management pilot program in 2020-2021. The results of that pilot program will inform the development of a template for use by States and communities, including better methods to increase reporting of speed-related crash data.

**H-18-44:** Develop a detailed pedestrian crash data set that represents the current, complete range of crash types and that can be used for local and State analysis and to model and simulate pedestrian collision avoidance systems.

#### **NHTSA Action:**

NHTSA requests that safety recommendation H-18-44 be classified as "Closed – Acceptable Action" for the following reasons:

- NHTSA's Office of Vehicle Safety Research (OVSR) undertook an effort to develop
  modernized investigative pedestrian crash data collection protocols that meet
  crashworthiness and crash avoidance-related data and causal analysis needs. The OVSR
  leveraged expertise and capabilities of the Crash Injury Research and Engineering Network
  (CIREN) program to complete this effort, which commenced in 2018.
- 2. On September 27, 2018, NHTSA awarded Task Orders to three CIREN contractors to begin work developing the investigative protocols and collecting data from a limited number of

- pedestrian crashes. The awardees included two Level One Trauma Centers and one academic biomechanics research center.
- 3. A conference call between the NHTSA and the NTSB took place on November 1, 2018, to brief the NTSB on NHTSA's project and to solicit feedback about study protocols from the NTSB given its recent experience with pedestrian crash investigations.
- 4. The effort considered current and future needs in the areas of injury causation, crashworthiness (pedestrian protection), and pedestrian crash avoidance. Existing data definitions and study protocols from other NHTSA data collection efforts were used as a baseline to ensure commonality.
- 5. The data collection portion of the CIREN study was performed to field-test the modernized protocols and data collection and analysis framework on a range of crash types. Progress of the study has been shared at several public venues Example:

  <a href="https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/ciren\_pedestrian\_pilot\_study\_pre-liminary\_cases\_tag.pdf">https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/documents/ciren\_pedestrian\_pilot\_study\_pre-liminary\_cases\_tag.pdf</a>.
- 6. Data from the study will allow validated modeling and simulation of pedestrian collision avoidance systems. In addition, State and local level agencies may use this data set for collection and analysis.
- **H-18-45:** Work with the Centers for Disease Control and Prevention (CDC) to develop and implement a plan for the States to combine highway crash data and injury health data, with the goal of producing a national database of pedestrian injuries and fatalities.
- **H-18-46:** Examine the past framework of the Crash Outcome Data Evaluation System (CODES) and establish methods that States and metropolitan planning organizations can use to collect pedestrian event data, then define a common framework that will allow those data sources to be combined.

#### **NHTSA Action:**

NHTSA requests that safety recommendations H-18-45 and 46 be classified as "Closed – Acceptable Alternate Action" for the following reasons:

1. As discussed with NTSB staff in February 2020, a national database of pedestrian injuries and fatalities may not be the most effective way to develop linked crash and outcome data. Our concerns noted that the duplication of injury counts may be an ineffective or insufficient methodology to achieve reductions in pedestrian crashes and injury outcomes; a national database would fall short on providing the detailed information sufficient to develop and evaluate countermeasures; aggregated, linked crash and injury outcome data at the national level would be prohibitively costly; and national aggregation may not be possible due to privacy concerns under HIPAA and other regulations.

- 2. As technology has advanced and State data capabilities have matured, NHTSA, the CDC, and other stakeholders instead should be looking beyond the probabilistic linkages that the now-defunct CODES program relied upon. With better quality data and more flexible technologies, deterministic and even direct linkages may now be used to generate more accurate data sets that link crashes and injury outcomes. The National Emergency Medical Service Information System (NEMSIS) provides a potential bridge between crash and outcome data that will allow for more direct links at the municipal and State levels.
- 3. NHTSA and the CDC are independently and collaboratively working with key stakeholders to provide data integration technical support and capacity-building at the State level. These efforts include publications like the CDC's *Linking Information for Nonfatal Crash Surveillance* (LINCS) report, and NHTSA's Crash Data Improvement Guide, The Importance of Sharing Data, and Data Integration: Linking it All Together. NHTSA and CDC also co-sponsor an annual Data Integration Roundtable with the Association of Traffic Safety Information Professionals that serves as a venue for the dissemination of information on good practices in data integration and represents the first steps in developing a community of practice focused on the linkage of crash and injury outcome data.
- 4. NHTSA also shares NEMSIS data from the National Emergency Medical Services (EMS) Database with the CDC's Division of Health Informatics and Surveillance (DHIS) through a 2018 memorandum of agreement and data use and disclosure agreement. CDC/DHIS maintains NEMSIS data on Data Hub, a secure platform for sharing data with CDC researchers. With support from NHTSA's Office of EMS, CDC staff are currently using NEMSIS data to research a number of areas, including injury, opioids, stroke, disasters, and influenza.
- 5. As NHTSA and the CDC work to update and extend their existing memorandum of understanding, the agencies will formalize a focus on providing collaborative data integration support at the State-level and will work to develop a focused slate of integrated data linkage products and guidance for States. These steps meet NTSB's goals of NHTSA providing national leadership, tools, and guidance for States in collecting integrated data sets linking crashes with outcomes.

If you have any questions, or require additional information, please contact me or Steven Bayless, Director, Governmental Affairs, Policy and Strategic Planning at 202-604-8414.

Sincerely yours,

James C. Owens Deputy Administrator